



UNIVERSITAS INDONESIA

**PEMETAAN KEBISINGAN AKIBAT AKTIVITAS
PESAWAT DENGAN *SOFTWARE INTEGRATED NOISE
MODEL (INM)* DI SEKITAR BANDAR UDARA
INTERNASIONAL SOEKARNO-HATTA**

SKRIPSI

FAHMI BARRY PRIMANDA

0706275574

**FAKULTAS TEKNIK
PROGRAM STUDI TEKNIK LINGKUNGAN
DEPOK
JANUARI 2012**



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Diajukan sebagai salah satu syarat untuk memperoleh gelar Sarjana Teknik

**FAHMI BARRY PRIMANDA
0706275574**

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PROGRAM STUDI TEKNIK LINGKUNGAN
DEPOK
JANUARI 2012**

HALAMAN PERNYATAAN ORISINALITAS

**Skripsi ini adalah hasil karya saya sendiri,
dan semua sumber baik yang dikutip maupun dirujuk
telah saya nyatakan dengan benar.**

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NPM : 0706275574
Tanda Tangan : 
Tanggal : 14 Desember 2011

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Judul Skripsi : Pemetaan Kebisingan Akibat Aktivitas Pesawat Dengan *Software Integrated Noise Model* (INM) Di Sekitar Bandar Udara Internasional Soekarno-Hatta.

Telah berhasil dipertahankan di hadapan Dewan Pengaji dan diterima sebagai bagian persyaratan yang diperlukan untuk memperoleh gelar Sarjana pada Program Studi Teknik Lingkungan Fakultas Teknik Universitas Indonesia.

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Ditetapkan di : Depok

Tanggal : 14 Desember 2011

KATA PENGANTAR

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Jakarta, 14 Desember 2011

Fahmi Barry Primanda

HALAMAN PERNYATAAN PERSETUJUAN PUBLIKASI TUGAS AKHIR UNTUK KEPENTINGAN AKADEMIS

Sebagai civitas akademika Universitas Indonesia, Saya yang bertanda tangan di bawah ini:

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(Fahmi Barry Primanda)

ABSTRAK

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Program Studi : Teknik Lingkungan

Judul Skripsi : Pemetaan Kebisingan Akibat Aktivitas Pesawat Dengan *Software Integrated Noise Model* (INM) Di Sekitar Bandar Udara Internasional Soekarno-Hatta.

Bandar udara Internasional Soekarno-Hatta merupakan bandara tersibuk di Indonesia. Dengan reputasi tersebut, maka mengetahui dampak lingkungan yang terjadi akibat aktivitas pesawat di bandara tersebut adalah hal yang penting untuk dilakukan, termasuk dalam hal ini dampak kebisingan pesawat. Pemetaan kebisingan pesawat dengan software INM merupakan salah satu cara untuk mengetahui dampak kebisingan pesawat terhadap pemukiman di sekitar bandara. Hasil pemetaan kebisingan dengan INM menunjukkan bahwa terdapat sejumlah luasan pemukiman yang terkena dampak kebisingan pesawat dengan nilai luasan rata-rata sebesar $45019,2376 \text{ m}^2$, luasan maksimum sebesar $49684,5863 \text{ m}^2$, dan luasan minimum sebesar $42514,2861 \text{ m}^2$. Untuk mengurangi dampak kebisingan pesawat bisa melakukan mitigasi kebisingan pesawat.

Kata kunci :

Pemetaan kebisingan pesawat, INM, pemukiman, Bandar udara Internasional Soekarno-Hatta.

ABSTRACT

Name : Fahmi Barry Primanda

Study Program: Environmental Engineering

Title : Aircraft Noise Mapping With Integrated Noise Model (INM) Software In The Vicinity Of Soekarno-Hatta International Airport.

Soekarno-Hatta International Airport is the busiest airport in Indonesia. With that reputation, it is important to know the environmental impact as an effect of aircraft activity in the airport, including aircraft noise. Noise mapping with INM software is the one way to identify the impact of aircraft noise to the residence area in the vicinity of the airport. The INM results show the area of residence that affected by aircraft noise. The mean value of the residences are affected by aircraft noise is $45019,2376\text{ m}^2$, the maximum value is $49684,5863\text{ m}^2$, and the minimum value is $42514,2861\text{ m}^2$. Reducing the impact of aircraft noise can be achieved with aircraft noise mitigation.

Keywords :

Aircraft noise mapping, INM, residence, Soekarno-Hatta International Airport.

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BAB 1

PENDAHULUAN

1.1 Latar Belakang

Seiring dengan berjalananya waktu, kemajuan teknologi di bidang transportasi pun berkembang sangat cepat, mulai dari transportasi darat, laut, hingga udara. Manusia sebagai makhluk yang kompleks membutuhkan sarana transportasi yang cepat untuk berpindah dari satu tempat ke tempat lain. Semakin tinggi jam terbang seseorang maka semakin butuh akan transportasi yang cepat. Salah satu transportasi yang memiliki kecepatan tinggi adalah pesawat terbang. Moda transportasi ini dapat mencapai tujuan dalam waktu yang singkat dan dapat mengangkut penumpang dalam jumlah yang relatif besar.

Bandar Udara Internasional Soekarno-Hatta merupakan salah satu bandara internasional tersibuk di Indonesia. Dengan luas mencapai 18 km^2 , bandar udara ini menjadi bandar udara yang terbesar di Indonesia. Dengan reputasi tersebut, Bandara Soekarno-Hatta banyak dilalui oleh berbagai jenis pesawat baik dari dalam maupun luar negeri.

Banyaknya pesawat yang *landing* maupun *take-off* di Bandara Soekarno-Hatta menyebabkan tingginya tingkat kebisingan di sekitar bandara. Tingkat kebisingan ini, selain dipengaruhi oleh frekuensi penerbangan yang tinggi juga dipengaruhi oleh jenis mesin jet yang digunakan oleh pesawat. Semakin besar dimensi pesawat maka ia juga harus didukung oleh mesin jet yang besar pula. Sedangkan, mesin jet yang besar akan mengakibatkan tingkat kebisingan yang dihasilkan pesawat juga semakin besar.

Berdasarkan Keputusan Menteri Lingkungan Hidup No. 48 Tahun 1996 Tentang Baku Tingkat Kebisingan, kebisingan adalah bunyi yang tidak diinginkan dari usaha atau kegiatan dalam tingkat dan waktu tertentu yang dapat menimbulkan gangguan kesehatan manusia dan kenyamanan lingkungan.

Kebisingan yang dihasilkan pesawat yang melintas di Bandara Soekarno-Hatta bisa menyebabkan gangguan terhadap penduduk yang tinggal di sekitar wilayah bandara. Penduduk yang berpotensi terganggu oleh kebisingan pesawat

adalah penduduk yang tinggal di sekitar area Bandara Soekarno-Hatta yang seharusnya tidak boleh dibangun rumah tinggal di area tersebut.

Berdasarkan Peraturan Menteri Perhubungan No. 13 Tahun 2010 Tentang Batas Kawasan Kebisingan di Sekitar Bandar Udara Internasional Soekarno-Hatta, pada pasal 11 ayat 1 disebutkan bahwa tanah dan ruang udara pada kawasan kebisingan tingkat 2 ($75 \leq \text{WECPNL} < 80$) dapat dimanfaatkan untuk berbagai jenis kegiatan dan/atau bangunan kecuali untuk jenis kegiatan dan/atau bangunan sekolah, rumah sakit, dan rumah tinggal.

Untuk mengidentifikasi luasan rumah tinggal (pemukiman) yang berada pada kawasan kebisingan tingkat 2 Bandar Udara Soekarno-Hatta diperlukan peta kontur kebisingan akibat kegiatan pesawat. Kegiatan pesawat yang dimaksud adalah aktivitas *landing* dan *take-off* pesawat serta aktivitas *ground operation* pesawat di landasan. Kebisingan yang ditimbulkan pada saat *ground operation* lebih rendah dibandingkan kebisingan yang ditimbulkan ketika *landing* maupun *take-off*. Ini disebabkan kebisingan di landasan bisa teradsorpsi oleh tanah maupun juga terhalang oleh gedung atau *barrier* lainnya. Sehingga yang dijadikan acuan dalam pengamatan tingkat kebisingan di bandara adalah aktivitas *landing* dan *take-off* pesawat terbang.

Untuk membuat peta kontur kebisingan akibat aktivitas *landing* dan *take-off* pesawat digunakan software *Integrated Noise Model* (INM). INM merupakan software yang dikembangkan oleh *Federal Aviation Administration* (FAA) US untuk menghasilkan kurva kebisingan (kontur kebisingan) yang diakibatkan oleh aktivitas pesawat. Selain itu, diperlukan juga pengukuran kebisingan di sekitar area bandara. Hasil pengukuran kebisingan ini akan digunakan dalam perhitungan WECPNL sebagai perbandingan untuk model INM yang dibuat.

1.2 Perumusan Masalah

Berdasarkan latar belakang yang telah diuraikan, dihasilkan rumusan masalah untuk penelitian ini. Rumusan masalah tersebut adalah sebagai berikut :

- a. Berapa tingkat kebisingan yang disebabkan oleh berbagai jenis pesawat pada saat *landing* dan *take-off* di bandara Soekarno-Hatta ?

- b. Bagaimana peta kontur kebisingan yang dihasilkan dari aktivitas *landing* dan *take-off* pesawat ?
- c. Berapa luasan pemukiman yang terkena dampak dari kebisingan tersebut ?

1.3 Tujuan Penelitian

Tujuan dilaksanakannya penelitian ini yaitu :

- a. Untuk mengetahui fluktuasi tingkat kebisingan yang disebabkan oleh berbagai jenis pesawat di Bandara Soekarno-Hatta.
- b. Mengetahui bentuk peta kontur kebisingan dari aktivitas *landing* dan *take-off* di Bandara Soekarno-Hatta.
- c. Mengetahui luasan pemukiman di sekitar Bandara yang terkena dampak dari kebisingan tersebut.

1.4 Manfaat Penelitian

Manfaat yang diharapkan dari penelitian ini antara lain :

- a. Manfaat teoritis dari penelitian ini adalah memberikan sumbangan berupa data primer tentang tingkat kebisingan berbagai jenis pesawat yang melintas di Bandara Soekarno-Hatta, mengetahui bentuk peta kebisingan dari data primer tersebut, serta mengetahui luasan pemukiman yang terkena dampak dari kebisingan tersebut.
- b. Manfaat praktis dari penelitian ini adalah sebagai upaya pengendalian kebisingan yang disebabkan oleh berbagai jenis pesawat di Bandara Soekarno-Hatta dan sebagai bahan evaluasi penetapan peruntukan tata guna lahan di sekitar area Bandar Udara Soekarno-Hatta.
- c. Manfaat akademis yang diperoleh peneliti dari penelitian ini adalah untuk memenuhi persyaratan guna menyelesaikan pendidikan pada Program Sarjana Strata Satu Departemen Teknik Sipil, Program Studi Teknik Lingkungan, Universitas Indonesia.

1.5 Batasan Penelitian

Penelitian ini dibatasi oleh hal-hal berikut :

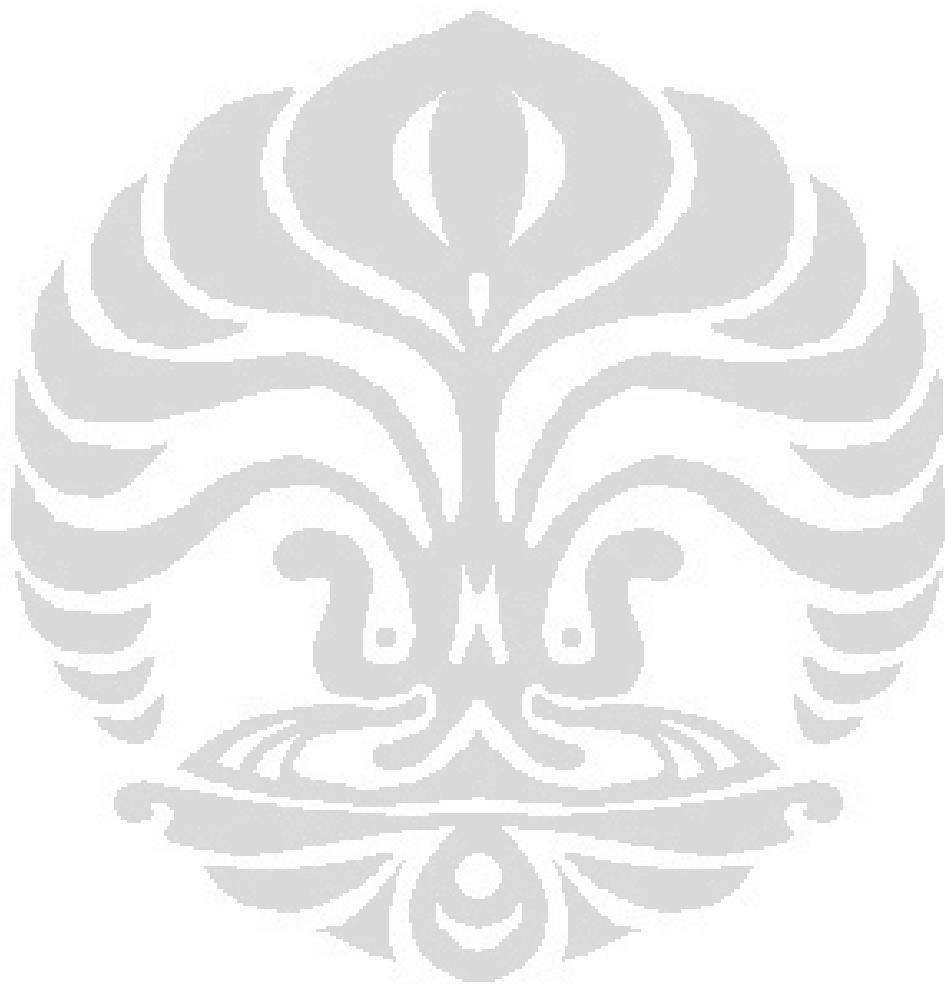
- a. Penelitian dilakukan di sekitar area Bandar Udara Soekarno-Hatta.
- b. Pengukuran yang dilakukan hanya pengukuran kebisingan.
- c. Pengukuran dilakukan sesuai dengan jadwal penerbangan dan waktu pengambilan sampel.

1.6 Sistematika Penulisan

BAB 1	PENDAHULUAN
	Berisi latar belakang, rumusan masalah, tujuan penulisan, batasan penelitian, manfaat penelitian, dan sistematika penulisan.
BAB 2	TINJAUAN PUSTAKA
	Pada bab ini dijelaskan mengenai teori yang berkaitan dengan kebisingan di bandara yang membantu dalam penyusunan skripsi.
BAB 3	METODE PENELITIAN
	Pada metodologi penelitian dijelaskan mengenai hipotesis penelitian, diagram alir penelitian, persiapan penelitian, pengambilan data, populasi dan sampel penelitian, variabel penelitian, pengolahan data, dan metode analisa.
BAB 4	GAMBARAN UMUM
	Pada bab ini dijelaskan mengenai gambaran umum penelitian yang mencakup profil Bandara Soekarno-Hatta, gambaran umum lokasi penelitian, serta gambaran umum zona kebisingan di Bandara Soekarno-Hatta.
BAB 5	HASIL DAN PEMBAHASAN
	Pada bab ini akan dijelaskan mengenai hasil dari penelitian yang dilakukan dan analisis yang berkaitan dengan hasil tersebut.

BAB 6 KESIMPULAN DAN SARAN

Pada bagian ini disimpulkan keseluruhan hasil penelitian yang telah dilakukan dan juga dikemukakan saran-saran yang berkaitan dengan kesimpulan tersebut.



BAB 2

TINJAUAN PUSTAKA

2.1 Bunyi

Secara fisik, bunyi dihasilkan oleh gangguan mekanik yang merambat sebagai gerakan gelombang di udara atau media lainnya. Bunyi secara fisik menimbulkan respon fisiologis pada telinga dan jalur pendengaran. Respon ini bisa digambarkan dan diukur dengan menggunakan metode yang tepat. Sebagai contoh, dengan parameter fisik (gerakan getaran membran gendang telinga) atau dengan parameter elektrofisiologi (perubahan potensial bioelektrik pada jaringan *sensory* dan *neural*). Namun demikian, tidak semua gelombang bunyi dapat menimbulkan respon pada sistem pendengaran secara fisiologi. Sebagai contoh, *ultrasound* memiliki frekuensi yang terlalu tinggi untuk dapat diterima oleh sistem pendengaran dan menimbulkan persepsi bunyi.

Secara psikologi, bunyi merupakan persepsi sensorik yang bermula dari peristiwa mental yang ditimbulkan oleh proses psikologi pada otak *auditory*. Ada beberapa wilayah lain dalam sistem syaraf yang diketahui juga terlibat dalam proses ini. Setelah dianalisa lebih lanjut, diketahui bahwa pola kompleks dari gelombang bunyi diklasifikasikan sebagai “*Gestalts*” dan kemudian baru diberi label seperti bising, musik, pidato, dan lain-lain. (Berglund & Lindvall, 1995)

Ukuran dan persepsi manusia terhadap bunyi melibatkan 3 karakteristik fisk dasar yaitu : intensitas, frekuensi, dan durasi. Pertama, intensitas merupakan ukuran energi akustik dari getaran bunyi dan ini diekspresikan sebagai tekanan bunyi atau suara. Semakin besar tekanan bunyi, maka semakin banyak energi yang dibawa oleh bunyi dan semakin keras persepsi terhadap bunyi tersebut. Karakteristik kedua yang juga penting adalah frekuensi yang merupakan jumlah waktu per detik dari getaran udara atau osilasi. Bunyi dengan frekuensi rendah memiliki sifat bergemuruh, sedangkan bunyi dengan frekuensi tinggi biasanya akan berbunyi berciut-ciut.

Berdasarkan informasi dari Kementerian Lingkungan Hidup, sebagian besar bunyi adalah merupakan gabungan berbagai sinyal, tetapi bunyi murni secara teoritis dapat dijelaskan dengan kecepatan osilasi atau frekuensi yang

diukur dalam *Hertz* (Hz) dan amplitudo atau kenyaringan bunyi dengan pengukuran dalam *decibel*. Manusia mendengar bunyi saat gelombang bunyi, yaitu getaran udara atau medium lain, sampai ke gendang telinga manusia. Frekuensi bunyi dari 20 Hz – 20.000 Hz dapat didengar oleh telinga manusia pada amplitudo umum dengan berbagai variasi dalam kurva responnya. Bunyi dibawah 20 Hz disebut *infrasonic* sedangkan bunyi diatas 20 kHz disebut *ultrasonic*.

Satuan tingkat intensitas bunyi adalah desibel, atau disebut juga sebagai tingkat kekuatan/ daya bunyi (*Sound Pressure Level / SPL*). Skala desibel merupakan skala logaritmik yang digunakan untuk mengukur tekanan bunyi. Hubungan antara tekanan dan tingkat bunyi dapat dilihat pada persamaan berikut:

$$SPL = 20 \log \frac{P}{P_0}$$

Dimana SPL = tingkat tekanan bunyi

P = tekanan (N/m^2)

$P_0 = 2 \cdot 10^{-5} N/m^2$

P_0 merupakan tekanan referensi karena tekanan tersebut merupakan tekanan minimal dimana telinga manusia normal masih bisa mendengar bunyi.

Sedangkan tekanan tingkat bunyi beban A (dB(A)) merupakan tingkat tekanan bunyi yang sesuai dengan respon subyektif manusia. Oleh karena itu dB(A) digunakan untuk melihat dampak dari tingkat tekanan bunyi terhadap manusia.

2.2 Kebisingan

Kebisingan adalah bunyi yang tidak dikehendaki karena tidak sesuai dengan konteks ruang dan waktu sehingga menimbulkan gangguan terhadap kenyamanan dan kesehatan manusia (Sasongko, dkk, 2000).

Kebisingan adalah bunyi yang tidak diinginkan dari usaha atau kegiatan dalam tingkat dan waktu tertentu yang dapat menimbulkan gangguan kesehatan manusia dan kenyamanan lingkungan (Kep. MenLH No. 48 Tahun 1996), atau semua suara yang tidak dikehendaki yang bersumber dari alat-alat proses produksi dan atau alat-alat kerja pada tingkat tertentu dapat menimbulkan gangguan pendengaran (Kep. MenNaker No. 51 Tahun 1999).

Emisi bisingan dari segi kejadiannya dibagi menjadi 2 yaitu bising seketika (*impulse noise*) dan bising menerus (*continuous noise*). Bising seketika adalah bising dalam waktu yang singkat dan intensitas yang besar, contohnya ledakan senjata dan petir. Sementara bising menerus adalah bising dalam durasi waktu yang lebih lama dan intensitas yang lebih rendah. (Timmy, 2000)

Bunyi yang menimbulkan kebisingan disebabkan oleh sumber suara yang bergetar. Getaran sumber suara ini mengganggu keseimbangan molekul-molekul udara di sekitarnya sehingga molekul-molekul udara ikut bergetar. Getaran sumber ini menyebabkan terjadinya gelombang rambatan energy mekanis dalam medium udara menurut pola rambatan longitudinal. Rambatan gelombang di udara ini dikenal sebagai suara atau bunyi (Sasongko, dkk, 2000).

Laju rambat gelombang suara di udara bergantung pada suhu sekitar. Pada suhu 20° C laju rambat suara sekitar 344 m/dt. Setiap kenaikan 10° C maka laju rambat suara bertambah sekitar 0,61 m/dt. Dalam pengendalian kebisingan diasumsikan bahwa laju rambat suara di udara tidak tergantung pada frekuensi dan kelembaban udara (Sasongko, dkk, 2000).

Sumber bunyi merupakan gabungan dari beberapa komponen sumber suara (PT. Quadrant Utama, 1998) :

a. Fluid Turbulence

Merupakan bising yang terbentuk oleh getaran yang diakibatkan benturan antar partikel dalam fluida, misalnya terjadi pada pipa, *valve*, *gas exhaust*, *moving and vibration part*, bising terjadi oleh getaran yang disebabkan oleh gesekan, benturan atau ketidakseimbangan gerakan bagian mesin / peralatan seperti bearing pada kompresor, *turbin*, *pluks pompa*, *blower*.

b. Electrical Equipment

Merupakan bising yang disebabkan efek perubahan fluks elektromagnetik pada bagian inti yang terbuat dari logam, misalnya generator, motor listrik, transformator.

c. Temperatur Difference

Merupakan bising yang terbentuk oleh pemuatan dan penyusutan *fluida*, misalnya terjadi pada mesin jet pesawat.

Karakter kebisingan yang penting untuk kesehatan adalah sebagai berikut (Olishfski, 1971) :

a. Intensitas

Intensitas adalah energi yang mengalir per satuan luas. Semakin jauh sumber suara,intensitas yang diterima akan semakin kecil, karena luas permukaan total yang harus dilalui semakin besar. Intensitas terkecil rata-rata yang masih menimbulkan rangsangan pendengaran pada telinga umumnya adalah 10^{-12} Watt/m² pada frekuensi 1000 Hz. Harga ini disebut harga ambang intensitas.Karena nilai intensitas suara ini memiliki rentang skala yang sangat besar, maka intensitas dinyatakan dengan skala logaritmis yang disebut skala desibel (dB), yaitu log perbandingan antara intensitas suara dengan harga ambang intensitas.

b. Frekuensi

Frekuensi suara adalah fluktuasi tekanan udara per unit waktu, dinyatakan dalam *Hertz*. Setiap frekuensi satuan suara member kontribusi terhadap tekanan suara total secara keseluruhan. Frekuensi yang dapat didengar oleh orang dewasa yang sehat berada pada rentang 20-20000 Hz.

c. Durasi eksposur

Semakin lama durasi eksposur, semakin besar kemungkinan kerusakan yang diderita mekanisme pendengaran.

2.2.1 Alat Pengukuran Kebisingan

Pengukuran tingkat kebisingan dan paparan bising dapat disesuaikan dengan tujuan pengukuran, berikut peralatan yang dapat digunakan untuk pengukuran kebisingan.

Tabel 2.1. Peralatan Pengukuran Kebisingan

Jenis Pengukuran	Alat yang digunakan	Hasil	Komentar
Paparan bising personal	Dosimeter	Dosis atau Leq	Paling akurat untuk pengukuran personal
	ISLM*	Leq	Bila pekerja berpindah-pindah, sulit untuk mengukur personal eksposurnya
	SLM**	dB(A)	Bila rentang kebisingan sangat luas, sulit untuk mencari rata-rata eksposurnya. Hanya berguna bila ada pembagian kerja yang jelas dan bila tingkat bising relatif stabil setiap waktunya
Tingkat kebisingan dihasilkan oleh sumber khusus	SLM	dB(A)	Pengukuran harus dilakukan 1 hingga 3 meter dari sumber (tidak langsung pada sumber)
	ISLM	Equivalent Sound Level dB(A)	Sangat berguna untuk rentang bising yang luas, dapat mengukur Leq pada waktu yang singkat (1 menit)
Survey kebisingan	SLM	dB(A)	Untuk membuat peta kebisingan
	ISLM	Leq	Untuk bising yang sangat bervariasi
Bising impulse	Impulse SLM	Tekanan puncak dB(A)	Untuk mengukur puncak setiap impuls

*ISLM= Integrating Sound Level Meter

**SLM = Sound Level Meter

Sumber : www.osha.gov

a. Sound Level Meter

Alat ini terdiri dari mikrofon, sirkuit, dan display pembacaan. Mikrofon ini akan mendeteksi tekanan udara yang bervariasi yang kemudian dengan bunyi akan mengubahnya menjadi sinyal elektrik. Sinyal ini kemudian akan diproses oleh sirkuit elektronik. Pembacaan akan terlihat dalam satuan desibel.

Sound Level Meter memiliki pembobotan atau skala A,B,dan C. Untuk pengukuran tingkat kebisingan dipakai skala A. Skala ini adalah skala kebisingan yang sensitif untuk frekuensi yang tinggi dan paling cocok

dengan pendengaran manusia. Skala B memberikan respon yang baik untuk frekuensi rendah, sedangkan untuk skala C memberikan respon yang paling baik terhadap frekuensi rendah.

b. *Integrating Sound Level Meter (ISLM)*

Alat ini memiliki kesamaan dengan dosimeter. ISLM menentukan ekivalen level suara pada kondisi tertentu. Perbedaannya dengan dosimeter adalah ISLM tidak digunakan untuk pengukuran personal eksposur dan menghasilkan pembacaan tunggal untuk bising yang ada.

c. *Noise Dosimeter*

Merupakan suatu peralatan yang kecil dan ringan yang dapat dijepitkan di ikat pinggang dengan sebuah mikrofon kecil yang dikaitkan di kerah baju, dekat dengan telinga. Alat ini menyimpan informasi rata-rata tingkat kebisingan yang diterima selama proses. Sangat berguna di industri, dimana bising yang terjadi bervariasi dalam durasi dan intensitasnya.

Pengukuran tingkat kebisingan dapat dilakukan dengan 2 cara, yaitu :

- Cara Sederhana

Dengan menggunakan *Sound Level Meter* biasa. Kebisingan diperiksa dengan pengukuran tingkat tekanan bunyi dB(A) selama 10 menit untuk tiap pengukuran. Pembacaan dilakukan setiap 5 detik.

- Cara Langsung

Dengan menggunakan *integrating sound level meter* yang mempunyai fasilitas pengukuran LTMS, yaitu Leq dengan waktu ukur tiap 5 detik. Pemeriksaan dilakukan dengan pengukuran selama 10 menit. Waktu pengukuran dilakukan selama aktivitas 24 jam (LSM) dengan pembagian sebagai berikut:

- a. Pada siang hari tingkat kebisingan diukur yang paling tinggi selama 10 jam (LS) pada selang waktu 06.00-22.00.
- b. Tingkat kebisingan pada malam hari diukur 8 jam (LM) pada selang 22.00-06.00. setiap pengukuran harus dapat mewakili selang waktu tertentu dengan menetapkan paling sedikit 4 waktu pengukuran pada siang hari dan paling sedikit 3 waktu pengukuran pada malam hari.

Contoh :

- LI diambil pada jam 07.00 mewakili jam 06.00-09.00
- L2 diambil pada jam 10.00 mewakili jam 09.00-11.00
- L3 diambil pada jam 15.00 mewakili jam 14.00-17.00
- L5 diambil pada jam 23.00 mewakili jam 22.00-24.00
- L6 diambil pada jam 01.00 mewakili jam 24.00-03.00
- L7 diambil pada jam 04.00 mewakili jam 03.00-06.00

Keterangan :

- Leq (Equivalent Continuous Noise Level) atau tingkat kebisingan sinambung setara ialah nilai tertentu kebisingan dari kebisingan yang berubah-ubah (fluktuatif selama waktu tertentu, yang setara dengan tingkat kebisingan dari kebisingan yang tetap (steady) pada selang waktu yang sama. Satuannya adalah dB(A)).
- LTMS = Leq dengan waktu sampling tiap 5 detik
- LS = Leq selama siang hari
- LM = Leq selama malam hari
- LSM = Leq selama siang dan malam

Adapun rumus-rumus yang bisa digunakan dalam pengukuran kebisingan adalah sebagai berikut :

- a. Tingkat Tekanan Bunyi Skala Pembobotan A

Berdasarkan SNI 7231 : 2009 mengenai Metode Pengukuran Intensitas Kebisingan di Tempat Kerja, tingkat tekanan bunyi pada skala pembobotan A *decibel* memiliki rumus :

$$LpA = 20 \log \frac{P_A}{P_0} \quad (2.1)$$

dimana :

LpA = tingkat tekanan bunyi pada pembobotan A

P_0 = tekanan bunyi referensi ($20 \mu\text{Pa} = 2.10^{-5} \text{ N/m}^2$)

P_A = tekanan bunyi rms pembobotan A (Pascal)

- b. Tekanan Bunyi Sinambung Setara Pembobotan A

Nilai rata-rata kuadrat tekanan bunyi sinambung setara pada pembobotan A berasal dari sumber bunyi sinambung ataupun tetap pada rentang waktu pengukuran tertentu dengan rumus sebagai berikut :

$$L_{Seq}(T) = 10 \log \left(\frac{1}{T} \int_{t1}^{t2} \left[\frac{P_{A(t)^2}}{P_0^2} \right] dt \right) \quad (2.2)$$

atau jika berfluktuasi (misal : pengukuran 8 jam) dapat menggunakan rumus berikut :

$$L_{eq}(8\text{jam}) = 10 \log \left(\frac{1}{8} \left(\sum_{i=1}^8 t_i 10^{0.1 L_i} \right) \right) \quad (2.3)$$

dimana :

- $P_{A(t)}$ = tekanan bunyi yang terukur pada waktu tertentu
- P_0 = tekanan bunyi referensi, yaitu $20 \mu\text{Pa}$
- L_{eq} = tingkat tekanan bunyi sinambung setara
- dB A = *decibel* pada pembobotan A
- t = rentang waktu pengukuran

2.2.2 Peraturan Terkait Kebisingan

Baku tingkat kebisingan adalah batas maksimal tingkat kebisingan yang diperbolehkan dibuang ke lingkungan dari usaha atau kegiatan sehingga tidak menimbulkan gangguan kesehatan manusia dan kenyamanan lingkungan (Kep. MenLH No. 48 Tahun 1996)

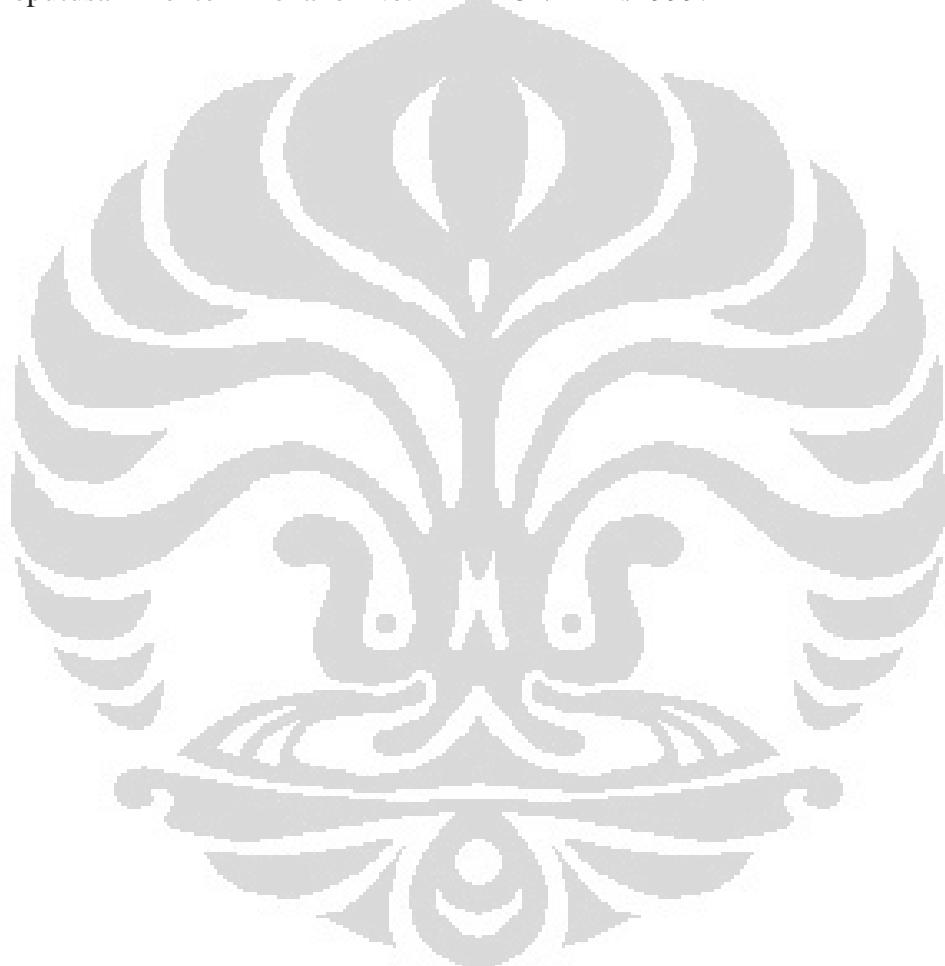
Berdasarkan Peraturan Menteri Kesehatan No.178 Tahun 1987 tentang kebisingan yang berhubungan dengan kesehatan, menyatakan pembagian wilayah kebisingan ke dalam empat zona, yaitu:

- a. Zona A, adalah zona untuk tempat penelitian, rumah sakit, tempat perawatan kesehatan atau sosial. Tingkat kebisingan 35-45 dB.
- b. Zona B, adalah untuk perumahan, tempat pendidikan, dan rekreasi. Tingkat kebisingan 45-55 dB.
- c. Zona C, adalah untuk perkantoran, pertokoan, perdagangan, pasar. Tingkat kebisingan 50-60 dB.
- d. Zona D, adalah untuk lingkungan industry, pabrik, stasiun kereta api, dan terminal bus, tingkat kebisingan 60-70 dB.

Sedangkan menurut IATA (International Air Transportation Association) kebisingan dibagi ke dalam 4 zona yaitu :

- a. Zona A : intensitas > 150 dB. Daerah berbahaya dan harus dihindari.
- b. Zona B : intensitas 135 – 150 dB. Individu yang terpapar perlu memakai pelindung telinga (*earmuff* dan *earplug*).
- c. Zona C : intensitas 115 – 135 dB. Perlu memakai *earmuff*.
- d. Zona D : intensitas 100 – 115 dB. Perlu memakai *earplug*

Adapun nilai ambang batas kebisingan di lingkungan kerja diatur oleh Surat Keputusan Menteri Menaker No. KEP – 51/MEN/1999.



Tabel 2.2. Nilai Ambang Batas Kebisingan Di Indonesia

Waktu pemajangan per hari		Intensitas Kebisingan dB(A)
8	Jam	85
4		88
2		91
1		94
30	Menit	97
15		100
7,5		103
3,75		106
1,88		109
0,94		112
28,12	Detik	115
14,06		118
7,03		121
3,52		124
1,76		127
0,88		130
0,44		133
0,22		136
0,11		139

Sumber : Kep. Menaker No. 51 Tahun 1999

2.2.3 Kawasan Kebisingan Bandara Soekarno-Hatta

Kawasan kebisingan Bandara Soekarno-Hatta diatur dalam Peraturan Menteri Perhubungan No. KM 13 Tahun 2010. Berdasarkan peraturan tersebut yang dimaksud dengan kawasan kebisingan adalah kawasan tertentu di sekitar bandar udara yang terpengaruh gelombang suara mesin pesawat udara dan yang dapat mengganggu lingkungan.

Terdapat 3 tingkat kebisingan di Bandar Udara Soekarno-Hatta. Pada pasal 3 disebutkan bahwa kawasan kebisingan di sekitar bandar udara terdiri dari :

- a. Kawasan kebisingan tingkat I mempunyai nilai tingkat kebisingan lebih besar atau sama dengan 70 WECPNL sampai dengan lebih kecil 75 WECPNL ($70 \leq \text{WECPNL} < 75$).
- b. Kawasan kebisingan tingkat II mempunyai nilai tingkat kebisingan lebih besar atau sama dengan 75 WECPNL sampai dengan lebih kecil 80 WECPNL ($75 \leq \text{WECPNL} < 80$).
- c. Kawasan kebisingan tingkat III mempunyai nilai tingkat kebisingan lebih besar atau sama dengan 80 WECPNL ($\text{WECPNL} \geq 80$).

Yang dimaksud dengan WECPNL pada peraturan diatas adalah *Weighted Equivalent Continuous Perceived Noise Level* atau tingkat kebisingan yang dapat diterima terus-menerus ekivalen tertimbang adalah satuan untuk menyusun frekuensi pesawat udara pada siang hari , malam hari, dan dini hari, pada saat kebisingan lebih terasa berdasarkan pada jumlah kebisingan harian dan penyesuaian terhadap dampak psikologis.

Penggunaan tanah atau peruntukkan tata guna lahan pada kawasan kebisingan Bandara Soekarno-Hatta diatur pada pasal 10, 11, dan 12 sebagai berikut :

- a. Tanah dan ruang udara pada kawasan kebisingan tingkat I dapat dimanfaatkan untuk berbagai jenis kegiatan dan / atau bangunan, kecuali untuk jenis kegiatan dan / atau bangunan sekolah dan rumah sakit. Bangunan sekolah dan rumah sakit yang sudah ada, pengelola bangunan dapat melengkapi dengan pemasangan insulasi suara sesuai dengan prosedur standar sehingga tingkat bising yang terjadi di dalam bangunan sesuai dengan ketentuan peraturan perundang-undangan.
- b. Tanah dan ruang udara pada kawasan kebisingan tingkat II dapat dimanfaatkan untuk berbagai jenis kegiatan dan / atau bangunan, kecuali untuk jenis kegiatan dan / atau bangunan sekolah, rumah sakit dan rumah tinggal. Bangunan sekolah, rumah sakit, dan rumah tinggal yang sudah ada, pengelola bangunan dapat melengkapi dengan pemasangan insulasi suara sesuai dengan prosedur standar sehingga tingkat bising yang terjadi di dalam bangunan sesuai dengan ketentuan peraturan perundang-undangan.

- c. Tanah dan ruang udara pada kawasan kebisingan tingkat III dapat dimanfaatkan untuk membangun bangunan atau fasilitas bandar udara yang dilengkapi dengan pemasangan insulasi suara sesuai dengan prosedur standar sehingga tingkat bising yang terjadi di dalam bangunan sesuai dengan ketentuan peraturan perundang-undangan. Selain itu, tanah dan ruang udara pada kawasan ini juga dapat dimanfaatkan sebagai jalur hijau atau sarana pengendalian lingkungan dan pertanian yang tidak mengundang burung.

2.2.4 Pengendalian Kebisingan

Secara umum upaya pengendalian kebisingan dilakukan melalui pengurangan dan pengendalian tingkat bising yang dapat dibagi ke dalam 3 aspek, yaitu (Mochamad Chaeran, 2008):

- Pengendalian pada sumber

Pengendalian kebisingan pada sumber meliputi :

- a. Perlindungan pada peralatan, struktur, dan pekerja dari dampak bising.
- b. Pembatasan tingkat bising yang boleh dipancarkan sumber.

Reduksi kebisingan pada sumber biasanya memerlukan modifikasi atau mereduksi gaya-gaya penyebab getaran sebagai sumber kebisingan dan mereduksi komponen-komponen peralatan. Pengendalian kebisingan pada sumber relatif lebih efisien dan praktis dibandingkan dengan pengendalian pada lintasan/rambatan dan penerima.

- Pengendalian pada rambatan

Pengendalian pada media rambatan dilakukan diantara sumber dan penerima kebisingan. Prinsip pengendaliannya adalah melemahkan intensitas kebisingan yang merambat dari sumber kepenerima dengan cara membuat hambatan-hambatan. Ada dua cara pengendalian kebisingan pada media rambatan yaitu *outdoor noise control* dan *indoor noise control*.

- Pengendalian kebisingan pada manusia

Pengendalian kebisingan pada manusia dilakukan untuk mereduksi tingkat kebisingan yang diterima setiap hari. Pengendalian ini terutama ditujukan pada orang yang setiap harinya menerima kebisingan, seperti operator pesawat terbang dan orang lain yang menerima kebisingan. Pada

manusia kerusakan akibat kebisingan diterima oleh pendengaran (telinga bagian dalam) sehingga metode pengendaliannya memanfaatkan alat bantu yang bisa mereduksi tingkat kebisingan yang masuk ke telinga.

2.3 Dampak Kebisingan Pesawat

Dampak kebisingan dari pesawat terhadap komunitas di sekitar bandara telah menimbulkan masalah penerbangan yang serius. Sejak pesawat jet komersial beroperasi pada tahun 1958, telah banyak reaksi diberikan oleh masyarakat terhadap kebisingan pesawat. Kebanyakan reaksi tersebut berkaitan dengan timbulan dan perambatan kebisingan dan juga dampak kebisingan terhadap manusia. Berdasarkan kenyataan tersebut, maka dikembangkan prosedur yang melarang para perencana (yang berkaitan dengan pesawat dan bandara) untuk mengestimasi besaran dan luasan kebisingan yang dihasilkan dari operasi bandara dan juga untuk memprediksi respon masyarakat.

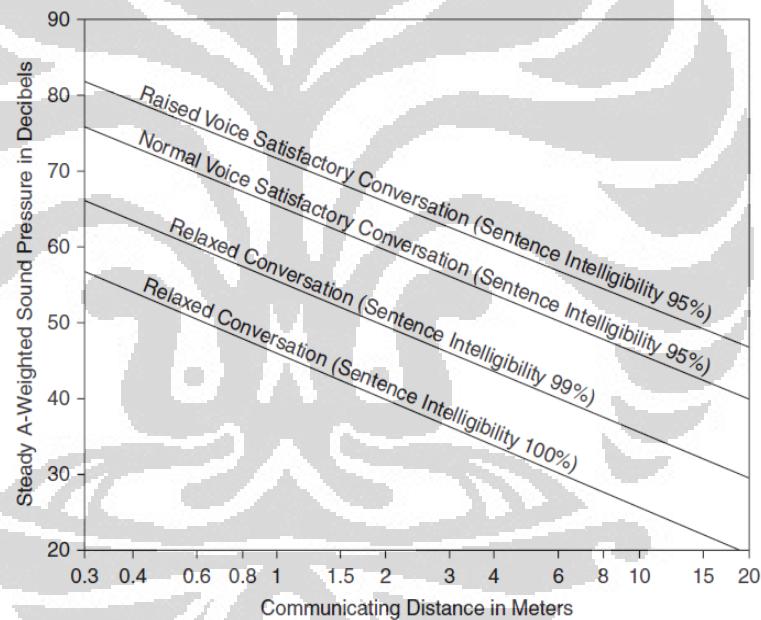
Dampak kebisingan pesawat terhadap masyarakat tergantung kepada beberapa faktor, yaitu besarnya kebisingan yang dihasilkan, durasi dari kebisingan tersebut, jalur penerbangan yang digunakan selama *take-off* dan *landing*, jumlah dan jenis operasi penerbangan, prosedur pengoperasian pesawat, aircraft mix (jenis-jenis pesawat yang beroperasi pada saat tersebut), sistem *runway* yang digunakan, hari dan musim berlangsung operasi, dan juga kondisi meteorologi. Hal-hal yang berkaitan dengan pemaparan kebisingan pesawat terhadap masyarakat adalah penggunaan tanah dan bangunan di sekitar bandara, jenis konstruksi bangunan yang digunakan, jarak bangunan tersebut dari bandara, tingkat kebisingan ambien, dan sikap masyarakat di sekitar bandara.

Dampak kebisingan terhadap masyarakat bisa diklasifikasikan 2 kategori yaitu dampak pada sikap manusia (tingkah laku manusia) dan dampak terhadap kesehatan atau fisiologis. Dampak terhadap sikap manusia adalah yang berkaitan dengan terjadinya gangguan terhadap aktivitas manusia. Ini mencakup kebisingan yang menimbulkan kejengkelan, gangguan komunikasi, gangguan ketika istirahat dan tidur. Sedangkan dampak terhadap kesehatan adalah yang berhubungan dengan hilangnya kemampuan pendengaran manusia atau bisa juga dampak nonauditory seperti timbulnya penyakit kardiovaskular dan hipertensi.

2.3.1 Gangguan Komunikasi

Salah satu dampak utama dari kebisingan pesawat adalah terjadinya mask speech atau terhalangnya aktivitas komunikasi bunyi lain yang lebih besar (dalam hal ini kebisingan pesawat). Hal ini menyebabkan sulitnya melakukan percakapan secara normal karena selalu terjadi interupsi oleh kebisingan pesawat. Tingkat bunyi atau suara pada saat percakapan akan menurun ketika jarak antara pembicara dan pendengar semakin meningkat. Sejalan dengan hal tersebut, tingkat suara pada saat percakapan juga akan menurun ketika adanya kebisingan latar belakang, sehingga akan semakin sulit untuk mendengar suara percakapan.

Hubungan antara jarak komunikasi antara pembicara dan pendengar dan tingkat kebisingan skala A (dB(A)) dengan tingkat kepuasan komunikasi bisa dilihat pada gambar berikut ini :



Gambar 2.1. Hubungan Tingkat Kepuasan Komunikasi Dengan Jarak
Komunikasi Dan Kebisingan Latar Belakang

Sumber : Horonjeff, et.al, 2010

Berdasarkan gambar diatas, kepuasan komunikasi tidak selalu harus mendengar setiap kata, 95 persen kejelasan suara sudah dapat diterima dalam kebanyakan percakapan. Ini karena sedikit kata yang tidak terdengar masih dapat dimengerti ketika ini terjadi dalam konteks yang familiar. Tetapi, untuk percakapan yang *relax* (santai), orang-orang memiliki harapan yang lebih besar

untuk dapat mendengar setiap kata yang keluar. Gambar diatas menunjukkan lingkungan yang ideal untuk dapat melakukan percakapan dengan baik.

Oleh karena itu, bagi penduduk yang tinggal di sekitar area bandara berpotensi besar untuk mengalami gangguan komunikasi. Ini karena kebisingan yang ditimbulkan pesawat cukup besar untuk menimbulkan gangguan tersebut. Bahkan, gangguan komunikasi ini secara tidak langsung bisa membahayakan keselamatan seseorang apabila komunikasi yang dilakukan dimaksudkan untuk memberi peringatan akan adanya bahaya.

2.3.2 Gangguan Ketika Tidur

Dampak kebisingan terhadap aktivitas tidur manusia menjadi perhatian yang cukup penting pada komunitas masyarakat yang terpapar kebisingan pesawat selama jam-jam malam. Beberapa penelitian mengenai hal ini menunjukkan hal yang sama bahwa meningkatnya tingkat paparan kebisingan menghasilkan probabilitas yang lebih besar terhadap gangguan tidur. Gangguan tidur yang terjadi pada penduduk di sekitar area bandara bisa berujung pada masalah kesehatan seperti depresi, insomnia, dan masalah fisiologis lainnya.

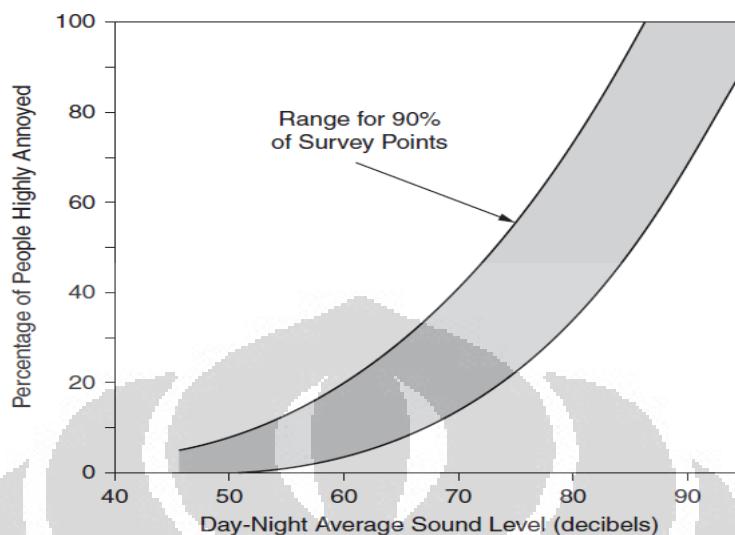
Lukas (1978) menyimpulkan beberapa point mengenai respon manusia ketika tidur terhadap kebisingan sebagai berikut :

- Anak-anak pada usia 5 sampai 8 tahun biasanya tidak terpengaruh oleh kebisingan ketika tidur.
- Seseorang yang lebih tua lebih sensitif terhadap gangguan ketika tidur dibandingkan dengan orang yang lebih muda.
- Secara umum, wanita lebih sensitif terhadap terhadap kebisingan dibandingkan pria.
- Terdapat variasi yang luas terkait dengan sensitivitas individu terhadap kejadian bising pada sekelompok orang dengan umur yang sama.

2.3.3 Gangguan Pada Komunitas Masyarakat

Sejak lama, survey data sosial telah membuktikan dengan jelas bahwa reaksi individu terhadap kebisingan sangat bervariasi untuk tingkat kebisingan rata-rata selama 24 jam. Sejumlah respon dari masyarakat terhadap faktor seperti gangguan komunikasi dan tidur telah dapat diprediksi dan ini berhubungan

dengan pengukuran paparan kebisingan secara kumulatif seperti DNL (*Day Night Level*). Berikut ini adalah gambar yang menunjukkan hubungan tersebut.



Gambar 2.2. Hubungan Nilai DNL Dengan Persentasi Ketergangguan Masyarakat Terhadap Kebisingan

Sumber : Horonjeff, et.al, 2010

Gambar diatas menunjukkan hubungan antara tingkat kebisingan *day-night* dengan persentase masyarakat yang sangat terganggu, tanpa memperhatikan sumber kebisingan. Kurva tersebut juga menunjukkan ketika nilai DNL berada di bawah 55 dB, kira-kira sekitar 5 % masyarakat masih merasa sangat terganggu. Persentase tersebut meningkat sangat tajam ketika nilai DNL berada diatas 65 dB.

2.3.4 Kehilangan Kemampuan Mendengar (Ketulian)

Kehilangan kemampuan mendengar (ketulian) diukur sebagai *threshold shift*. Threshold adalah bunyi atau suara terpelan yang masih bisa didengar oleh manusia. Ketika *threshold shift* terjadi, suara yang disampaikan ke telingan harus lebih keras sebelum suara tersebut bisa didengar. Selama ratusan tahun telah diketahui bahwa paparan bunyi yang keras secara berlebihan bisa menyebabkan terjadinya ketulian sementara(*noise-induced temporary threshold shifts*), yang jika dibiarkan terus bisa menyebabkan kerusakan pendengaran secara permanen. Dengan nilai *threshold shift* 25 dB seseorang bisa mengerti dengan benar hanya 90 % dari kalimat pada percakapan yang terjadi pada jarak 3 ft (1 m) di ruangan yang sunyi.

Penelitian selama lebih dari 40 tahun pada populasi industri dan militer telah memberikan pemahaman terhadap perkembangan ketulian akibat kebisingan dan hubungannya dengan tingkat kebisingan, kandungan spektrumnya, dan durasi paparan kebisingannya. Detail kriteria internasional telah dikembangkan untuk mengidentifikasi paparan kebisingan maksimum yang tidak mengakibatkan ketulian pada penduduk yang terpapar kebisingan tersebut. *Occupational Safety and Health Administration* (OSHA) mengeluarkan peraturan tentang identifikasi maksimum bunyi skala A (dB(A)) yang diizinkan boleh terpapar terhadap penduduk adalah sebesar 90 dB(A) untuk waktu paparan selama 8 jam.

Sebagai contoh, pada sebuah bandara terjadi paparan kebisingan dengan 1000 penerbangan per hari dengan nilai *Sound Exposure Level* (SEL) 100 dB dan rata-rata tingkat kebisingan sebesar 85 dB. Jika paparan ini terjadi selama 5 hari per minggu selama 40 tahun dan masyarakat terpapar di luar ruangan tanpa perlindungan dari bangunan maka ini akan memicu terjadinya *noise-induced permanent threshold shift* (NIPTS) dengan nilai kurang dari 10 dB pada 10 % populasi masyarakat yang terpapar.

2.3.5 Dampak Kesehatan Nonauditory

Jika berbicara tentang dampak kebisingan terhadap kesehatan biasanya hal yang dikaitkan adalah mengenai kehilangan kemampuan. Namun ternyata kebisingan juga berdampak pada kesehatan yang tidak berkaitan dengan pendengaran.

Berdasarkan sebuah penelitian tentang efek fisiologis kebisingan pesawat terhadap respon sistem syaraf disebutkan bahwa kebisingan pesawat bisa memicu respon sistem syaraf yang bisa mengakibatkan timbulnya stres (stres secara emosional). Penelitian tersebut menyimpulkan bahwa paparan kebisingan pesawat dalam waktu yang lama bisa menimbulkan terjadinya stres kronik dan terjadinya stres kronik akibat kebisingan bisa memicu munculnya hipertensi. (Black, et.al, 2007).

Terdapat bukti yang jelas bahwa gelombang bunyi bisa berdampak pada tekanan darah seseorang. Tekanan darah merupakan hasil dari pemompaan darah dari jantung yang menciptakan gaya yang cukup untuk mendorong darah menuju ke pembuluh darah arteri, kemudian ke pembuluh arterioles, dan berakhir di

pembuluh darah kapiler kecil. Tekanan darah tinggi atau hipertensi merupakan peningkatan tekanan darah di arteri. Jika seseorang terpapar kebisingan secara tiba-tiba atau dalam intensitas yang tidak bisa dikontrol, maka ini akan mengaktifkan sistem otonom dan hormonal, meningkatkan tekanan darah, meningkatkan detak jantung, dan menimbulkan *vasoconstriction*. (German and Stanfield, 2000).

2.3.6 Keterkaitan Kebisingan dan Tata Guna Lahan

Berdasarkan hubungan antara kebisingan dan kumpulan respon masyarakat terhadap lingkungannya, DNL telah menjadi standar yang dapat diterima untuk mengevaluasi paparan kebisingan pada masyarakat dan juga sebagai pembantu membuat keputusan tentang keterkaitan paparan kebisingan dengan tata guna lahan yang terkena paparan kebisingan.

Pada FAR bagian 150 disebutkan tentang prosedur untuk pengembangan program yang berkaitan dengan kebisingan bandara. FAA telah menjadikan DNL sebagai *metric* paparan kebisingan kumulatif untuk analisa kebisingan bandara dan juga telah mengembangkan panduan untuk evaluasi keterkaitan kebisingan dengan tata guna lahan. Berikut adalah tabel yang dibuat FAA sebagai panduan keterkaitan kebisingan dengan tata guna lahan.

Tabel 2.3. Panduan FAA Tentang Keterkaitan Kebisingan Dengan Tata Guna Lahan

Tata Guna Lahan	Tingkat Kebisingan Rata-Rata Tahunan, DNL, dB					
	< 65	65 - 70	70 - 75	75 - 80	80 - 85	> 85
Perumahan tetap	Y	T	T	T	T	T
Perumahan bergerak		Y	T	T	T	T
<i>Transient lodging</i>		Y	T	T	T	T
Sekolah		Y	T	T	T	T
Rumah sakit dan rumah perawatan	Y	25	30	T	T	T
Gereja, auditorium, dan <i>concert hall</i>	Y	25	30	T	T	T
Gedung pemerintahan	Y	Y	25	30	T	T
Bangunan transportasi		Y	Y	Y	Y	Y
Tempat parkir		Y	Y	Y	Y	T
Gedung kantor, bisnis (komersial)	Y	Y	25	30	T	T
Bangunan perlengkapan material dan <i>hardware</i>	Y	Y	Y	Y	Y	N
Bangunan perdagangan	Y	Y	25	30	T	T
Fasilitas umum		Y	Y	Y	Y	T
Bangunan komunikasi		Y	Y	25	30	T
Bangunan pabrik	Y	Y	Y	Y	Y	T
<i>Photographic</i> dan <i>optical</i>	Y	Y	25	30	T	T
Pertanian dan kehutanan	Y	Y	Y	Y	Y	Y
Peternakan	Y	Y	Y	T	T	T
Pertambangan dan perikanan		Y	Y	Y	Y	Y
Arena olahraga <i>outdoor</i>		Y	Y	Y	T	T
Teater musik <i>outdoor</i>	Y	T	T	T	T	T
Taman alam dan kebun binatang	Y	Y	T	T	T	T
Taman bermain dan perkemahan	Y	Y	Y	Y	Y	Y
Lapangan golf		Y	Y	25	30	T

Keterangan : Y (Ya) Tidak ada larangan mendirikan bangunan pada area tersebut

T (Tidak) Dilarang mendirikan bangunan pada area tersebut

25 atau 30 Boleh mendirikan bangunan di area tersebut, tapi tingkat kebisingan di dalam ruangan harus dikurangi 25 atau 30 dB

Sumber : Horonjeff, et.al, 2010

2.4 Sumber Kebisingan pada Pesawat Terbang

Mesin jet terbagi menjadi 2 yaitu mesin jet generasi awal yang dikenal dengan sebutan turbojet dan mesin jet generasi berikutnya yang disebut turbofan. Pada mesin turbojet, kebisingan ditimbulkan oleh semburan gas buang (*jet efflux*), kompresor, dan mesin turbinnya. Pada mesin ini, udara dihisap masuk lalu dimampatkan oleh kompresor, dicampurkan dengan bahan bakar, lalu dibakar, dan gas yang dihasilkan disemburkan oleh turbin dengan kecepatan tinggi untuk mendorong pesawat bergerak maju. Kebisingan terbesar disebabkan oleh semburan gas buang yang panas dan memiliki kecepatan tinggi yang bergesekan dan teraduk dengan udara luar yang lebih dingin dan bergerak lebih lamban.

Semakin tinggi laju semburan gas buang, semakin keras kebisingan yang dihasilkan (Timmy, 2000).

Semakin besar suatu pesawat didesain, maka pesawat tersebut harus didorong oleh mesin jet yang lebih kuat. Ini berarti, pesawat tersebut juga akan semakin bising. Usaha-usaha untuk mengurangi bising mesin turbojet ini adalah dengan memasang peredam bising, salah satu cara untuk membuat peredam bising ini adalah dengan memodifikasi salauran-saluran output gas buang, sehingga dihasilkan pencampuran gas buang dengan udara yang lebih halus. Akan tetapi, hal ini ternyata juga mengurangi efisiensi mesin dan meningkatkan konsumsi bahan bakar.

Generasi mesin jet yang berikutnya adalah mesin jet yang dilengkapi dengan kipas (*fan*). Pencetus turbofan yang pertama adalah Rolls-Royce, yaitu dengan menempelkan kipas (*fan*) tepat dimuka mesin jet. Berbeda dengan mesin turbojet, pada mesin turbofan tidak semua udara dihisap masuk ke dalam kompresor lalu mengalami pembakaran. Ada sebagian udara yang ditiup kipas ke sekeliling sisi luar mesin jet (biasa disebut dengan *airflow bypass*). *Fan efflux* yang lebih lambat dan dingin ini menyelimuti dan bercampur dengan *jet-efflux* yang cepat dan panas. Proses ini mendahului proses pencampuran akhir dengan udara luar, sehingga bising semburan gas buang yang dihasilkan jauh lebih kecil.

Pada mesin turbofan, kebisingan utama tidak lagi bersumber pada suara bising hasil pencampuran gas buang, namun bergeser menjadi bising bunyi kipas dan bising turbin. Mesin turbofan pertama kali dikenal dengan nama LBPR (*Low By-Pass Ratio Engine*), sedangkan generasi berikutnya dikenal dengan nama HBPR (*High By-Pass Ratio Engine*).

Perbedaan antara HBPR dan LBPR terletak pada diameter kipas yang digunakan. HBPR menggunakan kipas dengan diameter besar untuk menghasilkan semburan gas buang yang lebih lambat tetapi dengan volume yang lebih besar, sehingga dapat menghasilkan gaya dorong yang sama dengan kebisingan gas buang yang lebih kecil. Tetapi ternyata hal ini mengakibatkan meningkatnya bising yang berasal dari kipas. Untuk mengurangi kebisingan kipas ini digunakan bahan peredam suara pada lubang masuknya udara.

2.5 Integrated Noise Model (INM)

Sejak tahun 1978, FAA telah menggunakan INM sebagai metodologi standar untuk pengukuran (penilaian) kebisingan (*noise assessment*). INM adalah program komputer yang digunakan oleh lebih dari 1000 organisasi di lebih dari 65 negara, dengan basis pengguna yang meningkat setiap tahunnya. Program INM ini bisa digunakan secara langsung untuk menilai dampak kebisingan dengan berbagai skenario, seperti :

- a. Berdasarkan landasan baru atau perpanjangan landasan atau konfigurasi landasan.
- b. Berdasarkan kondisi lalu lintas penerbangan dan armada gabungan (campuran).
- c. Berdasarkan rute penerbangan revisi dan struktur ruang udara lokal.
- d. Berdasarkan profil penerbangan alternatif.
- e. Modifikasi untuk prosedur operasional lainnya.

Software Integrated Noise Model (INM) bisa melakukan perhitungan terhadap 3 jenis *metric* kebisingan yaitu : (1) *exposure-based metrics*, termasuk perubahan pada paparannya, (2) *maximum noise-level metrics*, dan (3) *time-based metrics*, termasuk di dalamnya adalah *time above*, *percent time above*, dan *time audible metrics*. Berikut ini adalah tabel metric kebisingan yang didukung oleh INM.

Tabel 2.4. Ringkasan Metrik Kebisingan Yang Didukung Oleh INM

Jenis Metrik	Nama INM	Nama ANSI	Definisi
Metrik Kebisingan Skala A			
<i>Exposure Based</i>	SEL	L_{AE}	<i>A-Weighted Sound Exposure Level</i>
	DNL	L_{dn}	<i>Day Night Average Sound Level</i>
	CNEL	L_{den}	<i>Community Noise Equivalent Level</i>
	LAEQ	L_{AeqT}	<i>Equivalent Sound Level</i>
	DDOSE	ΔL	<i>Change in Exposure</i>
<i>Maximum Level</i>	LAMAX	L_{ASmx}	<i>A-Weighted Maximum Sound Level</i>
<i>Time-Above Based</i>	TALA %TALA	$TA_{LA} \% TA_{LA}$	<i>Time-Above / Percent Time-Above</i>
<i>Time Audible</i>	TAUD %TAUD	$TA_{UD} \% TA_{UD}$	<i>Time Audible / Percent Time Audible</i>
Metrik Kebisingan Skala C			
<i>Exposure Based</i>	CEXP	L_{CE}	<i>C-Weighted Sound Exposure Level</i>
<i>Maximum Level</i>	LCMAX	L_{CSmx}	<i>C-Weighted Maximum Sound Level</i>
<i>Time-Above Based</i>	TALC %TALC	$TA_{LC} \% TA_{LC}$	<i>Time-Above / Percent Time Above</i>
Metrik Kebisingan <i>Tone-Corrected Perceived</i>			
<i>Exposure Based</i>	EPNL	L_{EPN}	<i>Effective Perceived Noise Level</i>
	NEF	L_{NEL}	<i>Noise Exposure Forecast</i>
	WECPNL	L_{WECPN}	<i>Weighted Equivalent Continuous Perceived Noise Level</i>
<i>Maximum Level</i>	PNLTM	L_{PNTSmx}	<i>Tone-Corrected Maximum Perceived Noise Level</i>
<i>Time-Above Based</i>	TAPNL %TAPNL	$TA_{PNL} \% TA_{PNL}$	<i>Time-Above / Percent Time-Above</i>

Sumber : INM 7.0 Technical Manual, FAA, 2008

Terdapat 2 kategori utama parameter input untuk INM yaitu data kinerja dan kebisingan pesawat dan data operasional pesawat. Perbedaan mendasar diantara keduanya adalah data kinerja dan kebisingan pesawat tidak tergantung dari data bandara, sedangkan data operasional pesawat harus didasarkan pada data aktual masing-masing bandara.

2.5.1 Data Kinerja dan Kebisingan Pesawat

INM menggunakan standar-standar peraturan pesawat, kebisingan internal pesawat, dan kinerja pesawat berdasarkan database yang mengandung sejumlah besar jenis-jenis pesawat. Model yang dibuat INM menggunakan data kebisingan untuk menentukan Sound Exposure Level dari jenis pesawat tertentu sebagai fungsi dari daya dorong pesawat dan jarak dari pengamat. Data kinerja pesawat digunakan dalam pembuatan model untuk menentukan *length of the takeoff roll* (panjang landasan yang dibutuhkan pesawat untuk lepas landas), *climb rate* (kecepatan pesawat yang dibutuhkan untuk mulai naik/climb), kecepatan pesawat, dan *thrust management* (pengaturan daya dorong pesawat) untuk keberangkatan dan kedatangan.

2.5.2 Data Operasional Pesawat

Selain data kebisingan dan kinerja pesawat, INM juga membutuhkan data operasional pesawat secara spesifik yang didapatkan dari bandara yang sedang dipelajari. Data ini seringkali sulit untuk didapatkan karena FAA maupun pihak bandara sendiri tidak secara rutin mengumpulkan data-data tersebut. Untuk memecahkan masalah tersebut, pihak bandara mulai untuk mengembangkan prosedur pengumpulan data secara spesifik untuk tujuan ini. Data operasional pesawat menggambarkan aktivitas pesawat di bandara menggunakan nilai rata-rata selama periode tertentu. Data operasional yang dibutuhkan adalah sebagai berikut :

- a. Gambaran fisik landasan bandara, termasuk tempat dimana pesawat akan *take-off* atau *landing*.
- b. Persentase penggunaan landasan.
- c. Jumlah pesawat yang beroperasi berdasarkan jenis pesawat.
- d. Pemecahan operasi pesawat siang-malam (*day-night*) berdasarkan jenis pesawat.
- e. Gambaran koridor penerbangan.
- f. Persentase penggunaan koridor penerbangan.



Gambar 2.3. Contoh Model Kontur Kebisingan INM di Greater Pittsburgh International Airport

Sumber : Horonjeff, et.al, 2010

2.6 Mitigasi Dampak Kebisingan Pesawat

Secara umum, solusi untuk mitigasi dampak kebisingan pesawat adalah dengan meningkatkan jarak antara pesawat dengan daerah pemukiman yang sensitif terkena dampak kebisingan pesawat, mengurangi tingkat kebisingan pada sumbernya, atau mengurangi jumlah kejadian kebisingan pada daerah yang sensitif terhadap kebisingan. Beberapa solusi memerlukan persetujuan dan keahlian dari pihak pemerintah maupun dari lembaga pengawasan penerbangan seperti FAA. Beberapa solusi untuk mitigasi dampak kebisingan pesawat didiskusikan di bawah ini.

2.6.1 Penghalang Kebisingan (*Noise Barrier*)

Penghalang kebisingan menawarkan kesempatan untuk mengontrol sumber kebisingan yang terjadi di *ground* (landasan) seperti *takeoff and landing roll*, *taxiway and apron movement*, *aircraft power-back*, *auxiliary power unit* (APUs), dan perawatan mesin. Agar efektif, penghalang (*barrier*) harus dipasang memotong jalur antara sumber kebisingan dan penerima kebisingan. Namun, penghalang ini menjadi tidak berguna ketika pesawat telah berada di udara dan

berada diatas penghalang tersebut. Keefektifan maksimal bisa diperoleh ketika penghalang ditempatkan dekat dengan sumber kebisingan atau dengan penerima kebisingan, bukan berada di tengah-tengah mereka (sumber dan penerima).

Jenis-jenis penghalang seperti dinding, *earth berm* (pepohonan) atau *wall-berm* kombinasi antara dinding dan *earth berm*. Bangunan yang panjang seperti terminal sendiri juga merupakan penghalang kebisingan yang efektif. Penghalang yang memotong jalur pengamatan pesawat biasanya hanya mengurangi kebisingan sebesar 5 dB. Semakin tinggi penghalang yang dipasang maka akan semakin berkurang kebisingan yang sampai ke penerima.

Penghalang kebisingan sebaiknya dipasang dekat dengan pemukiman yang memang ingin dilindungi dari kebisingan. Ini disebabkan penghalang yang efektif adalah yang tinggi dan kokoh (besar) sehingga akan tidak sesuai jika diletakkan dekat dengan sumber kebisingan atau dekat dengan landasan karena bisa mengganggu aktivitas di landasan.

Kinerja penghalang bisa berkurang karena adanya inversi suhu dan angin yang mengarah langsung dari sumber ke penerima. Ini terjadi terutama karena penghalang tidak diletakkan sedekat mungkin ke sumber atau ke penerima. Pada kondisi cuaca yang demikian, perjalanan pembiasan gelombang bunyi akan memiliki jalur pembelokan yang lebih tinggi dan bahkan pada kondisi ekstrim seperti badai angin efektivitas penghalang kebisingan akan berkurang atau bahkan sama sekali tidak bisa mengurangi tingkat kebisingan yang sampai ke penerima.

2.6.2 Insulasi Suara

Kebisingan pesawat telah menjadi masalah masyarakat sejak tahun 1960an ketika penerbangan komersial mulai menggunakan mesin jet. Keadaan tersebut membuat para ahli akustik dan arsitek mulai mengembangkan metode untuk mengisolasi rumah-rumah yang terkena paparan kebisingan dari pesawat. Program pengisolasi ini pertama kali dimulai pada tahun 1967 di daerah Los Angeles International Airport.

Pada akhir tahun 1980an Departemen Kelautan Amerika dan *Federal Aviation Administration* (FAA) bekerjasama menyiapkan *Guidelines for Sound Insulation of Residences Exposed to Aircraft Operations*. Dokumen tersebut selesai pada 1989 dan dipublikasikan secara luas pada Oktober 1992 oleh

Departemen Transportasi Amerika dengan nama Publication DOT/FAA/PP-92-5. (Ehrlich, et.al, 2005).

Mengisolasi rumah dari kebisingan pesawat bukan berarti menghilangkan atau mengurangi kebisingan tersebut. Tingkat kebisingan pesawat dengan cara ini tidak dapat dikurangi. Hanya saja, kebisingan tersebut tidak akan mengganggu aktivitas di dalam rumah karena rumahnya sudah terisolasi dari kebisingan tersebut. Rumah dapat diisolasi dari kebisingan dengan menggunakan teknik konstruksi yang tepat.

Jendela biasanya merupakan penghubung utama yang menyebabkan gelombang bunyi (kebisingan) masuk ke dalam struktur bangunan (rumah). Ketika jendela terbuka tingkat pengurangan kebisingan oleh anggota bangunan lainnya pun ikut berkurang. Tingkat reduksi kebisingan bisa berkurang hingga mencapai 14 dB ketika jendela terbuka. Ketika jendela tertutup tingkat pengurangan kebisingan akan menjadi lebih besar. Selain jendela, ada hal-hal lain yang harus diperhatikan untuk bisa mengurangi tingkat kebisingan secara efektif yaitu :

- a. Semua celah udara yang ada seperti yang ada di sekitar jendela dan sekitar pintu dan juga ventilasi pada loteng dan *basement*.
- b. Ketebalan dan jumlah lapisan kaca.
- c. Berat dari pintu eksterior.
- d. Berat dari atap dan dinding.

Program insulasi suara ini bisa mereduksi kebisingan 25 sampai 35 dB apabila benar-benar diperhatikan cara-caranya. Untuk menginsulasi suara harus memperhatikan celah udara yang ada yaitu dengan cara mendempul celah-celah di sekitar bingkai jendela atau pintu dan dengan insulasi dinding dan ventilasi loteng dengan bahan-bahan yang menyerap bunyi. Selain itu, bisa juga dengan mengganti jendela yang sudah rapuh dengan jendela yang lebih kuat dan juga lengkapi dengan lapisan kaca ganda. Untuk pintu, bisa dilakukan dengan mengganti bagian-bagian yang berlubang pada pintu dengan yang padat, misalnya mengganti bagian kunci yang berlubang dengan kunci yang tidak berlubang.

BAB 3

METODE PENELITIAN

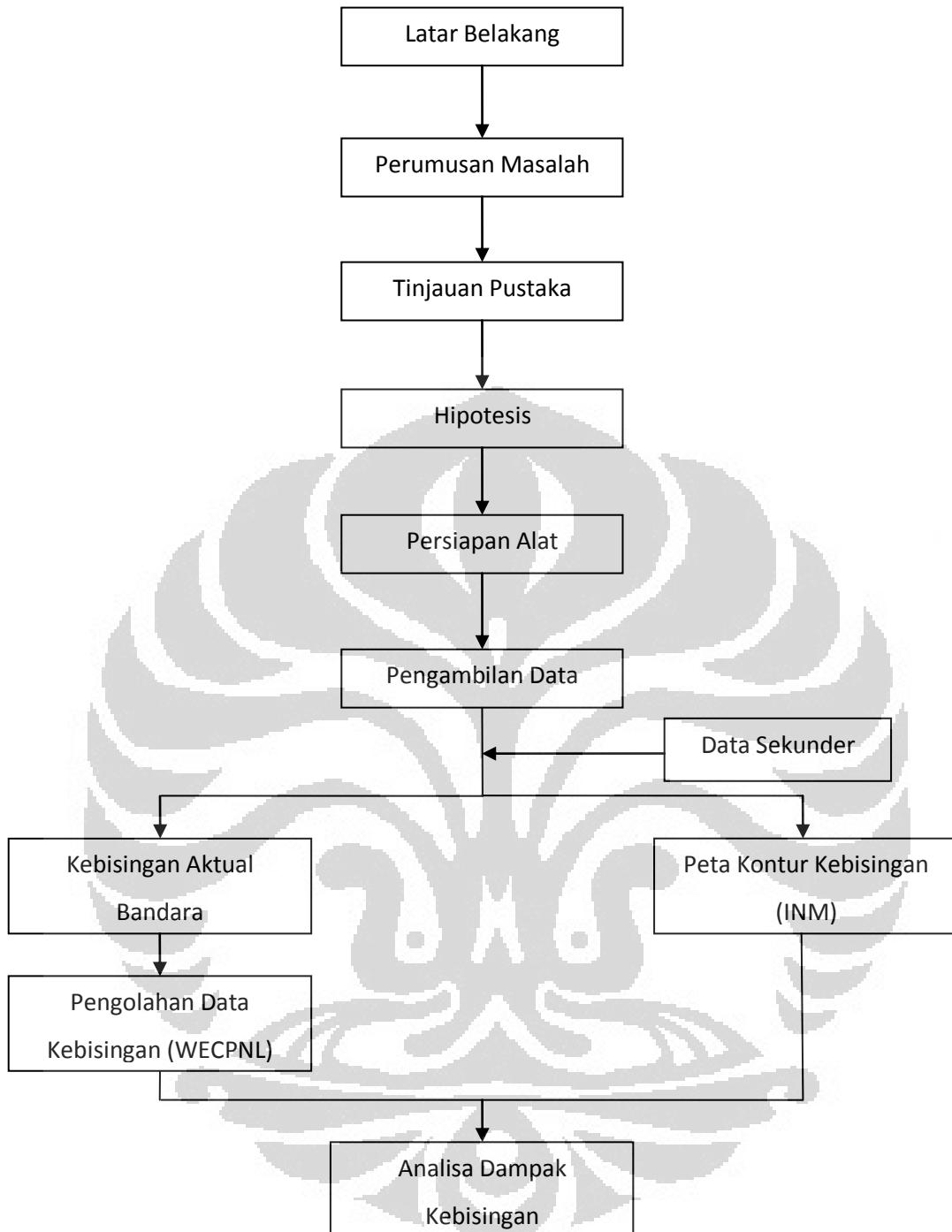
3.1 Hipotesis Penelitian

Terdapat area pemukiman di sekitar Bandar Udara Soekarno-Hatta yang masih terkena dampak dari kebisingan pesawat.

3.2 Diagram Alir Penelitian

Penelitian ini merupakan penelitian kuantitatif karena data yang digunakan adalah data kuantitatif. Penelitian yang akan dilakukan secara garis besar ditunjukkan oleh bagan di bawah ini.





Gambar 3.1. Diagram Alir Penelitian

Sumber : Pengolahan Penulis, 2011

3.3 Persiapan Penelitian

Persiapan penelitian meliputi persiapan alat, pemilihan lokasi penelitian, dan penentuan waktu penelitian.

- Persiapan Alat

Peralatan yang digunakan untuk pengukuran kebisingan dalam penelitian adalah *Sound Level Meter* model Sound pro SE / DL. Satuan tingkat kebisingan dinyatakan dalam desibel bobot A atau dB(A), yaitu bobot yang sesuai dengan respon telinga manusia normal. Pembacaan kebisingan dilakukan dalam periode waktu tertentu dengan menggunakan *Stopwatch*.

Mekanisme kerja dari *Sound Level Meter* adalah apabila ada benda bergetar, maka akan menyebabkan terjadinya perubahan tekanan udara yang dapat ditangkap oleh alat ini yang selanjutnya akan menggerakkan meter penunjuk.



Gambar 3.2. Sound Level Meter Tipe Soundpro SE / DL

Sumber : Dokumentasi Penulis, 2011

- Pemilihan Lokasi Penelitian

Terdapat 4 lokasi di sekitar Bandara Soekarno-Hatta yang akan diteliti tingkat kebisingannya pada penelitian ini. Keempat lokasi tersebut yaitu :

- a. Titik 1 berada di sebelah barat bandara, yang terletak pada koordinat : S. $06^{\circ} 07' 48,0''$ dan E. $106^{\circ} 36' 59''$.
- b. Titik 2 berada di sebelah timur bandara, yang terletak pada koordinat : S. $06^{\circ} 07' 17''$ dan E. $106^{\circ} 41' 22''$.
- c. Titik 3 berada di sebelah utara bandara, yang terletak pada koordinat : S. $06^{\circ} 06' 16''$ dan E. $106^{\circ} 40' 5''$.

- d. Sebelah selatan, terdapat di depan pos CTV yaitu pada koordinat : S. $06^{\circ} 08' 58''$ dan E. $106^{\circ} 38' 24''$.
- Penentuan Waktu Penelitian
Waktu penelitian dilakukan selama 3 hari dan setiap harinya berlangsung selama 24 jam dengan rincian sebagai berikut :

Tabel 3.1. Waktu Penelitian

Hari	Waktu Mulai	Waktu Selesai	Lama Pengukuran
1	11-04-2011, pukul 06.00	12-04-2011, pukul 06.00	24 jam
2	13-04-2011, pukul 06.00	14-04-2011, pukul 06.00	24 jam
3	16-04-2011, pukul 06.00	17-04-2011, pukul 06.00	24 jam

Sumber : Dokumentasi Penulis, 2011

3.4 Pengambilan Data

Salah satu sumber data dalam penelitian ini adalah data primer, yaitu data yang diperoleh melalui pengukuran langsung oleh peneliti yang bukan merupakan data yang telah ada dan bersifat numeric (data kuantitatif). Pembacaan alat dilakukan setiap 5 detik sesuai dengan Keputusan Menteri Lingkungan Hidup No. 48 Tahun 1996 tentang Baku Tingkat Kebisingan.

Prosedur pengukuran kebisingan dengan menggunakan *Sound Level Meter* sesuai dengan SNI 7231 : 2009, yaitu :

- a. Hidupkan alat ukur kebisingan.
- b. Periksa kondisi baterai, pastikan bahwa keadaan power dalam kondisi baik.
- c. Sesuaikan pembobotan waktu respon alat ukur dengan karakteristik sumber bunyi yang diukur (S untuk sumber bunyi relative konstan atau F untuk sumber bunyi kejut).
- d. Posisikan microphone alat ukur setinggi posisi telinga manusia. Hindari terjadinya refleksi bunyi dari tubuh atau penghalang sumber bunyi.
- e. Arahkan *microphone* alat ukur dengan sumber bunyi sesuai dengan karakteristik *microphone* (*microphone* tegak lurus dengan sumber bunyi, $70^{\circ} - 80^{\circ}$ terhadap sumber bunyi).
- f. Pilih tingkat tekanan bunyi (SPL) atau tingkat tekanan sinambung setara (Leq). Sesuaikanlah dengan tujuan pengukuran.

- g. Catat hasil pengukuran tingakt kebisingan.
- h. Bila alat ukur ukur Sound Level Meter tidak memiliki fasilitas Leq maka dihitung secara manual dengan menggunakan rumus sebagai berikut :

$$L_{eq} = 10 \log \left\{ \frac{1}{T} [(t_1 \times 10^{0,1L_1}) + (t_2 \times 10^{0,1L_2}) + \dots (t_n \times 10^{0,1L_n})] \right\}$$

Dimana :

- L_1 = tingkat tekanan bunyi pada periode t_1
- L_n = tingkat tekanan bunyi pada periode t_n
- T = total waktu pengukuran ($t_1 + t_2 + \dots + t_n$)

Selain itu, dibutuhkan juga data sekunder yang membantu dalam analisa, yaitu berupa jadwal penerbangan pesawat terbang saat penelitian dilaksanakan dan jenis pesawat yang digunakan. Data ini dapat diperoleh dari PT. Angkasa Pura II.

3.5 Populasi dan Sampel

Populasi dan sampel pada penelitian ini adalah :

Populasi (N) : Jumlah keseluruhan obyek yang diteliti, yaitu pesawat terbang yang melakukan *landing* dan *take-off* di Bandar Udara Soekarno-Hatta.

Sampel (n) : Sebagian jumlah objek yang diteliti, yaitu jumlah pesawat terbang yang melakukan *landing* dan *take-off* di Bandar Udara Soekarno-Hatta pada saat penelitian dilangsungkan.

3.6 Variabel Penelitian

Terdapat dua jenis variabel dalam penelitian ini, yaitu variabel bebas dan variabel terikat. Variabel bebas adalah faktor yang menjadi pokok permasalahan yang ingin diteliti. Variabel bebas yang diukur pada penelitian ini adalah jumlah pesawat beserta jenis dan tahun pembuatannya.

Variabel terikat merupakan faktor yang nilainya dianggap bergantung pada variable bebas dan diukur untuk menentukan korelasi sesungguhnya atas kedua jenis variabel tersebut. Variabel terikat dalam penelitian ini adalah hasil pengukuran tingkat kebisingan pada setiap jadwal penerbangan pada saat *landing* dan *take-off*.

