



EARSC

European Association
of Remote Sensing
Companies

EU EO Services Industries contribution to Global Sustainability

Giovanni SYLOS LABINI: EARSC VP. & CEO Planetek Italia

EARSC

EARSC is a trade association (non-profit Belgian company), founded in 1989, dedicated to helping European companies: *providing services (including consultancy) or supplying equipment in the field of remote sensing.*

Our mission is:

- to foster the development of the European Geo-Information Service Industry
- to represent European geospatial-information providers, creating a sustainable network between industry, decision makers and users

Today: 85 members (75 full and 10 observers) from 22 countries in Europe



Market development & promotion



OGEO:
Link with Oil & Gas Industry



EO Portal (wiki):
Information on Geospatial services



EO4OG: guide to geospatial products for the O&G Industry



Research Corner



eo4All
Links with IFI's



EOpages:
Brokerage site



EOmag:
Sector magazine



Achievement
Award

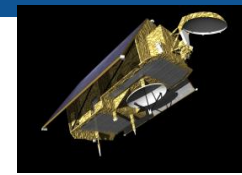


Annual Report

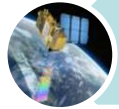


EARSC on Twitter

Space Component Dedicated Missions



S1: Radar Mission



S2: High Resolution Optical Mission



S3: Medium Resolution Imaging and Altimetry Mission



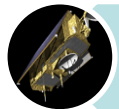
S4: Geostationary Atmospheric Chemistry Mission



S5P: Low Earth Orbit Atmospheric Chemistry Precursor Mission

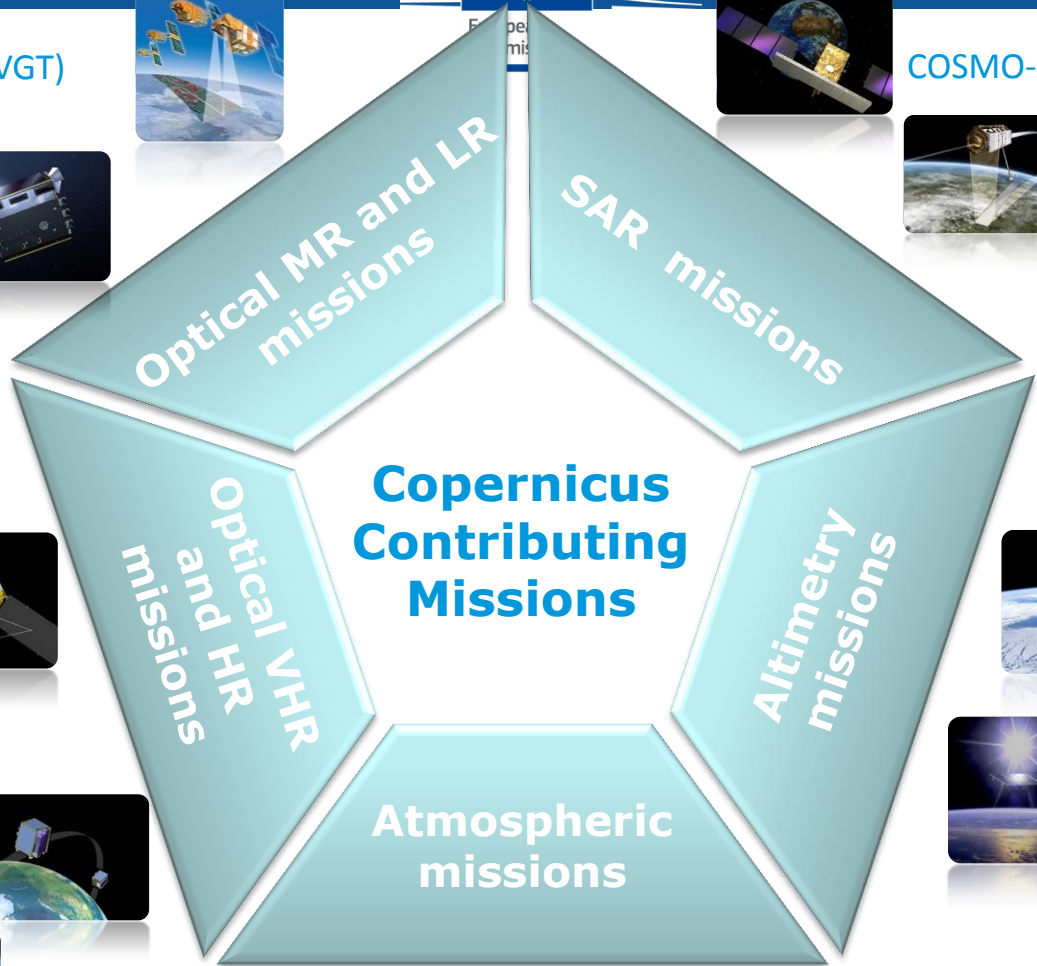


S5: Low Earth Orbit Atmospheric Chemistry Mission



S6 (Jason-CS): Altimetry Mission

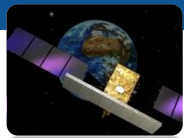
Copernicus Contributing Missions



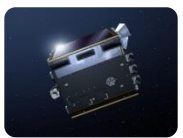
SPOT (VGT)



