



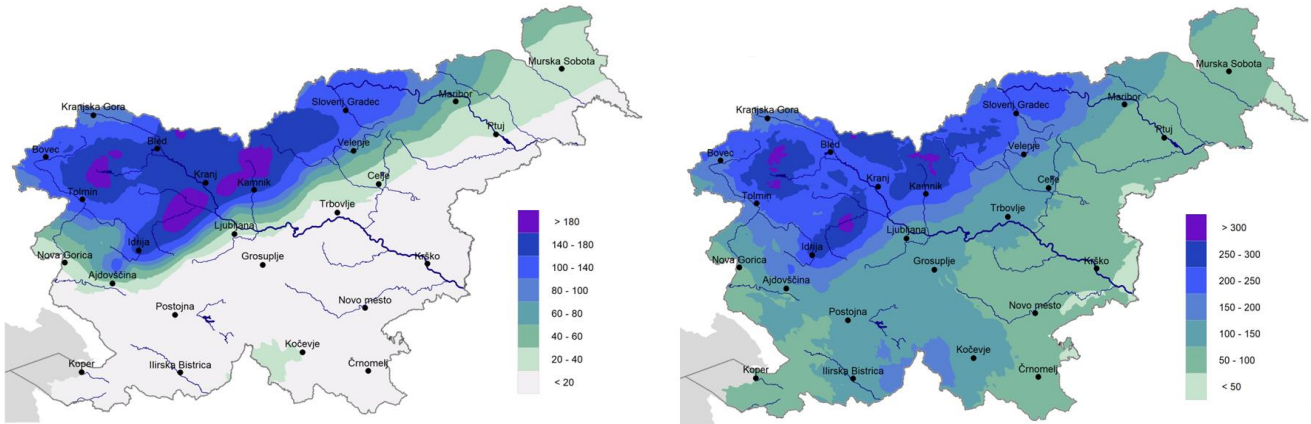
Supplement of

Brief communication: A first hydrological investigation of extreme August 2023 floods in Slovenia, Europe