3.7 Pengolahan Data

Nilai rata-rata kuadrat tekanan bunyi sinambung setara pada pembobotan A berasal dari sumber bunyi sinambung ataupun tetap pada rentang waktu pengukuran tertentu dengan rumus sebagai berikut :

$$L_{eq} = 10 \log \left\{ \frac{1}{T} [(t_1 \times 10^{0,1L_1}) + (t_2 \times 10^{0,1L_2}) + \dots + (t_n \times 10^{0,1L_n})] \right\}$$

Dimana :

L_1 = tingkat tekanan bunyi pada periode t_1

L_n = tingkat tekanan bunyi pada periode t_n

T = total waktu pengukuran ($t_1 + t_2 + \dots + t_n$)

Sedangkan untuk menghitung kawasan kebisingan digunakan perhitungan sesuai dengan Peraturan Menteri Perhubungan No. KM 13 Tahun 2010. Rumus perhitungan $\overline{dB(A)}$ dan WECPNL untuk kawasan kebisingan adalah sebagai berikut :

$$\text{WECPNL} = \overline{dB(A)} + 10 \log_n N - 27$$

$$\overline{dB(A)} = 10 \log [(1/n) \times \sum_{i=1}^n 10^{Li/10}]$$

$$N = N_2 + 3N_3 + 10(N_1 + N_4)$$

Dimana :

WECPNL = Weighted Equivalent Continuous Perceived Noise Level adalah satu diantara beberapa index tingkat kebisingan pesawat udara yang ditetapkan dan direkomendasikan oleh ICAO.

$\overline{dB(A)}$ = Nilai decibel bobot A rata-rata dari setiap puncak kesibukan pesawat dalam satu hari pengukuran.

n = Jumlah kedatangan dan keberangkatan pesawat udara selama periode 24 jam.

L_i = Bacaan $dB(A)$ tertinggi dari nomor penerbangan pesawat ke i dalam satu hari pengukuran.

N = Jumlah kedatangan dan keberangkatan pesawat udara yang dihitung berdasarkan pemberian bobot yang berbeda untuk pagi, petang, dan malam.

- N₁ = Jumlah kedatangan dan keberangkatan pesawat udara dari jam 00.00 – 07.00.
- N₂ = Jumlah kedatangan dan keberangkatan pesawat udara dari jam 07.00 – 19.00.
- N₃ = Jumlah kedatangan dan keberangkatan pesawat udara dari jam 19.00 – 22.00.
- N₄ = Jumlah kedatangan dan keberangkatan pesawat udara dari jam 22.00 – 00.00.

3.8 Metode Analisa

Metode yang digunakan pada penelitian ini adalah metode analisa statistik karena data yang diperoleh berupa data kuantitatif, yaitu data yang berupa angka atau yang dapat diangkakan. Adapun analisa statistik yang digunakan adalah statistik deskriptif. Analisa statistik deskriptif digunakan karena data kuantitatif yang didapatkan digunakan untuk membantu memaparkan atau menggambarkan keadaan yang sebenarnya dari suatu sampel penelitian.

BAB 4

GAMBARAN UMUM

4.1 Profil Bandara Soekarno-Hatta

Bandar Udara Internasional Soekarno-Hatta (disingkat Soetta) merupakan sebuah Bandar udara utama yang melayani kota Jakarta di Pulau Jawa, Indonesia. Bandar udara ini sering disebut juga Cengkareng dan kode IATA-nya adalah CGK yang merupakan singkatan dari Cengkareng.

Bandar Udara Soekarno Hatta terletak diwilayah administrasi Kelurahan Blendung, Kecamatan Neglasari, Kotamadya Tangerang dan Desa Rawa Rengas, Kecamatan Teluknaga, Kabupaten Tangerang, Pemerintah Propinsi Banten dan jarak sekitar 30 Km dari pusat kota Jakarta. Letak geografis bandar udara pada koordinat $06^{\circ}07'25,877''$ LU dan diantara $106^{\circ}39'40,134''$ BT dengan ketinggian 12,312 meter diatas permukaan laut rata-rata (MSL = Mean Sea Level). Wilayah yang berbatasan langsung dengan Bandara meliputi :

Sebelah Utara	: Rawa Rengas (Teluk Naga)
Sebelah Timur	: Rawa Bokor
Sebelah Selatan	: Blendung
Sebelah Barat	: Selapajang

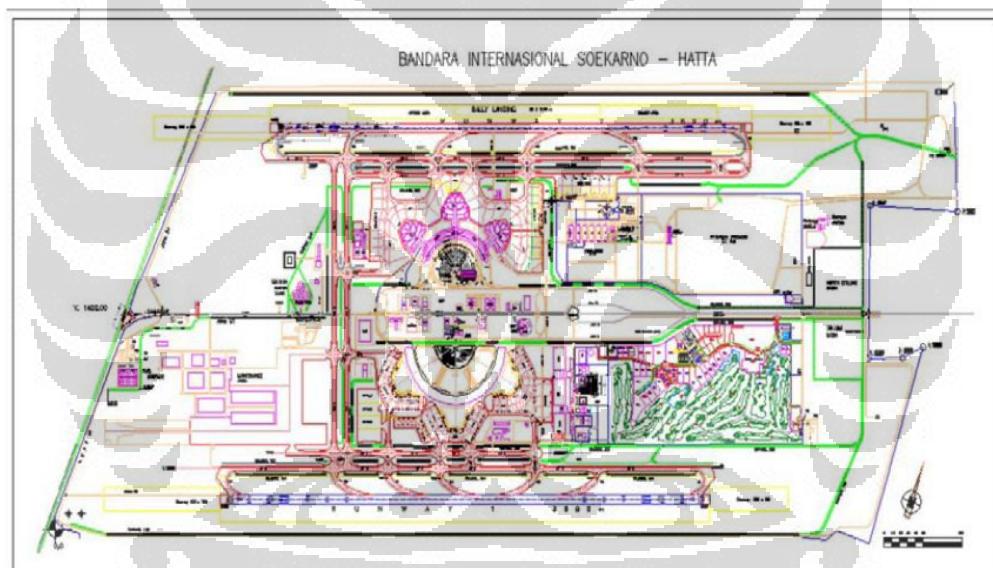
Bandara Soekarno-Hatta memiliki luas 18 km^2 dan memiliki 2 landasan paralel yang dipisahkan oleh 2 taxiway sepanjang 2400 m. Di bandara ini terdapat 2 terminal utama yaitu : 1) Terminal 1, untuk semua penerbangan domestik kecuali penerbangan yang dioperasikan oleh Garuda Indonesia dan Merpati Airlines, dan 2) Terminal 2, melayani semua penerbangan internasional juga domestik oleh Garuda dan Merpati.

Setiap bangunan terminal dibagi menjadi 3 concourse. Terminal 1A, 1B, dan 1C digunakan (kebanyakan) untuk penerbangan domestik oleh maskapai lokal. Terminal 1A melayani penerbangan oleh Lion Air dan Wings Air. Terminal 1B melayani penerbangan oleh Batavia Air, Kartika Airlines, dan Sriwijaya Air. Sedangkan terminal 1C melayani

penerbangan oleh Airfast Indonesia, Indonesia AirAsia, dan Mandala Airlines.

Terminal 2D dan 2E digunakan untuk melayani semua penerbangan internasional maskapai luar. Terminal 2D untuk semua maskapai luar yang dilayani oleh PT Jasa Angkasa Semesta, salah satu kru darat bandara. Terminal 2E untuk maskapai internasional yang dilayani oleh Garuda, termasuk semua penerbangan internasional Garuda dan Merpati. Terminal 2F untuk penerbangan domestik Garuda Indonesia dan Merpati Nusantara Airlines. Sedangkan Terminal 3 dipergunakan oleh dipergunakan oleh pesawat model Airbus A380.

4.2 Gambaran Lokasi Penelitian



Gambar 4.1. Peta Lokasi Bandar Udara Soekarno-Hatta

Sumber : RKL-RPL Bandara Soekarno-Hatta Semester 1 Tahun 2010

Lokasi penelitian dilangsungkan di 4 titik di sekitar Bandara Soekarno-Hatta. Pemilihan lokasi penelitian didasarkan pada pendekatan lokasi pengukuran kebisingan pesawat yang ditentukan oleh ICAO pada dokumen Annex 16 volume 1. ICAO, pada dokumen Annex 16, menjelaskan terdapat 3 titik yang digunakan untuk pengukuran kebisingan, yaitu: 1) Titik sejajar landasan yang berjarak 450 meter dari garis tengah landasan dan merupakan perpanjangan dari batas *roll away* (lepas-landas), atau biasa disebut *lateral full-power point*; 2) Titik referensi terbang atau *flyover reference point*, yang merupakan titik dari perpanjangan garis

tengah landasan pada jarak 6,5 km; dan 3) Titik referensi kedatangan atau *approach reference point* atau yang merupakan titik dari perpanjangan garis tengah landasan yang berjarak 2 km terhitung dari batas *touchdown* (pendaratan).



Gambar 4.2. Gambaran Lokasi Pengukuran Kebisingan

Sumber : Citra Google Earth, 2010

Lokasi penelitian yang dimaksud yaitu :

- a. Titik 1 berada di sebelah barat bandara, yang terletak pada koordinat : S. $06^{\circ} 07' 48,0''$ dan E. $106^{\circ} 36' 59''$.
- b. Titik 2 berada di sebelah timur bandara, yang terletak pada koordinat : S. $06^{\circ} 07' 17''$ dan E. $106^{\circ} 41' 22''$.
- c. Titik 3 berada di sebelah utara bandara, yang terletak pada koordinat : S. $06^{\circ} 06' 16''$ dan E. $106^{\circ} 40' 5''$.
- d. $06^{\circ} 08' 58''$ dan E. $106^{\circ} 38' 24''$.



Gambar 4.3. Lokasi Pengukuran Kebisingan, Titik 1 (Kiri Atas), Titik 2 (Kanan Atas), Titik 3 (Kiri Bawah), Titik 4 (Kanan Bawah).

Sumber : Dokumentasi Penulis, 2011

4.3 Gambaran Zona Kebisingan Bandara Soekarno-Hatta

Berdasarkan Keppres No. 64 Tahun 1986, gambaran kawasan kebisingan di Bandara Soekarno-Hatta adalah sebagai berikut :



Gambar 4.4. Batas Kawasan Kebisingan Bandar Udara Soekarno-Hatta

Sumber : RKL-RPL Bandara Soekarno-Hatta Semester 1 Tahun 2010

Terdapat 3 tingkat (level) kawasan kebisingan di Bandara Soekarno-Hatta. Ketiga tingkat tersebut adalah sebagai berikut :

- Batas Kawasan Kebisingan Tingkat 1
 $70 \leq \text{WECPNL} < 75$. Di kawasan ini tidak diperkenankan untuk bangunan sekolah dan rumah sakit.
- Batas Kawasan Kebisingan Tingkat 2
 $75 \leq \text{WECPNL} < 80$. Di kawasan ini tidak diperkenankan untuk bangunan sekolah, rumah sakit dan rumah tinggal.
- Batas Kawasan Kebisingan Tingkat 3
 $80 \leq \text{WECPNL}$. Di kawasan ini dapat dimanfaatkan untuk membangun bangunan atau fasilitas bandara yang dilengkapi pemasangan insulasi suara.

BAB 5

HASIL DAN PEMBAHASAN

5.1 Fluktuasi Tingkat Kebisingan

Berdasarkan hasil pengukuran kebisingan di keempat titik pengukuran di sekitar Bandara Soekarno-Hatta bisa diketahui fluktuasi tingkat kebisingan pesawat. Mengetahui fluktuasi tingkat kebisingan pesawat bertujuan untuk mendapatkan pola tingkat kebisingan selama 3 hari pengukuran. Hari pengukuran kebisingan pertama dan kedua yaitu Senin dan Rabu bisa mewakili pola tingkat kebisingan pesawat pada hari kerja, sedangkan hari pengukuran ketiga yaitu hari Sabtu bisa mewakili pola tingkat kebisingan pada hari libur.

Tabel 5.1. Fluktuasi Tingkat Kebisingan Hari Ke 1

Jam	Leq Rata-Rata				Rata -Rata Leq	Pergerakan Pesawat
	Titik 1	Titik 2	Titik 3	Titik 4		
06.00 - 07.00	61,0	55,8	53,8	62,8	58,3	52
07.00 - 08.00	59,6	62,9	49,2	61,5	58,3	49
08.00 - 09.00	58,6	64,3	50,7	60,5	58,5	58
09.00 - 10.00	62,1	58,3	48,0	59,2	56,9	52
10.00 - 11.00	61,1	59,7	48,0	60,3	57,3	47
11.00 - 12.00	61,3	59,5	47,5	59,3	56,9	56
12.00 - 13.00	58,9	58,2	49,6	59,1	56,4	48
13.00 - 14.00	58,2	59,9	48,5	60,6	56,8	56
14.00 - 15.00	58,3	61,4	48,7	60,1	57,1	64
15.00 - 16.00	59,4	70,1	57,4	60,2	61,8	69
16.00 - 17.00	66,5	66,0	63,1	64,9	65,2	54
17.00 - 18.00	60,8	62,3	62,7	64,3	62,5	59
18.00 - 19.00	59,2	64,1	59,0	65,1	61,8	60
19.00 - 20.00	58,6	58,9	60,3	64,5	60,6	53
20.00 - 21.00	58,7	57,5	56,1	59,7	58,0	44
21.00 - 22.00	57,3	56,1	53,7	59,6	56,7	28
22.00 - 23.00	51,8	55,0	52,7	56,3	54,0	21
23.00 - 00.00	52,8	53,2	52,7	54,4	53,3	16
00.00 - 01.00	50,0	51,5	51,7	54,5	51,9	6
01.00 - 02.00	48,1	49,8	51,6	54,5	51,0	5
02.00 - 03.00	49,7	49,5	52,1	55,3	51,7	2
03.00 - 04.00	48,3	49,7	48,0	58,9	51,2	0
04.00 - 05.00	53,4	49,9	52,9	64,1	55,1	0
05.00 - 06.00	61,3	55,9	52,2	58,1	56,9	10

Sumber : Pengolahan Penulis, 2011

Tabel 5.2. Fluktuasi Tingkat Kebisingan Hari Ke 2

Jam	Leq Rata-Rata				Rata -Rata	Pergerakan Pesawat
	Titik 1	Titik 2	Titik 3	Titik 4		
06.00 - 07.00	60,4	55,9	57,8	63,1	59,3	54
07.00 - 08.00	57,7	60,6	50,8	60,0	57,3	49
08.00 - 09.00	60,3	59,4	52,0	60,3	58,0	52
09.00 - 10.00	59,7	62,1	52,2	59,8	58,4	60
10.00 - 11.00	58,0	56,9	47,6	61,2	55,9	55
11.00 - 12.00	59,2	56,3	47,4	61,7	56,2	53
12.00 - 13.00	58,7	57,7	47,7	57,1	55,3	53
13.00 - 14.00	59,0	58,1	48,6	58,6	56,1	62
14.00 - 15.00	60,1	57,1	51,4	57,4	56,5	48
15.00 - 16.00	58,6	59,8	50,2	60,1	57,2	60
16.00 - 17.00	60,2	62,9	50,1	60,8	58,5	68
17.00 - 18.00	59,9	63,6	52,6	62,5	59,6	58
18.00 - 19.00	59,4	62,0	55,5	63,5	60,1	56
19.00 - 20.00	60,5	61,4	60,2	61,9	61,0	63
20.00 - 21.00	55,9	59,4	55,4	59,5	57,5	37
21.00 - 22.00	53,6	56,5	54,1	58,7	55,7	25
22.00 - 23.00	53,1	54,9	53,5	58,0	54,8	19
23.00 - 00.00	52,7	53,0	53,6	55,1	53,6	16
00.00 - 01.00	51,7	51,1	52,8	49,8	51,4	5
01.00 - 02.00	47,0	50,9	53,4	50,8	50,5	8
02.00 - 03.00	44,7	49,4	50,5	51,0	48,9	1
03.00 - 04.00	47,2	49,7	50,5	53,0	50,1	2
04.00 - 05.00	48,3	49,9	52,5	67,3	54,5	0
05.00 - 06.00	60,4	49,9	51,4	56,5	54,6	8

Sumber : Pengolahan Penulis, 2011

Tabel 5.3. Fluktuasi Tingkat Kebisingan Hari Ke 3

Jam	Leq Rata-Rata				Rata -Rata	Pergerakan Pesawat
	Titik 1	Titik 2	Titik 3	Titik 4		
06.00 - 07.00	59,8	61,5	58,4	63,9	60,9	52
07.00 - 08.00	59,5	61,7	50,7	62,8	58,7	46
08.00 - 09.00	58,0	64,3	51,2	61,4	58,7	54
09.00 - 10.00	60,5	57,5	49,6	58,9	56,6	55
10.00 - 11.00	58,2	58,6	49,0	60,4	56,6	56
11.00 - 12.00	59,8	58,6	50,0	58,2	56,7	63
12.00 - 13.00	61,1	56,9	46,4	57,0	55,3	46
13.00 - 14.00	59,3	59,2	45,7	57,2	55,3	60
14.00 - 15.00	58,9	60,4	46,4	57,1	55,7	50
15.00 - 16.00	58,0	69,9	49,1	60,4	59,3	64
16.00 - 17.00	59,6	65,5	58,8	63,0	61,7	61
17.00 - 18.00	61,2	60,9	56,4	65,1	60,9	57
18.00 - 19.00	58,1	63,5	61,0	63,2	61,4	59
19.00 - 20.00	58,0	58,1	58,9	61,3	59,1	58
20.00 - 21.00	55,5	56,9	55,4	73,0	60,2	38
21.00 - 22.00	54,5	55,5	56,8	71,4	59,5	20
22.00 - 23.00	47,6	54,1	53,5	69,8	56,2	22
23.00 - 00.00	49,6	52,5	52,2	62,8	54,3	16
00.00 - 01.00	48,3	52,4	51,1	62,7	53,6	3
01.00 - 02.00	47,7	49,8	50,1	63,9	52,9	4
02.00 - 03.00	45,6	49,2	50,9	54,3	50,0	2
03.00 - 04.00	48,1	55,0	50,2	51,6	51,2	2
04.00 - 05.00	50,1	50,8	53,0	65,4	54,8	1
05.00 - 06.00	56,6	57,8	54,0	57,2	56,4	14

Sumber : Pengolahan Penulis, 2011

Berdasarkan tabel-tabel diatas, dapat diketahui fluktuasi tingkat kebisingan pesawat di lingkungan ambien dan juga fluktuasi pergerakan pesawat terbang pada saat penelitian dilakukan. Fluktuasi tingkat kebisingan direpresentasikan dari nilai Leq rata-rata dari semua titik pengukuran kebisingan. Hal ini dimaksudkan agar nilai tingkat kebisingan dapat dianggap cukup mewakili nilai kebisingan pesawat pada lingkungan ambien (yaitu pada masing-masing titik pengukuran).

Dari tabel diatas, dapat dilihat bahwa pada hari pertama nilai kebisingan maksimum terjadi pada pukul 16.00 – 17.00 dengan nilai 65,2 dB(A) dan nilai kebisingan minimum terjadi pada pukul 01.00 – 02.00 dengan nilai 51 dB (A). Sedangkan, frekuensi penerbangan terbesar terjadi pada pukul 15.00 – 16.00 yaitu

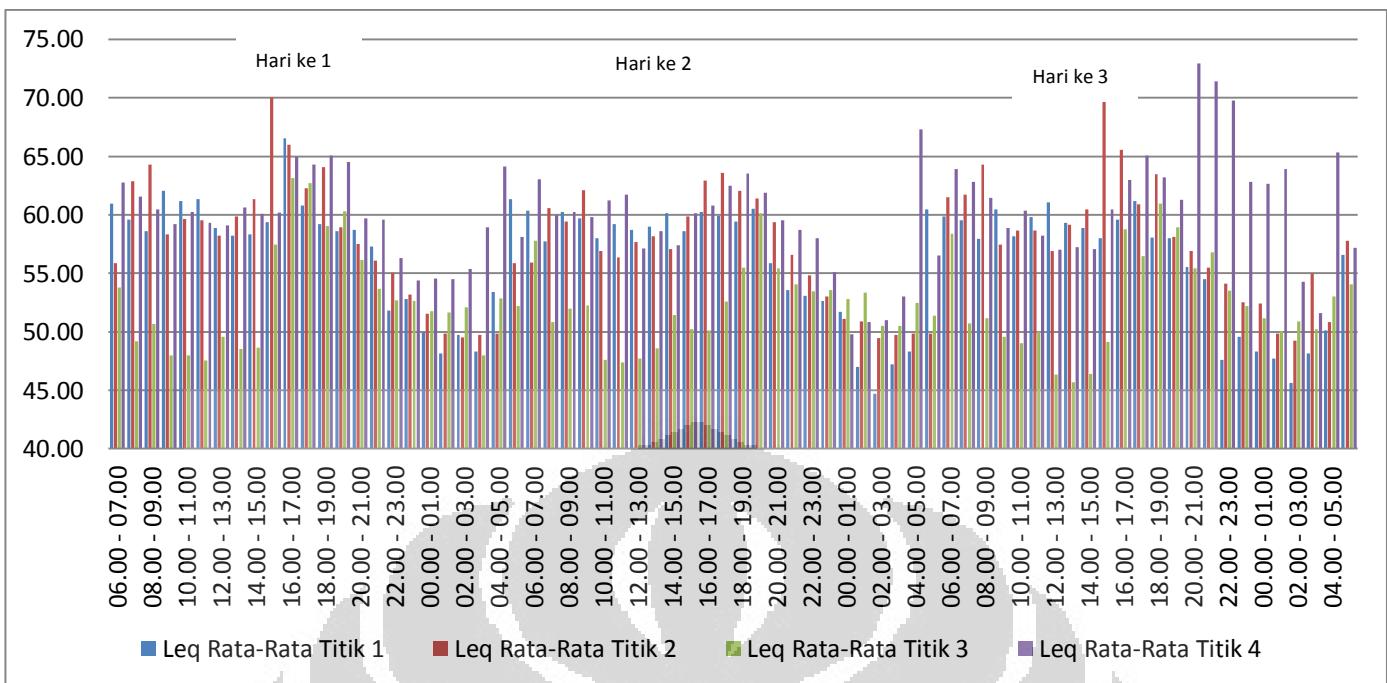
sebanyak 69 pergerakan pesawat dan frekuensi penerbangan terkecil terjadi pada pukul 02.00 - 03.00 yaitu sebanyak 2 pergerakan pesawat.

Pada hari pengukuran kedua, didapatkan nilai kebisingan maksimum sebesar 61 dB(A) pada interval pukul 19.00 – 20.00 dan nilai kebisingan minimum adalah sebesar 48,9 dB (A) yang terjadi pada pukul 02.00 – 03.00. Sementara itu, frekuensi penerbangan terbesar terjadi pada pukul 16.00 – 17.00 yaitu sebanyak 68 pergerakan pesawat dan frekuensi penerbangan terkecil terjadi pada pukul 02.00 - 03.00 yaitu sebanyak 1 pergerakan pesawat.

Pada hari pengukuran ketiga, didapatkan nilai kebisingan maksimum sebesar 61,7 dB(A) pada interval pukul 16.00 – 17.00. Sedangkan nilai kebisingan minimum adalah sebesar 50 dB (A) yang terjadi pada pukul 02.00 – 03.00. Adapun frekuensi penerbangan terbesar terjadi pada pukul 15.00 – 16.00 yang mencapai 64 pergerakan pesawat dan frekuensi penerbangan terkecil terjadi pada pukul 04.00 - 05.00 yaitu sebanyak 1 pergerakan pesawat.

Berdasarkan pengamatan tersebut, dapat disimpulkan bahwa pola frekuensi penerbangan pada ketiga hari pengukuran adalah sama. Frekuensi penerbangan terbesar selalu terjadi pada siang hari yaitu pada pukul 15.00 – 17.00 dan frekuensi penerbangan terkecil selalu terjadi pada malam hari yaitu pada pukul 02.00 – 05.00. Namun, hal tersebut tidak menunjukkan bahwa pada saat tersebut juga terjadi tingkat kebisingan maksimum dan minimum. Ini disebabkan saat terjadinya nilai kebisingan maksimum dan minimum tidak pernah sama dengan saat terjadinya frekuensi penerbangan terbesar dan terkecil. Nilai kebisingan maksimum dan minimum lebih dipengaruhi oleh jenis pesawat yang melintas. Pesawat yang memiliki mesin jet yang besar akan mengeluarkan kebisingan yang besar dan pesawat yang memiliki mesin jet yang kecil akan mengeluarkan kebisingan yang kecil.

Adapun untuk mengetahui pola tingkat kebisingan pada ketiga hari pengukuran dapat dilihat pada grafik berikut ini.

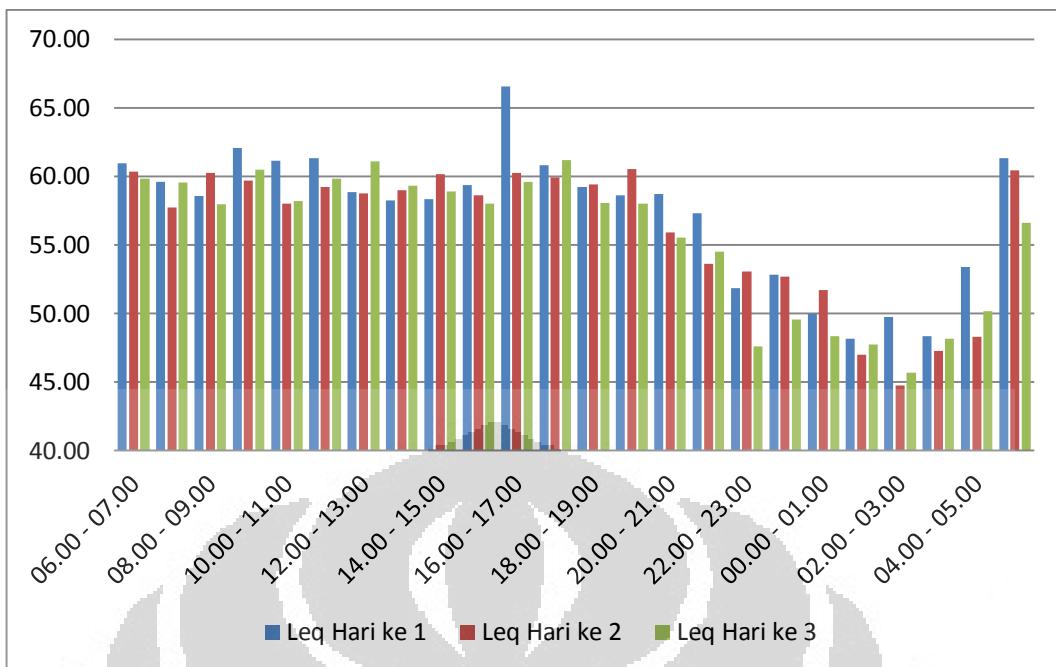


Gambar 5.1. Fluktuasi Tingkat Kebisingan Pada Ketiga Hari Pengukuran

Sumber : Pengolahan Penulis, 2011

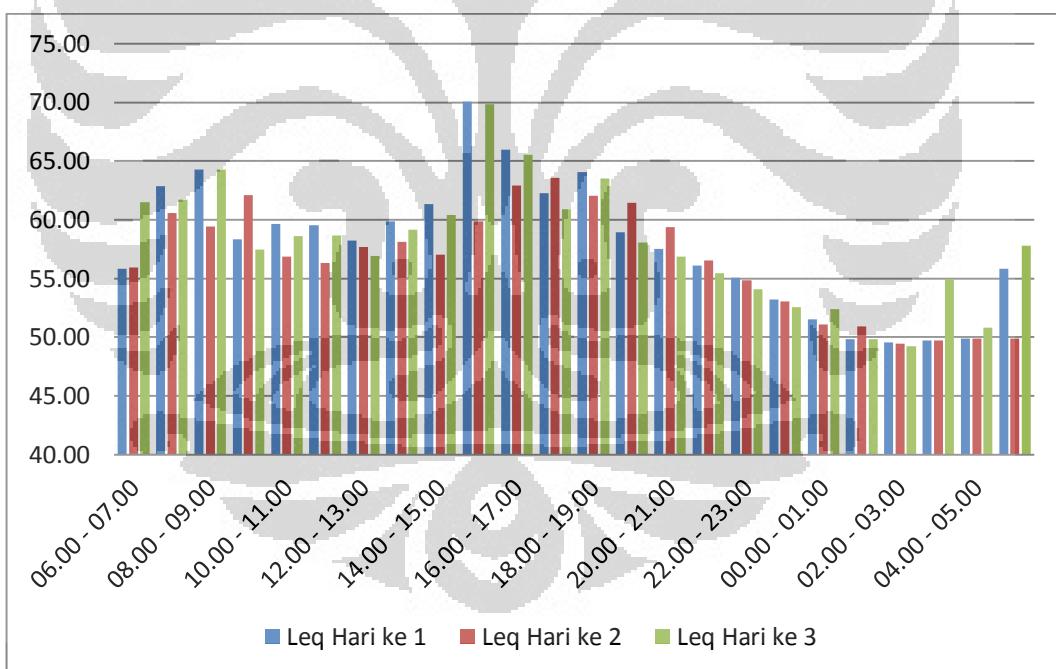
Berdasarkan grafik fluktuasi tingkat kebisingan pada ketiga hari pengukuran diatas diketahui bahwa pola tingkat kebisingan pada semua hari pengukuran berkisar antara 50 – 60 dB(A).

Adapun pola tingkat kebisingan pada masing-masing titik pengukuran pada ketiga hari pengukuran dapat dilihat pada grafik berikut ini.



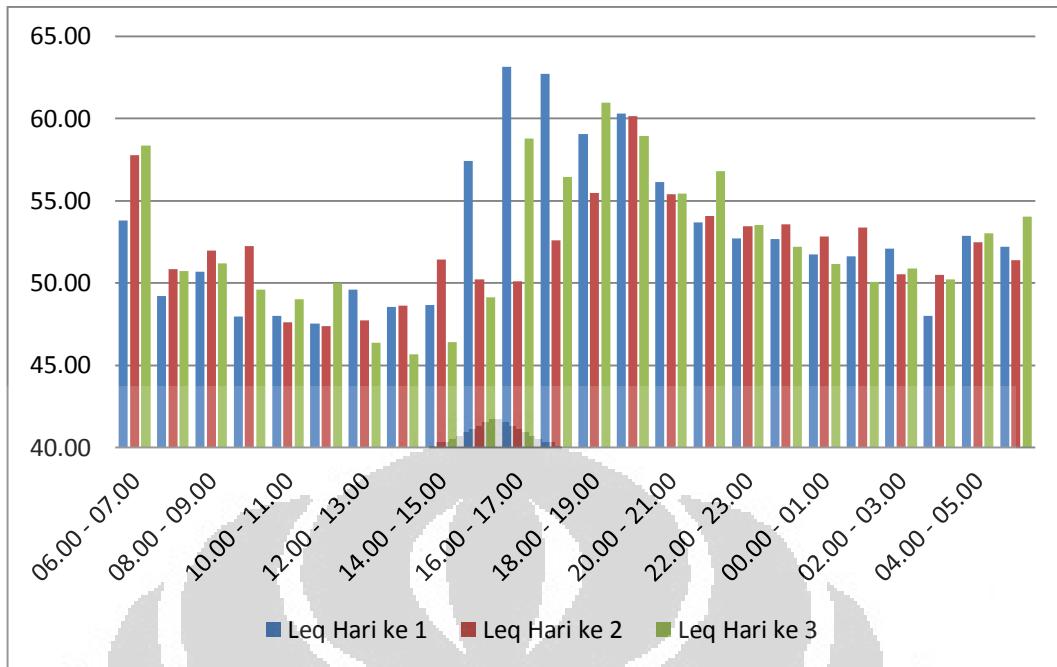
Gambar 5.2. Fluktuasi Tingkat Kebisingan Di Titik 1

Sumber : Pengolahan Penulis, 2011



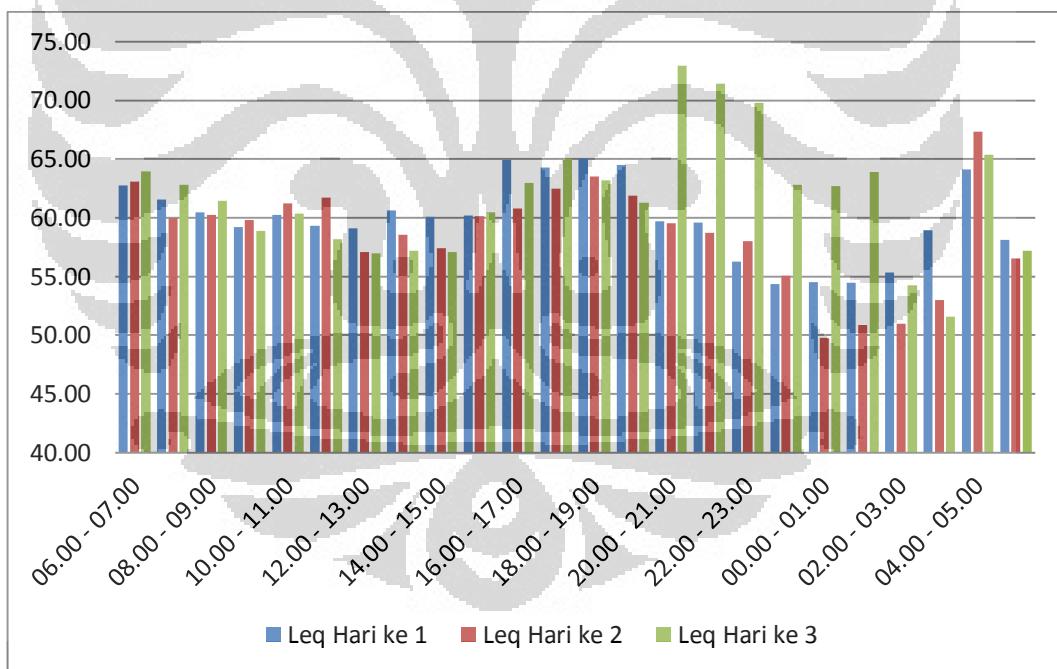
Gambar 5.3. Fluktuasi Tingkat Kebisingan Di Titik 2

Sumber : Pengolahan Penulis, 2011



Gambar 5.4. Fluktuasi Tingkat Kebisingan Pesawat Di Titik 3

Sumber : Pengolahan Penulis, 2011



Gambar 5.5. Fluktuasi Tingkat Kebisingan Di Titik 4

Sumber : Pengolahan Penulis, 2011

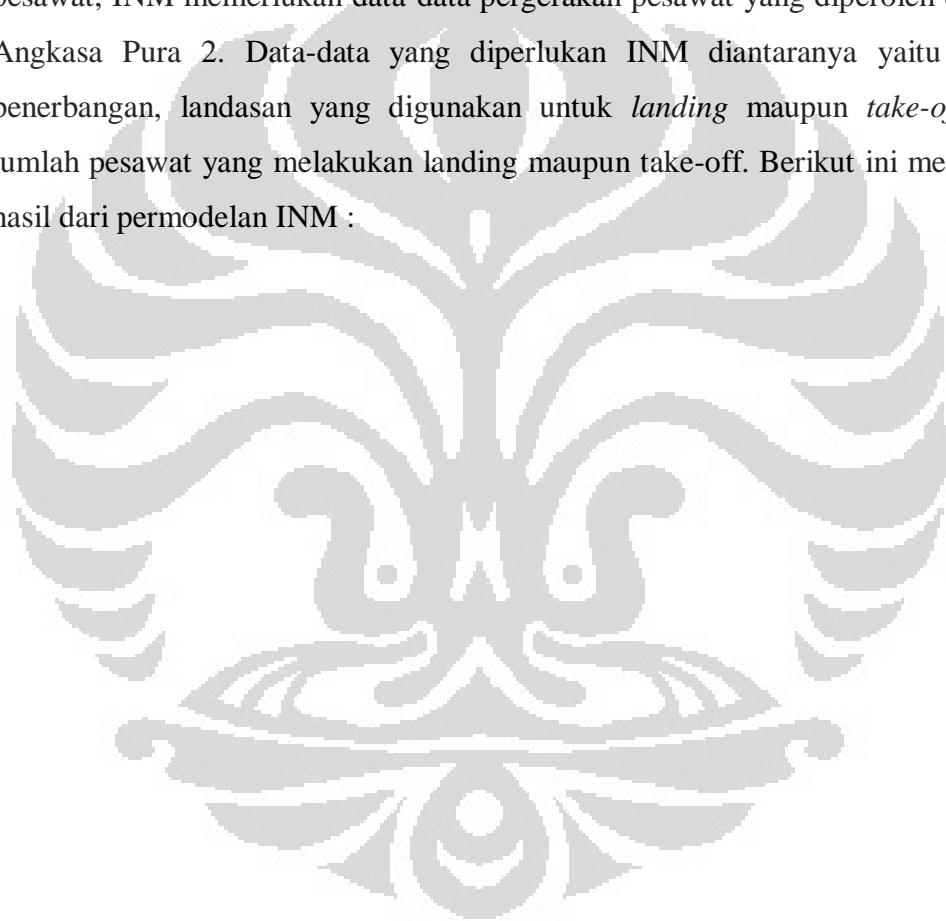
Berdasarkan pengamatan pada grafik-grafik diatas, dapat disimpulkan bahwa tingkat kebisingan maksimum pada ketiga hari pengukuran terjadi pada waktu sore hari dengan kisaran waktu berkisar antara pukul 16.00 – 20.00.

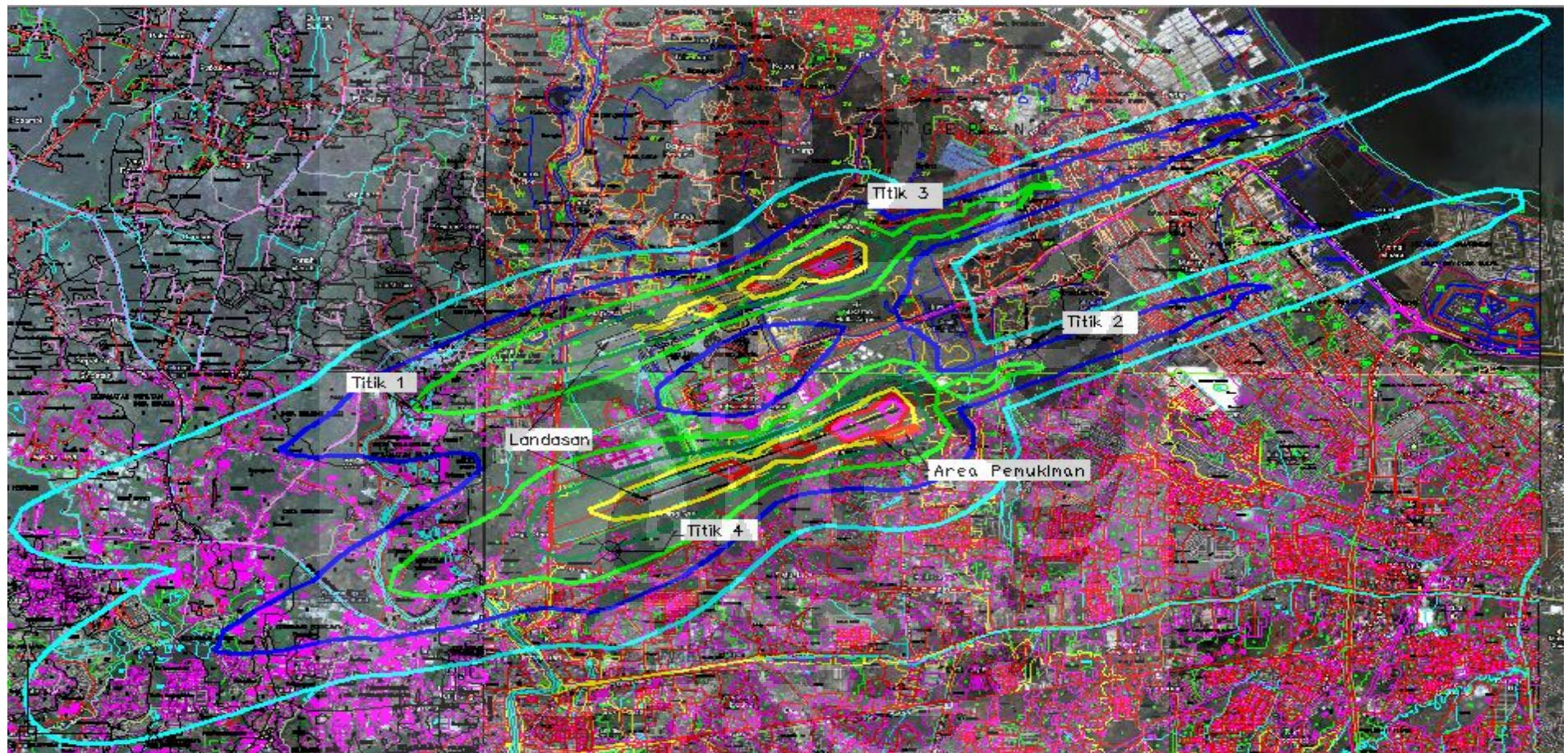
sedangkan, tingkat kebisingan maksimum terjadi pada malam hari yaitu pada kisaran waktu 01.00 – 03.00.

Dengan demikian, dapat disimpulkan bahwa pola tingkat kebisingan yang terjadi akibat aktivitas pesawat pada hari kerja maupun hari libur adalah sama. Pola tingkat kebisingan tersebut memiliki nilai kebisingan maksimum pada sore hari dan mencapai nilai minimum pada malam hari.

5.2 Hasil Peta Kontur Kebisingan Dengan INM

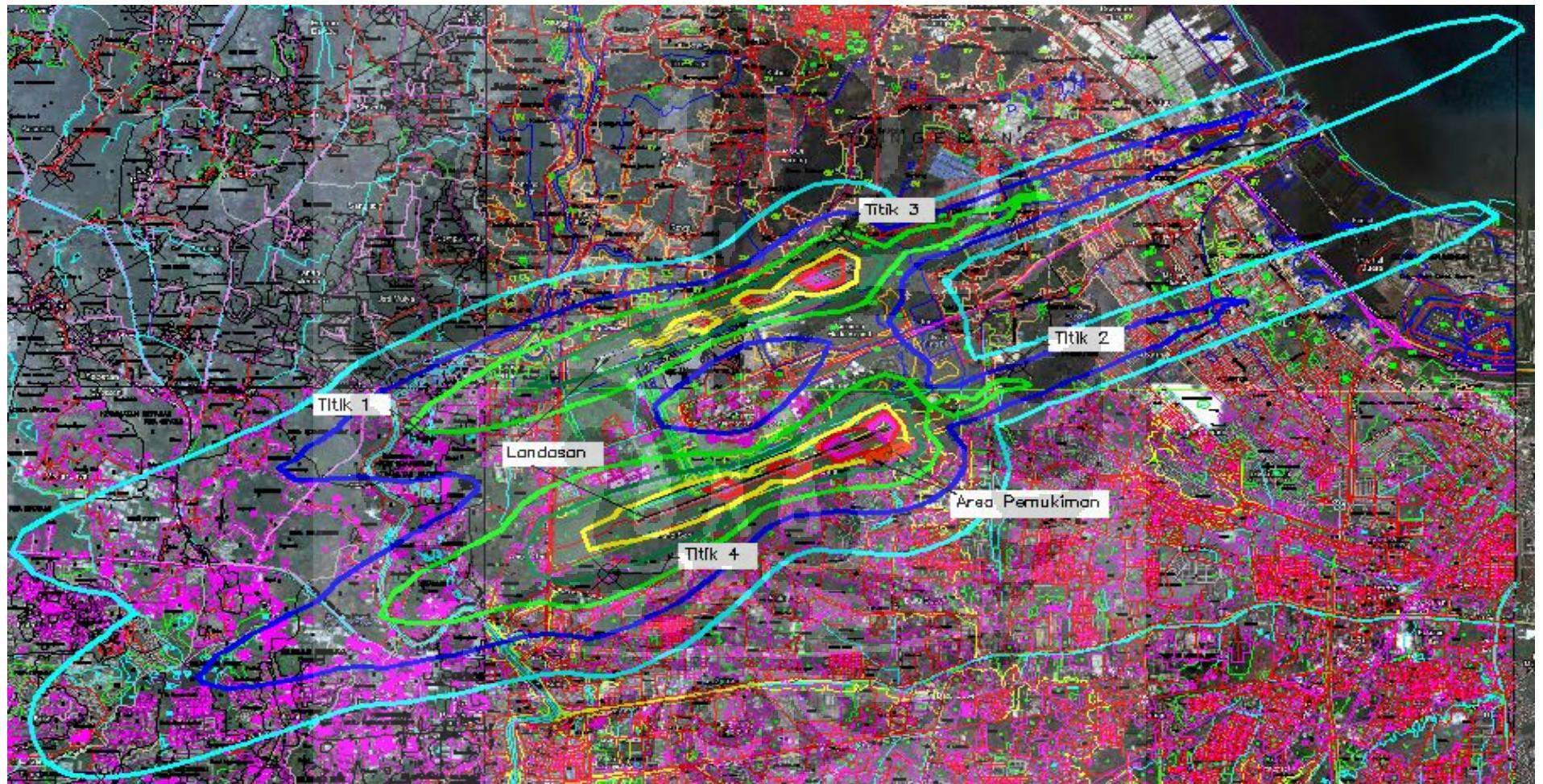
Untuk bisa membuat peta kontur kebisingan dari sumber kebisingan pesawat, INM memerlukan data-data pergerakan pesawat yang diperoleh dari PT. Angkasa Pura 2. Data-data yang diperlukan INM diantaranya yaitu : Rute penerbangan, landasan yang digunakan untuk *landing* maupun *take-off*, serta jumlah pesawat yang melakukan landing maupun take-off. Berikut ini merupakan hasil dari permodelan INM :





Gambar 5.6. Peta Kontur Kebisingan Hari ke 1

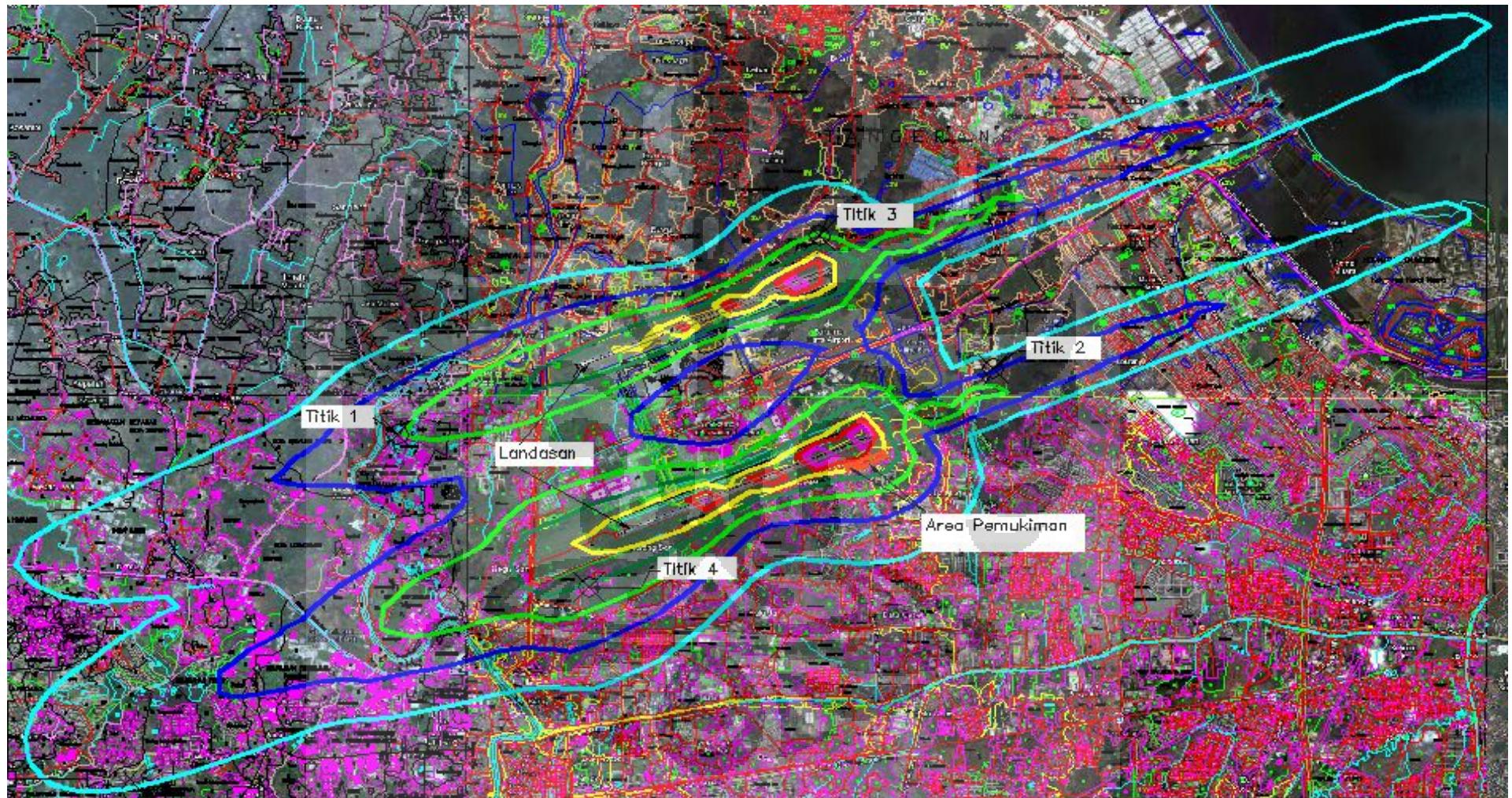
Sumber : Pengolahan Penulis, 2011



Gambar 5.7. Peta Kontur Kebisingan Hari ke 2

Sumber : Pengolahan Penulis, 2011

Universitas Indonesia



Gambar 5.8. Peta Kontur Kebisingan Hari ke 3

Sumber : Pengolahan Penulis, 2011

Universitas Indonesia

Keterangan gambar :

- : kontur kebisingan pada level 55 WECPNL
- : kontur kebisingan pada level 60 WECPNL
- : kontur kebisingan pada level 65 WECPNL
- : kontur kebisingan pada level 70 WECPNL
- : kontur kebisingan pada level 75 WECPNL
- : kontur kebisingan pada level 80 WECPNL
- : kontur kebisingan pada level > 85 WECPNL
- : Area pemukiman

Berdasarkan Peraturan Menteri Perhubungan No. KM 13 Tahun 2010, terdapat 3 kawasan kebisingan di sekitar area Bandara Soekarno-Hatta yaitu :

- Kawasan kebisingan tingkat 1, merupakan wilayah sekitar bandara yang memiliki nilai tingkat kebisingan lebih besar atau sama dengan 70 WECPNL sampai dengan lebih kecil 75 WECPNL ($70 \leq \text{WECPNL} < 75$).
- Kawasan kebisingan tingkat 2, merupakan wilayah di sekitar bandara yang memiliki nilai tingkat kebisingan lebih besar atau sama dengan 75 WECPNL sampai dengan lebih kecil dari 80 WECPNL ($75 \leq \text{WECPNL} < 80$).
- Kawasan kebisingan tingkat 3, merupakan wilayah di sekitar bandara yang nilai tingkat kebisingan lebih besar atau sama dengan 80 WECPNL ($\text{WECPNL} \geq 80$)

Untuk menghitung luasan kawasan kebisingan pada peta kontur diatas digunakan *software Autocad 2007*. Luasan kawasan kebisingan per hari berdasarkan model INM diatas adalah sebagai berikut :

- Hari ke 1
Luas kawasan kebisingan tingkat 1 = $4.190.901,375 \text{ m}^2$.
Luas kawasan kebisingan tingkat 2 = $2.010.140,297 \text{ m}^2$.
Luas kawasan kebisingan tingkat 3 = $537.626,9399 \text{ m}^2$.
- Hari ke 2

Luas kawasan kebisingan tingkat 1 = 4.240.682,47 m².

Luas kawasan kebisingan tingkat 2 = 2.150.579,713 m².

Luas kawasan kebisingan tingkat 3 = 564.481,065 m².

- Hari ke 3

Luas kawasan kebisingan tingkat 1 = 4.137.173,769 m².

Luas kawasan kebisingan tingkat 2 = 1.942.812,227 m².

Luas kawasan kebisingan tingkat 3 = 521.796,9853 m².

Agar dapat dimanfaatkan sebagai bahan evaluasi, maka perlu dihitung nilai rata-rata, maksimum, dan minimum dari luasan kawasan kebisingan pada ketiga hari pengukuran.

Tabel 5.4. Nilai Rata-Rata, Maksimum, dan Minimum Per Kawasan Kebisingan

Hari	Luas Kawasan Kebisingan (m ²)		
	Rata-Rata	Maksimum	Minimum
Kawasan Kebisingan Tingkat 1	4.189.585,871	4.240.682,47	4.137.173,769
Kawasan Kebisingan Tingkat 2	2.034.510,746	2.150.579,713	1.942.812,227
Kawasan Kebisingan Tingkat 3	541.301,6634	564.481,065	521.796,9853

Sumber : Pengolahan Penulis, 2011

Berdasarkan pengamatan pada peta kontur kebisingan, diketahui bahwa luasan kawasan kebisingan terbesar terjadi pada hari pengukuran ke 2. Hal ini dimungkinkan karena pada hari kedua tersebut juga merupakan hari dengan jumlah penerbangan terbesar yaitu sebanyak 912 penerbangan.

5.3 Perhitungan WECPNL

Nilai WECPNL didapatkan dari perhitungan sesuai dengan Permenhub No. KM 13 Tahun 2010. Salah satu parameter perhitungan WECPNL bisa didapatkan dari hasil pengukuran kebisingan di lapangan. Pengukuran dilakukan secara bersamaan di 4 titik yang saling menyilang. Titik tersebut sebagai perwakilan dari titik yang mengelilingi Bandara Soekarno-Hatta. Titik pertama berada di sebelah barat bandara, titik kedua berada di sebelah timur bandara, titik ketiga berada di sebelah utara bandara, dan titik keempat berada di sebelah selatan bandara.

Rumus yang digunakan untuk perhitungan ini adalah :

$$\begin{aligned}
 \text{WECPNL} &= \overline{dB(A)} + 10 \log_n N - 27 \\
 \overline{dB(A)} &= 10 \log [(1/n) \times \sum_{i=1}^n 10^{Li/10}] \\
 N &= N_2 + 3N_3 + 10(N_1 + N_4)
 \end{aligned}$$

Dimana :

- WECPNL = Weighted Equivalent Continuous Perceived Noise Level adalah satu diantara beberapa index tingkat kebisingan pesawat udara yang ditetapkan dan direkomendasikan oleh ICAO.
- $\overline{dB(A)}$ = Nilai decibel bobot A rata-rata dari setiap puncak kesibukan pesawat dalam satu hari pengukuran.
- n = Jumlah kedatangan dan keberangkatan pesawat udara selama periode 24 jam.
- Li = Bacaan dB(A) tertinggi dari nomor penerbangan pesawat ke i dalam satu hari pengukuran.
- N = Jumlah kedatangan dan keberangkatan pesawat udara yang dihitung berdasarkan pemberian bobot yang berbeda untuk pagi, petang, dan malam.
- N_1 = Jumlah kedatangan dan keberangkatan pesawat udara dari jam 00.00 – 07.00.
- N_2 = Jumlah kedatangan dan keberangkatan pesawat udara dari jam 07.00 – 19.00.
- N_3 = Jumlah kedatangan dan keberangkatan pesawat udara dari jam 19.00 – 22.00.
- N_4 = Jumlah kedatangan dan keberangkatan pesawat udara dari jam 22.00 – 00.00.

Nilai n, N, N_1 , N_2 , N_3 , N_4 didapatkan dari pengolahan data jadwal penerbangan yang didapatkan dari PT. Angkasa Pura 2. Berikut adalah nilainya :

Tabel 5.5. Parameter Perhitungan WECPNL

Hari	N_1	N_2	N_3	N_4	N	n
1	76	671	125	37	2176	909
2	78	674	126	34	2172	912
3	78	672	116	37	2170	903

Sumber : Pengolahan Penulis, 2011

Sedangkan nilai Li adalah nilai Leq tertinggi pada periode siang, sore, dan malam. Berikut adalah nilai Li per titik per hari :

- Hari ke 1

Tabel 5.6. Nilai Li Per Periode Hari ke 1

Periode	Titik 1	Titik 2	Titik 3	Titik 4
Siang (07.00 – 19.00)	85.9	82.8	70.7	84.5
Sore (19.00 – 22.00)	79.2	72.7	68.7	82.1
Malam (22.00 – 07.00)	75.5	71.4	65.9	79.9

Sumber : Pengolahan Penulis, 2011

- Hari ke 2

Tabel 5.7. Nilai Li Per Periode Hari ke 2

Periode	Titik 1	Titik 2	Titik 3	Titik 4
Siang (07.00 – 19.00)	87.6	79.2	66.8	84.1
Sore (19.00 – 22.00)	80.4	73.6	70.3	80.1
Malam (22.00 – 07.00)	86	71.4	75.3	82.7

Sumber : Pengolahan Penulis, 2011

- Hari ke 3

Tabel 5.8. Nilai Li Per Periode Hari ke 3

Periode	Titik 1	Titik 2	Titik 3	Titik 4
Siang (07.00 – 19.00)	84.8	82.6	73.5	86.8
Sore (19.00 – 22.00)	75.3	72.7	71.6	91.3
Malam (22.00 – 07.00)	74.3	81.8	69.4	83.3

Sumber : Pengolahan Penulis, 2011

Berdasarkan data-data diatas maka dapat dihitung nilai $\overline{dB(A)}$ dan WECPNL per titik per hari. Berdasarkan hasil perhitungan, didapatkan nilai $\overline{dB(A)}$ dan WECPNL sebagai berikut :

Tabel 5. 9. Nilai $\overline{dB}(A)$ Dan WECPNL Pada Ketiga Hari Pengukuran

Hari	Titik	Nilai $\overline{dB}(A)$	Nilai WECPNL
1	1	57.47	63.846
	2	53.897	60.273
	3	44.04	50.416
	4	57.75	64.126
2	1	60.747	67.115
	2	51.188	57.556
	3	47.336	53.7
	4	57.768	64.136
3	1	56.04	62.4
	2	55.908	62.273
	3	47.028	53.393
	4	63.542	69.906

Sumber : Pengolahan Penulis, 2011

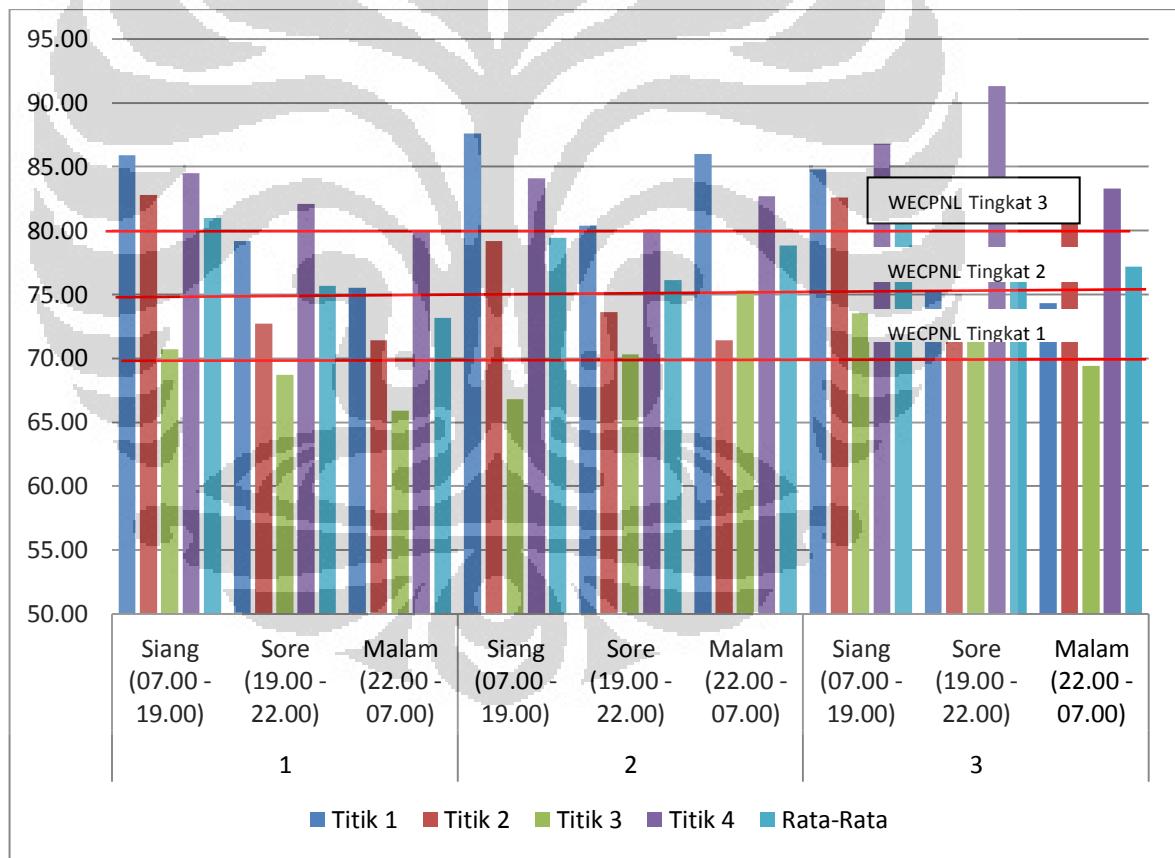
Berdasarkan Permenhub No. KM 13 Tahun 2010 diketahui baku mutu tingkat kebisingan pesawat berdasarkan nilai WECPNL. Pada kawasan kebisingan tingkat 1 baku mutunya adalah $70 \leq \text{WECPNL} < 75$. Kawasan kebisingan tingkat 2 baku mutunya adalah $75 \leq \text{WECPNL} < 80$. Dan kawasan kebisingan tingkat 3 baku mutunya adalah $\text{WECPNL} \geq 80$.

Untuk mengidentifikasi tingkat kebisingan pada masing-masing titik pengukuran yang melampaui baku mutu tingkat kebisingannya dapat digunakan nilai L_i yang merupakan representasi dari nilai tingkat kebisingan maksimum. Berikut ini adalah tabel yang menggambarkan distribusi nilai L_i terhadap baku mutu tingkat kebisingan (dalam interval WECPNL).

Tabel 5.10. Distribusi Nilai Li Berdasarkan WECPNL

Hari	Titik	Nilai L_i (dB)					
		Siang (07.00-19.00)		Sore (19.00-22.00)		Malam (22.00-07.00)	
1	1	85.9	81.0	79.2	75.7	75.5	73.2
	2	82.8		72.7		71.4	
	3	70.7		68.7		65.9	
	4	84.5		82.1		79.9	
2	1	87.6	79.4	80.4	76.1	86.0	78.9
	2	79.2		73.6		71.4	
	3	66.8		70.3		75.3	
	4	84.1		80.1		82.7	
3	1	84.8	81.9	75.3	77.7	74.3	77.2
	2	82.6		72.7		81.8	
	3	73.5		71.6		69.4	
	4	86.8		91.3		83.3	
Minimum – Maksimum		66.8 – 87.6	68.7 – 91.3		65.9 – 86.0		
Rata-Rata		80.77	76.5		76.4		

Sumber : Pengolahan Penulis, 2011



Gambar 5.9. Distribusi Nilai Li Berdasarkan WECPNL

Sumber : Pengolahan Penulis, 2011

Berdasarkan tabel dan grafik diatas dapat disimpulkan bahwa distribusi nilai Li pada periode siang sebagian besar berada pada kategori WECPNL tingkat

3 ($WECPNL \geq 80$). Sedangkan untuk periode sore dan malam sebagian besar berada pada kategori WECPNL tingkat 2 ($75 \leq WECPNL < 80$). Nilai terendah Li masih berada di bawah baku mutu WECPNL tingkat 1 yaitu sebesar 65,9 dB (A) dan nilai terbesar Li berada diatas baku mutu WECPNL tingkat 3 dengan nilai mencapai 91,3 dB(A).

5.4 Perbandingan Model INM dan WECPNL

Hasil pengolahan data kebisingan dengan *software* INM kemudian dibandingkan dengan nilai kebisingan hasil dari perhitungan WECPNL. Hal ini dimaksudkan untuk mengetahui apakah hasil model peta kontur kebisingan yang telah dibuat telah cukup valid untuk dipaparkan. Berikut adalah tabel perbandingannya.

Tabel 5.11. Perbandingan Nilai Model INM Dan Nilai WECPNL

Hari	Titik	INM (Interval)	Perkiraan Nilai INM (WECPNL)	WECPNL (Interval)	Nilai WECPNL
1	1	60 - 65	64	60 – 65	63.846
	2	55 – 60	59	60 – 65	60.273
	3	65 – 70	66	< 55	50.416
	4	65 – 70	68	60 – 65	64.126
2	1	65 – 70	66	65 – 70	67.115
	2	55 - 60	59	55 – 60	57.556
	3	65 – 70	66	< 55	53.7
	4	65 – 70	68	60 – 65	64.136
3	1	60 – 65	63	60 – 65	62.4
	2	55 – 60	59	60 – 65	62.273
	3	65 – 70	66	< 55	53.393
	4	65 – 70	68	65 – 70	69.906

Sumber : Pengolahan Penulis, 2011

Pada hari pertama, perbedaan nilai kebisingan antara INM dan WECPNL pada titik 1, 2, dan 4 tidak terlalu signifikan atau masih kurang dari 5 dB(A).

Perbedaan tersebut masih bisa ditolerir karena adanya nilai *uncertainty* pada kedua metode yang digunakan. Selain adanya nilai *uncertainty*, perbedaan tersebut juga bisa disebabkan tidak samanya alat (*tool*) yang digunakan ketika menentukan koordinat titik pengukuran. Ketika menentukan koordinat di lapangan penulis menggunakan GPS Garmin, sedangkan ketika memasukkan titik koordinat pengukuran pada peta bako surtanal penulis menggunakan koordinat UTM sesuai dengan default dari peta tersebut. Hal ini dimungkinkan, titik pengukuran pada model INM bergeser sedikit dari kondisi yang seharusnya.

Sedangkan pada titik 3 terjadi perbedaan yang cukup signifikan dengan perbedaan melebihi 10 dB(A). Perbedaan ini bisa diakibatkan karena adanya kesalahan ketika pengukuran kebisingan berlangsung di titik 3. Hal-hal yang bisa menyebabkan terjadinya kesalahan tersebut diantaranya yaitu :

- Tempat pengukuran kebisingan di titik 3 dikelilingi oleh beberapa pohon yang cukup besar sehingga kemungkinan kebisingan yang ditimbulkan oleh pesawat sebagian teredam oleh pohon tersebut. Dengan demikian hasil pengukuran oleh *sound level meter* akan menunjukkan nilai yang kecil.
- Kondisi pergerakan angin yang cukup kencang di titik 3 bisa mengganggu perambatan gelombang bunyi (kebisingan pesawat) untuk sampai ke *sound level meter*. Hal ini pun bisa mengakibatkan nilai kebisingan yang terbaca menjadi kecil.

Pola yang sama terjadi pada hari kedua dan ketiga yaitu perbedaan nilai kebisingan yang signifikan antara kedua metode hanya terjadi pada titik 3. Namun demikian, secara keseluruhan hasil nilai kebisingan dari kedua metode tersebut dapat dianggap sudah sama. Sehingga dapat dikatakan bahwa hasil nilai kebisingan pada peta kontur kebisingan sudah cukup valid.

5.5 Analisis Dampak Kebisingan Terhadap Pemukiman

Untuk menganalisa dampak kebisingan yang dihasilkan dari kegiatan pesawat digunakan peta kontur kebisingan yang telah dibuat. Berdasarkan pengamatan terhadap peta kontur kebisingan, dapat dilihat bahwa ada sedikit area pemukiman yang terkena dampak kebisingan dari kegiatan pesawat atau pada area tersebut seharusnya tidak diperuntukkan sebagai rumah tinggal.

Sesuai dengan Peraturan Menteri Perhubungan No. KM 13 tahun 2010 bahwa wilayah di sekitar Bandara Soekarno-Hatta dengan tingkat kebisingan $75 \leq \text{WECPNL} < 80$ tidak boleh dibangun rumah tinggal atau pemukiman. Namun demikian, berdasarkan model peta kontur kebisingan INM masih ditemukan adanya pemukiman penduduk yang berada pada wilayah tersebut.

Untuk menghitung luasan pemukiman yang berada pada peta kontur kebisingan digunakan *software Autocad* 2007. Berikut ini merupakan rincian luasan pemukiman penduduk yang terkena dampak kebisingan dari kegiatan pesawat :

- Pada peta kontur kebisingan hari pertama, luas pemukiman yang berada pada wilayah $75 \leq \text{WECPNL} < 80$ adalah sebesar $42858,8405 \text{ m}^2$.
- Pada peta kontur kebisingan hari kedua, luas pemukiman yang berada pada wilayah $75 \leq \text{WECPNL} < 80$ adalah sebesar $49684,5863 \text{ m}^2$.
- Pada peta kontur kebisingan hari ketiga, luas pemukiman yang berada pada wilayah $75 \leq \text{WECPNL} < 80$ adalah sebesar $42514,2861 \text{ m}^2$.

Sebagai bahan evaluasi maka perlu dihitung nilai rata-rata, nilai maksimum, dan nilai minimum dari dampak kebisingan terhadap pemukiman.

Nilai rata-rata luasan pemukiman yang terkena dampak kebisingan adalah sebesar $45019,2376 \text{ m}^2$. Nilai maksimum luasan pemukiman yang terkena dampak kebisingan adalah sebesar $49684,5863 \text{ m}^2$ terjadi pada hari kedua. Dan nilai minimum luasan pemukiman yang terkena dampak kebisingan adalah sebesar $42514,2861 \text{ m}^2$ terjadi pada hari ketiga.

Tabel 5.12. Luasan Pemukiman Yang Terkena Dampak Kebisingan Pesawat

Rata-Rata	Maksimum	Minimum
$45019,2376 \text{ m}^2$	$49684,5863 \text{ m}^2$	$42514,2861 \text{ m}^2$

Sumber : Pengolahan Penulis, 2011

Dari hasil tersebut, dapat dilihat bahwa luas pemukiman terbesar yang terkena dampak kebisingan terjadi pada hari kedua dimana pada hari tersebut juga merupakan hari dengan frekuensi penerbangan tertinggi dan juga merupakan hari dengan luas kawasan kebisingan terbesar.

BAB 6

KESIMPULAN DAN SARAN

6.1 Kesimpulan

Berdasarkan hasil penelitian dan pembahasan yang dilakukan maka dapat disimpulkan bahwa :

- a. Pola tingkat kebisingan pada hari kerja (Senin dan Rabu) memiliki pola yang sama yaitu tingkat kebisingan maksimum terjadi pada sore hari dan tingkat kebisingan minimum terjadi pada malam hari.
- b. Hasil model kontur kebisingan dengan menggunakan INM sudah cukup valid. Ini karena nilai INM pada ketiga titik pengukuran sudah mendekati nilai hasil perhitungan WECPNL. Titik pengukuran tersebut adalah titik 1, 2, dan 4.
- c. Terdapat pemukiman yang berada di sekitar Bandar Udara Soekarno-Hatta yang terkena dampak kebisingan pesawat. Pemukiman penduduk tersebut berada pada wilayah $75 \leq \text{WECPNL} < 80$, yang mana seharusnya pada wilayah tersebut tidak boleh dibangun rumah tinggal.
- d. Luas kawasan kebisingan tingkat I memiliki nilai rata-rata sebesar $4.189.585,871 \text{ m}^2$, nilai maksimum sebesar $4.240.682,47 \text{ m}^2$, dan nilai minimum sebesar $4.137.173,769 \text{ m}^2$. Luas kawasan kebisingan tingkat II memiliki nilai rata-rata sebesar $2.034.510,746 \text{ m}^2$, nilai maksimum sebesar $2.150.579,713 \text{ m}^2$, dan nilai minimum sebesar $1.942.812,227 \text{ m}^2$. Luas kawasan kebisingan tingkat III memiliki nilai rata-rata sebesar $541.301,6634 \text{ m}^2$, nilai maksimum sebesar $564.481,065 \text{ m}^2$, dan nilai minimum sebesar $521.796,9853 \text{ m}^2$.
- e. Luasan pemukiman yang terkena dampak kebisingan pesawat pada hari pengukuran pertama adalah sebesar $42858,8405 \text{ m}^2$. Luasan pemukiman yang terkena dampak kebisingan pesawat pada hari pengukuran kedua adalah sebesar $49684,5863 \text{ m}^2$. Luasan pemukiman yang terkena dampak kebisingan pesawat pada hari pengukuran kedua adalah sebesar $49684,5863 \text{ m}^2$.

- f. Nilai rata-rata luas pemukiman yang terkena dampak kebisingan adalah sebesar $45019,2376 \text{ m}^2$. Nilai maksimumnya adalah $49684,5863 \text{ m}^2$. Dan nilai minimumnya adalah $42514,2861 \text{ m}^2$.

6.2 Saran

Berdasarkan kesimpulan diatas, saran yang dapat diberikan pada hasil penelitian ini adalah :

- a. PT. Angkasa Pura 2 selaku pihak yang bertanggungjawab terhadap kegiatan operasional Bandara Soekarno-Hatta diharapkan melakukan mitigasi dampak kebisingan pesawat terhadap pemukiman di sekitar area bandara. Mitigasi ini bisa dilakukan dengan 2 cara yaitu : dengan memasang penghalang kebisingan (*noise barrier*) pada pemukiman yang terkena dampak kebisingan dan menerapkan program insulasi suara pada rumah tersebut.
- b. Pemerintah diharapkan mengimplementasikan peraturan-peraturan yang berhubungan dengan pengurangan tingkat kebisingan pesawat terbang sehingga dampaknya terhadap lingkungan pun akan berkurang.

