1. Introduction

Flooded areas are one of the largest sources of natural water, flood risk assessments and flood risk management (SR) are among the most common and effective means of flood disaster management. However, frequent floods, especially in the lowlands, threaten large parts of the coast and floodplains, causing widespread destructions, and thereby significantly affecting the economy. In this regard, the damage that flooding causes to urban infrastructure and transportation networks can be very costly. One of the main reasons for this is the exposure of large areas of infrastructure to flood risk. For these reasons, the analysis of flood and an assessment of incurred losses is necessary. Floods and floods in the world. Complete the flooding was caused by the maximum water level, which is determined by the date of the first flood event in 2017 and the last flood event in 2015. A better insight into the flooding of the river of the city of Zadar (2015).

2. Data collection

Downloaded data boosted NDWI imagery obtained by Copernicus open access hub (https://scihub.copernicus.eu/dhus/#/home to download). NDWI is calculated with the following formula:

\[ NDWI = \frac{G - R}{G + R} \]

\( G \) is the green band and \( R \) is the red band of the satellite. The sensor 4 and 8 were loaded channels equal spatial resolution.

3. Data analysis

Before calculating NDWI index it is necessary to carry out processing of the satellite images. The program uses the minimum NDWI value for the entire image for the calculation. The NDWI value is calculated for the entire image, so that it is possible to compare the results of the two different missions.

4. Results and discussion

The study results were impacted by the errors that have been impacted by the errors of the data collection. The advantage of the use of the results is the NDWI image. The obtained results are spatial resolution of 10 m.

5. Conclusion

The results were impacted by the errors that have been corrected with the errors of the data collection. The advantage of the use of the results is the NDWI image. The obtained results are spatial resolution of 10 m.

6. Acknowledgments

The authors would like to thank the German Research Foundation (DFG) project no. 174359572 (He 6154/10-1) for financial support. Further, we would like to thank the Deutsche Forschungsgemeinschaft (DFG) for the support of Robert Hohenwarter (DHI, Germany) and the collaboration with him on the results of the research conducted.

Literature