COSMO-Skymed



PROBA-V

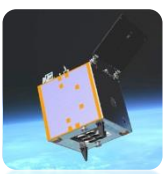


TerraSAR-X
Tandem-X

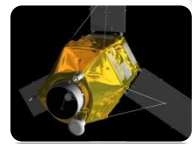


Radarsat

DMC



Pléiades

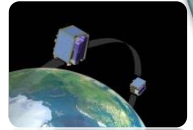


Cryosat

Deimos-2



RapidEye

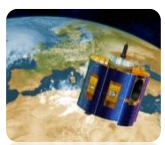


Jason

SPOT (HRS)



MetOp

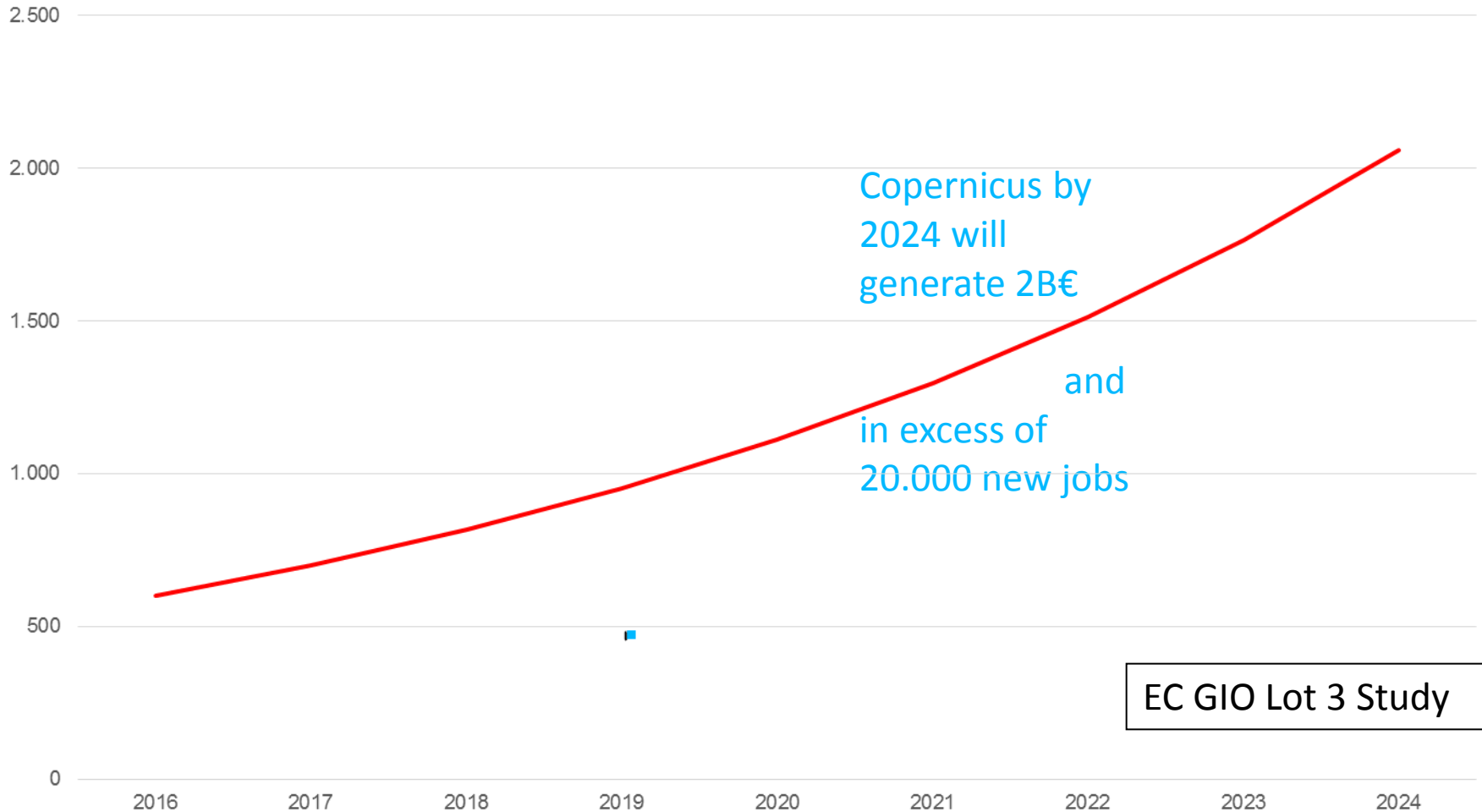


Meteosat 2nd Generation

Daniel Quintart, DG GROW

●●● | Impact of Copernicus

Estimated Total Addressable Market



«Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs»