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Lampiran 1

Tingkat Kebisingan Hari 1, 11 April 2011 – 12 April 2011

Titik 1		Titik 2		Titik 3		Titik 4		Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
05:58:14	70.4	6:01:04	57.1	6:02:00	51.6	6:04:21	57.1	06:38:14	67.5	6:41:04	57.2	6:42:00	52.1	6:47:35	70
05:59:14	62.1	6:02:04	53	6:03:00	53.4	6:05:21	55	06:39:14	54.0	6:42:04	59.1	6:43:00	51.6	6:48:35	57.6
06:00:14	62.5	6:03:04	49.4	6:04:00	50.4	6:06:21	68.8	06:40:14	59.5	6:43:04	60.3	6:44:00	56.1	6:49:35	57.9
06:01:14	60.5	6:04:04	56.1	6:05:00	52.6	6:07:21	56.3	06:41:14	51.7	6:44:04	57.9	6:45:00	51.8	6:50:35	59.3
06:02:14	62.6	6:05:04	54.7	6:06:00	51.2	6:08:21	71.1	06:42:14	66.3	6:45:04	56.8	6:46:00	52.5	6:51:35	58.1
06:03:14	64.6	6:06:04	52.5	6:07:00	50.5	6:09:21	58.6	06:43:14	58.3	6:46:04	51.6	6:47:00	51.7	6:52:35	56
06:04:14	61.6	6:07:04	50.5	6:08:00	51.7	6:10:21	55.2	06:44:14	59.7	6:47:04	55.1	6:48:00	51.5	6:53:35	68.1
06:05:14	63.5	6:08:04	51.3	6:09:00	53.9	6:11:21	69.3	06:45:14	60.3	6:48:04	54.5	6:49:00	53.2	6:54:35	55.8
06:06:14	60.2	6:09:04	53.6	6:10:00	50.4	6:12:21	57.2	06:46:14	56.2	6:49:04	53.7	6:50:00	52.1	6:55:35	79.9
06:07:14	60.2	6:10:04	50.6	6:11:00	56.0	6:13:21	56.9	06:47:14	72.8	6:50:04	56.3	6:51:00	53.4	6:56:35	59.8
06:08:14	61.7	6:11:04	59.1	6:12:00	52.3	6:14:21	70.6	06:48:14	59.2	6:51:04	53.1	6:52:00	52.0	6:57:35	55
06:09:14	74.4	6:12:04	51.9	6:13:00	56.2	6:15:21	67.2	06:49:14	66.3	6:52:04	69.5	6:53:00	53.5	6:58:35	56.6
06:10:14	56.7	6:13:04	54.1	6:14:00	54.1	6:16:21	58.1	06:50:14	63.6	6:53:04	53.5	6:54:00	53.1	6:59:35	53.4
06:11:14	69.5	6:14:04	58.2	6:15:00	57.4	6:17:21	71.4	06:51:14	52.2	6:54:04	52.8	6:55:00	51.6	7:00:35	56.9
06:12:14	57.6	6:15:04	51.9	6:16:00	53.6	6:18:21	58.3	06:52:14	60.4	6:55:04	52.8	6:56:00	53.1	7:01:35	55.5
06:13:14	69.3	6:16:04	53.6	6:17:00	57.4	6:19:21	70.1	06:53:14	60.5	6:56:04	54.6	6:57:00	51.9	7:02:35	56.9
06:14:14	61.6	6:17:04	54	6:18:00	57.3	6:20:21	58.8	06:54:14	56.4	6:57:04	54.3	6:58:00	52.9	7:03:35	67
06:15:14	59.5	6:18:04	54.5	6:19:00	55.2	6:21:21	68.4	06:55:14	55.3	6:58:04	56.2	6:59:00	52.5	7:04:35	57.1
06:16:14	68.8	6:19:04	54.3	6:20:00	58.3	6:22:21	57.4	06:56:14	67.2	6:59:04	57.4	7:00:00	51.4	7:05:35	55.7
06:17:14	57.8	6:20:04	52.4	6:21:00	53.2	6:23:21	71.9	06:57:14	55.2	7:00:04	54.3	7:01:00	50.0	7:06:35	69
06:18:14	59.5	6:21:04	56.9	6:22:00	61.8	6:24:21	59.8	06:58:14	71.8	7:01:04	67.4	7:02:00	56.5	7:07:35	56
06:19:14	62.8	6:22:04	56.3	6:23:00	57.7	6:25:21	67.6	06:59:14	54.3	7:02:04	54.2	7:03:00	50.8	7:08:35	54.3
06:20:14	69.6	6:23:04	56.3	6:24:00	59.6	6:26:21	70.5	07:00:14	53.6	7:03:04	56.9	7:04:00	52.8	7:09:35	52.1
06:21:14	53.3	6:24:04	52.3	6:25:00	53.9	6:27:21	58.5	07:01:14	53.6	7:04:04	69.2	7:05:00	50.7	7:10:35	54.6
06:22:14	72.0	6:25:04	54.3	6:26:00	58.9	6:28:21	68	07:02:14	57.3	7:05:04	54.1	7:06:00	51.4	7:11:35	54.9
06:23:14	57.1	6:26:04	54.3	6:27:00	52.2	6:29:21	58.1	07:03:14	66.1	7:06:04	74.4	7:07:00	47.4	7:12:35	65.4
06:24:14	55.7	6:27:04	61.9	6:28:00	58.5	6:30:21	57.2	07:04:14	70.1	7:07:04	60.4	7:08:00	48.6	7:13:35	67.5
06:25:14	57.3	6:28:04	54.3	6:29:00	53.2	6:31:21	78.8	07:05:14	56.3	7:08:04	53.3	7:09:00	50.3	7:14:35	53.4
06:26:14	71.3	6:29:04	52.6	6:30:00	62.2	6:32:21	56.5	07:06:14	56.5	7:09:04	66.4	7:10:00	49.6	7:15:35	55.7
06:27:14	54.8	6:30:04	57.3	6:31:00	51.7	6:33:21	57.7	07:07:14	62.8	7:10:04	58.7	7:11:00	53.0	7:16:35	65.8
06:28:14	61.3	6:31:04	53.1	6:32:00	50.1	6:34:21	57.4	07:08:14	60.4	7:11:04	56.1	7:12:00	50.0	7:17:35	67.1
06:29:14	54.3	6:32:04	55.8	6:33:00	60.1	6:35:21	70.3	07:09:14	57.3	7:12:04	67.5	7:13:00	48.2	7:18:35	68
06:30:14	55.5	6:33:04	56.5	6:34:00	54.0	6:36:21	60.6	07:10:14	56.7	7:13:04	71.4	7:14:00	47.2	7:19:35	62.7
06:31:14	69.0	6:34:04	67.2	6:35:00	54.4	6:37:21	58.1	07:11:14	59.2	7:14:04	65.5	7:15:00	46.4	7:20:35	70.5
06:32:14	54.2	6:35:04	70	6:36:00	53.5	6:38:21	60.1	07:12:14	64.9	7:15:04	69.5	7:16:00	48.6	7:21:35	55.2
06:33:14	51.4	6:36:04	57.5	6:37:00	50.5	6:39:21	70.2	07:13:14	55.1	7:16:04	61.1	7:17:00	50.6	7:22:35	58.9
06:34:14	65.7	6:37:04	57.2	6:38:00	50.2	6:40:21	63.7	07:14:14	60.2	7:17:04	54.2	7:18:00	50.1	7:23:35	57.4
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06:37:14	51.5	6:40:04	66.9	6:41:00	54.3	6:43:21	75.7	07:17:14	57.3	7:20:04	66.5	7:21:00	54.2	7:26:35	71.9

Titik 1		Titik 2		Titik 3		Titik 4		Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
07:18:14	66.0	7:21:04	55.4	7:22:00	53.1	7:27:35	58.2	08:00:14	65.9	8:03:04	58.5	8:04:00	49.7	8:09:35	54.4
07:19:14	69.2	7:22:04	68.2	7:23:00	52.6	7:28:35	70.7	08:01:14	56.5	8:04:04	59.6	8:05:00	50.7	8:10:35	54.5
07:20:14	55.1	7:23:04	58.1	7:24:00	50.9	7:29:35	55.1	08:02:14	56.9	8:05:04	69.8	8:06:00	47.5	8:11:35	60.6
07:21:14	63.7	7:24:04	51.8	7:25:00	48.5	7:30:35	53.9	08:03:14	60.3	8:06:04	59.7	8:07:00	53.6	8:12:35	53.5
07:22:14	54.3	7:25:04	51.3	7:26:00	50.3	7:31:35	58.3	08:04:14	56.3	8:07:04	57.3	8:08:00	53.0	8:13:35	59.7
07:23:14	61.1	7:26:04	70.1	7:27:00	53.9	7:32:35	68.4	08:05:14	54.5	8:08:04	57.5	8:09:00	47.2	8:14:35	54.8
07:24:14	54.5	7:27:04	63.1	7:28:00	48.1	7:33:35	58.7	08:06:14	64.4	8:09:04	68.1	8:10:00	51.6	8:15:35	53.6
07:25:14	56.7	7:28:04	52.3	7:29:00	47.2	7:34:35	68.2	08:07:14	60.0	8:10:04	61.4	8:11:00	48.5	8:16:35	58
07:26:14	58.3	7:29:04	59.9	7:30:00	49.5	7:35:35	55.7	08:08:14	58.4	8:11:04	69.3	8:12:00	46.4	8:17:35	54.9
07:27:14	56.9	7:30:04	67.9	7:31:00	45.2	7:36:35	67.1	08:09:14	62.9	8:12:04	62.7	8:13:00	49.0	8:18:35	60
07:28:14	61.1	7:31:04	66.2	7:32:00	47.7	7:37:35	55.6	08:10:14	56.6	8:13:04	63.2	8:14:00	53.9	8:19:35	56.8
07:29:14	64.7	7:32:04	70.9	7:33:00	44.7	7:38:35	60.5	08:11:14	63.0	8:14:04	63.9	8:15:00	49.9	8:20:35	67
07:30:14	60.2	7:33:04	67.3	7:34:00	44.7	7:39:35	57.6	08:12:14	56.9	8:15:04	64.2	8:16:00	55.1	8:21:35	64.5
07:31:14	59.8	7:34:04	61.3	7:35:00	45.7	7:40:35	70.6	08:13:14	46.5	8:16:04	64.1	8:17:00	50.7	8:22:35	64.5
07:32:14	57.8	7:35:04	57.3	7:36:00	49.6	7:41:35	58.1	08:14:14	70.4	8:17:04	62.3	8:18:00	54.1	8:23:35	68
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07:34:14	57.9	7:37:04	67.2	7:38:00	47.2	7:43:35	61.3	08:16:14	58.1	8:19:04	64.3	8:20:00	54.5	8:25:35	56
07:35:14	59.1	7:38:04	59.9	7:39:00	47.8	7:44:35	60.7	08:17:14	55.4	8:20:04	64.1	8:21:00	55.3	8:26:35	82.4
07:36:14	65.9	7:39:04	54.3	7:40:00	45.5	7:45:35	67.2	08:18:14	62.9	8:21:04	72.6	8:22:00	46.5	8:27:35	64.9
07:37:14	59.1	7:40:04	56.3	7:41:00	46.8	7:46:35	66.6	08:19:14	55.5	8:22:04	69.5	8:23:00	46.3	8:28:35	82.5
07:38:14	56.4	7:41:04	66.9	7:42:00	50.6	7:47:35	58.4	08:20:14	55.3	8:23:04	63.4	8:24:00	51.4	8:29:35	59.8
07:39:14	57.5	7:42:04	63.2	7:43:00	52.0	7:48:35	65.3	08:21:14	57.9	8:24:04	64.8	8:25:00	54.2	8:30:35	56
07:40:14	56.1	7:43:04	73.3	7:44:00	53.1	7:49:35	60.1	08:22:14	59.4	8:25:04	65.3	8:26:00	45.4	8:31:35	59.9
07:41:14	59.9	7:44:04	68.9	7:45:00	49.9	7:50:35	57.1	08:23:14	71.8	8:26:04	67.7	8:27:00	51.3	8:32:35	80.1
07:42:14	55.2	7:45:04	59.1	7:46:00	52.6	7:51:35	57.5	08:24:14	57.4	8:27:04	67.8	8:28:00	43.2	8:33:35	60.6
07:43:14	55.8	7:46:04	63.7	7:47:00	45.5	7:52:35	65.9	08:25:14	59.2	8:28:04	68.7	8:29:00	45.5	8:34:35	69.3
07:44:14	55.3	7:47:04	62.5	7:48:00	45.1	7:53:35	66.2	08:26:14	56.5	8:29:04	68.8	8:30:00	50.6	8:35:35	58.2
07:45:14	57.5	7:48:04	70.6	7:49:00	45.8	7:54:35	61.5	08:27:14	56.6	8:30:04	66.4	8:31:00	47.8	8:36:35	60.8
07:46:14	55.5	7:49:04	68.5	7:50:00	45.6	7:55:35	57.8	08:28:14	56.0	8:31:04	59.6	8:32:00	48.7	8:37:35	62
07:47:14	57.4	7:50:04	66.9	7:51:00	46.3	7:56:35	70.3	08:29:14	58.0	8:32:04	67.6	8:33:00	45.2	8:38:35	56.8
07:48:14	57.8	7:51:04	72.2	7:52:00	50.8	7:57:35	68.2	08:30:14	55.6	8:33:04	71.7	8:34:00	45.0	8:39:35	54.9
07:49:14	63.2	7:52:04	69.3	7:53:00	52.2	7:58:35	55.7	08:31:14	53.9	8:34:04	68.4	8:35:00	51.2	8:40:35	54.7
07:50:14	56.4	7:53:04	65.2	7:54:00	49.4	7:59:35	55.3	08:32:14	55.3	8:35:04	63.3	8:36:00	54.6	8:41:35	55
07:51:14	57.4	7:54:04	60.1	7:55:00	51.8	8:00:35	56.3	08:33:14	67.1	8:36:04	65.9	8:37:00	51.1	8:42:35	55.3
07:52:14	56.6	7:55:04	61.7	7:56:00	49.5	8:01:35	69.8	08:34:14	56.2	8:37:04	62.4	8:38:00	53.8	8:43:35	70.2
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07:54:14	69.9	7:57:04	56.9	7:58:00	49.6	8:03:35	54.5	08:36:14	55.4	8:39:04	59.4	8:40:00	50.1	8:45:35	68.6
07:55:14	59.5	7:58:04	68.6	7:59:00	48.7	8:04:35	53.9	08:37:14	66.1	8:40:04	59.5	8:41:00	52.0	8:46:35	61.1
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07:57:14	57.7	8:00:04	70.8	8:01:00	51.9	8:06:35	55.1	08:39:14	55.8	8:42:04	69.9	8:43:00	46.8	8:48:35	69.5
07:58:14	69.9	8:01:04	67.1	8:02:00	53.2	8:07:35	52.8	08:40:14	55.3	8:43:04	66.4	8:44:00	50.3	8:49:35	60.5
07:59:14	54.8	8:02:04	61.2	8:03:00	51.9	8:08:35	58.3	08:41:14	54.2	8:44:04	70.9	8:45:00	55.3	8:50:35	58.6

Titik 1		Titik 2		Titik 3		Titik 4		Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
08:42:14	54.6	8:45:04	57.9	8:46:00	45.6	8:51:35	68.6	09:24:14	66.6	9:27:04	51.1	9:28:00	51.2	9:33:35	56.8
08:43:14	61.9	8:46:04	59.5	8:47:00	52.7	8:52:35	63.3	09:25:14	62.5	9:28:04	50.6	9:29:00	44.4	9:34:35	53.3
08:44:14	54.4	8:47:04	60.2	8:48:00	52.2	8:53:35	63.2	09:26:14	70.0	9:29:04	68.6	9:30:00	46.5	9:35:35	68.7
08:45:14	54.3	8:48:04	68.3	8:49:00	48.3	8:54:35	62.5	09:27:14	66.5	9:30:04	51.8	9:31:00	49.9	9:36:35	57.6
08:46:14	58.7	8:49:04	60.6	8:50:00	51.4	8:55:35	61.5	09:28:14	60.5	9:31:04	48.7	9:32:00	47.2	9:37:35	70.8
08:47:14	56.0	8:50:04	59.8	8:51:00	53.7	8:56:35	61.5	09:29:14	63.4	9:32:04	50.1	9:33:00	47.6	9:38:35	56.9
08:48:14	54.9	8:51:04	66.2	8:52:00	55.8	8:57:35	54.6	09:30:11	63.4	9:33:04	51	9:34:00	45.2	9:39:35	54.3
08:49:14	54.9	8:52:04	67.6	8:53:00	53.9	8:58:35	52	09:31:11	58.5	9:34:04	67.9	9:35:00	49.8	9:40:35	55.5
08:50:14	60.7	8:53:04	67.3	8:54:00	47.9	8:59:35	52.8	09:32:11	69.1	9:35:04	51.8	9:36:00	46.2	9:41:35	59
08:51:14	70.8	8:54:04	69.4	8:55:00	50.5	9:00:35	53.4	09:33:11	67.0	9:36:04	52.7	9:37:00	42.1	9:42:35	72
08:52:14	56.1	8:55:04	62.1	8:56:00	55.7	9:01:35	54.5	09:34:11	57.9	9:37:04	69.3	9:38:00	42.2	9:43:35	56.1
08:53:14	54.7	8:56:04	59.6	8:57:00	51.6	9:02:35	53.8	09:35:11	69.7	9:38:04	55.3	9:39:00	46.2	9:44:35	55.4
08:54:14	69.2	8:57:04	52.2	8:58:00	50.3	9:03:35	52.4	09:36:11	61.0	9:39:04	49.6	9:40:00	45.6	9:45:35	62.5
08:55:14	60.2	8:58:04	55.5	8:59:00	46.8	9:04:35	52.5	09:37:11	62.7	9:40:04	51	9:41:00	46.0	9:46:35	69.8
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09:00:14	53.9	9:03:04	58.6	9:04:00	49.8	9:09:35	63.8	09:42:11	57.6	9:45:04	50.2	9:46:00	47.0	9:51:35	56.7
09:01:14	62.5	9:04:04	58.1	9:05:00	57.6	9:10:35	55.3	09:43:11	56.1	9:46:04	49.2	9:47:00	52.2	9:52:35	69
09:02:14	56.6	9:05:04	69.5	9:06:00	50.8	9:11:35	55.2	09:44:11	54.3	9:47:04	53.9	9:48:00	51.0	9:53:35	64
09:03:14	58.7	9:06:04	63.8	9:07:00	48.6	9:12:35	53.1	09:45:11	65.5	9:48:04	68.5	9:49:00	45.0	9:54:35	69.6
09:04:14	65.1	9:07:04	69.7	9:08:00	44.7	9:13:35	52.9	09:46:11	69.4	9:49:04	55.4	9:50:00	50.4	9:55:35	53.7
09:05:14	69.5	9:08:04	57.5	9:09:00	53.0	9:14:35	55.3	09:47:11	56.2	9:50:04	59.5	9:51:00	54.3	9:56:35	58.9
09:06:14	54.2	9:09:04	56.2	9:10:00	47.2	9:15:35	73.7	09:48:11	56.5	9:51:04	51.1	6:52:00	46.0	9:57:35	53
09:07:14	59.9	9:10:04	61.1	9:11:00	51.0	9:16:35	72.7	09:49:11	63.4	9:52:04	68.9	9:53:00	43.3	9:58:35	69.3
09:08:14	69.5	9:11:04	68.9	9:12:00	54.7	9:17:35	54.6	09:50:11	63.3	9:53:04	65.5	9:54:00	43.9	9:59:35	63.1
09:09:14	69.7	9:12:04	55.7	9:13:00	46.9	9:18:35	53.6	09:51:11	57.4	9:54:04	56.7	9:55:00	43.1	10:00:35	52.7
09:10:14	72.6	9:13:04	56.7	9:14:00	51.6	9:19:35	69.8	09:52:11	60.4	9:55:04	52.5	9:56:00	47.6	10:01:35	55.1
09:11:14	66.2	9:14:04	71.7	9:15:00	48.7	9:20:35	56.5	09:53:11	56.6	9:56:04	60.1	9:57:00	41.4	10:02:35	51.8
09:12:14	68.5	9:15:04	63.7	9:16:00	46.1	9:21:35	55.1	09:54:11	56.4	9:57:04	51	9:58:00	41.2	10:03:35	68
09:13:14	58.7	9:16:04	53.9	9:17:00	48.9	9:22:35	76.3	09:55:11	58.7	9:58:04	57	9:59:00	44.6	10:04:35	54.6
09:14:14	57.3	9:17:04	60.7	9:18:00	47.5	9:23:35	52.4	10:00:11	54.1	9:59:04	68.4	10:00:00	44.6	10:05:35	58.7
09:15:14	66.0	9:18:04	61.2	9:19:00	44.4	9:24:35	52.7	10:01:11	54.5	10:00:04	62.2	10:01:00	43.3	10:06:35	69.1
09:16:14	70.4	9:19:04	57.1	9:20:00	57.9	9:25:35	53.9	10:02:11	67.7	10:01:04	60.9	10:02:00	46.1	10:07:35	72.7
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09:20:14	62.1	9:23:04	51.7	9:24:00	41.8	9:29:35	52.5	10:06:11	57.1	10:05:04	51.9	10:06:00	43.2	10:11:35	66.2
09:21:14	57.2	9:24:04	67.6	9:25:00	47.3	9:30:35	70.9	10:07:11	63.7	10:06:04	52.5	10:07:00	46.6	10:12:35	53.7
09:22:14	62.5	9:25:04	64.6	9:26:00	45.8	9:31:35	55.5	10:08:11	57.0	10:07:04	71	10:08:00	45.2	10:13:35	55.1
09:23:14	72.9	9:26:04	52.8	9:27:00	49.8	9:32:35	56.5	10:09:11	57.3	10:08:04	65.7	10:09:00	49.9	10:14:35	70.8

Titik 1		Titik 2		Titik 3		Titik 4		Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq														
10:10:11	63.7	10:09:04	51.5	10:10:00	45.9	10:15:35	63.9	10:52:11	64.3	10:51:04	62	10:52:00	45.1	10:57:35	72.9
10:11:11	62.7	10:10:04	53.2	10:11:00	47.0	10:16:35	55	10:53:11	67.1	10:52:04	54	10:53:00	46.5	10:58:35	58.5
10:12:11	58.2	10:11:04	71.2	10:12:00	48.7	10:17:35	56.2	10:54:11	62.3	10:53:04	52.9	10:54:00	46.1	10:59:35	67.3
10:13:11	65.4	10:12:04	64.9	10:13:00	42.9	10:18:35	68.4	10:55:11	56.3	10:54:04	53.5	10:55:00	50.1	11:00:35	52.7
10:14:11	58.2	10:13:04	55.8	10:14:00	47.4	10:19:35	68.4	10:56:11	67.8	10:55:04	53.8	10:56:00	50.8	11:01:35	72.4
10:15:11	55.5	10:14:04	72.6	10:15:00	50.6	10:20:35	59.3	10:57:11	62.0	10:56:04	65.5	10:57:00	49.4	11:02:35	52.8
10:16:11	56.1	10:15:04	66.8	10:16:00	45.8	10:21:35	79.2	10:58:11	64.4	10:57:04	66.6	10:58:00	60.5	11:03:35	54.4
10:17:11	58.1	10:16:04	50.8	10:17:00	48.2	10:22:35	63.8	10:59:11	73.6	10:58:04	54.1	10:59:00	45.8	11:04:35	56.9
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10:21:11	54.4	10:20:04	73	10:21:00	50.2	10:26:35	53.6	11:03:11	63.7	11:05:21	70.4	11:06:04	47.4	11:08:35	53.8
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10:45:11	65.5	10:44:04	68	10:45:00	52.7	10:50:35	54.2	11:27:11	54.7	11:29:21	71.2	11:30:04	44.1	11:32:35	57.7
10:46:11	58.3	10:45:04	68.4	10:46:00	49.3	10:51:35	55.3	11:28:11	55.9	11:30:21	75.3	11:31:04	46.7	11:33:35	52.4
10:47:11	56.2	10:46:04	52	10:47:00	46.0	10:52:35	58.5	11:29:11	56.7	11:31:21	69.4	11:32:04	48.3	11:34:35	71.8
10:48:11	59.4	10:47:04	53.2	10:48:00	64.0	10:53:35	53.4	11:30:11	64.1	11:32:21	65.3	11:33:04	46.8	11:35:35	54
10:49:11	64.0	10:48:04	66.8	10:49:00	57.7	10:54:35	54.7	11:31:11	66.0	11:33:21	62.3	11:34:04	46.7	11:36:35	71.7
10:50:11	60.8	10:49:04	56.7	10:50:00	53.1	10:55:35	73.4	11:32:11	56.8	11:34:21	52.8	11:35:04	51.2	11:37:35	61.5
10:51:11	60.1	10:50:04	53.1	10:51:00	51.6	10:56:35	55.3	11:33:11	63.2	11:35:21	51.9	11:36:04	58.8	11:38:35	72

Titik 1		Titik 2		Titik 3		Titik 4		Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq														
11:34:11	69.4	11:36:21	52.2	11:37:04	57.1	11:39:35	55.2	12:16:11	60.3	12:18:21	50.7	12:19:04	53.1	12:25:35	53
11:35:11	59.6	11:37:21	65.8	11:38:04	51.0	11:40:35	50.9	12:17:11	59.1	12:19:21	51.4	12:20:04	48.0	12:26:35	70.3
11:36:11	56.9	11:38:21	71.6	11:39:04	60.4	11:41:35	53.4	12:18:11	58.7	12:20:21	51.9	12:21:04	48.3	12:27:35	62.5
11:37:11	60.6	11:39:21	55.5	11:40:04	47.4	11:42:35	54.3	12:19:11	62.6	12:21:21	53.4	12:22:04	49.9	12:28:35	71
11:38:11	57.2	11:40:21	55.7	11:41:04	50.4	11:43:35	52.7	12:20:11	56.6	12:22:21	51.8	12:23:04	46.5	12:29:35	53.8
11:39:11	57.4	11:41:21	53.9	11:42:04	42.9	11:44:35	52.8	12:21:11	56.6	12:23:21	51.9	12:24:04	45.4	12:30:35	57.6
11:40:11	58.0	11:42:21	54.8	11:43:04	45.2	11:45:35	54.8	12:22:11	60.9	12:24:21	50.5	12:25:04	45.6	12:31:35	72.6
11:41:11	56.9	11:43:21	54.3	11:44:04	46.3	11:46:35	53.6	12:23:11	58.9	12:25:21	73.6	12:26:04	51.7	12:32:35	72.8
11:42:11	60.7	11:44:21	59.5	11:45:04	48.6	11:47:35	50.9	12:24:11	57.5	12:26:21	68.4	12:27:04	48.6	12:33:35	56.3
11:43:11	62.1	11:45:21	56.1	11:46:04	46.4	11:48:35	49.9	12:25:11	56.7	12:27:21	61.8	12:28:04	45.0	12:34:35	54.1
11:44:11	62.7	11:46:21	61.7	11:47:04	49.5	11:49:35	57.8	12:26:11	54.0	12:28:21	53.7	12:29:04	46.8	12:35:35	60.3
11:45:11	69.8	11:47:21	59.2	11:48:04	43.6	11:50:35	55.1	12:27:11	54.4	12:29:21	69.6	12:30:04	44.0	12:36:35	62.8
11:46:11	67.8	11:48:21	61.4	11:49:04	46.2	11:51:35	81	12:28:11	55.9	12:30:21	53.6	12:31:04	47.6	12:37:35	72.4
11:47:11	57.1	11:49:21	67.8	11:50:04	42.0	11:52:35	71	12:29:11	58.9	12:31:21	69.8	12:32:04	44.1	12:38:35	58.1
11:48:11	56.4	11:50:21	71.1	11:51:04	48.8	11:57:35	75.5	12:30:11	53.8	12:32:21	68.3	12:33:04	47.4	12:39:35	54.8
11:49:11	56.7	11:51:21	64.4	11:52:04	47.7	11:58:35	68.3	12:31:11	53.3	12:33:21	51.2	12:34:04	46.3	12:40:35	51.9
11:50:11	81.5	11:52:21	55.1	11:53:04	44.6	11:59:35	61.3	12:32:11	61.2	12:34:21	59.2	12:35:04	51.3	12:41:35	51.2
11:51:11	68.2	11:53:21	56.5	11:54:04	43.6	12:00:35	55.2	12:33:11	59.3	12:35:21	52.5	12:36:04	49.9	12:42:35	63.2
11:52:11	68.6	11:54:21	57.4	11:55:04	44.1	12:01:35	57.1	12:34:11	52.3	12:36:21	52.5	12:37:04	44.8	12:43:35	54.1
11:53:11	68.1	11:55:21	68.7	11:56:04	46.6	12:02:35	56.1	12:35:11	66.2	12:37:21	51.9	12:38:04	46.0	12:44:35	52.6
11:54:11	60.6	11:56:21	50.3	11:57:04	46.8	12:03:35	56.7	12:36:11	59.1	12:38:21	50.1	12:39:04	55.6	12:45:35	51.5
11:55:11	59.3	11:57:21	57.3	11:58:04	46.4	12:04:35	57.3	12:37:11	59.9	12:39:21	50.6	12:40:04	58.7	12:46:35	51.1
11:56:11	61.2	11:58:21	64	11:59:04	47.5	12:05:35	58.5	12:38:11	58.1	12:40:21	52.1	12:41:04	47.7	12:47:35	50.7
11:57:11	66.0	11:59:21	58.4	12:00:04	51.9	12:06:35	54.7	12:39:11	57.3	12:41:21	52.5	12:42:04	44.1	12:48:35	51.9
11:58:11	58.3	12:00:21	65.8	12:01:04	46.7	12:07:35	53.6	12:40:11	60.0	12:42:21	55.9	12:43:04	46.9	12:49:35	59.7
11:59:11	58.4	12:01:21	58.7	12:02:04	47.7	12:08:35	67.8	12:41:11	56.5	12:43:21	55.2	12:44:04	47.6	12:50:35	54.8
12:00:11	62.7	12:02:21	52	12:03:04	47.0	12:09:35	56.9	12:42:11	60.0	12:44:21	50.1	12:45:04	40.9	12:51:35	51.5
12:01:11	56.8	12:03:21	69.7	12:04:04	49.3	12:10:35	56.6	12:43:11	60.6	12:45:21	68.3	12:46:04	44.8	12:52:35	50.8
12:02:11	60.3	12:04:21	59.9	12:05:04	53.1	12:11:35	55.5	12:44:11	62.9	12:46:21	65.2	12:47:04	49.2	12:53:35	51.7
12:03:11	61.1	12:05:21	50.7	12:06:04	53.0	12:12:35	71.9	12:45:11	60.8	12:47:21	52.3	12:48:04	41.8	12:54:35	50.8
12:04:11	56.7	12:06:21	66.6	12:07:04	52.8	12:13:35	57.5	12:46:11	61.9	12:48:21	51.8	12:49:04	49.7	12:55:35	56.3
12:05:11	55.8	12:07:21	53.2	12:08:04	53.5	12:14:35	69.7	12:47:11	64.5	12:49:21	53.5	12:50:04	65.9	12:56:35	51.9
12:06:11	56.1	12:08:21	51.2	12:09:04	47.4	12:15:35	69.7	12:48:11	59.0	12:50:21	56.1	12:51:04	51.1	12:57:35	55.9
12:07:11	56.4	12:09:21	69.5	12:10:04	45.7	12:16:35	83.4	12:49:11	57.6	12:51:21	66.2	12:52:04	65.3	12:58:35	51.6
12:08:11	66.4	12:10:21	52.4	12:11:04	46.7	12:17:35	65.4	12:50:11	58.7	12:52:21	69.5	12:53:04	57.4	12:59:35	53.7
12:09:11	62.3	12:11:21	50.4	12:12:04	46.3	12:18:35	57.1	12:51:11	61.3	12:53:21	68.7	12:54:04	51.8	13:00:35	50
12:10:11	56.2	12:12:21	68.5	12:13:04	45.1	12:19:35	69.1	12:52:11	61.6	12:54:21	59.6	12:55:04	58.4	13:01:35	70.5
12:11:11	57.4	12:13:21	55.3	12:14:04	48.9	12:20:35	56.6	12:53:11	58.4	12:55:21	58.2	12:56:04	58.7	13:02:35	60.8
12:12:11	64.9	12:14:21	51.4	12:15:04	45.8	12:21:35	59.1	12:54:11	59.7	12:56:21	68.1	12:57:04	51.3	13:03:35	52.8
12:13:11	62.8	12:15:21	54.7	12:16:04	45.4	12:22:35	71.4	12:55:11	61.8	12:57:21	64.6	12:58:04	63.2	13:04:35	54.2
12:14:11	58.7	12:16:21	65.1	12:17:04	47.7	12:23:35	71.7	12:56:11	54.1	12:58:21	66.8	12:59:04	54.3	13:05:35	50
12:15:11	56.8	12:17:21	55.1	12:18:04	46.6	12:24:35	58.7	12:57:11	59.7	12:59:21	59.5	13:00:04	63.9	13:06:35	50.1

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
12:58:11	53.5	13:00:21	55.1	13:01:04	64.2	13:07:35	52.3
12:59:11	56.2	13:01:21	55.6	13:02:04	55.7	13:08:35	71
13:00:11	64.4	13:02:21	70.7	13:03:04	43.8	13:09:35	69.3
13:01:11	56.9	13:03:21	64.5	13:04:04	45.4	13:10:35	64.2
13:02:11	62.1	13:04:21	66.2	13:05:04	46.3	13:11:35	84.5
13:03:11	66.0	13:05:21	52.4	13:06:04	45.7	13:12:35	54.7
13:04:11	67.0	13:06:21	56.5	13:07:04	38.3	13:13:35	74
13:05:11	67.2	13:07:21	68.8	13:08:04	38.9	13:14:35	54.8
13:06:11	63.7	13:08:21	63.8	13:09:04	51.7	13:15:35	57.4
13:07:11	65.1	13:09:21	53.6	13:10:04	60.1	13:16:35	56.4
13:08:11	64.4	13:10:21	66.8	13:11:04	45.7	13:17:35	58.5
13:09:11	56.9	13:11:21	57.4	13:12:04	43.5	13:18:35	71.4
13:10:11	58.4	13:12:21	52	13:13:04	46.8	13:19:35	55.7
13:11:11	61.7	13:13:21	70.2	13:14:04	47.6	13:20:35	60.4
13:12:11	59.7	13:14:21	63.8	13:15:04	42.7	13:21:35	64.1
13:13:11	62.9	13:15:21	54.3	13:16:04	44.9	13:22:35	68.8
13:14:11	59.4	13:16:21	55.5	13:17:04	46.5	13:23:35	53.4
13:15:11	58.0	13:17:21	67.8	13:18:04	43.7	13:24:35	51.6
13:16:11	60.9	13:18:21	62.1	13:19:04	47.3	13:25:35	55
13:17:11	56.4	13:19:21	55.2	13:20:04	52.3	13:26:35	51.8
13:18:11	53.3	13:20:21	57.6	13:21:04	48.9	13:27:35	75
13:19:11	54.5	13:21:21	69.2	13:22:04	50.6	13:28:35	61.1
13:20:11	50.1	13:22:21	54.5	13:23:04	42.9	13:29:35	53.5
13:21:11	48.8	13:23:21	69.6	13:24:04	46.7	13:30:35	57.5
13:22:11	51.5	13:24:21	73.2	13:25:04	43.5	13:31:35	71
13:23:11	61.3	13:25:21	70.8	13:26:04	46.5	13:32:35	51.9
13:24:11	64.5	13:26:21	68.5	13:27:04	47.4	13:33:35	53.9
13:25:11	62.2	13:27:21	59.6	13:28:04	46.5	13:34:35	71.6
13:26:11	59.5	13:28:21	74.8	13:29:04	47.9	13:35:35	54.6
13:27:11	57.8	13:29:21	67.1	13:30:04	49.8	13:36:35	59.1
13:28:11	57.6	13:30:21	61.1	13:31:04	54.2	13:37:35	69.4
13:29:11	53.6	13:31:21	50.4	13:32:04	56.3	13:38:35	58.6
13:30:11	73.5	13:32:21	55.3	13:33:04	49.2	13:39:35	73.5
13:31:11	55.2	13:33:21	55.6	13:34:04	45.0	13:40:35	69.1
13:32:11	61.5	13:34:21	59.2	13:35:04	46.5	13:41:35	61.9
13:33:11	60.0	13:35:21	59.8	13:36:04	50.3	13:42:35	69.4
13:34:11	57.3	13:36:21	66.7	13:37:04	54.5	13:43:35	57.2
13:35:11	64.6	13:37:21	64.3	13:38:04	54.4	13:44:35	72.7
13:36:11	59.9	13:38:21	52.4	13:39:04	47.6	13:45:35	54.4
13:37:11	59.1	13:39:21	55.3	13:40:04	42.5	13:46:35	72.7
13:38:11	63.6	13:40:21	68.7	13:41:04	44.2	13:47:35	53.2
13:39:11	55.5	13:41:21	50.9	13:42:04	39.6	13:48:35	55.5

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
13:40:11	58.0	13:42:21	51.4	13:43:04	45.3	13:49:35	54.7
13:41:11	56.2	13:43:21	51.7	13:44:04	43.2	13:50:35	56.8
13:42:11	52.2	13:44:21	68.9	13:45:04	43.2	13:51:35	57.8
13:43:11	67.5	13:45:21	50.9	13:46:04	56.6	13:52:35	59.8
13:44:11	56.0	13:46:21	49.7	13:47:04	53.1	13:53:35	57.5
13:45:11	57.7	13:47:21	68.2	13:48:04	44.0	13:54:35	51.6
13:46:11	56.6	13:48:21	52.6	13:49:04	44.9	13:55:35	50.4
13:47:11	58.8	13:49:21	51.4	13:50:04	44.9	13:56:35	72.5
13:48:11	53.7	13:50:21	63.8	13:51:04	40.5	13:57:35	60.9
13:49:11	50.3	13:51:21	56.2	13:52:04	51.5	13:58:35	59.9
13:50:11	51.0	13:52:21	63.3	13:53:04	51.0	13:59:35	59.6
13:51:11	51.2	13:53:21	56.9	13:54:04	50.4	14:00:35	72.4
13:52:11	50.0	13:54:21	48	13:55:04	55.7	14:01:35	69
13:53:11	48.8	13:55:21	53.4	13:56:04	57.5	14:02:35	57.1
13:54:11	51.1	13:56:21	57.8	13:57:04	52.8	14:03:35	54.7
13:55:11	51.5	13:57:21	62.6	13:58:04	51.7	14:04:35	51.4
13:56:11	53.5	13:58:21	54.9	13:59:04	56.6	14:05:35	52.9
13:57:11	52.9	13:59:21	52.9	14:00:04	52.6	14:06:35	50.2
13:58:11	60.8	14:00:21	64	14:01:04	51.3	14:07:35	51.6
13:59:11	59.6	14:01:21	47.6	14:02:04	54.6	14:08:35	81.6
14:00:11	53.4	14:02:21	66.3	14:03:04	53.5	14:09:35	55.5
14:01:11	55.2	14:03:21	63.2	14:04:04	46.9	14:10:35	52.6
14:02:11	60.1	14:04:21	53.5	14:05:04	40.2	14:11:35	53.4
14:03:11	58.2	14:05:21	53.6	14:06:04	41.0	14:12:35	54.8
14:04:11	58.7	14:06:21	69.6	14:07:04	42.3	14:13:35	52.3
14:05:11	57.3	14:07:21	61.4	14:08:04	40.3	14:14:35	71.2
14:06:11	57.3	14:08:21	57.5	14:09:04	44.5	14:15:35	57.5
14:07:11	57.4	14:09:21	55.5	14:10:04	43.5	14:16:35	56
14:08:11	56.9	14:10:21	67.9	14:11:04	41.6	14:17:35	53
14:09:11	61.0	14:11:21	62.7	14:12:04	48.5	14:18:35	55.2
14:10:11	58.3	14:12:21	59.9	14:13:04	50.7	14:19:35	54.1
14:11:11	58.4	14:13:21	66.2	14:14:04	50.9	14:20:35	58.7
14:12:11	57.3	14:14:21	66	14:15:04	48.6	14:21:35	72
14:13:11	64.1	14:15:21	53	14:16:04	45.0	14:22:35	52.5
14:14:11	56.9	14:16:21	69.1	14:17:04	49.7	14:23:35	55.1
14:15:11	57.4	14:17:21	67.7	14:18:04	48.3	14:24:35	77.5
14:16:11	65.4	14:18:21	63.5	14:19:04	52.6	14:25:35	72.6
14:17:11	61.3	14:19:21	58	14:20:04	50.0	14:26:35	82.5
14:18:11	61.8	14:20:21	50.5	14:21:04	48.0	14:27:35	57.5
14:19:11	60.2	14:21:21	63.6	14:22:04	49.7	14:28:35	52.5
14:20:11	57.4	14:22:21	68.6	14:23:04	52.9	14:29:35	55
14:21:11	53.0	14:23:21	62.7	14:24:04	45.8	14:30:35	73.6

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
14:22:11	56.7	14:24:21	50	14:25:04	52.2	14:31:35	53.5
14:23:11	50.8	14:25:21	66	14:26:04	49.4	14:32:35	56.3
14:24:11	51.2	14:26:21	52.1	14:27:04	54.6	14:33:35	59.9
14:25:11	56.7	14:27:21	51.6	14:28:04	49.6	14:34:35	73.5
14:26:11	68.0	14:28:21	65.3	14:29:04	52.7	14:35:35	61.8
14:27:11	59.0	14:29:21	69.6	14:30:04	49.0	14:36:35	58.1
14:28:11	53.9	14:30:21	58.9	14:31:04	54.7	14:37:35	56.2
14:29:11	53.7	14:31:21	64	14:32:04	54.6	14:38:35	59
14:30:11	58.3	14:32:21	56.1	14:33:04	56.5	14:39:35	59.1
14:31:11	53.2	14:33:21	69.6	14:34:04	54.3	14:40:35	63
14:32:11	71.8	14:34:21	63.1	14:35:04	51.4	14:41:35	72.1
14:33:11	57.7	14:35:21	68.3	14:36:04	45.8	14:42:35	55.1
14:36:32	59.7	14:36:21	66.8	14:37:04	52.5	14:43:35	56.9
14:37:32	51.1	14:37:21	55.1	14:38:04	51.9	14:44:35	71.9
14:38:32	58.2	14:38:21	72.4	14:39:04	47.4	14:45:35	59.5
14:39:32	72.4	14:39:21	67.8	14:40:04	54.3	14:46:35	51.6
14:40:32	65.2	14:40:21	54.1	14:41:04	47.6	14:47:35	71.7
14:41:32	64.8	14:41:21	68.1	14:42:04	45.4	14:48:35	61
14:42:32	61.1	14:42:21	54.3	14:43:04	52.1	14:49:35	52.7
14:43:32	56.5	14:43:21	70.2	14:44:04	44.6	14:50:35	53.4
14:44:32	57.8	14:44:21	66.6	14:45:04	52.5	14:51:35	72.8
14:45:32	56.8	14:45:21	50.2	14:46:04	51.0	14:52:35	57.2
14:46:32	53.6	14:46:21	53.1	14:47:04	51.1	14:53:35	61.6
14:47:32	57.0	14:47:21	59	14:48:04	46.7	14:54:35	53.5
14:48:32	57.8	14:48:21	67.8	14:49:04	48.0	14:55:35	52.9
14:49:32	53.1	14:49:21	57.3	14:50:04	49.6	14:56:35	51
14:50:32	55.6	14:50:21	60.6	14:51:04	50.0	14:57:35	72.1
14:51:32	70.0	14:51:21	59.6	14:52:04	42.4	14:58:35	55.3
14:52:32	57.7	14:52:21	71.7	14:53:04	44.5	14:59:35	56
14:53:32	56.8	14:53:21	68.3	14:54:04	47.1	15:00:35	60.9
14:54:32	55.9	14:54:21	51.4	14:55:04	40.8	15:01:35	52.7
14:55:32	53.1	14:55:21	55.4	14:56:04	48.0	15:02:35	71.1
14:56:32	55.4	14:56:21	64.1	14:57:04	47.0	15:03:35	59
14:57:32	56.5	14:57:21	68.8	14:58:04	42.7	15:04:35	57.2
14:58:32	61.0	14:58:21	58.1	14:59:04	44.4	15:05:35	54.8
14:59:32	57.6	14:59:21	54.7	15:00:04	52.5	15:06:35	53.8
15:00:32	54.5	15:00:21	65.9	15:01:04	55.8	15:07:35	51.5
15:01:32	57.5	15:01:21	58.4	15:02:04	60.3	15:08:35	71.6
15:02:32	61.0	15:02:21	58.1	15:03:04	54.6	15:09:35	57.3
15:03:32	58.8	15:03:21	65.6	15:04:04	58.2	15:10:35	54.1
15:04:32	67.7	15:04:21	57.5	15:05:04	58.9	15:11:35	53
15:05:32	64.0	15:05:21	82.5	15:06:04	60.4	15:12:35	58.6

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
15:06:32	66.3	15:06:21	75.3	15:07:04	55.4	15:13:35	71.8
15:07:32	60.3	15:07:21	66.5	15:08:04	55.3	15:14:35	60.5
15:08:32	63.5	15:08:21	58.5	15:09:04	52.1	15:15:35	53.9
15:09:32	70.0	15:09:21	71.6	15:10:04	53.8	15:16:35	54.8
15:10:32	64.0	15:10:21	59.2	15:11:04	54.4	15:17:35	80.9
15:11:32	64.0	15:11:21	69	15:12:04	57.5	15:18:35	79.9
15:12:32	61.3	15:12:21	67.6	15:13:04	53.4	15:19:35	79.9
15:13:32	57.3	15:13:21	82.8	15:14:04	51.2	15:20:35	79.9
15:14:32	60.0	15:14:21	78.3	15:15:04	53.0	15:21:35	61.1
15:15:32	57.5	15:15:21	76.4	15:16:04	54.0	15:22:35	51.4
15:16:32	62.6	15:16:21	65.4	15:17:04	52.5	15:23:35	53.2
15:17:32	57.1	15:17:21	73.7	15:18:04	55.9	15:24:35	56.5
15:18:32	65.0	15:18:21	60.9	15:19:04	60.1	15:25:35	54.1
15:19:32	56.6	15:19:21	65.6	15:20:04	54.1	15:26:35	60
15:20:32	62.7	15:20:21	70	15:21:04	57.8	15:27:35	57.8
15:21:32	60.9	15:21:21	59	15:22:04	55.2	15:28:35	56.9
15:22:32	58.1	15:22:21	62.2	15:23:04	47.6	15:29:35	60.5
15:23:32	60.1	15:23:21	71.8	15:24:04	53.2	15:30:35	53.8
15:24:32	54.7	15:24:21	68.5	15:25:04	51.9	15:31:35	73.3
15:25:32	56.0	15:25:21	70.3	15:26:04	51.2	15:32:35	54.1
15:26:32	61.9	15:26:21	74.7	15:27:04	58.6	15:33:35	57.5
15:27:32	60.7	15:27:21	75.5	15:28:04	61.1	15:34:35	53.3
15:28:32	56.4	15:28:21	76.4	15:29:04	56.0	15:35:35	71.2
15:29:32	60.5	15:29:21	77.1	15:30:04	55.3	15:36:35	54.3
15:30:32	60.2	15:30:21	74.7	15:31:04	59.8	15:37:35	53.1
15:31:32	53.3	15:31:21	76.5	15:32:04	58.2	15:38:35	53.1
15:32:32	56.2	15:32:21	73.4	15:33:04	64.1	15:39:35	53.6
15:33:32	63.4	15:33:21	74.2	15:34:04	63.7	15:40:35	64.2
15:34:32	53.9	15:34:21	74.5	15:35:04	56.6	15:41:35	72.4
15:35:32	53.4	15:35:21	73.2	15:36:04	57.7	15:42:35	54
15:36:32	57.2	15:36:21	68.8	15:37:04	69.2	15:43:35	53.9
15:37:32	60.2	15:37:21	74.8	15:38:04	56.2	15:44:35	57.8
15:38:32	59.9	15:38:21	74.6	15:39:04	57.4	15:45:35	62.4
15:39:32	59.3	15:39:21	74.3	15:40:04	57.5	15:46:35	72.6
15:40:32	65.0	15:40:21	75.7	15:41:04	60.9	15:47:35	57.4
15:41:32	54.7	15:41:21	76	15:42:04	57.2	15:48:35	53.5
15:42:32	50.0	15:42:21	74.3	15:43:04	56.8	15:49:35	54.2
15:43:32	60.5	15:43:21	74	15:44:04	66.9	15:50:35	81.1
15:44:32	56.6	15:44:21	73.5	15:45:04	60.0	15:51:35	57.1
15:45:32	61.7	15:45:21	70.6	15:46:04	57.5	15:52:35	55.9
15:46:32	66.7	15:46:21	70.3	15:47:04	66.2	15:53:35	54.7
15:47:32	61.4	15:47:21	69.7	15:48:04	57.8	15:54:35	56

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
15:48:32	58.3	15:48:21	71.2	15:49:04	56.7	15:55:35	55
15:49:32	54.9	15:49:21	71.9	15:50:04	60.4	15:56:35	56
15:50:32	57.6	15:50:21	71.5	15:51:04	57.6	15:57:35	55.3
15:51:32	63.6	15:51:21	72.4	15:52:04	57.1	15:58:35	58.1
15:52:32	55.6	15:52:21	69.4	15:53:04	56.2	15:59:35	74.2
15:53:32	55.2	15:53:21	63.4	15:54:04	53.4	16:00:35	56.5
15:54:32	62.1	15:54:21	61.6	15:55:04	58.7	16:01:35	58.8
15:55:32	65.0	15:55:21	63.8	15:56:04	63.5	16:02:35	59.6
15:56:32	52.5	15:56:21	72.7	15:57:04	57.9	16:03:35	58.7
15:57:32	51.1	15:57:21	65.7	15:58:04	60.8	16:04:35	71.3
15:58:32	57.3	15:58:21	67.8	15:59:04	68.9	16:05:35	56.5
15:59:32	53.2	15:59:21	64.9	16:00:04	55.0	16:06:35	60.4
16:00:32	57.5	16:00:21	73.2	16:01:04	58.6	16:07:35	65.3
16:01:32	67.9	16:01:21	68.4	16:02:04	64.2	16:08:35	69
16:02:32	66.3	16:02:21	72.7	16:03:04	55.8	16:09:35	55.5
16:03:32	73.1	16:03:21	68.3	16:04:04	63.5	16:10:35	55.5
16:04:32	70.4	16:09:06	69.5	16:05:04	64.5	16:11:35	60.7
16:05:32	70.2	16:10:06	72.3	16:06:04	58.2	16:12:35	67.6
16:06:32	70.2	16:11:06	66.1	16:07:04	62.8	16:13:35	70.7
16:07:32	71.2	16:12:06	63.6	16:12:39	65.9	16:14:35	79.1
16:08:32	73.9	16:13:06	69.7	16:13:39	59.8	16:15:35	66.3
16:09:32	75.1	16:14:06	63.5	16:14:39	51.3	16:16:35	70.6
16:10:32	74.8	16:15:06	58.9	16:15:39	58.1	16:17:35	70.8
16:11:32	75.2	16:16:06	70.6	16:16:39	62.7	17:28:35	65.4
16:12:32	69.5	16:17:06	67.8	16:17:39	65.3	16:19:35	66.4
16:13:32	72.6	16:18:06	63.1	16:18:39	57.0	16:20:35	66.7
16:14:32	68.2	16:19:06	71.7	16:19:39	67.6	16:21:35	64.8
16:15:32	67.7	16:20:06	66.2	16:20:39	70.6	16:22:35	69.2
16:16:32	71.0	16:21:06	72.3	16:21:39	62.7	16:23:35	66.2
16:17:32	59.8	16:22:06	68.6	16:22:39	61.1	16:24:35	65.8
16:18:32	66.5	16:23:06	66.9	16:23:39	61.9	16:25:35	64.8
16:19:32	67.5	16:24:06	65.9	16:24:39	62.5	16:26:35	65.6
16:20:32	69.8	16:25:06	71.7	16:25:39	63.0	16:27:35	63.2
16:21:32	71.7	16:26:06	67.8	16:26:39	61.7	16:28:35	68.5
16:22:32	72.0	16:27:06	63.2	16:27:39	60.7	16:29:35	62.8
16:23:32	68.7	16:28:06	64.4	16:28:39	56.9	16:30:35	62.6
16:24:32	66.5	16:29:06	68.5	16:29:39	59.3	16:31:35	65.6
16:25:32	66.9	16:30:06	63.8	16:30:39	64.7	16:32:35	62.5
16:26:32	70.4	16:31:06	72.4	16:31:39	59.0	16:33:35	60
16:27:32	71.3	16:32:06	70.2	16:32:39	60.2	16:34:35	67
16:28:32	69.3	16:33:06	68.1	16:33:39	60.5	16:35:35	63.7
16:29:32	71.4	16:34:06	66.4	16:34:39	70.3	16:36:35	63.5

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
16:30:32	66.1	16:35:06	65.2	16:35:39	62.0	16:37:35	64.5
16:31:32	59.6	16:36:06	56.6	16:36:39	62.6	16:38:35	64.4
16:32:32	62.1	16:37:06	69.8	16:37:39	66.4	16:39:35	64.8
16:33:32	61.0	16:38:06	58.7	16:38:39	70.7	16:40:35	64
16:34:32	60.4	16:39:06	55.9	16:39:39	62.5	16:41:35	65.7
16:35:32	62.1	16:40:06	71	16:40:39	64.0	16:42:35	65.7
16:36:32	59.1	16:41:06	65.7	16:41:39	68.4	16:43:35	69.9
16:37:32	64.6	16:42:06	69.2	16:42:39	61.6	16:44:35	70.6
16:38:32	59.7	16:43:06	59.2	16:43:39	67.2	16:48:57	66.4
16:39:32	63.3	16:44:06	63.1	16:44:39	62.9	16:49:57	66.5
16:40:32	62.8	16:45:06	67.1	16:45:39	70.0	16:50:57	67.2
16:41:32	63.4	16:46:06	65.2	16:46:39	63.0	16:51:57	65
16:42:32	61.0	16:47:06	61.2	16:47:39	64.5	16:52:57	67.2
16:43:32	58.9	16:48:06	59.8	16:48:39	69.0	16:53:57	67.8
16:44:32	63.2	16:49:06	67.1	16:49:39	64.9	16:54:57	64.3
16:45:32	60.3	16:50:06	61.6	16:50:39	66.2	16:55:57	62.7
16:46:32	66.1	16:51:06	61	16:51:39	66.7	16:56:57	67.3
16:47:32	64.7	16:52:06	70.9	16:52:39	63.8	16:57:57	63.4
16:48:32	64.0	16:53:06	64.9	16:53:39	68.6	16:58:57	64.4
16:49:32	64.9	16:54:06	64.2	16:54:39	63.5	16:59:57	62.7
16:50:32	60.6	16:55:06	63.1	16:55:39	63.6	17:00:57	65.7
16:51:32	64.6	16:56:06	68	16:56:39	63.2	17:01:57	62.9
16:52:32	63.8	16:57:06	62.9	16:57:39	63.2	17:02:57	74.1
16:53:32	67.2	16:58:06	61	16:58:39	66.7	17:03:57	66.3
16:54:32	67.1	16:59:06	61.4	16:59:39	64.6	17:04:57	62.4
16:55:32	64.9	17:00:06	59.8	17:00:39	64.0	17:05:57	72.7
16:56:32	67.5	17:01:06	72.4	17:01:39	63.3	17:06:57	70.1
16:57:32	71.1	17:02:06	67.8	17:02:39	60.5	17:07:57	62.4
16:58:32	65.0	17:03:06	55.7	17:03:39	62.1	17:08:57	62.2
16:59:32	66.6	17:04:06	54.5	17:04:39	62.6	17:09:57	65.8
17:00:32	63.2	17:05:06	58.9	17:05:39	67.9	17:10:57	61.4
17:01:32	63.9	17:06:06	70.4	17:06:39	61.5	17:11:57	62.1
17:02:32	60.2	17:07:06	66.1	17:07:39	64.1	17:12:57	61.7
17:03:32	65.2	17:08:06	56.2	17:08:39	63.2	17:13:57	61.9
17:04:32	63.0	17:09:06	71.7	17:09:39	61.9	17:14:57	69
17:05:32	58.9	17:10:06	64.8	17:10:39	60.6	17:15:57	61.8
17:06:32	60.0	17:11:06	60.5	17:11:39	60.9	17:16:57	61.3
17:07:32	65.6	17:12:06	69.4	17:12:39	60.3	17:17:57	61.3
17:08:32	62.1	17:13:06	51.6	17:13:39	62.6	17:18:57	61.2
17:09:32	60.6	17:14:06	55.5	17:14:39	62.8	17:19:57	61.3
17:10:32	60.6	17:15:06	70.7	17:15:39	63.5	17:20:57	63.4
17:11:32	60.9	17:16:06	66.9	17:16:39	63.0	17:21:57	61.8

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
17:12:32	64.1	17:17: 06	59.4	17:17:39	60.8	17:22:57	61.8
17:13:32	69.6	17:18: 06	49.3	17:18:39	62.2	17:23:57	62.1
17:14:32	60.3	17:19: 06	61.5	17:19:39	60.4	17:24:57	62.2
17:15:32	60.3	17:20: 06	70.2	17:20:39	65.3	17:25:57	62.8
17:16:32	61.1	17:21: 06	64.6	17:21:39	63.9	17:26:57	66
17:17:32	58.1	17:22: 06	57.3	17:22:39	61.9	17:27:57	63.5
17:18:32	61.4	17:23: 06	53.7	17:23:39	62.9	17:28:57	62
17:19:32	59.3	17:24: 06	55.5	17:24:39	64.6	17:29:57	63
17:20:32	58.5	17:25: 06	73	17:25:39	61.1	17:30:57	62
17:21:32	60.3	17:26: 06	65.6	17:26:39	61.8	17:31:57	62.2
17:22:32	57.9	17:27: 06	68.3	17:27:39	66.2	17:32:57	68.8
17:23:32	55.9	17:28: 06	56.7	17:28:39	61.6	17:33:57	62.5
17:24:32	56.7	17:29: 06	70.6	17:29:39	61.4	17:34:57	62.1
17:25:32	58.1	17:30: 06	64.7	17:30:39	61.9	17:35:57	58.1
17:26:32	64.5	17:31: 06	53	17:31:39	61.2	17:36:57	69.6
17:27:32	57.9	17:32: 06	69.8	17:32:39	60.5	17:37:57	59.6
17:28:32	58.3	17:33: 06	69.6	17:33:39	64.3	17:38:57	59.1
17:29:32	60.2	17:34: 06	57.5	17:34:39	66.5	17:39:57	65.8
17:30:32	60.7	17:35: 06	53.2	17:35:39	61.4	17:40:57	59.5
17:31:32	59.1	17:36: 06	55.7	17:36:39	62.2	17:41:57	61.8
17:32:32	62.9	17:37: 06	55.7	17:37:39	60.9	17:42:57	61.9
17:33:32	59.6	17:38: 06	53.6	17:38:39	66.8	17:43:57	64.8
17:34:32	68.0	17:39: 06	54.9	17:39:39	64.2	17:44:57	62.5
17:35:32	57.8	17:40: 06	68.7	17:40:39	66.6	17:45:57	63.5
17:36:32	58.0	17:41: 06	53.2	17:41:39	67.2	17:46:57	62
17:37:32	61.1	17:42: 06	55.7	17:42:39	66.4	17:47:57	63.2
17:38:32	56.9	17:43: 06	59.1	17:43:39	66.0	17:48:57	68
17:39:32	56.6	17:44: 06	70.9	17:44:39	62.4	17:49:57	60.9
17:40:32	60.0	17:45: 06	64.3	17:45:39	65.5	17:50:57	61.5
17:41:32	57.3	17:46: 06	60.5	17:46:39	61.3	17:51:57	64
17:42:32	85.9	17:47: 06	61.1	17:47:39	64.9	17:52:57	65.2
17:43:32	63.4	17:48: 06	68	17:48:39	64.0	17:53:57	62.5
17:44:32	61.2	17:49: 06	63.5	17:49:39	63.2	17:54:57	61
17:45:32	63.1	17:50: 06	64.3	17:50:39	58.3	17:55:57	73.2
17:46:32	62.2	17:51: 06	60.5	17:51:39	63.7	17:56:57	73.5
17:47:32	59.3	17:52: 06	58.4	17:52:39	60.4	17:57:57	72
17:48:32	57.7	17:53: 06	70.2	17:53:39	56.2	17:58:57	75.5
17:49:32	59.1	17:54: 06	63.4	17:54:39	64.2	17:59:57	74.1
17:50:32	62.5	17:55: 06	64.4	17:55:39	57.9	18:00:57	73.8
17:51:32	59.2	17:56: 06	69.2	17:56:39	62.3	18:01:57	71.5
17:52:32	60.9	17:57: 06	68.3	17:57:39	64.8	18:02:57	67.3
17:53:32	66.1	17:58: 06	61.9	17:58:39	60.2	18:03:57	63.9

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
17:54:32	55.5	17:59: 06	65	17:59:39	59.5	18:04:57	66.1
17:55:32	57.3	18:00: 06	67.6	18:00:39	60.9	18:05:57	68.5
17:56:32	58.8	18:01: 06	70.6	18:01:39	62.5	18:06:57	71.1
17:57:32	57.2	18:02: 06	59.5	18:02:39	67.8	18:07:57	66.4
17:58:32	55.7	18:03: 06	62.4	18:03:39	60.6	18:08:57	63.5
17:59:32	59.1	18:04: 06	70.5	18:04:39	61.1	18:09:57	63.6
18:00:32	67.3	18:05: 06	67.9	18:05:39	58.6	18:10:57	64.7
18:01:32	68.9	18:06: 06	65.4	18:06:39	70.2	18:11:57	66.4
18:02:32	66.9	18:07: 06	60.4	18:07:39	57.9	18:12:57	63.7
18:03:32	70.3	18:08: 06	63.6	18:08:39	59.7	18:13:57	63.9
18:04:32	65.4	18:09: 06	74.2	18:09:39	66.4	18:14:57	64.4
18:05:32	62.9	18:10: 06	62.3	18:10:39	60.0	18:15:57	67.6
18:06:32	63.7	18:11: 06	67.2	18:11:39	56.9	18:16:57	67.8
18:07:32	56.7	18:12: 06	71.2	18:12:39	56.0	18:17:57	68.6
18:08:32	60.4	18:13: 06	68.4	18:13:39	58.8	18:18:57	67
18:09:32	70.1	18:14: 06	67.6	18:14:39	64.9	18:19:57	67.3
18:10:32	61.2	18:15: 06	71	18:15:39	60.6	18:20:57	68.2
18:11:32	62.0	18:16: 06	66.7	18:16:39	60.4	18:21:57	66.1
18:12:32	62.2	18:17: 06	63	18:17:39	53.8	18:22:57	65.6
18:13:32	65.6	18:18: 06	71.4	18:18:39	53.2	18:23:57	70.9
18:14:32	58.3	18:19: 06	72.5	18:19:39	59.9	18:24:57	71.6
18:15:32	56.4	18:20: 06	63.1	18:20:39	54.8	18:25:57	66.6
18:16:32	54.4	18:21: 06	58.9	18:21:39	64.4	18:26:57	68.3
18:17:32	57.5	18:22: 06	58.7	18:22:39	52.1	18:27:57	66.4
18:18:32	53.5	18:23: 06	65.8	18:23:39	58.7	18:28:57	61.3
18:19:32	51.9	18:24: 06	67.6	18:24:39	62.8	18:29:57	60.2
18:20:32	60.6	18:25: 06	58.3	18:25:39	56.3	18:30:57	60.3
18:21:32	52.3	18:26: 06	64.4	18:26:39	59.3	18:31:57	63.6
18:22:32	53.3	18:27: 06	65.8	18:27:39	53.5	18:32:57	62.3
18:23:32	56.0	18:28: 06	61.1	18:28:39	58.6	18:33:57	60.7
18:24:32	56.4	18:29: 06	59.6	18:29:39	58.5	18:34:57	71
18:25:32	57.9	18:30: 06	59.1	18:30:39	58.6	18:35:57	60.2
18:26:32	58.2	18:31: 06	59.5	18:31:39	60.3	18:36:57	59.4
18:27:32	58.5	18:32: 06	59	18:32:39	68.0	18:37:57	62.4
18:28:32	54.5	18:33: 06	58.4	18:33:39	59.8	18:38:57	72.6
18:29:32	66.7	18:34: 06	69.4	18:34:39	58.5	18:39:57	61
18:30:32	58.6	18:35: 06	64.6	18:35:39	53.3	18:40:57	62
18:31:32	60.0	18:36: 06	59.1	18:36:39	57.2	18:41:57	63.8
18:32:32	52.4	18:37: 06	68.9	18:37:39	52.6	18:42:57	60.8
18:33:32	54.1	18:38: 06	58.6	18:38:39	51.3	18:43:57	58.8
18:34:32	56.2	18:39: 06	65.3	18:39:39	51.0	18:44:57	57.7
18:35:32	56.9	18:40: 06	55.6	18:40:39	58.1	18:45:57	58.1

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
18:36:32	52.7	18:41: 06	70.2	18:41:39	54.1	18:46:57	75
18:37:32	55.4	18:42: 06	57.9	18:42:39	55.6	18:47:57	73
18:38:32	57.4	18:43: 06	61.3	18:43:39	56.9	18:48:57	61.4
18:39:32	54.9	18:44: 06	62.9	18:44:39	58.8	18:49:57	61.4
18:40:32	56.1	18:45: 06	70.1	18:45:39	67.3	18:50:57	60.6
18:41:32	57.9	18:46: 06	63	18:46:39	64.5	18:51:57	73.4
18:42:32	62.4	18:47: 06	72.2	18:47:39	54.4	18:52:57	59.7
18:43:32	57.5	18:48: 06	68.2	18:48:39	62.8	18:53:57	64.1
18:44:32	61.0	18:49: 06	73.5	18:49:39	61.0	18:54:57	68.8
18:45:32	66.1	18:50: 06	58	18:50:39	56.9	18:55:57	57.3
18:46:32	53.0	18:51: 06	57.4	18:51:39	59.2	18:56:57	61.5
18:47:32	56.5	18:52: 06	57.8	18:52:39	63.9	18:57:57	68.9
18:48:32	60.8	18:53: 06	55.4	18:53:39	60.2	18:58:57	58.7
18:49:32	53.9	18:54: 06	56.6	18:54:39	58.8	18:59:57	62.8
18:50:32	59.9	18:55: 06	69.5	18:55:39	53.5	19:00:57	60.6
18:51:32	62.1	18:56: 06	58.1	18:56:39	56.3	19:01:57	70.1
18:52:32	64.4	18:57: 06	56.5	18:57:39	58.9	19:02:57	61.5
18:53:32	61.0	18:58: 06	65.4	18:58:39	63.0	19:03:57	61.3
18:54:32	59.7	18:59: 06	65.5	18:59:39	58.6	19:04:57	70.2
18:55:32	59.7	19:00: 06	59.8	19:00:39	56.7	19:05:57	64
18:56:32	58.6	19:01: 06	72.6	19:01:39	59.9	19:06:57	63.9
18:57:32	58.4	19:02: 06	66.5	19:02:39	58.5	19:07:57	79.3
18:58:32	59.6	19:03: 06	56.9	19:03:39	60.3	19:08:57	65.2
18:59:32	55.9	19:04: 06	58.3	19:04:39	59.5	19:09:57	78.5
19:00:32	55.6	19:05: 06	56.3	19:05:39	64.4	19:10:57	82.1
19:01:32	58.7	19:06: 06	56.8	19:06:39	58.0	19:11:57	79.5
19:02:32	68.2	19:07: 06	67.6	19:07:39	59.4	19:12:57	78.9
19:03:32	57.0	19:08: 06	57.6	19:08:39	64.9	19:13:57	59.9
19:04:32	68.0	19:09: 06	63	19:09:39	64.0	19:14:57	77.8
19:05:32	58.5	19:10: 06	67.5	19:10:39	59.7	19:15:57	64.7
19:06:32	57.0	19:11: 06	56.2	19:11:39	60.6	19:16:57	60.7
19:07:32	58.3	19:12: 06	55.8	19:12:39	64.3	19:17:57	62.8
19:08:32	56.8	19:13: 06	56.1	19:13:39	60.8	19:18:57	60
19:09:32	56.9	19:14: 06	59.3	19:14:39	59.7	19:19:57	67
19:10:32	53.9	19:15: 06	56.2	19:15:39	58.5	19:20:57	68.8
19:11:32	58.8	19:16: 06	55.3	19:16:39	65.3	19:21:57	57.9
19:12:32	79.2	19:17: 06	54.1	19:17:39	63.6	19:22:57	58.4
19:13:32	55.5	19:18: 06	54	19:18:39	58.7	19:23:57	61.8
19:14:32	61.5	19:19: 06	71.1	19:19:39	59.6	19:24:57	77
19:15:32	59.7	19:20: 06	64.3	19:20:39	65.1	19:25:57	70.6
19:16:32	57.4	19:21: 06	56	19:21:39	61.6	19:26:57	60.9
19:17:32	53.9	19:22: 06	55.3	19:22:39	61.7	19:27:57	68.9

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
19:18:32	53.1	19:23: 06	52.3	19:23:39	57.1	19:28:57	59.6
19:19:32	59.9	19:24: 06	55.3	19:24:39	67.5	19:29:57	58.7
19:20:32	52.6	19:25: 06	70	19:25:39	60.3	19:30:57	59.1
19:21:32	55.6	19:26: 06	62.6	19:26:39	64.7	19:31:57	57.7
19:22:32	57.3	19:27: 06	58.4	19:27:39	59.3	19:32:57	69.6
19:23:32	61.8	19:28: 06	54.3	19:28:39	62.8	19:33:57	59.9
19:24:32	54.7	19:29: 06	54.1	19:29:39	58.4	19:34:57	58.4
19:25:32	74.3	19:30: 06	59.3	19:30:39	58.9	19:35:57	58.5
19:26:32	56.8	19:31: 06	56.3	19:31:39	62.2	19:36:57	65
19:27:32	56.1	19:32: 06	56.7	19:32:39	63.7	19:37:57	75.4
19:31:23	58.8	19:33: 06	55.7	19:33:39	58.8	19:38:57	63.1
19:32:23	51.6	19:34: 06	59	19:34:39	65.4	19:39:57	61.2
19:33:23	56.0	19:35: 06	67	19:35:39	63.3	19:40:57	61
19:34:23	63.9	19:36: 06	55.4	19:36:39	58.4	19:41:57	59.3
19:35:23	53.9	19:37: 06	53.6	19:37:39	63.5	19:42:57	60.6
19:36:23	57.8	19:38: 06	56	19:38:39	57.0	19:43:57	60.2
19:37:23	61.9	19:39: 06	58.3	19:39:39	55.6	19:44:57	60.4
19:38:23	55.1	19:40: 06	56.7	19:40:39	58.2	19:45:57	59.7
19:39:23	54.1	19:41: 06	57.2	19:41:39	68.7	19:46:57	59.8
19:40:23	65.0	19:42: 06	71.7	19:42:39	62.8	19:47:57	59.4
19:41:23	56.8	19:43: 06	64.6	19:43:39	60.4	19:48:57	69.1
19:42:23	70.0	19:44: 06	67.2	19:44:39	59.6	19:49:57	60.9
19:43:23	54.1	19:45: 06	71.4	19:45:39	57.7	19:50:57	63.5
19:44:23	56.0	19:46: 06	66.9	19:46:39	62.4	19:51:57	59
19:45:23	59.8	19:47: 06	55.9	19:47:39	55.8	19:52:57	69.8
19:46:23	61.4	19:48: 06	53.8	19:48:39	66.7	19:53:57	69.8
19:47:23	67.9	19:49: 06	54.2	19:49:39	58.3	19:54:57	63
19:48:23	53.5	19:50: 06	53.5	19:50:39	59.9	19:55:57	67.8
19:49:23	53.6	19:51: 06	53.8	19:51:39	64.2	19:56:57	56.8
19:50:23	56.6	19:52: 06	53.6	19:52:39	55.6	19:57:57	59.9
19:51:23	66.0	19:53: 06	55.3	19:53:39	52.6	19:58:57	56.7
19:52:23	54.1	19:54: 06	53.6	19:54:39	59.7	19:59:57	55.5
19:53:23	54.6	19:55: 06	53.2	19:55:39	64.1	20:00:57	67
19:54:23	63.9	19:56: 06	53	19:56:39	53.1	20:01:57	68.4
19:55:23	60.0	19:57: 06	53.1	19:57:39	54.1	20:02:57	58.5
19:56:23	56.2	19:58: 06	69.9	19:58:39	51.9	20:03:57	63.1
19:57:23	56.8	19:59: 06	56.2	19:59:39	51.1	20:04:57	65
19:58:23	52.5	20:00: 06	53.8	20:00:39	52.2	20:05:57	61.7
19:59:23	52.7	20:01: 06	72	20:01:39	52.2	20:06:57	59.4
20:00:23	51.7	20:02: 06	62.7	20:02:39	55.7	20:07:57	57.6
20:01:23	53.7	20:03: 06	58.5	20:03:39	57.5	20:08:57	56.4
20:02:23	55.8	20:04: 06	53.9	20:04:39	55.3	20:09:57	56.6

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
20:03:23	54.5	20:05: 06	52.3	20:05:39	61.7	20:10:57	71
20:04:23	60.9	20:06: 06	70.2	20:06:39	61.0	20:11:57	65.8
20:05:23	50.3	20:07: 06	54.5	20:07:39	61.3	20:12:57	68.7
20:06:23	69.2	20:08: 06	70.6	20:08:39	51.5	20:13:57	61.3
20:07:23	54.5	20:09: 06	64.1	20:09:39	50.7	20:14:57	61.7
20:08:23	66.7	20:10: 06	52.6	20:10:39	57.9	20:15:57	69.7
20:09:23	53.6	20:11: 06	52.2	20:11:39	50.5	20:16:57	59.5
20:10:23	53.3	20:12: 06	52.1	20:12:39	52.2	20:17:57	59
20:11:23	55.8	20:13: 06	56.3	20:13:39	57.6	20:18:57	59.4
20:12:23	57.1	20:14: 06	56.6	20:14:39	52.1	20:19:57	58.7
20:13:23	55.1	20:15: 06	52.5	20:15:39	51.7	20:20:57	56.9
20:14:23	55.4	20:16: 06	52.9	20:16:39	55.0	20:21:57	59.5
20:15:23	62.3	20:17: 06	58	20:17:39	52.2	20:22:57	57.7
20:16:23	64.7	20:18: 06	56.5	20:18:39	51.0	20:23:57	58.8
20:17:23	67.4	20:19: 06	54.9	20:19:39	51.7	20:24:57	61.1
20:18:23	58.8	20:20: 06	56	20:20:39	55.1	20:25:57	59.1
20:19:23	58.2	20:21: 06	53.9	20:21:39	55.7	20:26:57	57.2
20:20:23	64.3	20:22: 06	53.5	20:22:39	67.1	20:27:57	69.6
20:21:23	62.6	20:23: 06	54.4	20:23:39	53.1	20:28:57	59.5
20:22:23	58.3	20:24: 06	54.7	20:24:39	51.9	20:29:57	56.4
20:23:23	59.1	20:25: 06	53.3	20:25:39	57.9	20:30:57	55.8
20:24:23	59.3	20:26: 06	72.7	20:26:39	68.4	20:31:57	58.5
20:25:23	64.7	20:27: 06	62	20:27:39	57.2	20:32:57	56.5
20:26:23	64.6	20:28: 06	53.6	20:28:39	58.4	20:33:57	57.1
20:27:23	57.8	20:29: 06	66.3	20:29:39	59.9	20:34:57	56.2
20:28:23	60.1	20:30: 06	56	20:30:39	64.2	20:35:57	57
20:29:23	60.1	20:31: 06	54.3	20:31:39	56.4	20:36:57	56.3
20:30:23	56.1	20:32: 06	54.5	20:32:39	52.1	20:37:57	57.5
20:31:23	55.8	20:33: 06	55.1	20:33:39	51.4	20:38:57	68.9
20:32:23	56.0	20:34: 06	61	20:34:39	56.4	20:39:57	59
20:33:23	56.7	20:35: 06	54.4	20:35:39	54.2	20:40:57	60.7
20:34:23	56.6	20:36: 06	54.9	20:36:39	52.1	20:41:57	55.9
20:35:23	57.4	20:37: 06	62.2	20:37:39	56.8	20:42:57	56.6
20:36:23	59.4	20:38: 06	54.4	20:38:39	60.7	20:43:57	56.2
20:37:23	57.4	20:39: 06	53.9	20:39:39	60.2	20:44:57	56.8
20:38:23	56.7	20:40: 06	54.5	20:40:39	65.3	20:45:57	56.7
20:39:23	72.5	20:41: 06	54.1	20:41:39	52.1	20:46:57	65.7
20:40:23	74.6	20:42: 06	54	20:42:39	56.6	20:47:57	57.5
20:41:23	56.3	20:43: 06	55.1	20:43:39	54.4	20:48:57	57.8
20:42:23	56.6	20:44: 06	54.6	20:44:39	52.2	20:49:57	58.1
20:43:23	55.9	20:45: 06	55.1	20:45:39	57.2	20:50:57	56.9
20:44:23	55.8	20:46: 06	59.5	20:46:39	60.5	20:51:57	57.1

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
20:45:23	56.5	20:47: 06	70.9	20:47:39	67.9	20:52:57	58.1
20:46:23	69.9	20:48: 06	64.7	20:48:39	53.5	20:53:57	60.4
20:47:23	62.0	20:49: 06	54.1	20:55:49	57.3	20:54:57	59.9
20:48:23	55.6	20:50: 06	54.2	20:56:49	52.4	20:55:57	56.8
20:49:23	55.6	20:51: 06	54	20:57:49	52.1	20:56:57	56.5
20:50:23	55.7	20:52: 06	56.8	20:58:49	57.9	20:57:57	56.8
20:51:23	55.9	20:53: 06	70.2	20:59:49	52.3	20:58:57	55.6
20:52:23	60.7	20:54: 06	65.8	21:00:49	51.2	20:59:57	55.4
20:53:23	55.5	20:55: 06	54.5	21:01:49	52.4	21:00:57	69.2
20:54:23	58.6	20:56: 06	57.6	21:02:49	55.4	21:01:57	54.6
20:55:23	58.7	20:57: 06	54	21:03:49	51.1	21:02:57	53
20:56:23	55.4	20:58: 06	54.8	21:04:49	51.2	21:03:57	56.2
20:57:23	55.6	20:59: 06	54.5	21:05:49	57.6	21:04:57	57.2
20:58:23	56.3	21:00: 06	54.9	21:06:49	52.5	21:05:57	72.9
20:59:23	57.0	21:01: 06	54.6	21:07:49	53.0	21:06:57	71
21:00:23	55.6	21:02: 06	54.4	21:08:49	53.2	21:07:57	57.7
21:01:23	55.9	21:03: 06	55.2	21:09:49	55.3	21:08:57	56.3
21:02:23	55.9	21:04: 06	54.9	21:10:49	54.4	21:09:57	56.4
21:03:23	55.9	21:05: 06	55.8	21:11:49	57.1	21:10:57	57
21:04:23	54.9	21:06: 06	53.5	21:12:49	53.3	21:11:57	57.7
21:05:23	56.1	21:07: 06	54.8	21:13:49	51.1	21:12:57	57.8
21:06:23	57.1	21:08: 06	55.7	21:14:49	52.0	21:13:57	58.2
21:07:23	56.5	21:09: 06	54.1	21:15:49	51.4	21:14:57	58
21:08:23	57.3	21:10: 06	55.4	21:16:49	51.9	21:15:57	58.1
21:09:23	58.6	21:11: 06	54.5	21:17:49	51.2	21:16:57	56.5
21:10:23	53.3	21:12: 06	54.4	21:18:49	54.8	21:17:57	57.7
21:11:23	61.3	21:18:11	70.3	21:19:49	53.9	21:18:57	56.9
21:12:23	53.3	21:19:11	55.9	21:20:49	50.4	21:23:49	57.8
21:13:23	51.4	21:20:11	54.6	21:21:49	51.6	21:24:49	56.5
21:14:23	53.7	21:21:11	58.7	21:22:49	50.8	21:25:49	60.7
21:15:23	51.0	21:22:11	70.4	21:23:49	51.6	21:26:49	69.3
21:16:23	53.3	21:23:11	65.2	21:24:49	53.3	21:27:49	56.3
21:17:23	60.4	21:24:11	55.2	21:25:49	54.3	21:28:49	56.7
21:18:23	56.1	21:25:11	56.8	21:26:49	60.7	21:29:49	56.1
21:19:23	57.6	21:26:11	54.7	21:27:49	55.3	21:30:49	56
21:20:23	54.7	21:27:11	54.3	21:28:49	58.0	21:31:49	55.9
21:21:23	54.9	21:28:11	57.3	21:29:49	50.9	21:32:49	55.7
21:22:23	55.5	21:29:11	57.4	21:30:49	51.8	21:33:49	56
21:23:23	54.5	21:30:11	54.6	21:31:49	52.4	21:34:49	56
21:24:23	54.7	21:31:11	54.8	21:32:49	57.5	21:35:49	56.7
21:25:23	56.7	21:32:11	64.6	21:33:49	50.2	21:36:49	57.3
21:26:23	56.2	21:33:11	70.1	21:34:49	50.6	21:37:49	67.7

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Lek	Jam	Lek	Jam	Lek	Jam	Lek
21:27:23	63.9	21:34:11	55	21:35:49	51.0	21:38:49	56.3
21:28:23	55.8	21:35:11	54.8	21:36:49	52.6	21:39:49	55.8
21:29:23	57.3	21:36:11	54.3	21:37:49	51.3	21:40:49	55.9
21:30:23	57.3	21:37:11	54	21:38:49	52.5	21:41:49	55.7
21:31:23	56.3	21:38:11	53.6	21:39:49	53.0	21:42:49	57.5
21:32:23	55.8	21:39:11	52.5	21:40:49	51.2	21:43:49	57.9
21:33:23	56.1	21:40:11	55.7	21:41:49	60.0	21:44:49	57.6
21:34:23	58.7	21:41:11	52.8	21:42:49	52.6	21:45:49	76.9
21:35:23	56.0	21:42:11	52.5	21:43:49	52.5	21:46:49	63.6
21:36:23	55.9	21:43:11	63.1	21:44:49	53.1	21:47:49	74.7
21:37:23	56.2	21:44:11	61.4	21:45:49	60.9	21:48:49	80.5
21:38:23	57.2	21:45:11	53.1	21:46:49	58.4	21:49:49	57.8
21:39:23	61.3	21:46:11	53.4	21:47:49	62.5	21:50:49	68.3
21:40:23	56.5	21:47:11	53.3	21:48:49	52.5	21:51:49	67.6
21:41:23	56.3	21:48:11	53.4	21:49:49	58.1	21:52:49	56.2
21:42:23	55.9	21:49:11	53	21:50:49	56.3	21:53:49	56.6
21:43:23	57.0	21:50:11	53.3	21:51:49	53.6	21:54:49	59.4
21:44:23	72.4	21:51:11	54	21:52:49	56.2	21:55:49	57.3
21:45:23	57.0	21:52:11	53.5	21:53:49	53.4	21:56:49	55.6
21:46:23	63.3	21:53:11	53.7	21:54:49	52.1	21:57:49	55.6
21:47:23	55.8	21:54:11	54.3	21:55:49	54.2	21:58:49	56.5
21:48:23	66.9	21:55:11	54.4	21:56:49	51.5	21:59:49	56.1
21:49:23	56.5	21:56:11	55.4	21:57:49	50.2	22:00:49	56.2
21:50:23	69.6	21:57:11	54.5	21:58:49	52.6	22:01:49	57.4
21:51:23	58.1	21:58:11	54.6	21:59:49	55.0	22:02:49	55.6
21:52:23	73.3	21:59:11	54.6	22:00:49	50.5	22:03:49	55.3
21:53:23	54.6	22:00:11	69.4	22:01:49	50.0	22:04:49	60.5
21:54:23	57.5	22:01:11	58.7	22:02:49	50.2	22:05:49	69.4
21:55:23	57.4	22:02:11	54.3	22:03:49	50.5	22:06:49	53.5
21:56:23	54.5	22:03:11	55.4	22:04:49	50.3	22:07:49	52.6
21:57:23	55.2	22:04:11	58.6	22:05:49	50.8	22:08:49	51.6
21:58:23	55.3	22:05:11	54.5	22:06:49	61.1	22:09:49	52.2
21:59:23	55.3	22:06:11	54.4	22:07:49	51.6	22:10:49	51.9
22:00:23	54.6	22:07:11	54.1	22:08:49	50.9	22:11:49	54.5
22:01:23	54.7	22:08:11	54.6	22:09:49	54.9	22:12:49	56.3
22:02:23	56.7	22:09:11	69.2	22:10:49	50.4	22:13:49	57.2
22:03:23	54.8	22:10:11	56	22:11:49	49.8	22:14:49	56.2
22:04:23	57.8	22:11:11	57.2	22:12:49	51.8	22:15:49	58.4
22:05:23	56.8	22:12:11	53.2	22:13:49	49.6	22:16:49	56.7
22:06:23	68.2	22:13:11	56.7	22:14:49	52.8	22:17:49	55.3
22:07:23	59.4	22:14:11	68.6	22:15:49	63.0	22:18:49	55.1
22:08:23	58.9	22:15:11	55.4	22:16:49	57.9	22:19:49	55.3

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Lek	Jam	Lek	Jam	Lek	Jam	Lek
22:09:23	55.0	22:16:11	54.3	22:17:49	54.7	22:20:49	55.9
22:10:23	54.7	22:17:11	55.4	22:18:49	59.9	22:21:49	55.8
22:11:23	54.8	22:18:11	54.5	22:19:49	50.9	22:22:49	56.6
22:12:23	55.2	22:19:11	53.8	22:20:49	50.6	22:23:49	55.7
22:13:23	54.7	22:20:11	54.8	22:21:49	51.0	22:24:49	57.6
22:14:23	55.3	22:21:11	54.2	22:22:49	52.0	22:25:49	57.6
22:15:23	69.5	22:22:11	54	22:23:49	52.3	22:26:49	56.4
22:16:23	54.9	22:23:11	53.7	22:24:49	50.9	22:27:49	55.3
22:17:23	49.2	22:24:11	54.3	22:25:49	52.4	22:28:49	56.4
22:18:23	51.8	22:25:11	54.1	22:26:49	59.9	22:29:49	55.6
22:19:23	51.6	22:26:11	53.6	22:27:49	58.0	22:30:49	56.8
22:20:23	49.9	22:27:11	55.4	22:28:49	58.0	22:31:49	59.6
22:21:23	46.3	22:28:11	55.5	22:29:49	56.0	22:32:49	56.3
22:22:23	50.7	22:29:11	55.2	22:30:49	49.5	22:33:49	55.9
22:23:23	48.2	22:30:11	52.9	22:31:49	50.0	22:34:49	56.4
22:24:23	53.3	22:31:11	53.4	22:32:49	52.3	22:35:49	55.4
22:25:23	54.3	22:32:11	53.7	22:33:49	54.5	22:36:49	55.2
22:26:23	51.5	22:33:11	52.8	22:34:49	51.1	22:37:49	55
22:27:23	55.3	22:34:11	53.4	22:35:49	52.7	22:38:49	55.2
22:28:23	54.4	22:35:11	54.2	22:36:49	50.9	22:39:49	55.2
22:29:23	51.6	22:36:11	53.1	22:37:49	57.2	22:40:49	55
22:30:23	60.3	22:37:11	52.4	22:38:49	53.8	22:41:49	55
22:31:23	55.6	22:38:11	52.9	22:39:49	51.1	22:42:49	55.2
22:32:23	57.2	22:39:11	58.5	22:40:49	50.8	22:43:49	57.8
22:33:23	56.4	22:40:11	53.8	22:41:49	52.6	22:44:49	56.4
22:34:23	45.6	22:41:11	54.6	22:42:49	50.5	22:45:49	57
22:35:23	46.9	22:42:11	54.9	22:43:49	51.4	22:46:49	56.4
22:36:23	45.9	22:43:11	54	22:44:49	54.0	22:47:49	56.1
22:37:23	46.1	22:44:11	52.8	22:45:49	58.1	22:48:49	55.3
22:38:23	51.1	22:45:11	52.7	22:46:49	51.5	22:49:49	55.6
22:39:23	45.4	22:46:11	52.5	22:47:49	58.3	22:50:49	70
22:40:23	46.2	22:47:11	54.1	22:48:49	51.9	22:51:49	55.6
22:41:23	47.0	22:48:11	53.7	22:49:49	50.0	22:52:49	55.5
22:42:23	46.2	22:49:11	52.7	22:50:49	50.1	22:53:49	55.6
22:43:23	52.4	22:50:11	52.7	22:51:49	53.3	22:54:49	55.8
22:44:23	46.6	22:50:11	54.8	22:52:49	52.9	22:55:49	55.9
22:45:23	46.3	22:52:11	53.2	22:53:49	48.8	22:56:49	56.2
22:46:23	52.5	22:53:11	54.2	22:54:49	48.9	22:57:49	55.9
22:47:23	46.5	22:54:11	55.9	22:55:49	50.0	22:58:49	55.8
22:48:23	46.2	22:55:11	53.4	22:56:49	53.5	22:59:49	55.5
22:49:23	52.9	22:56:11	53.2	22:57:49	49.6	23:00:49	55.4
22:50:23	48.1	22:57:11	52.6	22:58:49	48.8	23:01:49	55.9

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
22:51:23	50.0	22:58:11	53.1	22:59:49	51.3	23:02:49	55.7
22:52:23	50.0	22:59:11	53.3	23:00:49	49.5	23:03:49	56.4
22:53:23	46.8	23:00:11	54.7	23:01:49	49.7	23:04:49	55.5
22:54:23	45.5	23:01:11	53.6	23:02:49	50.5	23:05:49	57.9
22:55:23	45.9	23:02:11	53.8	23:03:49	52.2	23:06:49	56.8
22:56:23	47.0	23:03:11	69.5	23:04:49	56.2	23:07:49	55.5
22:57:23	46.4	23:04:11	59.8	23:05:49	50.3	23:08:49	55.5
22:58:23	46.1	23:05:11	54.3	23:06:49	58.6	23:09:49	55.7
22:59:23	46.5	23:06:11	58.1	23:07:49	52.4	23:10:49	56.2
23:00:23	48.7	23:07:11	53.6	23:08:49	50.4	23:11:49	55.8
23:01:23	48.2	23:08:11	53.5	23:09:49	50.2	23:12:49	72.6
23:02:23	49.4	23:09:11	54.1	23:10:49	50.3	23:13:49	63.9
23:03:23	48.2	23:10:11	54.8	23:11:49	53.3	23:14:49	52.7
23:04:23	48.5	23:11:11	57	23:12:49	50.9	23:15:49	51.3
23:05:23	56.5	23:12:11	52.9	23:13:49	50.9	23:16:49	51.9
23:06:23	66.3	23:13:11	52.2	23:14:49	53.7	23:17:49	51.7
23:07:23	57.7	23:14:11	52.6	23:15:49	52.1	23:18:49	54.6
23:08:23	53.4	23:15:11	51.4	23:16:49	52.8	23:19:49	51.9
23:09:23	52.7	23:16:11	52.1	23:17:49	51.0	23:20:49	55.2
23:10:23	52.1	23:17:11	52.7	23:18:49	52.5	23:21:49	50.8
23:11:23	53.6	23:18:11	52.8	23:19:49	54.4	23:22:49	50.9
23:12:23	53.0	23:19:11	56.2	23:20:49	53.4	23:23:49	51.2
23:13:23	53.1	23:20:11	52.8	23:21:49	57.0	23:24:49	50.6
23:14:23	53.7	23:21:11	53.7	23:22:49	59.5	23:25:49	51.6
23:15:23	54.0	23:22:11	53.3	23:23:49	51.1	23:26:49	50.5
23:16:23	49.4	23:23:11	51.7	23:24:49	50.4	23:27:49	50.2
23:17:23	51.9	23:24:11	51.2	23:25:49	50.6	23:28:49	50.6
23:18:23	56.7	23:25:11	50.8	23:26:49	52.3	23:29:49	49.5
23:19:23	55.9	23:26:11	50.5	23:27:49	56.7	23:30:49	50.5
23:20:23	52.6	23:27:11	50.9	23:28:49	54.8	23:31:49	51
23:21:23	67.9	23:28:11	51.7	23:29:49	50.7	23:32:49	50.7
23:22:23	50.0	23:29:11	51.3	23:30:49	51.3	23:33:49	55.6
23:23:23	50.3	23:30:11	52.3	23:31:49	52.6	23:34:49	54.5
23:24:23	51.2	23:31:11	51.9	23:32:49	63.6	23:35:49	54
23:25:23	53.8	23:32:11	52.3	23:33:49	51.6	23:36:49	54.4
23:26:23	54.5	23:33:11	52.6	23:34:49	52.3	23:37:49	54.7
23:27:23	51.9	23:34:11	52.5	23:35:49	52.2	23:38:49	55.8
23:28:23	51.1	23:35:11	52.1	23:36:49	63.0	23:39:49	54.9
23:29:23	52.1	23:36:11	52.5	23:37:49	58.1	23:40:49	54.4
23:30:23	51.5	23:37:11	52.6	23:38:49	55.8	23:41:49	54.2
23:31:23	52.2	23:38:11	52.7	23:39:49	60.3	23:42:49	54.3
23:32:23	50.9	23:39:11	53.3	23:40:49	52.6	23:43:49	56.5

