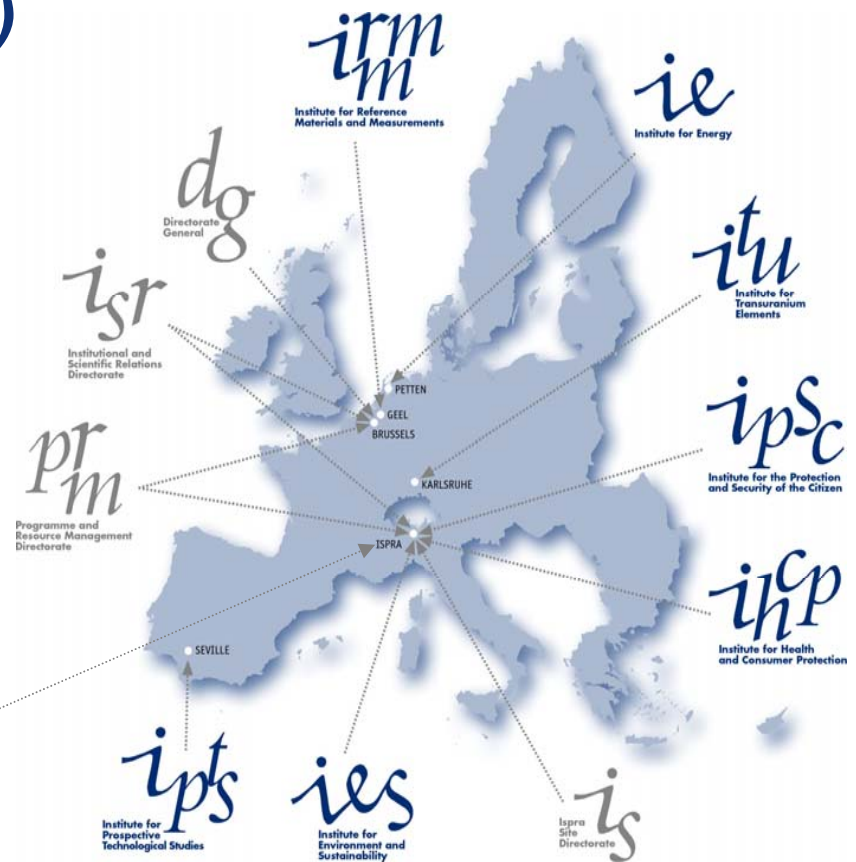
