# Pengaruh distribusi spasial curah hujan terhadap Total Suspended Solid (TSS) di daerah aliran Ci Lutung = Influence of spatial distribution of rainfall on Total Suspended Solid (TSS) in Ci Lutung watershed

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Abstrak

Penelitian yang bertujuan untuk menganalisis pengaruh distribusi spasial curah hujan terhadap total suspended solid di daerah aliran Ci Lutung, Kabupaten Majalengka. Proses ekstraksi citra Himawari 8 dibutuhkan untuk mengetahui pola distribusi spasial curah hujan ketika kejadian pengambilan sampel. Data Curve Number berupa kelompok hidrologi tanah dan Penggunaan Lahan dibutuhkan untuk memberi bobot tiap-tiap sub DAS yang telah didelineasi untuk karakteristik fisik wilayah. Pola distribusi spasial curah hujan memiliki korelasi kuat dengan konsentrasi TSS yang dihasilkan melalui debit limpasan. Pola Distribusi curah hujan yang variatif di setiap kejadian pengambilan sampel turut menyumbang andil terjadinya fluktuasi nilai konsentrasi total suspended solid dan kekeruhan. Korelasi kuat terdapat pada hubungan antara TSS dengan debit aliran dengan angka koefisien determinasi r2 sebesar 0,84. Sementara korelasi sedang terdapat pada hubungan antara kekeruhan dan TSS dengan angka koefisien determinasi r2 sebesar 0,58. <hr>The study aims to analyze the influence of spatial distribution of rainfall on total suspended solid in Ci Lutung flow area, Majalengka regency. The process of extraction the image of Himawari 8 is needed to know the pattern of spatial distribution of rainfall when the sampling takes place. Data Curve Number in the form of hydrologic soil group and Land Use is needed to give weight of each sub basin that has been diarealized for physical characteristic of region. The spatial distribution pattern of rainfall has a strong correlation with the concentration of TSS generated through runoff discharge. Variable rainfall distribution patterns in each sampling event contributed to the fluctuation of total suspended solid and turbidity concentration. The strong correlation is in the relationship between TSS with runoff discharge with the coefficient of determination r 2 is 0.84. While the correlation in the relationship between turbidity and TSS with the coefficient of determination r2 is 0.58.