Deutsches Zentrum
DLR   für Luft- und Raumfahrt

Disclaimer

Prototype DOP (Digital Orthophoto) flood processing chain

The current DOP flood service is still a prototype and was created in an operational framework. The information was manually detected and validated. As flood damage are considered:

- Rivers and riversides
- Debris inside/near the rivers
- Debris in backyards and in pavements
- Flooded areas near/around buildings
- Flooded areas in fields
- Flooded sport fields
- Dry clay on streets
- Dry clay on cars
- Flooded streets
- Trees on railways near the rivers with missing rail and sleepers
- Broken bridges
- Damaged roofs
- Roofs floating on the rivers

The following data used for this service was:

- DOP 10 cm post-disaster imagery from 16th July 2021
- DOP 15 cm pre-disaster imagery from June 2021

Data sources copyright information

Post-disaster imagery: ©DLR 2021

Pre-disaster imagery: ©BKG 2021

Reference

- Schwendemann, G. M., Schneibel, A. (2021) "Flood damage detection as of July 16th 2021 by means of Manual editing and Artificial Intelligence (Deep learning) approach within the ESRI framework ", UN-SPIDER Bonn International Virtual Conference Space-based Solutions for Disaster Management in Africa: Networks and Information Technologies in times of crisis, 16 -18 November 2021.

- Schwendemann, G. M. (2021) "Detección automática de inundaciones en Julio 2021 en Alemania: una comparación entre manual digitalización y la ayuda de la Inteligencia Artificial aplicando la arquitectura de red neuronal del método Deep learning en ESRI ". UN-SPIDER Reunión regional virtual de expertos de ONU-SPIDER para América Latina 23 - 26 November 2021.

Citation

When disseminating data/layers of the DOP- flood service in e.g. presentations or own map products, please cite the source as follows: © DLR/ZKI 2021

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