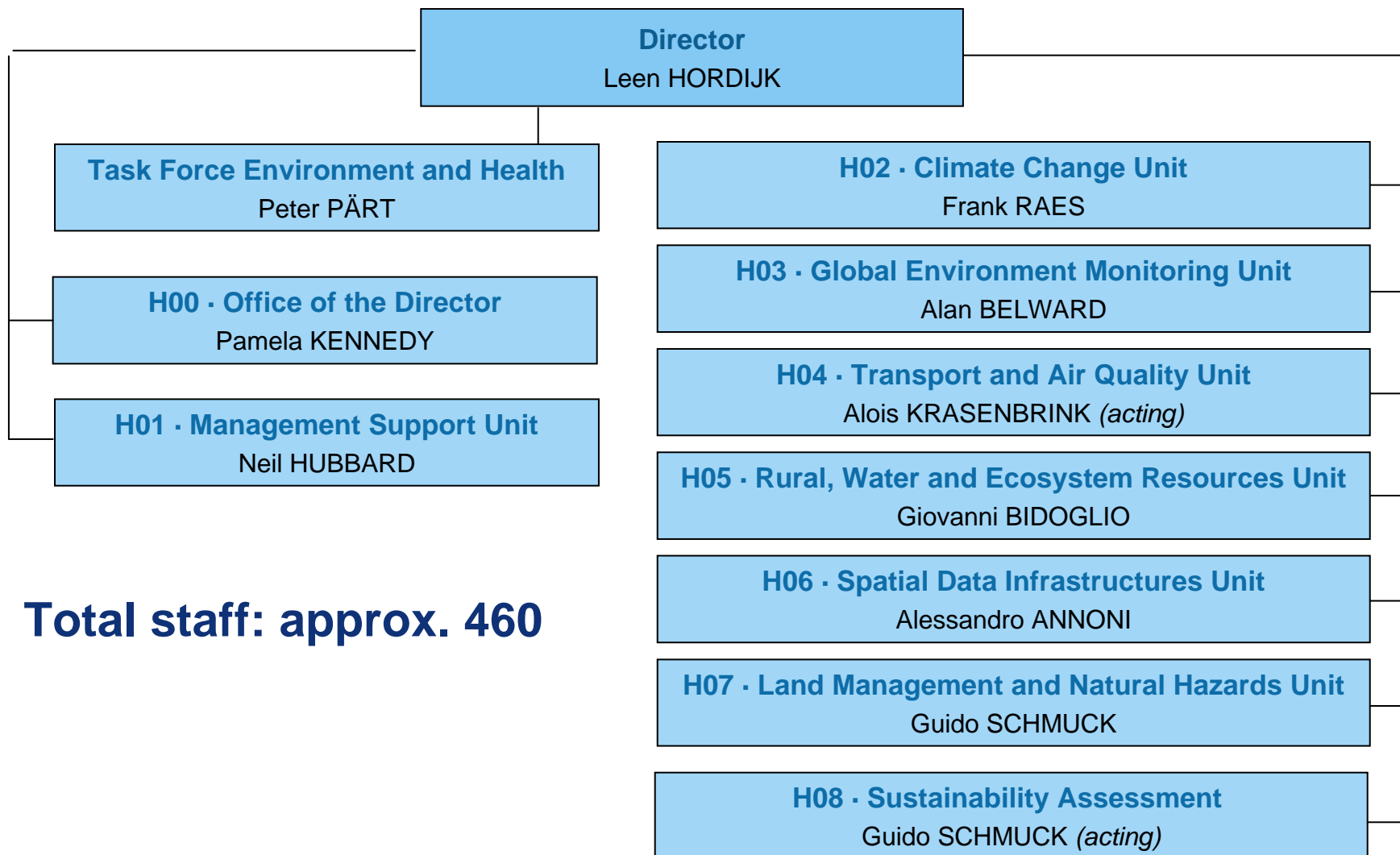


