

**Respon Tanggap Darurat  
Bencana Berbasis Data Satelit**  
Space-based Disaster Emergency Response

**BANJIR**

**F10**

Deli Serdang,Simalungun,Karo,  
Serdang Bedagai  
Provinsi Sumatera Utara, Indonesia

**Flood**

Deli Serdang, Simalungun, Karo, Serdang Bedagai  
North Sumatra Province, Indonesia



5 km

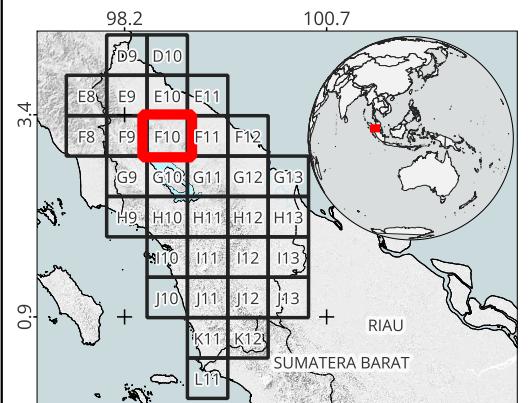
1:200,000  
Map scale for A3  
CRS: WGS84 (EPSG:4326)

Legenda:

- [Dashed black line] Batas kabupaten District border
- [Blue line] Danau Lake
- [Red line] Jaringan jalan primer Primary road
- [Red line with dots] Jaringan jalan Road
- [Blue rectangle] Estimasi area terdampak banjir Estimated flooded area

Sumber Data:  
Data source:

1. Batas administrasi dari Badan Informasi Geospasial  
Administrative boundary courtesy of Geospatial Information Agency (BIG)
2. Jaringan jalan dan nama tempat dari Open Street Map  
Road networks and nameplace courtesy of the Open Street Map (OSM)



**Deskripsi:**  
Estimasi genangan banjir dilakukan dengan menganalisis perubahan nilai backscatter ( $\Delta$ dB) pada citra SAR Sentinel-1 sebelum (22 November 2025) dan sesudah kejadian (28 November 2025). Penurunan backscatter yang melampaui ambang batas yang ditetapkan, diidentifikasi sebagai genangan banjir. Hasil estimasi masih memerlukan validasi lapangan.

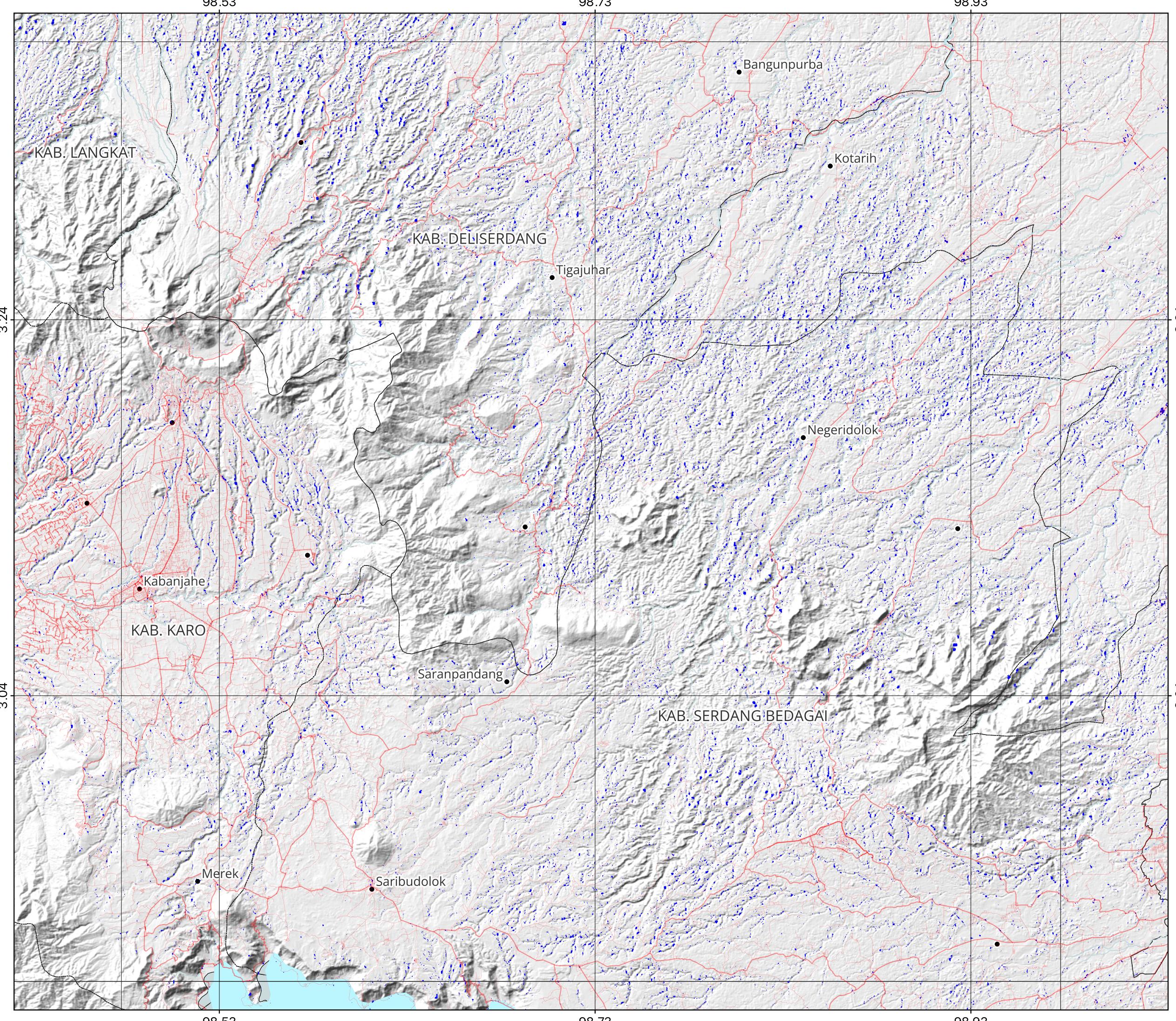
**Description:**  
Flood inundation was estimated by analyzing changes in backscatter ( $\Delta$ dB) in Sentinel-1 SAR imagery acquired before (22nd November 2025) and after the event (28th November 2025). A decrease in backscatter exceeding the predefined threshold was classified as flooded area. Estimated flood still needed to be verified further.

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