

### MISSION

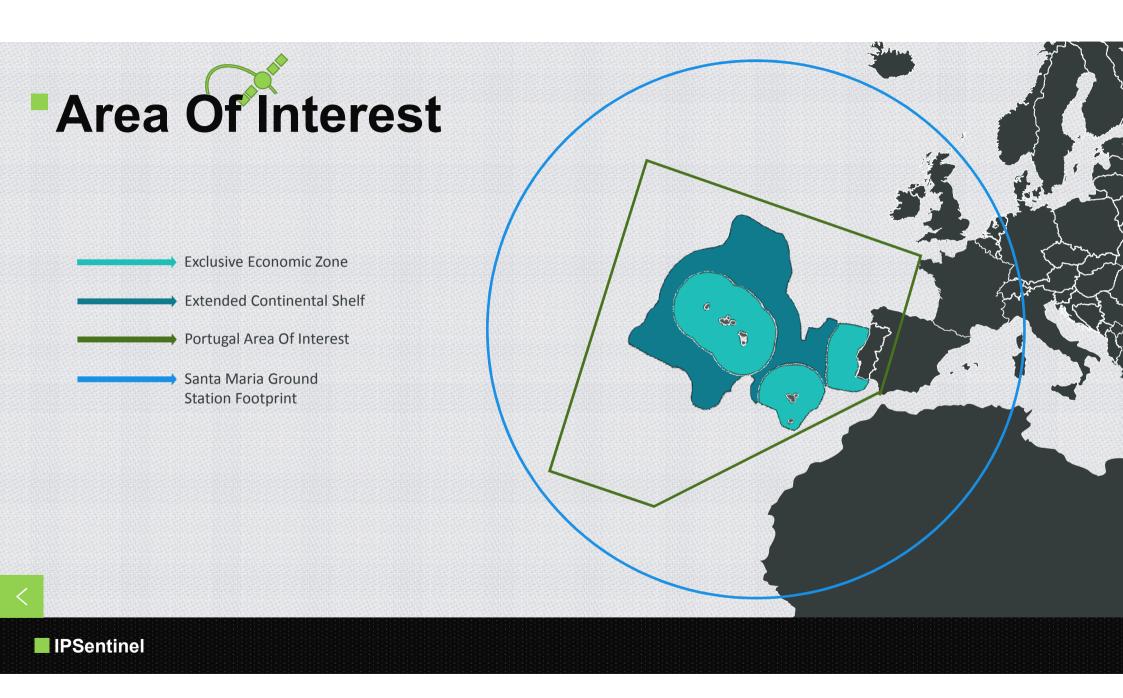


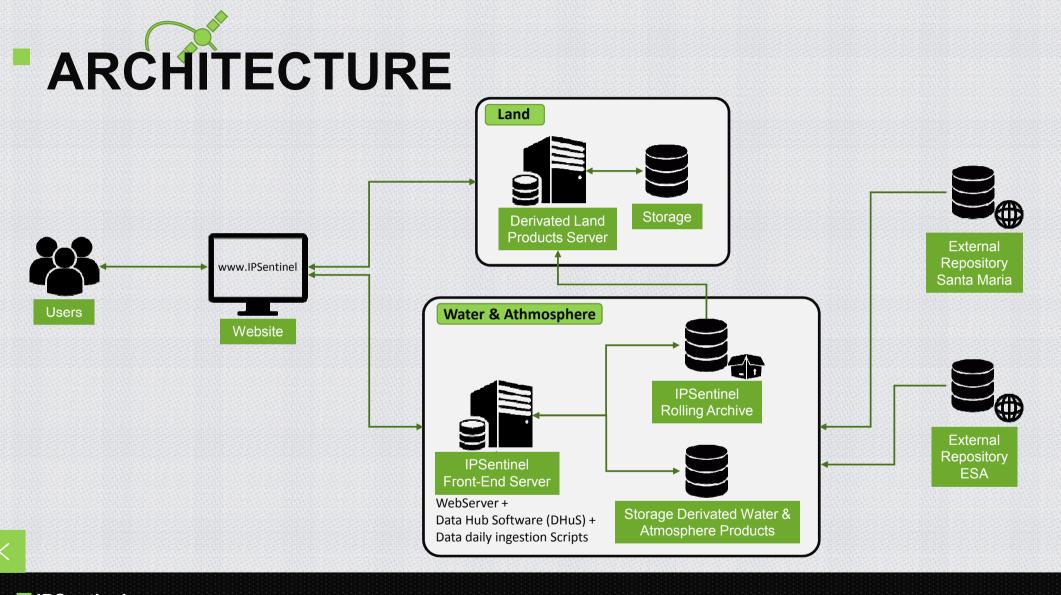
The Directorate-General for the Territory Development (<u>DGT</u>) and the Portuguese Institute for the Sea and the Atmosphere (<u>IPMA</u>), started a new project, under financial support of <u>EEA Grants</u> and manage by Directorate General for Sea Policy (<u>DGPM</u>), for the **implementation and coordination of a new technological infrastructure for storage and dissemination of** Sentinel satellites images acquired under the Copernicus program, creating a national platform that will act as "National Mirror" for Portugal and designated as Portuguese Infrastructure for Sentinel data - IPSentinel.





