Summary

Geoinformation systems and remote sensing proved the extent to which they can significantly contribute to the emergency response. In the context of decision making in emergency situations, high-quality and timely information, accessibility, defined standards, user-friendly interfaces, and appropriate visualisations are all factors of great significance and help.

Displacement settings represent a particularly complex case of emergency. The magnitude of displacement is rising, and nowadays it represents a global theme, involving both developed and developing countries. Displaced people's camps and settlements are getting more numerous and more crowded and the tendency of a high fraction of them is to lose their temporary nature to become permanent and extensive. Managing displacement settings and providing humanitarian support is crucial.

At the same time, the geospatial world is expanding. The availability of open data and free and open source tools is vast, and the capacities made freely available to extract information from it are growing, starting to be based on cloud infrastructures.

The starting point of the proposed research is the impression of an existing gap between available data and the operational use of it. The amount of data generated is impressive and its quality has proven to be good or high, embedding characteristics such as timeliness and accessibility. The majority of remote sensing applications in the field of displaced populations recurs to very high-resolution imagery, whose cost is not negligible and whose temporal resolution and spatial coverage is lower compared to high-resolution imagery.

From field experience it has also emerged that the information extraction task for operational use is generally left to the end user, who sometimes might not have the ability or the resources to use or make best use out of the available data.

Hence, the research questions arise. Is it possible to apply in the context of displacement standardized, operationally focused and simple (relatively to the end user) methods to take advantage of the large quantity of data and of the most recent processing capacities available? Can high-resolution open imagery be implemented in applications supporting displacement contexts? What are the potential applications of high-resolution open imagery in the context of displacement?