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
23:33:23	51.0	23:40:11	54.6	23:41:49	50.3	23:44:49	53.7
23:34:23	52.1	23:41:11	53.6	23:42:49	50.1	23:45:49	53.9
23:35:23	51.2	23:42:11	53.3	23:43:49	50.2	23:46:49	53.8
23:36:23	53.7	23:43:11	52.1	23:44:49	50.0	23:47:49	54.1
23:37:23	51.4	23:44:11	53.1	23:45:49	61.3	23:48:49	55.7
23:38:23	70.3	23:45:11	52.4	23:46:49	49.7	23:49:49	55.3
23:39:23	53.1	23:46:11	53.8	23:47:49	49.7	23:50:49	55.2
23:40:23	49.3	23:47:11	53.4	23:48:49	49.8	23:51:49	54.4
23:41:23	55.8	23:48:11	52.4	23:49:49	49.9	23:52:49	54.4
23:42:23	57.3	23:49:11	52.1	23:50:49	49.8	23:53:49	54
23:43:23	53.2	23:50:11	52.5	23:51:49	49.9	23:54:49	54
23:44:23	52.0	23:51:11	52.4	23:52:49	49.6	23:55:49	54.7
23:45:23	53.1	23:52:11	52.6	23:53:49	52.5	23:56:49	54.3
23:46:23	51.2	23:53:11	51.9	23:54:49	52.4	23:57:49	55.6
23:47:23	50.4	23:54:11	52.6	23:55:49	49.8	23:58:49	54.6
23:48:23	51.8	23:55:11	52.1	23:56:49	50.1	23:59:49	55.7
23:49:23	50.2	23:56:11	52	23:57:49	50.1	00:00:49	54.8
23:50:23	49.8	23:57:11	52.4	23:58:49	50.2	00:01:49	55.6
23:51:23	49.2	23:58:11	51.2	23:59:49	52.2	00:02:49	54.6
23:52:23	48.7	23:59:11	49.4	00:00:49	53.2	00:03:49	54.8
23:53:23	49.5	00:00:11	50.4	00:01:49	50.1	00:04:49	55.1
23:54:23	49.8	00:01:11	52.1	00:02:49	50.4	00:05:49	55.3
23:55:23	49.8	00:02:11	49.7	00:03:49	50.5	00:06:49	54.4
23:56:23	52.6	00:03:11	50.2	00:04:49	50.6	00:07:49	53.8
00:01:33	55.5	00:04:11	50.4	00:05:49	50.4	00:08:49	54.7
00:02:33	49.2	00:05:11	49.8	00:06:49	50.2	00:09:49	52.3
00:03:33	48.9	00:06:11	51.4	00:07:49	50.0	00:10:49	53.2
00:04:33	49.2	00:07:11	51.1	00:08:49	50.0	00:11:49	53.1
00:05:33	49.4	00:08:11	52.4	00:09:49	50.4	00:12:49	73.6
00:06:33	48.8	00:09:11	53.2	00:10:49	50.5	00:13:49	62
00:07:33	49.2	00:10:11	50.9	00:11:49	50.7	00:14:49	53.8
00:08:33	49.1	00:11:11	54.4	00:12:49	50.7	00:15:49	54
00:09:33	48.6	00:12:11	71.4	00:13:49	52.0	00:16:49	55.3
00:10:33	48.8	00:13:11	62.6	00:14:49	60.5	00:17:49	54.5
00:11:33	48.8	00:14:11	58.2	00:15:49	52.7	00:18:49	54
00:12:33	48.9	00:15:11	54.1	00:16:49	58.4	00:19:49	54.5
00:13:33	57.1	00:16:11	50.3	00:17:49	64.4	00:20:49	55.6
00:14:33	57.7	00:17:11	49.4	00:18:49	50.8	00:21:49	53.9
00:15:33	49.2	00:18:11	51.3	00:19:49	49.4	00:22:49	53.3
00:16:33	71.4	00:19:11	52.2	00:20:49	49.6	00:23:49	53.8
00:17:33	50.1	00:20:11	50.6	00:21:49	49.4	00:24:49	52.9
00:18:33	48.7	00:21:11	50.3	00:22:49	49.4	00:25:49	59.9

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
00:19:33	48.9	00:22:11	51.6	0:23:49	49.6	00:26:49	53.4
00:20:33	49.2	00:23:11	50.2	0:24:49	50.0	00:27:49	53
00:21:33	50.8	00:24:11	50.7	0:25:49	50.0	00:28:49	53.5
00:22:33	49.0	00:25:11	49.2	0:26:49	50.2	00:29:49	52.2
00:23:33	48.9	00:26:11	49.8	0:27:49	50.1	00:30:49	53.3
00:24:33	49.0	00:27:11	50	0:28:49	50.1	00:31:49	54.2
00:25:33	49.1	00:28:11	51.8	0:29:49	49.9	00:32:49	52.8
00:26:33	48.8	00:29:11	49.9	0:30:49	49.8	00:33:49	52.9
00:27:33	48.7	00:30:11	50.6	0:31:49	49.9	00:34:49	52.8
00:28:33	48.9	00:31:11	48.2	0:32:49	50.8	00:35:49	52.2
00:29:33	49.1	00:32:11	59.2	0:33:49	50.3	00:36:49	52.7
00:30:33	49.6	00:33:11	49.5	0:34:49	50.3	00:37:49	52.2
00:31:33	49.8	00:34:11	49	0:35:49	50.6	00:38:49	51.5
00:32:33	50.0	00:35:11	49.3	0:36:49	51.5	00:39:49	54.1
00:33:33	49.1	00:36:11	49.6	0:37:49	55.4	00:40:49	52.1
00:34:33	48.9	00:37:11	49.1	0:38:49	51.2	00:41:49	53.9
00:35:33	48.9	00:38:11	49.8	0:39:49	52.4	00:42:49	53.1
00:36:33	48.8	00:39:11	51.5	0:40:49	57.7	00:43:49	51.9
00:37:33	49.2	00:40:11	49.8	0:41:49	52.0	00:44:49	53.2
00:38:33	47.3	00:41:11	60.8	0:42:49	50.7	00:45:49	51.5
00:39:33	52.9	00:42:11	63.8	0:43:49	50.2	00:46:49	52.7
00:40:33	53.1	00:43:11	51.7	0:44:49	50.1	00:47:49	63.8
00:41:33	48.9	00:44:11	49.2	0:45:49	50.4	00:48:49	59.6
00:42:33	48.9	00:45:11	47.8	0:46:49	50.2	00:49:49	52.8
00:43:33	49.0	00:46:11	47.9	0:47:49	50.6	00:50:49	53.3
00:44:33	48.9	00:47:11	48.3	0:48:49	50.7	00:51:49	54.8
00:45:33	48.2	00:48:11	48.6	0:49:49	53.1	00:52:49	53
00:46:33	48.1	00:49:11	48.8	0:50:49	50.5	00:53:49	54
00:47:33	48.5	00:50:11	48.1	0:51:49	50.7	00:54:49	55.5
00:48:33	50.7	00:51:11	49.2	0:52:49	51.5	00:55:49	53.5
00:49:33	48.1	00:52:11	53.7	0:53:49	52.4	00:56:49	55.4
00:50:33	48.1	00:53:11	51.2	0:54:49	53.0	00:57:49	54.2
00:51:33	48.2	00:54:11	48.4	0:55:49	64.8	00:58:49	54.4
00:52:33	48.4	00:55:11	49.3	0:56:49	54.1	00:59:49	55.2
00:53:33	48.2	00:56:11	48.6	0:57:49	51.4	01:00:49	54.4
00:54:33	54.8	00:57:11	48.7	0:58:49	51.7	01:01:49	54
00:55:33	50.4	00:58:11	51.1	0:59:49	52.7	01:02:49	59.3
00:56:33	48.7	00:59:11	50.5	1:00:49	61.2	01:03:49	56.1
00:57:33	48.4	1:00:11	52	1:01:49	65.9	01:04:49	53.7
00:58:33	48.3	1:01:11	51.8	1:02:49	51.0	01:05:49	53.4
00:59:33	48.3	1:02:11	52.4	1:03:49	49.8	01:06:49	53.7
01:00:33	72.7	1:03:11	52.7	1:04:49	50.1	01:07:49	62.5

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
01:01:33	48.8	1:04:11	52.3	1:05:49	50.5	01:08:49	60.5
01:02:33	48.5	1:05:11	52.3	1:06:49	50.1	01:09:49	53.9
01:03:33	54.6	1:06:11	52.5	1:07:49	50.2	01:10:49	53.6
01:04:33	49.1	1:07:11	51.9	1:08:49	50.4	01:11:49	53.9
01:05:33	48.5	1:08:11	52	1:09:49	51.1	01:12:49	53.7
01:06:33	48.4	1:09:11	52	1:10:49	50.6	01:13:49	53.7
01:07:33	48.4	1:10:11	56.6	1:11:49	50.2	01:14:49	54.2
01:08:33	49.2	1:11:11	52	1:12:49	50.3	01:15:49	53.6
01:09:33	48.1	1:12:11	51.8	1:13:49	50.5	01:16:49	53.5
01:10:33	48.5	1:13:11	51.2	1:14:49	50.5	01:17:49	53.9
01:11:33	48.2	1:14:11	51.4	1:15:49	50.6	01:18:49	54.1
01:12:33	48.1	1:15:11	51.7	1:16:49	50.5	01:19:49	53.8
01:13:33	48.2	1:16:11	51.5	1:17:49	50.4	01:20:49	54.1
01:14:33	48.5	1:17:11	48.7	1:18:49	50.5	01:21:49	53.6
01:15:33	47.9	1:18:11	48.6	1:19:49	50.3	01:22:49	53.7
01:16:33	47.6	1:19:11	48.7	1:20:49	50.3	01:23:49	53.6
01:17:33	47.8	1:20:11	49	1:21:49	50.4	01:24:49	53.6
01:18:33	47.3	1:21:11	49.2	1:22:49	50.4	01:25:49	53.7
01:19:33	48.1	1:22:11	48.4	1:23:49	50.4	01:26:49	53.7
01:20:33	47.6	1:23:11	48.9	1:24:49	50.6	01:27:49	53.5
01:21:33	47.6	1:24:11	49.3	1:25:49	50.8	01:28:49	53.6
01:22:33	46.6	1:25:11	49.2	1:26:49	54.4	01:29:49	53.4
01:23:33	48.3	1:26:11	49	1:27:49	51.3	01:30:49	53.7
01:24:33	47.5	1:27:11	48.7	1:28:49	50.4	01:31:49	54
01:25:33	47.5	1:28:11	48.8	1:29:49	50.3	01:32:49	53.5
01:26:33	49.5	1:29:11	48.7	1:30:49	50.4	01:33:49	53.5
01:27:33	53.3	1:30:11	48.6	1:31:49	51.2	01:34:49	53.5
01:28:33	45.0	1:31:11	48.6	1:32:49	50.8	01:35:49	55.6
01:29:33	45.0	1:32:11	48.8	1:33:49	50.6	01:36:49	65.9
01:30:33	44.7	1:33:11	48.7	1:34:49	50.9	01:37:49	53.6
01:31:33	44.7	1:34:11	52.4	1:35:49	51.3	01:38:49	52.5
01:32:33	43.4	1:35:11	48.2	1:36:49	53.6	01:39:49	52.7
01:33:33	44.7	1:36:11	48.8	1:37:49	63.6	01:40:49	53
01:34:33	46.0	1:37:11	50.1	1:38:49	55.3	01:41:49	53.1
01:35:33	44.6	1:38:11	49.9	1:39:49	50.1	01:42:49	53.2
01:36:33	68.8	1:39:11	51.9	1:40:49	50.1	01:43:49	53
01:37:33	67.8	1:40:11	49.6	1:41:49	50.2	01:44:49	52.3
01:38:33	44.7	1:41:11	49.4	1:42:49	50.4	01:45:49	53.1
01:39:33	44.9	1:42:11	48.8	1:43:49	50.3	01:46:49	53.2
01:40:33	45.0	1:43:11	49.7	1:44:49	50.6	01:47:49	53.1
01:41:33	44.9	1:44:11	49.5	1:45:49	49.6	01:48:49	53.8
01:42:33	44.9	1:45:11	48.9	1:46:49	50.5	01:49:49	53.8

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
01:43:33	44.8	1:46:11	48.1	1:47:49	51.1	01:50:49	54.3
01:44:33	45.8	1:47:11	47.2	1:48:49	51.0	01:51:49	53.9
01:45:33	45.0	1:48:11	48.2	1:49:49	51.9	01:52:49	53.7
01:46:33	44.6	1:49:11	47.8	1:50:49	51.6	01:53:49	53.8
01:47:33	44.9	1:50:11	48	1:51:49	51.8	01:54:49	53.6
01:48:33	45.5	1:51:11	47.9	1:52:49	52.2	01:55:49	53.4
01:49:33	45.1	1:52:11	48	1:53:49	52.1	01:56:49	53.6
01:50:33	44.8	1:53:11	47.4	1:54:49	52.1	01:57:49	53.8
01:51:33	45.0	1:54:11	48.3	1:55:49	52.0	01:58:49	54.1
01:52:33	46.0	1:55:11	47.9	1:56:49	52.1	01:59:49	68.1
01:53:33	45.6	1:56:11	49	1:57:49	52.2	02:00:49	63.8
01:54:33	47.0	1:57:11	48.4	1:58:49	52.0	02:01:49	54.3
01:55:33	46.9	1:58:11	48.9	1:59:49	52.0	02:02:49	54.9
01:56:33	47.9	1:59:11	49.1	2:00:49	52.2	02:03:49	54.8
01:57:33	48.7	2:00:11	48.8	2:01:49	54.2	02:04:49	54.5
01:58:33	49.1	2:01:11	49.1	2:02:49	52.4	02:05:49	54.6
01:59:33	47.9	2:02:11	48.8	2:03:49	52.3	02:06:49	56.7
02:00:33	49.9	2:03:11	49.2	2:04:49	52.2	02:07:49	55.1
02:01:33	48.4	2:04:11	49.2	2:05:49	52.3	02:08:49	55
02:02:33	48.3	2:05:11	49	2:06:49	52.0	02:09:49	54.8
02:03:33	48.5	2:06:11	48.4	2:07:49	51.9	02:15:44	55.5
02:04:33	48.4	2:07:11	48.8	2:08:49	52.0	02:16:44	56.6
02:05:33	47.9	2:08:11	49	2:09:49	52.1	02:17:44	54.9
02:06:33	47.6	2:09:11	48.8	2:10:49	51.8	02:18:44	54.6
02:07:33	48.0	2:17:22	52.1	2:11:49	51.9	02:19:44	57
02:08:33	48.6	2:18:22	48.7	2:12:49	51.8	02:20:44	54.7
02:09:33	47.6	2:19:22	47.3	2:13:49	52.0	02:21:44	55.3
02:10:33	48.2	2:20:22	49.6	2:14:49	52.0	02:22:44	55.2
02:11:33	48.4	2:21:22	47.8	2:15:49	52.0	02:23:44	54.5
02:12:33	48.7	2:22:22	48.9	2:16:49	51.9	02:24:44	55.6
02:13:33	48.6	2:23:22	48.6	2:17:49	51.9	02:25:44	55.7
02:14:33	48.8	2:24:22	49.4	2:18:49	51.9	02:26:44	55.8
02:15:33	47.9	2:25:22	48.8	2:19:49	52.1	02:27:44	54.7
02:16:33	47.9	2:26:22	49.2	2:20:49	52.1	02:28:44	55
02:17:33	48.9	2:27:22	49.1	2:21:49	54.6	02:29:44	54.7
02:18:33	48.2	2:28:22	49.4	2:22:49	52.4	02:30:44	55.3
02:19:33	48.2	2:29:22	49.5	2:23:49	51.8	02:31:44	55.8
02:20:33	52.7	2:30:22	49.6	2:24:49	52.2	02:32:44	56
02:21:33	49.3	2:31:22	49.3	2:25:49	52.1	02:33:44	55
02:22:33	49.7	2:32:22	50	2:26:49	52.2	02:34:44	55.1
02:23:33	49.3	2:33:22	50.2	2:27:49	51.8	02:35:44	54.5
02:24:33	49.7	2:34:22	50.4	2:28:49	50.9	02:36:44	55.4

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
02:25:33	49.6	2:35:22	50.1	2:29:49	51.6	02:37:44	55.1
02:26:33	49.9	2:36:22	50.5	2:30:49	51.7	02:38:44	54.6
02:27:33	49.1	2:37:22	50.2	2:31:49	51.6	02:39:44	55
02:28:33	49.4	2:38:22	50.4	2:32:49	51.8	02:40:44	55.6
02:29:33	48.9	2:39:22	50.3	2:33:49	52.0	02:41:44	55.2
02:30:33	49.4	2:40:22	50.7	2:34:49	52.0	02:42:44	55.2
02:31:33	64.3	2:41:22	50.1	2:35:49	51.8	02:43:44	54.4
02:32:33	70.1	2:42:22	49.9	2:36:49	52.0	02:44:44	54.6
02:33:33	67.6	2:43:22	50.5	04:29:52	56.0	02:45:44	55.1
02:34:33	66.8	2:44:22	50.3	04:30:52	55.6	02:46:44	55
02:35:33	62.6	2:45:22	50.3	04:31:52	54.5	02:47:44	55
02:36:33	49.4	2:46:22	50.1	04:32:52	54.2	02:48:44	55.1
02:37:33	49.2	2:47:22	50.2	04:33:52	56.2	02:49:44	54.9
02:38:33	49.3	2:48:22	50.3	04:34:52	57.6	02:50:44	55.1
02:39:33	47.1	2:49:22	50.5	04:35:52	58.3	02:51:44	54.9
02:40:33	54.5	2:50:22	50	04:36:52	57.7	02:52:44	55
02:41:33	46.9	2:51:22	49.8	04:37:52	57.4	02:53:44	55.1
02:42:33	46.0	2:52:22	49.5	04:38:52	54.4	02:54:44	55.3
02:43:33	45.8	2:53:22	49.6	04:39:52	54.0	02:55:44	55.6
02:44:33	47.7	2:54:22	49.6	04:40:52	54.5	02:56:44	55.7
02:45:33	47.7	2:55:22	49.1	04:41:52	53.9	02:57:44	55.6
02:46:33	47.0	2:56:22	48.8	04:42:52	52.5	02:58:44	55.7
02:47:33	47.3	2:57:22	49.6	04:43:52	51.4	02:59:44	55.8
02:48:33	46.6	2:58:22	49.1	04:44:52	51.2	03:00:44	55.4
02:49:33	47.0	2:59:22	49	04:45:52	51.1	03:01:44	55.5
02:50:33	46.4	3:00:22	49.1	04:46:52	50.6	03:02:44	56.9
02:51:33	45.9	3:01:22	49.4	04:47:52	50.7	03:03:44	57.4
02:52:33	46.2	3:02:22	49.6	04:48:52	50.5	03:04:44	58.2
02:53:33	47.3	3:03:22	50	04:49:52	50.7	03:05:44	58.3
02:54:33	47.0	3:04:22	50.3	04:50:52	50.6	03:06:44	58.5
02:55:33	47.1	3:05:22	50.6	04:51:52	50.5	03:07:44	59.1
02:56:33	47.1	3:06:22	49.4	04:52:52	50.6	03:08:44	59.3
02:57:33	46.9	3:07:22	49.1	04:53:52	50.8	03:09:44	59.6
02:58:33	47.1	3:08:22	49.2	04:54:52	50.9	03:10:44	59.7
02:59:33	47.0	3:09:22	49.5	04:55:52	50.6	03:11:44	59.9
03:00:33	46.9	3:10:22	49.9	04:56:52	50.6	03:12:44	58.7
03:01:33	46.5	3:11:22	50	04:57:52	50.5	03:13:44	59.7
03:02:33	47.4	3:12:22	50.1	04:58:52	50.5	03:14:44	59.1
03:03:33	47.7	3:13:22	50.4	04:59:52	50.4	03:15:44	60.3
03:04:33	48.6	3:14:22	50.2	05:00:52	50.6	03:16:44	60.2
03:05:33	47.2	3:15:22	50.1	05:01:52	50.3	03:17:44	59.9
03:06:33	47.0	3:16:22	49.9	05:02:52	50.5	03:18:44	59.6

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
03:07:33	48.0	3:17:22	49.6	05:03:52	50.8	03:19:44	59.6
03:08:33	47.2	3:18:22	49.8	05:04:52	51.2	03:20:44	59.7
03:09:33	46.7	3:19:22	50.8	05:05:52	52.4	03:21:44	59.6
03:10:33	47.5	3:20:22	50.1	05:06:52	58.2	03:22:44	59.5
03:11:33	47.0	3:21:22	50.5	05:07:52	51.2	03:23:44	59.7
03:12:33	47.1	3:22:22	50.1	05:08:52	51.3	03:24:44	59.9
03:13:33	47.1	3:23:22	50.4	05:09:52	52.4	03:25:44	59.4
03:14:33	46.8	3:24:22	50.1	05:10:52	51.2	03:26:44	59.6
03:15:33	47.5	3:25:22	50.3	05:11:52	52.8	03:27:44	60.2
03:16:33	46.3	3:26:22	50.2	05:12:52	59.2	03:28:44	60.4
03:17:33	46.7	3:27:22	50	05:13:52	55.4	03:29:44	60.5
03:18:33	47.3	3:28:22	50.1	05:14:52	50.1	03:30:44	58.9
03:19:33	46.8	3:29:22	49.6	05:15:52	52.7	03:31:44	59.7
03:20:33	47.0	3:30:22	50.3	05:16:52	56.8	03:32:44	60
03:21:33	47.2	3:31:22	49.5	05:17:52	54.7	03:33:44	60.3
03:22:33	47.0	3:32:22	49.8	05:18:52	63.0	03:34:44	60.5
03:23:33	46.9	3:33:22	49.6	05:19:52	63.7	03:35:44	60.4
03:24:33	47.2	3:34:22	49.9	05:20:52	53.7	03:36:44	60.5
03:25:33	46.8	3:35:22	49.8	05:21:52	51.1	03:37:44	60.3
03:26:33	46.9	3:36:22	49.2	05:22:52	51.8	03:38:44	60.5
03:27:33	47.1	3:37:22	49.6	05:23:52	50.4	03:39:44	60.5
03:28:33	46.4	3:38:22	49.7	05:24:52	50.4	03:40:44	60.4
03:29:33	45.5	3:39:22	49.5	05:25:52	50.0	03:41:44	60.4
03:30:33	46.4	3:40:22	49.7	05:26:52	49.7	03:42:44	60.9
03:31:33	45.3	3:41:22	49.3	05:27:52	49.8	03:43:44	60.6
03:32:33	45.4	3:42:22	50	05:28:52	49.7	03:44:44	60.6
03:33:33	45.6	3:43:22	50	05:29:52	49.8	03:45:44	60.5
03:34:33	45.1	3:44:22	49.7	05:30:52	49.4	03:46:44	60.7
03:35:33	45.5	3:45:22	49.6	05:31:52	49.2	03:47:44	58.8
03:36:33	46.8	3:46:22	49.6	05:32:52	49.7	03:48:44	56.5
03:37:33	57.3	3:47:22	49.2	05:33:52	50.0	03:49:44	56
03:38:33	47.4	3:48:22	49.8	05:34:52	50.1	03:50:44	56
03:39:33	46.4	3:49:22	49.4	05:35:52	50.3	03:51:44	55.8
03:40:33	46.2	3:50:22	49.3	05:36:52	50.9	03:52:44	55
03:41:33	46.4	3:51:22	48.9	05:37:52	50.1	03:53:44	54.9
03:42:33	46.6	3:52:22	49	05:38:52	50.3	03:54:44	55
03:43:33	46.3	3:53:22	49.1	05:39:52	50.4	03:55:44	55.4
03:44:33	45.4	3:54:22	49.7	05:40:52	50.3	03:56:44	57.7
03:45:33	46.0	3:55:22	49.5	05:41:52	52.6	03:57:44	58.1
03:46:33	46.0	3:56:22	49.3	05:42:52	51.4	03:58:44	59
03:47:33	46.1	3:57:22	49.2	05:43:52	49.9	03:59:44	59.1
03:48:33	46.6	3:58:22	48.6	05:44:52	52.3	04:00:44	59.6

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
03:49:33	45.9	3:59:22	48.5	05:45:52	57.2	04:01:44	59.4
03:50:33	45.7	4:00:22	48.6	05:46:52	51.4	04:02:44	59.8
03:51:33	46.3	4:01:22	48.4	05:47:52	50.2	04:03:44	59.7
03:52:33	45.7	4:02:22	47.9	05:48:52	51.4	04:04:44	59.7
03:53:33	46.2	4:03:22	48.1	05:49:52	50.4	04:05:44	59.7
03:54:33	45.3	4:04:22	48	05:50:52	50.3	04:06:44	60.2
03:55:33	43.9	4:05:22	48.2	05:51:52	50.7	04:07:44	60.4
03:56:33	71.8	4:06:22	48.3	05:52:52	50.7	04:08:44	60.1
03:57:33	71.6	4:07:22	48.6	05:53:52	50.4	04:09:44	59.8
03:58:33	69.8	4:08:22	47.5	05:54:52	52.5	04:10:44	59.7
03:59:33	68.2	4:09:22	47.2	05:55:52	62.1	04:11:44	59.9
04:00:33	63.8	4:10:22	48	05:56:52	51.9	04:12:44	60.2
04:01:33	46.9	4:11:22	49.7	05:57:52	51.7	04:13:44	59.2
04:02:33	46.9	4:12:22	47.4	05:58:52	56.9	04:14:44	59.2
04:03:33	46.2	4:13:22	47.8			04:15:44	59.5
04:04:33	46.2	4:14:22	47.9			04:16:44	62
04:05:33	46.7	4:15:22	48.2			04:17:44	62.4
04:06:33	46.3	4:16:22	50.4			04:18:44	62.6
04:07:33	46.6	4:17:22	47.9			04:19:44	62.8
04:08:33	47.0	4:18:22	47.5			04:20:44	63
04:09:33	46.1	4:19:22	48.3			04:21:44	62
04:10:33	46.0	4:20:22	47.9			04:22:44	60.2
04:11:33	47.2	4:21:22	48.2			04:23:44	68.5
04:12:33	46.5	4:22:22	48.5			04:24:44	69.8
04:13:33	46.6	4:23:22	48.3			04:25:44	71.5
04:14:33	47.0	4:24:22	50.4			04:26:44	72.4
04:15:33	45.6	4:25:22	50.8			04:27:44	71.2
04:16:33	47.6	4:26:22	51.7			04:28:44	73
04:17:33	47.7	4:27:22	49.2			04:29:44	73
04:18:33	47.7	4:28:22	49.7			04:30:44	72.9
04:19:33	47.4	4:29:22	48.7			04:31:44	72.4
04:20:33	48.3	4:30:22	48.5			04:32:44	72
04:21:33	48.1	4:31:22	48.5			04:33:44	70.6
04:22:33	48.0	4:32:22	49.2			04:34:44	71.5
04:23:33	48.7	4:33:22	51.2			04:35:44	72.2
04:24:33	48.2	4:34:22	50.4			04:36:44	71.1
04:25:33	48.3	4:35:22	49.5			04:37:44	64.1
04:26:33	48.8	4:36:22	49.7			04:38:44	73.1
04:27:33	48.7	4:37:22	49.6			04:39:44	74
04:28:33	48.8	4:38:22	50.2			04:40:44	73.9
04:29:33	49.1	4:39:22	53.4			04:41:44	73.9
04:30:33	48.1	4:40:22	53.6			04:42:44	68.7

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
04:31:33	48.8	4:41:22	54.8			04:43:44	61.6
04:32:33	49.4	4:42:22	53.9			04:44:44	60.8
04:33:33	48.3	4:43:22	54			04:45:44	60.9
04:34:33	50.3	4:44:22	54.6			04:46:44	61
04:35:33	50.1	4:45:22	55.3			04:47:44	59.6
04:36:33	49.3	4:46:22	53.1			04:48:44	59.9
04:37:33	49.8	4:47:22	55			04:49:44	59.7
04:38:33	49.6	4:48:22	52.6			04:50:44	59.9
04:39:33	49.0	4:49:22	52.3			04:51:44	60
04:40:33	49.6	4:50:22	50.7			04:52:44	60.6
04:41:33	49.0	4:51:22	51.3			04:53:44	61.2
04:42:33	71.4	4:52:22	51.5			04:54:44	61.1
04:43:33	71.3	4:53:22	49.8			04:55:44	60.5
04:44:33	71.0	4:54:22	49			04:56:44	60.5
04:45:33	69.4	4:55:22	54.6			04:57:44	61.1
04:46:33	69.0	4:56:22	49.2			04:58:44	57.8
04:47:33	64.8	4:57:22	47.1			04:59:44	58.9
04:48:33	66.3	4:58:22	46.3			05:00:44	58.4
04:49:33	64.9	4:59:22	46.2			05:01:44	61.9
04:50:33	67.2	5:00:22	46.9			05:02:44	58.9
04:51:33	66.2	5:01:22	50.9			05:03:44	59
04:52:33	64.2	5:02:22	51.7			05:04:44	58.8
04:53:33	65.9	5:03:22	51.1			05:05:44	56.8
04:54:33	68.4	5:04:22	49.2			05:06:44	57.9
04:55:33	68.2	5:05:22	48.5			05:07:44	67.6
04:56:33	63.5	5:06:22	49.4			05:08:44	59.5
04:57:33	47.4	5:07:22	48.7			05:09:44	55.6
04:58:33	63.0	5:08:22	46.7			05:10:44	55.6
05:04:34	73.1	5:09:22	47.2			05:11:44	55.1
05:05:34	69.3	5:10:22	47.1			05:12:44	57.3
05:06:34	69.8	5:11:22	47.8			05:13:44	55.4
05:07:34	71.6	5:12:22	47.6			05:14:44	65.4
05:08:34	75.5	5:13:22	49			05:15:44	56.3
05:09:34	66.3	5:14:22	49.3			05:16:44	52.8
05:10:34	54.2	5:15:22	48.8			05:17:44	53.1
05:11:34	62.6	5:16:22	48.7			05:18:44	64.7
05:12:34	67.0	5:17:22	49.3			05:19:44	60
05:13:34	46.1	5:18:22	49			05:20:44	60.3
05:14:34	51.2	5:19:22	56.1			05:21:44	59.8
05:15:34	67.6	5:20:22	53.2			05:22:44	59.7
05:16:34	66.9	5:21:22	57.6			05:23:44	59.5
05:17:34	63.2	5:22:22	56			05:24:44	61.4

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
05:18:34	67.8	5:23:22	57.5			05:25:44	59.8
05:19:34	63.3	5:24:22	59.5			05:26:44	61.3
05:20:34	66.7	5:25:22	54.4			05:27:44	60.7
05:21:34	47.9	5:26:22	58.3			05:28:44	60.1
05:22:34	50.0	5:27:22	59			05:29:44	61.8
05:23:34	49.9	5:28:22	61.7			05:30:44	61.7
05:24:34	50.8	5:29:22	56			05:31:44	59.3
05:25:34	61.9	5:30:22	60.3			05:32:44	57.6
05:26:34	65.1	5:31:22	62			05:33:44	53.8
05:27:34	62.0	5:32:22	57.1			05:34:44	53.8
05:28:34	62.9	5:33:22	60			05:35:44	54.7
05:29:34	62.3	5:34:22	60.7			05:36:44	53.8
05:30:34	47.4	5:35:22	59.8			05:37:44	54.5
05:31:34	47.3	5:36:22	60.2			05:38:44	55.2
05:32:34	48.8	5:37:22	58.9			05:39:44	55
05:33:34	50.1	5:38:22	59.9			05:40:44	66.1
05:34:34	57.8	5:39:22	59.1			05:41:44	59.2
05:35:34	64.0	5:40:22	58.5			05:42:44	56.2
05:36:34	58.5	5:41:22	52.8			05:43:44	55.8
05:37:34	54.9	5:42:22	55.5			05:44:44	55.7
05:38:34	59.2	5:43:22	70			05:45:44	55.6
05:39:34	58.7	5:44:22	53.2			05:46:44	56.2
05:40:34	69.6	5:45:22	55.7			05:47:44	58.1
05:41:34	69.6	5:46:22	55.3			05:48:44	57.1
05:42:34	69.7	5:47:22	53.8			05:49:44	57.5
05:43:34	67.7	5:48:22	56.5			05:50:44	56.3
05:44:34	66.9	5:49:22	66.7			05:51:44	56.1
05:45:34	54.8	5:50:22	57.4			05:52:44	55
05:46:34	53.7	5:51:22	60.3			05:53:44	56
05:47:34	52.7	5:52:22	69.4			05:54:44	56
05:48:34	57.0	5:53:22	56.9			05:55:44	55.4
05:49:34	56.0	5:54:22	59.5			05:56:44	56.3
05:50:34	64.9	5:55:22	60.2			05:57:44	56.9
05:51:34	67.1	5:56:22	58.6			05:58:44	67.8
05:52:34	61.5	5:57:22	58.2			05:59:44	59.7
05:53:34	61.8	5:58:22	69.4			06:00:44	58.2
05:54:34	63.3	5:59:22	69.1				
05:55:34	56.4	6:00:22	57.2				
05:56:34	57.3						
05:57:34	57.1						
05:58:34	85.9						
05:59:34	79.2						

Tingkat Kebisingan Hari 2 (13 April 2011 – 14 April 2011)

Titik 1		Titik 2		Titik 3		Titik 4		Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
06:00:59	73.7	5:57:00	58.4	06:04:00	57.9	05:59:52	54.3	06:41:59	64.7	6:38:00	55.5	06:45:00	54.0	06:40:52	55.6
06:01:59	53.9	5:58:00	62.7	06:05:00	63.8	06:00:52	58.1	06:42:59	53.2	6:39:00	55.8	06:46:00	61.6	06:41:52	57.8
06:02:59	53.2	5:59:00	63.5	06:06:00	53.9	06:01:52	72.3	06:43:59	57.7	6:40:00	58.5	06:47:00	54.4	06:42:52	56.2
06:03:59	66.2	6:00:00	64	06:07:00	54.3	06:02:52	54.3	06:44:59	54.0	6:41:00	54.1	06:48:00	54.2	06:43:52	60.9
06:04:59	56.5	6:01:00	53.2	06:08:00	68.1	06:03:52	58.9	06:45:59	66.4	6:42:00	69.7	06:49:00	50.3	06:44:52	67
06:05:59	58.0	6:02:00	58.1	06:09:00	55.7	06:04:52	70.8	06:46:59	62.9	6:43:00	55	06:50:00	54.0	06:45:52	77.7
06:06:59	59.5	6:03:00	56	06:10:00	56.2	06:05:52	55.9	06:47:59	67.7	6:44:00	59.3	06:51:00	52.9	06:46:52	62.6
06:07:59	60.4	6:04:00	58.4	06:11:00	66.5	06:06:52	60.6	06:48:59	55.3	6:45:00	58.4	06:52:00	52.8	06:47:52	80.5
06:08:59	55.8	6:05:00	54.2	06:12:00	66.4	06:07:52	71.1	06:49:59	54.8	6:46:00	60.4	06:53:00	57.3	06:48:52	57.4
06:09:59	69.7	6:06:00	50.8	06:13:00	62.8	06:08:52	57.1	06:50:59	57.0	6:47:00	59.5	06:54:00	51.3	06:49:52	69.9
06:10:59	63.6	6:07:00	51.9	06:14:00	63.6	06:09:52	72.8	06:51:59	56.7	6:48:00	58.6	06:55:00	51.6	06:50:52	70.3
06:11:59	55.9	6:08:00	51.8	06:15:00	58.6	06:10:52	57.4	06:52:59	68.7	6:49:00	56.8	06:56:00	55.3	06:51:52	62.3
06:12:59	64.3	6:09:00	51.7	06:16:00	66.2	06:11:52	68.1	06:53:59	59.6	6:50:00	57.3	06:57:00	53.8	06:52:52	71.2
06:13:59	56.8	6:10:00	53.1	06:17:00	62.7	06:12:52	58.6	06:54:59	52.8	6:51:00	56.8	06:58:00	58.6	06:53:52	63.4
06:14:59	65.1	6:11:00	52.5	06:18:00	58.5	06:13:52	72.9	06:55:59	53.2	6:52:00	57.6	06:59:00	51.1	06:54:52	56.3
06:15:59	61.3	6:12:00	52.8	06:19:00	60.4	06:14:52	56.6	06:56:59	72.1	6:53:00	59.7	07:00:00	54.9	06:55:52	59.9
06:16:59	60.7	6:13:00	53.5	06:20:00	55.8	06:15:52	55.1	06:57:59	59.5	6:54:00	55.5	07:01:00	59.1	06:56:52	60.5
06:17:59	61.1	6:14:00	59.5	06:21:00	63.5	06:16:52	67.9	06:58:59	66.9	6:55:00	54.8	07:02:00	55.9	06:57:52	58.1
06:18:59	55.6	6:15:00	56.8	06:22:00	55.9	06:17:52	67.9	06:59:59	51.9	6:56:00	55.1	07:03:00	51.1	06:58:52	65.5
06:19:59	62.2	6:16:00	57.4	06:23:00	61.9	06:18:52	65.7	07:00:59	48.6	6:57:00	69.1	07:04:00	51.8	06:59:52	65.7
06:20:59	54.9	6:17:00	53.1	06:24:00	63.3	06:19:52	58	07:01:59	64.7	6:58:00	55.8	07:05:00	53.8	07:00:52	63.4
06:21:59	54.3	6:18:00	53.9	06:25:00	54.6	06:20:52	69.9	07:02:59	59.6	6:59:00	53.7	07:06:00	53.3	07:01:52	71.2
06:22:59	65.1	6:19:00	55.2	06:26:00	55.1	06:21:52	68.9	07:03:59	49.2	7:00:00	54.7	07:07:00	55.3	07:02:52	61.3
06:23:59	71.0	6:20:00	52.4	06:27:00	62.4	06:22:52	64.1	07:04:59	58.8	7:01:00	73.9	07:08:00	50.0	07:03:52	61.1
06:24:59	55.7	6:21:00	53.5	06:28:00	57.0	06:23:52	71.2	07:05:59	53.7	7:02:00	65.2	07:09:00	55.0	07:04:52	60.3
06:25:59	55.5	6:22:00	54.1	06:29:00	58.9	06:24:52	56.7	07:06:59	64.1	7:03:00	62	07:10:00	52.0	07:05:52	70
06:26:59	56.5	6:23:00	53.9	06:30:00	56.3	06:25:52	68.1	07:07:59	58.5	7:04:00	60.9	07:11:00	50.2	07:06:52	57.9
06:27:59	69.9	6:24:00	55	06:31:00	55.2	06:26:52	57.4	07:08:59	71.6	7:05:00	71.5	07:12:00	50.7	07:07:52	55.7
06:28:59	58.9	6:25:00	55.3	06:32:00	58.6	06:27:52	68.6	07:09:59	63.2	7:06:00	56.9	07:13:00	57.9	07:08:52	55.3
06:29:59	69.8	6:26:00	58.2	06:33:00	54.7	06:28:52	58.1	07:10:59	56.6	7:07:00	59	07:14:00	57.9	07:09:52	54.6
06:30:59	63.0	6:27:00	53.8	06:34:00	58.1	06:29:52	55.6	07:11:59	56.9	7:08:00	70.4	07:15:00	49.4	07:10:52	53.3
06:31:59	53.7	6:28:00	51.5	06:35:00	55.5	06:30:52	56.6	07:12:59	66.4	7:09:00	60.3	07:16:00	51.8	07:11:52	56.3
06:32:59	59.2	6:29:00	52.6	06:36:00	59.9	06:31:52	58.4	07:13:59	56.5	7:10:00	55.7	07:17:00	56.9	07:12:52	66.3
06:33:59	56.1	6:30:00	53.4	06:37:00	57.7	06:32:52	69.6	07:14:59	54.3	7:11:00	60.5	07:18:00	53.8	07:13:52	57.7
06:34:59	59.1	6:31:00	52.7	06:38:00	56.2	06:33:52	59.7	07:15:59	55.3	7:12:00	69.7	07:19:00	51.3	07:14:52	68.2
06:35:59	56.9	6:32:00	52.1	06:39:00	58.9	06:34:52	63.3	07:16:59	62.6	7:13:00	55.6	07:20:00	52.5	07:15:52	56.5
06:36:59	65.4	6:33:00	51.6	06:40:00	55.6	06:35:52	64.4	07:17:59	61.7	7:14:00	76.3	07:21:00	53.5	07:16:52	53.5
06:37:59	68.5	6:34:00	52.5	06:41:00	60.1	06:36:52	59	07:18:59	54.1	7:15:00	57.2	07:22:00	48.8	07:17:52	52.3
06:38:59	54.5	6:35:00	54	06:42:00	54.1	06:37:52	59	07:19:59	54.8	7:16:00	58.5	07:23:00	47.9	07:18:52	62.7
06:39:59	70.0	6:36:00	66.8	06:43:00	60.9	06:38:52	57.2	07:20:59	55.0	7:17:00	57	07:24:00	48.3	07:19:52	70.3
06:40:59	54.6	6:37:00	56.6	06:44:00	59.5	06:39:52	58.5	07:21:59	57.7	7:18:00	74.7	07:25:00	49.5	07:24:05	54.9

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
07:22:59	62.6	7:19:00	72.9	07:26:00	47.5	07:25:05	51.9
07:23:59	55.4	7:20:00	54.5	07:27:00	48.5	07:26:05	56
07:24:59	53.6	7:21:00	57.3	07:28:00	50.4	07:27:05	56.7
07:25:59	71.4	7:22:00	55.3	07:29:00	52.4	07:28:05	67.9
07:26:59	55.8	7:23:00	55.4	07:30:00	52.4	07:29:05	81.7
07:27:59	67.1	7:24:00	54.7	07:31:00	55.3	07:30:05	58.4
07:28:59	57.1	7:25:00	55.8	07:32:00	47.8	07:31:05	53.1
07:29:59	58.3	7:26:00	53.8	07:33:00	45.3	07:32:05	57.9
07:30:59	65.3	7:27:00	58.3	07:34:00	46.2	07:33:05	54.7
07:31:59	57.3	7:28:00	57	07:35:00	47.3	07:34:05	52.8
07:32:59	53.8	7:29:00	54.2	07:36:00	47.2	07:35:05	55.7
07:33:59	54.5	7:30:00	54.5	07:37:00	46.7	07:36:05	50.3
07:34:59	67.8	7:31:00	57.5	07:38:00	51.5	07:37:05	58.3
07:35:59	54.3	7:32:00	56.5	07:39:00	49.4	07:38:05	70.6
07:36:59	54.3	7:33:00	55.5	07:40:00	52.0	07:39:05	69.1
07:37:59	53.8	7:34:00	69.3	07:41:00	50.0	07:40:05	57.7
07:38:59	54.7	7:35:00	55	07:42:00	48.9	07:41:05	70.9
07:39:59	58.7	7:36:00	57.2	07:43:00	53.1	07:42:05	71.4
07:40:59	55.1	7:37:00	70.1	07:44:00	56.0	07:43:05	55.1
07:41:59	54.8	7:38:00	56.3	07:45:00	51.8	07:44:05	54.1
07:42:59	67.6	7:39:00	56.4	07:46:00	52.6	07:45:05	51.2
07:43:59	56.0	7:40:00	57.3	07:47:00	51.5	07:46:05	51
07:44:59	55.3	7:41:00	57.6	07:48:00	52.0	07:47:05	69.6
07:45:59	56.4	7:42:00	55.7	07:49:00	48.6	07:48:05	51.1
07:46:59	55.4	7:43:00	59.9	07:50:00	46.6	07:49:05	51.8
07:47:59	54.4	7:44:00	60.1	07:51:00	46.7	07:50:05	59
07:48:59	54.7	7:45:00	58.5	07:52:00	46.5	07:51:05	53.7
07:49:59	61.3	7:46:00	71.4	07:53:00	49.8	07:52:05	52.6
07:50:59	57.4	7:47:00	55.8	07:54:00	50.8	07:53:05	57.9
07:51:59	56.9	7:48:00	57.5	07:55:00	55.0	07:54:05	55.9
07:52:59	56.1	7:49:00	56.8	07:56:00	43.7	07:55:05	70.1
07:53:59	56.2	7:50:00	68.8	07:57:00	47.6	07:56:05	68.2
07:54:59	54.6	7:51:00	66.9	07:58:00	45.7	07:57:05	67.1
07:55:59	54.8	7:52:00	60.8	07:59:00	46.3	07:58:05	61.3
07:56:59	53.6	7:53:00	64	08:00:00	49.2	07:59:05	71.4
07:57:59	53.8	7:54:00	70.5	08:01:00	53.6	08:00:05	59.5
07:58:59	56.1	7:55:00	55.3	08:02:00	47.2	08:01:05	58.4
07:59:59	54.2	7:56:00	53.6	08:03:00	52.4	08:02:05	69.6
08:00:59	54.3	7:57:00	63.6	08:04:00	48.4	08:03:05	54.6
08:01:59	54.0	7:58:00	69.8	08:05:00	47.2	08:04:05	56.2
08:02:59	64.2	7:59:00	53.8	08:06:00	52.2	08:05:05	66.4
08:03:59	57.4	8:00:00	54.4	08:07:00	50.3	08:06:05	60.1

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
08:04:59	54.4	8:01:00	72	08:08:00	50.9	08:07:05	63.7
08:05:59	63.9	8:02:00	55.4	08:09:00	52.7	08:08:05	65.9
08:06:59	54.2	8:03:00	53.8	08:10:00	55.0	08:09:05	66.2
08:07:59	54.4	8:04:00	56.3	08:11:00	56.0	08:10:05	64
08:08:59	63.3	8:05:00	69.9	08:12:00	49.5	08:11:05	59.2
08:09:59	64.8	8:06:00	60.6	08:13:00	50.9	08:12:05	70.3
08:10:59	61.9	8:07:00	59.7	08:14:00	54.6	08:13:05	59.2
08:11:59	64.1	8:08:00	70.8	08:15:00	47.5	08:14:05	80.9
08:12:59	58.9	8:09:00	58	08:16:00	54.3	08:15:05	64.4
08:13:59	65.7	8:10:00	54.2	08:17:00	46.7	08:16:05	53.8
08:14:59	63.8	8:11:00	67.1	08:18:00	48.2	08:17:05	53.2
08:15:59	57.9	8:12:00	55.7	08:19:00	53.0	08:18:05	53.1
08:16:59	60.5	8:13:00	56.2	08:20:00	54.4	08:19:05	71
08:17:59	60.5	8:14:00	56.6	08:21:00	60.6	08:20:05	57.1
08:18:59	60.9	8:15:00	54	08:22:00	47.2	08:21:05	82.4
08:19:59	64.2	8:16:00	61.1	08:23:00	61.4	08:22:05	55.2
08:20:59	63.9	8:17:00	59.5	08:24:00	51.8	08:23:05	57.2
08:21:59	57.3	8:18:00	72.5	08:25:00	53.5	08:24:05	51.8
08:22:59	78.1	8:19:00	57.4	08:26:00	52.4	08:25:05	52
08:23:59	72.1	8:20:00	56.8	08:27:00	50.2	08:26:05	79.3
08:24:59	54.1	8:21:00	54.4	08:28:00	60.2	08:27:05	69.2
08:25:59	54.0	8:22:00	54.6	08:29:00	44.8	08:28:05	65.5
08:26:59	64.4	8:23:00	70.3	08:30:00	52.9	08:29:05	54.1
08:27:59	57.2	8:24:00	53.7	08:31:00	51.5	08:30:05	52.7
08:28:59	68.6	8:25:00	70.2	08:32:00	49.7	08:31:05	65.9
08:29:59	59.4	8:26:00	55.1	08:33:00	56.8	08:32:05	66.7
08:30:59	62.5	8:27:00	53.3	08:34:00	49.6	08:33:05	53.8
08:31:59	54.2	8:28:00	52	08:35:00	47.9	08:34:05	54.8
08:32:59	64.0	8:29:00	50.4	08:36:00	49.1	08:35:05	54.3
08:33:59	69.2	8:30:00	71.7	08:37:00	48.2	08:36:05	52.2
08:34:59	55.1	8:31:00	49.1	08:38:00	55.3	08:37:05	51.3
08:35:59	55.0	8:32:00	49.5	08:39:00	42.4	08:38:05	51.4
08:36:59	54.1	8:33:00	55.2	08:40:00	44.4	08:39:05	51.5
08:37:59	54.0	8:34:00	69.2	08:41:00	47.9	08:40:05	52
08:38:59	58.6	8:35:00	59.3	08:42:00	45.1	08:41:05	51.3
08:55:23	62.9	8:36:00	53.1	08:43:00	48.0	08:42:05	53.2
08:56:23	65.9	8:37:00	50.2	08:44:00	55.7	08:43:05	70.2
08:57:23	56.1	8:38:00	67.2	08:45:00	55.8	08:44:05	69.7
08:58:23	53.4	8:39:00	50.8	08:46:00	53.4	08:45:05	54.1
08:59:23	53.7	8:40:00	51.9	08:47:00	54.7	08:46:05	61.1
09:00:23	58.9	8:41:00	59.4	08:48:00	54.8	08:47:05	51.6
09:01:23	58.0	8:42:00	68.9	08:49:00	51.6	08:48:05	78.5

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
09:02:23	55.5	8:43:00	53.2	08:50:00	55.7	08:49:05	74.2
09:03:23	65.0	8:44:00	53.4	08:51:00	55.2	08:50:05	54.6
09:04:23	67.5	8:45:00	59	08:52:00	57.0	08:51:05	54.3
09:05:23	56.3	8:46:00	56.1	08:53:00	52.6	08:52:05	53.1
09:06:23	55.1	8:47:00	72	08:54:00	52.7	08:53:05	51.4
09:07:23	54.1	8:48:00	66	08:55:00	60.4	08:54:05	50.6
09:08:23	67.4	8:49:00	56.3	08:56:00	52.2	08:55:05	54.9
09:09:23	54.2	8:50:00	55.1	08:57:00	53.5	08:56:05	71.2
09:10:23	61.0	8:51:00	72.2	08:58:00	51.3	08:57:05	67.3
09:11:23	53.8	8:52:00	54.1	08:59:00	54.3	08:58:05	57.4
09:12:23	66.2	8:53:00	71.2	09:00:00	52.1	08:59:05	56.9
09:13:23	60.2	8:54:00	64.8	09:01:00	51.9	09:00:05	71
09:14:23	53.8	8:55:00	54.6	09:02:00	53.6	09:01:05	62.8
09:15:23	62.4	8:56:00	53.3	09:03:00	53.1	09:02:05	59.7
09:16:23	55.8	8:57:00	57.4	09:04:00	49.6	09:03:05	64.3
09:17:23	58.4	8:58:00	60.7	09:05:00	59.0	09:04:05	61.5
09:18:23	66.0	8:59:00	71.6	09:06:00	51.0	09:05:05	56.1
09:19:23	72.8	9:00:00	57	09:07:00	52.0	09:06:05	68
09:20:23	66.6	9:01:00	57.3	09:08:00	54.1	09:07:05	62.8
09:21:23	54.9	9:02:00	69.1	09:09:00	54.5	09:08:05	55.9
09:22:23	59.5	9:03:00	59.9	09:10:00	48.7	09:09:05	64.5
09:23:23	59.6	9:04:00	56.2	09:11:00	50.8	09:10:05	69.9
09:24:23	54.3	9:05:00	69.7	09:12:00	50.1	09:11:05	55.1
09:25:23	61.4	9:06:00	57.9	09:13:00	58.6	09:12:05	54.2
09:26:23	64.3	9:07:00	59.9	09:14:00	56.5	09:13:05	50.5
09:27:23	59.6	9:08:00	61.3	09:15:00	57.4	09:14:05	52.6
09:28:23	54.5	9:09:00	68.8	09:16:00	48.5	09:15:05	58.3
09:29:23	64.6	9:10:00	58.1	09:17:00	57.2	09:16:05	52.9
09:30:23	55.3	9:11:00	55.6	09:18:00	51.3	09:17:05	53.9
09:31:23	57.1	9:12:00	70.5	09:19:00	51.3	09:18:05	54.5
09:32:23	56.1	9:13:00	71.8	09:20:00	60.9	09:19:05	51.6
09:33:23	54.4	9:14:00	64.8	09:21:00	58.3	09:20:05	69.1
09:34:23	54.5	9:15:00	59.4	09:22:00	54.0	09:21:05	53.8
09:35:23	63.8	9:16:00	69.2	09:23:00	56.0	09:22:05	70.3
09:36:23	56.7	9:17:00	61.2	09:24:00	60.2	09:23:05	57.6
09:37:23	72.6	9:18:00	62.3	09:25:00	53.7	09:24:05	54.8
09:38:23	54.4	9:19:00	71.7	09:26:00	53.1	09:25:05	68.4
09:39:23	69.8	9:20:00	65.4	09:27:00	56.4	09:26:05	80.8
09:40:23	56.0	9:21:00	62.8	09:28:00	52.5	09:27:05	58.7
09:41:23	67.2	9:22:00	59.8	09:29:00	52.8	09:28:05	58.6
09:42:23	57.0	9:23:00	56.5	09:30:00	54.9	09:29:05	52.7
09:43:23	66.9	9:24:00	68.8	09:31:00	50.4	09:30:05	67.8

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
09:44:23	63.2	9:25:00	69.7	09:32:00	55.1	09:31:05	70.4
09:45:23	57.7	9:26:00	57.1	09:33:00	48.3	09:32:05	66.9
09:46:23	69.8	9:27:00	59.4	09:34:00	50.7	09:33:05	52.4
09:47:23	67.8	9:28:00	55.7	09:35:00	48.3	09:34:05	51.7
09:48:23	59.5	9:29:00	69.8	09:36:00	48.2	09:35:05	62.3
09:49:23	54.0	9:30:00	55.1	09:37:00	52.6	09:36:05	52.1
09:50:23	53.9	9:31:00	53.6	09:43:01	48.9	09:37:05	51.9
09:51:23	53.2	9:32:00	56.9	09:44:01	48.6	09:38:05	51.5
09:52:23	53.1	9:33:00	53.4	09:45:01	48.3	09:39:05	68.4
09:53:23	54.4	9:34:00	71.4	09:46:01	58.3	09:40:05	53.2
09:54:23	54.5	9:35:00	56.8	09:47:01	53.4	09:41:05	53.3
09:55:23	62.0	9:36:00	53.6	09:48:01	51.5	09:42:05	54
09:56:23	54.6	9:37:00	53.5	09:49:01	55.1	09:43:05	51.8
09:57:23	55.7	9:38:00	67.9	09:50:01	53.2	09:44:05	51.5
09:58:23	69.2	9:39:00	64.5	09:51:01	46.0	09:45:05	54.3
09:59:23	54.0	9:40:00	60.2	09:52:01	49.7	09:46:05	53.7
10:00:23	53.8	9:41:00	55.6	09:53:01	44.8	09:47:05	71.1
10:01:23	59.8	9:42:00	69.4	09:54:01	49.6	09:48:05	60.2
10:02:23	60.2	9:43:00	55.1	09:55:01	48.5	09:49:05	69.7
10:03:23	56.7	9:44:00	55.3	09:56:01	50.9	09:50:05	65.9
10:04:23	55.6	9:45:00	53	09:57:01	43.7	09:51:05	51.9
10:05:23	66.2	9:46:00	69.8	09:58:01	47.4	09:52:05	52.5
10:06:23	60.4	9:47:00	65.7	09:59:01	47.9	09:53:05	69.6
10:07:23	66.2	9:48:00	51	10:00:01	49.7	09:54:05	63.3
10:08:23	63.2	9:49:00	51.2	10:01:01	51.5	09:55:05	56.9
10:09:23	73.5	9:50:00	50.6	10:02:01	49.2	09:56:05	62
10:10:23	54.7	9:51:00	52.6	10:03:01	48.6	09:57:05	71.3
10:11:23	56.5	9:52:00	72.3	10:04:01	46.8	09:58:05	60.3
10:12:23	59.7	9:53:00	71.4	10:05:01	46.9	09:59:05	60.4
10:13:23	57.1	9:54:00	66.6	10:06:01	48.3	10:00:05	57.9
10:14:23	54.4	9:55:00	68.4	10:07:01	48.3	10:01:05	56.5
10:15:23	60.9	9:56:00	69.4	10:08:01	49.1	10:02:05	59.7
10:16:23	63.0	9:57:00	69.4	10:09:01	49.2	10:03:05	56.6
10:17:23	59.3	9:58:00	61.2	10:10:01	49.2	10:04:05	58.4
10:18:23	56.7	9:59:00	68.8	10:11:01	45.1	10:05:05	56.5
10:19:23	55.2	10:00:00	71.8	10:12:01	44.2	10:06:05	71
10:20:23	54.2	10:01:00	52.7	10:13:01	52.0	10:07:05	60.3
10:21:23	55.2	10:02:00	59.7	10:14:01	45.9	10:08:05	61.4
10:22:23	69.7	10:03:00	68.2	10:15:01	48.2	10:09:05	71.7
10:23:23	59.3	10:04:00	50.6	10:16:01	49.8	10:10:05	63.6
10:24:23	58.6	10:05:00	69.1	10:17:01	47.1	10:11:05	80.6
10:25:23	63.1	10:06:00	55.4	10:18:01	47.1	10:12:05	71.8

Titik 1		Titik 2		Titik 3		Titik 4		Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq														
10:26:23	57.3	10:07:00	55.6	10:19:01	47.0	10:13:05	84.1	11:08:23	54.3	10:49:00	68	11:01:01	46.1	10:55:05	54.6
10:27:23	55.2	10:08:00	64.8	10:20:01	45.4	10:14:05	70.2	11:09:23	65.9	10:50:00	52.9	11:02:01	48.6	10:56:05	53.7
10:28:23	54.8	10:09:00	70.8	10:21:01	49.4	10:15:05	51.4	11:10:23	57.6	10:51:00	50.3	11:03:01	45.3	10:57:05	49.8
10:29:23	60.3	10:10:00	51.5	10:22:01	45.4	10:16:05	51.6	11:11:23	54.2	10:52:00	49.9	11:04:01	40.5	10:58:05	52.7
10:30:23	55.0	10:11:00	50.4	10:23:01	46.8	10:17:05	70.7	11:12:23	60.8	10:53:00	69	11:05:01	46.2	10:59:05	49.7
10:31:23	56.8	10:12:00	50.4	10:24:01	49.0	10:18:05	67.3	11:13:23	55.0	10:54:00	50.1	11:06:01	43.9	11:00:05	71.4
10:32:23	63.2	10:13:00	70.1	10:25:01	48.1	10:19:05	70.9	11:14:23	54.7	10:55:00	47.7	11:07:01	45.0	11:01:05	51
10:33:23	58.3	10:14:00	62.8	10:26:01	46.4	10:20:05	68.7	11:15:23	54.7	10:56:00	49.4	11:08:01	45.9	11:02:05	49.1
10:34:23	54.2	10:15:00	49.5	10:27:01	48.9	10:21:05	55.8	11:16:23	55.7	11:03:40	70.2	11:09:01	46.2	11:03:05	65.8
10:35:23	53.8	10:16:00	69.3	10:28:01	44.2	10:22:05	53.5	11:17:23	64.9	11:04:40	49.4	11:10:01	41.3	11:04:05	67.1
10:36:23	53.5	10:17:00	54.6	10:29:01	49.8	10:23:05	60	11:18:23	53.7	11:05:40	56.6	11:11:01	45.0	11:05:05	69.5
10:37:23	66.4	10:18:00	51.5	10:30:01	51.4	10:24:05	69.7	11:19:23	55.1	11:06:40	56.2	11:12:01	45.4	11:06:05	67.3
10:38:23	56.8	10:19:00	55.4	10:31:01	46.6	10:25:05	53	11:20:23	57.0	11:07:40	47.8	11:13:01	45.5	11:07:05	67.9
10:39:23	54.5	10:20:00	55.1	10:32:01	45.5	10:26:05	50.8	11:21:23	57.6	11:08:40	48.2	11:14:01	47.3	11:08:05	73.2
10:40:23	53.6	10:21:00	51.5	10:33:01	51.5	10:27:05	55.3	11:22:23	56.2	11:09:40	71.4	11:15:01	48.3	11:09:05	74.6
10:41:23	54.1	10:22:00	57.9	10:34:01	50.3	10:28:05	69.5	11:23:23	69.3	11:10:40	51.1	11:16:01	43.7	11:10:05	68.9
10:42:23	54.1	10:23:00	69.5	10:35:01	46.3	10:29:05	53.6	11:24:23	56.1	11:11:40	51.2	11:17:01	44.0	11:11:05	54.9
10:43:23	57.0	10:24:00	52.2	10:36:01	44.8	10:30:05	50.3	11:25:23	57.5	11:12:40	56.4	11:18:01	44.4	11:12:05	51.2
10:44:23	55.0	10:25:00	54.6	10:37:01	49.6	10:31:05	50	11:26:23	56.4	11:13:40	69.5	11:19:01	44.4	11:13:05	71.5
10:45:23	61.3	10:26:00	58	10:38:01	50.9	10:32:05	68.5	11:27:23	55.4	11:14:40	48.8	11:20:01	50.7	11:14:05	54
10:46:23	55.5	10:27:00	68.4	10:39:01	50.2	10:33:05	52.8	11:28:23	55.5	11:15:40	50.9	11:21:01	41.3	11:15:05	49.1
10:47:23	55.9	10:28:00	49.1	10:40:01	44.1	10:34:05	52.5	11:29:23	55.4	11:16:40	62.4	11:22:01	45.4	11:16:05	50.9
10:48:23	55.5	10:29:00	50	10:41:01	44.2	10:35:05	49.9	11:30:23	69.4	11:17:40	68.8	11:23:01	46.6	11:17:05	70.9
10:49:23	54.2	10:30:00	50.4	10:42:01	44.5	10:36:05	52.5	11:31:23	54.9	11:18:40	50.8	11:24:01	46.5	11:18:05	54.8
10:50:23	54.5	10:31:00	70.2	10:43:01	48.8	10:37:05	67.5	11:32:23	55.0	11:19:40	52.7	11:25:01	46.2	11:19:05	53
10:51:23	63.3	10:32:00	48.8	10:44:01	46.1	10:38:05	61.7	11:33:23	55.2	11:20:40	71.4	11:26:01	48.0	11:20:05	70.1
10:52:23	55.1	10:33:00	53.4	10:45:01	48.9	10:39:05	49.6	11:34:23	63.4	11:21:40	58.7	11:27:01	44.4	11:21:05	64.4
10:53:23	54.0	10:34:00	49.4	10:46:01	48.0	10:40:05	50.8	11:35:23	54.7	11:22:40	53.9	11:28:01	48.0	11:22:05	66.8
10:54:23	58.6	10:35:00	68.5	10:47:01	46.0	10:41:05	49.7	11:36:23	62.9	11:23:40	50.4	11:29:01	50.8	11:23:05	61.7
10:55:23	55.6	10:36:00	48.4	10:48:01	49.6	10:42:05	52.9	11:37:23	64.4	11:24:40	59.1	11:30:01	48.1	11:24:05	79
10:56:23	55.4	10:37:00	48.8	10:49:01	49.3	10:43:05	67.6	11:38:23	60.8	11:25:40	53.8	11:31:01	45.0	11:25:05	56.1
10:57:23	54.6	10:38:00	57.5	10:50:01	55.8	10:44:05	50.7	11:39:23	59.3	11:26:40	50.4	11:32:01	48.3	11:26:05	72.1
10:58:23	63.7	10:39:00	54.2	10:51:01	50.0	10:45:05	58.5	11:40:23	62.2	11:27:40	49.8	11:33:01	46.3	11:27:05	60
10:59:23	55.1	10:40:00	62.3	10:52:01	46.7	10:46:05	81.1	11:41:23	55.1	11:28:40	55.7	11:34:01	45.9	11:28:05	69.2
11:00:23	67.2	10:41:00	57.6	10:53:01	46.7	10:47:05	66.1	11:42:23	63.1	11:29:40	52.5	11:35:01	49.0	11:29:05	69.5
11:01:23	65.6	10:42:00	68.2	10:54:01	45.1	10:48:05	69.1	11:43:23	55.1	11:30:40	60.6	11:36:01	47.0	11:30:05	58.2
11:02:23	56.1	10:43:00	50.9	10:55:01	41.9	10:49:05	68.2	11:44:23	59.2	11:31:40	53.8	11:37:01	47.2	11:31:05	54.8
11:03:23	54.1	10:44:00	49.1	10:56:01	43.6	10:50:05	80.9	11:45:23	59.4	11:32:40	52.4	11:38:01	51.2	11:32:05	69.6
11:04:23	54.2	10:45:00	69.8	10:57:01	42.1	10:51:05	76.4	11:46:23	67.1	11:33:40	61.6	11:39:01	52.8	11:33:05	58.2
11:05:23	70.1	10:46:00	60	10:58:01	47.1	10:52:05	66.4	11:47:23	55.2	11:34:40	56.9	11:40:01	48.9	11:34:05	62.5
11:06:23	64.9	10:47:00	50.6	10:59:01	45.2	10:53:05	65.5	11:48:23	81.8	11:35:40	70.8	11:41:01	58.6	11:35:05	56.3
11:07:23	54.2	10:48:00	51.4	11:00:01	44.2	10:54:05	70.4	11:49:23	60.0	11:36:40	56.4	11:42:01	51.5	11:36:05	69.5

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
11:50:23	56.8	11:37:40	50.1	11:43:01	52.8	11:37:05	58.6
11:51:23	56.8	11:38:40	50.8	11:44:01	53.4	11:38:05	59.4
11:52:23	64.4	11:39:40	54.5	11:45:01	55.4	11:39:05	63.8
11:53:23	55.5	11:40:40	51.6	11:46:01	53.1	11:40:05	53.9
11:54:23	54.9	11:41:40	68.2	11:47:01	50.5	11:41:05	51.2
11:55:23	56.6	11:42:40	48.6	11:48:01	56.6	11:42:05	53.7
11:56:23	56.8	11:43:40	54.7	11:49:01	48.2	11:43:05	72
11:57:23	63.6	11:44:40	53	11:50:01	48.0	11:44:05	50.9
11:58:23	61.7	11:45:40	53.9	11:51:01	47.8	11:45:05	49.7
11:59:23	57.4	11:46:40	50.2	11:52:01	45.1	11:46:05	54
12:00:23	58.8	11:47:40	67.3	11:53:01	50.1	11:47:05	51.4
12:01:23	77.6	11:48:40	47.8	11:54:01	47.5	11:48:05	53.9
12:02:23	57.9	11:49:40	50	11:55:01	43.4	11:49:05	52.1
12:03:23	57.1	11:50:40	63.6	11:56:01	43.7	11:50:05	50.7
12:04:23	65.4	11:51:40	67.1	11:57:01	48.1	11:51:05	83.5
12:05:23	69.5	11:52:40	54.1	11:58:01	43.3	11:52:05	73.4
12:06:23	56.3	11:53:40	66.6	11:59:01	46.9	11:53:05	54.4
12:07:23	60.8	11:54:40	59.3	12:00:01	47.8	11:54:05	52.1
12:08:23	62.9	11:55:40	70	12:01:01	49.3	11:55:05	71.9
12:09:23	56.7	11:56:40	49.9	12:02:01	49.2	11:56:05	64.5
12:10:23	66.7	11:57:40	49	12:03:01	51.1	11:57:05	69.5
12:11:23	62.6	11:58:40	50.2	12:04:01	53.1	11:58:05	70.4
12:12:23	58.5	11:59:40	50.7	12:05:01	54.4	11:59:05	54.9
12:13:23	59.6	12:00:40	58.6	12:06:01	53.0	12:00:05	53
12:14:23	67.6	12:01:40	67.2	12:07:01	53.0	12:01:05	51.8
12:15:23	55.2	12:02:40	57.8	12:08:01	51.9	12:02:05	59.1
12:16:23	55.9	12:03:40	67.8	12:09:01	48.6	12:03:05	59.6
12:17:23	54.0	12:04:40	62	12:10:01	49.5	12:04:05	71.6
12:18:23	54.5	12:05:40	52.7	12:11:01	49.6	12:05:05	58.9
12:19:23	65.4	12:06:40	68.4	12:12:01	53.3	12:06:05	60.1
12:20:23	66.3	12:07:40	48.8	12:13:01	50.7	12:07:05	57
12:21:23	59.4	12:08:40	66.8	12:14:01	49.4	12:08:05	51.4
12:22:23	61.4	12:09:40	60.6	12:15:01	49.4	12:09:05	70.1
12:23:23	55.9	12:10:40	48.1	12:16:01	49.7	12:10:05	51.6
12:24:23	54.8	12:11:40	65.8	12:17:01	45.5	12:11:05	58.5
12:25:23	54.3	12:12:40	69.3	12:18:01	43.0	12:12:05	67.7
12:26:23	53.9	12:13:40	57.5	12:19:01	43.2	12:13:05	72.1
12:27:23	54.1	12:14:40	49.2	12:20:01	41.8	12:14:05	70.9
12:28:23	53.8	12:15:40	47.8	12:21:01	42.8	12:15:05	50.5
12:29:23	54.2	12:16:40	69	12:22:01	44.5	12:16:05	56.3
12:30:23	57.1	12:17:40	48.5	12:23:01	46.0	12:17:05	68.9
12:31:23	55.4	12:18:40	47.8	12:24:01	45.0	12:18:05	53.6

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
12:32:23	56.0	12:19:40	48	12:25:01	55.0	12:19:05	50.7
12:33:23	55.2	12:20:40	71.3	12:26:01	48.3	12:20:05	77.2
12:34:23	57.5	12:21:40	48.2	12:27:01	56.7	12:21:05	72.6
12:35:23	60.4	12:22:40	50.2	12:28:01	57.5	12:22:05	57.4
12:36:23	54.4	12:23:40	52.3	12:29:01	53.5	12:23:05	59.6
12:37:23	57.1	12:24:40	68.8	12:30:01	46.3	12:24:05	48.6
12:38:23	55.0	12:25:40	50.8	12:31:01	46.7	12:25:05	48.9
12:39:23	56.4	12:26:40	70.6	12:32:01	51.5	12:26:05	47.7
12:40:23	54.0	12:27:40	49.3	12:33:01	43.4	12:27:05	50.2
12:41:23	57.0	12:28:40	57.3	12:34:01	42.3	12:28:05	50.6
12:42:23	63.2	12:29:40	51.9	12:35:01	44.1	12:29:05	49.2
12:43:23	54.6	12:30:40	52.6	12:36:01	48.7	12:30:05	49.5
12:44:23	54.7	12:31:40	68.7	12:37:01	46.0	12:31:05	68.5
12:45:23	70.3	12:32:40	53.7	12:38:01	42.6	12:32:05	56.3
12:46:23	55.2	12:33:40	52.6	12:39:01	45.5	12:33:05	71.2
12:47:23	54.4	12:34:40	63.4	12:40:01	45.3	12:34:05	47.5
13:03:45	54.7	12:35:40	52.9	12:41:01	48.2	12:35:05	46.5
13:04:45	53.2	12:36:40	58.1	12:42:01	48.4	12:36:05	45.4
13:05:45	70.3	12:37:40	57.4	12:43:01	40.8	12:37:05	47.8
13:06:45	67.7	12:38:40	54.5	12:44:01	43.2	12:38:05	61.7
13:07:45	83.6	12:39:40	55	12:45:01	42.2	12:39:05	68.8
13:08:45	54.2	12:40:40	56.5	12:46:01	43.4	12:40:05	74.9
13:09:45	57.0	12:41:40	63	12:47:01	46.6	12:41:05	49.5
13:10:45	54.2	12:42:40	69.5	12:48:01	44.8	12:42:05	52.2
13:11:45	54.6	12:43:40	55.2	12:49:01	43.9	12:43:05	49.2
13:12:45	55.7	12:44:40	73	12:50:01	45.6	12:44:05	65
13:13:45	58.2	12:45:40	55	12:51:01	45.4	12:45:05	56.1
13:14:45	60.2	12:46:40	57.1	12:52:01	44.3	12:46:05	49.6
13:15:45	64.9	12:47:40	68.6	12:53:01	47.0	12:47:05	49.2
13:16:45	49.7	12:48:40	56.8	12:54:01	47.3	12:48:05	55.6
13:17:45	47.6	12:49:40	51.5	12:55:01	47.2	12:49:05	53.5
13:18:45	59.3	12:50:40	51.3	12:56:01	50.1	12:50:05	54.7
13:19:45	65.8	12:51:40	68.1	12:57:01	53.0	12:51:05	60.3
13:20:45	60.9	12:52:40	51.7	12:58:01	49.8	12:52:05	54.8
13:21:45	53.5	12:53:40	50.5	12:59:01	44.0	12:57:22	51.2
13:22:45	57.1	12:54:40	51.6	13:00:01	47.5	12:58:22	51.2
13:23:45	54.9	12:55:40	70.6	13:01:01	48.3	12:59:22	51.8
13:24:45	57.9	12:56:40	50.4	13:02:01	45.5	13:00:22	62.6
13:25:45	63.1	12:57:40	49.6	13:03:01	43.1	13:01:22	55.5
13:26:45	58.7	12:58:40	58.5	13:04:01	43.4	13:02:22	70.6
13:27:45	58.0	12:59:40	49.6	13:05:01	45.4	13:03:22	53.9
13:28:45	51.1	13:00:40	50.6	13:06:01	44.4	13:04:22	54.2

Titik 1		Titik 2		Titik 3		Titik 4		Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq														
13:29:45	54.6	13:01:40	48.9	13:07:01	46.3	13:05:22	53.7	14:11:45	60.6	13:43:40	51.8	13:49:01	42.8	13:47:22	48.2
13:30:45	62.8	13:02:40	49.2	13:08:01	46.4	13:06:22	80.8	14:12:45	56.1	13:44:40	68.8	13:50:01	48.2	13:48:22	74.7
13:31:45	57.6	13:03:40	57	13:09:01	44.7	13:07:22	58.9	14:13:45	57.4	13:45:40	62.6	13:51:01	46.2	13:49:22	52.8
13:32:45	57.5	13:04:40	51.9	13:10:01	58.8	13:08:22	54.5	14:14:45	56.2	13:46:40	70	13:52:01	49.1	13:50:22	57.5
13:33:45	57.0	13:05:40	74.5	13:11:01	44.5	13:09:22	70.1	14:15:45	67.8	13:47:40	54	13:53:01	48.6	13:51:22	73.6
13:34:45	73.8	13:06:40	50.9	13:12:01	49.5	13:10:22	50.4	14:16:45	61.4	13:48:40	71.6	13:54:01	46.1	13:52:22	49.4
13:35:45	57.1	13:07:40	50.5	13:13:01	48.8	13:11:22	52.2	14:17:45	56.3	13:49:40	53.8	13:55:01	46.3	13:53:22	50.1
13:36:45	57.1	13:08:40	57.4	13:14:01	53.3	13:12:22	48.4	14:18:45	56.9	13:50:40	69.1	13:56:01	46.3	13:54:22	69.7
13:37:45	57.7	13:09:40	51.6	13:15:01	45.3	13:13:22	49.7	14:19:45	74.0	13:51:40	69.1	13:57:01	43.7	13:55:22	52.2
13:38:45	57.7	13:10:40	57	13:16:01	47.3	13:14:22	68.8	14:20:45	61.5	13:52:40	50.8	13:58:01	45.7	13:56:22	50.8
13:39:45	58.9	13:11:40	50.6	13:17:01	46.9	13:15:22	70.7	14:21:45	57.9	13:53:40	64.8	13:59:01	47.4	13:57:22	48.4
13:40:45	55.4	13:12:40	50.8	13:18:01	55.6	13:16:22	50.2	14:22:45	57.9	13:54:40	68.3	14:00:01	44.9	13:58:22	48.2
13:41:45	55.9	13:13:40	68.9	13:19:01	51.0	13:17:22	49.3	14:23:45	67.4	13:55:40	68.9	14:01:01	47.0	13:59:22	49.3
13:42:45	59.4	13:14:40	64.4	13:20:01	52.9	13:18:22	68.2	14:24:45	68.4	13:56:40	55.1	14:02:01	46.6	14:00:22	49.8
13:43:45	58.6	13:15:40	52.2	13:21:01	48.0	13:19:22	69.6	14:25:45	57.0	13:57:40	74.6	14:03:01	47.0	14:01:22	51.7
13:44:45	56.1	13:16:40	52	13:22:01	49.3	13:20:22	64.8	14:26:45	58.8	13:58:40	52.9	14:04:01	49.6	14:02:22	50.4
13:45:45	63.7	13:17:40	51.2	13:23:01	45.5	13:21:22	70.6	14:27:45	70.3	13:59:40	52.1	14:05:01	54.7	14:03:22	70.7
13:46:45	61.0	13:18:40	69.5	13:24:01	49.0	13:22:22	55.3	14:28:45	60.0	14:00:40	68	14:06:01	45.5	14:04:22	53.1
13:47:45	56.9	13:19:40	55.7	13:25:01	49.4	13:23:22	53.4	14:29:45	58.7	14:01:40	51.4	14:07:01	46.8	14:05:22	69
13:48:45	56.1	13:20:40	51	13:26:01	49.9	13:24:22	68.9	14:30:45	56.1	14:02:40	51.2	14:08:01	46.8	14:06:22	69.5
13:49:45	57.9	13:21:40	50.5	13:27:01	48.7	13:25:22	72.7	14:31:45	64.9	14:03:40	68.4	14:09:01	44.6	14:07:22	54.2
13:50:45	58.4	13:22:40	52.8	13:28:01	50.2	13:26:22	75.7	14:32:45	57.1	14:04:40	51.2	14:10:01	47.0	14:08:22	55.5
13:51:45	58.1	13:23:40	52.8	13:29:01	51.1	13:27:22	66.9	14:33:45	76.8	14:05:40	51.3	14:11:01	48.5	14:09:22	48
13:52:45	57.6	13:24:40	63.8	13:30:01	52.9	13:28:22	49.7	14:34:45	57.1	14:06:40	50.7	14:12:01	50.0	14:10:22	54.2
13:53:45	58.6	13:25:40	49.5	13:31:01	55.8	13:29:22	51.8	14:35:45	56.0	14:07:40	52.4	14:13:01	48.7	14:11:22	60.3
13:54:45	67.9	13:26:40	50.8	13:32:01	53.8	13:30:22	70	14:36:45	58.8	14:08:40	53.9	14:14:01	51.9	14:12:22	53.5
13:55:45	65.6	13:27:40	53	13:33:01	62.5	13:31:22	50.5	14:37:45	56.1	14:09:40	52.3	14:15:01	52.9	14:13:22	80.9
13:56:45	66.8	13:28:40	53.4	13:34:01	43.6	13:32:22	52	14:38:45	55.6	14:10:40	51.7	14:16:01	54.2	14:14:22	55.4
13:57:45	57.7	13:29:40	68	13:35:01	46.8	13:33:22	78.8	14:39:45	56.2	14:11:40	52.5	14:17:01	52.2	14:15:22	59.1
13:58:45	55.4	13:30:40	68.5	13:36:01	46.9	13:34:22	66.7	14:40:45	61.8	14:12:40	70.7	14:18:01	50.5	14:16:22	61.1
13:59:45	56.3	13:31:40	60.8	13:37:01	49.1	13:35:22	69.2	14:41:45	55.8	14:13:40	52.3	14:19:01	51.6	14:17:22	50.8
14:00:45	58.5	13:32:40	54.1	13:38:01	47.3	13:36:22	50.1	14:42:45	56.4	14:14:40	57.2	14:20:01	51.6	14:18:22	53.4
14:01:45	55.8	13:33:40	70.5	13:39:01	47.5	13:37:22	54.1	14:43:45	56.0	14:15:40	54.7	14:21:01	50.4	14:19:22	55.1
14:02:45	55.5	13:34:40	59.7	13:40:01	49.5	13:38:22	51	14:44:45	68.8	14:16:40	56	14:22:01	49.2	14:20:22	52.2
14:03:45	69.3	13:35:40	52	13:41:01	55.7	13:39:22	50.8	14:45:45	56.0	14:17:40	56.6	14:23:01	53.5	14:21:22	50.9
14:04:45	62.6	13:36:40	52.7	13:42:01	49.4	13:40:22	48.8	14:46:45	55.6	14:18:40	68.9	14:24:01	55.3	14:22:22	50.4
14:05:45	58.3	13:37:40	53.6	13:43:01	46.6	13:41:22	70.3	14:47:45	59.6	14:19:40	54.3	14:25:01	55.8	14:23:22	52.3
14:06:45	62.2	13:38:40	71.5	13:44:01	51.2	13:42:22	54.9	14:48:45	56.0	14:20:40	60.3	14:26:01	50.4	14:24:22	51.7
14:07:45	63.8	13:39:40	51.8	13:45:01	48.2	13:43:22	53.4	14:49:45	56.4	14:21:40	66.1	14:27:01	48.8	14:25:22	51.2
14:08:45	56.5	13:40:40	53	13:46:01	53.0	13:44:22	47.5	14:50:45	56.0	14:22:40	49.9	14:28:01	49.2	14:26:22	52.8
14:09:45	56.1	13:41:40	68.4	13:47:01	49.9	13:45:22	52.2	14:51:45	56.2	14:23:40	55	14:29:01	54.1	14:27:22	57.8
14:10:45	56.5	13:42:40	53.3	13:48:01	46.8	13:46:22	47.5	14:52:45	63.4	14:24:40	51	14:30:01	56.9	14:28:22	49.8

