

About the COSMO-SkyMed Series

What

The **COSMO-SkyMed (Constellation of small Satellites for the Mediterranean basin Observation) Series** consists of two generations of Synthetic Aperture Radar (SAR) satellites with the overall objective of providing frequent all-weather Earth observation, which can be applied to defence and civil needs

The **first-generation COSMO-SkyMed (CSK)** mission consists of four identical SAR satellites

COSMO-SkyMed Second Generation (CSG) consists of two enhanced SAR satellites

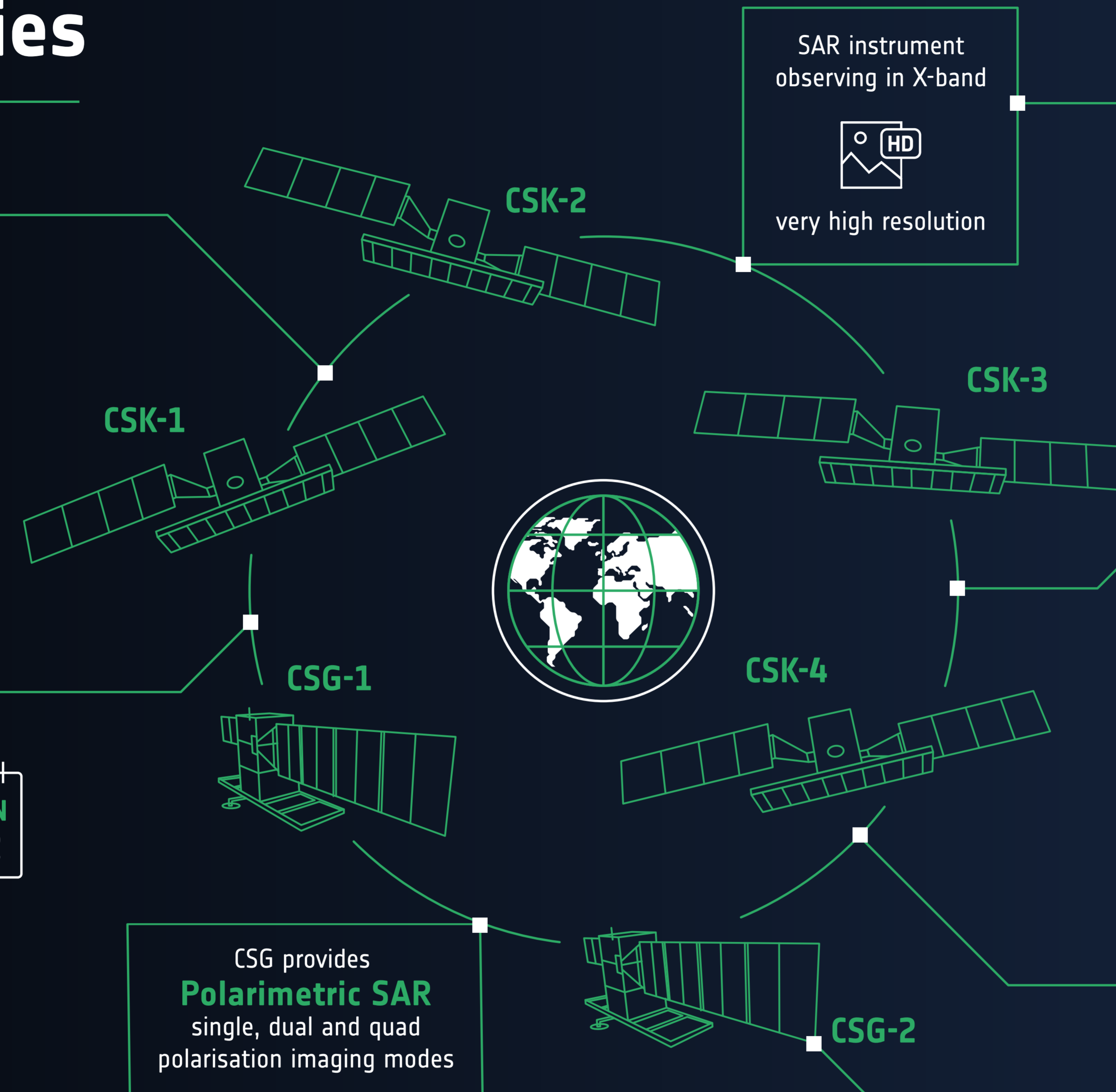
When

Launched in



CSK-3 is no longer operational

The third and fourth CSG satellites are soon ready to join the other COSMO-SkyMed satellites in orbit



Capability

up to **1 m** CSK

Each of the satellites is equipped with a synthetic aperture radar instrument observing in X-band and capable of operating in all visible conditions at high resolution and in real time

Applications

COSMO-SkyMed data enable a wide variety of applications, such as:

- **Defence and security** such as surveillance, mapping, target detection
- **Risk management** including floods, droughts, forest fires
- **Agriculture and food management**
- **Marine and coastal monitoring**
- **Meteorological applications**

Objective

The main mission objective is to provide frequent, global, **multi-purpose imagery of landscape topography, vegetation, snow cover and sea ice cover**, that satisfy both military and institutional or commercial needs

Built by

The constellation is owned and operated by ASI (the Italian Space Agency) and funded by the Italian Ministry of Research and the Italian Ministry of Defence

Data and users

ESA advertises the availability of COSMO-SkyMed data to scientists for research purposes, as part of ESA's Third Party Missions. The data is distributed by e-GEOS and can be requested and downloaded on a free basis after user acceptance for Cat-1 usage

Data access: earth.esa.int/eogateway/missions/cosmo-skymed/