IPSentinel will store all the images obtained by the different Sentinel satellites to a geographical area of interest for Portugal creating a privileged access to a wide range of Earth Observation (EO) data for the national users and interested entities.

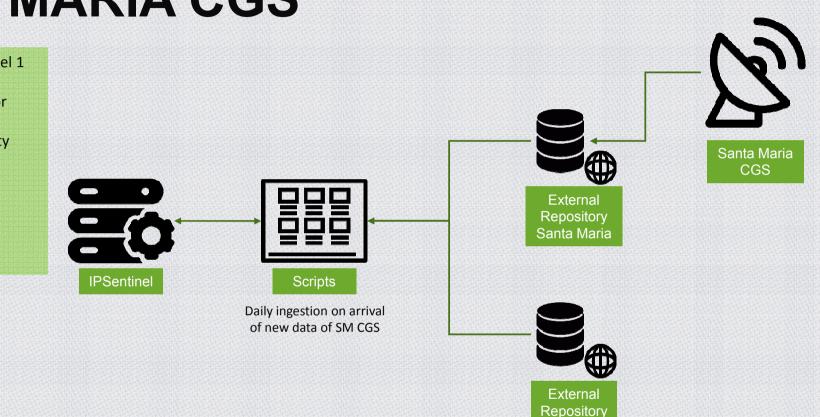




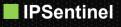


Santa Maria CGS receives Sentinel 1 Data earlier than ESA GS. This advantage is extremely useful for emergency services:

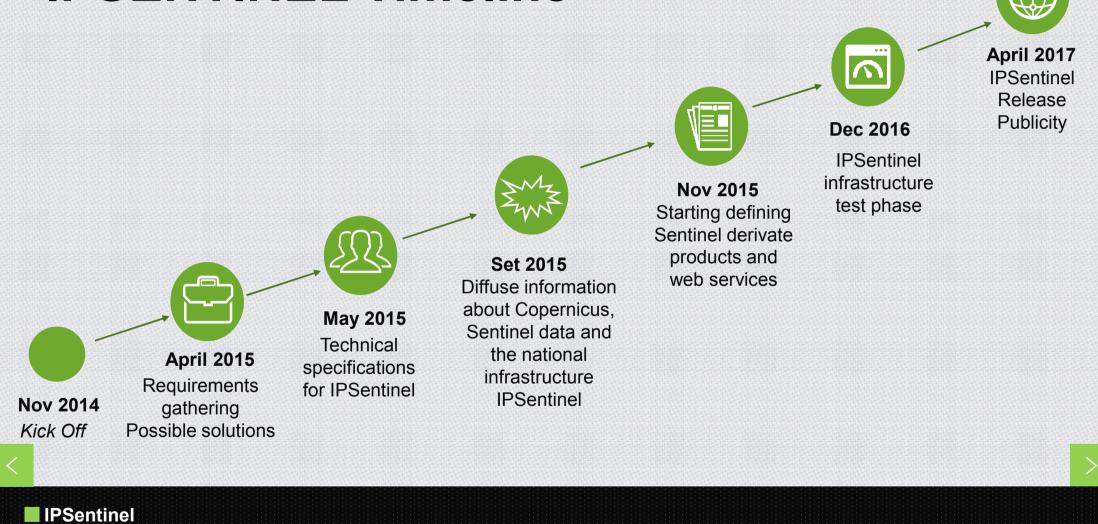
- Maritime security and safety
- Landslides,
- Earthquakes
- Subsidence
- Fires
- Etc.



ESA









#### DETAILS

The portuguese EO Website will give national users a front page for:



#### **EO News** Latest on Copernicus program, Sentinel Missions, etc.

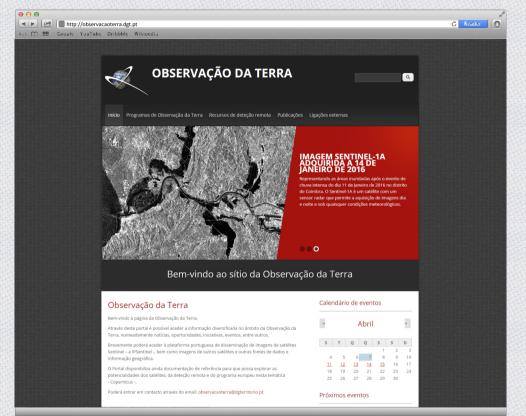


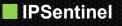
#### **EO softwares** Sentinel Toolboxes, tutorials, etc.