(WCED,1987)

MEET THE NEXUS

70% of WATER use is from AGRICULTURE;

FOOD production and distribution accounts for

30% of global ENERGY consumption

WATER is extracted, distributed and purified using
ENERGY.

WITHIN NEXT 35 YEARS THE WORLD WILL NEED

60% MORE **FOOD**

55% MORE **WATER**

50% MORE **ENERGY**

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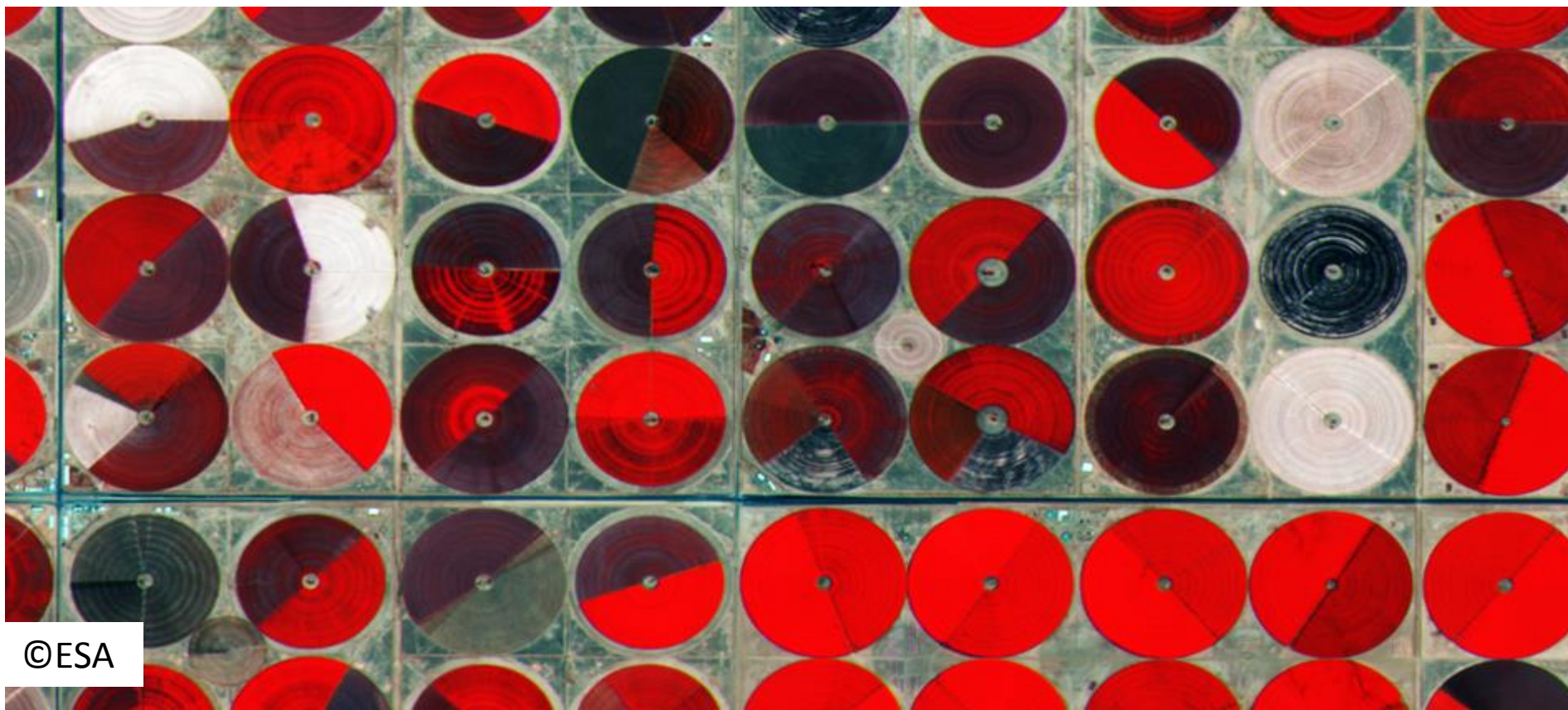
50% MORE **ENERGY**