# Joint Research Centre (JRC)

The European Commission's  
Research-Based Policy  
Support Organisation

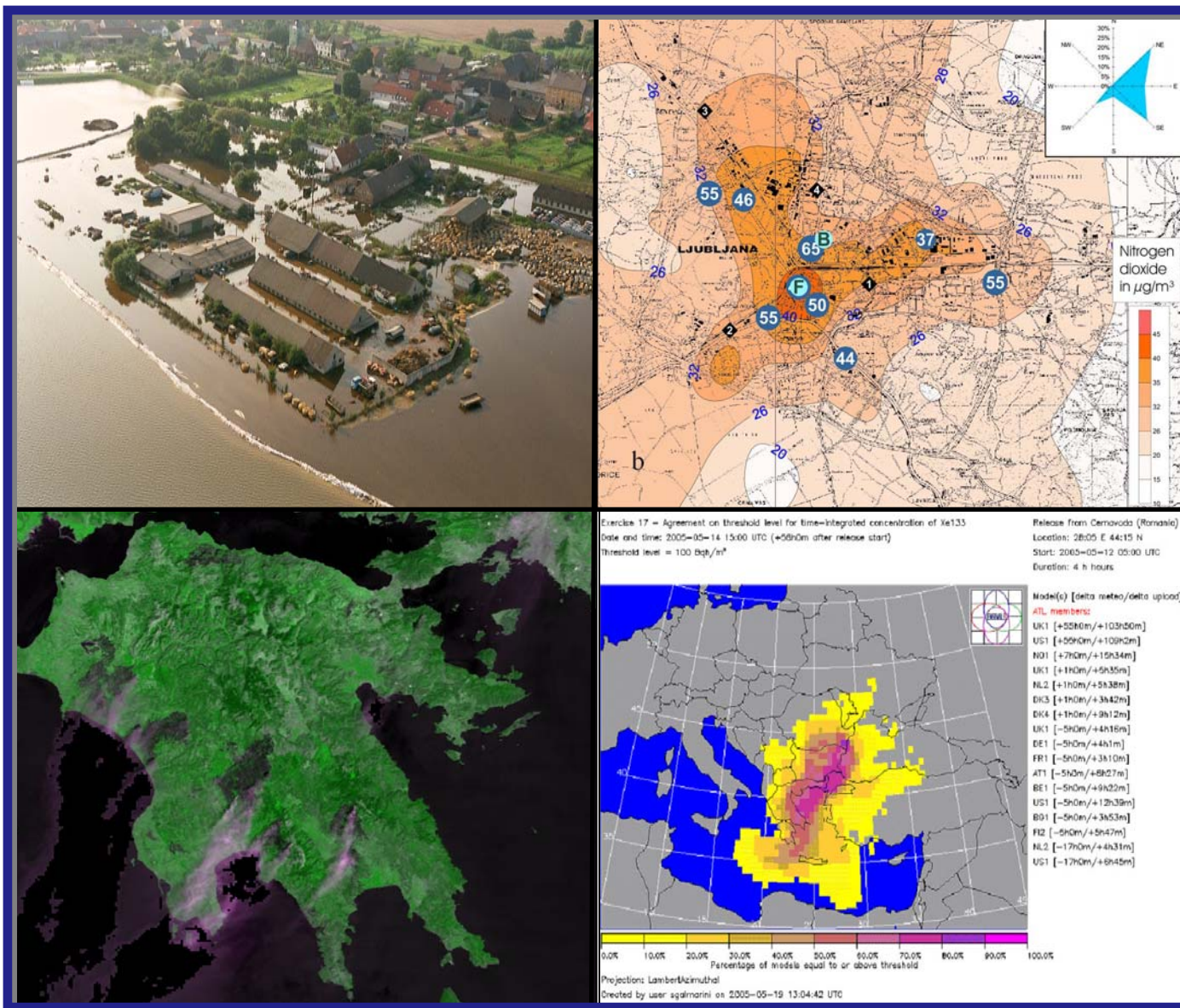


# Organisational Chart IES, June 2010



**Total staff: approx. 460**







**INSPIRE Geoportal**  
 the EU portal for Geographic Information  
[home](#) [Info tours](#) [themes](#) [catalogues](#) [map](#)

**Portal Entries**

**Information Tours**

Find out what INSPIRE is what this portal can offer and how to use the pages and tools.



**Themes**

Discover and access a wide variety of geographic information for specific application areas and European data centres.