Titik 1		Titik 2		Titik 3		Titik 4		Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq														
14:53:45	63.0	14:25:40	51.1	14:31:01	50.2	14:29:22	49.8	15:35:45	56.3	15:07:40	54.4	15:16:16	53.3	15:11:22	57.3
14:54:45	63.8	14:26:40	51.8	14:32:01	51.1	14:30:22	57.3	15:36:45	55.9	15:08:40	52.3	15:17:16	54.6	15:12:22	73.7
14:55:45	60.7	14:27:40	70.7	14:33:01	52.0	14:31:22	54.3	15:37:45	56.0	15:09:40	69.8	15:18:16	56.3	15:13:22	57.9
14:56:45	68.2	14:28:40	50.5	14:34:01	55.7	14:32:22	51.3	15:38:45	64.2	15:10:40	51.2	15:19:16	56.6	15:14:22	59.6
14:57:45	63.3	14:29:40	52.7	14:35:01	51.6	14:33:22	53.8	15:39:45	57.7	15:11:40	50.8	15:20:16	48.9	15:15:22	59.1
14:58:45	57.6	14:30:40	70.1	14:36:01	46.4	14:34:22	52.1	15:40:45	64.1	15:12:40	70.6	15:21:16	49.5	15:16:22	78.7
14:59:45	59.0	14:31:40	49.5	14:37:01	45.8	14:35:22	70.5	15:41:45	56.2	15:13:40	49.8	15:22:16	46.9	15:17:22	78.4
15:00:45	64.4	14:32:40	52	14:38:01	53.6	14:36:22	54.7	15:42:45	56.5	15:14:40	50	15:23:16	47.9	15:18:22	60.9
15:01:45	56.0	14:33:40	57.2	14:39:01	56.9	14:37:22	53.1	15:43:45	58.2	15:15:40	52.3	15:24:16	48.3	15:19:22	59.6
15:02:45	56.4	14:34:40	52.8	14:40:01	49.4	14:38:22	53.9	15:44:45	56.3	15:16:40	68.5	15:25:16	47.2	15:20:22	68.7
15:03:45	57.9	14:35:40	68.3	14:41:01	51.3	14:39:22	71.6	15:45:45	57.1	15:17:40	50.9	15:26:16	46.1	15:21:22	68.8
15:04:45	56.1	14:36:40	54.2	14:42:01	54.5	14:40:22	55.1	15:46:45	70.4	15:18:40	68.8	15:27:16	45.6	15:22:22	56.8
15:05:45	56.9	14:37:40	53	14:43:01	51.1	14:41:22	55.8	15:47:45	57.1	15:19:40	51.1	15:28:16	49.3	15:23:22	55.8
15:06:45	62.8	14:38:40	69.8	14:44:01	50.6	14:42:22	72.4	15:48:45	55.3	15:20:40	72.1	15:29:16	46.2	15:24:22	69.3
15:07:45	56.0	14:39:40	56.1	14:45:01	50.3	14:43:22	57.1	15:49:45	61.9	15:21:40	52.6	15:30:16	45.7	15:25:22	65.3
15:08:45	56.1	14:40:40	51.5	14:46:01	49.9	14:44:22	61.9	15:50:45	57.4	15:22:40	54	15:31:16	45.1	15:26:22	70.8
15:09:45	55.9	14:41:40	53.8	14:47:01	48.6	14:45:22	53.5	15:51:45	57.3	15:23:40	52.5	15:32:16	66.6	15:27:22	54.8
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15:11:45	62.0	14:43:40	52.5	14:49:01	56.8	14:47:22	64	15:53:45	56.5	15:25:40	72.2	15:34:16	46.1	15:29:22	55.7
15:12:45	62.2	14:44:40	52.8	14:53:16	54.9	14:48:22	72.8	15:54:45	64.1	15:26:40	51.1	15:35:16	48.0	15:30:22	50.9
15:13:45	65.0	14:45:40	53.6	14:54:16	54.9	14:49:22	52.7	15:55:45	68.2	15:27:40	52.7	15:36:16	48.2	15:31:22	57.5
15:14:45	57.7	14:46:40	63.7	14:55:16	60.0	14:50:22	54.6	15:56:45	56.2	15:28:40	67.6	15:37:16	50.3	15:32:22	69.1
15:15:45	56.9	14:47:40	68.6	14:56:16	57.0	14:51:22	71.1	15:57:45	62.9	15:29:40	66.3	15:38:16	46.0	15:33:22	59.1
15:16:45	59.0	14:48:40	51.2	14:57:16	57.4	14:52:22	56.5	15:58:45	56.0	15:30:40	48.4	15:39:16	47.4	15:34:22	53.9
15:17:45	56.6	14:49:40	55.2	14:58:16	59.5	14:53:22	70.3	15:59:45	56.5	15:31:40	51	15:40:16	48.7	15:35:22	55.3
15:18:45	59.8	14:50:40	66.1	14:59:16	57.9	14:54:22	54.7	16:00:45	63.7	15:32:40	70.9	15:41:16	50.8	15:36:22	52.5
15:19:45	68.2	14:51:40	66.1	15:00:16	63.7	14:55:22	49.9	16:01:45	56.3	15:33:40	61.8	15:42:16	49.1	15:37:22	54
15:20:45	56.3	14:52:40	56	15:01:16	51.8	14:56:22	62	16:02:45	60.8	15:34:40	58.1	15:43:16	50.7	15:38:22	55.2
15:21:45	56.0	14:53:40	58.5	15:02:16	51.6	14:57:22	70.9	16:03:45	55.9	15:35:40	68.6	15:44:16	49.5	15:39:22	80.9
15:22:45	56.8	14:54:40	53.3	15:03:16	49.4	14:58:22	51.6	16:04:45	56.0	15:36:40	60.9	15:45:16	49.9	15:40:22	58.5
15:23:45	65.9	14:55:40	56.3	15:04:16	56.3	14:59:22	50.1	16:05:45	56.5	15:37:40	69	15:46:16	53.2	15:41:22	60.2
15:24:45	56.3	14:56:40	67.7	15:05:16	53.4	15:00:22	72.7	16:06:45	55.9	15:38:40	52	15:47:16	50.5	15:42:22	69.4
15:25:45	56.4	14:57:40	51.6	15:06:16	51.2	15:01:22	56.1	16:07:45	71.9	15:39:40	58.7	15:48:16	48.6	15:43:22	52.9
15:26:45	58.5	14:58:40	53.5	15:07:16	49.5	15:02:22	69.2	16:08:45	56.4	15:40:40	56.6	15:49:16	52.7	15:44:22	59.4
15:27:45	57.0	14:59:40	54.5	15:08:16	49.2	15:03:22	56.7	16:09:45	56.1	15:41:40	63.9	15:50:16	47.5	15:45:22	69.4
15:28:45	56.3	15:00:40	64.2	15:09:16	48.1	15:04:22	55.4	16:10:45	55.1	15:42:40	79.2	15:51:16	48.7	15:46:22	57
15:29:45	55.9	15:01:40	54.9	15:10:16	47.0	15:05:22	53.9	16:11:45	50.0	15:43:40	50.6	15:52:16	50.6	15:47:22	55.2
15:30:45	55.9	15:02:40	57.5	15:11:16	52.5	15:06:22	53.4	16:12:45	56.7	15:44:40	54.7	15:53:16	49.2	15:48:22	54.5
15:31:45	55.9	15:03:40	54.5	15:12:16	47.7	15:07:22	57.2	16:13:45	81.6	15:45:40	69	15:54:16	47.7	15:49:22	55.6
15:32:45	60.1	15:04:40	57.7	15:13:16	47.4	15:08:22	58.8	16:14:45	56.9	15:46:40	52.4	15:55:16	46.4	15:50:22	53.5
15:33:45	56.0	15:05:40	71.3	15:14:16	57.8	15:09:22	56	16:15:45	59.4	15:47:40	50.8	15:56:16	45.6	15:51:22	55.4
15:34:45	56.1	15:06:40	53.7	15:15:16	54.5	15:10:22	56.5	16:16:45	59.3	15:48:40	58.1	15:57:16	48.4	15:52:22	71.3

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
16:17:45	56.3	15:49:40	69.8	15:58:16	47.4	15:53:22	53.8
16:18:45	56.3	15:50:40	64.3	15:59:16	57.0	15:54:22	51.9
16:19:45	64.3	15:51:40	55.2	16:00:16	47.7	15:55:22	55.7
16:20:45	57.4	15:52:40	68.1	16:01:16	49.2	15:56:22	50.6
16:21:45	56.0	15:53:40	57.4	16:02:16	49.4	15:57:22	70
16:22:45	63.2	15:54:40	50.3	16:03:16	47.9	15:58:22	54.7
16:23:45	57.7	15:55:40	57.8	16:04:16	51.5	15:59:22	56.6
16:24:45	57.5	15:56:40	67.8	16:05:16	48.5	16:00:22	69.1
16:25:45	56.4	15:57:40	56.8	16:06:16	45.7	16:01:22	64.1
16:26:45	65.0	15:58:40	73.3	16:07:16	53.2	16:02:22	69
16:27:45	64.0	15:59:40	70.9	16:08:16	52.6	16:03:22	57.1
16:28:45	62.2	16:00:40	70	16:09:16	47.9	16:04:22	55.3
16:29:45	63.7	16:01:40	66	16:10:16	53.7	16:05:22	56.3
16:30:45	65.9	16:02:40	73.1	16:11:16	48.5	16:06:22	55.5
16:31:45	58.3	16:03:40	58.3	16:12:16	50.9	16:07:22	71.1
16:32:45	65.4	16:08:20	63.5	16:13:16	46.1	16:08:22	57.8
16:33:45	57.3	16:09:20	62.3	16:14:16	47.7	16:09:22	50.6
16:34:45	67.2	16:10:20	62.6	16:15:16	48.1	16:10:22	51
16:35:45	57.2	16:11:20	72	16:16:16	51.3	16:11:22	64.5
16:36:45	70.6	16:12:20	65.3	16:17:16	49.2	16:12:22	56
16:37:45	59.9	16:13:20	63.6	16:18:16	51.1	16:13:22	59.2
16:38:45	57.0	16:14:20	70	16:19:16	49.0	16:14:22	69.9
16:39:45	58.3	16:15:20	52	16:20:16	50.3	16:15:22	59.1
16:40:45	57.4	16:16:20	58.5	16:21:16	49.7	16:16:22	51.7
16:41:45	67.0	16:17:20	70	16:22:16	53.7	16:17:22	60.5
16:42:45	57.7	16:18:20	51.8	16:23:16	49.6	16:18:22	53.4
16:43:45	70.1	16:19:20	66.7	16:24:16	51.3	16:19:22	70.4
16:44:45	60.1	16:20:20	53.1	16:25:16	52.8	16:20:22	56.7
16:45:45	56.3	16:21:20	56.3	16:26:16	49.4	16:21:22	58
16:46:45	63.0	16:22:20	71.7	16:27:16	51.7	16:22:22	72.8
16:47:45	58.9	16:23:20	53.2	16:28:16	49.0	16:23:22	58.7
16:48:45	56.8	16:24:20	61.4	16:29:16	49.7	16:24:22	53.8
16:49:45	60.9	16:25:20	70	16:30:16	51.9	16:25:22	54.7
16:50:45	56.8	16:26:20	60.9	16:31:16	48.7	16:26:22	55.4
16:51:45	62.3	16:27:20	66.4	16:32:16	47.4	16:27:22	71.7
16:52:45	56.7	16:28:20	55.2	16:33:16	47.0	16:28:22	55.4
16:53:45	64.1	16:29:20	53.9	16:34:16	45.2	16:29:22	56.9
16:54:45	56.1	16:30:20	69.9	16:35:16	49.8	16:30:22	66.6
16:55:45	66.0	16:31:20	60.5	16:36:16	45.7	16:31:22	62.8
16:56:45	58.9	16:32:20	60	16:37:16	48.5	16:32:22	56.1
16:57:45	63.0	16:33:20	64.5	16:38:16	48.8	16:33:22	68.2
16:58:45	59.3	16:34:20	63	16:39:16	58.7	16:34:22	67.8

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
16:59:45	57.0	16:35:20	65.1	16:40:16	51.6	16:35:22	69.2
17:00:45	66.8	16:36:20	65.3	16:41:16	47.4	16:36:22	60.1
17:01:45	56.7	16:37:20	61.9	16:42:16	51.1	16:37:22	70.8
17:02:45	64.3	16:38:20	69	16:43:16	52.5	16:38:22	67.6
17:03:45	55.9	16:39:20	56.2	16:44:16	47.4	16:39:22	51.9
17:04:45	65.1	16:40:20	65.5	16:45:16	50.5	16:40:22	52
17:05:45	54.5	16:41:20	69.7	16:46:16	49.3	16:41:22	69.4
17:06:45	55.2	16:42:20	60.9	16:47:16	47.5	16:42:22	70.2
17:07:45	56.7	16:43:20	62.2	16:48:16	51.6	16:43:22	59
17:08:45	55.3	16:44:20	62.9	16:49:16	48.3	16:44:22	70.6
17:09:45	60.8	16:45:20	63.1	16:50:16	49.5	16:45:22	68.1
17:10:45	65.2	16:46:20	63.9	16:51:16	50.1	16:46:22	68.8
17:11:45	54.7	16:47:20	60.2	16:52:16	50.9	16:47:22	70
17:12:45	55.1	16:48:20	62.8	16:53:16	50.4	16:48:22	56.5
17:13:45	55.5	16:49:20	60.3	16:54:16	49.5	16:49:22	58.7
17:14:45	55.9	16:50:20	67.4	16:55:16	49.5	16:50:22	71.6
17:15:45	54.1	16:51:20	65.8	16:56:16	53.6	16:51:22	55.3
17:16:45	54.4	16:52:20	54.4	16:57:16	60.9	16:52:22	54.5
17:17:45	54.9	16:53:20	62.9	16:58:16	55.5	16:53:22	55.5
17:18:45	62.4	16:54:20	72.2	16:59:16	51.4	16:54:22	52.2
17:19:45	59.0	16:55:20	60.1	17:00:16	48.6	16:55:22	55.3
17:20:45	57.4	16:56:20	62.2	17:01:16	49.4	16:56:22	55.4
17:21:45	58.6	16:57:20	57.3	17:02:16	48.4	16:57:22	52.9
17:22:45	59.8	16:58:20	73.1	17:03:16	44.2	16:58:22	56.1
17:23:45	56.1	16:59:20	52.8	17:04:16	46.2	16:59:22	59.3
17:24:45	60.6	17:00:20	60.5	17:05:16	45.2	17:00:22	59.2
17:25:45	57.2	17:01:20	60.5	17:06:16	45.3	17:01:22	63.3
17:26:45	65.8	17:02:20	63.3	17:07:16	47.8	17:02:22	69.2
17:27:45	55.8	17:03:20	69.5	17:08:16	47.5	17:03:22	72.2
17:28:45	56.8	17:04:20	69.3	17:09:16	51.7	17:04:22	71.2
17:29:45	58.8	17:05:20	76.7	17:10:16	49.7	17:05:22	58.9
17:30:45	63.9	17:06:20	72.6	17:11:16	52.2	17:06:22	53.3
17:31:45	73.7	17:07:20	69.7	17:12:16	50.0	17:07:22	54.7
17:32:45	55.8	17:08:20	70	17:13:16	49.5	17:08:22	70.4
17:33:45	54.5	17:09:20	53.8	17:14:16	52.6	17:09:22	56.6
17:34:45	54.1	17:10:20	55.4	17:15:16	53.6	17:10:22	54.5
17:35:45	56.0	17:11:20	67.8	17:16:16	52.9	17:11:22	65
17:36:45	87.6	17:12:20	59.8	17:17:16	51.5	17:12:22	59.2
17:37:45	64.5	17:13:20	68.5	17:18:16	52.4	17:13:22	64.5
17:38:45	63.8	17:14:20	62	17:19:16	51.0	17:14:22	63.1
17:39:45	55.7	17:15:20	63.5	17:20:16	51.9	17:15:22	58
17:40:45	54.7	17:16:20	62.2	17:21:16	52.9	17:16:22	57.7

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
17:41:45	59.0	17:17:20	71.2	17:22:16	52.0	17:17:22	53.4
17:42:45	56.4	17:18:20	56.4	17:23:16	53.0	17:18:22	54.4
17:43:45	62.8	17:19:20	61.8	17:24:16	56.8	17:19:22	60.7
17:44:45	64.1	17:20:20	61	17:25:16	51.3	17:20:22	60.9
17:45:45	69.7	17:21:20	69.5	17:26:16	49.7	17:21:22	73.3
17:46:45	56.4	17:22:20	68.9	17:27:16	48.6	17:22:22	68.6
17:47:45	58.9	17:23:20	63	17:28:16	50.3	17:23:22	71.8
17:48:45	57.7	17:24:20	69.5	17:29:16	50.7	17:24:22	54.2
17:49:45	62.1	17:25:20	57.7	17:30:16	51.1	17:25:22	59.6
17:50:45	64.9	17:26:20	61.7	17:31:16	50.6	17:26:22	58.6
17:51:45	57.5	17:27:20	61.7	17:32:16	50.4	17:27:22	58.9
17:52:45	57.8	17:28:20	70.4	17:33:16	52.1	17:28:22	69.4
17:53:45	68.3	17:29:20	62.1	17:34:16	51.8	17:29:22	55.9
17:54:45	65.6	17:30:20	56.2	17:35:16	52.0	17:30:22	57.1
17:55:45	59.6	17:31:20	56	17:36:16	53.9	17:31:22	62.9
18:01:57	66.5	17:32:20	70	17:37:16	56.4	17:32:22	70.8
18:02:57	60.4	17:33:20	63.6	17:38:16	50.4	17:33:22	58.5
18:03:57	60.2	17:34:20	57.4	17:39:16	53.4	17:34:22	56.7
18:04:57	61.1	17:35:20	71.9	17:40:16	53.0	17:35:22	72.1
18:05:57	55.2	17:36:20	57.1	17:41:16	57.0	17:36:22	61.7
18:06:57	56.6	17:37:20	58.5	17:42:16	51.0	17:37:22	62.4
18:07:57	64.0	17:38:20	69	17:43:16	53.3	17:38:22	58.3
18:08:57	62.1	17:39:20	55.8	17:44:16	49.8	17:39:22	58.8
18:09:57	61.8	17:40:20	54.9	17:45:16	52.5	17:40:22	68.4
18:10:57	59.1	17:41:20	71.3	17:46:16	55.5	17:41:22	67
18:11:57	60.9	17:42:20	65.7	17:47:16	56.8	17:42:22	57.3
18:12:57	59.0	17:43:20	59.1	17:48:16	60.5	17:43:22	57.1
18:13:57	57.9	17:44:20	68.6	17:49:16	58.9	17:44:22	67.5
18:14:57	53.7	17:45:20	59.5	17:50:16	56.7	17:45:22	56.7
18:15:57	54.7	17:46:20	62.5	17:51:16	53.7	17:46:22	54.9
18:16:57	69.6	17:47:20	66.5	17:52:16	57.8	17:47:22	72.8
18:17:57	73.7	17:48:20	65.5	17:53:16	55.8	17:48:22	76.6
18:18:57	55.0	17:49:20	58.7	17:54:16	53.8	17:49:22	70.3
18:19:57	54.8	17:50:20	59.4	17:55:16	57.5	17:50:22	58.3
18:20:57	54.9	17:51:20	74.5	17:56:16	59.0	17:51:22	56.9
18:21:57	54.4	17:52:20	70.6	17:57:16	62.3	17:52:22	74
18:22:57	54.2	17:53:20	60.4	17:58:16	62.3	17:53:22	65.5
18:23:57	60.6	17:54:20	59.7	17:59:16	58.5	17:54:22	67.6
18:24:57	64.3	17:55:20	58.2	18:00:16	62.5	17:55:22	58.5
18:25:57	55.2	17:56:20	57.6	18:01:16	56.5	18:02:20	59
18:26:57	65.0	17:57:20	70.5	18:02:16	57.0	18:03:20	55.1
18:27:57	55.5	17:58:20	56.1	18:03:16	56.1	18:04:20	69.6

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
18:28:57	55.8	17:59:20	60.9	18:04:16	57.0	18:05:20	57.7
18:29:57	56.5	18:00:20	58.1	18:05:16	56.1	18:06:20	61.1
18:30:57	61.7	18:01:20	60.5	18:06:16	57.8	18:07:20	57.2
18:31:57	55.1	18:02:20	59.4	18:07:16	57.5	18:08:20	78.8
18:32:57	55.0	18:03:20	56.6	18:08:16	58.7	18:09:20	65.1
18:33:57	56.3	18:04:20	70.6	18:09:16	63.2	18:10:20	54.2
18:34:57	54.4	18:05:20	55.5	18:10:16	58.1	18:11:20	77.8
18:35:57	53.4	18:06:20	54.9	18:11:16	57.8	18:12:20	73.6
18:36:57	54.7	18:07:20	52.5	18:12:16	65.1	18:13:20	54.7
18:37:57	69.0	18:08:20	71	18:13:16	54.2	18:14:20	54.7
18:38:57	54.9	18:09:20	62.5	18:14:16	56.1	18:15:20	69.9
18:39:57	71.2	18:10:20	70.4	18:15:16	58.0	18:16:20	58
18:40:57	60.0	18:11:20	66.6	18:16:16	65.6	18:17:20	57.4
18:41:57	56.1	18:12:20	59.4	18:17:16	56.5	18:18:20	72.4
18:42:57	61.1	18:13:20	65.8	18:18:16	57.5	18:19:20	78.2
18:43:57	66.0	18:14:20	52.1	18:19:16	51.3	18:20:20	81.2
18:44:57	55.8	18:15:20	69.8	18:20:16	56.4	18:21:20	82.2
18:45:57	53.5	18:16:20	60.8	18:21:16	55.3	18:22:20	81.3
18:46:57	55.2	18:17:20	58.6	18:22:16	65.4	18:23:20	70
18:47:57	54.9	18:18:20	53.8	18:23:16	48.6	18:24:20	53.7
18:48:57	55.9	18:19:20	69.5	18:24:16	47.4	18:25:20	53.4
18:49:57	61.4	18:20:20	63.3	18:25:16	54.1	18:26:20	67.1
18:50:57	59.1	18:21:20	59	18:26:16	55.2	18:27:20	56.1
18:51:57	57.1	18:22:20	59.5	18:27:16	48.9	18:28:20	55.8
18:52:57	67.7	18:23:20	72.3	18:28:16	51.0	18:29:20	68.7
18:53:57	61.6	18:24:20	67	18:29:16	47.0	18:30:20	55.8
18:54:57	70.2	18:25:20	64.9	18:30:16	48.9	18:31:20	62.2
18:55:57	55.0	18:26:20	70.6	18:31:16	56.6	18:32:20	58.1
18:56:57	70.1	18:27:20	61.2	18:32:16	49.3	18:33:20	59.6
18:57:57	57.4	18:28:20	60.3	18:33:16	52.7	18:34:20	59.2
18:58:57	58.7	18:29:20	69.4	18:34:16	55.3	18:35:20	56.2
18:59:57	60.3	18:30:20	60.3	18:35:16	48.7	18:36:20	66.8
19:00:57	56.1	18:31:20	60.6	18:36:16	48.4	18:37:20	63
19:01:57	55.9	18:32:20	58.8	18:37:16	50.0	18:38:20	55
19:02:57	66.6	18:33:20	67.2	18:38:16	48.8	18:39:20	70.9
19:03:57	57.9	18:34:20	70.4	18:39:16	52.4	18:40:20	55.9
19:04:57	58.3	18:35:20	62.1	18:40:16	47.4	18:41:20	55.3
19:05:57	57.0	18:36:20	61.7	18:41:16	54.7	18:42:20	69.7
19:06:57	70.0	18:37:20	71.7	18:42:16	60.0	18:43:20	61.3
19:07:57	59.3	18:38:20	68	18:43:16	58.8	18:44:20	54.6
19:08:57	61.0	18:39:20	70	18:44:16	60.0	18:45:20	57.5
19:09:57	63.6	18:40:20	63.1	18:45:16	60.9	18:46:20	65.3

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
19:10:57	80.4	18:41:20	60	18:46:16	57.5	18:47:20	68.3
19:11:57	57.1	18:42:20	62.8	18:47:16	56.4	18:48:20	66.8
19:12:57	55.6	18:43:20	58.8	18:48:16	52.6	18:49:20	64.6
19:13:57	60.7	18:44:20	55.5	18:49:16	51.1	18:50:20	64.9
19:14:57	62.1	18:45:20	58.2	18:50:16	55.2	18:51:20	67.9
19:15:57	58.6	18:46:20	73.2	18:51:16	50.6	18:52:20	69.3
19:16:57	60.5	18:47:20	60.2	18:52:16	54.1	18:53:20	64.1
19:17:57	60.5	18:48:20	58.1	18:53:16	51.7	18:54:20	60
19:18:57	58.4	18:49:20	53.2	18:54:16	52.6	18:55:20	57.5
19:19:57	54.2	18:50:20	68.2	18:55:16	57.9	18:56:20	71.1
19:20:57	69.1	18:51:20	56.5	18:56:16	58.3	18:57:20	61.5
19:21:57	57.9	18:52:20	54	18:57:16	66.8	18:58:20	60.4
19:22:57	55.7	18:53:20	60	18:58:16	55.1	18:59:20	58.1
19:23:57	55.9	18:54:20	55.5	18:59:16	64.7	19:00:20	57.8
19:24:57	62.3	18:55:20	58.9	19:00:16	52.3	19:01:20	58.7
19:25:57	59.7	18:56:20	72.6	19:01:16	55.5	19:02:20	57.3
19:26:57	56.8	18:57:20	58.5	19:02:16	58.2	19:03:20	69.5
19:27:57	67.4	18:58:20	54.4	19:03:16	58.7	19:04:20	58.5
19:28:57	61.6	18:59:20	53.1	19:04:16	67.3	19:05:20	62.3
19:29:57	58.0	19:00:20	57.3	19:05:16	56.3	19:06:20	60.2
19:30:57	58.5	19:01:20	56.1	19:06:16	57.1	19:07:20	79.6
19:31:57	58.0	19:02:20	62.1	19:07:16	67.1	19:08:20	59.7
19:32:57	58.9	19:03:20	71.9	19:08:16	54.0	19:09:20	61.5
19:33:57	77.0	19:04:20	57.5	19:09:16	55.0	19:10:20	69.4
19:34:57	65.9	19:05:20	56.4	19:10:16	58.0	19:11:20	61.1
19:35:57	55.2	19:06:20	56.9	19:11:16	64.2	19:12:20	60.2
19:36:57	60.3	19:07:20	67.6	19:12:16	59.3	19:13:20	61.5
19:37:57	64.3	19:08:20	57.4	19:13:16	59.7	19:14:20	67.4
19:38:57	56.9	19:09:20	59.7	19:14:16	61.6	19:15:20	57.5
19:39:57	57.9	19:10:20	70.3	19:15:16	66.8	19:16:20	56.1
19:40:57	55.0	19:11:20	69.5	19:16:16	56.7	19:17:20	70.9
19:41:57	60.9	19:12:20	58.3	19:17:16	60.5	19:18:20	57.7
19:42:57	54.5	19:13:20	58.8	19:18:16	60.5	19:19:20	56.6
19:43:57	55.0	19:14:20	70.5	19:19:16	62.0	19:20:20	65.7
19:44:57	55.5	19:15:20	60.8	19:20:16	59.5	19:21:20	62.7
19:45:57	66.6	19:16:20	58.1	19:21:16	65.4	19:22:20	56.1
19:46:57	58.1	19:17:20	69.6	19:22:16	66.0	19:23:20	57.7
19:47:57	56.9	19:18:20	59.7	19:23:16	58.2	19:24:20	59.6
19:48:57	65.7	19:19:20	57.9	19:24:16	60.0	19:25:20	62.6
19:49:57	66.2	19:20:20	66.9	19:25:16	65.0	19:26:20	59.4
19:50:57	59.3	19:21:20	54.7	19:26:16	56.2	19:27:20	77.4
19:51:57	71.1	19:22:20	53.7	19:27:16	58.6	19:28:20	63.8

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
19:52:57	62.9	19:23:20	62.3	19:28:16	59.4	19:29:20	59.7
19:53:57	57.5	19:24:20	68.5	19:29:16	67.6	19:30:20	59.8
19:54:57	56.8	19:25:20	54.3	19:30:16	59.1	19:31:20	60.2
19:55:57	66.4	19:26:20	54.1	19:31:16	60.7	19:32:20	60.5
19:56:57	55.3	19:27:20	69.8	19:32:16	70.3	19:33:20	71.9
19:57:57	53.7	19:28:20	55.8	19:33:16	61.5	19:34:20	62.5
19:58:57	55.0	19:29:20	56.1	19:34:16	59.5	19:35:20	62.3
19:59:57	66.9	19:30:20	66.7	19:35:16	67.0	19:36:20	66.9
20:00:57	53.8	19:31:20	54.2	19:36:16	54.7	19:37:20	62.4
20:01:57	62.4	19:32:20	62.5	19:37:16	58.8	19:38:20	61.3
20:02:57	63.5	19:33:20	70.4	19:38:16	60.1	19:39:20	59.7
20:03:57	55.3	19:34:20	61.2	19:39:16	57.6	19:40:20	67.4
20:04:57	56.9	19:35:20	63.1	19:40:16	56.2	19:41:20	61.1
20:05:57	56.2	19:36:20	60.8	19:41:16	59.2	19:42:20	59.5
20:06:57	60.0	19:37:20	67.7	19:42:16	56.2	19:43:20	58.7
20:07:57	56.1	19:38:20	69.4	19:43:16	57.0	19:44:20	59.7
20:08:57	61.9	19:39:20	60.5	19:44:16	64.3	19:45:20	59.7
20:09:57	59.6	19:40:20	73.6	19:45:16	60.9	19:46:20	59.3
20:10:57	67.6	19:41:20	56.4	19:49:24	60.5	19:47:20	58.8
20:11:57	58.3	19:42:20	58.7	19:50:24	66.0	19:48:20	56.9
20:12:57	56.0	19:43:20	54.8	19:51:24	56.7	19:49:20	56.5
20:13:57	62.1	19:44:20	66.1	19:52:24	64.6	19:50:20	70.2
20:14:57	56.9	19:45:20	54.5	19:53:24	65.6	19:51:20	58.8
20:15:57	49.6	19:46:20	55.1	19:54:24	55.6	19:52:20	65.4
20:16:57	51.9	19:47:20	70.5	19:55:24	57.8	19:53:20	60.4
20:17:57	54.5	19:48:20	58.1	19:56:24	64.4	19:54:20	57.8
20:18:57	53.8	19:49:20	55.7	19:57:24	54.5	19:55:20	59.8
20:19:57	52.5	19:50:20	68.4	19:58:24	54.8	19:56:20	69.9
20:20:57	59.1	19:51:20	57.9	19:59:24	58.6	19:57:20	60
20:21:57	64.5	19:52:20	54.2	20:00:24	69.2	19:58:20	57.9
20:22:57	51.7	19:53:20	68.7	20:01:24	55.2	19:59:20	59.6
20:23:57	58.2	19:54:20	63	20:02:24	54.4	20:00:20	56.4
20:24:57	51.7	19:55:20	58.2	20:03:24	57.2	20:01:20	57
20:25:57	53.5	19:56:20	70.3	20:04:24	64.6	20:02:20	56.7
20:26:57	67.7	19:57:20	56.4	20:05:24	56.6	20:03:20	56.8
20:27:57	54.5	19:58:20	59.4	20:06:24	57.7	20:04:20	57.5
20:28:57	53.3	19:59:20	55.9	20:07:24	69.0	20:05:20	56.5
20:29:57	55.5	20:00:20	68.2	20:08:24	53.6	20:06:20	57.8
20:30:57	57.0	20:01:20	59.9	20:09:24	53.1	20:07:20	57.4
20:31:57	53.4	20:02:20	72.3	20:10:24	56.4	20:08:20	57.7
20:32:57	52.7	20:03:20	57.1	20:11:24	62.0	20:09:20	61.8
20:33:57	52.3	20:04:20	57.7	20:12:24	54.3	20:10:20	61.4

Titik 1		Titik 2		Titik 3		Titik 4		Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq														
20:34:57	52.6	20:05:20	59.5	20:13:24	60.8	20:11:20	59.1	21:16:57	53.3	20:47:20	64.7	20:55:24	51.6	20:53:20	68.2
20:35:57	76.3	20:06:20	69.9	20:14:24	60.3	20:12:20	59.5	21:17:57	49.7	20:48:20	55.7	20:56:24	51.8	20:54:20	55.5
20:36:57	54.0	20:07:20	54.8	20:15:24	64.1	20:13:20	60.6	21:18:57	54.4	20:49:20	69.1	20:57:24	52.8	20:55:20	54.5
20:37:57	52.5	20:08:20	55	20:16:24	50.7	20:14:20	62.8	21:19:57	51.7	20:50:20	55	20:58:24	55.9	20:56:20	55.4
20:38:57	53.2	20:09:20	59.1	20:17:24	56.0	20:15:20	58.5	21:20:57	51.9	20:51:20	55.6	20:59:24	52.0	20:57:20	56.4
20:39:57	51.3	20:10:20	56.6	20:18:24	62.8	20:16:20	57.1	21:21:57	48.0	20:52:20	53.7	21:00:24	52.1	20:58:20	56.8
20:40:57	55.3	20:11:20	60.9	20:19:24	53.0	20:17:20	61.3	21:22:57	49.8	20:53:20	51.6	21:01:24	52.0	20:59:20	68.2
20:41:57	53.4	20:12:20	60.1	20:20:24	50.9	20:18:20	59.5	21:23:57	52.2	20:54:20	52.6	21:02:24	53.2	21:00:20	56.4
20:42:57	53.1	20:13:20	55.6	20:21:24	50.9	20:19:20	59.3	21:24:57	50.5	20:55:20	56.1	21:03:24	50.9	21:01:20	57.2
20:43:57	53.6	20:14:20	56.3	20:22:24	51.0	20:20:20	60.5	21:25:57	63.4	20:56:20	55.4	21:04:24	51.1	21:02:20	55.8
20:44:57	65.5	20:15:20	57.5	20:23:24	55.9	20:21:20	70.8	21:26:57	52.4	20:57:20	63.7	21:05:24	51.0	21:03:20	60.2
20:45:57	52.1	20:16:20	57.7	20:24:24	52.2	20:22:20	59.8	21:27:57	64.7	20:58:20	59.2	21:06:24	51.4	21:04:20	57.5
20:46:57	55.6	20:17:20	55	20:25:24	52.1	20:23:20	57.5	21:28:57	48.1	20:59:20	55.2	21:07:24	51.4	21:05:20	57.5
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21:00:57	52.2	20:31:20	56	20:39:24	54.7	20:37:20	61.1	21:42:57	52.1	21:20:01	54.6	21:21:24	50.1	21:19:20	56.5
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21:10:57	53.8	20:41:20	66.3	20:49:24	57.4	20:47:20	55.4	21:52:57	63.2	21:30:01	54.6	21:31:24	55.5	21:29:20	56.3
21:11:57	56.0	20:42:20	58	20:50:24	51.8	20:48:20	55.6	21:53:57	58.7	21:31:01	54.8	21:32:24	69.9	21:30:20	56.3
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21:13:57	53.6	20:44:20	55.5	20:52:24	51.8	20:50:20	56.5	21:55:57	49.9	21:33:01	70.1	21:34:24	51.0	21:32:20	66.3
21:14:57	53.4	20:45:20	53	20:53:24	51.9	20:51:20	57.4	21:56:57	51.7	21:34:01	55	21:35:24	51.7	21:33:20	61.5
21:15:57	55.0	20:46:20	68.4	20:54:24	53.2	20:52:20	56.6	21:57:57	49.8	21:35:01	54.8	21:36:24	51.5	21:34:20	57.1

Titik 1		Titik 2		Titik 3		Titik 4		Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq														
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22:01:57	68.3	21:39:01	52.5	21:40:24	51.7	21:38:20	59.7	22:43:57	51.5	22:21:01	54.2	22:22:24	55.4	22:20:20	58.6
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22:31:57	49.8	22:09:01	69.2	22:10:24	51.0	22:08:20	55.4	23:17:20	47.1	22:51:01	53.1	22:52:24	52.9	22:56:16	57.4
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22:33:57	54.7	22:11:01	57.2	22:12:24	52.4	22:10:20	57.1	23:19:20	50.9	22:53:01	54	22:54:24	51.1	22:58:16	59
22:34:57	50.9	22:12:01	53.2	22:13:24	51.6	22:11:20	57.6	23:20:20	67.1	22:54:01	55.9	22:55:24	51.7	22:59:16	59.9
22:35:57	49.3	22:13:01	53.7	22:14:24	54.3	22:12:20	60	23:21:20	58.1	22:55:01	53.4	22:56:24	54.9	23:00:16	51.9
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22:37:57	49.0	22:15:01	55.4	22:16:24	52.6	22:14:20	56.4	23:23:20	49.9	22:57:01	52.6	22:58:24	51.6	23:02:16	57.2
22:38:57	50.1	22:16:01	54.3	22:17:24	54.1	22:15:20	58.3	23:24:20	50.0	22:58:01	53.1	22:59:24	61.4	23:03:16	56.8
22:39:57	51.1	22:17:01	55.4	22:18:24	54.7	22:16:20	56.6	23:25:20	48.5	22:59:01	53.3	23:00:24	51.0	23:04:16	57.9

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
23:26:20	49.8	23:00:01	54.4	23:01:24	49.8	23:05:16	57.1
23:27:20	73.3	23:01:01	53.6	23:02:24	52.7	23:06:16	56.8
23:28:20	49.5	23:02:01	53.8	23:03:24	49.8	23:07:16	55.6
23:29:20	68.3	23:03:01	69.5	23:04:24	60.7	23:08:16	56.1
23:30:20	49.5	23:04:01	54.8	23:05:24	50.0	23:09:16	57.7
23:31:20	48.3	23:05:01	54.3	23:06:24	50.1	23:10:16	55.4
23:32:20	52.9	23:06:01	58.1	23:07:24	50.3	23:11:16	52.7
23:33:20	46.9	23:07:01	53	23:08:24	49.8	23:12:16	50.2
23:34:20	71.6	23:08:01	53.5	23:09:24	49.6	23:13:16	55.3
23:35:20	69.3	23:09:01	54.1	23:10:24	49.7	23:14:16	55.2
23:36:20	46.8	23:10:01	54.8	23:11:24	49.7	23:15:16	55.3
23:37:20	46.9	23:11:01	57	23:12:24	49.8	23:16:16	55.3
23:38:20	47.7	23:12:01	52.9	23:13:24	50.2	23:17:16	55.5
23:39:20	48.5	23:13:01	52.2	23:14:24	49.8	23:18:16	56.6
23:40:20	48.1	23:14:01	52.6	23:15:24	49.7	23:19:16	56.7
23:41:20	51.1	23:15:01	51.4	23:16:24	50.4	23:20:16	56.4
23:42:20	48.4	23:16:01	52.1	23:17:24	55.0	23:21:16	55.1
23:43:20	71.3	23:17:01	52.7	23:18:24	49.9	23:22:16	56.4
23:44:20	48.3	23:18:01	52	23:19:24	50.0	23:23:16	56.4
23:45:20	52.5	23:19:01	56.2	23:20:24	50.4	23:24:16	55.9
23:46:20	47.6	23:20:01	52.3	23:21:24	51.3	23:25:16	56.1
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23:48:20	45.4	23:22:01	53.3	23:23:24	55.5	23:27:16	55.9
23:49:20	49.5	23:23:01	51.7	23:24:24	69.1	23:28:16	53.5
23:50:20	75.6	23:24:01	51.2	23:25:24	53.1	23:29:16	57.1
23:51:20	49.3	23:25:01	50.8	23:26:24	65.1	23:30:16	64.5
23:52:20	46.2	23:26:01	50.5	23:27:24	50.1	23:31:16	54.1
23:53:20	51.1	23:27:01	50.9	23:28:24	50.1	23:32:16	56.2
23:54:20	49.5	23:28:01	51	23:29:24	50.5	23:33:16	55.7
23:55:20	49.4	23:29:01	51.3	23:30:24	51.2	23:34:16	57.8
23:56:20	51.2	23:30:01	52	23:31:24	58.0	23:35:16	55.8
23:57:20	86.0	23:31:01	51.9	23:32:24	53.0	23:36:16	54.3
23:58:20	55.8	23:32:01	52.3	23:33:24	61.6	23:37:16	55.1
23:59:20	49.0	23:33:01	51.6	23:34:24	60.3	23:38:16	56.3
00:00:20	49.0	23:34:01	52.5	23:35:24	49.7	23:39:16	55
00:01:20	71.0	23:35:01	52.1	23:36:24	50.8	23:40:16	57.3
00:02:20	49.0	23:36:01	52.5	23:37:24	57.9	23:41:16	58.4
00:03:20	48.9	23:37:01	52.6	23:38:24	56.9	23:42:16	55.9
00:04:20	48.9	23:38:01	52.7	23:39:24	62.5	23:43:16	57.6
00:05:20	48.6	23:39:01	53.3	23:40:24	49.7	23:44:16	53.7
00:06:20	59.5	23:40:01	54.6	23:41:24	50.0	23:45:16	54.8
00:07:20	49.0	23:41:01	53	23:42:24	50.9	23:46:16	56

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
00:08:20	48.8	23:42:01	53.3	23:43:24	54.5	23:47:16	56
00:09:20	48.7	23:43:01	52.1	23:44:24	50.7	23:48:16	55.4
00:10:20	47.6	23:44:01	53.1	23:45:24	51.7	23:49:16	53.7
00:11:20	47.2	23:45:01	52.4	23:46:24	56.1	23:50:16	56.1
00:12:20	56.4	23:46:01	53	23:47:24	57.1	23:51:16	50.7
00:13:20	69.8	23:47:01	53.4	23:48:24	52.6	23:52:16	54.6
00:14:20	50.6	23:48:01	52.4	23:49:24	52.0	23:53:16	55.2
00:15:20	77.0	23:49:01	52	23:50:24	55.1	23:54:16	51.9
00:16:20	48.3	23:50:01	52.5	23:51:24	53.5	23:55:16	47.5
00:17:20	48.4	23:51:01	52.4	23:52:24	57.3	23:56:16	50.9
00:18:20	47.1	23:52:01	52.6	23:53:24	55.2	23:57:16	56.5
00:19:20	48.0	23:53:01	51.9	23:54:24	62.5	23:58:16	48.4
00:20:20	67.3	23:54:01	52.6	23:55:24	54.4	23:59:16	47
00:21:20	46.6	23:55:01	52.1	23:56:24	55.1	00:00:16	51
00:22:20	46.6	23:56:01	52	23:57:24	54.6	00:01:16	51.3
00:23:20	46.5	23:57:01	52.4	23:58:24	57.4	00:02:16	53.8
00:24:20	46.6	23:58:01	51.2	23:59:24	55.2	00:03:16	54.3
00:25:20	46.9	23:59:01	49.4	00:00:24	53.6	00:04:16	46.8
00:26:20	46.9	00:00:01	50.4	00:01:24	70.1	00:05:16	46.7
00:27:20	70.3	00:01:01	52.1	00:02:24	50.7	00:06:16	48
00:28:20	47.3	00:02:01	49.7	00:03:24	56.2	00:07:16	51.1
00:29:20	47.2	00:03:01	50.2	00:04:24	52.1	00:08:16	50.5
00:30:20	46.7	00:04:01	50.4	00:05:24	56.7	00:09:16	53.1
00:31:20	46.8	00:05:01	49.8	00:06:24	50.4	00:10:16	46.9
00:32:20	47.4	00:06:01	51.4	00:07:24	50.1	00:11:16	53
00:33:20	47.0	00:07:01	51.1	00:08:24	50.2	00:12:16	51.8
00:34:20	49.4	00:08:01	51	00:09:24	50.1	00:13:16	48.1
00:35:20	48.8	00:09:01	53.2	00:10:24	50.1	00:14:16	47.3
00:36:20	48.7	00:10:01	50.9	00:11:24	61.9	00:15:16	54.6
00:37:20	48.8	00:11:01	54.4	00:12:24	51.7	00:16:16	50.9
00:38:20	47.8	00:12:01	71.4	00:13:24	49.8	00:17:16	49.1
00:39:20	46.6	00:13:01	50.6	00:14:24	50.1	00:18:16	50.3
00:40:20	47.1	00:14:01	51.2	00:15:24	50.1	00:19:16	48.8
00:41:20	46.9	00:15:01	50.1	00:16:24	50.4	00:20:16	51.3
00:42:20	46.9	00:16:01	50.3	00:17:24	57.7	00:21:16	44.8
00:43:20	47.8	00:17:01	49.4	00:18:24	52.7	00:22:16	47.4
00:44:20	55.8	00:18:01	51.3	00:19:24	65.9	00:23:16	48.2
00:45:20	51.1	00:19:01	52.2	00:20:24	51.3	00:24:16	47.8
00:46:20	48.1	00:20:01	50.6	00:21:24	50.7	00:25:16	52.7
00:47:20	67.0	00:21:01	50.3	00:22:24	50.7	00:26:16	47.1
00:48:20	48.5	00:22:01	51.6	00:23:24	50.7	00:27:16	50.4
00:49:20	47.8	00:23:01	50.2	00:24:24	56.8	00:28:16	46.6

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
00:50:20	47.3	00:24:01	50	00:25:24	51.0	00:29:16	48.3
00:51:20	47.5	00:25:01	49.2	00:26:24	50.2	00:30:16	47.2
00:52:20	48.3	00:26:01	49.8	00:27:24	50.4	00:31:16	56.2
00:53:20	73.2	00:27:01	50	00:28:24	50.9	00:32:16	47.7
00:54:20	46.4	00:28:01	51.8	00:29:24	50.6	00:33:16	48.6
00:55:20	46.9	00:29:01	49.9	00:30:24	50.6	00:34:16	50.7
00:56:20	60.4	00:30:01	50.6	00:31:24	55.6	00:35:16	46.5
00:57:20	46.6	00:31:01	48.2	00:32:24	55.0	00:36:16	47.3
00:58:20	70.1	00:32:01	59.2	00:33:24	50.7	00:37:16	46
00:59:20	57.1	00:33:01	49.5	00:34:24	50.9	00:38:16	45.4
01:00:20	47.6	00:34:01	49	00:38:50	51.2	00:39:16	46.1
01:01:20	46.4	00:35:01	49.3	00:39:50	57.4	00:40:16	46.3
01:02:20	52.1	00:36:01	49.6	00:40:50	50.0	00:41:16	47.2
01:03:20	46.4	00:37:01	49.1	00:41:50	50.1	00:42:16	49.9
01:04:20	61.1	00:38:01	49.8	00:42:50	50.1	00:43:16	49.9
01:05:20	47.6	00:39:01	51.5	00:43:50	50.2	00:44:16	56.3
01:06:20	45.8	00:40:01	49.8	00:44:50	49.7	00:45:16	51.5
01:07:20	46.2	00:41:01	60.8	00:45:50	49.7	00:46:16	48.8
01:08:20	48.2	00:42:01	64.8	00:46:50	49.6	00:47:16	51.6
01:09:20	57.1	00:43:01	51.7	00:47:50	49.7	00:48:16	54.9
01:10:20	47.9	00:44:01	49.2	00:48:50	49.7	00:49:16	51.6
01:11:20	49.0	00:45:01	47.8	00:49:50	51.5	00:50:16	48.9
01:12:20	75.7	00:46:01	47.9	00:50:50	53.7	00:51:16	49.7
01:13:20	48.7	00:47:01	48.3	00:51:50	63.7	00:52:16	50.3
01:14:20	47.4	00:48:01	48.6	00:52:50	50.2	00:53:16	52.8
01:15:20	46.1	00:49:01	48.8	00:53:50	50.3	00:54:16	48.7
01:16:20	46.1	00:50:01	48.1	00:54:50	56.8	00:55:16	48.6
01:17:20	46.0	00:51:01	49.2	00:55:50	51.4	00:56:16	52.3
01:18:20	46.2	00:52:01	53.7	00:56:50	52.9	00:57:16	48.3
01:19:20	46.2	00:53:01	51.2	00:57:50	62.6	00:58:16	51.4
01:20:20	46.2	00:54:01	48.4	00:58:50	50.5	00:59:16	54.6
01:21:20	46.0	00:55:01	49.3	00:59:50	52.8	01:00:16	53.6
01:22:20	43.1	00:56:01	48.6	01:00:50	60.8	01:01:16	50.8
01:23:20	44.3	00:57:01	48.7	01:01:50	52.7	01:02:16	50.7
01:24:20	44.2	00:58:01	51.1	01:02:50	58.0	01:03:16	51.6
01:25:20	43.2	00:59:01	50.5	01:03:50	50.6	01:04:16	52.8
01:26:20	46.8	1:00:01	48.4	01:04:50	50.6	01:05:16	49.9
01:27:20	62.7	1:01:01	55.2	01:05:50	51.1	01:06:16	49.1
01:28:20	45.2	1:02:01	58.5	01:06:50	51.9	01:07:16	49.2
01:29:20	43.3	1:03:01	59.7	01:07:50	53.7	01:08:16	49.7
01:30:20	43.3	1:04:01	54	01:08:50	65.6	01:09:16	52.3
01:31:20	43.3	1:05:01	49.8	01:09:50	53.2	01:10:16	50.3

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
01:32:20	40.7	1:06:01	46.8	01:10:50	52.0	01:11:16	51.3
01:33:20	40.9	1:07:01	54.2	01:11:50	57.4	01:12:16	54.2
01:34:20	39.7	1:08:01	51.7	01:12:50	54.0	01:13:16	49.8
01:35:20	41.3	1:09:01	53.4	01:13:50	60.4	01:14:16	49.6
01:36:20	41.5	1:10:01	54.1	01:14:50	53.8	01:15:16	49.5
01:37:20	44.5	1:11:01	52.5	01:15:50	57.9	01:16:16	50.8
01:38:20	46.1	1:12:01	52.4	01:16:50	69.2	01:17:16	50.8
01:39:20	43.2	1:13:01	48.3	01:17:50	51.3	01:18:16	49.9
01:40:20	43.5	1:14:01	53.1	01:18:50	51.2	01:19:16	51
01:41:20	44.1	1:15:01	51	01:19:50	51.3	01:20:16	50.5
01:42:20	44.0	1:16:01	48	01:20:50	51.2	01:21:16	51.2
01:43:20	41.0	1:17:01	50	01:21:50	51.2	01:22:16	51.1
01:44:20	43.8	1:18:01	50.1	01:22:50	51.4	01:23:16	52.1
01:45:20	46.2	1:19:01	53.9	01:23:50	51.3	01:24:16	52.2
01:46:20	44.6	1:20:01	58	01:24:50	51.3	01:25:16	51.1
01:47:20	40.2	1:21:01	54.7	01:25:50	51.2	01:26:16	52.1
01:48:20	41.0	1:22:01	49.1	01:26:50	51.2	01:27:16	54
01:49:20	44.1	1:23:01	49.2	01:27:50	51.4	01:28:16	50.8
01:50:20	45.3	1:24:01	50	01:28:50	51.6	01:29:16	51.1
01:51:20	65.0	1:25:01	54.9	01:29:50	52.1	01:30:16	50.5
01:52:20	61.5	1:26:01	50.7	01:30:50	53.3	01:31:16	50.9
01:53:20	45.9	1:27:01	50.5	01:31:50	58.5	01:32:16	50.4
01:54:20	45.7	1:28:01	50.4	01:32:50	51.2	01:33:16	50.3
01:55:20	46.3	1:29:01	55.5	01:33:50	54.9	01:34:16	50.4
01:56:20	49.8	1:30:01	50.2	01:34:50	59.2	01:35:16	50.8
01:57:20	46.1	1:31:01	51.9	01:35:50	51.5	01:36:16	51.2
01:58:20	45.8	1:32:01	55.1	01:36:50	51.3	01:37:16	49.4
01:59:20	47.4	1:33:01	50.9	01:37:50	52.6	01:38:16	51.6
02:00:20	45.4	1:34:01	56.1	01:38:50	51.0	01:39:16	50.4
02:01:20	44.5	1:35:01	61.5	01:39:50	51.0	01:40:16	49.7
02:02:20	42.3	1:36:01	50.2	01:40:50	51.0	01:41:16	49.9
02:03:20	42.6	1:37:01	50	01:41:50	50.9	01:42:16	49.2
02:04:20	42.9	1:38:01	48.3	01:42:50	51.1	01:43:16	49.1
02:05:20	40.7	1:39:01	46.5	01:43:50	51.1	01:44:16	49.4
02:06:20	42.8	1:40:01	46.5	01:44:50	50.9	01:45:16	50.7
02:07:20	47.0	1:41:01	46.3	01:45:50	50.7	01:46:16	50
02:08:20	44.2	1:42:01	47.3	01:46:50	50.7	01:47:16	51
02:09:20	42.9	1:43:01	50.9	01:47:50	50.7	01:48:16	50.1
02:10:20	39.9	1:44:01	48.3	01:48:50	50.7	01:49:16	49.2
02:11:20	45.7	1:45:01	47.5	01:49:50	50.6	01:50:16	52.3
02:12:20	41.9	1:46:01	47.9	01:50:50	50.6	01:51:16	51.9
02:13:20	42.6	1:47:01	47.8	01:51:50	50.4	01:52:16	57.9

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
02:14:20	42.3	1:48:01	48.9	01:52:50	50.2	01:53:16	50.3
02:15:20	42.4	1:49:01	51.5	01:53:50	50.7	01:54:16	49.7
02:16:20	42.5	1:50:01	48.2	01:54:50	55.4	01:55:16	50.1
02:17:20	42.2	1:51:01	47.7	01:55:50	68.4	01:56:16	50.2
02:18:20	43.3	1:52:01	48.5	01:56:50	62.2	01:57:16	50
02:19:20	44.0	1:53:01	49.3	01:57:50	49.9	01:58:16	50.7
02:20:20	42.0	1:54:01	48.1	01:58:50	49.9	01:59:16	50.5
02:21:20	42.2	1:55:01	48	01:59:50	49.9	02:00:16	50.7
02:22:20	42.7	1:56:01	48.4	02:00:50	49.9	02:01:16	50.8
02:23:20	39.9	1:57:01	48.1	02:01:50	49.9	02:02:16	50.4
02:24:20	38.6	1:58:01	48.3	02:02:50	49.9	02:03:16	50.1
02:25:20	40.5	1:59:01	48.3	02:03:50	49.9	02:04:16	49.7
02:26:20	43.8	2:00:01	48.8	02:04:50	49.9	02:05:16	49.8
02:27:20	44.4	2:01:01	48.2	02:05:50	49.6	02:06:16	50.2
02:28:20	42.6	2:02:01	48.4	02:06:50	49.6	02:07:16	49.8
02:29:20	43.1	2:03:01	48.9	02:07:50	49.6	02:08:16	50
02:30:20	42.9	2:04:01	48.5	02:08:50	49.4	02:09:16	50.7
02:31:20	41.3	2:05:01	47.7	02:09:50	50.0	02:10:16	50.3
02:32:20	62.4	2:06:01	47.9	02:10:50	50.3	02:11:16	50.2
02:33:20	66.9	2:07:01	49	02:11:50	50.3	02:12:16	50.2
02:34:20	66.6	2:08:01	48.3	02:12:50	50.4	02:13:16	50.4
02:35:20	64.3	2:09:01	48.5	02:13:50	50.5	02:14:16	50.6
02:36:20	54.1	2:10:01	48.6	02:14:50	50.5	02:15:16	50.7
02:37:20	54.0	2:11:01	48.8	02:15:50	50.5	02:16:16	50.7
02:38:20	57.1	2:17:48	54.1	02:16:50	50.6	02:17:16	51.4
02:39:20	43.5	2:18:48	48.7	02:17:50	50.5	02:18:16	50.2
02:40:20	43.5	2:19:48	47.3	02:18:50	50.6	02:19:16	50.5
02:41:20	43.9	2:20:48	49.8	02:19:50	50.5	02:20:16	50.9
02:42:20	43.8	2:21:48	47.8	02:20:50	50.5	02:21:16	50.5
02:43:20	43.6	2:22:48	48.9	02:21:50	50.5	02:22:16	50.9
02:44:20	43.5	2:23:48	48.8	02:22:50	50.5	02:23:16	50.8
02:45:20	44.4	2:24:48	49.2	02:23:50	50.4	02:24:16	51.2
02:46:20	43.7	2:25:48	48.8	02:24:50	50.4	02:25:16	51.7
02:47:20	43.7	2:26:48	49.2	02:25:50	50.3	02:26:16	51.8
02:48:20	43.7	2:27:48	49.1	02:26:50	50.4	02:27:16	50.3
02:49:20	41.6	2:28:48	49.4	02:27:50	50.5	02:28:16	50.7
02:50:20	40.1	2:29:48	49.5	02:28:50	50.6	02:29:16	51.1
02:51:20	39.8	2:30:48	49.6	02:29:50	50.6	02:30:16	50.4
02:52:20	40.9	2:31:48	49.6	02:30:50	50.5	02:31:16	50.2
02:53:20	41.7	2:32:48	50	02:31:50	50.1	02:32:16	50.2
02:54:20	42.4	2:33:48	50	02:32:50	50.0	02:33:16	50.7
02:55:20	41.7	2:34:48	50.4	02:33:50	50.0	02:34:16	50

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
02:56:20	42.7	2:35:48	50.1	02:34:50	50.2	02:35:16	50
02:57:20	41.2	2:36:48	50.5	02:35:50	50.2	02:36:16	49.7
02:58:20	40.5	2:37:48	50.2	02:36:50	50.3	02:37:16	52.4
02:59:20	41.6	2:38:48	50.4	02:37:50	50.1	02:38:16	49.7
03:00:20	42.7	2:39:48	50.3	02:38:50	50.2	02:39:16	50.5
03:01:20	43.3	2:40:48	50.4	02:39:50	50.2	02:40:16	55.4
03:02:20	43.7	2:41:48	50.1	02:40:50	50.8	02:41:16	51.1
03:03:20	50.3	2:42:48	49.9	02:41:50	64.6	02:42:16	51.5
03:04:20	48.2	2:43:48	50.5	02:42:50	65.0	02:43:16	51.4
03:05:20	48.3	2:44:48	50.1	02:43:50	50.0	02:44:16	52
03:06:20	48.1	2:45:48	50.3	02:44:50	49.6	02:45:16	51.6
03:07:20	47.5	2:46:48	50.1	02:45:50	49.6	02:46:16	51
03:08:20	47.1	2:47:48	50.2	02:46:50	49.7	02:47:16	51
03:09:20	48.9	2:48:48	50.3	02:47:50	49.5	02:48:16	51.5
03:10:20	44.9	2:49:48	50.5	02:48:50	49.4	02:49:16	51.2
03:11:20	46.9	2:50:48	50	02:49:50	49.6	02:50:16	51.7
03:12:20	47.2	2:51:48	49.8	02:50:50	49.6	02:51:16	51.5
03:13:20	47.3	2:52:48	49.5	02:51:50	49.6	02:52:16	51.7
03:14:20	47.6	2:53:48	49.6	02:52:50	49.6	02:53:16	51.6
03:15:20	46.1	2:54:48	49.6	02:53:50	49.6	02:54:16	51.3
03:16:20	47.1	2:55:48	49.1	02:54:50	49.7	02:55:16	57.1
03:17:20	47.5	2:56:48	48.8	02:55:50	49.3	02:56:16	51.4
03:18:20	46.8	2:57:48	49	02:56:50	49.2	02:57:16	51.3
03:19:20	49.0	2:58:48	49	02:57:50	49.4	02:58:16	51.3
03:20:20	49.0	2:59:48	49	02:58:50	49.4	02:59:16	51.4
03:21:20	49.1	3:00:48	49.1	02:59:50	49.4	03:00:16	51.2
03:22:20	47.5	3:01:48	49.4	03:00:50	49.5	03:01:16	51.5
03:23:20	47.4	3:02:48	49.6	03:01:50	49.6	03:02:16	51.4
03:24:20	47.6	3:03:48	50	03:02:50	49.5	03:03:16	51.6
03:25:20	47.7	3:04:48	50.3	03:03:50	49.9	03:04:16	54.4
03:26:20	47.6	3:05:48	50	03:04:50	49.4	03:05:16	56.4
03:27:20	47.5	3:06:48	49.4	03:05:50	49.3	03:06:16	56.4
03:28:20	48.2	3:07:48	49.4	03:06:50	49.2	03:07:16	54.8
03:29:20	47.5	3:08:48	49.2	03:07:50	49.3	03:08:16	55.5
03:30:20	47.1	3:09:48	49.5	03:08:50	48.9	03:09:16	53.9
03:31:20	48.1	3:10:48	49.9	03:09:50	49.2	03:10:16	53.2
03:32:20	77.2	3:11:48	50	03:10:50	49.4	03:11:16	52.8
03:33:20	59.3	3:12:48	50.1	03:11:50	49.4	03:12:16	51.5
03:34:20	47.8	3:13:48	50.4	03:12:50	49.4	03:13:16	51.2
03:35:20	47.4	3:14:48	50.1	03:13:50	49.2	03:14:16	51.1
03:36:20	45.1	3:15:48	50.1	03:14:50	49.1	03:15:16	51.5
03:37:20	46.0	3:16:48	49.9	03:15:50	49.2	03:16:16	51.5

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
03:38:20	45.8	3:17:48	49.9	03:16:50	49.4	03:17:16	51.5
03:39:20	46.1	3:18:48	49.8	03:17:50	49.4	03:18:16	51.7
03:40:20	45.2	3:19:48	50.8	03:18:50	49.5	03:19:16	51.4
03:41:20	44.5	3:20:48	50.1	03:19:50	49.5	03:20:16	51.6
03:42:20	45.8	3:21:48	50.5	03:20:50	49.2	03:21:16	51.9
03:43:20	46.1	3:22:48	50.1	03:21:50	49.0	03:22:16	51.9
03:44:20	45.8	3:23:48	50.4	03:22:50	49.0	03:23:16	52
03:45:20	45.8	3:24:48	50.1	03:23:50	49.3	03:24:16	51.8
03:46:20	45.8	3:25:48	50.3	03:24:50	49.5	03:25:16	51.8
03:47:20	46.1	3:26:48	50.2	03:25:50	49.9	03:26:16	51.9
03:48:20	45.4	3:27:48	50	03:26:50	50.2	03:27:16	52.4
03:49:20	45.8	3:28:48	50.1	03:27:50	50.2	03:28:16	52.1
03:50:20	47.0	3:29:48	49.6	03:28:50	49.8	03:29:16	52.1
03:51:20	45.2	3:30:48	50.3	03:29:50	49.7	03:30:16	52
03:52:20	44.1	3:31:48	49.5	03:30:50	49.5	03:31:16	52.3
03:53:20	44.6	3:32:48	49.8	03:31:50	50.3	03:32:16	56
03:54:20	45.3	3:33:48	49.6	03:32:50	50.1	03:33:16	52.3
03:55:20	44.5	3:34:48	49.9	03:33:50	51.0	03:34:16	53.9
03:56:20	44.6	3:35:48	49.8	03:34:50	54.4	03:35:16	52.7
03:57:20	45.0	3:36:48	49.9	03:35:50	66.0	03:36:16	52.7
03:58:20	44.9	3:37:48	49.6	03:36:50	75.3	03:37:16	51.8
03:59:20	45.1	3:38:48	49.7	03:37:50	51.8	03:38:16	52.1
04:00:20	45.0	3:39:48	49.5	03:38:50	49.1	03:39:16	53.3
04:01:20	45.3	3:40:48	49.7	03:39:50	49.3	03:40:16	52.9
04:02:20	44.8	3:41:48	49.7	03:40:50	49.3	03:41:16	52
04:03:20	44.6	3:42:48	50	03:41:50	49.3	03:42:16	52.7
04:04:20	44.6	3:43:48	50	03:42:50	49.6	03:43:16	52.1
04:05:20	43.3	3:44:48	49.7	03:43:50	49.4	03:44:16	52.4
04:06:20	43.2	3:45:48	49.6	03:44:50	49.4	03:45:16	52.1
04:07:20	43.5	3:46:48	49.6	03:45:50	49.6	03:46:16	53
04:08:20	43.7	3:47:48	49.9	03:46:50	51.7	03:47:16	54.1
04:09:20	43.0	3:48:48	49.8	03:47:50	50.8	03:52:01	55.7
04:10:20	43.0	3:49:48	49.4	03:48:50	51.2	03:53:01	53.7
04:11:20	43.6	3:50:48	49.3	03:49:50	50.8	03:54:01	55.3
04:12:20	43.6	3:51:48	48.9	03:50:50	49.8	03:55:01	55
04:13:20	43.8	3:52:48	49	03:51:50	50.0	03:56:01	53.8
04:14:20	43.8	3:53:48	49.1	03:52:50	50.1	03:57:01	56.2
04:15:20	67.2	3:54:48	49.7	03:53:50	50.0	03:58:01	57.3
04:16:20	63.1	3:55:48	49.5	03:54:50	50.2	03:59:01	56.9
04:17:20	63.3	3:56:48	49.3	03:55:50	49.9	04:00:01	56.5
04:18:20	44.3	3:57:48	49.2	03:56:50	49.8	04:01:01	56.4
04:19:20	44.1	3:58:48	48.6	03:57:50	49.7	04:02:01	56.5

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
04:20:20	41.7	3:59:48	48.5	03:58:50	49.7	04:03:01	67.5
04:21:20	40.7	4:00:48	48.4	03:59:50	50.0	04:04:01	75.2
04:22:20	40.8	4:01:48	48.4	04:00:50	50.2	04:05:01	77
04:23:20	40.1	4:02:48	47.9	04:01:50	49.8	04:06:01	80.3
04:24:20	40.3	4:03:48	48	04:02:50	49.8	04:07:01	81.1
04:25:20	43.2	4:04:48	48	04:03:50	49.8	04:08:01	82.2
04:26:20	41.3	4:05:48	48.2	04:04:50	49.9	04:09:01	81.7
04:40:50	44.8	4:06:48	48.3	04:05:50	50.1	04:10:01	82.2
04:41:50	53.4	4:07:48	48.6	04:06:50	49.8	04:11:01	80.3
04:42:50	67.8	4:08:48	47.7	04:07:50	49.9	04:12:01	81.9
04:43:50	67.3	4:09:48	47.5	04:08:50	49.9	04:13:01	81.4
04:44:50	67.8	4:10:48	48	04:09:50	49.8	04:14:01	76.9
04:45:50	64.8	4:11:48	49.7	04:10:50	50.1	04:15:01	77.9
04:46:50	65.3	4:12:48	47.4	04:11:50	50.3	04:16:01	77.5
04:47:50	65.2	4:13:48	47.8	04:12:50	50.7	04:17:01	81.8
04:48:50	59.6	4:14:48	47.9	04:13:50	50.8	04:18:01	81.5
04:49:50	59.4	4:15:48	48.2	04:14:50	51.0	04:19:01	81.8
04:50:50	43.1	4:16:48	50.4	04:15:50	51.5	04:20:01	79.3
04:51:50	41.6	4:17:48	47.9	04:16:50	52.1	04:21:01	76
04:52:50	41.7	4:18:48	47.5	04:17:50	52.5	04:22:01	80.5
04:53:50	45.7	4:19:48	48.3	04:18:50	51.7	04:23:01	72.3
04:54:50	42.4	4:20:48	47.9	04:19:50	52.4	04:24:01	81.9
04:55:50	41.9	4:21:48	48	04:20:50	53.5	04:25:01	82.7
04:56:50	41.6	4:22:48	48.5	04:21:50	53.4	04:26:01	81.5
04:57:50	42.5	4:23:48	48.5	04:22:50	53.2	04:27:01	80
04:58:50	42.1	4:24:48	50.4	04:23:50	54.7	04:28:01	55.2
04:59:50	42.6	4:25:48	50.8	04:24:50	56.1	04:29:01	54.8
05:00:50	42.8	4:26:48	51.7	04:25:50	56.0	04:30:01	57.1
05:01:50	42.1	4:27:48	49.2	04:26:50	55.8	04:31:01	58.6
05:02:50	43.5	4:28:48	49.7	04:27:50	54.8	04:32:01	58.6
05:03:50	70.6	4:29:48	48.7	04:28:50	55.8	04:33:01	58.4
05:04:50	46.8	4:30:48	48.5	04:29:50	55.8	04:34:01	56.9
05:05:50	64.6	4:31:48	48.5	04:30:50	55.5	04:35:01	57.4
05:06:50	65.9	4:32:48	49	04:31:50	53.5	04:36:01	58.5
05:07:50	66.6	4:33:48	51.2	04:32:50	56.2	04:37:01	64.2
05:08:50	64.9	4:34:48	50.4	04:33:50	56.5	04:38:01	80.6
05:09:50	41.8	4:35:48	49.5	04:34:50	54.1	04:39:01	80.3
05:10:50	44.2	4:36:48	49.7	04:35:50	54.4	04:40:01	78.5
05:11:50	63.4	4:37:48	49.6	04:36:50	53.8	04:41:01	78.4
05:12:50	67.9	4:38:48	50.2	04:37:50	55.4	04:42:01	57.3
05:13:50	66.1	4:39:48	53.4	04:38:50	56.7	04:43:01	56.2
05:14:50	66.7	4:40:48	53.4	04:39:50	58.8	04:44:01	57.1

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
05:15:50	63.9	4:41:48	54.8	04:40:50	58.5	04:45:01	57.3
05:16:50	61.9	4:42:48	53.9	04:41:50	57.9	04:46:01	54.8
05:17:50	59.7	4:43:48	54	04:42:50	53.9	04:47:01	54.1
05:18:50	44.3	4:44:48	54.6	04:43:50	51.1	04:48:01	55.1
05:19:50	61.8	4:45:48	55.3	04:44:50	51.1	04:49:01	53.4
05:20:50	67.2	4:46:48	53.3	04:45:50	51.2	04:50:01	53.7
05:21:50	64.6	4:47:48	55	04:46:50	51.1	04:51:01	54.5
05:22:50	58.6	4:48:48	52.6	04:47:50	50.7	04:52:01	55.9
05:23:50	63.6	4:49:48	52.3	04:48:50	50.4	04:53:01	53.9
05:24:50	74.5	4:50:48	50.7	04:49:50	50.5	04:54:01	56
05:25:50	46.1	4:51:48	51.3	04:50:50	50.7	04:55:01	54.3
05:26:50	64.6	4:52:48	51.5	04:51:50	50.4	04:56:01	54.1
05:27:50	60.1	4:53:48	49.8	04:52:50	50.6	04:57:01	53.2
05:28:50	64.6	4:54:48	49	04:53:50	50.6	04:58:01	53.5
05:29:50	48.2	4:55:48	54.6	04:54:50	50.4	04:59:01	54.5
05:30:50	48.0	4:56:48	49.2	04:55:50	50.4	05:00:01	54.9
05:31:50	47.4	4:57:48	47.1	04:56:50	50.4	05:01:01	54.2
05:32:50	65.6	4:58:48	46.3	04:57:50	50.4	05:02:01	52.9
05:33:50	65.9	4:59:48	46.2	04:58:50	50.4	05:03:01	70.8
05:34:50	64.5	5:00:48	46.9	04:59:50	50.6	05:04:01	54.5
05:35:50	64.3	5:01:48	50.9	05:00:50	50.8	05:05:01	51.6
05:36:50	64.6	5:02:48	51.7	05:01:50	50.8	05:06:01	52
05:37:50	63.1	5:03:48	51.1	05:02:50	50.7	05:07:01	51.3
05:38:50	64.7	5:04:48	49	05:03:50	50.6	05:08:01	53.9
05:39:50	65.3	5:05:48	48.5	05:04:50	50.4	05:09:01	54.2
05:40:50	71.2	5:06:48	49.4	05:05:50	50.6	05:10:01	52.2
05:41:50	69.7	5:07:48	48.7	05:06:50	50.5	05:11:01	51.3
05:42:50	70.9	5:08:48	46.7	05:07:50	50.8	05:12:01	56.7
05:43:50	69.8	5:09:48	47.2	05:08:50	50.5	05:13:01	51.9
05:44:50	71.5	5:10:48	47.1	05:09:50	50.7	05:14:01	69.4
05:45:50	71.4	5:11:48	47.8	05:10:50	52.5	05:15:01	54.8
05:46:50	64.0	5:12:48	47.6	05:20:17	52.7	05:16:01	53.7
05:47:50	62.7	5:13:48	49	05:21:17	53.7	05:17:01	56.3
05:48:50	56.6	5:14:48	49.3	05:22:17	65.3	05:18:01	55.8
05:49:50	48.8	5:15:48	48.8	05:23:17	49.9	05:19:01	52.9
05:50:50	50.9	5:16:48	48.8	05:24:17	49.9	05:20:01	52.6
05:51:50	52.1	5:17:48	49.3	05:25:17	52.6	05:21:01	52.1
05:52:50	53.8	5:18:48	49	05:26:17	50.2	05:22:01	52.1
05:53:50	55.4	5:19:48	50.5	05:27:17	50.4	05:23:01	52
05:54:50	51.5	5:20:48	51.3	05:28:17	51.2	05:24:01	52.6
05:55:50	65.0	5:21:48	51.5	05:29:17	54.6	05:25:01	57.7
05:56:50	65.8	5:22:48	53.2	05:30:17	63.2	05:26:01	57

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
05:57:50	65.4	5:23:48	56.8	05:31:17	49.9	05:27:01	71.3
05:58:50	73.6	5:24:48	48.7	05:32:17	49.8	05:28:01	66.9
05:59:50	61.0	5:25:48	48.3	05:33:17	50.5	05:29:01	60.8
06:00:50	59.4	5:26:48	49.3	05:34:17	50.2	05:30:01	51.9
06:01:50	62.6	5:27:48	49.5	05:35:17	51.6	05:31:01	53.9
06:02:50	50.6	5:28:48	50.3	05:36:17	50.2	05:32:01	50.5
06:03:50	55.4	5:29:48	49.7	05:37:17	50.0	05:33:01	52.2
06:04:50	77.3	5:30:48	48.8	05:38:17	50.1	05:34:01	51.3
06:05:50	65.6	5:31:48	49.9	05:39:17	49.9	05:35:01	57.8
06:06:50	68.6	5:32:48	49.7	05:40:17	49.8	05:36:01	56.6
06:07:50	63.4	5:33:48	49.1	05:41:17	49.7	05:37:01	59.7
06:08:50	64.9	5:34:48	49.4	05:42:17	49.6	05:38:01	57.8
06:09:50	63.1	5:35:48	49.4	05:43:17	49.9	05:39:01	55
06:10:50	69.3	5:36:48	50.8	05:44:17	49.9	05:40:01	54.1
06:11:50	61.8	5:37:48	50.6	05:45:17	50.0	05:41:01	60.6
06:12:50	67.6	5:38:48	50.8	05:46:17	50.4	05:42:01	61.3
06:13:50	66.7	5:39:48	51.2	05:47:17	51.1	05:43:01	57.5
06:14:50	61.3	5:40:48	51.1	05:48:17	60.7	05:44:01	58.3
06:15:50	67.3	5:41:48	50.6	05:49:17	50.4	05:45:01	58.6
06:16:50	48.0	5:42:48	53	05:50:17	50.0	05:46:01	57
06:17:50	61.1	5:43:48	50.1	05:51:17	51.0	05:47:01	56.9
06:18:50	56.9	5:44:48	49	05:52:17	50.7	05:48:01	61
06:19:50	58.3	5:45:48	49.3	05:53:17	49.9	05:49:01	58.4
06:20:50	64.6	5:46:48	49	05:54:17	49.8	05:50:01	57.4
06:21:50	48.8	5:47:48	48.4	05:55:17	49.8	05:51:01	57.6
06:22:50	60.4	5:48:48	48.2	05:56:17	50.0	05:52:01	58.3
06:23:50	66.3	5:49:48	49	05:57:17	50.9	05:53:01	55.6
06:24:50	61.4	5:50:48	48.9	05:58:17	50.8	05:54:01	56.2
06:25:50	69.4	5:51:48	53.4	05:59:17	52.1	05:55:01	57.9
06:26:50	54.8	5:52:48	50.1	06:00:17	54.4	05:56:01	59.8
06:27:50	64.7	5:53:48	52	06:01:17	65.9	05:57:01	62.4
06:28:50	71.5	5:54:48	52	06:02:17	55.0	05:58:01	59
06:29:50	70.7	5:55:48	52.2	06:03:17	64.8		
06:30:50	56.6	5:56:48	55.3	06:04:17	55.9		
06:31:50	53.3	5:57:48	47.7	06:05:17	62.4		
06:32:50	62.5	5:58:48	48	06:06:17	54.9		
		5:59:48	49.2	06:07:17	66.3		
		6:00:48	50.2	06:08:17	53.5		
				06:09:17	66.3		
				06:10:17	59.2		
				06:11:17	56.4		
				06:12:17	66.4		

Tingkat Kebisingan Hari 3 (16 April 2011 – 17 April 2011)

Titik 1		Titik 2		Titik 3		Titik 4		Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
05:58:45	66.3	6:07:44	63.8	06:03:00	55.9	05:59:39	53.7	06:39:45	60.5	6:48:44	53.6	06:44:00	56.9	06:40:39	70.7
05:59:45	59.2	6:08:44	60.4	06:04:00	66.4	06:00:39	52.3	06:40:45	64.6	6:49:44	53.8	06:45:00	60.1	06:41:39	65.8
6:00:45	62.3	6:09:44	71.2	06:05:00	53.4	06:01:39	70.6	06:41:45	62.5	6:50:44	55.7	06:46:00	58.9	06:42:39	71.4
06:01:45	74.3	6:10:44	56.9	06:06:00	65.7	06:02:39	58.6	06:42:45	71.0	6:51:44	56.4	06:47:00	61.7	06:43:39	63.4
06:02:45	53.0	6:11:44	53.4	06:07:00	52.4	06:03:39	59.1	06:43:45	65.7	6:52:44	69.3	06:48:00	60.7	06:44:39	73
06:03:45	61.5	6:12:44	71	06:08:00	67.6	06:04:39	56.4	06:44:45	52.6	6:53:44	55.1	06:49:00	54.6	06:45:39	68
06:04:45	54.6	6:13:44	62.3	06:09:00	54.8	06:05:39	54.4	06:45:45	56.2	6:54:44	55.5	06:50:00	56.7	06:46:39	65.5
06:05:45	59.0	6:14:44	73.2	06:10:00	66.9	06:06:39	53.7	06:46:45	69.7	6:55:44	55.1	06:51:00	63.6	06:47:39	70.4
06:06:45	67.9	6:15:44	58	06:11:00	58.6	06:07:39	69.9	06:47:45	54.3	6:56:44	63.6	06:52:00	54.5	06:48:39	74.1
06:07:45	52.9	6:16:44	59.2	06:12:00	63.1	06:08:39	57.2	06:48:45	54.7	6:57:44	55.3	06:53:00	51.3	06:49:39	69.8
06:08:45	62.7	6:17:44	71.5	06:13:00	57.1	06:09:39	54.2	06:49:45	62.8	6:58:44	63.9	06:54:00	60.4	06:50:39	68
06:09:45	53.1	6:18:44	61.9	06:14:00	61.6	06:10:39	55	06:50:45	65.0	6:59:44	61.1	06:55:00	59.3	06:51:39	56.7
06:10:45	57.6	6:19:44	63.9	06:15:00	54.4	06:11:39	54.6	06:51:45	54.1	7:00:44	62.1	06:56:00	52.3	06:52:39	64.4
06:11:45	69.5	6:20:44	81.8	06:16:00	62.5	06:12:39	58	06:52:45	53.8	7:01:44	60	06:57:00	48.8	06:53:39	75.9
06:12:45	58.8	6:21:44	56.7	06:17:00	57.4	06:13:39	71.7	06:53:45	52.6	7:02:44	56.6	06:58:00	50.1	06:54:39	57.4
06:13:45	61.7	6:22:44	60.3	06:18:00	65.2	06:14:39	66.4	06:54:45	53.0	7:03:44	58.7	06:59:00	54.6	06:55:39	56.9
06:14:45	62.0	6:23:44	69.6	06:19:00	59.3	06:15:39	68	06:55:45	60.4	7:04:44	69.3	07:00:00	56.0	06:56:39	59.8
06:15:45	57.5	6:24:44	58	06:20:00	64.9	06:16:39	55.5	06:56:45	53.4	7:05:44	58.3	07:01:00	52.9	06:57:39	57.3
06:16:45	68.4	6:25:44	71.9	06:21:00	63.6	06:17:39	70.7	06:57:45	53.7	7:06:44	70.8	07:02:00	49.2	06:58:39	60.3
06:17:45	66.2	6:26:44	66.8	06:22:00	54.6	06:18:39	69.9	07:01:36	55.7	7:07:44	54.4	07:03:00	49.8	06:59:39	55.2
06:18:45	68.0	6:27:44	63.3	06:23:00	64.1	06:19:39	65.8	07:02:36	66.6	7:08:44	64.4	07:04:00	51.0	07:00:39	69.8
06:19:45	53.8	6:28:44	60.4	06:24:00	50.6	06:20:39	54.7	07:03:36	61.9	7:09:44	68.2	07:05:00	50.4	07:01:39	59.3
06:20:45	52.9	6:29:44	59.4	06:25:00	50.9	06:21:39	58.9	07:04:36	69.9	7:10:44	55.2	07:06:00	49.2	07:02:39	51.5
06:21:45	62.4	6:30:44	69.9	06:26:00	51.8	06:22:39	55.9	07:05:36	53.8	7:11:44	54.9	07:07:00	52.3	07:03:39	57.7
06:22:45	57.5	6:31:44	59	06:27:00	55.7	06:23:39	54.2	07:06:36	56.0	7:12:44	63.5	07:08:00	52.1	07:04:39	72
06:23:45	59.6	6:32:44	56	06:28:00	56.8	06:24:39	70.9	07:07:36	55.9	7:13:44	70.4	07:09:00	58.2	07:05:39	80.1
06:24:45	63.7	6:33:44	58.3	06:29:00	66.3	06:25:39	55	07:08:36	72.5	7:14:44	52.5	07:10:00	49.7	07:06:39	72.2
06:25:45	58.4	6:34:44	59.9	06:30:00	57.0	06:26:39	74.1	07:09:36	58.0	7:15:44	69.5	07:11:00	53.9	07:07:39	72.2
06:26:45	59.3	6:35:44	59.9	06:31:00	64.1	06:27:39	56.4	07:10:36	57.9	7:16:44	61.1	07:12:00	52.7	07:08:39	70.6
06:27:45	65.2	6:36:44	61.1	06:32:00	60.4	06:28:39	74.2	07:11:36	57.5	7:17:44	54.2	07:13:00	56.3	07:09:39	69.5
06:28:45	53.4	6:37:44	60	06:33:00	64.7	06:29:39	69	07:12:36	66.6	7:18:44	54	07:14:00	53.3	07:10:39	57.1
06:29:45	66.1	6:38:44	63.8	06:34:00	61.0	06:30:39	69.7	07:13:36	58.3	7:19:44	70.2	07:15:00	54.5	07:11:39	54.2
06:30:45	69.1	6:39:44	65.3	06:35:00	54.6	06:31:39	64.4	07:14:36	55.6	7:20:44	56.5	07:16:00	51.0	07:12:39	53.8
06:31:45	63.2	6:40:44	73.8	06:36:00	63.0	06:32:39	74.7	07:15:36	54.9	7:21:44	55.4	07:17:00	52.9	07:13:39	53
06:32:45	53.1	6:41:44	58.9	06:37:00	52.5	06:33:39	65.1	07:16:36	55.1	7:22:44	68.2	07:18:00	53.9	07:14:39	76.1
06:33:45	54.6	6:42:44	54	06:38:00	59.1	06:34:39	72.5	07:17:36	65.1	7:23:44	58.1	07:19:00	49.7	07:15:39	70.3
06:34:45	57.8	6:43:44	53.4	06:39:00	55.3	06:35:39	64.7	07:18:36	69.9	7:24:44	51.8	07:20:00	50.1	07:16:39	64.8
06:35:45	56.2	6:44:44	53.1	06:40:00	57.9	06:36:39	71.6	07:19:36	58.2	7:25:44	51.3	07:21:00	53.4	07:17:39	66.1
06:36:45	60.7	6:45:44	55.5	06:41:00	57.1	06:37:39	62	07:20:36	55.9	7:26:44	70.1	07:22:00	54.6	07:18:39	65.8
06:37:45	56.2	6:46:44	70.1	06:42:00	59.1	06:38:39	74.9	07:21:36	62.1	7:27:44	53.1	07:23:00	50.4	07:19:39	68.9
06:38:45	56.3	6:47:44	55.2	06:43:00	57.0	06:39:39	66.6	07:22:36	54.7	7:28:44	52.3	07:24:00	55.1	07:20:39	66.6