This false-colour image from the Sentinel-2A satellite shows agricultural structures near Tubarjal, Saudi Arabia. Circles come from a central-pivot irrigation system, where the long water pipe rotates around a well at the centre



©ESA

The crop yield prediction process using soil information and weather information could improve yield forecasting error in risk rating of 200% or greater



©ESA

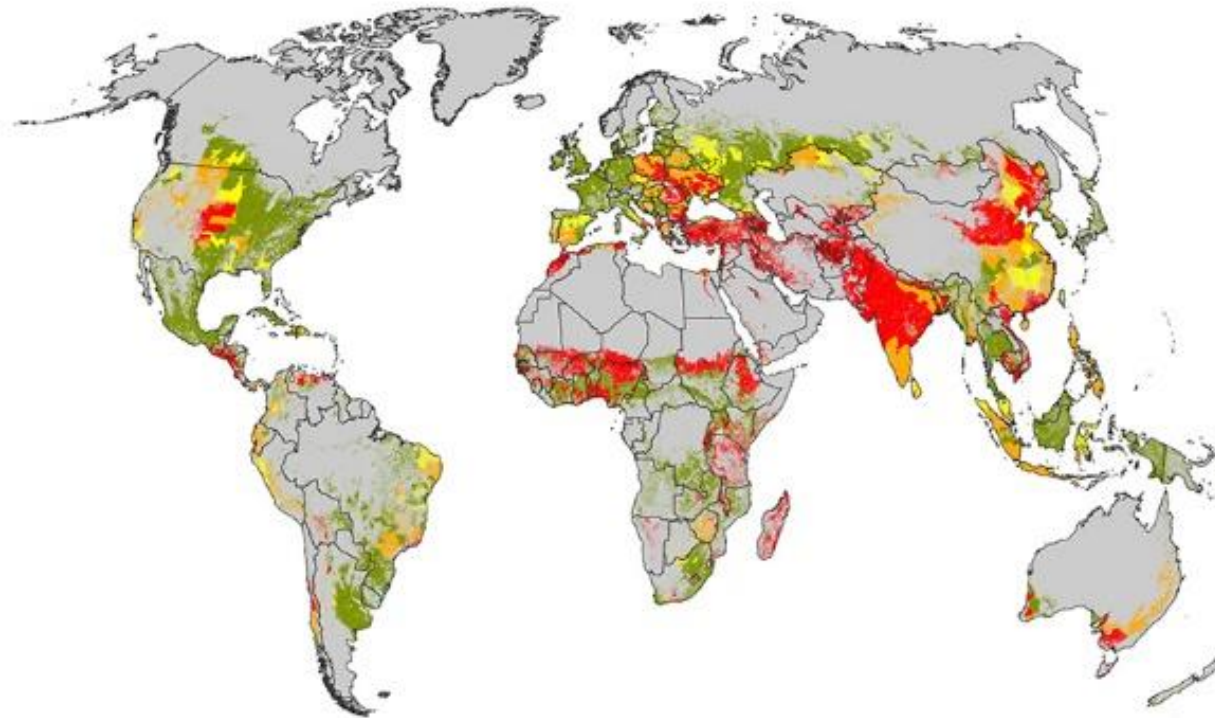
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Water stress will increase in many agricultural areas by 2025 due to growing water use and higher temperatures (based on IPCC scenario A1B)



