

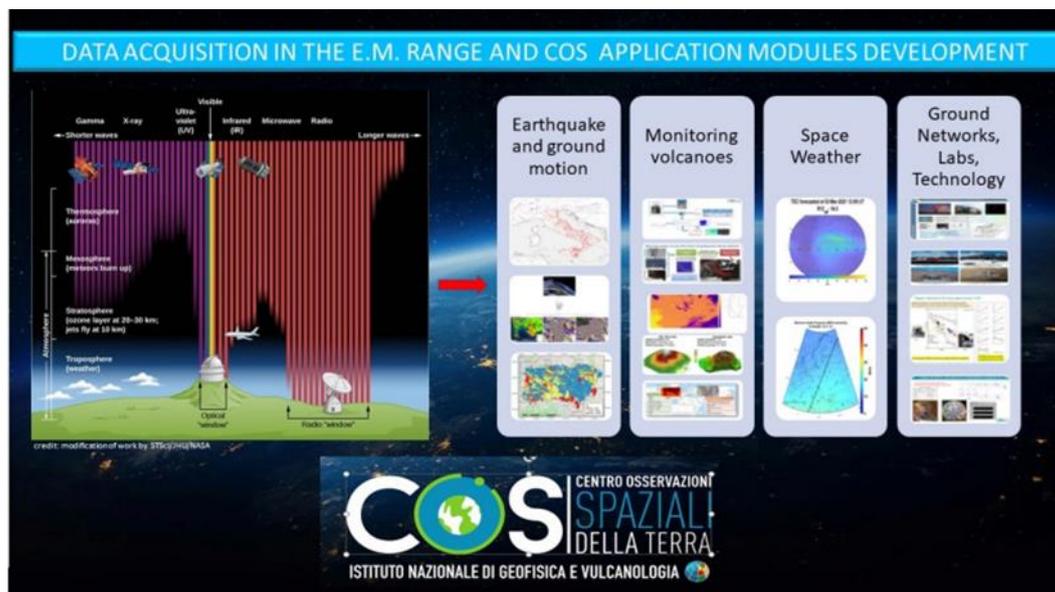


INGV Center for Space Observations of Earth (COS)

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Since the late 90s, INGV effectively contributes to the development of space technologies both in the **Earth Observation** sector (including all available space systems Optical, SAR) and in the **Global Navigation Satellite Systems** (GNSS) sector allowing the INGV to play a role of excellence both for the study of satellite missions and for the development and supply of operational products for end-users. INGV has also laboratories with specific competences in developing instruments for the control and telemetry of stratospheric balloons, acquiring airborne data using UAVs both for local monitoring purposes and to test new sensors which could be selected for future space missions and provide Calibration/validation data for Space observations.

INGV in 2021 established the **Center for Space Observations of Earth (COS)** with the aim to coordinate the INGV activities in the fields of Space and Aerospace. The COS contributes to the strategy of INGV Departments, namely Environment, Earthquakes and Volcanoes, and the INGV Sections / Observatories by adding specific products and services based on space observations to assist monitoring, surveillance, research and services for the society regarding Earth processes. The COS, also represents INGV in working groups which in the last years have defined the National Space Policy, in particular those represented in the COMINT (interministerial Committee for policies relating to space and aerospace), it also represents INGV in National and International Committees with Space Agencies, United Nations. The COS in the next phase will implement a suitable infrastructure to support INGV researchers in develop and consolidate the processing chains for EO and Space Weather products which will support scientific activities and services in Earth Science. Moreover the COS infrastructure will also reinforce the cooperation with industrial partners by providing a series of complementary activities which could improve the national expertise and technological transfer in with a consequent advantage for all the space sector chain.



The figure shows the whole range of the electromagnetic spectrum and space technologies used to develop applications modules within the to support studies and services for Earth Observations and Space Weather.