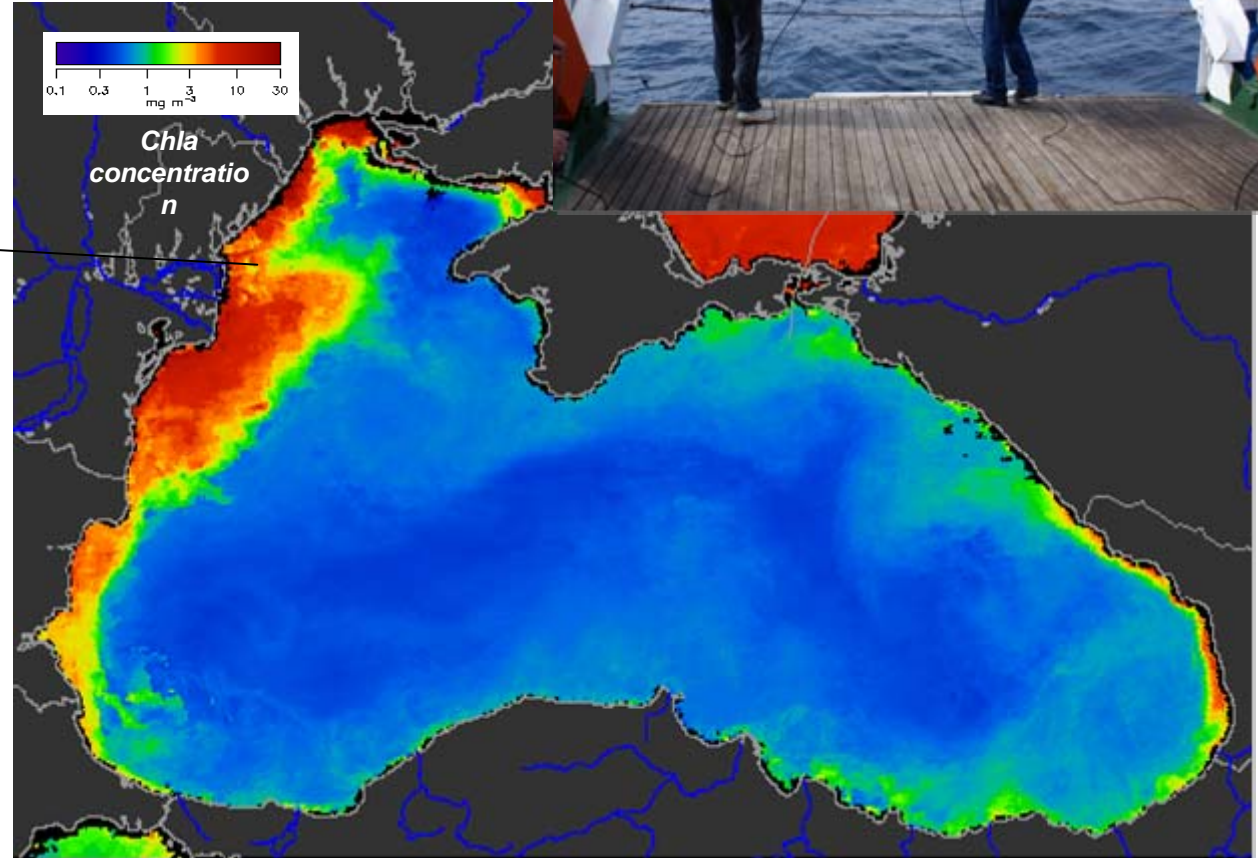
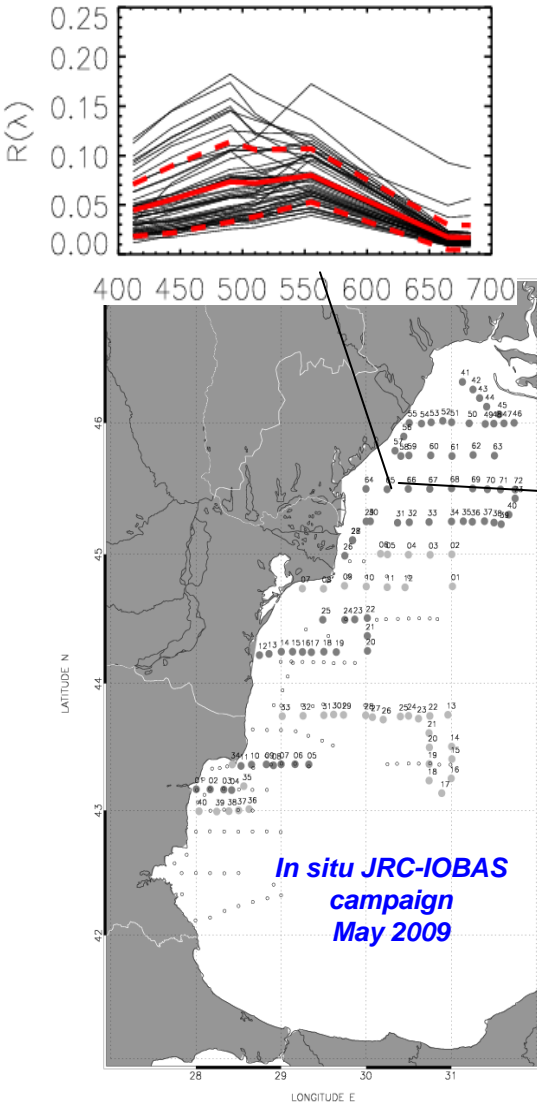


