

Discover how RADARSAT scans Earth's surface

What

ESA's Third Party Mission RADARSAT consists of a pair of Earth-imaging radar satellites from the Canadian Space Agency (CSA)

When

Launched in

4 NOV
1995

RADARSAT-1

14 DEC
2007

RADARSAT-2

RADARSAT-1 was decommissioned on 29 March 2013

Instruments

The satellites are equipped with a **Synthetic Aperture Radar (SAR) sensor in the C band.**

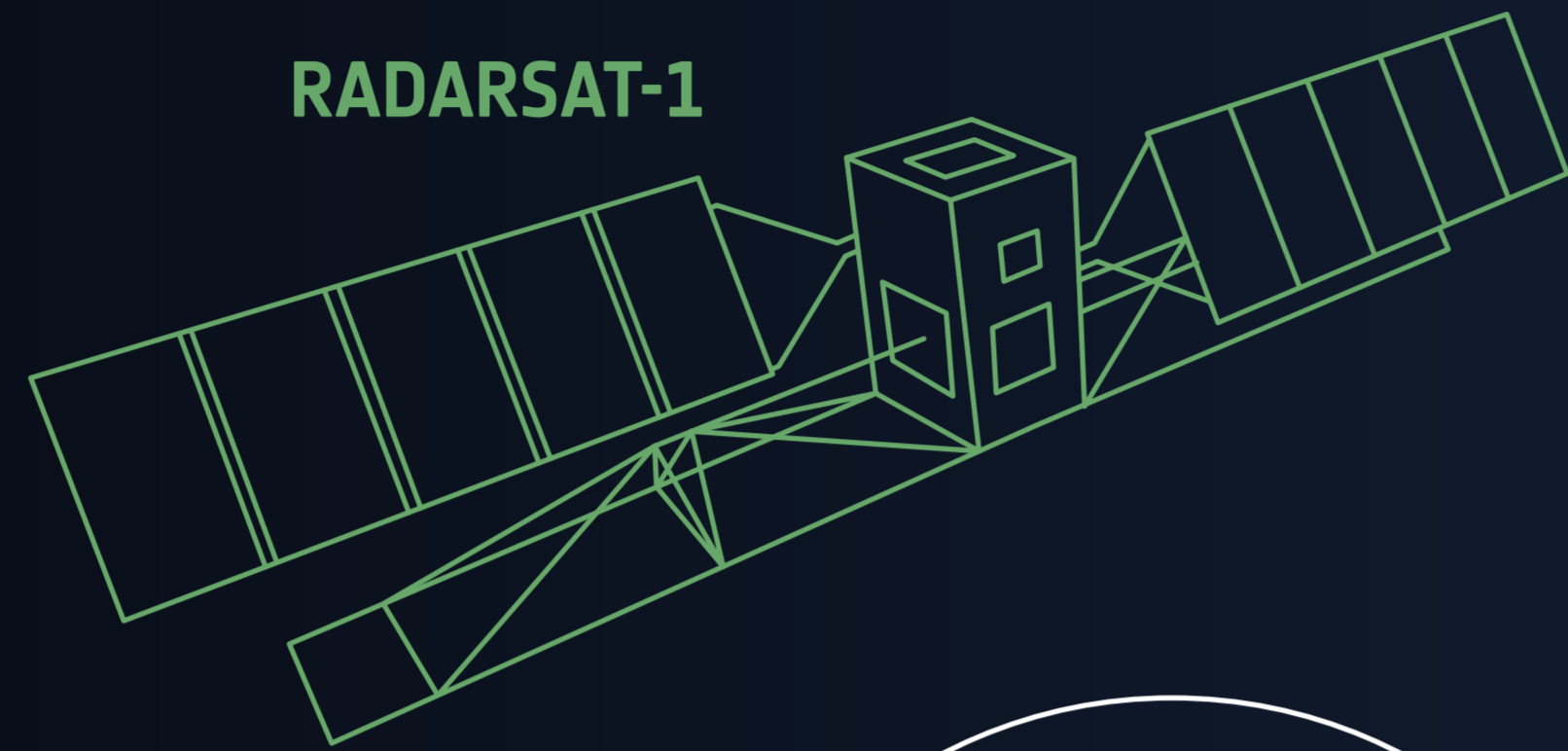
SAR is particularly sensitive to surface roughness, such that it can readily distinguish between various water, land, and artificial features. It sees straight through clouds, rain, snow, dust and haze