Water Stress Condition

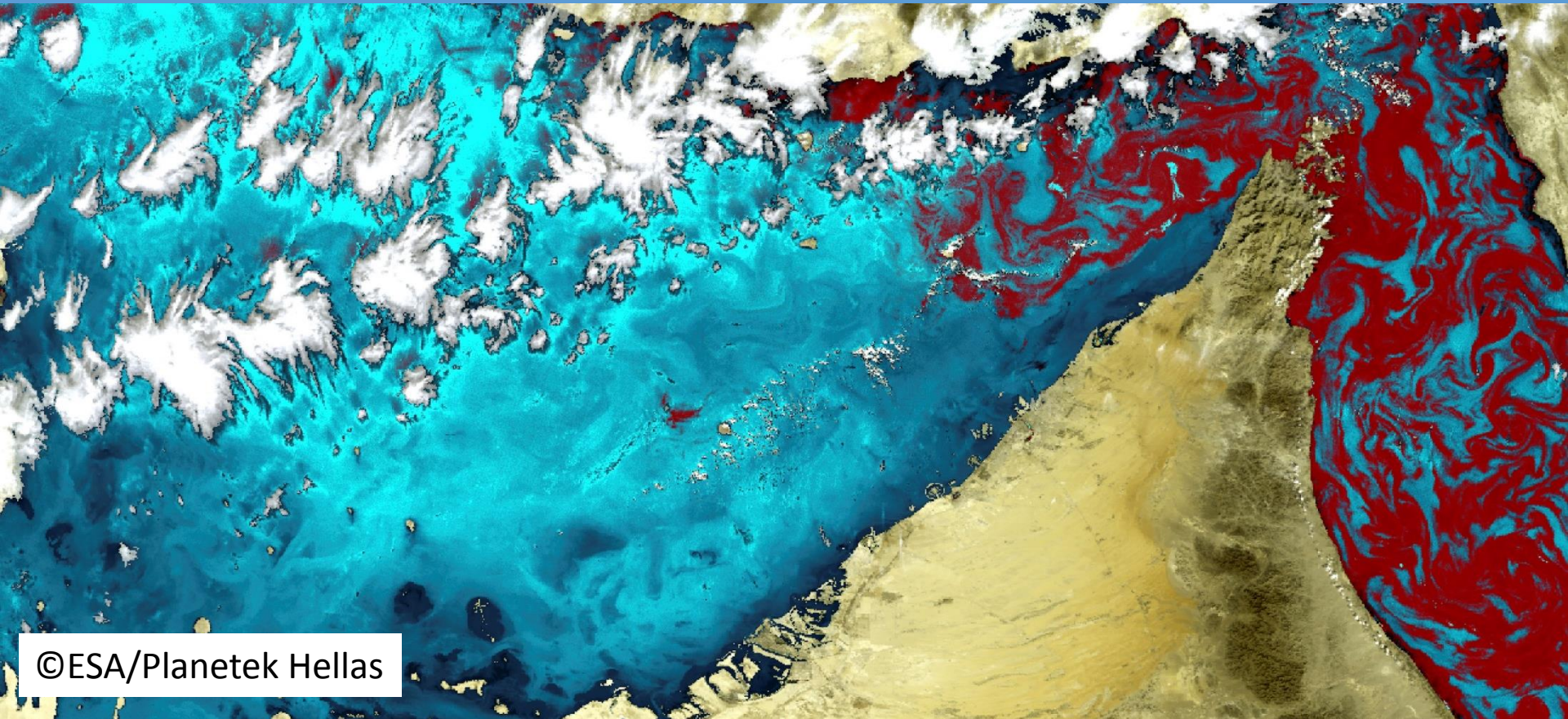


Lower

Near Normal

Higher

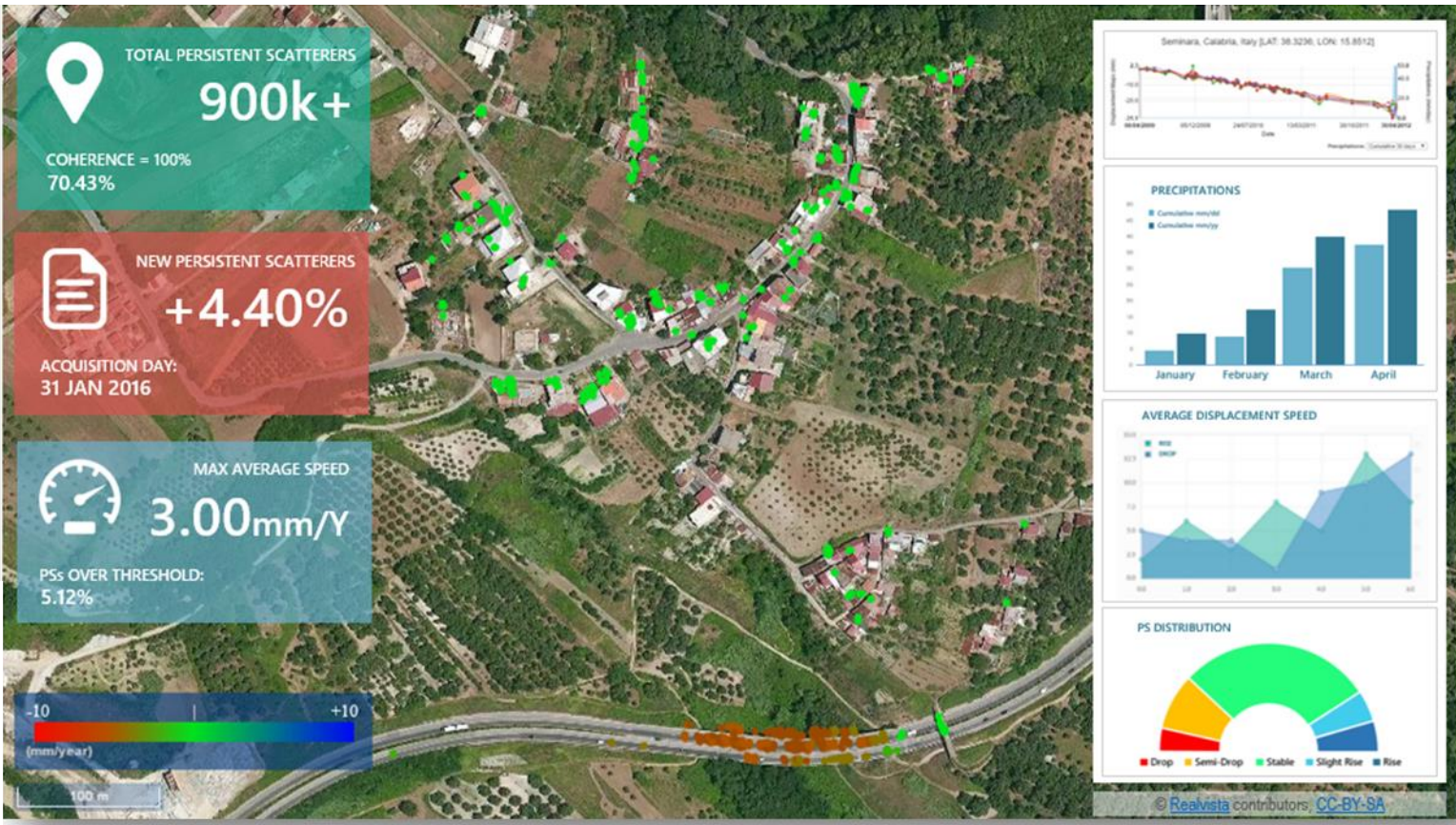
A 'red tide' over the coast of the United Arab Emirates has affected desalination plants over the last four years, causing severe damage and sometimes bringing operations to a halt.