**News**

- 24-Feb-07 03 March 2007 - Deadline 13th EC GI & GIS Abstract submission
- 13-Feb-07 Conciliation agreement approved by EP on INSPIRE
- 02-Feb-07 INSPIRE Draft Implementing Rules for Metadata
- 29-Jan-07 Council adopts INSPIRE
- 22-Jan-07 Consultation on INSPIRE Draft Implementing Rules to start shortly
- 18-Jan-07 INSPIRE Directive - Joint text approved by the Conciliation Committee.
- 12-Jan-07 INSPIRE Metadata Survey report
- 10-Jan-07 Call for Papers:



## Zibordi et al validating ocean colour

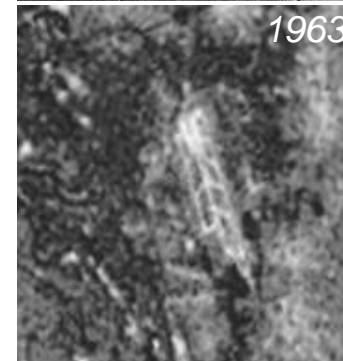
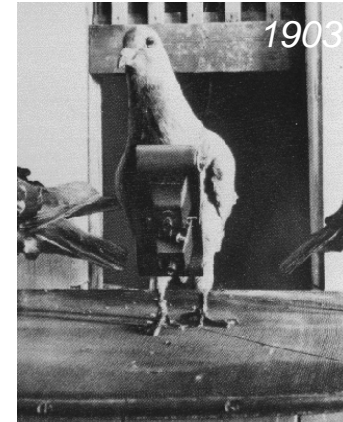


- Article 189 Lisbon Treaty: To promote scientific and technical progress, industrial competitiveness and the implementation of its policies, the Union shall draw up a European space policy...establish a European space programme...establish any appropriate relations with the European Space Agency





- “The information requirements associated with global environment security and the capabilities of satellite observing systems must converge” *Baveno Group 19<sup>th</sup> May 1998*
- “At a time when command of information has geo-strategic implications, GMES aims at providing the EU with the capacity to pursue its interests and to effectively address today’s challenges and threats in a wide variety of policy areas” *Establishing a GMES capacity by 2008 COM (2004) 65 final*
- “Space systems help us to understand the fragility of our planet. They provide tools to address challenges mankind faces in the 21st century such as security threats, environmental degradation and climate change” *Global Monitoring for Environment and Security (GMES): we care for a safer planet COM(2008) 748 final*
- “Europe has decided to develop its own operational Earth observation capacity in order to reflect the EU’s growing responsibility in European and world affairs” *Proposal for a Regulation of the European Parliament and of the Council on the European Earth observation programme (GMES) and its initial operations (2011–2013) COM(2009) 223 final approved by EP 16th June 2010*







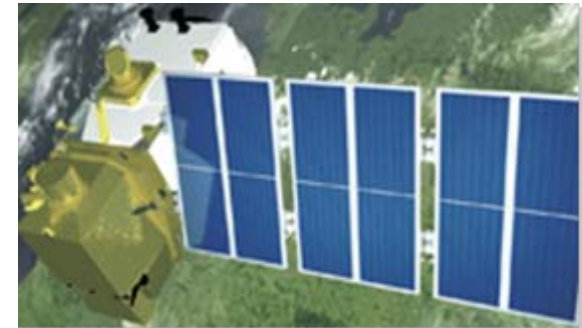
- Overall framework
  - space component (ESA coordination)
  - in-situ component (EEA coordination)
  - service component (EC coordination)
    - land, marine, atmosphere, emergency response, climate change, security
- Funding leading up to the regulation
  - 2003 – 2006 the EU and ESA spent €100m each on GMES projects
  - 2007 – 2013 the EU budgeted €430m for GMES project work
  - 2007 – 2013 the EU contributed €624m to the total ESA GMES space component budget of €2246m
- Funding for **GMES Initial Operations (GIO)**
  - 2011 – 2013 the EU has allocated €107m to the implementation of the Regulation
  - 2011 – 2013 the EU has redeployed an additional €43m from the research budget

