

Abstract

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18 years ESA ERS and ENVISAT Earth Observations

Since 1991 ESA is operating multi instrument Earth Observation (EO) Satellites, ERS-1, ERS-2 and Envisat, performing continuous global observations of the Ocean, Land and Atmosphere.

Since then an ESA EO community has gradually build up, starting using ERS-1 data mainly for research. Now 18 years later large amount of applications have been developed having reached maturity of supporting operational services.

Within the past 18 years also the informatics environment went through significant changes in terms of internet usage and data processing and storage capabilities. This evolution has also influenced the usage of ERS / ENVISAT data, demanding global mission life time data sets or large amount of SAR data stacks. The ESA satellite data provision services have been following the changes supporting fast and easy data access.

The paper gives an overview of 18 years of ESA's multi instrument satellite scientific and data usage achievements and service evolution.