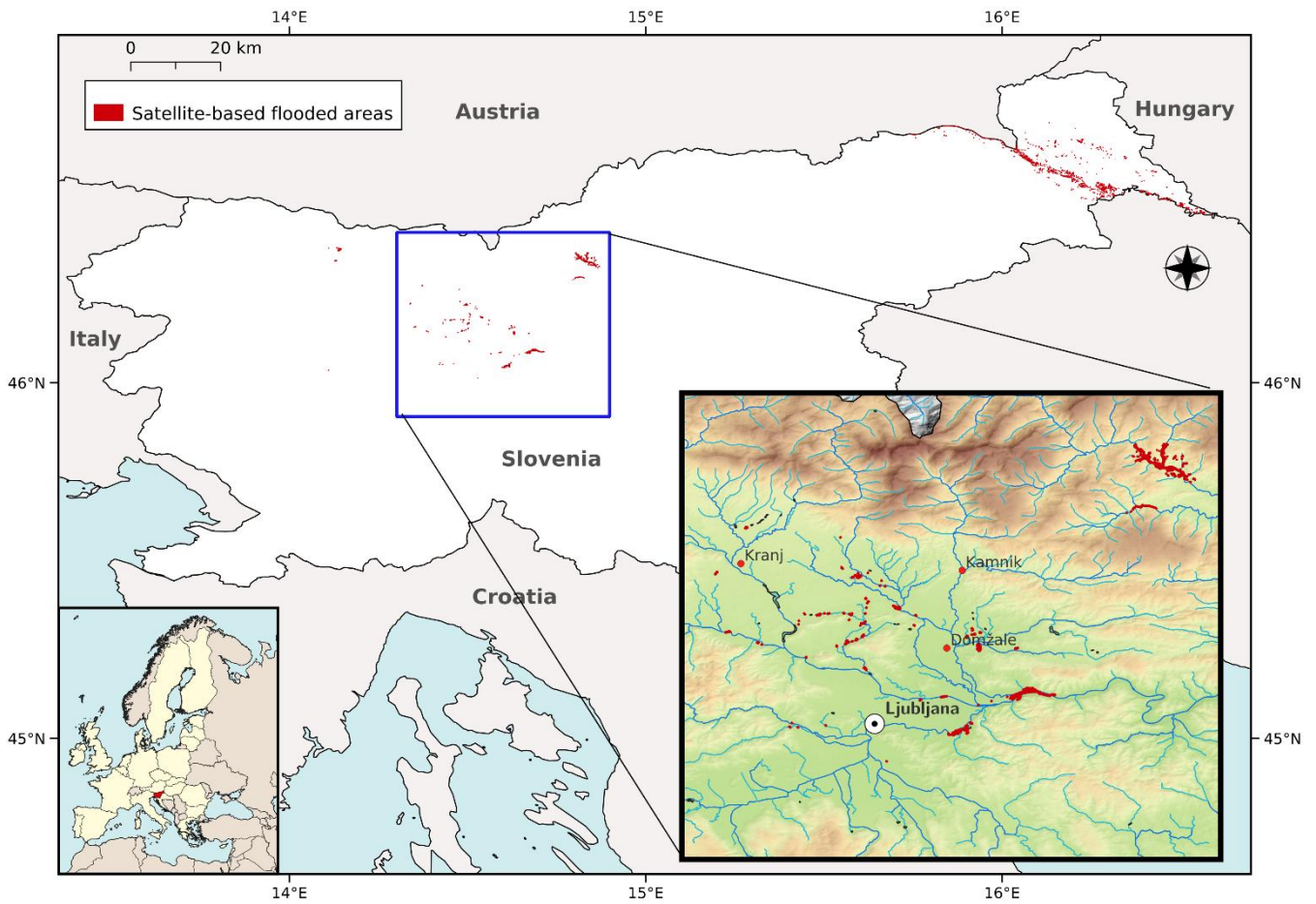
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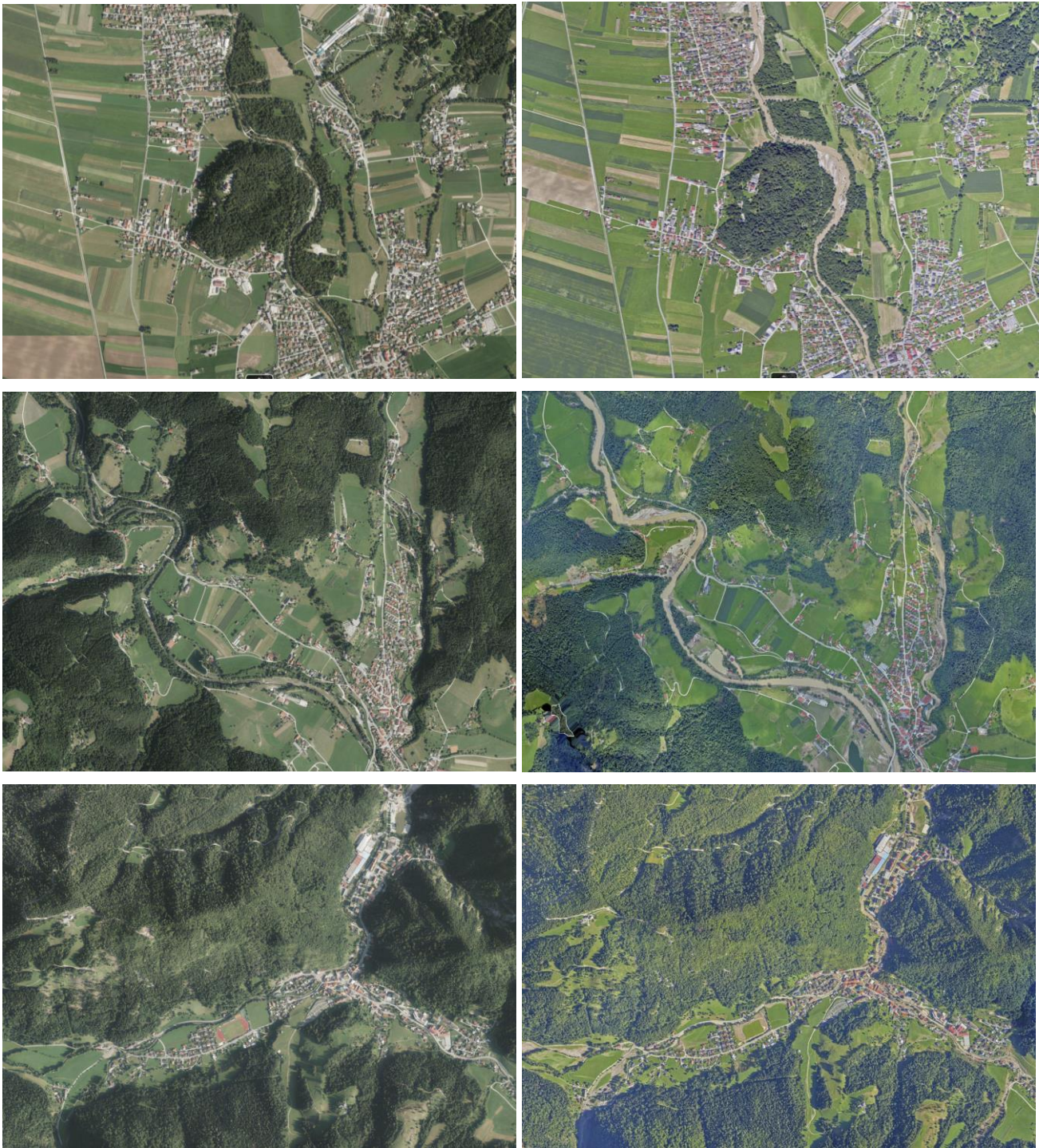
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5 **Figure S1: A map of 24 hours (left) and 72 hours (right) rainfall totals (in mm) from the 3rd of August 8:00 until the 4th of August at 8:00 and until 6th of August 8:00, respectively, based on the measured rainfall at stations operated by the Slovenian Environment Agency (ARSO). The map is adopted after ARSO (ARSO, 2023a).**



10 **Figure S2: Location of flooded areas according to the satellite-based data (Copernicus Emergency Management Service, 2023). It should be noted that the recognised affected areas are highly underestimated in location and extent due to remote sensing limitations and that not all areas could be covered effectively. Delivery of the products was done mostly a few days after the event based on the satellite data acquired from 4th of August onwards (Copernicus Emergency Management Service, 2023).**



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Figure S3: Morphological changes (e.g., shifted river channels, bank erosion processes) in the river corridors based on the orthophoto images before (i.e., in year 2022) and after the August 2023 flood events (orthophoto survey was conducted on the 7th and 8th of August 2023). Scale of orthophoto images is 1:8000. Upper panel shows the Kamniška Bistrica River near the settlement

- 20 **Homec**, middle panel shows the Savinja River and its tributaries near the settlement Ljubno ob Savinji, and the lower panel shows the Meža River and its tributaries near the settlement Črna na Koroškem. Left figures show situation in year 2022 and right figures show situation after the August 2023 flood event. Source of orthophoto images is <https://poplave2023.evode.si/>.