**€2.9bn**

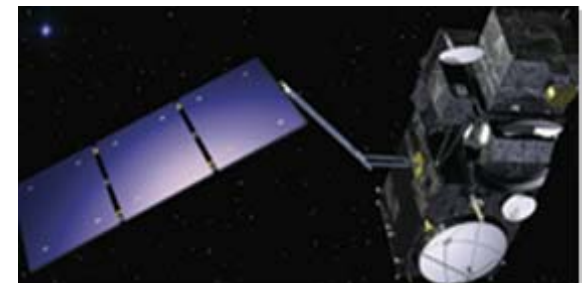
**€150m**



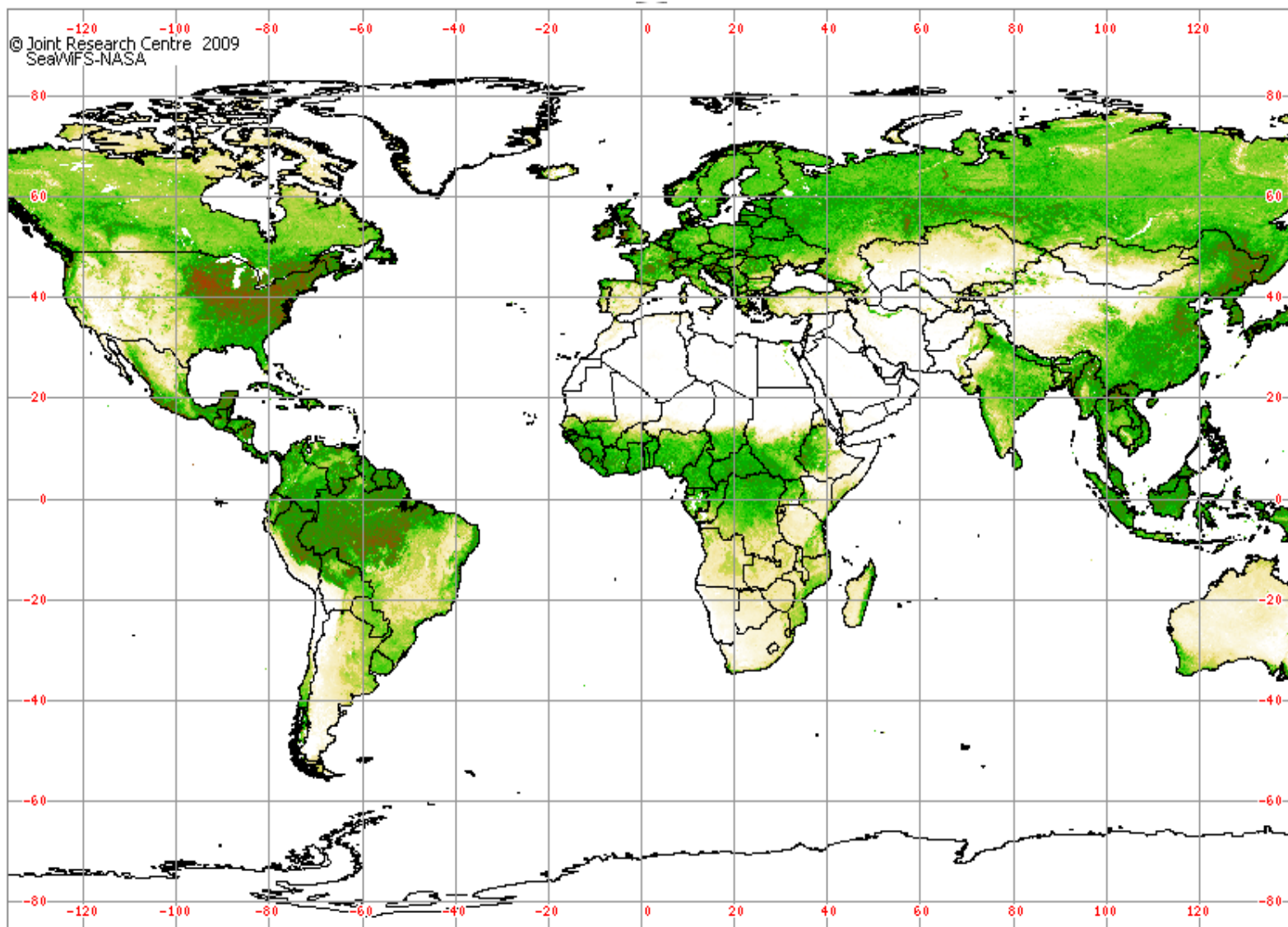
*Sentinel 1 (C-band SAR)  
a and b*



*Sentinel 2 (13 channel MSI)  