©ESA/Planetek Hellas

EARSC study estimate the benefit of EO monitoring of pipeline at 2740 \$/Km/y, only in US about 20.000 Miles of Water pipes should be replaced every year since 2035

©Planetek



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Land Use and DEM generation from EO data can largely improve wind speed forecast on large areas

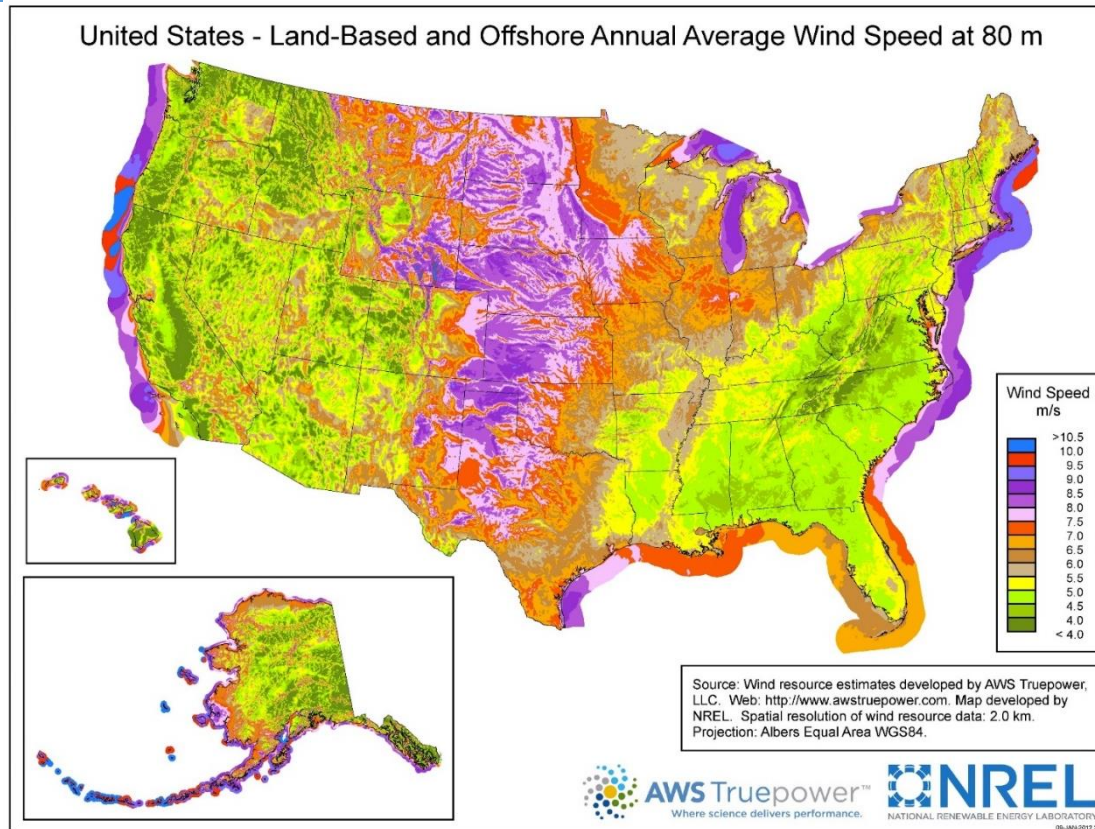




Photo credit championssportsradio.com/, JRC

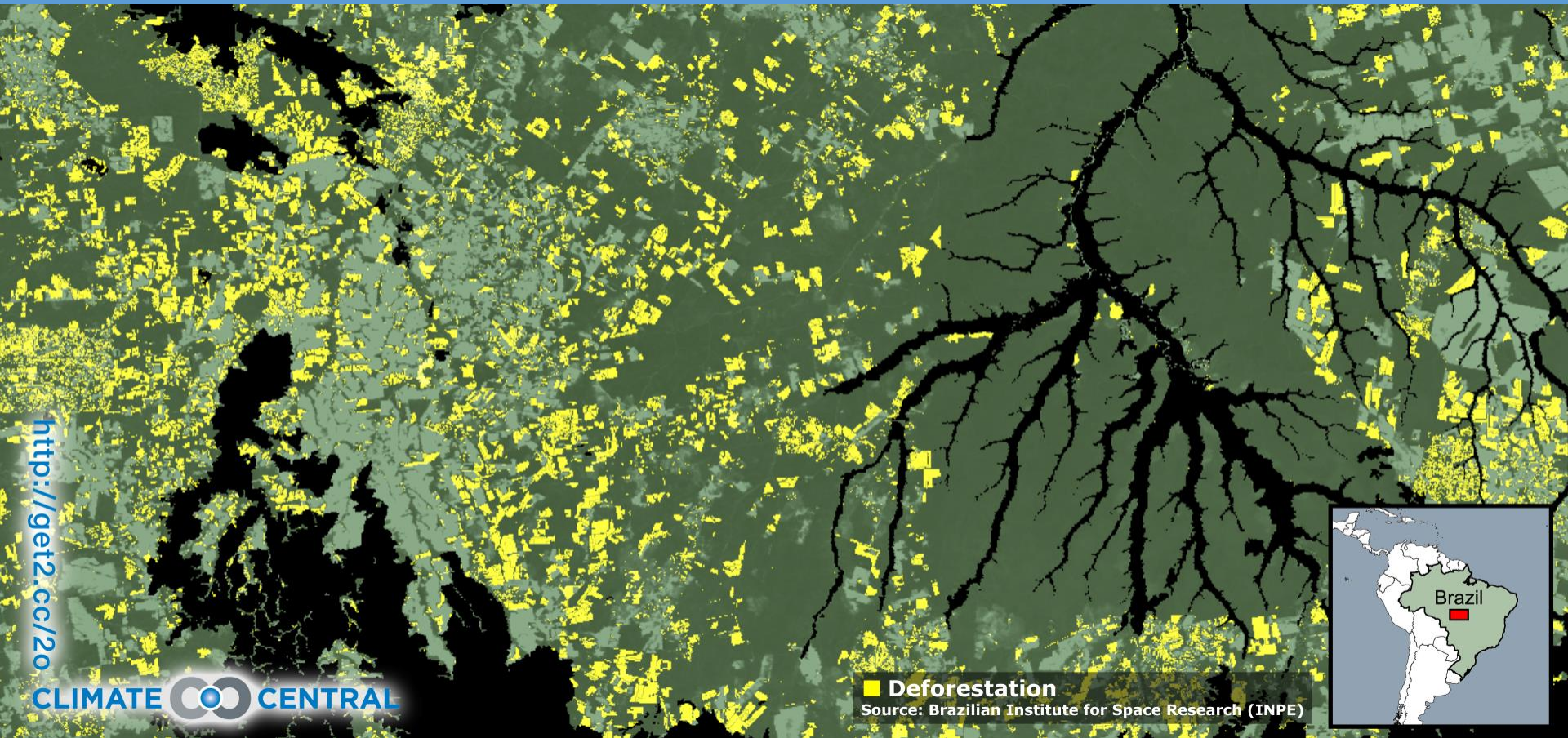


Photo credit championssportsradio.com/, JRC

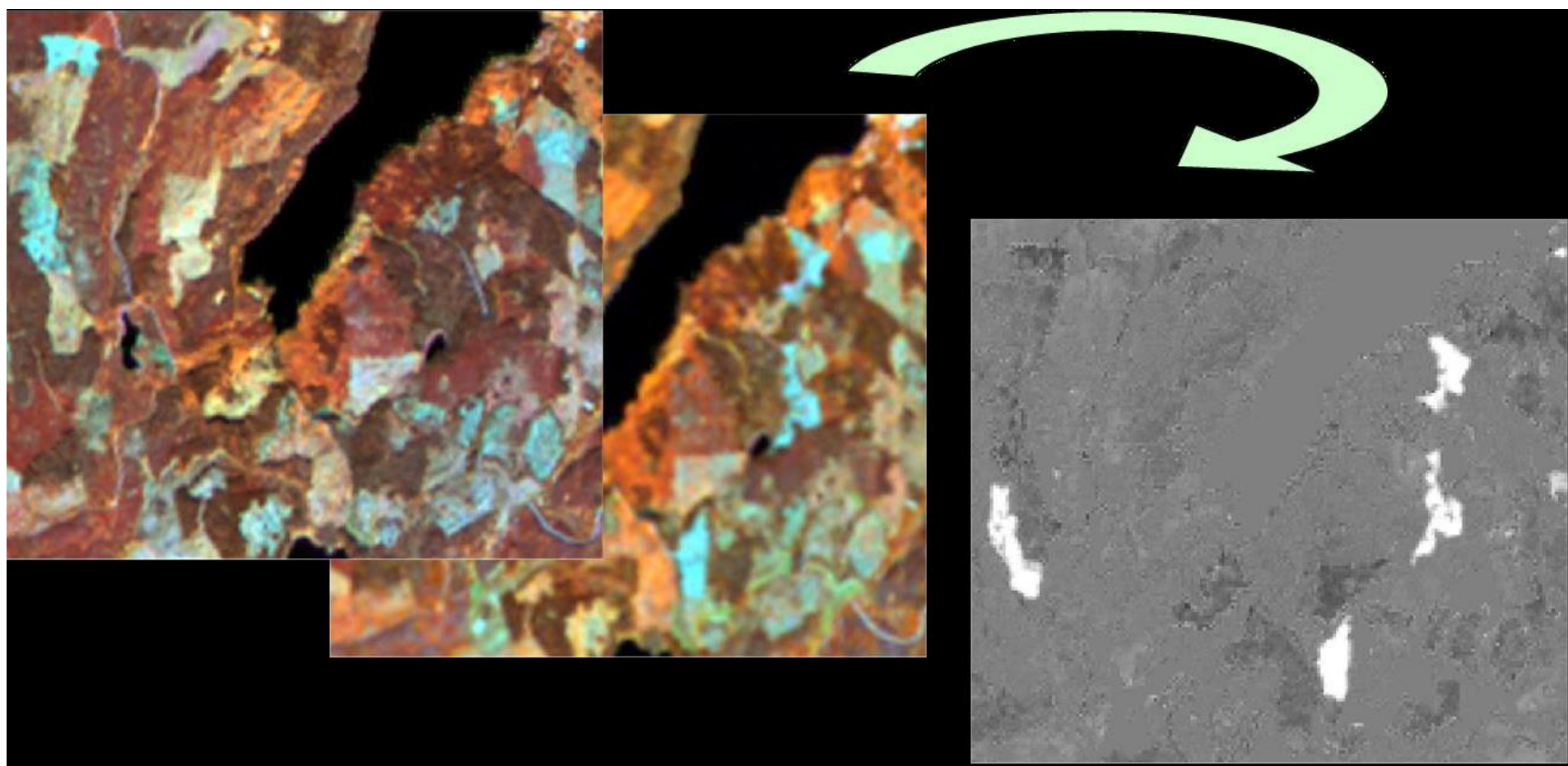
An aerial photograph of a large football stadium filled with spectators. The field is covered in a massive pile of brown debris, likely from a forest fire. Large video screens at the top of the stadium show a close-up of the debris. The text 'Each 3 sec. we destroy a football court of Forest' is overlaid in blue on the image.

**Each 3 sec.
we destroy a
football
court of
Forest**

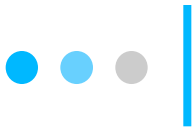
EO data can improve Deforestation monitoring and spread good practices in forest management



••• | Forest Management in Sweden



According to our analysis, the result leads to a total direct economic benefit to Sweden of between €16.1m and €21.6m per annum



For more Information

For Information on EARSC:

www.earsc.eu / www.eomag.eu / secretariat@earsc.org

For more information on the remote sensing industry:

www.eopages.eu

For information on EO applications:

www.earsc-portal.eu

For links to the O&G Community

www.ogeo-portal.eu