PERHITUNGAN DATA DEBIT YANG HILANG
Latar Belakang

Keberadaan data debit yang tidak lengkap dan terjadinya kekosongan data debit sering terjadi.

Penyebab: pencatatan data yang tidak kontinyu atau kehilangan dalam penyimpanan.

Telah banyak peningkatan metode atau penemuan-penemuan yang menyangkut pengembangan teknik analisa, namun ketidakpastian frekuensi banjir membuat perhitungan prediksi secara akurat menjadi sangat penting.

Metode pendekatan yang digunakan dalam memprediksi kekosongan data debit tersebut adalah metode pendekatan yang didasarkan pada prinsip-prinsip dari teori informasi entropy.
Informasi Entropi

oleh Kullback dan Leibler adalah seperti pada Persamaan (5) berikut:

\[ I(P : Q) = \sum_{i=1}^{N} P_i \ln \frac{p_i}{q_i} \] (5)

Dimana \( p_i \) adalah probabilitas dari event \( i \) dari probabilitas distribusi \( P \) dan \( q_i \) probabilitas dari event \( i \) dari probabilitas distribusi \( Q \)

Cara menghitung data debit yg hilang

Data debit Ngunt 1 dan Ngunt 2

Bila terdapat data debit (mm) yang hilang pada bulan Maret s/d Oktober 1991

Bagaimana cara menghitungnya?

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**Hitung rata-rata peluang debit bulanan/debit tahunan**
Hitung \( p_1 \) dan \( p_2 \)

Hitung \( \ln(p_1) \) dan \( \ln(p_2) \), dimana \( p_2 \) menggunakan rata-rata \( p_2 \) sepuluh tahun terakhir.

\[
I = \ln \frac{p_1}{p_2}
\]

Debit dugaan = debit ngunut 1 * \( \frac{\ln(p_1)}{\ln(p_2)} \)

Error = 0,17

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## Cara perhitungan

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Jml 1101

p2 adalah rata-rata p selama 10 th terakhir
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**Harga mutlak**: 0,11

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#### Debit Ngunut 1

![Debit Ngunut 1 Graph](chart1.png)


![Pustaka Chart](chart2.png)
TERIMA KASIH