a and b*



*Sentinel 3 (21 channel OLCI)  
a and b*

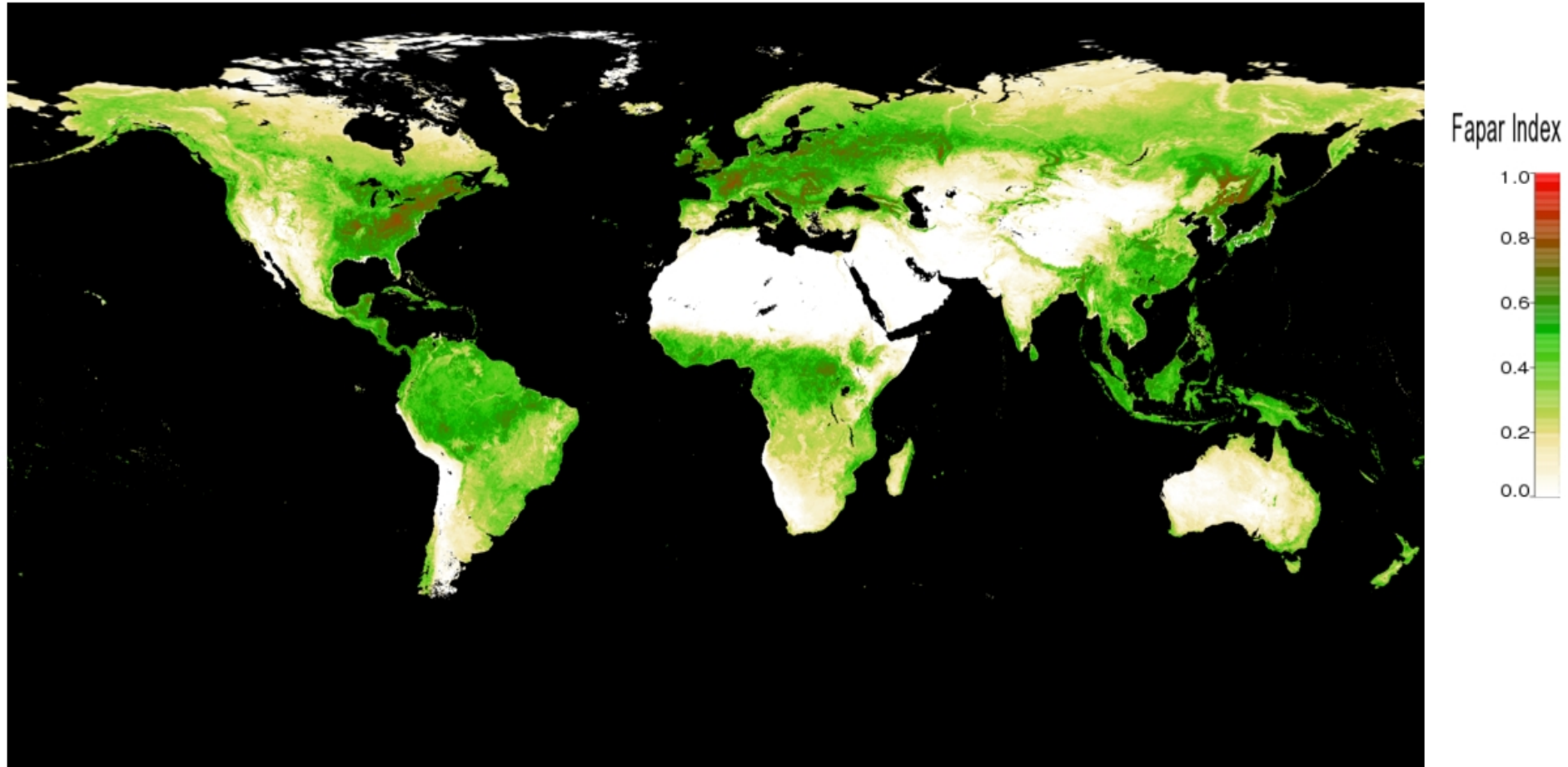


1998 onwards

<http://earth.eo.esa.int/level3/meris-level3/>

