

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

**BANJIR**

H12

Labuhanbatu Utara, Labuhanbatu, Tapanuli Selatan, Padang Lawas Utara  
Provinsi Sumatera Utara, Indonesia

**Flood**

Labuhanbatu Utara, Labuhanbatu, Tapanuli Selatan, Padang Lawas Utara  
North Sumatra Province, Indonesia



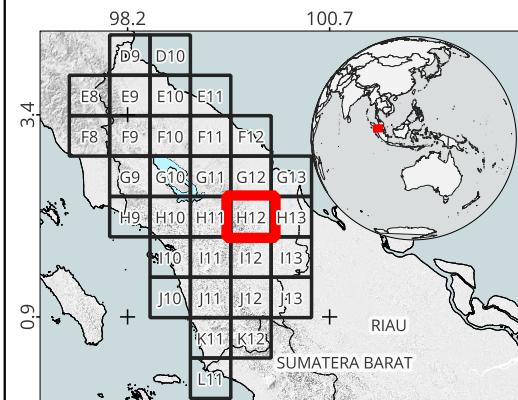
5 km  
1:200,000  
Map scale for A3  
CRS: WGS84 (EPSG:4326)

**Legenda:**

|   |  |                                     |                                       |
|---|--|-------------------------------------|---------------------------------------|
| <span style="border: 1px dashed black; padding: 2px;"> </span>                | Batas kabupaten<br>District border                       | <span style="color: red;">—</span>  | Jaringan jalan primer<br>Primary road |
| <span style="background-color: #0070C0; color: white; padding: 2px;"> </span> | Danau<br>Lake  | <span style="color: red;">—</span>  | Jaringan jalan<br>Road                |
| <span style="background-color: #0000FF; color: white; padding: 2px;"> </span> | Estimasi area terdampak banjir<br>Estimated flooded area | <span style="color: blue;">■</span> |                                       |

**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.

Information Produced by:  
Indonesia Regional Support Office, UN-SPIDER, INASA, BRIN  
<https://bit.ly/Indonesia-RSO-BRIN>

Supported by:  
- Center for Data and Information, BRIN  
- Research Center for Geoinformatics, BRIN  
Contact: Yenni Vetrina Ph.D (yenn004@brin.go.id)



banjir\_Sumut\_251130\_R1\_H12