### **Copernicus Sentinel Missions**

Sentinel Data, specifications, etc.





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## **EO Portuguese Data Service**

#### DETAILS

The EO Portuguese Data Service will provide Sentinel services and derivated produts. Follows some examples:



Safe2Geotiff Data conversion from Sentinel native format (SAFE) to Geotiff



#### Monthly Sentinel 2 image composite Sentinel 2 monthly images with pixels less

contamine (e.g. cloud free)



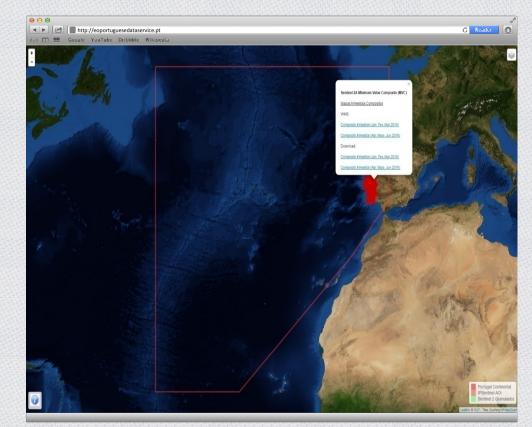
#### **National Mosaic**

Sentinel 2 image covering all Portuguese continental territory



#### **Subsidences and Landslides**

Subsidences using Sentinel 1 data



# **IPSENTINEL** Products



### Sentinel 1A Image Product type: GRD

Sensor mode: IW Resolution: High Resolution Date: 14.01.2016

#### DETAILS

Floods in Coimbra District after heavy rains





# **IPSENTINEL Products**



#### Sentinel 1B first data strip

Date: 28.04.2016 Strip: 600 km

#### DETAILS

Norwegian Svalbard archipelago

Captured two hours after the satellite's radar was switched on. Joining its twin Sentinel-1A providing a 6 day time resolution.







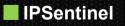
Sentinel 2A Image Sensor mode: MSI Bands: 2, 3, 4 Resolution: 10 m

Date: 18.08.2015

#### DETAILS

City of Lisbon True colour composition (RGB – 432)





# **IPSENTINEL Products**



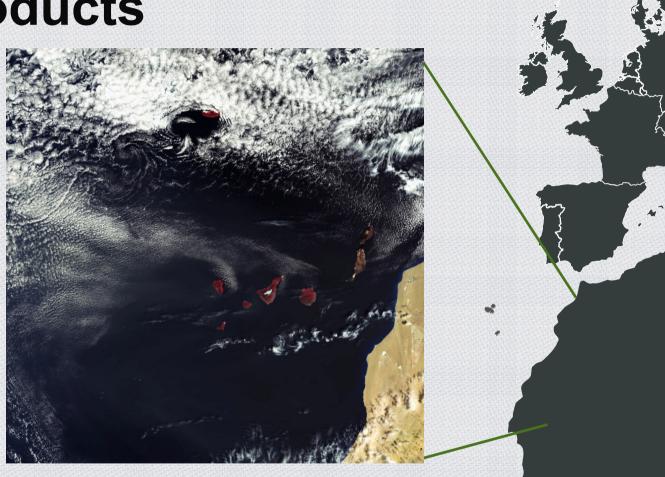
Sentinel 3A Image Sensor mode: SLSTR False-colour Date: 08.03.2016

#### DETAILS

Portuguese island of Madeira, the Spanish Canary Islands and the northwest coast of Africa. The snow-capped peak of Mount Teide on the island of Tenerife is clearly visible.

#### **INSTRUMENTS**

SLSTR - Sea and Land Surface Temperature Radiometer OLCI - Ocean and Land Colour Instrument SRAL - Synthetic Aperture Radar Altimeter Combination of SLSTR/OLCI data that generate ocean colour and land reflectance, land and sea temperature, ocean and land topography core products and vegetation core products.







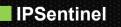
### Serviços de Dados Geográficos INSPIRE

#### Serviços de Rede

- Partilha de dados geográficos.
- Devem estar em conformidade com as DE.
- Devem funcionar de acordo com as especificações e regras definidas de comum acordo, por

forma a assegurar a interoperabilidades das IDE dos estados membros.









### Serviços de Dados Geográficos INSPIRE



#### Technical Guidance for INSPIRE Spatial Data Services and services allowing spatial data services to be invoked

**Drafting Team "Network Services"** 



INSPIRE Infrastructure for Spatial Information in Europe

Technical Guidance for the implementation of INSPIRE Download Services



INSPIRE Infrastructure for Spatial Information in Europe

Technical Guidance for the implementation of INSPIRE View Services