Titik 1		Titik 2		Titik 3		Titik 4		Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
07:23:36	65.7	7:29:44	59.9	07:25:00	54.9	07:21:39	64.2	08:05:36	60.1	8:11:44	69.3	08:07:00	42.1	08:03:39	61.2
07:24:36	53.2	7:30:44	67.9	07:26:00	54.0	07:22:39	57.6	08:06:36	57.3	8:12:44	62.7	08:08:00	43.9	08:04:39	60.6
07:25:36	54.8	7:31:44	66.2	07:27:00	50.7	07:23:39	59.5	08:07:36	52.9	8:13:44	63.2	08:09:00	52.0	08:05:39	79.6
07:26:36	65.0	7:32:44	70.9	07:28:00	48.5	07:24:39	59.9	08:08:36	53.2	8:14:44	63.9	08:10:00	50.8	08:06:39	65.2
07:27:36	59.4	7:33:44	66.3	07:29:00	47.4	07:25:39	70.1	08:09:36	59.6	8:15:44	64.2	08:11:00	56.5	08:07:39	57.5
07:28:36	54.7	7:34:44	61.3	07:30:00	47.3	07:26:39	72.5	08:10:36	58.5	8:16:44	64.1	08:12:00	51.4	08:08:39	65.1
07:29:36	64.0	7:35:44	57.3	07:31:00	48.4	07:27:39	64	08:11:36	58.0	8:17:44	62.3	08:13:00	52.8	08:09:39	78.3
07:30:36	53.5	7:36:44	55.5	07:32:00	47.3	07:28:39	56.1	08:12:36	54.8	8:18:44	70.2	08:14:00	56.4	08:10:39	55
07:31:36	63.5	7:37:44	67.2	07:33:00	47.5	07:29:39	54	08:13:36	63.9	8:19:44	64.3	08:15:00	54.2	08:11:39	56.1
07:32:36	67.7	7:38:44	53.9	07:34:00	48.4	07:30:39	75	08:14:36	60.7	8:20:44	64.1	08:16:00	57.4	08:12:39	63.6
07:33:36	56.4	7:39:44	54.3	07:35:00	48.1	07:31:39	62.4	08:15:36	53.0	8:21:44	72.6	08:17:00	53.6	08:13:39	62
07:34:36	56.1	7:40:44	56.3	07:36:00	50.8	07:32:39	64.6	08:16:36	75.6	8:22:44	69.5	08:18:00	54.9	08:14:39	67.4
07:35:36	58.4	7:41:44	66.9	07:37:00	53.9	07:33:39	54.4	08:17:36	61.5	8:23:44	63.4	08:19:00	58.8	08:15:39	76.9
07:36:36	59.2	7:42:44	60.2	07:38:00	47.2	07:34:39	54.8	08:18:36	56.0	8:24:44	64.8	08:20:00	53.3	08:16:39	57.5
07:37:36	54.4	7:43:44	73.3	07:39:00	47.2	07:35:39	54.3	08:19:36	75.3	8:25:44	65.3	08:21:00	57.2	08:17:39	54.7
07:38:36	61.7	7:44:44	68.9	07:40:00	48.0	07:36:39	54.1	08:20:36	57.3	8:26:44	67.7	08:22:00	54.1	08:18:39	54.9
07:39:36	63.1	7:45:44	59.1	07:41:00	47.3	07:37:39	53.8	08:21:36	57.1	8:27:44	67.8	08:23:00	51.3	08:19:39	69.7
07:40:36	62.8	7:46:44	63.7	07:42:00	49.5	07:38:39	55.8	08:22:36	60.2	8:28:44	68.7	08:24:00	54.7	08:20:39	57.7
07:41:36	58.3	7:47:44	62.5	07:43:00	54.0	07:39:39	54.3	08:23:36	54.7	8:29:44	68.8	08:25:00	60.2	08:21:39	59.6
07:42:36	59.0	7:48:44	70.6	07:44:00	56.1	07:40:39	59.5	08:24:36	53.9	8:30:44	66.4	08:26:00	50.2	08:22:39	68.6
07:43:36	58.5	7:49:44	62.5	07:45:00	49.0	07:41:39	62	08:25:36	60.7	8:31:44	59.6	08:27:00	57.0	08:23:39	56.9
07:44:36	56.8	7:50:44	66.9	07:46:00	46.1	07:42:39	54.7	08:26:36	55.7	8:32:44	67.6	08:28:00	47.0	08:24:39	58.5
07:45:36	55.0	7:51:44	72.2	07:47:00	52.9	07:43:39	54.5	08:27:36	62.0	8:33:44	71.7	08:29:00	53.1	08:25:39	57.4
07:46:36	55.9	7:52:44	59.3	07:48:00	49.3	07:44:39	59.5	08:28:36	56.4	8:34:44	58.4	08:30:00	59.6	08:26:39	54.9
07:47:36	57.9	7:53:44	60.2	07:49:00	58.4	07:45:39	57.7	08:29:36	53.2	8:35:44	58.3	08:31:00	47.7	08:27:39	62.7
07:48:36	56.2	7:54:44	60.1	07:50:00	60.0	07:46:39	69.6	08:30:36	54.5	8:36:44	65.9	08:32:00	56.1	08:28:39	60.1
07:49:36	57.1	7:55:44	61.7	07:51:00	53.3	07:47:39	69.2	08:31:36	54.4	8:37:44	62.4	08:33:00	51.7	08:35:28	65.4
07:50:36	55.8	7:56:44	69.7	07:52:00	48.8	07:48:39	68.5	08:32:36	72.2	8:38:44	64.2	08:34:00	47.3	08:36:28	57.4
07:51:36	57.9	7:57:44	56.9	07:53:00	48.2	07:49:39	54.9	08:33:36	56.3	8:39:44	59.4	08:35:00	47.9	08:37:28	69.8
07:52:36	56.9	7:58:44	68.6	07:54:00	53.0	07:50:39	56	08:34:36	54.3	8:40:44	59.5	08:36:00	51.1	08:38:28	62.1
07:53:36	66.2	7:59:44	57.3	07:55:00	46.0	07:51:39	60.5	08:35:36	57.6	8:41:44	59.5	08:37:00	56.8	08:39:28	56.6
07:54:36	58.2	8:00:44	70.8	07:56:00	45.9	07:52:39	68.3	08:36:36	55.4	9:14:44	71.7	08:38:00	50.3	08:40:28	58.5
07:55:36	63.1	8:01:44	67.1	07:57:00	42.6	07:53:39	59.5	08:37:36	53.2	9:15:44	53.7	08:39:00	48.4	08:41:28	58.8
07:56:36	67.8	8:02:44	61.2	07:58:00	43.3	07:54:39	72.5	08:38:36	71.3	9:16:44	53.9	08:40:00	48.3	08:42:28	62.9
07:57:36	57.5	8:03:44	58.5	07:59:00	49.4	07:55:39	70.3	08:39:36	55.2	9:17:44	60.7	08:41:00	47.1	08:43:28	68
07:58:36	62.2	8:04:44	59.6	08:00:00	43.7	07:56:39	58.7	08:40:36	66.1	9:18:44	61.2	08:42:00	49.4	08:44:28	55.1
07:59:36	56.4	8:05:44	69.8	08:01:00	42.4	07:57:39	83.1	08:41:36	55.0	9:19:44	57.1	08:43:00	52.6	08:45:28	57.8
08:00:36	59.3	8:06:44	59.7	08:02:00	46.9	07:58:39	59.6	08:42:36	54.9	9:20:44	72.9	08:44:00	50.6	08:46:28	58
08:01:36	56.0	8:07:44	57.3	08:03:00	47.5	07:59:39	57.7	08:43:36	54.3	9:21:44	65.6	08:45:00	45.0	08:47:28	56.9
08:02:36	54.5	8:08:44	57.5	08:04:00	45.4	08:00:39	70.2	08:44:36	54.1	9:22:44	55.5	08:46:00	42.8	08:48:28	65.4
08:03:36	57.8	8:09:44	68.1	08:05:00	44.1	08:01:39	57.3	08:45:36	55.2	9:23:44	51.7	08:47:00	51.3	08:49:28	66.4
08:04:36	47.2	8:10:44	61.4	08:06:00	52.8	08:02:39	58.5	08:46:36	55.8	9:24:44	67.6	08:48:00	45.9	08:50:28	57.7

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
08:47:36	61.5	9:25:44	64.6	08:49:00	42.6	08:51:28	60.8
08:48:36	58.0	9:26:44	52.8	08:50:00	51.2	08:52:28	71.8
08:49:36	55.5	9:27:44	51.1	08:51:00	55.6	08:53:28	60.5
08:50:36	56.6	9:28:44	50.6	08:52:00	55.7	08:54:28	62.6
08:51:36	60.8	9:29:44	68.6	08:53:00	45.8	08:55:28	51.8
08:52:36	68.3	9:30:44	51.8	08:54:00	50.2	08:56:28	56.7
08:53:36	54.9	9:31:44	48.7	08:55:00	49.1	08:57:28	56.4
08:54:36	64.8	9:32:44	50.1	08:56:00	56.4	08:58:28	54.4
08:55:36	52.9	9:33:44	51	08:57:00	51.6	08:59:28	58.4
08:56:36	53.9	9:34:44	67.9	08:58:00	53.3	09:00:28	55
08:57:36	53.7	9:35:44	51.8	08:59:00	55.9	09:01:28	68.5
08:58:36	54.9	9:36:44	52.7	09:00:00	51.4	09:02:28	56.6
08:59:36	55.4	9:37:44	69.3	09:01:00	46.6	09:03:28	56.6
09:00:36	54.3	9:38:44	55.3	09:02:00	51.1	09:04:28	57.5
09:01:36	54.8	9:39:44	49.6	09:03:00	54.0	09:05:28	68.8
09:02:36	55.3	9:40:44	51	09:04:00	50.8	09:06:28	57.6
09:03:36	68.6	9:41:44	52.1	09:05:00	50.8	09:07:28	57.7
09:04:36	62.8	9:42:44	56.6	09:06:00	56.9	09:08:28	57.1
09:05:36	53.1	9:43:44	59.1	09:07:00	51.2	09:09:28	55
09:06:36	71.3	9:44:44	59.4	09:08:00	55.7	09:10:28	59
09:07:36	67.0	9:45:44	50.2	09:09:00	45.7	09:11:28	68
09:08:36	54.2	9:46:44	49.2	09:10:00	49.9	09:12:28	62.1
09:09:36	58.6	9:47:44	53.9	09:11:00	52.8	09:13:28	54.8
09:10:36	58.6	9:48:44	68.5	09:12:00	49.5	09:14:28	57.1
09:11:36	58.1	9:49:44	55.4	09:13:00	42.2	09:15:28	50.9
09:12:36	54.6	9:50:44	59.5	09:14:00	49.2	09:16:28	51.9
09:13:36	57.0	9:51:44	51.1	09:15:00	46.1	09:17:28	53.8
09:14:36	54.2	9:52:44	68.9	09:16:00	50.0	09:18:28	52.9
09:15:36	67.7	9:53:44	55.5	09:17:00	44.3	09:19:28	57.2
09:16:36	54.0	9:54:44	56.7	09:18:00	47.1	09:20:28	54.3
09:17:36	61.0	9:55:44	52.5	09:19:00	42.8	09:21:28	69
09:18:36	63.3	9:56:44	60.1	09:20:00	47.9	09:22:28	57.7
09:19:36	59.1	9:57:44	51	09:21:00	51.0	09:23:28	77.9
09:20:36	72.6	9:58:44	57	09:22:00	50.4	09:24:28	70.1
09:21:36	55.9	9:59:44	68.4	09:23:00	42.8	09:25:28	58.1
09:22:36	56.9	10:00:44	58.2	09:24:00	45.7	09:26:28	51.3
09:23:36	56.1	10:01:44	60.9	09:25:00	52.1	09:27:28	52.9
09:24:36	70.2	10:02:44	55.2	09:26:00	58.1	09:28:28	57
09:25:36	57.5	10:03:44	69.4	09:27:00	51.8	09:29:28	69.5
09:26:36	55.5	10:04:44	50.4	09:28:00	50.4	09:30:28	55.5
09:27:36	56.8	10:05:44	51.9	09:29:00	56.4	09:31:28	54
09:28:36	70.0	10:06:44	52.5	09:30:00	57.3	09:32:28	53.7

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
09:29:36	57.0	10:07:44	71	09:31:00	49.8	09:33:28	68.4
09:30:36	62.0	10:08:44	50.7	09:32:00	45.0	09:34:28	50.9
09:31:36	65.0	10:09:44	51.5	09:33:00	46.8	09:35:28	51.6
09:32:36	60.1	10:10:44	53.2	09:34:00	49.3	09:36:28	54.7
09:33:36	54.5	10:11:44	71.2	09:35:00	46.9	09:37:28	70.8
09:34:36	54.4	10:12:44	55.9	09:36:00	48.7	09:38:28	53.1
09:35:36	62.2	10:13:44	55.8	09:37:00	50.0	09:39:28	51
09:36:36	67.3	10:14:44	72.6	09:38:00	46.6	09:40:28	51.7
09:37:36	60.2	10:15:44	52.8	09:39:00	44.4	09:41:28	49.4
09:38:36	55.8	10:16:44	50.8	09:40:00	49.8	09:42:28	59.2
09:39:36	54.2	10:17:44	53.2	09:41:00	54.8	09:43:28	51.1
09:40:36	59.2	10:18:44	56.6	09:42:00	55.9	09:44:28	75.4
09:41:36	56.0	10:19:44	55	09:43:00	48.5	09:45:28	59.5
09:42:36	77.7	10:20:44	73	09:44:00	49.1	09:46:28	52.3
09:43:36	55.8	10:21:44	54.5	09:45:00	47.6	09:47:28	53.5
09:44:36	59.0	10:22:44	59.4	09:46:00	48.0	09:48:28	55.1
09:45:36	67.6	10:23:44	69.2	09:47:00	48.6	09:49:28	70.5
09:46:36	69.7	10:24:44	54.9	09:48:00	49.6	09:50:28	68.7
09:47:36	55.7	10:25:44	59.2	09:49:00	47.6	09:51:28	51.3
09:48:36	60.1	10:26:44	55.5	09:50:00	50.9	09:52:28	53.4
09:49:55	63.8	10:27:44	68.2	09:51:00	49.6	09:53:28	50.9
09:55:55	71.9	10:28:44	52	09:52:00	55.5	09:54:28	65.2
09:56:55	57.5	10:29:44	58.9	09:53:00	51.5	09:55:28	72.3
09:57:55	68.3	10:30:44	53.4	09:54:00	45.1	09:56:28	70.6
09:58:55	56.0	10:31:44	53.3	09:55:00	46.8	09:57:28	61.2
09:59:55	55.6	10:32:44	67.5	09:56:00	47.1	09:58:28	54.1
10:00:55	56.3	10:33:44	54.1	09:57:00	46.3	09:59:28	68.5
10:01:55	55.6	10:34:44	65	09:58:00	49.1	10:00:28	50.1
10:02:55	55.7	10:35:44	71.9	09:59:00	51.8	10:01:28	50.1
10:03:55	55.7	10:36:44	61.4	10:00:00	54.5	10:02:28	59.9
10:04:55	61.3	10:37:44	51.9	10:01:00	49.7	10:03:28	51.9
10:05:55	56.6	10:38:44	52.9	10:02:00	51.2	10:04:28	51.9
10:06:55	54.0	10:39:44	69.1	10:03:00	51.3	10:05:28	69.2
10:07:55	71.1	10:40:44	51.2	10:04:00	45.0	10:06:28	53.9
10:08:55	56.6	10:41:44	72.8	10:05:00	46.2	10:07:28	53.2
10:09:55	69.0	10:42:44	53	10:06:00	46.2	10:08:28	53
10:10:55	66.5	10:43:44	51.7	10:07:00	49.2	10:09:28	53.6
10:11:55	57.5	10:44:44	68	10:08:00	44.4	10:10:28	56.4
10:12:55	61.5	10:45:44	68.4	10:14:18	43.7	10:11:28	69.7
10:13:55	59.3	10:46:44	52	10:15:18	44.3	10:12:28	55.7
10:14:55	57.7	10:47:44	53.2	10:16:18	44.9	10:13:28	53.8
10:15:55	55.1	10:48:44	66.8	10:17:18	50.5	10:14:28	68.9

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
10:16:55	57.7	10:49:44	56.7	10:18:18	47.2	10:15:28	53.4
10:17:55	57.2	10:50:44	53.1	10:19:18	52.2	10:16:28	70.2
10:18:55	54.3	10:51:44	62	10:20:18	47.3	10:17:28	52.3
10:19:55	54.2	10:52:44	54	10:21:18	49.8	10:18:28	54.3
10:20:55	54.4	10:53:44	52.9	10:22:18	47.6	10:19:28	59.9
10:21:55	55.5	10:54:44	53.5	10:23:18	49.6	10:20:28	68.8
10:22:55	54.5	10:55:44	53.8	10:24:18	48.8	10:21:28	56.8
10:23:55	56.3	10:56:44	65.5	10:25:18	48.5	10:22:28	53
10:24:55	63.9	10:57:44	66.6	10:26:18	62.8	10:23:28	54.1
10:25:55	55.5	10:58:44	54.1	10:27:18	53.4	10:24:28	56.1
10:26:55	55.3	10:59:44	54.6	10:28:18	49.7	10:25:28	70
10:27:55	61.0	11:00:44	56.7	10:29:18	51.1	10:26:28	63.9
10:28:55	57.1	11:01:44	67.8	10:30:18	51.4	10:27:28	70
10:29:55	56.7	11:02:44	53.6	10:31:18	51.7	10:28:28	59.9
10:30:55	67.4	11:03:44	52.2	10:32:18	53.5	10:29:28	71.3
10:31:55	55.2	11:04:44	73.4	10:33:18	51.9	10:30:28	58.4
10:32:55	58.2	11:05:44	51	10:34:18	52.0	10:31:28	58.6
10:33:55	54.6	11:06:44	50	10:35:18	47.2	10:32:28	57.1
10:34:55	54.5	11:07:44	59	10:36:18	45.9	10:33:28	57.8
10:35:55	57.8	11:08:44	68.5	10:37:18	50.8	10:34:28	56.3
10:36:55	57.5	11:09:44	50.8	10:38:18	50.4	10:35:28	57.7
10:37:55	56.2	11:10:44	67.2	10:39:18	49.6	10:36:28	58.1
10:38:55	60.2	11:11:44	52.7	10:40:18	49.0	10:37:28	70.9
10:39:55	55.3	11:12:44	53.6	10:41:18	48.5	10:38:28	63.3
10:40:55	54.6	11:13:44	69.2	10:42:18	46.3	10:39:28	70.9
10:41:55	54.8	11:14:44	50.8	10:43:18	46.3	10:40:28	57.5
10:42:55	60.2	11:15:44	68.5	10:44:18	48.8	10:41:28	58.1
10:43:55	55.1	11:16:44	58.9	10:45:18	46.8	10:42:28	67.1
10:44:55	55.6	11:17:44	59.2	10:46:18	46.9	10:43:28	69.8
10:45:55	66.3	11:31:29	69	10:47:18	48.8	10:44:28	57.9
10:46:55	56.9	11:32:29	55.3	10:48:18	51.0	10:45:28	55.8
10:47:55	54.7	11:33:29	52.3	10:49:18	49.7	10:46:28	57.2
10:48:55	63.1	11:34:29	52.7	10:50:18	47.6	10:47:28	54.5
10:49:55	64.9	11:35:29	51.9	10:51:18	51.0	10:48:28	55.7
10:50:55	57.2	11:36:29	52.2	10:52:18	50.2	10:49:28	55.9
10:51:55	55.1	11:37:29	55.8	10:53:18	48.0	10:50:28	57.7
10:52:55	64.9	11:38:29	71.3	10:54:18	46.6	10:51:28	55.9
10:53:55	57.3	11:39:29	55.5	10:55:18	50.8	10:52:28	69.4
10:54:55	55.8	11:40:29	55.7	10:56:18	46.6	10:53:28	62.7
10:55:55	56.8	11:41:29	53.9	10:57:18	52.3	10:54:28	75.1
10:56:55	59.7	11:42:29	54.8	10:58:18	46.4	10:55:28	82.4
10:57:55	67.8	11:43:29	54.7	10:59:18	46.9	10:56:28	66.3

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
10:58:55	55.4	11:44:29	59.5	11:00:18	49.1	10:57:28	69.4
10:59:55	54.9	11:45:29	56.1	11:01:18	47.3	10:58:28	50
11:00:55	56.2	11:46:29	61.7	11:02:18	48.1	10:59:28	68.9
11:01:55	65.3	11:47:29	59.2	11:03:18	49.1	11:00:28	65.2
11:02:55	57.6	11:48:29	61.4	11:04:18	47.6	11:01:28	58.2
11:03:55	56.6	11:49:29	67.8	11:05:18	51.3	11:02:28	54
11:04:55	56.2	11:50:29	71.1	11:06:18	49.0	11:03:28	69.8
11:05:55	65.5	11:51:29	54.4	11:07:18	47.2	11:04:28	60.3
11:06:55	71.8	11:52:29	55.1	11:08:18	49.9	11:05:28	50.5
11:07:55	55.6	11:53:29	56.5	11:09:18	48.8	11:06:28	55
11:08:55	59.3	11:54:29	57	11:10:18	49.4	11:07:28	70.4
11:09:55	55.3	11:55:29	68.7	11:11:18	56.9	11:08:28	59.4
11:10:55	78.1	11:56:29	50.3	11:12:18	47.3	11:09:28	52.1
11:11:55	60.3	11:57:29	57	11:13:18	47.4	11:10:28	58.4
11:12:55	56.2	11:58:29	64	11:14:18	47.6	11:11:28	53
11:13:55	67.4	11:59:29	58.4	11:15:18	49.3	11:12:28	51.6
11:14:55	55.2	12:00:29	65.8	11:16:18	52.4	11:13:28	59
11:15:55	64.5	12:01:29	50.7	11:17:18	50.6	11:14:28	55.6
11:16:55	58.1	12:02:29	52	11:18:18	51.1	11:15:28	71.2
11:17:55	53.8	12:03:29	69.7	11:19:18	48.2	11:16:28	62.5
11:18:55	53.3	12:04:29	49.9	11:20:18	60.7	11:17:28	50.6
11:19:55	54.6	12:05:29	50.7	11:21:18	59.2	11:18:28	50.9
11:20:55	62.6	12:06:29	66.6	11:22:18	56.9	11:19:28	50.9
11:21:55	56.4	12:07:29	53.2	11:23:18	47.3	11:20:28	73.9
11:22:55	55.7	12:08:29	51.2	11:24:18	48.4	11:21:28	53.6
11:23:55	56.9	12:09:29	69.5	11:25:18	48.3	11:22:28	56.4
11:24:55	54.3	12:10:29	52.4	11:26:18	46.8	11:23:28	79.3
11:25:55	55.6	12:11:29	50.4	11:27:18	50.0	11:24:28	57.9
11:26:55	58.2	12:12:29	68.5	11:28:18	51.3	11:25:28	56.1
11:27:55	56.1	12:13:29	52.3	11:29:18	52.0	11:26:28	51.9
11:28:55	58.2	12:14:29	51.4	11:30:18	48.8	11:27:28	70.5
11:29:55	67.7	12:15:29	54.7	11:31:18	51.3	11:28:28	55.5
11:30:55	57.4	12:16:29	65.1	11:32:18	51.3	11:29:28	70.8
11:31:55	57.2	12:17:29	50	11:33:18	46.9	11:30:28	49.6
11:32:55	65.8	12:18:29	50.7	11:34:18	45.0	11:31:28	50.4
11:33:55	59.6	12:19:29	51.4	11:35:18	46.4	11:32:28	52.6
11:34:55	61.1	12:20:29	51.9	11:36:18	46.3	11:33:28	52.7
11:35:55	67.6	12:21:29	53.4	11:37:18	47.7	11:34:28	51
11:36:55	56.8	12:22:29	51.8	11:38:18	46.4	11:35:28	70.2
11:37:55	58.1	12:23:29	51.9	11:39:18	48.1	11:36:28	53.5
11:38:55	57.4	12:24:29	50.5	11:40:18	46.7	11:37:28	49.1
11:39:55	59.0	12:25:29	73.6	11:41:18	48.1	11:38:28	52.1

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
11:40:55	59.2	12:26:29	51	11:42:18	45.3	11:39:28	49.1
11:41:55	56.8	12:27:29	50.8	11:43:18	49.9	11:40:28	54.7
11:42:55	58.2	12:28:29	53.7	11:44:18	45.8	11:41:28	67.7
11:43:55	62.8	12:29:29	69.6	11:45:18	49.2	11:42:28	48.3
11:44:55	59.8	12:30:29	53.6	11:46:18	47.4	11:43:28	47.1
11:45:55	63.3	12:31:29	69.8	11:47:18	47.7	11:44:28	55.4
11:46:55	56.4	12:32:29	68.3	11:48:18	49.0	11:45:28	68.4
11:47:55	61.9	12:33:29	51.2	11:49:18	55.4	11:46:28	57.2
11:48:55	58.8	12:34:29	59.2	11:50:18	50.5	11:47:28	52.2
11:49:55	57.7	12:35:29	52.5	11:51:18	54.0	11:48:28	69.4
11:50:55	66.8	12:36:29	52.5	11:52:18	45.6	11:49:28	62.8
11:51:55	65.8	12:37:29	51.9	11:53:18	46.9	11:50:28	66.3
11:52:55	58.1	12:38:29	50.1	11:54:18	46.9	11:51:28	72.7
11:53:55	57.7	12:39:29	50.3	11:55:18	47.2	11:52:28	68.1
11:54:55	57.5	12:40:29	52.1	11:56:18	49.6	11:53:28	66.8
11:55:55	55.9	12:41:29	52.5	11:57:18	47.8	11:54:28	52.6
11:56:55	61.6	12:42:29	55.6	11:58:18	66.1	11:55:28	49.5
11:57:55	73.8	12:43:29	55.2	11:59:18	73.5	11:56:28	49.4
11:58:55	57.1	12:44:29	50.1	12:00:18	50.9	11:57:28	70.5
11:59:55	56.9	12:45:29	68.3	12:01:18	50.6	11:58:28	48.8
12:00:55	80.5	12:46:29	55.2	12:02:18	49.5	11:59:28	48.9
12:01:55	61.0	12:47:29	52.3	12:03:18	50.5	12:00:28	53.6
12:02:55	60.9	12:48:29	51.8	12:04:18	50.5	12:01:28	56.2
12:03:55	56.7	12:49:29	53.5	12:05:18	45.9	12:02:28	52.4
12:04:55	55.3	12:50:29	56.1	12:06:18	46.7	12:03:28	53.7
12:05:55	60.6	12:51:29	66.2	12:07:18	44.1	12:04:28	69
12:06:55	62.3	12:52:29	69.5	12:09:12	45.5	12:05:28	51.3
12:07:55	58.9	12:53:29	68.7	12:10:12	47.6	12:06:28	52.5
12:08:55	58.9	12:54:29	59.6	12:11:12	45.0	12:07:28	48.3
12:09:55	58.9	12:55:29	58.2	12:12:12	46.4	12:08:28	49.2
12:10:55	56.1	12:56:29	68.1	12:13:12	46.8	12:09:28	51.9
12:11:55	60.5	12:57:29	52.6	12:14:12	47.3	12:10:28	79.2
12:12:55	69.2	12:58:29	66.8	12:15:12	47.9	12:11:28	59.5
12:13:55	58.5	12:59:29	59.5	12:16:12	48.0	12:12:28	51.8
12:14:55	67.0	13:00:29	55.1	12:17:12	43.3	12:13:28	53.2
12:15:55	51.9	13:01:29	55.6	12:18:12	47.9	12:14:28	51.7
12:16:55	62.1	13:02:29	70.7	12:19:12	45.8	12:15:28	49.3
12:17:55	64.5	13:03:29	54.5	12:20:12	50.6	12:16:28	70.1
12:18:55	57.0	13:04:29	66.2	12:21:12	47.3	12:17:28	53.3
12:19:55	65.6	13:05:29	52.4	12:22:12	44.0	12:18:28	53.9
12:20:55	69.0	13:06:29	56.5	12:23:12	46.8	12:19:28	69.5
12:21:55	56.0	13:07:29	68.8	12:24:12	44.1	12:20:28	52

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
12:22:55	70.0	13:08:29	60.8	12:25:12	47.7	12:21:28	50.7
12:23:55	59.6	13:09:29	53.6	12:26:12	43.0	12:22:28	70.8
12:24:55	61.6	13:10:29	66.8	12:27:12	46.4	12:23:28	53.1
12:25:55	56.0	13:11:29	57.4	12:28:12	46.6	12:24:28	51.2
12:26:55	56.5	13:12:29	52	12:29:12	43.0	12:25:28	52.4
12:27:55	64.0	13:13:29	70.2	12:30:12	43.9	12:26:28	48
12:28:55	58.8	13:14:29	54	12:31:12	48.3	12:27:28	53.9
12:29:55	55.9	13:15:29	54.3	12:32:12	45.4	12:28:28	49.1
12:30:55	57.0	13:16:29	55.5	12:33:12	45.4	12:29:28	49.1
12:31:55	70.1	13:17:29	67.8	12:34:12	47.8	12:30:28	55.8
12:32:55	66.2	13:18:29	55.1	12:35:12	45.8	12:31:28	68.2
12:33:55	68.9	13:19:29	55.2	12:36:12	44.9	12:32:28	56
12:34:55	60.2	13:20:29	57.6	12:37:12	45.4	12:33:28	68.5
12:35:55	64.4	13:21:29	69	12:38:12	42.8	12:34:28	53.4
12:36:55	64.6	13:22:29	54.5	12:39:12	46.6	12:35:28	69.8
12:37:55	65.2	13:23:29	69.6	12:40:12	46.1	12:36:28	53.8
12:38:55	67.1	13:24:29	73.2	12:41:12	44.9	12:37:28	57.6
12:39:55	61.2	13:25:29	70.8	12:42:12	43.7	12:38:28	67.7
12:40:55	58.1	13:26:29	68.5	12:43:12	47.8	12:39:28	55.2
12:41:55	66.7	13:27:29	59.6	12:44:12	44.9	12:40:28	53.6
12:42:55	62.1	13:28:29	74.8	12:45:12	40.8	12:41:28	53.3
12:43:55	57.8	13:29:29	57.1	12:46:12	43.4	12:42:28	62.3
12:44:55	68.0	13:30:29	61.1	12:47:12	43.3	12:43:28	77.5
12:45:55	54.1	13:31:29	50	12:48:12	47.2	12:44:28	53.2
12:46:55	60.8	13:32:29	55.3	12:49:12	44.6	12:45:28	58.9
12:47:55	57.4	13:33:29	55.6	12:50:12	48.3	12:46:28	58.9
12:48:55	57.2	13:34:29	59.2	12:51:12	44.5	12:47:28	68.7
12:49:55	62.6	13:35:29	59.8	12:52:12	49.6	12:48:28	51.1
12:50:55	55.7	13:36:29	66.7	12:53:12	46.4	12:49:28	53.1
12:51:55	53.7	13:37:29	64.3	12:54:12	44.3	12:50:28	48.6
12:52:55	56.1	13:38:29	52.4	12:55:12	47.6	12:51:28	51.2
12:53:55	61.3	13:39:29	55.3	12:56:12	48.5	12:52:28	50.9
12:54:55	59.5	13:40:29	68.7	12:57:12	49.4	12:53:28	52.1
12:55:55	60.8	13:41:29	50.9	12:58:12	46.0	12:54:28	69.7
12:56:55	54.5	13:42:29	51.4	12:59:12	48.2	12:55:28	53.1
12:57:55	68.1	13:43:29	51.7	13:00:12	44.7	12:56:28	57.8
12:58:55	53.6	13:44:29	68.9	13:01:12	45.4	12:57:28	77.3
12:59:55	58.1	13:45:29	50.9	13:02:12	49.0	12:58:28	52.6
13:00:55	55.9	13:46:29	49.7	13:03:12	43.3	12:59:28	49.9
13:01:55	76.5	13:47:29	68.2	13:04:12	43.3	13:00:28	49.6
13:02:55	57.0	13:48:29	52.6	13:05:12	46.7	13:01:28	55.5
13:03:55	55.5	13:49:29	51	13:06:12	40.9	13:02:28	54.8

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
13:04:55	57.9	13:50:29	63.8	13:07:12	42.1	13:03:28	48.5
13:05:55	58.5	13:51:29	56.2	13:08:12	42.8	13:04:28	50.6
13:06:55	59.6	13:52:29	63.3	13:09:12	44.7	13:05:28	53.3
13:07:55	53.5	13:53:29	56.9	13:10:12	44.9	13:06:28	67.8
13:08:55	65.7	13:54:29	48	13:11:12	43.1	13:07:28	57.2
13:09:55	58.6	13:55:29	53	13:12:12	41.4	13:08:28	52.6
13:10:55	58.1	13:56:29	57	13:13:12	45.7	13:09:28	72
13:11:55	50.7	13:57:29	62.6	13:14:12	48.1	13:10:28	50.6
13:12:55	52.4	13:58:29	54.9	13:15:12	51.1	13:11:28	48.7
13:13:55	54.4	13:59:29	52.9	13:16:12	43.6	13:12:28	70
13:14:55	65.0	14:00:29	64	13:17:12	42.6	13:13:28	52.2
13:15:55	54.0	14:01:29	47.6	13:18:12	43.7	13:14:28	55.5
13:16:55	61.0	14:02:29	66	13:19:12	45.3	13:15:28	49.4
13:17:55	56.9	14:03:29	63.2	13:20:12	58.4	13:16:28	72
13:18:55	56.0	14:04:29	53.5	13:21:12	48.4	13:17:28	55.5
13:19:55	60.6	14:05:29	53.6	13:22:12	44.0	13:18:28	49
13:20:55	57.4	14:06:29	69.6	13:23:12	45.2	13:19:28	49.6
13:21:55	66.5	14:07:29	61.4	13:24:12	45.1	13:20:28	46
13:22:55	60.8	14:08:29	57.5	13:25:12	45.9	13:21:28	70.4
13:23:55	68.0	14:09:29	55.5	13:26:12	47.1	13:22:28	46.4
13:24:55	62.5	14:10:29	67.9	13:27:12	51.2	13:23:28	50.6
13:25:55	53.8	14:11:29	62.7	13:28:12	44.1	13:24:28	48.7
13:26:55	55.2	14:12:29	59.9	13:29:12	50.7	13:25:28	67.2
13:27:55	55.3	14:13:29	66.2	13:30:12	43.1	13:26:28	58.2
13:28:55	52.2	14:14:29	66	13:31:12	46.7	13:27:28	48.3
13:29:55	65.2	14:15:29	53	13:32:12	48.4	13:28:28	64.9
13:30:55	52.5	14:16:29	69.1	13:33:12	44.7	13:29:28	70.1
13:31:55	52.7	14:17:29	67.7	13:34:12	43.2	13:30:28	52.7
13:32:55	84.8	14:18:29	67.7	13:35:12	42.2	13:31:28	64.3
13:33:55	56.8	14:19:29	58	13:36:12	42.4	13:32:28	64.8
13:34:55	51.7	14:20:29	50.5	13:37:12	41.2	13:33:28	71.5
13:35:55	52.8	14:21:29	63.6	13:38:12	44.8	13:34:28	58.1
13:36:55	62.2	14:22:29	68.6	13:39:12	45.1	13:35:28	69
13:37:55	62.2	14:23:29	52	13:40:12	44.4	13:36:28	71.2
13:38:55	69.1	14:24:29	50	13:41:12	44.9	13:37:28	68.9
13:39:55	60.5	14:25:29	66	13:42:12	46.6	13:38:28	60
13:40:55	70.7	14:26:29	52.1	13:43:12	44.6	13:39:28	55
13:41:55	57.5	14:27:29	51.6	13:44:12	48.0	13:40:28	70.5
13:42:55	60.4	14:28:29	65.3	13:45:12	44.8	13:41:28	66.8
13:43:55	73.4	14:29:29	69.6	13:46:12	47.1	13:42:28	56.6
13:44:55	63.7	14:30:29	58.9	13:47:12	46.9	13:43:28	54.4
13:45:55	57.3	14:31:29	64	13:48:12	45.3	13:44:28	55.8

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
13:46:55	58.2	14:32:29	56.1	13:49:12	42.5	13:45:28	68.1
13:47:55	61.1	14:33:29	69.8	13:50:12	45.7	13:49:40	52.6
13:48:55	62.3	14:34:29	53.1	13:51:12	50.3	13:50:40	48.7
13:49:55	61.0	14:35:29	68.5	13:52:12	46.1	13:51:40	48.7
13:50:55	63.9	14:36:29	66.8	13:53:12	45.6	13:52:40	48
13:51:55	64.7	14:37:29	55.1	13:54:12	46.4	13:53:40	48
13:52:55	59.2	14:38:29	72.2	13:55:12	46.7	13:54:40	48.1
13:53:55	53.7	14:39:29	53.8	13:56:12	46.6	13:55:40	50.4
13:54:55	52.2	14:40:29	54.1	13:57:12	47.8	13:56:40	50.1
13:55:55	52.3	14:41:29	68.1	13:58:12	46.2	13:57:40	50.5
13:56:55	54.0	14:42:29	54.3	13:59:12	49.6	13:58:40	70.6
13:57:55	53.8	14:43:29	70.2	14:00:12	48.0	13:59:40	52.7
13:58:55	52.9	14:44:29	56.6	14:01:12	45.7	14:00:40	49.6
13:59:55	55.5	14:45:29	50.2	14:02:12	47.8	14:01:40	50.8
14:00:55	53.8	14:46:29	53.1	14:03:12	46.8	14:02:40	49.4
14:01:55	52.5	14:47:29	59	14:04:12	47.6	14:03:40	51
14:02:55	53.9	14:48:29	67.8	14:05:12	46.6	14:04:40	55.6
14:03:55	58.3	14:49:29	57.3	14:06:12	46.6	14:05:40	52.9
14:04:55	67.8	14:50:29	60.6	14:07:12	49.1	14:06:40	69.3
14:05:55	52.9	14:51:29	59.6	14:08:12	48.7	14:07:40	68.5
14:06:55	55.9	14:52:29	71.7	14:09:12	45.7	14:08:40	70.3
14:07:55	66.3	14:53:29	53.3	14:10:12	47.4	14:09:40	50
14:08:55	66.7	14:54:29	51.4	14:11:12	48.4	14:10:40	70.7
14:09:55	52.4	14:55:29	55.4	14:12:12	47.0	14:11:40	53.3
14:10:55	54.3	14:56:29	64.1	14:13:12	46.3	14:12:40	48.3
14:11:55	63.6	14:57:29	68.8	14:14:12	46.1	14:13:40	66.5
14:12:55	53.0	14:58:29	58.1	14:15:12	44.5	14:14:40	52.3
14:13:55	52.0	14:59:29	54.7	14:16:12	46.8	14:15:40	52.1
14:14:55	62.3	15:00:29	65.9	14:17:12	43.6	14:16:40	67.2
14:15:55	53.4	15:01:29	58.4	14:18:12	46.9	14:17:40	65.8
14:16:55	55.5	15:02:29	58.1	14:19:12	42.2	14:18:40	73.4
14:17:55	55.5	15:03:29	65.6	14:20:12	46.5	14:19:40	53.4
14:18:55	59.9	15:04:29	57.5	14:21:12	48.0	14:20:40	48.6
14:19:55	54.8	15:05:29	82.5	14:22:12	45.7	14:21:40	53.3
14:20:55	53.5	15:06:29	70.3	14:23:12	47.2	14:22:40	54.1
14:21:55	66.5	15:07:29	66.5	14:24:12	43.6	14:23:40	49.9
14:22:55	66.3	15:08:29	58.5	14:25:12	44.2	14:24:40	49.9
14:23:55	55.2	15:09:29	71.6	14:26:12	43.1	14:25:40	71.6
14:24:55	53.1	15:10:29	59.2	14:27:12	44.6	14:26:40	52.4
14:25:55	54.3	15:11:29	69	14:28:12	47.8	14:27:40	47.7
14:26:55	77.8	15:12:29	67	14:29:12	46.7	14:28:40	70.8
14:27:55	58.7	15:13:29	82.6	14:30:12	44.1	14:29:40	49.4

Titik 1		Titik 2		Titik 3		Titik 4		Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq														
14:28:55	64.1	15:14:29	78.8	14:31:12	49.7	14:30:40	58.6	15:14:15	57.4	15:56:29	72.7	15:13:12	44.4	15:12:40	55.4
14:29:55	61.5	15:15:29	76.1	14:32:12	42.9	14:31:40	69.3	15:15:15	68.2	15:57:29	60.7	15:14:12	49.5	15:13:40	69.5
14:30:55	61.1	15:16:29	65.4	14:33:12	49.8	14:32:40	54.9	15:16:15	54.8	15:58:29	67.8	15:15:12	44.7	15:14:40	56.6
14:31:55	53.1	15:17:29	73.9	14:34:12	48.5	14:33:40	60.2	15:17:15	50.8	15:59:29	64.9	15:16:12	44.8	15:15:40	54.2
14:32:55	54.0	15:18:29	60.5	14:35:12	44.8	14:34:40	54.9	15:18:15	52.1	16:00:29	73.2	15:17:12	43.7	15:16:40	58.1
14:33:55	70.5	15:19:29	65.6	14:36:12	42.7	14:35:40	55.7	15:19:15	63.7	16:01:29	63.4	15:18:12	47.3	15:17:40	60
14:34:55	71.1	15:20:29	70	14:37:12	46.6	14:36:40	57	15:20:15	58.9	16:02:29	72.7	15:19:12	45.8	15:18:40	74.6
14:35:55	51.9	15:21:29	59	14:38:12	46.4	14:37:40	56.6	15:21:15	61.3	16:03:29	68	15:20:12	51.2	15:19:40	65.4
14:36:55	55.8	15:22:29	62.2	14:39:12	46.5	14:38:40	52.3	15:22:15	57.8	16:04:29	71.2	15:21:12	42.6	15:20:40	53.4
14:37:55	53.3	15:23:29	70.8	14:40:12	47.4	14:39:40	56.5	15:23:15	53.6	16:05:29	75.7	15:22:12	47.8	15:21:40	58.9
14:38:55	52.4	15:24:29	68.5	14:41:12	48.4	14:40:40	53.1	15:24:15	61.9	16:06:29	73.5	15:23:12	45.7	15:22:40	59.6
14:39:55	64.3	15:25:29	70.3	14:42:12	46.0	14:41:40	56.4	15:25:15	53.9	16:07:29	69.9	15:24:12	49.7	15:23:40	58.9
14:40:55	58.8	15:26:29	74.7	14:43:12	47.2	14:42:40	56.7	15:26:15	55.2	16:08:29	71.9	15:25:12	53.3	15:24:40	60.2
14:41:55	70.9	15:27:29	75.2	14:44:12	44.7	14:43:40	58.4	15:27:15	55.0	16:09:29	69.9	15:26:12	53.6	15:25:40	58.3
14:42:55	52.2	15:28:29	76.1	14:45:12	52.2	14:44:40	56.5	15:28:15	67.6	16:10:29	72	15:27:12	49.3	15:26:40	67.9
14:43:55	61.4	15:29:29	77.1	14:46:12	49.6	14:45:40	57.6	15:29:15	56.6	16:11:29	64.2	15:28:12	47.5	15:27:40	60.6
14:44:55	59.8	15:30:29	74.7	14:47:12	45.9	14:46:40	56.6	15:30:15	56.4	16:12:29	63.6	15:29:12	49.7	15:28:40	82
14:45:55	65.2	15:31:29	76.2	14:48:12	46.9	14:47:40	66.2	15:31:15	65.7	16:13:29	69.9	15:30:12	51.3	15:29:40	65.1
14:46:55	61.2	15:32:29	73.4	14:49:12	48.9	14:48:40	68.9	15:32:15	55.9	16:14:29	60.5	15:31:12	48.0	15:30:40	70.5
14:47:55	70.1	15:33:29	74.2	14:50:12	44.1	14:49:40	52.6	15:33:15	56.2	16:15:29	58.9	15:32:12	51.4	15:31:40	57.6
14:48:55	53.8	15:34:29	74.5	14:51:12	46.3	14:50:40	53.4	15:34:15	58.9	16:16:29	70.6	15:33:12	43.2	15:32:40	54.2
14:49:55	55.0	15:35:29	73.2	14:52:12	47.4	14:51:40	55.4	15:35:15	54.8	16:17:29	57.8	15:34:12	48.1	15:33:40	57
14:50:55	53.0	15:36:29	68.8	14:53:12	44.5	14:52:40	56.9	15:36:15	58.4	16:18:29	63.1	15:35:12	44.7	15:34:40	55.5
14:51:55	55.6	15:37:29	74.8	14:54:12	47.5	14:53:40	59.3	15:37:15	53.5	16:19:29	71.7	15:36:12	47.1	15:35:40	70.5
14:52:55	65.8	15:38:29	74.6	14:55:12	45.9	14:54:40	56.3	15:38:15	63.2	16:20:29	65.2	15:37:12	45.0	15:36:40	53.5
14:53:55	55.8	15:39:29	74.3	14:56:12	43.6	14:55:40	54.7	15:39:15	55.1	16:21:29	72.3	15:38:12	45.0	15:37:40	57.3
14:58:15	56.5	15:40:29	75.7	14:57:12	46.4	14:56:40	55.8	15:40:15	53.8	16:22:29	67.6	15:39:12	46.7	15:38:40	55.6
14:59:15	59.3	15:41:29	76	14:58:12	44.0	14:57:40	50.6	15:41:15	56.4	16:23:29	66.9	15:40:12	43.4	15:39:40	59.5
15:00:15	71.4	15:42:29	74.3	14:59:12	46.9	14:58:40	49.9	15:42:15	57.1	16:24:29	65.9	15:41:12	48.1	15:40:40	68.4
15:01:15	56.3	15:43:29	74	15:00:12	44.4	14:59:40	56	15:43:15	52.1	16:25:29	71.7	15:42:12	49.5	15:41:40	58.9
15:02:15	58.7	15:44:29	73.5	15:01:12	47.1	15:00:40	69.9	15:44:15	55.2	16:26:29	66.8	15:43:12	47.4	15:42:40	57.6
15:03:15	69.2	15:45:29	70.6	15:02:12	45.2	15:01:40	55.4	15:45:15	56.9	16:27:29	63	15:44:12	44.2	15:43:40	66
15:04:15	52.8	15:46:29	70.3	15:03:12	48.3	15:02:40	58.6	15:46:15	56.3	16:28:29	64.4	15:45:12	51.1	15:44:40	54.4
15:05:15	59.5	15:47:29	69.7	15:04:12	47.1	15:03:40	56.1	15:47:15	61.7	16:29:29	68.5	15:46:12	58.5	15:45:40	53.5
15:06:15	73.0	15:48:29	71.2	15:05:12	46.6	15:04:40	50.9	15:48:15	57.0	16:30:29	53.8	15:47:12	52.2	15:46:40	50.7
15:07:15	53.2	15:49:29	71.9	15:06:12	47.1	15:05:40	54.4	15:49:15	80.9	16:35:55	65.4	15:48:12	59.5	15:47:40	70.2
15:08:15	51.8	15:50:29	71.5	15:07:12	44.9	15:06:40	72.7	15:50:15	64.0	16:36:55	56.6	15:49:12	69.3	15:48:40	70.6
15:09:15	63.0	15:51:29	72.4	15:08:12	46.8	15:07:40	59.9	15:51:15	54.2	16:37:55	69.8	15:50:12	60.2	15:49:40	56
15:10:15	53.0	15:52:29	69.4	15:09:12	44.3	15:08:40	54.9	15:52:15	61.9	16:38:55	56.7	15:51:12	60.1	15:50:40	58.2
15:11:15	52.0	15:53:29	63.4	15:10:12	46.1	15:09:40	54.1	15:53:15	53.8	16:39:55	55	15:52:12	52.5	15:51:40	54.5
15:12:15	59.5	15:54:29	61.6	15:11:12	43.9	15:10:40	56.6	15:54:15	51.9	16:40:55	71	15:53:12	53.1	15:52:40	70.1
15:13:15	56.4	15:55:29	63.8	15:12:12	46.6	15:11:40	59.6	15:55:15	51.0	16:41:55	60.7	15:54:12	62.9	15:53:40	50.5

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
15:56:15	52.7	16:42:55	69	15:55:12	58.8	15:54:40	57.9
15:57:15	54.2	16:43:55	59.2	16:00:47	67.2	15:55:40	56
15:58:15	55.7	16:44:55	60.1	16:01:47	58.4	15:56:40	68.9
15:59:15	55.8	16:45:55	67.1	16:02:47	60.6	15:57:40	61.3
16:00:15	58.5	16:46:55	65.2	16:03:47	67.9	15:58:40	63.4
16:01:15	71.1	16:47:55	61.2	16:04:47	58.3	15:59:40	66.7
16:02:15	62.1	16:48:55	59.8	16:05:47	51.1	16:00:40	58.3
16:03:15	53.3	16:49:55	67.1	16:06:47	55.2	16:01:40	56.1
16:04:15	61.9	16:50:55	61.6	16:07:47	58.9	16:02:40	60.4
16:05:15	63.5	16:51:55	61	16:08:47	67.6	16:03:40	56.6
16:06:15	53.6	16:52:55	70.9	16:09:47	53.9	16:04:40	59.5
16:07:15	57.9	16:53:55	64.9	16:10:47	59.9	16:05:40	60.1
16:08:15	61.7	16:54:55	64.1	16:11:47	61.3	16:06:40	57.1
16:09:15	61.9	16:55:55	63.1	16:12:47	68.4	16:07:40	67.8
16:10:15	58.0	16:56:55	68	16:13:47	67.6	16:08:40	60.3
16:11:15	64.3	16:57:55	61.9	16:14:47	70.6	16:09:40	68.6
16:12:15	62.1	16:58:55	61	16:15:47	70.9	16:10:40	64.5
16:13:15	59.6	16:59:55	61.4	16:16:47	71.4	16:11:40	62.1
16:14:15	68.4	17:00:55	59.8	16:17:47	71.4	16:12:40	66.5
16:15:15	58.6	17:01:55	72.4	16:18:47	70.6	16:13:40	68
16:16:15	55.8	17:02:55	57.8	16:19:47	71.2	16:14:40	60.2
16:17:15	58.6	17:03:55	52.7	16:20:47	69.1	16:15:40	59.8
16:18:15	60.4	17:04:55	54.5	16:21:47	67.5	16:16:40	60.8
16:19:15	58.7	17:05:55	58.9	16:22:47	64.1	16:17:40	61
16:20:15	61.1	17:06:55	70.4	16:23:47	59.7	16:18:40	62.8
16:21:15	64.3	17:07:55	57.1	16:24:47	61.5	16:19:40	66.8
16:22:15	58.7	17:08:55	56.2	16:25:47	69.8	16:20:40	63.8
16:23:15	56.5	17:09:55	71.7	16:26:47	67.9	16:21:40	62.1
16:24:15	55.6	17:10:55	53.8	16:27:47	69.8	16:22:40	71.5
16:25:15	57.8	17:11:55	60.5	16:28:47	63.3	16:23:40	60.7
16:26:15	62.0	17:12:55	69.4	16:29:47	59.7	16:24:40	57.3
16:27:15	65.0	17:13:55	51.6	16:30:47	58	16:25:40	68.6
16:28:15	52.8	17:14:55	55.5	16:31:47	57.1	16:26:40	64.2
16:29:15	57.3	17:15:55	70.7	16:32:47	59.8	16:27:40	59.8
16:30:15	56.9	17:16:55	51.9	16:33:47	55.1	16:28:40	72.7
16:31:15	58.5	17:17:55	52.4	16:34:47	56.8	16:29:40	61.1
16:32:15	58.2	17:18:55	49.3	16:35:47	52.2	16:30:40	64.7
16:33:15	54.4	17:19:55	61.5	16:36:47	50.6	16:31:40	71.1
16:34:15	51.6	17:20:55	70.2	16:37:47	51.7	16:32:40	60.5
16:35:15	57.9	17:21:55	54.6	16:38:47	55.5	16:33:40	61.4
16:36:15	52.1	17:22:55	57.3	16:39:47	53.7	16:34:40	61.6
16:37:15	56.9	17:23:55	53.7	16:40:47	54.6	16:35:40	62.1

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
16:38:15	56.4	17:24:55	55.5	16:41:47	49.7	16:36:40	63
16:39:15	56.6	17:25:55	73	16:42:47	49.4	16:37:40	61.3
16:40:15	62.0	17:26:55	61.6	16:43:47	46.9	16:38:40	61.4
16:41:15	57.1	17:27:55	68.3	16:44:47	60.2	16:39:40	58.9
16:42:15	60.5	17:28:55	56.7	16:45:47	48.2	16:40:40	62.7
16:43:15	62.6	17:29:55	70.6	16:46:47	48.6	16:41:40	60.1
16:44:15	64.6	17:30:55	54.7	16:47:47	49	16:42:40	59.1
16:45:15	63.1	17:31:55	53	16:48:47	48.7	16:43:40	60.7
16:46:15	61.7	17:32:55	69.8	16:49:47	54.5	16:44:40	72
16:47:15	62.7	17:33:55	69.6	16:50:47	52.1	16:45:40	71.6
16:48:15	63.4	17:34:55	57.5	16:51:47	56.6	16:46:40	64.6
16:49:15	61.9	17:35:55	53.2	16:52:47	48.1	16:47:40	77.7
16:50:15	58.1	17:36:55	55.7	16:53:47	50.9	16:48:40	60.8
16:51:15	59.1	17:37:55	55.7	16:54:47	50.3	16:49:40	57.7
16:52:15	58.5	17:38:55	53.6	16:55:47	52.2	16:50:40	70.1
16:53:15	59.7	17:39:55	54.9	16:56:47	59	16:51:40	58.2
16:54:15	60.0	17:40:55	68.7	16:57:47	56	16:52:40	71.9
16:55:15	60.5	17:41:55	53.2	16:58:47	54.1	16:53:40	58.3
16:56:15	58.9	17:42:55	55.7	16:59:47	52.1	16:54:40	58.7
16:57:15	60.3	17:43:55	59.1	17:00:47	52.3	16:55:40	64.8
16:58:15	61.7	17:44:55	70.9	17:01:47	53.7	16:56:40	72.3
16:59:15	59.5	17:45:55	62.3	17:02:47	52.3	16:57:40	55.6
17:00:15	60.8	17:46:55	60.5	17:03:47	52.4	16:58:40	58.5
17:01:15	57.6	17:47:55	61.1	17:04:47	52	16:59:40	57.9
17:02:15	58.2	17:48:55	68	17:05:47	49.7	17:00:40	60.9
17:03:15	60.1	17:49:55	61.5	17:06:47	50.6	17:01:40	58.3
17:04:15	60.8	17:50:55	64.3	17:07:47	49.7	17:02:40	70
17:05:15	59.3	17:51:55	60.5	17:08:47	48.5	17:03:40	59.7
17:06:15	57.1	17:52:55	58.4	17:09:47	54.5	17:04:40	58.4
17:07:15	61.2	17:53:55	70.2	17:10:47	53.1	17:05:40	57.5
17:08:15	61.9	17:54:55	63.4	17:11:47	62.5	17:06:40	59.2
17:09:15	57.6	17:55:55	64.4	17:12:47	61.2	17:07:40	60.4
17:10:15	55.3	17:56:55	69.2	17:13:47	48.8	17:08:40	59.8
17:11:15	63.6	17:57:55	68.3	17:14:47	54.2	17:09:40	57.7
17:12:15	67.1	17:58:55	61.9	17:15:47	49.7	17:10:40	72.1
17:13:15	68.5	17:59:55	65	17:16:47	49.7	17:11:40	66.6
17:14:15	64.4	18:00:55	67.6	17:17:47	54.1	17:12:40	77.7
17:15:15	63.4	18:01:55	70.6	17:18:47	62.5	17:13:40	78.9
17:16:15	65.2	18:02:55	59.5	17:19:47	63.7	17:14:40	61.8
17:17:15	67.8	18:03:55	62.4	17:20:47	52.4	17:15:40	62.8
17:18:15	60.7	18:04:55	70.5	17:21:47	55.9	17:16:40	71
17:19:15	55.7	18:05:55	67.9	17:22:47	51.3	17:17:40	64.9

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
17:20:15	65.8	18:06:55	65.4	17:23:47	55	17:18:40	59.6
17:21:15	61.6	18:07:55	60.4	17:24:47	54.4	17:19:40	62.9
17:22:15	66.7	18:08:55	63.6	17:25:47	57	17:20:40	73.7
17:23:15	56.6	18:09:55	74	17:26:47	57.7	17:21:40	72.6
17:24:15	65.7	18:10:55	62.3	17:27:47	63.8	17:22:40	60.4
17:25:15	69.1	18:11:55	67.2	17:28:47	53.8	17:23:40	60
17:26:15	67.8	18:12:55	71.2	17:29:47	57.3	17:24:40	60.2
17:27:15	64.1	18:13:55	68.4	17:30:47	63.8	17:25:40	60.5
17:28:15	68.2	18:14:55	67.6	17:31:47	58.5	17:26:40	60.6
17:29:15	64.6	18:15:55	71	17:32:47	54.8	17:27:40	60.7
17:30:15	60.6	18:16:55	59.4	17:33:47	56.8	17:28:40	69.2
17:31:15	65.0	18:17:55	63	17:34:47	62.8	17:29:40	63.2
17:32:15	61.3	18:18:55	71.4	17:35:47	58	17:30:40	61.2
17:33:15	60.6	18:19:55	72.5	17:36:47	57.7	17:31:40	60.3
17:34:15	66.3	18:20:55	59.1	17:37:47	64	17:32:40	61.1
17:35:15	64.8	18:21:55	58.9	17:38:47	55.7	17:33:40	64.6
17:36:15	64.4	18:22:55	58.7	17:39:47	57.7	17:34:40	61.7
17:37:15	70.7	18:23:55	65.8	17:40:47	60.5	17:35:40	63.9
17:38:15	55.6	18:24:55	67.6	17:41:47	61	17:36:40	62.6
17:39:15	50.8	18:25:55	58.3	17:42:47	62.9	17:37:40	61.3
17:40:15	61.7	18:26:55	64.4	17:43:47	54.7	17:38:40	62.2
17:41:15	61.2	18:27:55	65.8	17:44:47	54.3	17:39:40	62.3
17:42:15	67.0	18:28:55	59	17:45:47	59.3	17:40:40	61.2
17:43:15	62.5	18:29:55	59.6	17:46:47	53.4	17:41:40	62.5
17:44:15	62.0	18:30:55	59.1	17:47:47	58.8	17:42:40	70.2
17:45:15	58.7	18:31:55	59	17:48:47	59.1	17:43:40	63.3
17:46:15	63.7	18:32:55	59	17:49:47	55.1	17:44:40	61.5
17:47:15	57.0	18:33:55	58.4	17:50:47	53.2	17:45:40	60.6
17:48:15	58.1	18:34:55	69.4	17:51:47	63.9	17:46:40	61.3
17:49:15	55.8	18:35:55	54.6	17:52:47	51.6	17:47:40	60.3
17:50:15	53.4	18:36:55	59.1	17:53:47	55.8	17:48:40	61.1
17:51:15	56.5	18:37:55	68.9	17:54:47	57.8	17:49:40	70.1
17:52:15	59.6	18:38:55	58.6	17:55:47	68.7	17:50:40	58.8
17:53:15	61.9	18:39:55	65.3	17:56:47	53.9	17:51:40	59.3
17:54:15	53.5	18:40:55	55.6	17:57:47	58.6	17:52:40	82.4
17:55:15	57.6	18:41:55	70.2	17:58:47	63.1	17:53:40	83.6
17:56:15	53.4	18:42:55	57.9	17:59:47	57.4	17:55:40	79
17:57:15	53.4	18:43:55	61.3	18:00:47	60.8	17:56:40	84.1
17:58:15	59.7	18:44:55	62.9	18:01:47	59.7	17:57:40	86.8
17:59:15	56.5	18:45:55	70.1	18:02:47	66.7	18:04:03	70.5
18:00:15	56.9	18:46:55	63	18:03:47	59.1	18:05:03	60.7
18:01:15	50.6	18:47:55	72.2	18:04:47	59.2	18:06:03	61

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
18:02:15	53.0	18:48:55	58.2	18:05:47	58.7	18:07:03	60.3
18:03:15	53.8	18:49:55	73.5	18:06:47	58.7	18:08:03	59.7
18:04:15	55.8	18:50:55	58	18:07:47	59.1	18:09:03	60.2
18:05:15	49.8	18:51:55	57.4	18:08:47	58.7	18:10:03	59.7
18:06:15	50.2	18:52:55	57.8	18:09:47	59.7	18:11:03	61.4
18:07:15	59.7	18:53:55	55.4	18:10:47	59.3	18:12:03	59.5
18:08:15	58.9	18:54:55	56.6	18:11:47	58.8	18:13:03	61.3
18:09:15	60.2	18:55:55	69.5	18:12:47	59	18:14:03	59.5
18:10:15	55.3	18:56:55	58.1	18:13:47	60.9	18:15:03	58.2
18:11:15	52.6	18:57:55	56.5	18:14:47	59.3	18:16:03	70.1
18:12:15	64.2	18:58:55	65.4	18:15:47	57.9	18:17:03	59.1
18:13:15	56.5	18:59:55	65.5	18:16:47	58.5	18:18:03	60.4
18:14:15	56.0	19:00:55	59.8	18:17:47	61.1	18:19:03	57.2
18:15:15	51.3	19:01:55	72.6	18:18:47	60.6	18:20:03	69.9
18:16:15	57.2	19:02:55	56.5	18:19:47	67.9	18:21:03	71
18:17:15	61.7	19:03:55	56.9	18:20:47	61	18:22:03	72
18:18:15	66.3	19:04:55	58.3	18:21:47	59.8	18:23:03	64.8
18:19:15	59.8	19:05:55	56.3	18:22:47	69.6	18:24:03	57.3
18:20:15	55.9	19:06:55	56.8	18:23:47	59.7	18:25:03	59
18:21:15	65.1	19:07:55	67.6	18:24:47	60.9	18:26:03	68.8
18:22:15	62.8	19:08:55	57.6	18:25:47	59.7	18:27:03	52.6
18:23:15	61.3	19:09:55	63	18:26:47	60.3	18:28:03	56.5
18:24:15	54.7	19:10:55	67.5	18:27:47	66	18:29:03	69.5
18:25:15	56.0	19:11:55	56.2	18:28:47	60.3	18:30:03	62.8
18:26:15	58.8	19:12:55	55.8	18:29:47	59.4	18:31:03	64
18:27:15	55.6	19:13:55	56.1	18:30:47	61.3	18:32:03	60.9
18:28:15	59.4	19:14:55	59.3	18:31:47	62.4	18:33:03	75.4
18:29:15	51.7	19:15:55	56.2	18:32:47	58.6	18:34:03	71.4
18:30:15	62.8	19:16:55	55.3	18:33:47	59.9	18:35:03	69.3
18:31:15	56.4	19:17:55	54.1	18:34:47	59.5	18:36:03	62.4
18:32:15	56.2	19:18:55	54	18:35:47	60.8	18:37:03	73.2
18:33:15	57.5	19:19:55	71.1	18:36:47	60.9	18:38:03	63
18:34:15	62.0	19:20:55	57.3	18:37:47	59.1	18:39:03	63.7
18:35:15	59.4	19:21:55	56	18:38:47	60.8	18:40:03	61.6
18:36:15	61.0	19:22:55	55.3	18:39:47	60.9	18:41:03	71.1
18:37:15	57.8	19:23:55	52.3	18:40:47	59.3	18:42:03	57.8
18:38:15	52.7	19:24:55	55.3	18:41:47	60.4	18:43:03	60.1
18:39:15	59.2	19:25:55	70	18:42:47	61.2	18:44:03	59.7
18:40:15	70.3	19:26:55	57.6	18:43:47	63.8	18:45:03	66.3
18:41:15	61.8	19:27:55	54.4	18:44:47	60.7	18:46:03	66.6
18:42:15	62.0	19:28:55	54.3	18:45:47	60.7	18:47:03	58.8
18:43:15	56.6	19:29:55	54.1	18:46:47	63.4	18:48:03	59

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
18:44:15	59.9	19:30:55	59.3	18:47:47	63.9	18:49:03	71.4
18:45:15	59.1	19:31:55	56.3	18:48:47	63.2	18:50:03	58.4
18:46:15	62.5	19:32:55	56.7	18:49:47	60.7	18:51:03	70.3
18:47:15	59.2	19:33:55	55.7	18:50:47	61.1	18:52:03	62.5
18:48:15	58.6	19:34:55	59	18:51:47	61.4	18:53:03	59.4
18:49:15	67.4	19:35:55	67	18:52:47	62.9	18:54:03	68.4
18:50:15	57.7	19:36:55	55.4	18:53:47	62.4	18:55:03	59
18:51:15	59.2	19:37:55	53.6	18:54:47	61.3	18:56:03	56.5
18:52:15	54.1	19:38:55	56	18:55:47	61.2	18:57:03	59.4
18:53:15	56.8	19:39:55	58.3	18:56:47	61.3	18:58:03	66.8
18:54:15	58.1	19:40:55	56.7	18:57:47	60.9	18:59:03	58.7
18:55:15	58.5	19:41:55	57.2	18:58:47	64	19:00:03	59.2
18:56:15	52.7	19:42:55	71.7	18:59:47	60.4	19:01:03	68.8
18:57:15	54.0	19:43:55	58.6	19:00:47	58.5	19:02:03	62
18:58:15	51.4	19:44:55	58.4	19:01:47	58.9	19:03:03	56.1
18:59:15	67.0	19:45:55	71.4	19:02:47	53.2	19:04:03	55.7
19:00:15	63.5	19:46:55	56.9	19:03:47	58.2	19:05:03	56.2
19:01:15	70.8	19:47:55	55.9	19:04:47	60.3	19:06:03	66.2
19:02:15	63.4	19:48:55	53.8	19:05:47	52.2	19:07:03	58.9
19:03:15	64.4	19:49:55	54.2	19:06:47	56	19:08:03	56.4
19:04:15	67.3	19:50:55	53.5	19:07:47	57.6	19:09:03	55.8
19:05:15	63.8	19:51:55	53.8	19:08:47	59.2	19:10:03	57.7
19:06:15	56.9	19:52:55	53.6	19:09:47	54.2	19:11:03	57.1
19:07:15	54.6	19:53:55	55.3	19:10:47	56.2	19:12:03	68.8
19:08:15	60.8	19:54:55	53.6	19:11:47	63.6	19:13:03	64.3
19:09:15	57.1	19:55:55	53.2	19:12:47	55.9	19:14:03	59.9
19:10:15	53.9	19:56:55	53	19:13:47	55.5	19:15:03	55.3
19:11:15	51.4	19:57:55	53.1	19:14:47	62.9	19:16:03	67.1
19:12:15	61.4	19:58:55	69.9	19:15:47	54	19:17:03	60.1
19:13:15	55.8	19:59:55	56.2	19:16:47	56.7	19:18:03	57.9
19:14:15	56.7	20:00:55	53.8	19:17:47	54	19:19:03	66
19:15:15	52.5	20:01:55	72	19:18:47	58.7	19:20:03	59.8
19:16:15	62.9	20:02:55	62.7	19:19:47	56.8	19:21:03	67.7
19:17:15	54.7	20:03:55	58.5	19:20:47	58.8	19:22:03	59.8
19:18:15	56.7	20:04:55	53.9	19:21:47	56.9	19:23:03	59.2
19:19:15	60.2	20:05:55	52.3	19:22:47	57	19:24:03	68
19:20:15	56.1	20:06:55	70.2	19:23:47	71.1	19:25:03	58.3
19:21:15	55.7	20:07:55	54.5	19:24:47	54.4	19:26:03	55.9
19:22:15	49.4	20:08:55	70.6	19:25:47	54.8	19:27:03	65.1
19:23:15	48.8	20:09:55	54.1	19:26:47	57.2	19:28:03	62.3
19:24:15	52.1	20:10:55	52.6	19:27:47	59.1	19:29:03	64.7
19:25:15	62.7	20:11:55	52.2	19:28:47	54.7	19:30:03	55.5

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
19:26:15	57.2	20:12:55	52.1	19:29:47	59.1	19:31:03	55.4
19:27:15	49.8	20:13:55	56.3	19:30:47	59	19:32:03	56.6
19:28:15	52.9	20:14:55	56.6	19:31:47	61.8	19:33:03	56.8
19:29:15	57.3	20:15:55	52.5	19:32:47	56.3	19:34:03	59.5
19:30:15	55.7	20:16:55	52.9	19:33:47	59.2	19:35:03	58.2
19:31:15	57.3	20:17:55	58	19:34:47	62	19:36:03	62.8
19:32:15	63.0	20:18:55	56.5	19:35:47	63.5	19:37:03	59.2
19:33:15	48.6	20:19:55	54.9	19:36:47	57.1	19:38:03	57.2
19:34:15	52.7	20:20:55	56	19:37:47	57.2	19:39:03	59
19:35:15	55.6	20:21:55	53.9	19:38:47	64.5	19:40:03	68
19:36:15	56.1	20:22:55	53.5	19:39:47	64.2	19:41:03	59.8
19:37:15	66.2	20:23:55	54.4	19:40:47	58.4	19:42:03	59.5
19:38:15	62.2	20:24:55	54.7	19:41:47	59.8	19:43:03	60.6
19:39:15	51.8	20:25:55	53.3	19:42:47	65.1	19:44:03	61.4
19:40:15	63.0	20:26:55	72.7	19:43:47	69.2	19:45:03	58.5
19:41:15	67.3	20:27:55	54	19:44:47	64.5	19:46:03	61.5
19:42:15	57.2	20:28:55	53.6	19:45:47	57.9	19:47:03	63.3
19:43:15	55.6	20:29:55	66.3	19:46:47	59.8	19:48:03	57.8
19:44:15	56.9	20:30:55	56	19:47:47	57.8	19:49:03	58.7
19:45:15	50.8	20:31:55	54.3	19:48:47	57.3	19:50:03	70.8
19:46:15	56.3	20:32:55	54.5	19:49:47	58.7	19:51:03	61.7
19:47:15	57.3	20:33:55	55.1	19:50:47	63.3	19:52:03	58.9
19:48:15	53.7	20:34:55	61	19:51:47	60.8	19:53:03	69.1
19:49:15	56.5	20:35:55	54.4	19:52:47	62.1	19:54:03	69.1
19:50:15	61.0	20:36:55	54.9	19:53:47	57.7	19:55:03	65.8
19:51:15	61.9	20:37:55	62.2	19:54:47	59.8	19:56:03	69.2
19:52:15	63.8	20:38:55	54.4	19:55:47	57.5	19:57:03	62.3
19:53:15	65.0	20:39:55	53.9	19:56:47	58.4	19:58:03	60.5
19:54:15	57.0	20:40:55	54.5	19:57:47	58.4	19:59:03	70
19:55:15	54.4	20:41:55	54.1	19:58:47	60.2	20:00:03	61.3
19:56:15	61.2	20:42:55	54	19:59:47	59.6	20:01:03	63.8
19:57:15	65.2	20:43:55	55.1	20:00:47	62.5	20:03:45	91.3
20:00:17	55.2	20:44:55	54.6	20:01:47	55.5	20:04:45	73.3
20:01:17	66.9	20:45:55	55.1	20:02:47	56.3	20:05:45	72.5
20:02:17	56.9	20:46:55	59.5	20:03:47	59.9	20:06:45	72.2
20:03:17	53.3	20:47:55	70.9	20:04:47	55.5	20:07:45	73.7
20:04:17	51.8	20:48:55	54.7	20:05:47	55.1	20:08:45	70.3
20:05:17	50.5	20:49:55	54.1	20:06:47	57.9	20:09:45	73.2
20:06:17	58.5	20:50:55	54.2	20:07:47	60.3	20:10:45	77.6
20:07:17	52.4	20:51:55	54	20:08:47	56.2	20:11:45	72.4
20:08:17	58.4	20:52:55	56.8	20:09:47	56.2	20:12:45	79.4
20:09:17	62.8	20:53:55	70.2	20:10:47	56.8	20:13:45	80.3

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
20:10:17	57.7	20:54:55	55.8	20:11:47	56.8	20:14:45	76.2
20:11:17	59.3	20:55:55	54.5	20:12:47	57.5	20:15:45	71.7
20:12:17	57.2	20:56:55	57.6	20:13:47	56.9	20:16:45	70
20:13:17	60.0	20:57:55	54	20:14:47	56.1	20:17:45	74.3
20:14:17	57.0	20:58:55	54.8	20:15:47	60.2	20:18:45	70.9
20:15:17	56.1	20:59:55	54.5	20:16:47	53.3	20:19:45	70.2
20:16:17	56.1	21:00:55	54.9	20:17:47	60.8	20:20:45	84
20:17:17	55.5	21:01:55	54.6	20:18:47	57.5	20:21:45	72.6
20:18:17	59.1	21:02:55	54.4	20:19:47	68.1	20:22:45	71.1
20:19:17	62.4	21:03:55	55	20:20:47	52.8	20:23:45	71.4
20:20:17	56.5	21:04:55	54.9	20:21:47	52.3	20:24:45	72.2
20:21:17	55.5	21:05:55	55.8	20:22:47	57.2	20:25:45	73.7
20:22:17	54.8	21:06:55	53.5	20:23:47	59.4	20:26:45	71.4
20:23:17	60.2	21:07:55	54.8	20:24:47	63	20:27:45	80
20:24:17	55.6	21:08:55	55.7	20:25:47	58.9	20:28:45	71.5
20:25:17	51.6	21:09:55	54.1	20:26:47	53.7	20:29:45	69.6
20:26:17	51.6	21:10:55	55.4	20:27:47	52.6	20:30:45	70.4
20:27:17	52.5	21:11:55	54.5	20:28:47	53.5	20:31:45	70.8
20:28:17	65.7	21:12:55	54.4	20:29:47	58	20:32:45	68.4
20:29:17	51.5	21:13:55	54.3	20:30:47	52.4	20:33:45	71.2
20:30:17	50.6	21:14:55	54.7	20:31:47	51.5	20:34:45	75.6
20:31:17	49.5	21:15:55	54.3	20:32:47	51.1	20:35:45	76.3
20:32:17	50.9	21:16:55	54.5	20:33:47	51.4	20:36:45	79.5
20:33:17	52.2	21:17:55	60.2	20:34:47	51	20:37:45	73
20:34:17	50.5	21:18:55	71.2	20:35:47	50.9	20:38:45	71.7
20:35:17	52.8	21:19:55	56	20:36:47	51	20:39:45	74.3
20:36:17	51.0	21:20:55	72.2	20:37:47	52.3	20:40:45	69.9
20:37:17	75.3	21:21:55	58.2	20:38:47	58.3	20:41:45	70.4
20:38:17	60.3	21:22:55	56.1	20:39:47	53.9	20:42:45	71.7
20:39:17	55.4	21:23:55	56.5	20:40:47	51.4	20:43:45	67.1
20:40:17	52.2	21:24:55	60.6	20:41:47	51.1	20:44:45	70.1
20:41:17	52.0	21:25:55	58.9	20:42:47	51.5	20:45:45	76.8
20:42:17	60.1	21:26:55	56.5	20:43:47	57.5	20:46:45	71.8
20:43:17	54.6	21:27:55	70.4	20:44:47	52.9	20:47:45	80.6
20:44:17	52.8	21:28:55	58.9	20:45:47	52	20:48:45	72.5
20:45:17	51.6	21:29:55	55.9	20:46:47	52.2	20:49:45	71.6
20:46:17	52.3	21:30:55	70.8	20:47:47	52.2	20:50:45	70.2
20:47:17	56.0	21:31:55	56.4	20:48:47	58.3	20:51:45	70.1
20:48:17	68.2	21:32:55	55.4	20:49:47	52	20:52:45	71.1
20:49:17	52.4	21:33:55	53.3	20:50:47	52.3	20:53:45	75.2
20:50:17	49.5	21:34:55	57	20:51:47	55.8	20:54:45	79.3
20:51:17	49.3	21:40:34	58.6	20:52:47	52.2	20:55:45	69.2

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
20:52:17	49.0	21:41:34	50.5	20:53:47	57.3	20:56:45	69.7
20:53:17	54.8	21:42:34	50	20:54:47	63.1	20:57:45	71.1
20:54:17	53.9	21:43:34	49.7	20:55:47	58.6	20:58:45	69.6
20:55:17	52.3	21:44:34	50.1	20:56:47	52.2	20:59:45	73
20:56:17	47.5	21:45:34	49.6	20:57:47	52.5	21:00:45	67.4
20:57:17	62.3	21:46:34	49.8	20:58:47	54	21:01:45	70.5
20:58:17	55.4	21:47:34	50.8	20:59:47	53.1	21:02:45	74.5
20:59:17	54.2	21:48:34	51.4	21:00:47	53.3	21:03:45	72.5
21:00:17	53.5	21:49:34	50.2	21:04:58	65.10	21:04:45	70.6
21:01:17	58.3	21:50:34	49.3	21:05:58	54.60	21:05:45	70.5
21:02:17	52.5	21:51:34	51.9	21:06:58	55.10	21:06:45	72.1
21:03:17	49.5	21:52:34	49.9	21:07:58	55.40	21:07:45	74.8
21:04:17	55.2	21:53:34	50.2	21:08:58	54.90	21:08:45	72.7
21:05:17	53.4	21:54:34	53.2	21:09:58	54.90	21:09:45	71.8
21:06:17	49.9	21:55:34	51.1	21:10:58	57.10	21:10:45	69
21:07:17	48.2	21:56:34	52.5	21:11:58	54.20	21:11:45	70.4
21:08:17	46.1	21:57:34	54	21:12:58	54.10	21:12:45	69.9
21:09:17	46.0	21:58:34	63.1	21:13:58	54.20	21:13:45	71.2
21:10:17	48.5	21:59:34	50.1	21:14:58	54.10	21:14:45	70.6
21:11:17	57.3	22:00:34	51.8	21:15:58	54.10	21:15:45	70
21:12:17	58.2	22:01:34	52.3	21:16:58	58.00	21:16:45	70
21:13:17	53.3	22:02:34	53.4	21:17:58	53.90	21:17:45	66.5
21:14:17	50.6	22:03:34	54.5	21:18:58	54.00	21:18:45	68.5
21:15:17	52.4	22:04:34	71.4	21:19:58	53.80	21:19:45	68.6
21:16:17	63.7	22:05:34	58.2	21:20:58	53.50	21:20:45	69.4
21:17:17	59.0	22:06:34	55.2	21:21:58	52.20	21:21:45	69.9
21:18:17	61.3	22:07:34	68.2	21:22:58	50.20	21:22:45	68.1
21:19:17	60.1	22:08:34	56.2	21:23:58	51.00	21:23:45	67.6
21:20:17	57.6	22:09:34	52.3	21:24:58	53.50	21:24:45	67.2
21:21:17	56.2	22:10:34	71.9	21:25:58	56.00	21:25:45	69.7
21:22:17	60.6	22:11:34	50.6	21:26:58	54.10	21:26:45	70.9
21:23:17	57.1	22:12:34	49.5	21:27:58	53.30	21:27:45	69.7
21:24:17	58.6	22:13:34	52.2	21:28:58	54.60	21:28:45	69.8
21:25:17	57.9	22:14:34	51.6	21:29:58	56.50	21:29:45	67.8
21:26:17	58.0	22:15:34	52.7	21:30:58	67.80	21:30:45	69.7
21:27:17	51.2	22:16:34	52.1	21:31:58	54.50	21:31:45	70.8
21:28:17	52.2	22:17:34	51.2	21:32:58	55.20	21:32:45	70.3
21:29:17	58.0	22:18:34	53.5	21:33:58	54.20	21:33:45	70.1
21:30:17	57.0	22:19:34	56.2	21:34:58	56.10	21:34:45	70
21:31:17	56.6	22:20:34	52.8	21:35:58	62.00	21:35:45	70.5
21:32:17	52.9	22:21:34	51.1	21:36:58	70.90	21:36:45	69.4
21:33:17	56.0	22:22:34	57.9	21:37:58	54.20	21:37:45	71.6

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
21:34:17	56.2	22:23:34	53.4	21:38:58	54.40	21:38:45	72.7
21:35:17	54.6	22:24:34	52	21:39:58	57.00	21:39:45	72.9
21:36:17	55.2	22:25:34	55.2	21:40:58	71.60	21:40:45	70.5
21:37:17	55.8	22:26:34	51.1	21:41:58	60.30	21:41:45	70.9
21:38:17	50.1	22:27:34	52.2	21:42:58	57.70	21:42:45	71.3
21:39:17	55.7	22:28:34	54.9	21:43:58	66.50	21:43:45	72.9
21:40:17	48.9	22:29:34	53.9	21:44:58	54.20	21:44:45	72.2
21:41:17	52.6	22:30:34	53	21:45:58	55.10	21:45:45	70.6
21:42:17	54.0	22:31:34	53.2	21:46:58	56.30	21:46:45	72.1
21:43:17	53.3	22:32:34	56.5	21:47:58	66.90	21:47:45	78.7
21:44:17	54.9	22:33:34	54.3	21:48:58	53.30	21:48:45	77.6
21:45:17	55.0	22:34:34	53.2	21:49:58	53.40	21:49:45	80.2
21:46:17	47.2	22:35:34	54.5	21:50:58	59.10	21:50:45	72.9
21:47:17	48.7	22:36:34	50.7	21:51:58	53.70	21:51:45	71
21:48:17	67.5	22:37:34	50.7	21:52:58	53.50	21:52:45	70.9
21:49:17	51.1	22:38:34	51.6	21:53:58	53.80	21:53:45	73.4
21:50:17	51.4	22:39:34	50	21:54:58	57.20	21:54:45	72.2
21:51:17	51.9	22:40:34	50.5	21:55:58	57.40	21:55:45	74.4
21:52:17	47.9	22:41:34	51.2	21:56:58	54.80	21:56:45	74.6
21:53:17	49.9	22:42:34	50	21:57:58	61.80	21:57:45	70.4
21:54:17	61.8	22:43:34	70.6	21:58:58	60.70	21:58:45	75.2
21:55:17	53.5	22:44:34	56.4	21:59:58	67.40	21:59:45	81.5
21:56:17	60.6	22:45:34	53.6	22:00:58	64.50	22:00:45	74.8
21:57:17	53.3	22:46:34	55.2	22:01:58	53.50	22:01:45	73.3
21:58:17	57.9	22:47:34	52.8	22:02:58	53.60	22:02:45	70.8
21:59:17	54.3	22:48:34	68.4	22:03:58	53.60	22:03:45	70.5
22:00:17	49.5	22:49:34	54.3	22:04:58	54.60	22:04:45	71.5
22:01:17	53.9	22:50:34	50.6	22:05:58	59.00	22:05:45	73.4
22:02:17	47.4	22:51:34	51.3	22:06:58	54.10	22:06:45	71.6
22:03:17	45.0	22:52:34	51	22:07:58	53.80	22:07:45	81.2
22:04:17	45.4	22:53:34	50.9	22:08:58	58.40	22:08:45	72.9
22:05:17	62.9	22:54:34	50.5	22:09:58	54.50	22:09:45	71.3
22:06:17	45.0	22:55:34	49.4	22:10:58	55.00	22:10:45	71.6
22:07:17	45.4	22:56:34	50.4	22:11:58	58.90	22:11:45	72.1
22:08:17	52.7	22:57:34	50.4	22:12:58	54.20	22:12:45	71.5
22:09:17	47.2	22:58:34	50.2	22:13:58	53.60	22:13:45	69.5
22:10:17	47.6	22:59:34	50.8	22:14:58	56.60	22:14:45	70.9
22:11:17	47.8	23:00:34	50.9	22:15:58	59.20	22:15:45	70.6
22:12:17	47.5	23:01:34	54.2	22:16:58	53.60	22:16:45	70.1
22:13:17	46.4	23:02:34	51.4	22:17:58	53.80	22:17:45	74.2
22:14:17	46.6	23:03:34	50.9	22:18:58	58.30	22:18:45	70.4
22:15:17	46.5	23:04:34	64.1	22:19:58	53.80	22:19:45	70.8