Synthetic Aperture Radar (SAR) with fully polarimetric capabilities

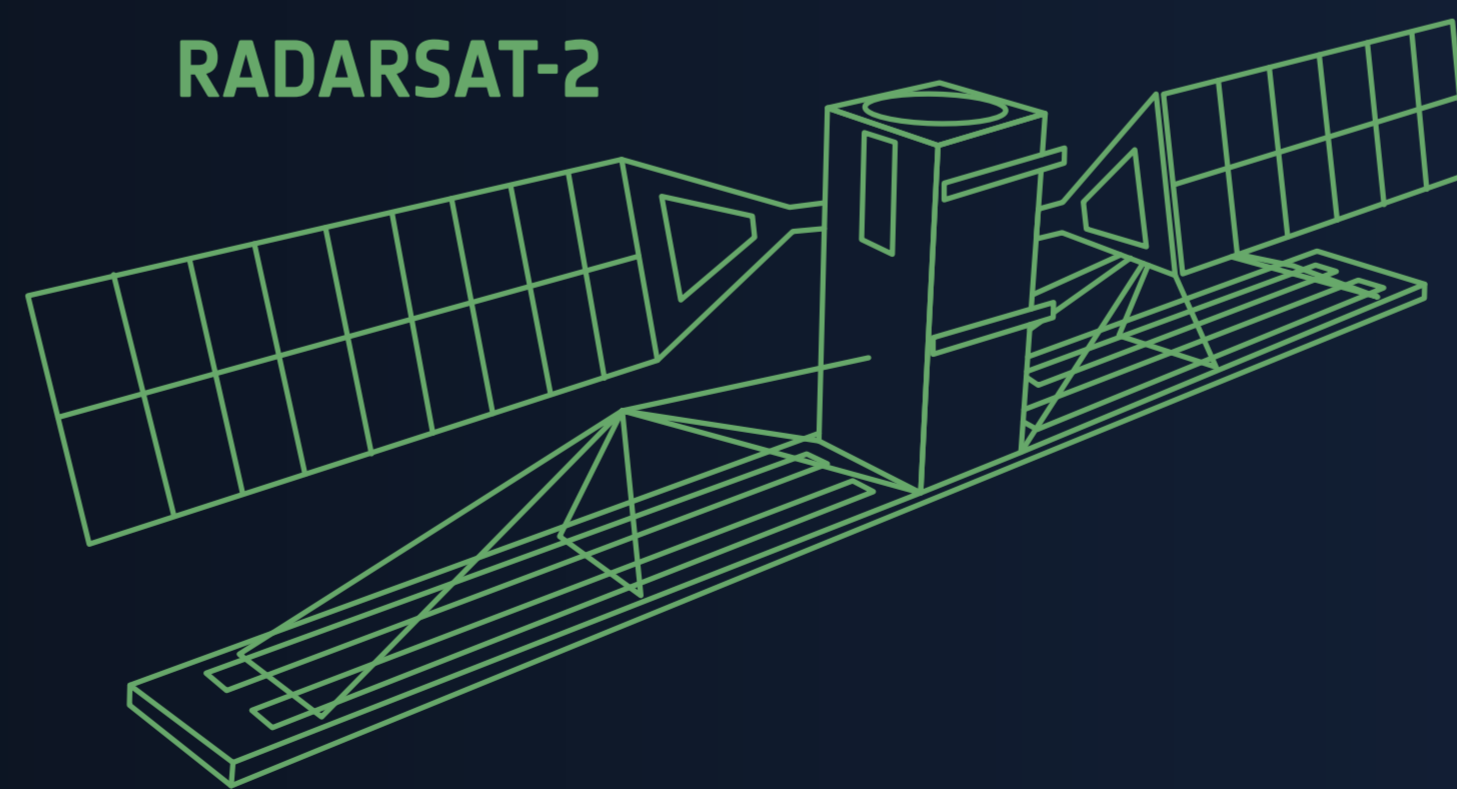
with fully polarimetric capabilities

1 - 100 metres
Spatial resolution

18 - 500 km
Swath widths



RADARSAT-1



RADARSAT-2

Objectives

RADARSAT aims to provide useful information to both commercial and scientific users in the following fields:



Ice monitoring



Agriculture



Hydrology



Forestry



Topography



Marine surveillance



Geology



Disaster management

Data

ESA, in collaboration with MacDonald Dettwiler Associates Ltd. (MDA), is offering free access to RADARSAT-1 and RADARSAT-2 data for research and application development purposes, both archived and new acquisitions.

Tools are available for visualising, processing and analysing RADARSAT data, including [PolSARpro](#) and the [Copernicus Sentinel-1 Toolbox](#)

Data access: earth.esa.int/eogateway/missions/radarsat#data-section