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
22:16:17	47.0	23:05:34	69.5	22:20:58	53.80	22:20:45	70.5
22:17:17	53.3	23:06:34	51.6	22:21:58	56.50	22:21:45	77.5
22:18:17	64.6	23:07:34	52	22:22:58	53.70	22:22:45	70.5
22:19:17	46.8	23:08:34	51.5	22:23:58	53.90	22:23:45	69.1
22:20:17	46.8	23:09:34	55	22:24:58	54.10	22:24:45	69.6
22:21:17	47.9	23:10:34	50	22:25:58	54.50	22:25:45	70.8
22:22:17	47.9	23:11:34	51.4	22:26:58	53.90	22:26:45	70.4
22:23:17	47.6	23:12:34	52.4	22:27:58	52.40	22:27:45	70.1
22:24:17	45.9	23:13:34	50.8	22:28:58	52.20	22:28:45	70.5
22:25:17	46.6	23:14:34	50	22:29:58	51.80	22:34:59	66.8
22:26:17	46.4	23:15:34	48.4	22:30:58	52.30	22:35:59	67.6
22:27:17	44.6	23:16:34	49.6	22:31:58	56.90	22:36:59	67.5
22:28:17	45.8	23:17:34	49.5	22:32:58	66.90	22:37:59	68
22:29:17	45.7	23:18:34	48.9	22:33:58	50.60	22:38:59	67.4
22:30:17	45.8	23:19:34	50	22:34:58	55.50	22:39:59	68
22:31:17	46.1	23:20:34	50	22:35:58	54.20	22:40:59	67.8
22:32:17	46.2	23:21:34	50.5	22:36:58	50.30	22:41:59	68.6
22:33:17	45.7	23:22:34	51.5	22:37:58	50.60	22:42:59	67.3
22:34:17	46.5	23:23:34	51.5	22:38:58	50.30	22:43:59	67.3
22:35:17	45.3	23:24:34	50.6	22:39:58	50.30	22:44:59	67.2
22:36:17	45.2	23:25:34	52.1	22:40:58	50.40	22:45:59	67
22:37:17	45.9	23:26:34	52.5	22:41:58	50.30	22:46:59	67.3
22:38:17	46.3	23:27:34	54.8	22:42:58	50.20	22:47:59	67.2
22:39:17	46.0	23:28:34	53.7	22:43:58	50.40	22:48:59	67.4
22:40:17	46.3	23:29:34	51.1	22:44:58	50.20	22:49:59	68.4
22:41:17	45.7	23:30:34	52.1	22:45:58	50.10	22:50:59	67.9
22:42:17	45.4	23:31:34	52.5	22:46:58	49.90	22:51:59	67.7
22:43:17	45.8	23:32:34	52	22:47:58	50.10	22:52:59	68
22:44:17	46.7	23:33:34	51.5	22:48:58	50.10	22:53:59	67.5
22:45:17	46.0	23:34:34	69.8	22:49:58	51.10	22:54:59	67.7
22:46:17	45.5	23:35:34	53.9	22:50:58	50.30	22:55:59	67.4
22:47:17	45.6	23:36:34	52.2	22:51:58	53.30	22:56:59	67.2
22:48:17	45.8	23:37:34	53.7	22:52:58	50.20	22:57:59	67.3
22:49:17	46.7	23:38:34	54.7	22:53:58	49.90	22:58:59	67.2
22:50:17	55.6	23:39:34	52.1	22:54:58	50.00	22:59:59	67.1
22:51:17	46.6	23:40:34	52.6	22:55:58	58.00	23:00:59	67
22:52:17	45.2	23:41:34	53.2	22:56:58	54.50	23:01:59	67.4
22:53:17	46.4	23:42:34	50.9	22:57:58	49.90	23:02:59	67.3
22:54:17	45.3	23:43:34	52.6	22:58:58	50.00	23:03:59	67.2
22:55:17	45.3	23:44:34	50.1	22:59:58	50.40	23:04:59	67.3
22:56:17	45.8	23:45:34	50.3	23:00:58	54.50	23:05:59	67.7
22:57:17	55.7	23:46:34	51.1	23:01:58	51.10	23:06:59	67.2

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
22:58:17	49.4	23:47:34	54.3	23:02:58	50.00	23:07:59	65.9
22:59:17	48.4	23:48:34	51	23:03:58	50.20	23:08:59	64.6
23:00:17	49.4	23:49:34	51.8	23:04:58	50.40	23:09:59	64.3
23:01:17	49.5	23:50:34	53.1	23:05:58	50.60	23:10:59	64.3
23:02:17	48.5	23:51:34	52.3	23:06:58	55.10	23:11:59	64.2
23:03:17	47.0	23:52:34	53	23:07:58	51.50	23:12:59	64.1
23:04:17	46.9	23:53:34	50.9	23:08:58	50.70	23:13:59	64.2
23:05:17	46.7	23:54:34	52.9	23:09:58	51.70	23:14:59	64.2
23:06:17	46.4	23:55:34	50.4	23:10:58	64.40	23:15:59	64.2
23:07:17	46.8	23:56:34	50.1	23:11:58	64.40	23:16:59	64.4
23:08:17	46.7	23:57:34	52	23:12:58	50.80	23:17:59	64.3
23:09:17	46.6	23:58:34	52	23:13:58	50.70	23:18:59	64.5
23:10:17	53.1	23:59:34	52.7	23:14:58	50.00	23:19:59	64.6
23:11:17	46.1	00:00:34	52.7	23:15:58	51.10	23:20:59	64.2
23:12:17	45.3	00:01:34	51.6	23:16:58	52.30	23:21:59	64.2
23:13:17	49.7	00:02:34	49.9	23:17:58	51.60	23:22:59	64.1
23:14:17	46.0	00:03:34	50	23:18:58	64.30	23:23:59	63.8
23:15:17	45.8	00:04:34	50	23:19:58	67.20	23:24:59	64.4
23:16:17	47.5	00:05:34	52	23:20:58	53.00	23:25:59	64.2
23:17:17	46.9	00:06:34	50.1	23:21:58	65.20	23:26:59	64.3
23:18:17	47.2	00:07:34	50.8	23:22:58	65.90	23:27:59	64.4
23:19:17	47.4	00:08:34	50.4	23:23:58	55.20	23:28:59	64.9
23:20:17	47.2	00:09:34	52.3	23:24:58	67.00	23:29:59	64.2
23:21:17	46.7	00:10:34	57.7	23:25:58	55.20	23:30:59	64
23:22:17	45.9	00:11:34	53.5	23:26:58	49.00	23:31:59	64.3
23:23:17	47.1	00:12:34	50.7	23:27:58	48.90	23:32:59	64.4
23:24:17	46.9	00:13:34	50.3	23:28:58	49.00	23:33:59	64.3
23:25:17	47.3	00:14:34	51.4	23:29:58	51.00	23:34:59	64.2
23:26:17	46.2	00:15:34	52.1	23:30:58	49.30	23:35:59	64.3
23:27:17	46.7	00:16:34	52.1	23:31:58	49.60	23:36:59	64.8
23:28:17	58.9	00:17:34	52	23:32:58	53.80	23:37:59	64.8
23:29:17	72.4	00:18:34	51.6	23:33:58	54.50	23:38:59	64.6
23:30:17	47.0	00:19:34	51.9	23:34:58	49.30	23:39:59	65
23:31:17	46.5	00:20:34	52.3	23:35:58	48.90	23:40:59	64.4
23:32:17	46.6	00:21:34	54.2	23:36:58	48.80	23:41:59	64.6
23:33:17	46.4	00:22:34	52.7	23:37:58	49.40	23:42:59	64.3
23:34:17	46.8	00:23:34	53.4	23:38:58	54.70	23:43:59	64.2
23:35:17	52.6	00:24:34	54.1	23:39:58	48.80	23:44:59	65.4
23:36:17	51.2	00:25:34	53.2	23:40:58	48.60	23:45:59	64.5
23:37:17	73.9	00:26:34	54.7	23:41:58	48.80	23:46:59	64.5
23:38:17	47.6	00:27:34	52.7	23:42:58	49.00	23:47:59	62.6
23:39:17	52.1	00:28:34	53.7	23:43:58	49.20	23:48:59	66.9

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
23:40:17	66.0	00:29:34	52.6	23:44:58	49.00	23:49:59	64.7
23:41:17	46.4	00:30:34	52.3	23:45:58	49.00	23:50:59	54.1
23:42:17	72.0	00:31:34	52.4	23:46:58	54.30	23:51:59	56.7
23:43:17	48.2	00:32:34	53.7	23:47:58	48.90	23:52:59	55.8
23:44:17	47.6	00:33:34	52.3	23:48:58	48.90	23:53:59	52.1
23:45:17	47.5	00:34:34	52	23:49:58	49.00	23:54:59	52.6
23:46:17	47.4	00:35:34	52.7	23:50:58	49.20	23:55:59	50.7
23:47:17	51.4	00:36:34	54.1	23:51:58	49.10	23:56:59	51.4
23:48:17	47.1	00:37:34	52.7	23:52:58	48.90	23:57:59	52.1
23:49:17	48.2	00:38:34	52.6	23:53:58	48.60	23:58:59	49.9
23:50:17	49.3	00:39:34	53	23:54:58	48.70	23:59:59	52.1
23:51:17	47.3	00:40:34	53.7	23:55:58	48.60	00:00:59	50.8
23:52:17	48.2	00:41:34	52.1	23:56:58	48.70	00:01:59	53.5
23:53:17	48.1	00:42:34	52.2	23:57:58	48.90	00:02:59	53.1
23:54:17	48.4	00:43:34	52.6	23:58:58	48.80	00:03:59	54.5
23:55:17	50.3	00:44:34	53.1	23:59:58	49.20	00:04:59	51.8
23:56:17	49.2	00:45:34	52.7	00:00:58	48.80	00:05:59	51.7
23:57:17	48.2	00:46:34	51.5	00:01:58	49.00	00:06:59	51.2
23:58:17	48.3	00:47:34	52.6	00:02:58	48.60	00:07:59	56.1
23:59:17	48.5	00:48:34	52.1	00:03:58	48.80	00:08:59	53.3
00:00:17	48.0	00:49:34	52.8	00:04:58	48.90	00:09:59	61
00:01:17	48.8	00:50:34	53.6	00:05:58	49.00	00:10:59	63.5
00:02:17	47.3	00:51:34	53.2	00:06:58	49.10	00:11:59	64.2
00:03:17	47.2	00:52:34	52.9	00:07:58	50.20	00:12:59	64.1
00:04:17	47.4	00:53:34	52.8	00:08:58	49.30	00:13:59	64.1
00:05:17	47.5	00:54:34	51.7	00:09:58	49.40	00:14:59	64.9
00:06:17	47.8	00:55:34	52.8	00:10:58	49.40	00:15:59	64.4
00:07:17	47.8	00:56:34	52	00:11:58	49.80	00:16:59	64.4
00:08:17	48.5	00:57:34	52.2	00:12:58	50.20	00:17:59	64.6
00:09:17	47.9	00:58:34	51.9	00:13:58	50.20	00:18:59	64.4
00:10:17	49.3	00:59:34	51.2	00:14:58	50.30	00:19:59	64.4
00:11:17	52.1	1:00:34	52	00:15:58	50.50	00:20:59	64.4
00:12:17	49.6	1:01:34	51.8	00:16:58	50.80	00:21:59	64.8
00:13:17	47.6	1:02:34	52.4	00:17:58	49.70	00:22:59	64.6
00:14:17	47.5	1:03:34	52.7	00:18:58	51.40	00:23:59	64.7
00:15:17	47.7	1:04:34	52.3	00:19:58	50.10	00:24:59	64.8
00:16:17	47.6	1:05:34	52.3	00:20:58	50.00	00:25:59	64.6
00:17:17	47.7	1:06:34	52.5	00:21:58	49.80	00:26:59	64.4
00:18:17	47.6	1:07:34	51.9	00:22:58	49.90	00:27:59	64.9
00:19:17	47.7	1:08:34	52	00:23:58	49.90	00:28:59	64.2
00:20:17	47.8	1:09:34	52	00:24:58	50.00	00:29:59	64.4
00:21:17	46.5	1:10:34	56.6	00:25:58	50.00	00:30:59	64.4

Titik 1		Titik 2		Titik 3		Titik 4		Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
00:22:17	47.9	1:11:34	52	00:26:58	49.90	00:31:59	64.3	01:06:10	47.6	1:53:34	47.4	01:08:58	49.60	01:13:59	64.1
00:23:17	48.4	1:12:34	51.8	00:27:58	49.80	00:32:59	64.3	01:07:10	47.3	1:54:34	48.3	01:09:58	49.80	01:14:59	64
00:24:17	47.8	1:13:34	51.2	00:28:58	50.90	00:33:59	64.7	01:08:10	47.6	1:55:34	47.9	01:10:58	49.80	01:15:59	64.1
00:25:17	47.7	1:14:34	51.4	00:29:58	49.80	00:34:59	64.5	01:09:10	49.6	1:56:34	49	01:11:58	49.90	01:16:59	64.2
00:26:17	46.7	1:15:34	51.7	00:30:58	49.80	00:35:59	73.1	01:10:10	46.9	1:57:34	48.4	01:12:58	49.70	01:17:59	64.1
00:27:17	47.1	1:16:34	51.5	00:31:58	49.30	00:36:59	64.4	01:11:10	46.7	1:58:34	48.9	01:13:58	49.80	01:18:59	64.2
00:28:17	46.9	1:17:34	48.7	00:32:58	49.40	00:37:59	64.2	01:12:10	47.6	1:59:34	49.1	01:14:58	49.60	01:19:59	64.1
00:29:17	46.4	1:18:34	48.6	00:33:58	49.50	00:38:59	63.9	01:13:10	47.7	2:00:34	48.8	01:15:58	49.80	01:20:59	64.1
00:30:17	46.9	1:19:34	48.7	00:34:58	53.60	00:39:59	63.8	01:14:10	47.6	2:01:34	49.1	01:16:58	49.70	01:21:59	64
00:31:17	46.8	1:20:34	49	00:35:58	53.90	00:40:59	64	01:15:10	47.4	2:02:34	48.8	01:17:58	49.80	01:22:59	64.1
00:32:17	48.0	1:21:34	49.2	00:36:58	69.30	00:41:59	64.1	01:16:10	47.3	2:03:34	49.2	01:18:58	49.50	01:23:59	63.9
00:33:17	48.1	1:22:34	48.4	00:37:58	48.60	00:42:59	64	01:17:10	46.5	2:04:34	49.2	01:19:58	49.50	01:24:59	63.6
00:34:17	46.1	1:23:34	48.9	00:38:58	50.10	00:43:59	64	01:18:10	46.2	2:05:34	49	01:20:58	49.50	01:25:59	63.9
00:35:17	46.9	1:24:34	49.3	00:39:58	52.50	00:44:59	64	01:19:10	46.1	2:06:34	48.4	01:21:58	49.60	01:26:59	63.8
00:36:17	50.3	1:25:34	49.2	00:40:58	67.20	00:45:59	64.1	01:20:10	46.5	2:07:34	48.8	01:22:58	49.50	01:27:59	63.9
00:37:17	53.0	1:26:34	49	00:41:58	49.60	00:46:59	64.2	01:21:10	46.5	2:08:34	49	01:23:58	49.60	01:28:59	63.6
00:38:17	48.0	1:27:34	48.7	00:42:58	49.50	00:47:59	64.2	01:22:10	49.7	2:09:34	48.8	01:24:58	49.50	01:29:59	63.6
00:39:17	47.4	1:28:34	48.8	00:43:58	52.20	00:48:59	64.3	01:23:10	50.8	2:10:34	48.8	01:25:58	49.80	01:30:59	63.7
00:40:17	47.8	1:29:34	48.7	00:44:58	56.60	00:49:59	64.4	01:24:10	49.7	2:11:34	48.9	01:26:58	49.40	01:31:59	63.8
00:41:17	49.0	1:30:34	48.6	00:45:58	61.70	00:50:59	64.3	01:25:10	46.8	2:12:34	48.9	01:27:58	49.60	01:32:59	63.7
00:42:17	47.5	1:31:34	48.6	00:46:58	69.40	00:51:59	64.1	01:26:10	47.0	2:13:34	48.8	01:28:58	49.90	01:33:59	63.6
00:43:17	47.2	1:32:34	48.8	00:47:58	49.40	00:52:59	64.3	01:27:10	46.8	2:14:34	47.7	01:29:58	49.70	01:34:59	63.4
00:44:17	47.0	1:33:34	48.7	00:48:58	49.30	00:53:59	64.4	01:28:10	46.8	2:15:34	47.8	01:30:58	54.40	01:35:59	63.3
00:45:17	47.4	1:34:34	52.4	00:49:58	49.30	00:54:59	64.2	01:29:10	47.0	2:16:34	47.6	01:31:58	55.50	01:36:59	63.7
00:46:17	48.2	1:35:34	48.2	00:50:58	49.30	00:55:59	64.2	01:30:10	46.8	2:17:34	47.7	01:32:58	49.20	01:37:59	63.8
00:47:17	47.3	1:36:34	48.8	00:51:58	49.70	00:56:59	63.9	01:31:10	46.8	2:18:34	48	01:33:58	49.50	01:38:59	63.6
00:48:17	51.9	1:37:34	50.1	00:52:58	49.80	00:57:59	64	01:32:10	47.3	2:19:34	47.9	01:34:58	49.80	01:39:59	63.6
00:49:17	47.9	1:38:34	49.9	00:53:58	49.50	00:58:59	64.2	01:33:10	47.1	2:20:34	48.4	01:35:58	49.80	01:40:59	63.3
00:50:17	47.5	1:39:34	51.9	00:54:58	49.60	00:59:59	64.1	01:34:10	47.0	2:21:34	48.9	01:36:58	49.70	01:41:59	63.2
00:51:17	46.6	1:40:34	49.6	00:55:58	49.60	01:00:59	63.9	01:35:10	46.9	2:22:34	49	01:37:58	49.70	01:42:59	63.1
00:52:17	47.1	1:41:34	49.4	00:56:58	49.40	01:01:59	63.8	01:36:10	46.9	2:23:34	48.9	01:38:58	49.60	01:43:59	63.5
00:53:17	48.2	1:42:34	48.8	00:57:58	49.30	01:02:59	64	01:37:10	48.3	2:24:34	48.1	01:39:58	49.80	01:44:59	63.5
00:54:17	67.4	1:43:34	49.7	00:58:58	49.30	01:03:59	64.3	01:38:10	47.0	2:25:34	48.2	01:40:58	49.80	01:45:59	63.4
00:55:17	47.1	1:44:34	49.5	00:59:58	49.50	01:04:59	64.5	01:39:10	46.9	2:26:34	48.4	01:41:58	49.60	01:46:59	63.3
00:56:17	48.7	1:45:34	48.9	01:00:58	49.70	01:05:59	64.3	01:40:10	47.1	2:27:34	48.8	01:42:58	49.80	01:47:59	67.4
00:57:17	46.9	1:46:34	48.1	01:01:58	49.40	01:06:59	64	01:41:10	46.8	2:28:34	48.5	01:43:58	49.50	01:48:59	63.9
00:58:17	54.9	1:47:34	47.2	01:02:58	49.40	01:07:59	64.1	01:42:10	46.6	2:29:34	48.7	01:44:58	49.50	01:49:59	63.2
00:59:17	47.4	1:48:34	48.2	01:03:58	49.40	01:08:59	69.5	01:43:10	46.9	2:30:34	47.5	01:45:58	49.40	01:50:59	63.4
01:02:10	49.8	1:49:34	47.8	01:04:58	49.30	01:09:59	64.3	01:44:10	46.7	2:31:34	49.1	01:46:58	49.90	01:51:59	63.5
01:03:10	47.6	1:50:34	48	01:05:58	49.60	01:10:59	64.5	01:45:10	46.6	2:32:34	49.5	01:47:58	49.80	01:52:59	63
01:04:10	72.9	1:51:34	47.9	01:06:58	49.60	01:11:59	64.1	01:46:10	46.8	2:33:34	49.5	01:48:58	49.70	01:53:59	63
01:05:10	48.0	1:52:34	48	01:07:58	49.70	01:12:59	64.2	01:47:10	46.8	2:34:34	49.4	01:49:58	49.90	01:54:59	63.2

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
01:48:10	48.0	2:35:34	49.4	01:50:58	49.80	01:55:59	63
01:49:10	49.2	2:36:34	49.6	01:51:58	49.80	01:56:59	63.3
01:50:10	46.7	2:37:34	49.9	01:52:58	49.70	01:57:59	63.1
01:51:10	46.8	2:38:34	49.9	01:53:58	49.90	01:58:59	63.4
01:52:10	46.9	2:39:34	49.8	01:54:58	50.20	01:59:59	63.4
01:53:10	46.8	2:40:34	70.6	01:55:58	53.10	02:00:59	63.4
01:54:10	46.6	2:41:34	56.4	01:56:58	50.90	02:01:59	62.9
01:55:10	46.6	2:42:34	50	01:57:58	49.70	02:02:59	62.8
01:56:10	46.7	2:43:34	48.7	01:58:58	52.20	02:03:59	62.9
01:57:10	46.9	2:44:34	48.8	01:59:58	55.70	02:04:59	62.9
01:58:10	46.8	2:45:34	48.7	02:00:58	54.30	02:05:59	63
01:59:10	46.7	2:46:34	48.5	02:01:58	53.30	02:06:59	62.9
02:00:10	46.6	2:47:34	47.6	02:02:58	54.20	02:07:59	62.9
02:01:10	45.7	2:48:34	48.4	02:03:58	61.10	02:08:59	62.7
02:02:10	46.4	2:49:34	48.8	02:07:03	52.3	02:09:59	62.6
02:03:10	46.5	2:50:34	48.6	02:08:03	48.8	02:10:59	62.7
02:04:10	46.6	2:51:34	48.3	02:09:03	51.7	02:11:59	62.5
02:05:10	47.2	2:52:34	48.4	02:10:03	53.4	02:12:59	51.1
02:06:10	46.3	2:53:34	48.6	02:11:03	55.2	02:13:59	52.9
02:07:10	46.2	2:54:34	48.6	02:12:03	51.7	02:14:59	50.2
02:08:10	45.6	2:55:34	48.6	02:13:03	51.5	02:15:59	51.7
02:09:10	46.6	2:56:34	48.8	02:14:03	49.7	02:16:59	49.8
02:10:10	46.9	2:57:34	48.7	02:15:03	50.5	02:17:59	49.8
02:11:10	46.5	2:58:34	48.7	02:16:03	50.2	02:18:59	50.4
02:12:10	46.4	2:59:34	48.9	02:17:03	57.7	02:19:59	52.4
02:13:10	46.1	3:00:34	49.1	02:18:03	49.6	02:20:59	58.5
02:14:10	47.3	3:01:34	49	02:19:03	49.9	02:21:59	52.3
02:15:10	46.9	3:02:34	49.1	02:20:03	50.2	02:22:59	53.3
02:16:10	46.3	3:03:34	49	02:21:03	50.2	02:23:59	52.2
02:17:10	46.2	3:04:34	49	02:22:03	52.9	02:24:59	52.7
02:18:10	46.4	3:05:34	49	02:23:03	53.4	02:25:59	51.3
02:19:10	46.1	3:06:34	49.2	02:24:03	50.3	02:26:59	50.8
02:20:10	46.3	3:07:34	49.9	02:25:03	50.2	02:27:59	50.5
02:21:10	46.2	3:08:34	51.4	02:26:03	50.2	02:28:59	52.3
02:22:10	46.1	3:09:34	51.7	02:27:03	49.9	02:29:59	52.2
02:23:10	46.0	3:10:34	52.1	02:28:03	49.5	02:30:59	51.2
02:24:10	45.9	3:11:34	58.4	02:29:03	49.5	02:31:59	51.1
02:25:10	45.8	3:12:34	75.1	02:30:03	49.5	02:32:59	51.6
02:26:10	45.8	3:13:34	52.5	02:31:03	49.5	02:33:59	51.5
02:27:10	44.9	3:20:07	53.7	02:32:03	49.5	02:34:59	54.1
02:28:10	44.8	3:21:07	53.2	02:33:03	49.6	02:35:59	67.4
02:29:10	43.8	3:22:07	53.9	02:34:03	49.5	02:36:59	52.3

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
02:30:10	44.1	3:23:07	54	02:35:03	49.6	02:37:59	52.3
02:31:10	44.9	3:24:07	55.5	02:36:03	49.8	02:38:59	52.2
02:32:10	44.4	3:25:07	58.6	02:37:03	49.7	02:39:59	51.4
02:33:10	44.3	3:26:07	56.5	02:38:03	50.0	02:40:59	50.9
02:34:10	44.3	3:27:07	57	02:39:03	49.7	02:41:59	55.6
02:35:10	44.4	3:28:07	56.3	02:40:03	49.7	02:42:59	51.4
02:36:10	48.5	3:29:07	55.5	02:41:03	49.6	02:43:59	57.4
02:37:10	45.0	3:30:07	56.7	02:42:03	49.7	02:44:59	50.5
02:38:10	44.8	3:31:07	55.8	02:43:03	49.7	02:45:59	50.3
02:39:10	44.9	3:32:07	56.2	02:44:03	49.8	02:46:59	50.8
02:40:10	47.4	3:33:07	57.3	02:45:03	50.0	02:47:59	51.7
02:41:10	45.3	3:34:07	56.9	02:46:03	50.4	02:48:59	53.9
02:42:10	45.1	3:35:07	56.2	02:47:03	49.8	02:49:59	50.7
02:43:10	45.4	3:36:07	56.3	02:48:03	49.7	02:50:59	51
02:44:10	45.6	3:37:07	56.1	02:49:03	49.7	02:51:59	51
02:45:10	45.0	3:38:07	56.9	02:50:03	49.6	02:52:59	51.7
02:46:10	46.3	3:39:07	57.1	02:51:03	49.5	02:53:59	50.8
02:47:10	45.4	3:40:07	58.7	02:52:03	49.6	02:54:59	51
02:48:10	45.3	3:41:07	57.2	02:53:03	49.6	02:55:59	51.1
02:49:10	45.2	3:42:07	57.5	02:54:03	56.6	02:56:59	51.2
02:50:10	45.1	3:43:07	57.7	02:55:03	50.5	02:57:59	50.7
02:51:10	45.3	3:44:07	57.6	02:56:03	49.4	02:58:59	50.6
02:52:10	45.1	3:45:07	58	02:57:03	49.6	02:59:59	50.5
02:53:10	45.4	3:46:07	54	02:58:03	49.7	03:00:59	50.3
02:54:10	45.4	3:47:07	54	02:59:03	49.8	03:01:59	50.7
02:55:10	45.3	3:48:07	54	03:00:03	49.7	03:02:59	51.5
02:56:10	46.2	3:49:07	55.2	03:01:03	49.5	03:03:59	50
02:57:10	43.6	3:50:07	56.2	03:02:03	49.7	03:04:59	50.6
02:58:10	43.6	3:51:07	56	03:03:03	49.6	03:05:59	50.8
02:59:10	43.7	3:52:07	55.9	03:04:03	49.6	03:06:59	51.1
03:00:10	43.4	3:53:07	56.2	03:05:03	49.4	03:07:59	51.7
03:01:10	47.5	3:54:07	55.8	03:06:03	49.6	03:08:59	51.3
03:02:10	51.4	3:55:07	53.5	03:07:03	49.5	03:09:59	51.4
03:03:10	43.7	3:56:07	53.5	03:08:03	49.6	03:10:59	51.6
03:04:10	44.0	3:57:07	54.2	03:09:03	49.8	03:11:59	50.5
03:05:10	45.1	3:58:07	54.7	03:10:03	49.8	03:12:59	51
03:06:10	44.6	3:59:07	54.3	03:11:03	49.9	03:13:59	52
03:07:10	44.8	4:00:07	54	03:12:03	51.4	03:14:59	51.9
03:08:10	45.9	4:01:07	53.9	03:13:03	50.0	03:15:59	51.5
03:09:10	43.9	4:02:07	53.6	03:14:03	49.9	03:16:59	50.3
03:10:10	43.7	4:03:07	54.6	03:15:03	50.0	03:17:59	53.2
03:11:10	44.1	4:04:07	54.4	03:16:03	49.8	03:18:59	54

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
03:12:10	47.1	4:05:07	53.9	03:17:03	49.8	03:19:59	52.9
03:13:10	45.4	4:06:07	64	03:18:03	49.7	03:20:59	51.8
03:14:10	45.6	4:07:07	52.5	03:19:03	49.8	03:27:14	55.4
03:15:10	46.6	4:08:07	52.3	03:20:03	49.9	03:28:14	50.8
03:16:10	49.4	4:09:07	52	03:21:03	49.9	03:29:14	50.4
03:17:10	46.0	4:10:07	51.9	03:22:03	51.1	03:30:14	49.9
03:18:10	44.5	4:11:07	52.8	03:23:03	50.1	03:31:14	51.9
03:19:10	44.5	4:12:07	47.6	03:24:03	50.0	03:32:14	51.1
03:20:10	45.9	4:13:07	50.8	03:25:03	50.0	03:33:14	52.2
03:21:10	45.2	4:14:07	47.3	03:26:03	50.1	03:34:14	51
03:22:10	44.8	4:15:07	51.6	03:27:03	50.4	03:35:14	50.8
03:23:10	44.6	4:16:07	49.8	03:28:03	50.1	03:36:14	50.9
03:24:10	46.1	4:17:07	51.6	03:29:03	50.3	03:37:14	51.4
03:25:10	45.5	4:18:07	50.8	03:30:03	50.0	03:38:14	51
03:26:10	47.4	4:19:07	49.1	03:31:03	50.1	03:39:14	50.5
03:27:10	45.5	4:20:07	51.1	03:32:03	50.0	03:40:14	50.5
03:28:10	45.5	4:21:07	49.2	03:33:03	49.8	03:41:14	51.6
03:29:10	45.6	4:22:07	49.3	03:34:03	49.9	03:42:14	51.2
03:30:10	46.5	4:23:07	48.4	03:35:03	50.1	03:43:14	50.6
03:31:10	47.6	4:24:07	48.9	03:36:03	50.0	03:44:14	51.3
03:32:10	45.5	4:25:07	47.7	03:37:03	49.7	03:45:14	51.4
03:33:10	45.3	4:26:07	46.9	03:38:03	50.0	03:46:14	52.6
03:34:10	45.3	4:27:07	47.4	03:39:03	50.1	03:47:14	54.1
03:35:10	45.7	4:28:07	49.1	03:40:03	50.2	03:48:14	54.1
03:36:10	45.3	4:29:07	46.8	03:41:03	50.3	03:49:14	54.6
03:37:10	45.4	4:30:07	46.5	03:42:03	50.4	03:50:14	53.6
03:38:10	45.7	4:31:07	46.2	03:43:03	50.4	03:51:14	51.7
03:39:10	46.0	4:32:07	48.3	03:44:03	50.4	03:52:14	51
03:40:10	45.4	4:33:07	46.7	03:45:03	50.6	03:53:14	51.4
03:41:10	46.8	4:34:07	46.6	03:46:03	51.0	03:54:14	51.8
03:42:10	45.5	4:35:07	51.4	03:47:03	50.8	03:55:14	52.6
03:43:10	48.8	4:36:07	49.9	03:48:03	50.4	03:56:14	50.9
03:44:10	46.2	4:37:07	49.8	03:49:03	50.1	03:57:14	51.2
03:45:10	45.9	4:38:07	52.1	03:50:03	50.4	03:58:14	50.6
03:46:10	45.5	4:39:07	49.2	03:51:03	50.5	03:59:14	51
03:47:10	45.8	4:40:07	48.7	03:52:03	50.4	04:00:14	51.4
03:48:10	45.4	4:41:07	54.7	03:53:03	49.7	04:01:14	51.1
03:49:10	64.5	4:42:07	50.3	03:54:03	51.0	04:02:14	50.7
03:50:10	67.2	4:43:07	50.1	03:55:03	51.5	04:03:14	50.6
03:51:10	65.4	4:44:07	48.4	03:56:03	51.6	04:04:14	51.2
03:52:10	63.0	4:45:07	49.3	03:57:03	51.5	04:05:14	51.7
03:53:10	61.2	4:46:07	49.1	03:58:03	52.2	04:06:14	50.9

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
03:54:10	60.1	4:47:07	49.7	03:59:03	51.8	04:07:14	51.1
03:55:10	47.8	4:48:07	49.7	04:00:03	51.7	04:08:14	51.6
03:56:10	61.3	4:49:07	51	04:01:03	53.8	04:09:14	53.3
03:57:10	60.9	4:50:07	54.2	04:02:03	52.9	04:10:14	53.4
03:58:10	46.8	4:51:07	49.1	04:03:03	53.6	04:11:14	54.7
03:59:10	49.0	4:52:07	56	04:04:03	52.8	04:12:14	56.3
04:00:10	46.3	4:53:07	53	04:05:03	53.8	04:13:14	58.3
04:01:10	46.6	4:54:07	53.5	04:06:03	53.3	04:14:14	59.7
04:02:10	49.5	4:55:07	53.5	04:07:03	52.6	04:15:14	60.4
04:03:10	52.7	4:56:07	51	04:08:03	51.3	04:16:14	60.6
04:04:10	49.5	4:57:07	58.7	04:09:03	52.9	04:17:14	62.7
04:05:10	48.9	4:58:07	48.9	04:10:03	52.5	04:18:14	75.7
04:06:10	48.3	4:59:07	51.2	04:11:03	50.8	04:19:14	81
04:07:10	51.2	5:00:07	48.9	04:12:03	50.1	04:20:14	79.3
04:08:10	49.6	5:01:07	50.8	04:13:03	51.7	04:21:14	66.1
04:09:10	46.7	5:02:07	56.7	04:14:03	51.5	04:22:14	82.2
04:10:10	48.1	5:03:07	57.7	04:15:03	51.7	04:23:14	80.1
04:11:10	47.4	5:04:07	54.5	04:16:03	54.5	04:24:14	81.7
04:12:10	48.1	5:05:07	52.6	04:17:03	57.4	04:25:14	81.6
04:13:10	47.8	5:06:07	52.7	04:18:03	58.3	04:26:14	81.6
04:14:10	48.2	5:07:07	56.7	04:19:03	57.1	04:27:14	80.7
04:15:10	48.2	5:08:07	57.5	04:20:03	54.4	04:28:14	81.9
04:16:10	47.2	5:09:07	56.7	04:21:03	51.6	04:29:14	80.9
04:17:10	47.4	5:10:07	54.6	04:22:03	51.2	04:30:14	81.4
04:18:10	47.7	5:11:07	55	04:23:03	51.4	04:31:14	82.7
04:19:10	48.4	5:12:07	55.9	04:24:03	49.5	04:32:14	83.3
04:20:10	48.0	5:13:07	51.5	04:25:03	51.6	04:33:14	82.4
04:21:10	47.5	5:14:07	52.5	04:26:03	51.2	04:34:14	82.9
04:22:10	47.4	5:15:07	54.7	04:27:03	50.6	04:35:14	79.1
04:23:10	47.5	5:16:07	59	04:28:03	50.2	04:36:14	80.2
04:24:10	47.8	5:17:07	56.3	04:29:03	49.8	04:37:14	79.3
04:25:10	47.9	5:18:07	59.5	04:30:03	49.9	04:38:14	78.1
04:26:10	48.4	5:19:07	56.1	04:31:03	50.0	04:39:14	79.2
04:27:10	53.4	5:20:07	53.2	04:32:03	50.3	04:40:14	78.6
04:28:10	49.3	5:21:07	57.6	04:33:03	49.8	04:41:14	80.4
04:29:10	47.1	5:22:07	56	04:34:03	53.1	04:42:14	68.9
04:30:10	46.5	5:23:07	57.5	04:35:03	53.7	04:43:14	56.6
04:31:10	47.5	5:24:07	59.5	04:36:03	69.0	04:44:14	57.4
04:32:10	48.4	5:25:07	54.4	04:37:03	51.6	04:45:14	58.4
04:33:10	48.0	5:26:07	58.3	04:38:03	52.6	04:46:14	59.3
04:34:10	66.6	5:27:07	59	04:39:03	58.1	04:47:14	57.9
04:35:10	66.6	5:28:07	61.7	04:40:03	61.5	04:48:14	57.2

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
04:36:10	66.5	5:29:07	56	04:41:03	51.1	04:49:14	58.5
04:37:10	66.4	5:30:07	60.3	04:42:03	51.9	04:50:14	57.1
04:38:10	49.2	5:31:07	62	04:43:03	52.3	04:51:14	55.1
04:39:10	49.0	5:32:07	57.1	04:44:03	50.2	04:52:14	55.3
04:40:10	49.0	5:33:07	60	04:45:03	51.6	04:53:14	56.8
04:41:10	48.4	5:34:07	60.7	04:46:03	50.2	04:54:14	52.5
04:42:10	48.6	5:35:07	59.8	04:47:03	50.1	04:55:14	55.7
04:43:10	48.5	5:36:07	60.2	04:48:03	49.9	04:56:14	54.9
04:44:10	48.1	5:37:07	58.9	04:49:03	50.9	04:57:14	53.4
04:45:10	48.3	5:38:07	59.9	04:50:03	50.7	04:58:14	53.5
04:46:10	47.3	5:39:07	59.1	04:51:03	50.1	04:59:14	52.4
04:47:10	47.1	5:40:07	58.5	04:52:03	49.7	05:00:14	52
04:48:10	46.7	5:41:07	52.8	04:53:03	49.8	05:01:14	53.9
04:49:10	46.6	5:42:07	55.5	04:54:03	52.9	05:02:14	60.5
04:50:10	46.0	5:43:07	70	04:55:03	52.3	05:03:14	68.7
04:51:10	45.7	5:44:07	53.2	04:56:03	54.3	05:04:14	61.9
04:52:10	45.9	5:45:07	55.7	04:57:03	56.0	05:05:14	53.7
04:53:10	46.7	5:46:07	55.3	04:58:03	66.4	05:06:14	56.4
04:54:10	46.9	5:47:07	53.8	04:59:03	65.6	05:07:14	54
04:55:10	64.1	5:48:07	56.5	05:00:03	67.4	05:08:14	52.5
04:56:10	48.4	5:49:07	66.7	05:01:03	61.2	05:09:14	53.6
04:57:10	47.5	5:50:07	57.4	05:02:03	50.0	05:10:14	54.4
04:58:10	65.6	5:51:07	60.3	05:03:03	49.9	05:11:14	52.9
04:59:10	65.7	5:52:07	69.4	05:04:03	49.4	05:12:14	68.9
05:00:10	46.4	5:53:07	56.9	05:05:03	49.5	05:13:14	64.2
05:01:10	46.2	5:54:07	59.5	05:06:03	49.4	05:14:14	68.7
05:02:10	67.6	5:55:07	60.2	05:07:03	49.6	05:15:14	54.6
05:03:10	46.5	5:56:07	58.6	05:08:03	49.5	05:16:14	66.7
05:04:10	56.1	5:57:07	58.2	05:09:03	49.5	05:17:14	55.1
05:05:10	50.7	5:58:07	69.4	05:10:03	49.8	05:18:14	55.2
05:06:10	45.0	5:59:07	69.1	05:11:03	49.7	05:19:14	55.2
05:07:10	44.4	6:00:07	57.2	05:12:03	50.0	05:20:14	64.7
05:08:10	44.5	6:01:07	61.1	05:13:03	50.4	05:21:14	58.8
05:09:10	47.2	6:02:07	57.3	05:14:03	50.9	05:22:14	57.4
05:10:10	48.4	6:03:07	71.9	05:15:03	52.4	05:23:14	55.3
05:11:10	48.0	6:04:07	57.4	05:16:03	56.1	05:24:14	58.7
05:12:10	65.2	6:05:07	56.6	05:17:03	60.7	05:25:14	53.2
05:13:10	59.5	6:06:07	69.9	05:18:03	52.9	05:26:14	50.2
05:14:10	49.3	6:07:07	55.4	05:19:03	50.4	05:27:14	51.1
05:15:10	67.1	6:08:07	55.4	05:20:03	51.7	05:28:14	50.8
05:16:10	54.1			05:21:03	54.7	05:29:14	50.4
05:17:10	48.6			05:22:03	65.2	05:30:14	50.1

Titik 1		Titik 2		Titik 3		Titik 4	
Jam	Leq	Jam	Leq	Jam	Leq	Jam	Leq
05:18:10	66.8			05:23:03	51.4	05:31:14	52
05:19:10	45.6			05:24:03	50.4	05:32:14	51.9
05:20:10	51.8			05:25:03	52.4	05:33:14	51.5
05:21:10	45.4			05:26:03	51.8	05:34:14	51.5
05:22:10	45.6			05:27:03	51.3	05:35:14	55.3
05:23:10	45.0			05:28:03	52.1	05:36:14	59.5
05:24:10	53.3			05:29:03	52.8	05:37:14	55.3
05:25:10	52.7			05:30:03	56.7	05:38:14	54.2
05:26:10	52.9			05:31:03	51.4	05:39:14	54.8
05:27:10	52.8			05:32:03	52.7	05:40:14	53.5
05:28:10	51.6			05:33:03	52.3	05:41:14	53.5
05:29:10	52.5			05:34:03	56.8	05:42:14	52.9
05:30:10	51.6			05:35:03	57.7	05:43:14	51.3
05:31:10	64.8			05:36:03	63.2	05:44:14	69
05:32:10	66.9			05:37:03	56.0	05:45:14	54.7
05:33:10	67.1			05:38:03	67.6	05:46:14	65
05:34:10	66.6			05:39:03	58.1	05:47:14	60.9
05:35:10	64.9			05:40:03	60.6	05:48:14	61.3
05:36:10	62.8					05:49:14	52.7
05:37:10	54.5					05:50:14	57.5
05:38:10	62.5					05:51:14	55.7
05:39:10	66.9					05:52:14	59.9
05:40:10	66.2					05:53:14	57.4
05:41:10	55.7					05:54:14	63.1
05:42:10	61.8					05:55:14	61.8
05:43:10	60.7					05:56:14	61.2
05:44:10	64.0					05:57:14	58.1
05:45:10	60.7					05:58:14	72.9
05:46:10	53.5					05:59:14	60.1
05:47:10	54.8						
05:48:10	55.3						
05:49:10	67.1						
05:50:10	64.0						
05:51:10	61.4						
05:52:10	63.2						
05:53:10	62.3						
05:54:10	61.3						
05:55:10	58.3						
05:56:10	63.9						
05:57:10	61.4						
05:58:10	58.8						
05:59:10	62.0						

Lampiran 2

Data Pergerakan Pesawat Hari 1, 11 April 2011 – 12 April 2011

Flight_No	Leg	Actual Dept/Arr
GA 0510	D	6:00:00 AM
SJ 0268	D	6:02:00 AM
GA 0160	D	6:03:00 AM
GA 0005	A	6:03:00 AM
GA 0600	D	6:03:00 AM
SQ 0951	D	6:09:00 AM
QZ 7340	D	6:10:00 AM
GA 0180	D	6:11:00 AM
JT 0380	D	6:12:00 AM
GA 0110	D	6:13:00 AM
SJ 0592	D	6:14:00 AM
Y6 0711	D	6:16:00 AM
JT 0788	D	6:17:00 AM
GA 0230	D	6:18:00 AM
GA 0150	D	6:18:00 AM
GA 0220	D	6:21:00 AM
GA 0202	D	6:21:00 AM
GA 0302	D	6:22:00 AM
JT 0562	D	6:22:00 AM
GA 0401	A	6:22:00 AM
Y6 0811	D	6:22:00 AM
CX 0736	D	6:22:00 AM
GA 0500V	D	6:23:00 AM
JT 0748	D	6:25:00 AM
SJ 0180	D	6:25:00 AM
GA 0530	D	6:26:00 AM
Y6 0201	D	6:27:00 AM
QZ 7510	D	6:28:00 AM
Y6 0343	D	6:29:00 AM
QZ 7668	D	6:29:00 AM
JT 0320	D	6:29:00 AM
GA 0130	D	6:31:00 AM
GA 0400	D	6:32:00 AM
SJ 0050	D	6:33:00 AM
QZ 7690	D	6:33:00 AM
JT 0760	D	6:34:00 AM
JT 0651	A	6:39:00 AM
SJ 0160	D	6:40:00 AM
GA 0822	D	6:42:00 AM
GA 0550	D	6:46:00 AM
CI 0680	D	6:47:00 AM

Flight_No	Leg	Actual Dept/Arr
SJ 0082	D	6:49:00 AM
GA 0231	A	6:51:00 AM
GA 0724B	D	6:52:00 AM
GA 0724V	D	6:52:00 AM
JT 0252	D	6:53:00 AM
GA 0201	A	6:54:00 AM
GA 0604	D	6:55:00 AM
JT 0321	A	6:57:00 AM
JQ 0114U	D	6:57:00 AM
JT 0500	D	6:57:00 AM
GA 0111	A	6:58:00 AM
SJ 0070	D	7:00:00 AM
GA 0142	D	7:02:00 AM
JT 0030	D	7:03:00 AM
SJ 0081	A	7:03:00 AM
JT 0388	D	7:04:00 AM
SJ 0221	A	7:05:00 AM
Y6 0861	D	7:07:00 AM
GA 0303	A	7:08:00 AM
JT 0773	A	7:09:00 AM
GAC 0040	D	7:09:00 AM
JT 0331	A	7:10:00 AM
GAC 0010	A	7:10:00 AM
GA 0304	D	7:11:00 AM
GAC 0090	D	7:13:00 AM
JT 0340	D	7:14:00 AM
GA 0170	D	7:15:00 AM
SJ 0092	D	7:16:00 AM
JT 0570	D	7:19:00 AM
GA 0431	A	7:19:00 AM
JT 0011	A	7:19:00 AM
Y6 0322	A	7:20:00 AM
GA 0512	D	7:21:00 AM
JT 0300	D	7:22:00 AM
JT 0614	D	7:24:00 AM
SJ 0257	A	7:24:00 AM
GA 0531	A	7:25:00 AM
GA 0181	A	7:30:00 AM
Y6 0585	D	7:30:00 AM
JT 0374	D	7:31:00 AM
Y6 0591	D	7:31:00 AM

Flight_No	Leg	Actual Dept/Arr
Y6 0735	D	7:34:00 AM
JT 0351	A	7:34:00 AM
Y6 0655	D	7:37:00 AM
Y6 0571	D	7:37:00 AM
GA 0501	A	7:38:00 AM
JT 0552	D	7:42:00 AM
JT 0763	A	7:42:00 AM
JT 0511	A	7:43:00 AM
Y6 0892	A	7:44:00 AM
JT 0561	A	7:45:00 AM
GA 0438	D	7:46:00 AM
GA 0403	A	7:48:00 AM
GA 0611	A	7:50:00 AM
SJ 0079	A	7:50:00 AM
GA 0511	A	7:51:00 AM
Y6 0563	D	7:53:00 AM
JT 0723	A	7:54:00 AM
JT 0536	D	7:57:00 AM
GA 0161	A	7:59:00 AM
GA 0112	D	8:00:00 AM
JT 0752	D	8:00:00 AM
GA 0204	D	8:00:00 AM
JT 0211	A	8:00:00 AM
GA 0823	A	8:01:00 AM
QZ 7780	D	8:02:00 AM
AK 0380	A	8:04:00 AM
SJ 0211	A	8:04:00 AM
GA 0182	D	8:06:00 AM
JT 0785	A	8:09:00 AM
GA 0089	A	8:10:00 AM
GA 0232V	D	8:10:00 AM
GAC 0011	D	8:10:00 AM
JT 0152	D	8:11:00 AM
Y6 0672	A	8:15:00 AM
GA 0306	D	8:17:00 AM
SQ 0952	A	8:19:00 AM
GA 0305	A	8:21:00 AM
SJ 0185	A	8:21:00 AM
JT 0350	D	8:22:00 AM
SJ 0039	A	8:23:00 AM
Y6 0893	D	8:24:00 AM

Flight_No	Leg	Actual Dept/Arr
JT 0571	A	8:24:00 AM
JT 0671	A	8:25:00 AM
JT 0393	A	8:27:00 AM
GA 0233	A	8:28:00 AM
CX 0718	D	8:30:00 AM
SJ 0088	D	8:32:00 AM
SJ 0060	D	8:32:00 AM
GA 0171	A	8:32:00 AM
GA 0113	A	8:33:00 AM
GA 0514	D	8:35:00 AM
JT 0394	D	8:36:00 AM
SJ 0068	D	8:37:00 AM
Y6 0852	A	8:38:00 AM
TR 2274	A	8:38:00 AM
Y6 0210	A	8:40:00 AM
JT 0150	D	8:41:00 AM
GA 0223	A	8:42:00 AM
GA 0290	D	8:42:00 AM
QZ 7782	D	8:42:00 AM
MH 0713	A	8:44:00 AM
GA 0819	A	8:47:00 AM
JT 0607	A	8:47:00 AM
JT 0778	D	8:47:00 AM
GA 0100	D	8:47:00 AM
Y6 0505	D	8:49:00 AM
VF 0201	A	8:49:00 AM
JT 0711	A	8:50:00 AM
JT 0572	D	8:50:00 AM
GA 0602	D	8:51:00 AM
AK 0381	D	8:51:00 AM
GA 0203	A	8:52:00 AM
Y6 0644	A	8:53:00 AM
Y6 0346	A	8:55:00 AM
JT 0504	D	8:56:00 AM
GA 0402	D	8:57:00 AM
GA 0820	D	8:59:00 AM
JT 0501	A	9:00:00 AM
JT 0381	A	9:02:00 AM
JT 0565	A	9:04:00 AM
JT 0771	A	9:04:00 AM
GA 0898	D	9:05:00 AM
GA 0234	D	9:08:00 AM
SJ 0051	A	9:10:00 AM

Flight_No	Leg	Actual Dept/Arr
GA 0184	D	9:11:00 AM
GA 0824	D	9:11:00 AM
JT 0673	A	9:12:00 AM
JT 0302	D	9:13:00 AM
JT 0654	D	9:14:00 AM
SJ 0104	D	9:16:00 AM
SJ 0181	A	9:17:00 AM
CZ 0388	D	9:19:00 AM
GA 0131	A	9:19:00 AM
GA 0308	D	9:19:00 AM
SJ 0224	D	9:20:00 AM
SJ 0071	A	9:22:00 AM
JT 0691	A	9:23:00 AM
JT 0330	D	9:25:00 AM
GA 0307	A	9:27:00 AM
Y6 0202	A	9:27:00 AM
SQ 0953	D	9:28:00 AM
SJ 0032	D	9:29:00 AM
JT 0341	A	9:30:00 AM
GA 0981	A	9:31:00 AM
GA 0152	D	9:32:00 AM
SJ 0010	D	9:37:00 AM
GA 0151	A	9:37:00 AM
GA 0503	A	9:39:00 AM
SJ 0591	A	9:39:00 AM
JT 0322	D	9:40:00 AM
GA 0114	D	9:40:00 AM
Y6 0651	D	9:41:00 AM
GA 0206	D	9:41:00 AM
JT 0390	D	9:41:00 AM
SJ 0093	A	9:43:00 AM
JT 0615	A	9:46:00 AM
JT 0304	D	9:47:00 AM
Y6 0632	A	9:48:00 AM
Y6 0521	D	9:49:00 AM
Y6 0553	D	9:51:00 AM
GA 0102	D	9:51:00 AM
JT 0376	D	9:52:00 AM
MH 0712	D	9:52:00 AM
GA 0613	A	9:53:00 AM
QZ 7511	A	9:54:00 AM
Y6 0635	D	9:56:00 AM
Y6 0702	A	9:57:00 AM

Flight_No	Leg	Actual Dept/Arr
GA 0866	D	9:59:00 AM
SJ 0089	A	9:59:00 AM
TR 2275	D	10:02:00 AM
GA 0404	D	10:04:00 AM
SQ 0956	A	10:05:00 AM
VF 0202	D	10:05:00 AM
GA 0860	D	10:07:00 AM
JT 0636	D	10:08:00 AM
JT 0692	D	10:09:00 AM
GA 0430	D	10:10:00 AM
JT 0020	D	10:12:00 AM
Y6 0506	A	10:13:00 AM
JT 0758	D	10:14:00 AM
SJ 0172	D	10:14:00 AM
MH 0711	A	10:16:00 AM
JT 0253	A	10:16:00 AM
JT 0558	D	10:18:00 AM
GA 0513	A	10:18:00 AM
JT 0200	D	10:22:00 AM
GA 0551	A	10:22:00 AM
JT 0323	A	10:23:00 AM
GA 0533	A	10:23:00 AM
JT 0574	D	10:24:00 AM
JT 0397	A	10:26:00 AM
SJ 0250	D	10:28:00 AM
SJ 0190	D	10:29:00 AM
GA 0205	A	10:30:00 AM
JT 0537	A	10:31:00 AM
GA 0310	D	10:31:00 AM
GA 0235	A	10:32:00 AM
JT 0358	D	10:32:00 AM
JT 0389	A	10:33:00 AM
GA 0309	A	10:33:00 AM
JT 0553	A	10:34:00 AM
GA 0115	A	10:34:00 AM
JT 0712	D	10:36:00 AM
SJ 0054	D	10:36:00 AM
GA 0132	D	10:37:00 AM
GA 0825	A	10:42:00 AM
Y6 0661	D	10:45:00 AM
GA 0101	A	10:46:00 AM
GA 0163	A	10:47:00 AM
SJ 0072	D	10:49:00 AM

Flight_No	Leg	Actual Dept/Arr
GA 0502	D	10:50:00 AM
GA 0608	D	10:50:00 AM
SJ 0061	A	10:52:00 AM
SJ 0069	A	10:53:00 AM
JT 0616	D	10:53:00 AM
Y6 0541	D	10:59:00 AM
Y6 0583	D	11:00:00 AM
QZ 7512	D	11:00:00 AM
JT 0031	A	11:00:00 AM
SJ 0210	D	11:02:00 AM
GA 0172	D	11:04:00 AM
Y6 0586	A	11:04:00 AM
GAC 0014	A	11:07:00 AM
GA 0641	A	11:08:00 AM
PV 0004	D	11:08:00 AM
JT 0761	A	11:09:00 AM
GA 0173	A	11:09:00 AM
JT 0505	A	11:11:00 AM
QZ 7691	A	11:11:00 AM
JT 0373	A	11:15:00 AM
GA 0183	A	11:15:00 AM
JT 0204	D	11:17:00 AM
MH 0710	D	11:19:00 AM
JT 0789	A	11:20:00 AM
JT 0207	A	11:21:00 AM
QZ 7781	A	11:21:00 AM
SJ 0083	A	11:21:00 AM
Y6 0572	A	11:23:00 AM
GA 0311	A	11:25:00 AM
Y6 0243	D	11:27:00 AM
TR 2272	A	11:28:00 AM
GA 0405	A	11:30:00 AM
Y6 0564	A	11:30:00 AM
GA 0237V	A	11:32:00 AM
GA 0222	D	11:34:00 AM
GA 0208	D	11:35:00 AM
GA 0312	D	11:36:00 AM
GA 0515	A	11:38:00 AM
JT 0370	D	11:38:00 AM
GA 0186	D	11:38:00 AM
JT 0333	A	11:40:00 AM
GA 0103	A	11:41:00 AM
JT 0796	D	11:41:00 AM

Flight_No	Leg	Actual Dept/Arr
GAC 0091	A	11:41:00 AM
JT 0576	D	11:42:00 AM
GA 0236	D	11:44:00 AM
JT 0573	A	11:45:00 AM
GA 0826	D	11:46:00 AM
JT 0353	A	11:47:00 AM
GA 0116	D	11:47:00 AM
SQ 0957	D	11:48:00 AM
Y6 0531	D	11:49:00 AM
GA 0980	D	11:49:00 AM
JT 0775	A	11:49:00 AM
JT 0604	D	11:50:00 AM
JT 0017	A	11:50:00 AM
SJ 0246	D	11:50:00 AM
QZ 7784	D	11:51:00 AM
SJ 0231	A	11:52:00 AM
GA 0162	D	11:53:00 AM
SJ 0096	D	11:53:00 AM
GA 0291	A	11:57:00 AM
GA 0207	A	12:00:00 PM
QZ 7692	D	12:00:00 PM
JT 0290	D	12:03:00 PM
GA 0117	A	12:05:00 PM
GA 0022	A	12:05:00 PM
SJ 0225	A	12:09:00 PM
GAC 0041	A	12:09:00 PM
JT 0153	A	12:09:00 PM
GA 0532	D	12:11:00 PM
Y6 0565	D	12:12:00 PM
GA 0516	D	12:15:00 PM
JT 0764	D	12:17:00 PM
GA 0146	D	12:17:00 PM
GA 0313	A	12:17:00 PM
JT 0506	D	12:17:00 PM
JT 0344	D	12:18:00 PM
JT 0753	A	12:19:00 PM
Y6 0522	A	12:19:00 PM
SJ 0266	D	12:19:00 PM
Y6 0203	D	12:22:00 PM
TG 0433	A	12:22:00 PM
Y6 0515	D	12:23:00 PM
PR 0503	A	12:24:00 PM
JT 0774	D	12:24:00 PM

Flight_No	Leg	Actual Dept/Arr
Y6 0592	A	12:25:00 PM
GA 0406	D	12:25:00 PM
JT 0301	A	12:26:00 PM
JT 0022	D	12:26:00 PM
GA 0058	D	12:27:00 PM
JT 0559	A	12:28:00 PM
GA 0036	D	12:30:00 PM
QZ 7783	A	12:32:00 PM
JT 0637	A	12:33:00 PM
JT 0398	D	12:35:00 PM
SJ 0055	A	12:36:00 PM
GA 0314	D	12:38:00 PM
JT 0795	A	12:39:00 PM
TR 2273	D	12:40:00 PM
Y6 0301	D	12:40:00 PM
GA 0407	A	12:44:00 PM
GA 0238	D	12:46:00 PM
CX 0777	A	12:50:00 PM
SJ 0599	A	12:53:00 PM
GA 0827	A	12:55:00 PM
GA 0104	D	12:57:00 PM
GA 0153	A	12:57:00 PM
GA 0185	A	12:58:00 PM
GA 0292	D	12:59:00 PM
GA 0080	D	1:00:00 PM
CI 0761	A	1:00:00 PM
GA 0210	D	1:01:00 PM
JT 0655	A	1:02:00 PM
JT 0324	D	1:03:00 PM
GA 0517	A	1:04:00 PM
JT 0338	D	1:05:00 PM
SQ 0958	A	1:08:00 PM
GA 0651	A	1:08:00 PM
JT 0154	D	1:09:00 PM
JT 0352	D	1:10:00 PM
GA 0133	A	1:11:00 PM
SJ 0105	A	1:12:00 PM
GA 0188	D	1:12:00 PM
JT 0652	D	1:13:00 PM
JT 0325	A	1:14:00 PM
SJ 0960	D	1:15:00 PM
SJ 0097	A	1:17:00 PM
QZ 7344	D	1:19:00 PM

Flight_No	Leg	Actual Dept/Arr
JT 0617	A	1:20:00 PM
SJ 0073	A	1:21:00 PM
Y6 0593	D	1:22:00 PM
JT 0728	D	1:22:00 PM
SJ 0251	A	1:22:00 PM
GA 0021	D	1:22:00 PM
Y6 0712	A	1:22:00 PM
JT 0395	A	1:23:00 PM
JT 0575	A	1:24:00 PM
JT 0556	D	1:26:00 PM
JT 0377	A	1:26:00 PM
SJ 0186	D	1:27:00 PM
SJ 0074	D	1:27:00 PM
SJ 0213	A	1:29:00 PM
BR 0237	A	1:30:00 PM
JT 0382	D	1:31:00 PM
GA 0315	A	1:31:00 PM
GA 0316	D	1:32:00 PM
TG 0434	D	1:32:00 PM
SJ 0173	A	1:33:00 PM
Y6 0554	A	1:35:00 PM
GA 0118	D	1:37:00 PM
GA 0154	D	1:39:00 PM
JT 0012	D	1:39:00 PM
GA 0508	D	1:40:00 PM
JT 0524	D	1:45:00 PM
GA 0717	A	1:45:00 PM
JT 0742	D	1:46:00 PM
JT 0021	A	1:47:00 PM
PR 0504	D	1:47:00 PM
GA 0409	A	1:47:00 PM
JT 0634	D	1:49:00 PM
JT 0111	A	1:50:00 PM
QZ 7341	A	1:51:00 PM
GA 0239	A	1:57:00 PM
Y6 0542	A	1:57:00 PM
JT 0378	D	1:59:00 PM
PV 0005	A	2:00:00 PM
Y6 0532	A	2:01:00 PM
SJ 0230	D	2:01:00 PM
SJ 0191	A	2:03:00 PM
GA 0187	A	2:03:00 PM
GA 0209	A	2:03:00 PM

Flight_No	Leg	Actual Dept/Arr
QZ 7669	A	2:04:00 PM
JT 0303	A	2:06:00 PM
GA 0225	A	2:06:00 PM
SJ 0161	A	2:12:00 PM
GA 0119	A	2:12:00 PM
SJ 0094	D	2:13:00 PM
GA 0505	A	2:14:00 PM
GA 0610	D	2:14:00 PM
GA 0174	D	2:14:00 PM
GA 0821	A	2:14:00 PM
QZ 7694	D	2:17:00 PM
GA 0212	D	2:18:00 PM
JT 0713	A	2:18:00 PM
JT 0582	D	2:18:00 PM
GA 0108	D	2:19:00 PM
JT 0608	D	2:20:00 PM
Y6 0244	A	2:20:00 PM
SQ 0959	D	2:20:00 PM
GA 0433	A	2:21:00 PM
JT 0359	A	2:22:00 PM
GA 0828	D	2:22:00 PM
AK 0384	A	2:24:00 PM
SJ 0260	D	2:26:00 PM
JT 0751	A	2:27:00 PM
SJ 0590	D	2:27:00 PM
SJ 0248	D	2:28:00 PM
JT 0605	A	2:29:00 PM
SJ 0970	A	2:31:00 PM
SJ 0020	D	2:33:00 PM
QZ 7513	A	2:35:00 PM
CI 0762	D	2:36:00 PM
EY 0472	A	2:36:00 PM
Y6 0584	A	2:38:00 PM
Y6 0743	D	2:38:00 PM
JT 0507	A	2:39:00 PM
GA 0317	A	2:40:00 PM
GA 0408	D	2:41:00 PM
JT 0766	D	2:41:00 PM
JT 0577	A	2:42:00 PM
GA 0318	D	2:43:00 PM
VF 0203	A	2:43:00 PM
SJ 0034	D	2:44:00 PM
Y6 0371	D	2:45:00 PM

Flight_No	Leg	Actual Dept/Arr
Y6 0516	A	2:46:00 PM
QZ 7788	D	2:46:00 PM
Y6 0302	A	2:50:00 PM
GA 0105	A	2:51:00 PM
GA 0175	A	2:51:00 PM
JT 0793	A	2:52:00 PM
KU 0415	A	2:52:00 PM
JT 0292	D	2:54:00 PM
Y6 0551	D	2:56:00 PM
SJ 0247	A	2:57:00 PM
JT 0345	A	2:57:00 PM
NH 0937	A	2:58:00 PM
GA 0653	A	2:58:00 PM
JT 0371	A	2:58:00 PM
Y6 0543	D	2:59:00 PM
BR 0238	D	3:01:00 PM
JT 0201	A	3:01:00 PM
GA 0240	D	3:04:00 PM
SJ 0182	D	3:04:00 PM
GA 0241	A	3:04:00 PM
CX 0776	D	3:08:00 PM
AK 0385	D	3:09:00 PM
JT 0781	A	3:09:00 PM
GA 0605	A	3:11:00 PM
GA 0504	D	3:11:00 PM
Y6 0656	A	3:12:00 PM
GA 0136	D	3:14:00 PM
SJ 0222	D	3:14:00 PM
JT 0339	A	3:15:00 PM
SJ 0052	D	3:15:00 PM
GA 0895	A	3:15:00 PM
Y6 0812	A	3:16:00 PM
GA 0143	A	3:16:00 PM
Y6 0844	A	3:19:00 PM
Y6 0523	D	3:20:00 PM
GA 0830	D	3:20:00 PM
GA 0120	D	3:20:00 PM
MH 0721	A	3:22:00 PM
GA 0190	D	3:23:00 PM
JT 0291	A	3:24:00 PM
EK 0356	A	3:25:00 PM
QZ 7785	A	3:27:00 PM
GA 0518	D	3:27:00 PM

Flight_No	Leg	Actual Dept/Arr
QZ 7514	D	3:27:00 PM
QZ 7345	A	3:29:00 PM
SJ 0269	A	3:30:00 PM
GA 0211	A	3:31:00 PM
Y6 0566	A	3:31:00 PM
SJ 0095	A	3:31:00 PM
JT 0307	A	3:33:00 PM
GA 0164	D	3:34:00 PM
Y6 0204	A	3:35:00 PM
Y6 0205	D	3:37:00 PM
XN 0801	A	3:38:00 PM
GA 0879	A	3:38:00 PM
JT 0714	D	3:39:00 PM
JT 0384	D	3:40:00 PM
JT 0578	D	3:42:00 PM
GA 0535	A	3:42:00 PM
GA 0165	A	3:43:00 PM
SJ 0090	D	3:43:00 PM
GA 0829	A	3:44:00 PM
JT 0502	D	3:45:00 PM
SV 0820	A	3:45:00 PM
PV 0006	D	3:45:00 PM
TN 0709	A	3:45:00 PM
GA 0320	D	3:46:00 PM
SJ 0075	A	3:46:00 PM
GA 0121	A	3:48:00 PM
GA 0176	D	3:49:00 PM
GA 0713	A	3:49:00 PM
GA 0319	A	3:50:00 PM
JT 0018	D	3:51:00 PM
JT 0550	D	3:51:00 PM
VF 0204	D	3:53:00 PM
Y6 0631	D	3:54:00 PM
QZ 7693	A	3:54:00 PM
GA 0601	A	3:55:00 PM
GA 0059	A	3:56:00 PM
GA 0983	A	3:56:00 PM
SQ 0960	A	3:58:00 PM
SJ 0098	D	3:58:00 PM
JT 0557	A	3:59:00 PM
GA 0410	D	3:59:00 PM
GA 0293	A	4:00:00 PM
JT 0612	D	4:04:00 PM

Flight_No	Leg	Actual Dept/Arr
JT 0387	A	4:06:00 PM
JT 0326	D	4:06:00 PM
JT 0538	D	4:09:00 PM
GA 0520	D	4:10:00 PM
GA 0037	A	4:10:00 PM
JT 0749	A	4:11:00 PM
GA 0138	D	4:11:00 PM
GA 0109	A	4:13:00 PM
JT 0334	D	4:14:00 PM
QZ 7519	A	4:14:00 PM
GA 0214	D	4:18:00 PM
JT 0768	D	4:19:00 PM
JT 0635	A	4:19:00 PM
Y6 0577	D	4:21:00 PM
JT 0396	D	4:22:00 PM
GA 0189	A	4:22:00 PM
JT 0202	D	4:23:00 PM
JT 0023	A	4:23:00 PM
GA 0242	D	4:23:00 PM
MH 0720	D	4:24:00 PM
SJ 0214	D	4:24:00 PM
GA 0020	A	4:25:00 PM
GA 0106	D	4:27:00 PM
JT 0765	A	4:28:00 PM
JL 0725	A	4:31:00 PM
JT 0799	A	4:32:00 PM
GA 0321	A	4:32:00 PM
JT 0372	D	4:32:00 PM
GA 0439	A	4:32:00 PM
SJ 0187	A	4:33:00 PM
Y6 0344	A	4:36:00 PM
QZ 7736	D	4:38:00 PM
QZ 7716	D	4:39:00 PM
GA 0509V	A	4:41:00 PM
GA 0519	A	4:41:00 PM
Y6 0671	D	4:44:00 PM
JT 0327	A	4:44:00 PM
SJ 0076	D	4:45:00 PM
JT 0355	A	4:45:00 PM
Y6 0315	D	4:48:00 PM
JT 0156	D	4:48:00 PM
Y6 0636	A	4:49:00 PM
JT 0294	D	4:49:00 PM

Flight_No	Leg	Actual Dept/Arr
GA 0224	D	4:50:00 PM
MZ 0791	A	4:50:00 PM
JT 0609	A	4:51:00 PM
Y6 0561	D	4:53:00 PM
SJ 0593	A	4:55:00 PM
GA 0832	D	4:55:00 PM
GA 0213	A	4:55:00 PM
GA 0322	D	4:56:00 PM
SJ 0086	D	4:58:00 PM
JT 0391	A	5:01:00 PM
GA 0156	D	5:03:00 PM
GA 0122	D	5:04:00 PM
JT 0155	A	5:04:00 PM
TN 0708	D	5:04:00 PM
JT 0354	D	5:05:00 PM
JT 0525	A	5:06:00 PM
GA 0081	A	5:08:00 PM
JT 0581	A	5:09:00 PM
SJ 0053	A	5:10:00 PM
JT 0779	A	5:15:00 PM
SQ 0961	D	5:15:00 PM
Y6 0701	D	5:16:00 PM
GA 0534	D	5:16:00 PM
KL 0809	A	5:17:00 PM
Y6 0552	A	5:19:00 PM
QZ 7518	D	5:21:00 PM
JT 0015	A	5:22:00 PM
GA 0506	D	5:23:00 PM
GA 0243	A	5:25:00 PM
GA 0155	A	5:25:00 PM
GA 0522	D	5:25:00 PM
JT 0653	A	5:25:00 PM
JT 0379	A	5:26:00 PM
JT 0399	A	5:26:00 PM
GA 0867	A	5:27:00 PM
GA 0044	D	5:29:00 PM
SJ 0011	A	5:33:00 PM
GA 0192V	D	5:34:00 PM
GAC 0015	D	5:34:00 PM
SV 0825	D	5:35:00 PM
Y6 0544	A	5:37:00 PM
MH 0723	A	5:37:00 PM
JT 0554	D	5:38:00 PM

Flight_No	Leg	Actual Dept/Arr
Y6 0652	A	5:38:00 PM
GA 0323	A	5:39:00 PM
GA 0818	D	5:40:00 PM
SJ 0099	A	5:41:00 PM
GA 0244	D	5:42:00 PM
GA 0412	D	5:44:00 PM
Y6 0524	A	5:45:00 PM
JT 0024	D	5:46:00 PM
SJ 0040	D	5:46:00 PM
GA 0123	A	5:47:00 PM
LH 0778	A	5:48:00 PM
GA 0324	D	5:49:00 PM
GA 0885V	A	5:49:00 PM
JT 0782N	D	5:50:00 PM
SJ 0249	A	5:54:00 PM
GA 0177	A	5:54:00 PM
JT 0606	D	5:54:00 PM
GA 0137	A	5:56:00 PM
JT 0696	D	5:56:00 PM
GA 0216	D	5:57:00 PM
SJ 0267	A	5:57:00 PM
GA 0612	D	5:58:00 PM
SQ 0962	A	5:58:00 PM
JT 0503	A	5:58:00 PM
SJ 0183	A	5:58:00 PM
Y6 0361	D	6:00:00 PM
SJ 0062	D	6:00:00 PM
GA 0023	D	6:02:00 PM
EK 0357	D	6:02:00 PM
GA 0191	A	6:03:00 PM
GA 0507	A	6:05:00 PM
Y6 0594	A	6:07:00 PM
SJ 0091	A	6:07:00 PM
Y6 0372	A	6:08:00 PM
JT 0586	D	6:08:00 PM
SJ 0261	A	6:09:00 PM
JT 0254	D	6:11:00 PM
GA 0432	D	6:13:00 PM
JT 0336	D	6:14:00 PM
SJ 0016	D	6:15:00 PM
JT 0206	D	6:16:00 PM
JT 0157	A	6:17:00 PM
JT 0293	A	6:18:00 PM

Flight_No	Leg	Actual Dept/Arr
JT 0693	A	6:19:00 PM
Y6 0846D	A	6:21:00 PM
Y6 0744	A	6:22:00 PM
QF 0041	A	6:22:00 PM
JT 0720	D	6:22:00 PM
Y6 0206	A	6:23:00 PM
JT 0158	D	6:23:00 PM
GAC 0017	D	6:24:00 PM
SJ 0212	D	6:25:00 PM
GA 0107	A	6:28:00 PM
QZ 7695	A	6:29:00 PM
GA 0831	A	6:31:00 PM
SJ 0033	A	6:32:00 PM
GA 0178	D	6:32:00 PM
JT 0784	D	6:32:00 PM
GA 0215	A	6:33:00 PM
SJ 0087	A	6:34:00 PM
JT 0383	A	6:36:00 PM
JT 0564	D	6:36:00 PM
JT 0026	D	6:37:00 PM
SJ 0038	D	6:38:00 PM
GA 0245	A	6:39:00 PM
SJ 0015	A	6:40:00 PM
JT 0715	A	6:41:00 PM
GA 0139	A	6:44:00 PM
JT 0551	A	6:45:00 PM
SJ 0078	D	6:45:00 PM
EY 0471	D	6:47:00 PM
JT 0777	A	6:48:00 PM
MH 0722	D	6:49:00 PM
JT 0770	D	6:50:00 PM
JT 0613	A	6:51:00 PM
MH 0725	A	6:51:00 PM
GA 0603	A	6:51:00 PM
QZ 7789	A	6:51:00 PM
KL 0810	D	6:53:00 PM
JT 0579	A	6:56:00 PM
GA 0413	A	6:57:00 PM
JT 0539	A	6:58:00 PM
GA 0326	D	6:58:00 PM
MJ 0603A	A	6:59:00 PM
GA 0536	D	6:59:00 PM
Y6 0662	A	7:04:00 PM

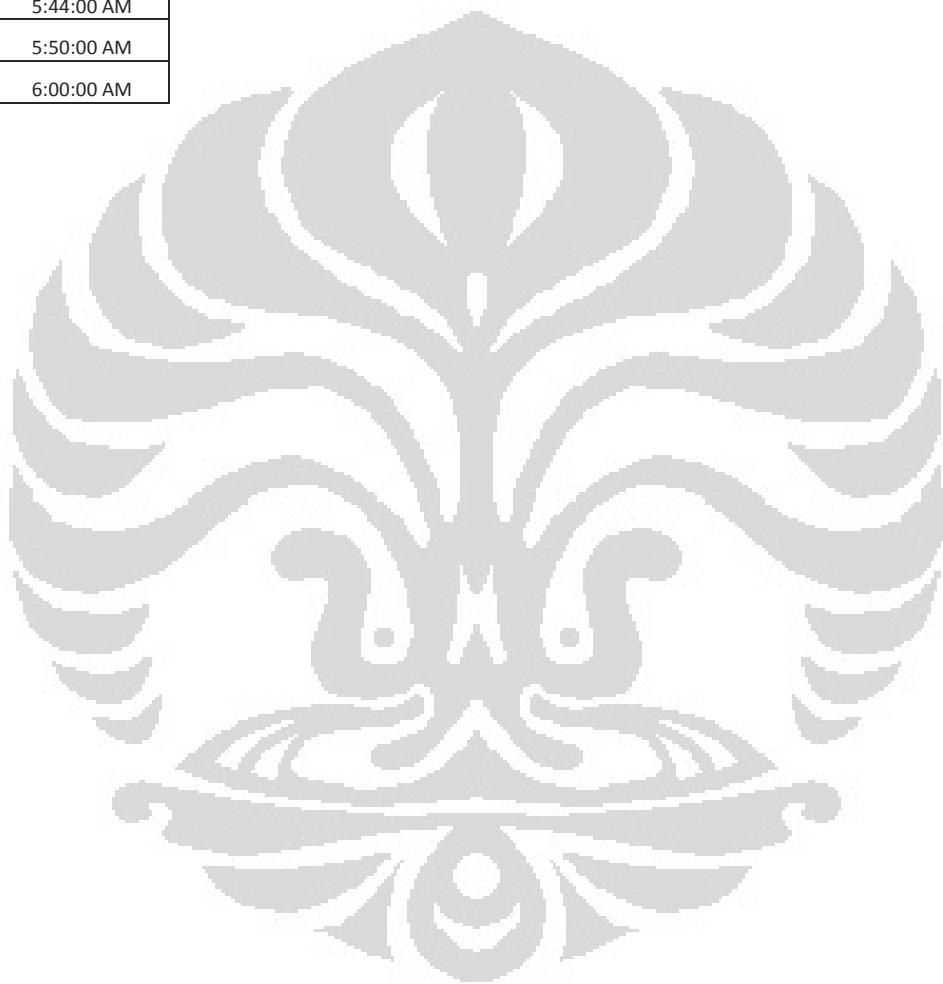
Flight_No	Leg	Actual Dept/Arr
JT 0335	A	7:04:00 PM
GA 0982	D	7:05:00 PM
GA 0655	A	7:05:00 PM
JT 0767	A	7:07:00 PM
SJ 0014	D	7:07:00 PM
LH 0779	D	7:08:00 PM
SJ 0184	D	7:08:00 PM
GA 0124	D	7:08:00 PM
GA 0218	D	7:09:00 PM
GA 0885	D	7:09:00 PM
JT 0721	A	7:09:00 PM
Y6 0316	A	7:10:00 PM
GA 0325	A	7:10:00 PM
SJ 0215	A	7:11:00 PM
SJ 0084	D	7:12:00 PM
Y6 0209	D	7:12:00 PM
GA 0833	A	7:14:00 PM
SJ 0077	A	7:14:00 PM
QZ 7786	D	7:17:00 PM
SQ 0963	D	7:17:00 PM
SQ 0966	A	7:21:00 PM
GA 0609	A	7:22:00 PM
SJ 0080	D	7:22:00 PM
JT 0510	D	7:23:00 PM
QZ 7515	A	7:24:00 PM
Y6 0321	D	7:28:00 PM
SJ 0220	D	7:28:00 PM
GA 0899	A	7:29:00 PM
GA 0179	A	7:30:00 PM
GA 0166	D	7:30:00 PM
GA 0246	D	7:33:00 PM
JT 0580	D	7:33:00 PM
GA 0125	A	7:33:00 PM
GA 0834	D	7:34:00 PM
GA 0167	A	7:35:00 PM
JT 0016	D	7:36:00 PM
JT 0762	D	7:36:00 PM
GA 0227	A	7:37:00 PM
CX 0719	A	7:40:00 PM
GA 0126	D	7:42:00 PM
Y6 0736	A	7:42:00 PM
Y6 0345	D	7:43:00 PM
QZ 7696	D	7:44:00 PM

Flight No	Leg	Actual Dept/Arr
JT 0555	A	7:47:00 PM
JT 0585	A	7:49:00 PM
Y6 0578	A	7:49:00 PM
MH 0724	D	7:51:00 PM
JT 0386	D	7:52:00 PM
GA 0196	D	7:52:00 PM
JT 0329	A	7:57:00 PM
JT 0650	D	7:57:00 PM
GA 0416	D	7:58:00 PM
JT 0678	D	8:00:00 PM
GA 0521	A	8:00:00 PM
JT 0568	D	8:01:00 PM
JT 0328	D	8:01:00 PM
JT 0295	A	8:01:00 PM
JT 0630	D	8:03:00 PM
GA 0247	A	8:07:00 PM
QZ 7516	D	8:09:00 PM
JT 0375	A	8:09:00 PM
GA 0725	A	8:11:00 PM
GA 0725B	A	8:11:00 PM
GA 0524	D	8:12:00 PM
AK 0388	A	8:14:00 PM
JT 0356	D	8:16:00 PM
JT 0716	D	8:16:00 PM
GA 0217	A	8:16:00 PM
GA 0327	A	8:18:00 PM
KE 0627	A	8:19:00 PM
MJ 0604A	D	8:21:00 PM
Y6 0562	A	8:22:00 PM
SJ 0063	A	8:24:00 PM
CI 0679	A	8:24:00 PM
GA 0418	D	8:25:00 PM
GA 0523	A	8:26:00 PM
JT 0743	A	8:29:00 PM
JT 0337	A	8:31:00 PM
GA 0157	A	8:31:00 PM
GA 0328	D	8:32:00 PM
GA 0193	A	8:34:00 PM
GA 0863	A	8:35:00 PM
JT 0332	D	8:35:00 PM
JT 0357	A	8:38:00 PM
SQ 0967	D	8:38:00 PM
JT 0772	D	8:44:00 PM

Flight No	Leg	Actual Dept/Arr
JT 0151	A	8:47:00 PM
SJ 0041	A	8:47:00 PM
GA 0537	A	8:48:00 PM
QF 0042	D	8:52:00 PM
GA 0147	A	8:54:00 PM
JT 0563	A	8:54:00 PM
Y6 0862	A	8:55:00 PM
AK 0389	D	8:58:00 PM
SJ 0223	A	8:59:00 PM
GA 0835	A	8:59:00 PM
MZ 0761	A	9:02:00 PM
JT 0385	A	9:04:00 PM
GA 0329	A	9:06:00 PM
JT 0010	D	9:06:00 PM
GA 0016A	A	9:06:00 PM
Y6 0845	D	9:10:00 PM
JT 0587	A	9:15:00 PM
QR 0670	A	9:19:00 PM
GA 0330	D	9:19:00 PM
SJ 0085	A	9:20:00 PM
CZ 0387	A	9:23:00 PM
Y6 0362	A	9:25:00 PM
GA 0127	A	9:25:00 PM
JT 0392	D	9:27:00 PM
JT 0025	A	9:27:00 PM
GA 0650	D	9:30:00 PM
GA 0525	A	9:35:00 PM
JT 0255	A	9:36:00 PM
JT 0584	D	9:45:00 PM
GA 0088	D	9:48:00 PM
NH 0938	D	9:49:00 PM
JL 0726	D	9:51:00 PM
MZ 0774	D	9:52:00 PM
SJ 0256	D	9:52:00 PM
AP 0001	D	9:55:00 PM
GA 0420	D	9:55:00 PM
GA 0884	A	9:56:00 PM
GAC 0019	D	9:58:00 PM
JT 0203	A	10:01:00 PM
GA 0332	D	10:01:00 PM
SJ 0021	A	10:06:00 PM
GA 0331	A	10:06:00 PM
GAC 0018	A	10:06:00 PM

Flight No	Leg	Actual Dept/Arr
JT 0159	A	10:13:00 PM
SJ 0035	A	10:15:00 PM
GA 0417	A	10:15:00 PM
KE 0628	D	10:17:00 PM
GAC 0045	A	10:19:00 PM
JT 0027	A	10:23:00 PM
JT 0783	A	10:26:00 PM
JT 0633	A	10:29:00 PM
GA 0195	A	10:30:00 PM
SQ 0968	A	10:34:00 PM
JT 0583	A	10:36:00 PM
GA 0419	A	10:39:00 PM
MH 0727	A	10:43:00 PM
SJ 0017	A	10:50:00 PM
JT 0308	D	10:51:00 PM
GA 0652	D	10:56:00 PM
QZ 7787	A	11:00:00 PM
GA 0421	A	11:00:00 PM
JT 0798	D	11:00:00 PM
JT 0309	A	11:00:00 PM
KU 0416	D	11:09:00 PM
QZ 7737	A	11:10:00 PM
JT 0019	A	11:15:00 PM
Y6 0837	D	11:20:00 PM
BI 0737	A	11:22:00 PM
GA 0884	D	11:24:00 PM
GA 0333	A	11:26:00 PM
EK 0358	A	11:34:00 PM
5J 0759	A	11:39:00 PM
GA 0712	D	11:40:00 PM
QZ 7697	A	11:54:00 PM
QZ 7517	A	11:55:00 PM
GA 0894	D	12:18:00 AM
8K 0302	D	12:21:00 AM
QZ 7717N	A	12:34:00 AM
5J 0760	D	12:44:00 AM
8F 0113	A	12:50:00 AM
SJ 0598	D	12:54:00 AM
GA 0640	D	1:01:00 AM
QR 0671	D	1:04:00 AM
Y6 0851	D	1:16:00 AM
EK 0359	D	1:37:00 AM
JT 0790	D	1:49:00 AM

Flight_No	Leg	Actual Dept/Arr
Y6 0643	D	2:04:00 AM
8F 0110	D	2:51:00 AM
GA 0300	D	5:13:00 AM
BI 0738	D	5:14:00 AM
XN 0800	D	5:14:00 AM
MH 0726	D	5:19:00 AM
JT 0792	D	5:21:00 AM
MZ 0762	D	5:22:00 AM
JT 0776	D	5:25:00 AM
SJ 0592	D	5:44:00 AM
GA 0654	D	5:50:00 AM
GA 0180	D	6:00:00 AM



Data Pergerakan Pesawat Hari 2, 13 April 2011 – 14 April 2011

Flight_No	Leg	Actual Dept/Arr
GA 0600	D	6:00:00 AM
SQ 0951	D	6:04:00 AM
GA 0180	D	6:05:00 AM
CX 0736	D	6:06:00 AM
SJ 0180	D	6:08:00 AM
GA 0510	D	6:10:00 AM
GA 0302	D	6:10:00 AM
Y6 0343	D	6:11:00 AM
Y6 0811	D	6:12:00 AM
QZ 7340	D	6:13:00 AM
GA 0230	D	6:14:00 AM
GA 0220	D	6:15:00 AM
JT 0380	D	6:15:00 AM
JT 0788	D	6:15:00 AM
QZ 7668	D	6:16:00 AM
GA 0150	D	6:17:00 AM
GA 0110	D	6:19:00 AM
SJ 0160	D	6:21:00 AM
GA 0500V	D	6:22:00 AM
JT 0562	D	6:23:00 AM
Y6 0201	D	6:23:00 AM
Y6 0711	D	6:24:00 AM
JT 0320	D	6:24:00 AM
GA 0530	D	6:25:00 AM
GA 0401	A	6:26:00 AM
SJ 0050	D	6:27:00 AM
GA 0400	D	6:28:00 AM
GA 0130	D	6:28:00 AM
JT 0748	D	6:29:00 AM
JT 0760	D	6:29:00 AM
QZ 7690	D	6:32:00 AM
GA 0202	D	6:32:00 AM
JT 0152	D	6:34:00 AM
QZ 7510	D	6:34:00 AM
GA 0550	D	6:36:00 AM
CI 0680	D	6:38:00 AM
JT 0252	D	6:39:00 AM
GA 0100	D	6:40:00 AM
JT 0651	A	6:41:00 AM
GA 0231	A	6:43:00 AM
GA 0822V	D	6:44:00 AM
GA 0201	A	6:49:00 AM

Flight_No	Leg	Actual Dept/Arr
SJ 0082	D	6:50:00 AM
JT 0030	D	6:50:00 AM
GA 0111	A	6:51:00 AM
SJ 0070	D	6:52:00 AM
GA 0724B	D	6:54:00 AM
JT 0321	A	6:54:00 AM
GA 0724	D	6:54:00 AM
JT 0500	D	6:57:00 AM
SJ 0250	D	6:57:00 AM
GA 0604	D	6:57:00 AM
GA 0303	A	6:58:00 AM
SJ 0081	A	6:58:00 AM
GA 0142	D	7:01:00 AM
JT 0773	A	7:01:00 AM
Y6 0322	A	7:03:00 AM
Y6 0861	D	7:03:00 AM
JT 0331	A	7:04:00 AM
GA 0512	D	7:06:00 AM
GAC 0040	D	7:06:00 AM
SJ 0221	A	7:06:00 AM
GA 0160	D	7:07:00 AM
GAC 0010	A	7:07:00 AM
JT 0011	A	7:08:00 AM
Y6 0892	A	7:12:00 AM
JT 0340	D	7:12:00 AM
GAC 0090	D	7:12:00 AM
Y6 0591	D	7:14:00 AM
GA 0304V	D	7:15:00 AM
GA 0531	A	7:16:00 AM
JT 0570	D	7:17:00 AM
SJ 0257	A	7:19:00 AM
JT 0388	D	7:20:00 AM
JT 0614	D	7:21:00 AM
GA 0431	A	7:22:00 AM
SJ 0092	D	7:22:00 AM
KE 0375	D	7:23:00 AM
JT 0374	D	7:24:00 AM
QZ 7780	D	7:25:00 AM
GA 0170	D	7:29:00 AM
JT 0763	A	7:30:00 AM
GA 0181	A	7:31:00 AM
JT 0351	A	7:33:00 AM

Flight_No	Leg	Actual Dept/Arr
GA 0611	A	7:36:00 AM
Y6 0585	D	7:39:00 AM
GA 0438	D	7:40:00 AM
GA 0501	A	7:41:00 AM
JT 0511	A	7:42:00 AM
JT 0536	D	7:43:00 AM
Y6 0735	D	7:44:00 AM
GA 0403	A	7:45:00 AM
Y6 0655	D	7:48:00 AM
SJ 0079	A	7:49:00 AM
Y6 0563	D	7:50:00 AM
JT 0723	A	7:53:00 AM
JT 0300	D	7:53:00 AM
GA 0511	A	7:54:00 AM
GA 0089	A	7:55:00 AM
JT 0561	A	7:56:00 AM
GA 0112	D	7:57:00 AM
GA 0823	A	7:58:00 AM
SJ 0211	A	7:58:00 AM
JT 0552	D	8:00:00 AM
GA 0161	A	8:02:00 AM
GAC 0011	D	8:03:00 AM
JT 0785	A	8:03:00 AM
GA 0232	D	8:04:00 AM
JT 0211	A	8:05:00 AM
JT 0752	D	8:05:00 AM
GA 0305	A	8:08:00 AM
SQ 0952	A	8:09:00 AM
Y6 0852	A	8:09:00 AM
GA 0182	D	8:10:00 AM
AK 0380	A	8:12:00 AM
JT 0350	D	8:12:00 AM
Y6 0210	A	8:13:00 AM
GA 0306	D	8:15:00 AM
SJ 0185	A	8:18:00 AM
SJ 0068	D	8:18:00 AM
JT 0394	D	8:19:00 AM
SJ 0060	D	8:22:00 AM
Y6 0672	A	8:23:00 AM
GA 0101	A	8:25:00 AM
SJ 0088	D	8:26:00 AM
Y6 0893	D	8:26:00 AM

Flight_No	Leg	Actual Dept/Arr
JT 0671A	A	8:26:00 AM
GA 0819	A	8:27:00 AM
SJ 0039	A	8:28:00 AM
Y6 0505	D	8:30:00 AM
GA 0204	D	8:31:00 AM
JT 0571	A	8:32:00 AM
JT 0150	D	8:33:00 AM
TR 2274	A	8:33:00 AM
GA 0233	A	8:35:00 AM
CX 0718	D	8:35:00 AM
GA 0171	A	8:36:00 AM
JT 0504	D	8:36:00 AM
GA 0000	A	8:40:00 AM
JT 0607	A	8:42:00 AM
GA 0223	A	8:43:00 AM
SJ 0051	A	8:44:00 AM
GA 0113	A	8:44:00 AM
GA 0514	D	8:45:00 AM
JT 0304	D	8:46:00 AM
JT 0778	D	8:47:00 AM
8K 0301	A	8:48:00 AM
GA 0290	D	8:49:00 AM
JT 0711	A	8:49:00 AM
GA 0602	D	8:50:00 AM
MH 0713	A	8:51:00 AM
SJ 0032	D	8:52:00 AM
VF 0201	A	8:53:00 AM
Y6 0346	A	8:53:00 AM
JT 0673	A	8:59:00 AM
AK 0381	D	9:00:00 AM
GA 0402	D	9:00:00 AM
JT 0771	A	9:01:00 AM
GA 0898	D	9:02:00 AM
SJ 0181	A	9:03:00 AM
JT 0572	D	9:03:00 AM
Y6 0571	D	9:04:00 AM
Y6 0644	A	9:06:00 AM
JT 0501	A	9:07:00 AM
GA 0203V	A	9:09:00 AM
JT 0565	A	9:10:00 AM
GA 0820	D	9:11:00 AM
SJ 0071	A	9:11:00 AM
JT 0322	D	9:11:00 AM

Flight_No	Leg	Actual Dept/Arr
GA 0234	D	9:12:00 AM
JT 0393	A	9:12:00 AM
CZ 0388	D	9:14:00 AM
JT 0381	A	9:14:00 AM
GA 0131	A	9:14:00 AM
GA 0184	D	9:15:00 AM
QZ 7782	D	9:18:00 AM
GA 0307	A	9:20:00 AM
JT 0341	A	9:20:00 AM
SJ 0104	D	9:21:00 AM
GA 0308	D	9:21:00 AM
JT 0302	D	9:24:00 AM
GA 0503	A	9:25:00 AM
GA 0824	D	9:26:00 AM
Y6 0635	D	9:26:00 AM
Y6 0202	A	9:27:00 AM
PV 0003	D	9:30:00 AM
SJ 0224	D	9:32:00 AM
JT 0654	D	9:33:00 AM
SJ 0010	D	9:33:00 AM
FX 5194	A	9:33:00 AM
JT 0323	A	9:35:00 AM
GA 0151	A	9:38:00 AM
Y6 0521	D	9:38:00 AM
SQ 0953	D	9:40:00 AM
JT 0691	A	9:42:00 AM
GA 0102	D	9:44:00 AM
JT 0615	A	9:47:00 AM
GA 0152	D	9:47:00 AM
GA 0206	D	9:49:00 AM
SJ 0072	D	9:49:00 AM
GA 0613	A	9:50:00 AM
GA 0114	D	9:52:00 AM
SJ 0093	A	9:52:00 AM
JT 0636	D	9:53:00 AM
MH 0712	D	9:54:00 AM
Y6 0702	A	9:54:00 AM
JT 0330	D	9:54:00 AM
GA 0981V	A	9:55:00 AM
Y6 0651	D	9:55:00 AM
Y6 0632	A	9:56:00 AM
SJ 0251	A	9:58:00 AM
Y6 0506	A	9:58:00 AM

Flight_No	Leg	Actual Dept/Arr
GA 0533	A	9:59:00 AM
GA 0866	D	9:59:00 AM
TR 2275	D	9:59:00 AM
SJ 0591	A	10:01:00 AM
JT 0712	D	10:02:00 AM
VF 0202	D	10:03:00 AM
SJ 0089	A	10:04:00 AM
GA 0860	D	10:05:00 AM
JT 0537	A	10:09:00 AM
JT 0758	D	10:10:00 AM
JT 0376	D	10:12:00 AM
MH 0711	A	10:12:00 AM
SJ 0190	D	10:14:00 AM
JT 0553	A	10:14:00 AM
Y6 0203	D	10:15:00 AM
JT 0020	D	10:16:00 AM
JT 0692	D	10:17:00 AM
JT 0253	A	10:17:00 AM
SJ 0186	D	10:17:00 AM
GA 0430	D	10:18:00 AM
JT 0781	A	10:20:00 AM
GA 0309	A	10:20:00 AM
JT 0390	D	10:20:00 AM
GA 0513	A	10:21:00 AM
JT 0558	D	10:21:00 AM
GA 0404	D	10:24:00 AM
GA 0551	A	10:25:00 AM
JT 0397	A	10:26:00 AM
GA 0235	A	10:28:00 AM
QZ 7511	A	10:29:00 AM
GA 0310	D	10:30:00 AM
SJ 0069	A	10:30:00 AM
GA 0132	D	10:31:00 AM
JT 0200	D	10:31:00 AM
SQ 0956	A	10:34:00 AM
JT 0389	A	10:35:00 AM
GA 0205	A	10:36:00 AM
GA 0502	D	10:38:00 AM
GA 0115	A	10:39:00 AM
GA 0825	A	10:41:00 AM
JT 0031	A	10:41:00 AM
JT 0153	A	10:42:00 AM
JT 0761	A	10:43:00 AM

Flight_No	Leg	Actual Dept/Arr
JT 0574	D	10:44:00 AM
Y6 0661	D	10:46:00 AM
QZ 7691	A	10:47:00 AM
JT 0373	A	10:47:00 AM
GA 0183	A	10:48:00 AM
JT 0616	D	10:48:00 AM
GA 0608V	D	10:49:00 AM
SJ 0054	D	10:50:00 AM
GA 0163	A	10:51:00 AM
GAC 0014	A	10:53:00 AM
SJ 0096	D	10:56:00 AM
JT 0505	A	10:57:00 AM
SJ 0061	A	10:58:00 AM
GA 0173	A	10:59:00 AM
SJ 0231	A	10:59:00 AM
JT 0358	D	11:01:00 AM
GA 0641	A	11:02:00 AM
GA 0172	D	11:03:00 AM
QZ 7781	A	11:06:00 AM
JT 0796	D	11:08:00 AM
Y6 0564	A	11:08:00 AM
Y6 0586	A	11:10:00 AM
SJ 0172	D	11:12:00 AM
JT 0789	A	11:14:00 AM
FX 5194	D	11:14:00 AM
Y6 0541	D	11:14:00 AM
JT 0204	D	11:14:00 AM
JT 0207	A	11:15:00 AM
SJ 0083	A	11:16:00 AM
GA 0186	D	11:17:00 AM
GA 0515	A	11:17:00 AM
GA 0311	A	11:18:00 AM
QZ 7512	D	11:20:00 AM
SJ 0210	D	11:21:00 AM
SV 0822	A	11:22:00 AM
MH 0710	D	11:23:00 AM
JT 0604	D	11:24:00 AM
GA 0237	A	11:25:00 AM
JT 0576	D	11:26:00 AM
SJ 0960	D	11:27:00 AM
GA 0405	A	11:29:00 AM
GA 0236	D	11:31:00 AM
QZ 7784	D	11:33:00 AM

Flight_No	Leg	Actual Dept/Arr
GA 0312	D	11:34:00 AM
GAC 0091	A	11:34:00 AM
Y6 0583	D	11:35:00 AM
TG 0433	A	11:37:00 AM
GA 0222	D	11:38:00 AM
GA 0208	D	11:39:00 AM
JT 0353	A	11:39:00 AM
JT 0370	D	11:39:00 AM
JT 0154	D	11:41:00 AM
JT 0324	D	11:42:00 AM
GA 0103	A	11:47:00 AM
QZ 7692	D	11:47:00 AM
GA 0022	A	11:47:00 AM
GA 0036	D	11:48:00 AM
JT 0775	A	11:49:00 AM
GA 0980	D	11:51:00 AM
Y6 0522	A	11:51:00 AM
GA 0116	D	11:52:00 AM
Y6 0844	A	11:53:00 AM
GA 0826	D	11:55:00 AM
SJ 0073	A	11:55:00 AM
SJ 0246	D	11:55:00 AM
Y6 0531	D	11:55:00 AM
SQ 0957	D	11:58:00 AM
JT 0017	A	11:59:00 AM
JT 0573	A	12:00:00 PM
GA 0117	A	12:00:00 PM
JT 0506	D	12:00:00 PM
GAC 0041	A	12:01:00 PM
JT 0022	D	12:02:00 PM
Y6 0553	D	12:03:00 PM
JT 0344	D	12:04:00 PM
GA 0406	D	12:04:00 PM
JT 0795	A	12:05:00 PM
GA 0291	A	12:06:00 PM
Y6 0592	A	12:07:00 PM
GA 0516	D	12:08:00 PM
GA 0162V	D	12:08:00 PM
GA 0207	A	12:09:00 PM
JT 0333	A	12:10:00 PM
Y6 0565	D	12:12:00 PM
Y6 0301	D	12:13:00 PM
GA 0146	D	12:14:00 PM

Flight_No	Leg	Actual Dept/Arr
PR 0503	A	12:14:00 PM
GA 0532	D	12:14:00 PM
SJ 0020	D	12:15:00 PM
Y6 0712	A	12:15:00 PM
JT 0637	A	12:18:00 PM
SJ 0225	A	12:19:00 PM
PV 0002	A	12:21:00 PM
JT 0753	A	12:22:00 PM
GA 0058	D	12:22:00 PM
SJ 0097	A	12:23:00 PM
SJ 0266	D	12:25:00 PM
JT 0764	D	12:27:00 PM
JT 0301	A	12:28:00 PM
GA 0407	A	12:29:00 PM
Y6 0572	A	12:29:00 PM
GA 0314	D	12:29:00 PM
JT 0774	D	12:35:00 PM
GA 0313	A	12:35:00 PM
QZ 7783	A	12:36:00 PM
JT 0398	D	12:39:00 PM
SJ 0055	A	12:41:00 PM
JT 0559	A	12:43:00 PM
GA 0080	D	12:44:00 PM
JT 0290	D	12:45:00 PM
GA 0238	D	12:46:00 PM
Y6 0243	D	12:49:00 PM
JT 0325	A	12:51:00 PM
GA 0210	D	12:52:00 PM
BR 0237	A	12:52:00 PM
JT 0713	A	12:53:00 PM
TG 0434	D	12:54:00 PM
SQ 0958V	A	12:57:00 PM
GA 0292	D	12:58:00 PM
GA 0104	D	12:58:00 PM
GA 0517	A	12:59:00 PM
GA 0185	A	1:01:00 PM
GA 0021	D	1:01:00 PM
SJ 0074	D	1:01:00 PM
JT 0110	D	1:03:00 PM
SJ 0970	A	1:04:00 PM
CX 0777	A	1:04:00 PM
CI 0761	A	1:05:00 PM
SJ 0187	A	1:07:00 PM

Flight_No	Leg	Actual Dept/Arr
GA 0827	A	1:09:00 PM
JT 0338	D	1:09:00 PM
GA 0133	A	1:13:00 PM
SJ 0090	D	1:13:00 PM
JT 0395	A	1:16:00 PM
SJ 0105	A	1:16:00 PM
JT 0728	D	1:17:00 PM
JT 0556	D	1:17:00 PM
GA 0153	A	1:19:00 PM
JT 0655	A	1:19:00 PM
Y6 0551	D	1:19:00 PM
GA 0188	D	1:20:00 PM
JT 0012	D	1:22:00 PM
QZ 7344	D	1:23:00 PM
GA 0508	D	1:23:00 PM
JT 0352	D	1:25:00 PM
GA 0118	D	1:25:00 PM
Y6 0593	D	1:26:00 PM
Y6 0204	A	1:27:00 PM
JT 0652	D	1:27:00 PM
Y6 0515	D	1:29:00 PM
GA 0651	A	1:30:00 PM
JT 0382	D	1:31:00 PM
SJ 0040	D	1:31:00 PM
GA 0315	A	1:33:00 PM
JT 0605	A	1:33:00 PM
SJ 0191	A	1:34:00 PM
QZ 7341	A	1:35:00 PM
SJ 0094	D	1:38:00 PM
QZ 7669	A	1:38:00 PM
JT 0575	A	1:39:00 PM
EY 0472	A	1:39:00 PM
JT 0377	A	1:40:00 PM
GA 0239	A	1:41:00 PM
JT 0634	D	1:41:00 PM
SJ 0599	A	1:43:00 PM
JT 0378	D	1:43:00 PM
GA 0316	D	1:43:00 PM
GA 0821	A	1:44:00 PM
PR 0504	D	1:44:00 PM
Y6 0532	A	1:45:00 PM
SJ 0230	D	1:45:00 PM
GA 0505	A	1:46:00 PM

Flight_No	Leg	Actual Dept/Arr
SJ 0161	A	1:46:00 PM
JT 0617	A	1:49:00 PM
GA 0154	D	1:49:00 PM
Y6 0743	D	1:53:00 PM
JT 0524	D	1:55:00 PM
CX 3241	A	1:56:00 PM
SJ 0213	A	1:56:00 PM
Y6 0542	A	1:59:00 PM
GA 0187	A	1:59:00 PM
GA 0209	A	1:59:00 PM
JT 0742	D	1:59:00 PM
JT 0021	A	2:04:00 PM
JT 0582	D	2:04:00 PM
GA 0409	A	2:11:00 PM
GA 0119	A	2:12:00 PM
VF 0203	A	2:12:00 PM
JT 0714	D	2:13:00 PM
SJ 0222	D	2:14:00 PM
AK 0384	A	2:15:00 PM
BI 0735	A	2:16:00 PM
JT 0751	A	2:17:00 PM
GA 0828	D	2:19:00 PM
GA 0408	D	2:19:00 PM
GA 0433	A	2:20:00 PM
GA 0174	D	2:21:00 PM
GA 0225	A	2:21:00 PM
CI 0762	D	2:21:00 PM
JT 0345	A	2:23:00 PM
GA 0108	D	2:24:00 PM
JT 0577	A	2:24:00 PM
SQ 0959	D	2:26:00 PM
Y6 0302	A	2:27:00 PM
QZ 7788	D	2:29:00 PM
JT 0507	A	2:31:00 PM
JT 0307	A	2:32:00 PM
MJ 0603	A	2:33:00 PM
GA 0212	D	2:33:00 PM
BR 0238	D	2:35:00 PM
JT 0384	D	2:37:00 PM
JT 0793	A	2:38:00 PM
GA 0317V	A	2:39:00 PM
GA 0105	A	2:40:00 PM
GA 0610	D	2:40:00 PM

Flight_No	Leg	Actual Dept/Arr
JT 0359	A	2:41:00 PM
QZ 7694	D	2:41:00 PM
JT 0303	A	2:44:00 PM
QZ 7513	A	2:45:00 PM
JT 0292	D	2:45:00 PM
GA 0318	D	2:46:00 PM
SJ 0260	D	2:48:00 PM
SJ 0173	A	2:48:00 PM
SJ 0052	D	2:48:00 PM
MH 0721	A	2:50:00 PM
NH 0937	A	2:52:00 PM
JT 0766	D	2:54:00 PM
SJ 0182	D	2:54:00 PM
Y6 0543	D	2:54:00 PM
GA 0653	A	2:56:00 PM
Y6 0812	A	2:58:00 PM
GA 0175V	A	3:00:00 PM
Y6 0584	A	3:00:00 PM
VF 0204S	D	3:01:00 PM
JT 0608	D	3:01:00 PM
AK 0385	D	3:03:00 PM
GA 0504	D	3:04:00 PM
GA 0240	D	3:04:00 PM
SJ 0247	A	3:04:00 PM
JT 0612	D	3:04:00 PM
QZ 7785	A	3:05:00 PM
Y6 0656	A	3:06:00 PM
SJ 0590	D	3:06:00 PM
GA 0518	D	3:07:00 PM
JT 0371	A	3:09:00 PM
GA 0605	A	3:10:00 PM
CX 0776	D	3:13:00 PM
GA 0136	D	3:14:00 PM
SJ 0075	A	3:14:00 PM
GA 0241	A	3:15:00 PM
GA 0520	D	3:15:00 PM
GA 0830	D	3:16:00 PM
Y6 0554	A	3:17:00 PM
SJ 0593	A	3:19:00 PM
GA 0211	A	3:21:00 PM
GA 0037	A	3:21:00 PM
CX 3242	D	3:22:00 PM
JT 0339	A	3:22:00 PM

Flight_No	Leg	Actual Dept/Arr
Y6 0701	D	3:23:00 PM
JT 0155	A	3:24:00 PM
GA 0120	D	3:25:00 PM
JT 0327	A	3:28:00 PM
VF 0204S	A	3:29:00 PM
GA 0143	A	3:30:00 PM
SJ 0269	A	3:32:00 PM
Y6 0516	A	3:32:00 PM
Y6 0205	D	3:33:00 PM
JT 0557	A	3:35:00 PM
JT 0023	A	3:36:00 PM
Y6 0566	A	3:38:00 PM
SJ 0091	A	3:38:00 PM
GA 0879	A	3:39:00 PM
GA 0319	A	3:41:00 PM
QZ 7345	A	3:43:00 PM
JT 0799	A	3:43:00 PM
JT 0354	D	3:48:00 PM
GA 0165	A	3:49:00 PM
GA 0059	A	3:49:00 PM
JT 0502	D	3:51:00 PM
GA 0020	A	3:51:00 PM
BI 0736	D	3:52:00 PM
GA 0829	A	3:53:00 PM
GA 0713	A	3:53:00 PM
SJ 0095	A	3:53:00 PM
SJ 0098	D	3:53:00 PM
EK 0356V	A	3:54:00 PM
GA 0190	D	3:55:00 PM
QZ 7514	D	3:55:00 PM
SJ 0015	A	3:57:00 PM
JT 0326	D	3:58:00 PM
GA 0535	A	3:58:00 PM
Y6 0552	A	4:00:00 PM
JT 0334	D	4:01:00 PM
Y6 0244	A	4:01:00 PM
JT 0018	D	4:02:00 PM
MJ 0604	D	4:02:00 PM
SJ 0062	D	4:03:00 PM
GA 0983	A	4:03:00 PM
GA 0164	D	4:04:00 PM
GA 0410	D	4:05:00 PM
GA 0189	A	4:05:00 PM

Flight_No	Leg	Actual Dept/Arr
JT 0578	D	4:07:00 PM
GA 0121	A	4:07:00 PM
GA 0320	D	4:07:00 PM
GA 0891	A	4:08:00 PM
QZ 7519	A	4:08:00 PM
JT 0202	D	4:08:00 PM
XN 0801	A	4:09:00 PM
Y6 0344	A	4:11:00 PM
GA 0984	D	4:11:00 PM
SQ 0960	A	4:11:00 PM
QZ 7744	D	4:12:00 PM
JT 0538	D	4:13:00 PM
JL 0725	A	4:15:00 PM
JT 0749	A	4:15:00 PM
GA 0176	D	4:15:00 PM
MH 0720	D	4:15:00 PM
JT 0291	A	4:16:00 PM
GA 0439	A	4:17:00 PM
JT 0201	A	4:18:00 PM
Y6 0371	D	4:18:00 PM
QZ 7693	A	4:19:00 PM
GA 0081	A	4:22:00 PM
GA 0015A	D	4:22:00 PM
GA 0214	D	4:23:00 PM
Y6 0561	D	4:24:00 PM
JT 0372	D	4:26:00 PM
VF 0204	D	4:26:00 PM
Y6 0636	A	4:27:00 PM
JT 0635	A	4:27:00 PM
GA 0109	A	4:28:00 PM
GA 0138	D	4:28:00 PM
JT 0387	A	4:29:00 PM
GA 0519	A	4:32:00 PM
Y6 0631	D	4:33:00 PM
Y6 0671	D	4:34:00 PM
GA 0242	D	4:36:00 PM
GA 0601	A	4:37:00 PM
SJ 0076	D	4:40:00 PM
JT 0391	A	4:40:00 PM
GA 0509V	A	4:41:00 PM
GA 0321	A	4:43:00 PM
QZ 7716	D	4:43:00 PM
GA 0106	D	4:45:00 PM

Flight_No	Leg	Actual Dept/Arr
JT 0342	D	4:45:00 PM
GA 0023	D	4:45:00 PM
JT 0782	D	4:45:00 PM
Y6 0315	D	4:45:00 PM
JT 0355	A	4:46:00 PM
JT 0765	A	4:49:00 PM
GA 0322	D	4:49:00 PM
SJ 0086	D	4:49:00 PM
GA 0224	D	4:51:00 PM
JT 0554	D	4:52:00 PM
SJ 0053	A	4:52:00 PM
TN 0709	A	4:52:00 PM
JT 0156	D	4:56:00 PM
JT 0613	A	4:56:00 PM
JT 0715	A	4:57:00 PM
QZ 7518	D	5:00:00 PM
Y6 0577	D	5:00:00 PM
JT 0379	A	5:01:00 PM
GA 0213V	A	5:02:00 PM
GA 0122	D	5:04:00 PM
SJ 0041	A	5:05:00 PM
JT 0015	A	5:06:00 PM
KL 0809	A	5:08:00 PM
JT 0581	A	5:09:00 PM
JT 0024	D	5:10:00 PM
JT 0768	D	5:11:00 PM
GA 0156	D	5:11:00 PM
TK 0066	A	5:12:00 PM
GA 0832	D	5:12:00 PM
Y6 0523	D	5:12:00 PM
JT 0779	A	5:13:00 PM
JT 0653	A	5:17:00 PM
GA 0192	D	5:17:00 PM
JT 0525	A	5:19:00 PM
SJ 0099	A	5:19:00 PM
GA 0867	A	5:19:00 PM
GA 0243	A	5:24:00 PM
GA 0044	D	5:25:00 PM
Y6 0652	A	5:26:00 PM
GA 0155	A	5:28:00 PM
JT 0399	A	5:29:00 PM
GA 0534	D	5:31:00 PM
MH 0723	A	5:32:00 PM

Flight_No	Leg	Actual Dept/Arr
Y6 0544	A	5:33:00 PM
JT 0696	D	5:33:00 PM
JT 0550	D	5:34:00 PM
JT 0206	D	5:35:00 PM
SQ 0961V	D	5:35:00 PM
Y6 0744	A	5:38:00 PM
GA 0885	A	5:39:00 PM
JT 0606	D	5:39:00 PM
JT 0609	A	5:39:00 PM
SV 0817A	D	5:40:00 PM
MZ 0781	A	5:41:00 PM
JT 0335	A	5:43:00 PM
TN 0708	D	5:43:00 PM
JT 0503	A	5:44:00 PM
Y6 0361	D	5:44:00 PM
JT 0396	D	5:46:00 PM
GA 0522	D	5:46:00 PM
JT 0294	D	5:46:00 PM
GA 0123	A	5:47:00 PM
Y6 0345	D	5:48:00 PM
GA 0412	D	5:49:00 PM
LH 0778	A	5:50:00 PM
JT 0254	D	5:51:00 PM
SJ 0183	A	5:52:00 PM
GA 0612V	D	5:56:00 PM
GA 0324	D	5:56:00 PM
JT 0293	A	5:57:00 PM
GA 0323	A	5:57:00 PM
GA 0216	D	5:58:00 PM
GA 0293	A	5:58:00 PM
JT 0716	D	6:01:00 PM
GA 0244	D	6:02:00 PM
SQ 0962	A	6:02:00 PM
SJ 0011	A	6:02:00 PM
GA 0137	A	6:06:00 PM
GA 0507	A	6:06:00 PM
GA 0818	D	6:07:00 PM
EK 0357V	D	6:07:00 PM
SJ 0033	A	6:08:00 PM
Y6 0594	A	6:09:00 PM
JT 0026	D	6:10:00 PM
GA 0432	D	6:10:00 PM
JT 0157	A	6:10:00 PM

Flight_No	Leg	Actual Dept/Arr
SJ 0078	D	6:12:00 PM
Y6 0321	D	6:14:00 PM
GAC 0017	D	6:15:00 PM
JT 0693	A	6:15:00 PM
SJ 0038	D	6:15:00 PM
JT 0586	D	6:15:00 PM
GA 0177	A	6:16:00 PM
SJ 0087	A	6:17:00 PM
GA 0191	A	6:18:00 PM
GA 0831V	A	6:19:00 PM
Y6 0206	A	6:21:00 PM
JT 0770	D	6:21:00 PM
QZ 7789	A	6:22:00 PM
JT 0777	A	6:25:00 PM
JT 0336	D	6:25:00 PM
GA 0107	A	6:25:00 PM
JT 0383	A	6:27:00 PM
GA 0603	A	6:29:00 PM
JT 0720	D	6:31:00 PM
SJ 0063	A	6:33:00 PM
SJ 0261	A	6:33:00 PM
MH 0722	D	6:34:00 PM
JT 0784	D	6:36:00 PM
AP 0002	A	6:38:00 PM
MH 0725	A	6:39:00 PM
JT 0539	A	6:39:00 PM
Y6 0209	D	6:40:00 PM
JT 0564	D	6:41:00 PM
GA 0215	A	6:43:00 PM
Y6 0316	A	6:43:00 PM
JT 0721	A	6:45:00 PM
GA 0245	A	6:46:00 PM
GA 0178	D	6:47:00 PM
QZ 7695	A	6:48:00 PM
JT 0343	A	6:49:00 PM
JT 0630	D	6:49:00 PM
GA 0139	A	6:52:00 PM
EY 0471	D	6:52:00 PM
SJ 0077	A	6:53:00 PM
KL 0810	D	6:54:00 PM
GA 0413V	A	6:57:00 PM
GA 0506	D	6:59:00 PM
Y6 0736	A	6:59:00 PM

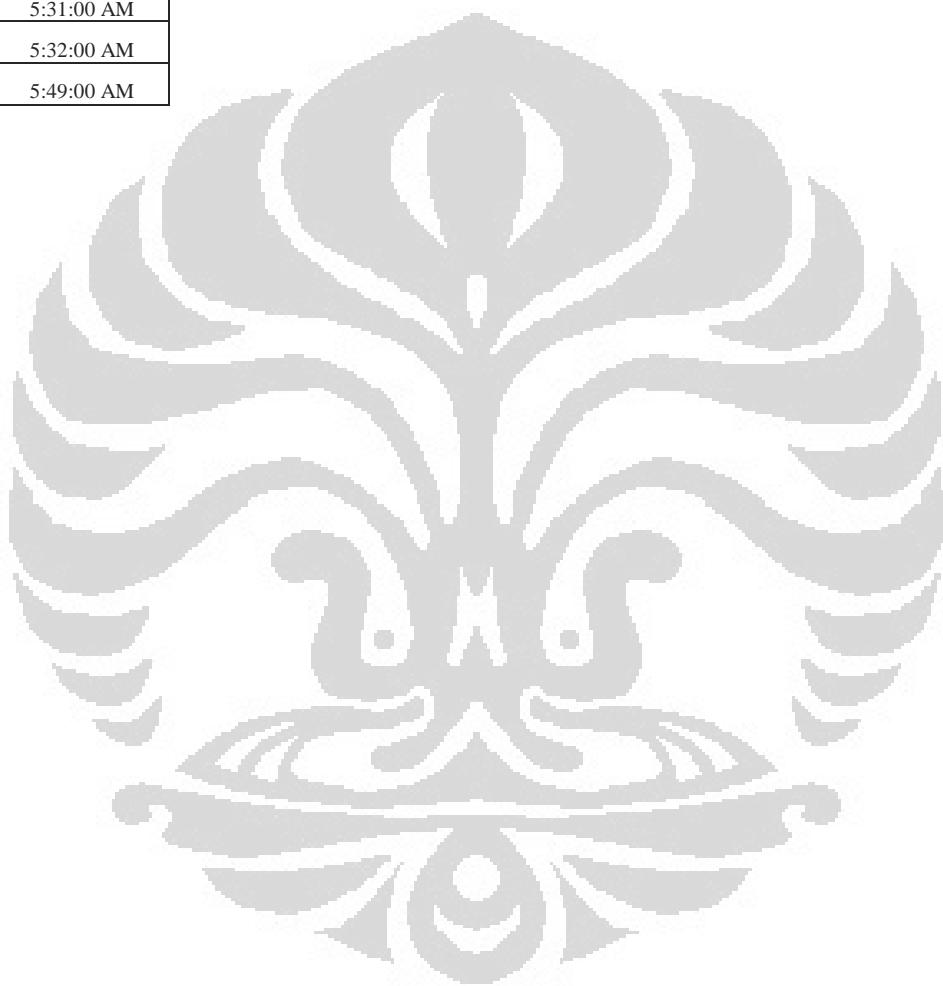
Flight_No	Leg	Actual Dept/Arr
SJ 0184	D	7:02:00 PM
GA 0885	D	7:03:00 PM
GA 0536	D	7:03:00 PM
GA 0655	A	7:06:00 PM
JT 0386	D	7:06:00 PM
GA 0325	A	7:08:00 PM
SJ 0080	D	7:09:00 PM
GA 0982	D	7:09:00 PM
GA 0326	D	7:09:00 PM
TR 2272	A	7:10:00 PM
QZ 7696	D	7:10:00 PM
LH 0779	D	7:11:00 PM
JT 0329	A	7:11:00 PM
JT 0767	A	7:12:00 PM
SJ 0212	D	7:14:00 PM
SJ 0021	A	7:14:00 PM
TK 0067	D	7:14:00 PM
JT 0357	A	7:14:00 PM
JT 0385	A	7:14:00 PM
JT 0555	A	7:16:00 PM
GA 0833	A	7:16:00 PM
JT 0579	A	7:17:00 PM
GA 0218	D	7:18:00 PM
GA 0124	D	7:19:00 PM
JT 0016	D	7:19:00 PM
QZ 7515	A	7:20:00 PM
GA 0227	A	7:20:00 PM
SQ 0963V	D	7:20:00 PM
Y6 0524	A	7:21:00 PM
JT 0392	D	7:22:00 PM
JT 0510	D	7:26:00 PM
SQ 0966	A	7:27:00 PM
QZ 7786	D	7:29:00 PM
SJ 0220	D	7:30:00 PM
GA 0125	A	7:31:00 PM
GA 0523	A	7:32:00 PM
SJ 0223	A	7:33:00 PM
GA 0834	D	7:33:00 PM
GA 0246	D	7:33:00 PM
GA 0521	A	7:33:00 PM
SJ 0014	D	7:34:00 PM
GA 0609V	A	7:36:00 PM
JT 0158	D	7:37:00 PM

Flight_No	Leg	Actual Dept/Arr
GA 0167V	A	7:39:00 PM
GA 0166	D	7:40:00 PM
GA 0126	D	7:41:00 PM
JT 0568	D	7:41:00 PM
CX 0719	A	7:44:00 PM
Y6 0562	A	7:44:00 PM
JT 0762	D	7:46:00 PM
JT 0551	A	7:47:00 PM
GAC 0016	A	7:48:00 PM
MH 0724	D	7:48:00 PM
GA 0899	A	7:50:00 PM
JT 0375	A	7:50:00 PM
JT 0585	A	7:54:00 PM
QF 0041	A	7:55:00 PM
JT 0328	D	7:56:00 PM
Y6 0372	A	7:56:00 PM
AK 0388	A	7:59:00 PM
TR 2273	D	7:59:00 PM
JT 0678	D	7:59:00 PM
GA 0327	A	7:59:00 PM
GA 0179	A	8:02:00 PM
GA 0196	D	8:03:00 PM
Y6 0578	A	8:03:00 PM
GA 0725	A	8:05:00 PM
GA 0418	D	8:14:00 PM
QZ 7516	D	8:14:00 PM
GA 0247	A	8:19:00 PM
GA 0524	D	8:19:00 PM
JT 0295	A	8:21:00 PM
CI 0679	A	8:23:00 PM
KE 0627	A	8:23:00 PM
JT 0337	A	8:25:00 PM
GA 0193	A	8:29:00 PM
GA 0863	A	8:29:00 PM
JT 0356	D	8:29:00 PM
SJ 0256	D	8:32:00 PM
JT 0332	D	8:32:00 PM
GA 0147	A	8:32:00 PM
GA 0328	D	8:33:00 PM
GAC 0019	D	8:35:00 PM
JT 0151	A	8:35:00 PM
GA 0217	A	8:36:00 PM
SQ 0967	D	8:36:00 PM

Flight_No	Leg	Actual Dept/Arr
JT 0743	A	8:37:00 PM
JT 0308	D	8:38:00 PM
JT 0587	A	8:38:00 PM
GA 0157	A	8:38:00 PM
JT 0650	D	8:40:00 PM
JT 0203	A	8:40:00 PM
GA 0537	A	8:42:00 PM
JT 0025	A	8:43:00 PM
AK 0389	D	8:44:00 PM
JT 0772	D	8:46:00 PM
MZ 0761	A	8:49:00 PM
Y6 0862	A	8:51:00 PM
GA 0835	A	8:55:00 PM
JT 0010	D	8:59:00 PM
Y6 6621	A	9:04:00 PM
GA 0329	A	9:06:00 PM
JT 0633	A	9:08:00 PM
Y6 0845	D	9:09:00 PM
JT 0580	D	9:09:00 PM
JT 0255	A	9:13:00 PM
JT 0783	A	9:15:00 PM
CZ 0387	A	9:15:00 PM
GA 0330	D	9:16:00 PM
GAC 0018	A	9:18:00 PM
QR 0670	A	9:23:00 PM
Y6 0362	A	9:24:00 PM
QF 0042	D	9:25:00 PM
JT 0027	A	9:28:00 PM
GA 0650	D	9:30:00 PM
JT 0584	D	9:41:00 PM
GA 0088	D	9:41:00 PM
GA 0127	A	9:43:00 PM
AP 0001	D	9:44:00 PM
GA 0420	D	9:46:00 PM
MZ 0774	D	9:48:00 PM
NH 0938	D	9:51:00 PM
GA 0525	A	9:55:00 PM
GA 0884	A	9:56:00 PM
GA 0332	D	9:57:00 PM
GAC 0045	A	10:00:00 PM
JL 0726	D	10:01:00 PM
JT 0218	D	10:03:00 PM
JT 0309	A	10:04:00 PM

Flight_No	Leg	Actual Dept/Arr
GA 0195	A	10:05:00 PM
JT 0563	A	10:07:00 PM
KE 0628	D	10:15:00 PM
GA 0417	A	10:15:00 PM
GA 0419	A	10:19:00 PM
QZ 7745	A	10:21:00 PM
GA 0716	D	10:25:00 PM
GA 0331	A	10:29:00 PM
SQ 0968	A	10:33:00 PM
EK 0358	A	10:37:00 PM
JT 0798	D	10:38:00 PM
MH 0727	A	10:39:00 PM
GA 0421	A	10:53:00 PM
GA 0652	D	10:56:00 PM
QZ 7787	A	10:59:00 PM
MZ 0007T	D	11:00:00 PM
JT 0019N	A	11:03:00 PM
QZ 7697	A	11:13:00 PM
Y6 0837	D	11:27:00 PM
GA 0712	D	11:32:00 PM
JT 0159N	A	11:34:00 PM
QZ 7517	A	11:37:00 PM
GA 0878	D	11:40:00 PM
JT 0583N	A	11:41:00 PM
GA 0333	A	11:42:00 PM
PR 0535	A	11:43:00 PM
GA 0884	D	11:44:00 PM
5J 0759	A	11:51:00 PM
8K 0302	D	11:51:00 PM
JT 0209N	A	11:52:00 PM
QZ 7717	A	11:56:00 PM
MH 6075	A	12:04:00 AM
GA 0894	D	12:18:00 AM
MZ 0008T	A	12:36:00 AM
SJ 0598	D	12:47:00 AM
EK 0359	D	12:54:00 AM
PR 0536V	D	1:00:00 AM
5J 0760	D	1:01:00 AM
Y6 0851	D	1:06:00 AM
8F 0111	A	1:07:00 AM
GA 0640	D	1:09:00 AM
QR 0671	D	1:14:00 AM
Y6 0643	D	1:31:00 AM

Flight_No	Leg	Actual Dept/Arr
JT 0790	D	1:47:00 AM
8F 0110	D	2:34:00 AM
MH 6076	D	3:26:00 AM
GA 0003	A	3:45:00 AM
JT 0776	D	5:08:00 AM
GA 0005	A	5:09:00 AM
MH 0726	D	5:11:00 AM
JT 0792V	D	5:14:00 AM
GA 0300	D	5:20:00 AM
MZ 0762	D	5:31:00 AM
XN 0800	D	5:32:00 AM
GA 0654	D	5:49:00 AM



Data Pergerakan Pesawat Hari 3, 16 April 2011 – 17 April 2011

Flight_No	Leg	Actual Dept/Arr
SQ 0951	D	6:02:00 AM
GA 0600V	D	6:03:00 AM
GA 0510	D	6:08:00 AM
MH 6208	D	6:09:00 AM
GA 0302	D	6:12:00 AM
QZ 7340	D	6:13:00 AM
QZ 7668	D	6:13:00 AM
GA 0150	D	6:15:00 AM
GA 0220	D	6:16:00 AM
JT 0380	D	6:17:00 AM
GA 0230	D	6:17:00 AM
GA 0500	D	6:17:00 AM
GA 0110	D	6:18:00 AM
SJ 0592	D	6:20:00 AM
JT 0748	D	6:20:00 AM
Y6 0711	D	6:26:00 AM
Y6 0201	D	6:27:00 AM
JT 0562	D	6:28:00 AM
GA 0130	D	6:31:00 AM
JT 0651	A	6:31:00 AM
SJ 0160	D	6:31:00 AM
KE 0369	D	6:31:00 AM
QZ 7690	D	6:32:00 AM
GA 0202	D	6:32:00 AM
QZ 7510	D	6:33:00 AM
JT 0152	D	6:33:00 AM
GA 0400	D	6:34:00 AM
GA 0401	A	6:34:00 AM
GA 0100	D	6:35:00 AM
SJ 0050	D	6:36:00 AM
JT 0760	D	6:40:00 AM
JT 0252	D	6:40:00 AM
GA 0530	D	6:40:00 AM
Y6 0591	D	6:41:00 AM
Y6 0892	A	6:42:00 AM
JT 0320	D	6:42:00 AM
GA 0822	D	6:45:00 AM
GA 0231	A	6:45:00 AM
CI 0680	D	6:45:00 AM
GA 0550	D	6:47:00 AM
JT 0500	D	6:50:00 AM
GA 0604	D	6:50:00 AM

Flight_No	Leg	Actual Dept/Arr
GA 0201	A	6:51:00 AM
JT 0321	A	6:51:00 AM
JT 0788	D	6:52:00 AM
JT 0331	A	6:54:00 AM
GA 0111	A	6:56:00 AM
SJ 0070	D	6:57:00 AM
JT 0030	D	6:58:00 AM
JT 0773	A	6:59:00 AM
GA 0303	A	6:59:00 AM
SJ 0221	A	6:59:00 AM
SJ 0250	D	7:00:00 AM
GA 0512	D	7:02:00 AM
SJ 0081	A	7:04:00 AM
SJ 0092	D	7:05:00 AM
JT 0388	D	7:05:00 AM
GA 0142	D	7:05:00 AM
GA 0724B	D	7:07:00 AM
GA 0724	D	7:07:00 AM
GAC 0090	D	7:07:00 AM
GAC 0010	A	7:08:00 AM
SJ 0257	A	7:09:00 AM
Y6 0861	D	7:10:00 AM
GA 0160	D	7:10:00 AM
Y6 0322	A	7:14:00 AM
SJ 0088	D	7:15:00 AM
GAC 0040	D	7:15:00 AM
GA 0431	A	7:16:00 AM
GA 0531	A	7:16:00 AM
GA 0304	D	7:20:00 AM
JT 0300	D	7:20:00 AM
GA 0170	D	7:21:00 AM
JT 0614	D	7:24:00 AM
QZ 7780	D	7:25:00 AM
JT 0763	A	7:25:00 AM
JT 0570	D	7:26:00 AM
JT 0351	A	7:28:00 AM
Y6 0343	D	7:28:00 AM
Y6 0811	D	7:29:00 AM
Y6 0735	D	7:31:00 AM
Y6 0571	D	7:35:00 AM
JT 0374	D	7:35:00 AM
GA 0181	A	7:37:00 AM

Flight_No	Leg	Actual Dept/Arr
GA 0611	A	7:37:00 AM
SJ 0079	A	7:41:00 AM
GA 0403	A	7:42:00 AM
GA 0511	A	7:43:00 AM
GA 0501	A	7:44:00 AM
GA 0438	D	7:44:00 AM
JT 0723	A	7:45:00 AM
JT 0552	D	7:49:00 AM
GA 0161	A	7:51:00 AM
JT 0536	D	7:51:00 AM
JT 0511	A	7:52:00 AM
JT 0350	D	7:53:00 AM
AK 0380	A	7:56:00 AM
GA 0823	A	7:58:00 AM
JT 0752	D	8:03:00 AM
JT 0785	A	8:04:00 AM
JT 0561	A	8:05:00 AM
SQ 0952	A	8:06:00 AM
SJ 0082	D	8:06:00 AM
GAC 0011	D	8:07:00 AM
JT 0211	A	8:07:00 AM
Y6 0672	A	8:09:00 AM
GA 0182	D	8:11:00 AM
JT 0011	A	8:12:00 AM
SJ 0060	D	8:12:00 AM
SJ 0211	A	8:13:00 AM
SJ 0068	D	8:14:00 AM
SJ 0039	A	8:15:00 AM
GA 0305	A	8:15:00 AM
SJ 0190	D	8:15:00 AM
GA 0204	D	8:16:00 AM
GA 0232	D	8:17:00 AM
JT 0394	D	8:17:00 AM
Y6 0891	D	8:19:00 AM
GA 0306	D	8:20:00 AM
JT 0671	A	8:21:00 AM
Y6 0505	D	8:21:00 AM
JT 0571	A	8:22:00 AM
GA 0112	D	8:22:00 AM
GA 0101	A	8:25:00 AM
Y6 0210	A	8:26:00 AM
GA 0171	A	8:28:00 AM

Flight_No	Leg	Actual Dept/Arr
GA 0233	A	8:31:00 AM
JT 0393	A	8:31:00 AM
TR 2274	A	8:32:00 AM
Y6 0852	A	8:34:00 AM
CX 0718	D	8:35:00 AM
GA 0514	D	8:38:00 AM
JT 0504	D	8:39:00 AM
SJ 0224	D	8:39:00 AM
GA 0819	A	8:39:00 AM
SJ 0051	A	8:40:00 AM
JT 0607	A	8:40:00 AM
SJ 0180	D	8:40:00 AM
GA 0223	A	8:41:00 AM
SJ 0185	A	8:43:00 AM
Y6 0585	D	8:43:00 AM
MH 0713	A	8:45:00 AM
GA 0981	A	8:45:00 AM
GA 0113	A	8:47:00 AM
SJ 0089	A	8:47:00 AM
AK 0381	D	8:49:00 AM
JT 0711	A	8:52:00 AM
JT 0304	D	8:53:00 AM
GA 0602	D	8:53:00 AM
GA 0290	D	8:54:00 AM
GA 0203	A	8:55:00 AM
JT 0501	A	8:56:00 AM
Y6 0346	A	9:00:00 AM
GA 0402	D	9:00:00 AM
GA 0089	A	9:00:00 AM
JT 0381	A	9:01:00 AM
JT 0572	D	9:03:00 AM
GA 9721	A	9:06:00 AM
JT 0771	A	9:06:00 AM
VF 0201	A	9:07:00 AM
GA 0307	A	9:09:00 AM
GA 0898	D	9:09:00 AM
SJ 0071	A	9:10:00 AM
JT 0565	A	9:11:00 AM
JT 0322	D	9:13:00 AM
JT 0673	A	9:15:00 AM
Y6 0655	D	9:18:00 AM
CZ 0388	D	9:18:00 AM
GA 0824	D	9:20:00 AM

Flight_No	Leg	Actual Dept/Arr
GA 0503	A	9:21:00 AM
Y6 0644	A	9:21:00 AM
PV 0004	D	9:21:00 AM
GA 0184	D	9:21:00 AM
JT 0150	D	9:22:00 AM
GA 0131	A	9:23:00 AM
GA 0820	D	9:24:00 AM
SJ 0104	D	9:26:00 AM
GA 0308	D	9:27:00 AM
GA 0151	A	9:27:00 AM
JT 0778	D	9:28:00 AM
Y6 0202	A	9:28:00 AM
QZ 7783	A	9:29:00 AM
GA 0222	D	9:29:00 AM
SJ 0032	D	9:30:00 AM
GA 0234	D	9:34:00 AM
JT 0615	A	9:34:00 AM
Y6 0632	A	9:36:00 AM
JT 0330	D	9:37:00 AM
JT 0390	D	9:37:00 AM
JT 0302	D	9:38:00 AM
SQ 0953V	D	9:39:00 AM
GA 0152	D	9:39:00 AM
JT 0691	A	9:41:00 AM
SJ 0093	A	9:42:00 AM
SJ 0591	A	9:44:00 AM
JT 0340	D	9:46:00 AM
GA 0613	A	9:46:00 AM
GA 0206	D	9:47:00 AM
SJ 0251	A	9:48:00 AM
SJ 0096	D	9:51:00 AM
GA 0114	D	9:52:00 AM
GA 0102	D	9:53:00 AM
MH 0712	D	9:54:00 AM
Y6 0506	A	9:58:00 AM
QZ 7511	A	9:58:00 AM
Y6 0635	D	9:59:00 AM
Y6 0521	D	10:00:00 AM
SJ 0072	D	10:00:00 AM
JT 0712	D	10:02:00 AM
TR 2275	D	10:03:00 AM
Y6 0702	A	10:05:00 AM
JT 0253	A	10:06:00 AM

Flight_No	Leg	Actual Dept/Arr
Y6 0563	D	10:06:00 AM
JT 0636	D	10:07:00 AM
JT 0553	A	10:08:00 AM
JT 0020	D	10:11:00 AM
JT 0537	A	10:11:00 AM
JT 0323	A	10:12:00 AM
GA 0866	D	10:12:00 AM
GA 0404	D	10:12:00 AM
SQ 0956	A	10:14:00 AM
GA 0309	A	10:15:00 AM
GA 0430	D	10:16:00 AM
JT 0558	D	10:16:00 AM
VF 0202	D	10:16:00 AM
GA 0551	A	10:16:00 AM
JT 0376	D	10:17:00 AM
GA 0533V	A	10:17:00 AM
JT 0692	D	10:19:00 AM
QZ 7520	D	10:21:00 AM
SJ 0069	A	10:21:00 AM
GA 0205	A	10:22:00 AM
Y6 0651	D	10:24:00 AM
JT 0758	D	10:25:00 AM
MH 0711	A	10:25:00 AM
JT 0200	D	10:26:00 AM
GA 0235	A	10:27:00 AM
JT 0781	A	10:27:00 AM
SJ 0054	D	10:27:00 AM
GA 0310	D	10:28:00 AM
JT 0389	A	10:30:00 AM
JT 0031	A	10:32:00 AM
GA 0132	D	10:34:00 AM
JT 0397	A	10:34:00 AM
GA 0825	A	10:36:00 AM
GA 0183	A	10:39:00 AM
GA 0502	D	10:42:00 AM
JT 0574	D	10:44:00 AM
GA 0115	A	10:45:00 AM
Y6 0531	D	10:45:00 AM
JT 0505	A	10:46:00 AM
JT 0153	A	10:47:00 AM
QZ 7512	D	10:49:00 AM
JT 0604	D	10:50:00 AM
JT 0373	A	10:50:00 AM

Flight_No	Leg	Actual Dept/Arr
GA 0641	A	10:54:00 AM
GA 0608	D	10:55:00 AM
QZ 7781	A	10:56:00 AM
GA 0173	A	10:58:00 AM
SJ 0186	D	10:58:00 AM
JT 0761	A	10:59:00 AM
GA 0163	A	10:59:00 AM
GAC 0014	A	11:00:00 AM
SJ 0266	D	11:00:00 AM
Y6 0553	D	11:01:00 AM
SJ 0210	D	11:01:00 AM
QZ 7691	A	11:02:00 AM
JT 0654	D	11:03:00 AM
GA 0172	D	11:04:00 AM
Y6 0661	D	11:04:00 AM
SJ 0231	A	11:04:00 AM
TG 0433	A	11:06:00 AM
JT 0616	D	11:09:00 AM
Y6 0572	A	11:11:00 AM
JT 0110	D	11:12:00 AM
SV 0818	A	11:13:00 AM
SJ 0061	A	11:14:00 AM
GA 0513	A	11:16:00 AM
GA 0860	D	11:16:00 AM
SJ 0097	A	11:20:00 AM
GA 0186	D	11:21:00 AM
JT 0576	D	11:22:00 AM
JT 0353	A	11:23:00 AM
GAC 0091	A	11:24:00 AM
SJ 0246	D	11:27:00 AM
JT 0207	A	11:27:00 AM
GA 0236	D	11:28:00 AM
GA 0312	D	11:29:00 AM
Y6 0203	D	11:29:00 AM
JT 0796	D	11:29:00 AM
MH 0710	D	11:30:00 AM
GA 0311	A	11:30:00 AM
GA 0103	A	11:31:00 AM
JT 0017	A	11:32:00 AM
JT 0358	D	11:33:00 AM
JT 0789	A	11:35:00 AM
GA 0405	A	11:35:00 AM
JT 0324	D	11:36:00 AM

Flight_No	Leg	Actual Dept/Arr
JT 0204	D	11:37:00 AM
Y6 0583	D	11:38:00 AM
MZ 0539	A	11:39:00 AM
SJ 0191	A	11:39:00 AM
SJ 0181	A	11:40:00 AM
JT 0154	D	11:41:00 AM
QZ 7692	D	11:42:00 AM
JT 0333	A	11:44:00 AM
GA 0208	D	11:44:00 AM
JT 0370	D	11:46:00 AM
JT 0775	A	11:48:00 AM
QZ 7784	D	11:48:00 AM
TR 2272	A	11:50:00 AM
GA 0291	A	11:51:00 AM
GA 0826	D	11:52:00 AM
SQ 0957	D	11:52:00 AM
GA 0162	D	11:52:00 AM
JT 0022	D	11:52:00 AM
GA 0225	A	11:53:00 AM
GA 0116	D	11:54:00 AM
SJ 0010	D	11:55:00 AM
GA 0237	A	11:55:00 AM
JT 0506	D	11:56:00 AM
GAC 0041	A	11:56:00 AM
PV 0005	A	11:58:00 AM
GA 0980	D	11:58:00 AM
GA 0036	D	11:59:00 AM
JT 0344	D	12:00:00 PM
JT 0341	A	12:00:00 PM
GA 0406	D	12:01:00 PM
GA 0207	A	12:03:00 PM
GA 0117	A	12:03:00 PM
SJ 0225	A	12:03:00 PM
GA 0022	A	12:05:00 PM
JT 0795	A	12:08:00 PM
SJ 0960X	D	12:10:00 PM
SJ 0073	A	12:12:00 PM
Y6 0522	A	12:13:00 PM
GA 0532	D	12:15:00 PM
Y6 0712	A	12:15:00 PM
Y6 0586	A	12:15:00 PM
SJ 0083	A	12:19:00 PM
GA 0146	D	12:20:00 PM

Flight_No	Leg	Actual Dept/Arr
JT 0301	A	12:21:00 PM
GA 0058	D	12:22:00 PM
SJ 0055	A	12:22:00 PM
GA 0516	D	12:25:00 PM
JT 0637	A	12:25:00 PM
JT 0764	D	12:26:00 PM
GA 0313	A	12:26:00 PM
JT 0559	A	12:26:00 PM
JT 0753	A	12:27:00 PM
SJ 0020	D	12:29:00 PM
Y6 0592	A	12:31:00 PM
CX 0777	A	12:33:00 PM
Y6 0565	D	12:35:00 PM
GA 0407	A	12:38:00 PM
SJ 0172	D	12:41:00 PM
MZ 0538	D	12:42:00 PM
GA 0314	D	12:43:00 PM
JT 0774	D	12:45:00 PM
JT 0398	D	12:46:00 PM
JT 0713	A	12:48:00 PM
GA 0515	A	12:48:00 PM
GA 0133	A	12:49:00 PM
GA 0104	D	12:49:00 PM
GA 0210	D	12:51:00 PM
GA 0238	D	12:54:00 PM
TR 2273	D	12:54:00 PM
JT 0290	D	12:55:00 PM
GA 0185	A	12:55:00 PM
SJ 0034	D	12:55:00 PM
QZ 7523	A	12:57:00 PM
GA 0021	D	1:00:00 PM
Y6 0532	A	1:00:00 PM
CI 0761	A	1:00:00 PM
SJ 0599	A	1:03:00 PM
TG 0434V	D	1:03:00 PM
JT 0325	A	1:05:00 PM
GA 0292	D	1:06:00 PM
SJ 0090	D	1:07:00 PM
GA 0153	A	1:08:00 PM
SQ 0958	A	1:09:00 PM
JT 0395	A	1:09:00 PM
JT 0556	D	1:10:00 PM
SJ 0213	A	1:12:00 PM

Flight_No	Leg	Actual Dept/Arr
GA 0188	D	1:12:00 PM
GA 0827	A	1:14:00 PM
Y6 0564	A	1:15:00 PM
GA 0508	D	1:16:00 PM
SJ 0105	A	1:16:00 PM
JT 0338	D	1:17:00 PM
GA 0226	D	1:18:00 PM
SJ 0074	D	1:18:00 PM
SJ 0040	D	1:20:00 PM
GA 0118	D	1:23:00 PM
SJ 0970X	A	1:25:00 PM
GA 0315	A	1:27:00 PM
JT 0605	A	1:27:00 PM
JT 0352	D	1:28:00 PM
JT 0012	D	1:29:00 PM
JT 0524	D	1:30:00 PM
Y6 0551	D	1:30:00 PM
GA 0080	D	1:30:00 PM
QZ 7341	A	1:31:00 PM
JT 0617	A	1:31:00 PM
GA 0651	A	1:34:00 PM
Y6 0243	D	1:35:00 PM
SJ 0094	D	1:35:00 PM
SV 0823	D	1:37:00 PM
JT 0378	D	1:37:00 PM
Y6 0541	D	1:38:00 PM
JT 0634	D	1:38:00 PM
GA 0316	D	1:42:00 PM
GA 0239	A	1:44:00 PM
JT 0652	D	1:44:00 PM
QZ 7669	A	1:45:00 PM
JT 0377	A	1:46:00 PM
GA 0821	A	1:47:00 PM
Y6 0593	D	1:48:00 PM
GA 0505	A	1:49:00 PM
JT 0382	D	1:50:00 PM
GA 0717	A	1:52:00 PM
SJ 0187	A	1:53:00 PM
QZ 7521	A	1:54:00 PM
QZ 7522	D	1:55:00 PM
Y6 0371	D	1:55:00 PM
JT 0573	A	1:55:00 PM
MJ 0603	A	1:56:00 PM

Flight_No	Leg	Actual Dept/Arr
JT 0714	D	1:57:00 PM
SJ 0161	A	1:57:00 PM
GA 0187	A	1:58:00 PM
GA 0209	A	1:58:00 PM
GA 0119	A	2:00:00 PM
JT 0728	D	2:01:00 PM
JT 0021	A	2:02:00 PM
JT 0742	D	2:02:00 PM
GA 0409	A	2:03:00 PM
EY 0472	A	2:04:00 PM
GA 0154	D	2:06:00 PM
Y6 0515	D	2:07:00 PM
SJ 0590	D	2:07:00 PM
GA 0174	D	2:10:00 PM
Y6 0204	A	2:11:00 PM
JT 0582	D	2:11:00 PM
VF 0203	A	2:12:00 PM
GA 0433	A	2:13:00 PM
AK 0384	A	2:15:00 PM
JT 0303	A	2:16:00 PM
QZ 7694	D	2:16:00 PM
SJ 0230	D	2:17:00 PM
GA 0408	D	2:18:00 PM
JT 0507	A	2:19:00 PM
JT 0384	D	2:20:00 PM
JT 0345	A	2:21:00 PM
Y6 0844	A	2:23:00 PM
SQ 0959	D	2:24:00 PM
GA 0610	D	2:25:00 PM
Y6 0554	A	2:25:00 PM
JT 0577	A	2:25:00 PM
GA 0108	D	2:26:00 PM
GA 0317	A	2:28:00 PM
GA 0517	A	2:29:00 PM
SJ 0247	A	2:29:00 PM
GA 0828	D	2:30:00 PM
JT 0608	D	2:31:00 PM
QZ 7513	A	2:32:00 PM
GA 0105	A	2:33:00 PM
CI 0762	D	2:34:00 PM
JT 0655	A	2:37:00 PM
JT 0612	D	2:38:00 PM
JT 0751	A	2:39:00 PM

Flight_No	Leg	Actual Dept/Arr
JT 0307	A	2:39:00 PM
QZ 7788	D	2:40:00 PM
JT 0371	A	2:44:00 PM
MH 0721	A	2:47:00 PM
GA 0318	D	2:47:00 PM
GA 0212	D	2:51:00 PM
GA 0175	A	2:52:00 PM
QZ 7344	D	2:52:00 PM
GA 0653	A	2:55:00 PM
JT 0292	D	2:56:00 PM
Y6 0838	A	2:56:00 PM
GA 0504	D	2:59:00 PM
SJ 0260	D	3:01:00 PM
GA 0518	D	3:02:00 PM
GA 0605	A	3:02:00 PM
JT 0359	A	3:03:00 PM
NH 0937	A	3:03:00 PM
GA 0895	A	3:05:00 PM
JT 0793	A	3:05:00 PM
GA 0241	A	3:06:00 PM
GA 0136	D	3:07:00 PM
SJ 0052	D	3:07:00 PM
AK 0385	D	3:07:00 PM
XN 0801	A	3:09:00 PM
Y6 0584	A	3:10:00 PM
JT 0327	A	3:11:00 PM
SJ 0062	D	3:12:00 PM
QZ 7785	A	3:14:00 PM
GA 0143	A	3:15:00 PM
GA 0520	D	3:15:00 PM
CX 0776	D	3:16:00 PM
GA 0830	D	3:18:00 PM
GA 0879	A	3:18:00 PM
GA 0211	A	3:19:00 PM
GA 0120	D	3:19:00 PM
JT 0766	D	3:19:00 PM
JT 0339	A	3:21:00 PM
GA 0240	D	3:24:00 PM
JT 0155	A	3:24:00 PM
MJ 0604	D	3:24:00 PM
SJ 0075	A	3:26:00 PM
VF 0204	D	3:27:00 PM
Y6 0301	D	3:28:00 PM

Flight_No	Leg	Actual Dept/Arr
JT 0557	A	3:30:00 PM
JT 0018	D	3:32:00 PM
QZ 7514	D	3:32:00 PM
GA 0164	D	3:33:00 PM
SJ 0095	A	3:34:00 PM
GA 0037	A	3:34:00 PM
JT 0334	D	3:35:00 PM
JT 0201	A	3:35:00 PM
SJ 0098	D	3:36:00 PM
GA 0165	A	3:37:00 PM
SJ 0593	A	3:37:00 PM
Y6 0523	D	3:37:00 PM
JT 0502	D	3:39:00 PM
SJ 0091	A	3:39:00 PM
GA 0829	A	3:40:00 PM
JT 0023	A	3:41:00 PM
JT 0578	D	3:43:00 PM
GA 0221	A	3:43:00 PM
GA 0535	A	3:45:00 PM
GA 0320	D	3:47:00 PM
GA 0059	A	3:47:00 PM
GA 9840X	D	3:50:00 PM
JT 0538	D	3:50:00 PM
Y6 0566	A	3:50:00 PM
Y6 0701	D	3:50:00 PM
EK 0356	A	3:50:00 PM
GA 0121	A	3:52:00 PM
Y6 0552	A	3:54:00 PM
GA 0190	D	3:56:00 PM
QZ 7693	A	3:57:00 PM
JT 0354	D	3:57:00 PM
MH 0720	D	3:59:00 PM
GA 0319	A	3:59:00 PM
JT 0202	D	4:00:00 PM
GA 0293	A	4:01:00 PM
GA 0020	A	4:01:00 PM
TN 0709	A	4:02:00 PM
GA 0189	A	4:04:00 PM
GA 0983	A	4:04:00 PM
GA 0176	D	4:08:00 PM
JT 0550	D	4:10:00 PM
SQ 0960V	A	4:11:00 PM
Y6 0542	A	4:13:00 PM

Flight_No	Leg	Actual Dept/Arr
GA 0410	D	4:13:00 PM
JT 0326	D	4:14:00 PM
GA 0109	A	4:15:00 PM
Y6 0743	D	4:16:00 PM
JT 0635	A	4:17:00 PM
JT 0291	A	4:19:00 PM
GA 0242	D	4:20:00 PM
GA 0439	A	4:20:00 PM
GA 0601	A	4:23:00 PM
JT 0387	A	4:23:00 PM
SJ 0173	A	4:24:00 PM
GA 0015A	D	4:24:00 PM
JT 0372	D	4:24:00 PM
GA 0509	A	4:26:00 PM
Y6 0516	A	4:26:00 PM
GA 0214	D	4:27:00 PM
GA 0138	D	4:27:00 PM
JT 0749	A	4:29:00 PM
JL 0725	A	4:29:00 PM
Y6 0631	D	4:30:00 PM
Y6 0344	A	4:31:00 PM
GA 0106	D	4:32:00 PM
JT 0782	D	4:33:00 PM
Y6 0244	A	4:34:00 PM
Y6 0656	A	4:35:00 PM
JT 0765	A	4:39:00 PM
Y6 0636	A	4:43:00 PM
GA 0321	A	4:44:00 PM
JT 0613	A	4:45:00 PM
JT 0156	D	4:45:00 PM
MZ 0791	A	4:45:00 PM
SJ 0041	A	4:47:00 PM
QZ 7736	D	4:48:00 PM
QZ 7345	A	4:49:00 PM
GA 0832	D	4:49:00 PM
SJ 0053	A	4:50:00 PM
GA 0122	D	4:50:00 PM
GA 0023	D	4:50:00 PM
GA 0224	D	4:51:00 PM
SJ 0182	D	4:51:00 PM
GA 0519	A	4:51:00 PM
8K 0302	D	4:51:00 PM
QZ 7716	D	4:52:00 PM

Flight_No	Leg	Actual Dept/Arr
GA 0044	D	4:52:00 PM
JT 0768	D	4:54:00 PM
GA 0322	D	4:56:00 PM
JT 0715	A	4:57:00 PM
SJ 0076	D	4:57:00 PM
JT 0396	D	4:59:00 PM
SJ 0015	A	4:59:00 PM
JT 0024	D	4:59:00 PM
JT 0525	A	5:02:00 PM
TN 0708	D	5:02:00 PM
SJ 0099	A	5:03:00 PM
KL 0809	A	5:04:00 PM
JT 0355	A	5:06:00 PM
JT 0379	A	5:09:00 PM
GA 0213	A	5:09:00 PM
GA 0156	D	5:10:00 PM
JT 0609	A	5:10:00 PM
JT 0391	A	5:13:00 PM
JT 0581	A	5:15:00 PM
Y6 0372	A	5:16:00 PM
Y6 0205	D	5:18:00 PM
GA 0612	D	5:19:00 PM
GA 0081	A	5:19:00 PM
JT 0799	A	5:21:00 PM
JT 0342	D	5:22:00 PM
GA 0867	A	5:23:00 PM
JT 0779	A	5:25:00 PM
JT 0015	A	5:25:00 PM
GA 0192	D	5:27:00 PM
JT 0399	A	5:28:00 PM
GA 0506	D	5:31:00 PM
SQ 0961	D	5:32:00 PM
GA 0713	A	5:33:00 PM
JT 0696	D	5:33:00 PM
Y6 0302	A	5:34:00 PM
QZ 7519	A	5:34:00 PM
JT 0653	A	5:38:00 PM
GA 0155	A	5:38:00 PM
GA 0412	D	5:38:00 PM
GA 0243	A	5:38:00 PM
GA 0885	A	5:39:00 PM
JT 0335	A	5:40:00 PM
GA 0323	A	5:42:00 PM

Flight_No	Leg	Actual Dept/Arr
Y6 0524	A	5:43:00 PM
GA 0534	D	5:43:00 PM
GA 0123	A	5:44:00 PM
GA 0818	D	5:45:00 PM
GA 0137	A	5:46:00 PM
Y6 0812	A	5:46:00 PM
GA 0244	D	5:47:00 PM
MH 0723	A	5:49:00 PM
GA 0522	D	5:50:00 PM
Y6 0315	D	5:50:00 PM
GA 0177	A	5:51:00 PM
GA 0324	D	5:52:00 PM
JT 0503	A	5:53:00 PM
GA 0191	A	5:53:00 PM
GA 0216	D	5:55:00 PM
LH 0778	A	5:56:00 PM
JT 0206	D	5:56:00 PM
Y6 0543	D	5:57:00 PM
SJ 0086	D	5:58:00 PM
Y6 0577	D	5:58:00 PM
SJ 0267	A	5:58:00 PM
TK 0066	A	5:59:00 PM
SJ 0078	D	6:00:00 PM
JT 0293	A	6:01:00 PM
Y6 0561	D	6:03:00 PM
Y6 0345	D	6:03:00 PM
JT 0336	D	6:04:00 PM
SQ 0962	A	6:04:00 PM
SJ 0063	A	6:06:00 PM
EK 0357	D	6:06:00 PM
Y6 0652	A	6:08:00 PM
QZ 7695	A	6:08:00 PM
GA 0507	A	6:09:00 PM
JT 0539	A	6:09:00 PM
GA 0107	A	6:12:00 PM
AP 0002	A	6:14:00 PM
GA 0432	D	6:18:00 PM
QZ 7789	A	6:19:00 PM
JT 0606	D	6:21:00 PM
QZ 7518	D	6:21:00 PM
Y6 0594	A	6:22:00 PM
GAC 0017	D	6:22:00 PM
JT 0630	D	6:23:00 PM

Flight_No	Leg	Actual Dept/Arr
JT 0383	A	6:25:00 PM
JT 0554	D	6:26:00 PM
JT 0770	D	6:27:00 PM
JT 0551	A	6:28:00 PM
GA 0603	A	6:29:00 PM
GA 0831	A	6:29:00 PM
SJ 0038	D	6:33:00 PM
JT 0157	A	6:34:00 PM
JT 0720	D	6:35:00 PM
Y6 0209	D	6:35:00 PM
JT 0254	D	6:35:00 PM
GA 0139	A	6:35:00 PM
JT 0294	D	6:36:00 PM
JT 0716	D	6:39:00 PM
Y6 0736	A	6:40:00 PM
GA 0245	A	6:40:00 PM
JT 0026	D	6:41:00 PM
MZ 0641	A	6:43:00 PM
JT 0158	D	6:43:00 PM
GA 0414	D	6:45:00 PM
MH 0725	A	6:46:00 PM
Y6 0662	A	6:46:00 PM
GA 0178	D	6:47:00 PM
JT 0693	A	6:48:00 PM
GA 0215	A	6:48:00 PM
GA 0413	A	6:50:00 PM
JT 0586	D	6:50:00 PM
JT 0564	D	6:51:00 PM
SJ 0261	A	6:51:00 PM
GA 0325	A	6:51:00 PM
MH 0722	D	6:52:00 PM
JT 0579	A	6:53:00 PM
SJ 0212	D	6:55:00 PM
SJ 0021	A	6:56:00 PM
GA 0885B	D	6:57:00 PM
KL 0810	D	6:57:00 PM
GA 0655	A	6:57:00 PM
JT 0784	D	6:58:00 PM
GA 0885	D	7:00:00 PM
QZ 7786	D	7:03:00 PM
Y6 0671	D	7:04:00 PM
GA 0536	D	7:06:00 PM
JT 0777	A	7:07:00 PM

Flight_No	Leg	Actual Dept/Arr
GA 0124	D	7:07:00 PM
JT 0385	A	7:08:00 PM
GA 0125	A	7:09:00 PM
SJ 0077	A	7:10:00 PM
JT 0386	D	7:11:00 PM
SJ 0033	A	7:12:00 PM
QZ 7696	D	7:13:00 PM
GA 0521	A	7:14:00 PM
SJ 0087	A	7:14:00 PM
JT 0510	D	7:15:00 PM
LH 0779	D	7:15:00 PM
GA 0833	A	7:16:00 PM
Y6 0321	D	7:18:00 PM
GA 0218	D	7:19:00 PM
SQ 0966	A	7:20:00 PM
GA 0609	A	7:22:00 PM
GA 0167	A	7:22:00 PM
TK 0067	D	7:22:00 PM
JT 0568	D	7:24:00 PM
GA 0227	A	7:25:00 PM
GA 0523	A	7:26:00 PM
SQ 0963	D	7:27:00 PM
QZ 7515	A	7:27:00 PM
GA 0166	D	7:28:00 PM
CX 0719	A	7:32:00 PM
JT 0357	A	7:33:00 PM
GA 0179	A	7:33:00 PM
JT 0580	D	7:34:00 PM
GAC 0016	A	7:35:00 PM
SJ 0011	A	7:36:00 PM
JT 0392	D	7:36:00 PM
GA 0416	D	7:37:00 PM
Y6 0744A	A	7:38:00 PM
JT 0767	A	7:40:00 PM
JT 0329	A	7:40:00 PM
JT 0343	A	7:40:00 PM
GA 0246	D	7:41:00 PM
JT 0295	A	7:41:00 PM
GA 0834	D	7:44:00 PM
SJ 0183	A	7:44:00 PM
JT 0721	A	7:45:00 PM
JT 0678	D	7:45:00 PM
SJ 0035	A	7:48:00 PM

Flight_No	Leg	Actual Dept/Arr
MH 0724	D	7:48:00 PM
JT 0375	A	7:51:00 PM
GA 0126	D	7:54:00 PM
AK 0388	A	7:54:00 PM
JT 0016	D	7:55:00 PM
SJ 0184	D	7:56:00 PM
JT 0356	D	7:56:00 PM
SJ 0080	D	7:58:00 PM
GA 0899	A	7:59:00 PM
Y6 0361	D	7:59:00 PM
Y6 0316	A	8:00:00 PM
GA 0196	D	8:00:00 PM
Y6 0206	A	8:01:00 PM
JT 0762	D	8:01:00 PM
GA 0247	A	8:02:00 PM
SJ 0220	D	8:08:00 PM
JT 0337	A	8:09:00 PM
GA 0725	A	8:11:00 PM
GA 0725B	A	8:11:00 PM
CI 0679	A	8:13:00 PM
JT 0650	D	8:13:00 PM
GA 0328	D	8:14:00 PM
Y6 0544	A	8:16:00 PM
QZ 7516	D	8:18:00 PM
GA 0524	D	8:18:00 PM
GAC 0019	D	8:19:00 PM
JT 0151	A	8:20:00 PM
JT 0308	D	8:20:00 PM
GA 0157	A	8:22:00 PM
GA 0418	D	8:22:00 PM
JT 0203	A	8:24:00 PM
GA 0147	A	8:29:00 PM
GA 0217	A	8:31:00 PM
SJ 0256	D	8:33:00 PM
GA 0193	A	8:34:00 PM
JT 0328	D	8:34:00 PM
JT 0555	A	8:35:00 PM
SQ 0967	D	8:37:00 PM
KE 0627	A	8:39:00 PM
GA 0835	A	8:43:00 PM
JT 0633	A	8:43:00 PM
AK 0389	D	8:44:00 PM
SJ 0014	D	8:45:00 PM

Flight_No	Leg	Actual Dept/Arr
JT 0010	D	8:47:00 PM
MZ 0761	A	8:53:00 PM
JT 0743	A	8:53:00 PM
JT 0332	D	8:54:00 PM
JT 0025	A	8:57:00 PM
GA 0329	A	9:02:00 PM
GA 0537	A	9:02:00 PM
JT 0772	D	9:02:00 PM
JT 0783	A	9:04:00 PM
GAC 0018	A	9:05:00 PM
JT 0563	A	9:07:00 PM
GA 0863V	A	9:10:00 PM
CZ 0387	A	9:15:00 PM
GA 0127	A	9:24:00 PM
Y6 0562	A	9:24:00 PM
Y6 0578	A	9:25:00 PM
GA 0650	D	9:28:00 PM
QR 0670	A	9:37:00 PM
GA 0417	A	9:41:00 PM
GAC 0045	A	9:44:00 PM
JT 0584	D	9:51:00 PM
JT 0585	A	9:52:00 PM
JT 0218	D	9:53:00 PM
GA 0088	D	9:54:00 PM
MZ 0774	D	9:59:00 PM
NH 0938	D	10:00:00 PM
GA 0420	D	10:05:00 PM
GA 0884	A	10:06:00 PM
Y6 0845	D	10:07:00 PM
JL 0726	D	10:09:00 PM
GA 0332	D	10:09:00 PM
GA 0419	A	10:10:00 PM
AP 0001	D	10:13:00 PM
JT 0159	A	10:14:00 PM
GA 0525	A	10:16:00 PM
KE 0628V	D	10:16:00 PM
EK 0358	A	10:19:00 PM
GA 0195	A	10:20:00 PM
JT 0255	A	10:21:00 PM
JT 0027	A	10:22:00 PM
JT 0798	D	10:24:00 PM
JT 0309	A	10:25:00 PM
JT 0583	A	10:27:00 PM

Flight_No	Leg	Actual Dept/Arr
SQ 0968	A	10:30:00 PM
MH 0727	A	10:34:00 PM
QZ 7787	A	10:37:00 PM
GA 0652	D	10:55:00 PM
GA 0421	A	11:02:00 PM
BI 0737	A	11:03:00 PM
Y6 0362	A	11:05:00 PM
GA 0333	A	11:07:00 PM
QZ 7697	A	11:21:00 PM
QZ 7737	A	11:22:00 PM
GA 0884	D	11:33:00 PM
JT 0019	A	11:41:00 PM
GA 0712X	D	11:41:00 PM
JT 0575	A	11:46:00 PM
GA 0890	D	11:46:00 PM
QZ 7517	A	11:48:00 PM
GA 0878	D	11:49:00 PM
QZ 7717	A	11:54:00 PM
Y6 0837	D	11:55:00 PM
JT 0209N	A	11:59:00 PM
JT 0587A	A	12:28:00 AM
SJ 0598	D	12:42:00 AM
EK 0359	D	12:55:00 AM
GA 0640	D	1:05:00 AM
QR 0671	D	1:09:00 AM
Y6 0851	D	1:16:00 AM
JT 0790	D	1:55:00 AM
Y6 0862	A	2:38:00 AM
Y6 0643	D	2:43:00 AM
Y6 0005	A	3:16:00 AM
FX 5194	A	3:36:00 AM
KE 0375	A	4:09:00 AM
BI 0738	D	5:02:00 AM
MZ 0640	D	5:03:00 AM
MH 0726	D	5:06:00 AM
FX 5194	D	5:11:00 AM
XN 0800	D	5:19:00 AM
JT 0792	D	5:20:00 AM
JT 0776	D	5:20:00 AM
GA 0300	D	5:24:00 AM
MZ 0762	D	5:25:00 AM
QZ 7782	D	5:43:00 AM
GA 0654	D	5:48:00 AM

Flight_No	Leg	Actual Dept/Arr
SJ 0592	D	5:50:00 AM
Y6 0892	A	5:51:00 AM
GA 0600	D	5:57:00 AM