ENVISAT - MERIS

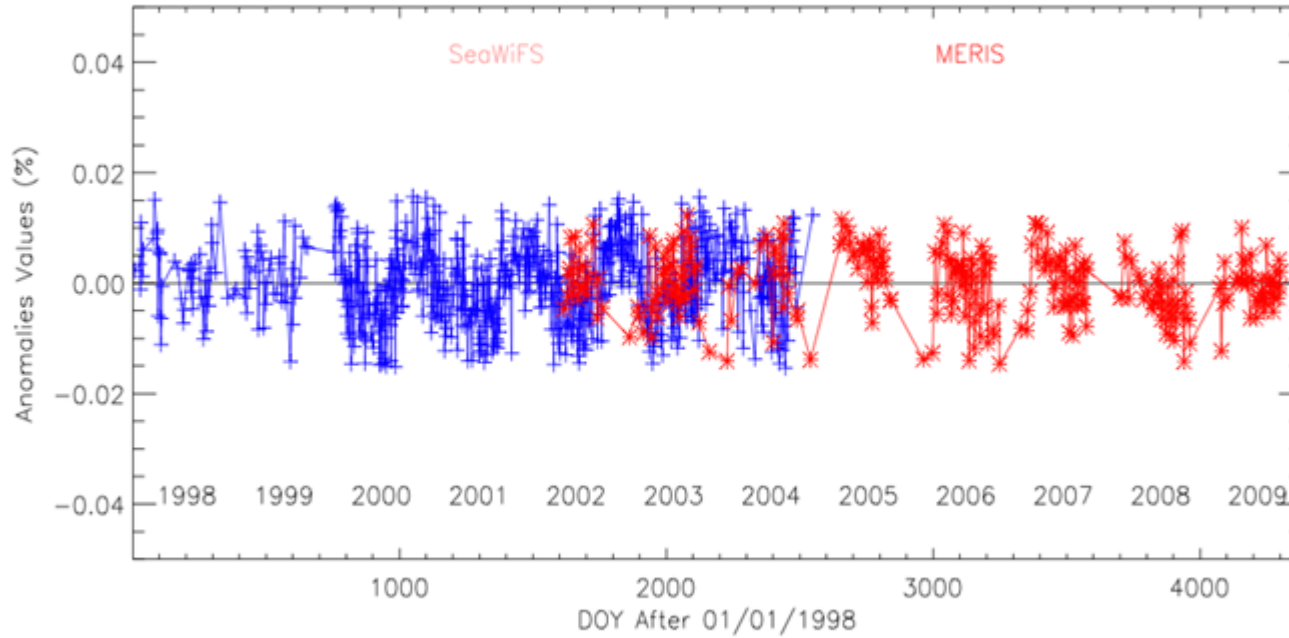
Fraction of Absorbed Photosynthetically Active Radiation - Global Coverage - Monthly Average - June 2010



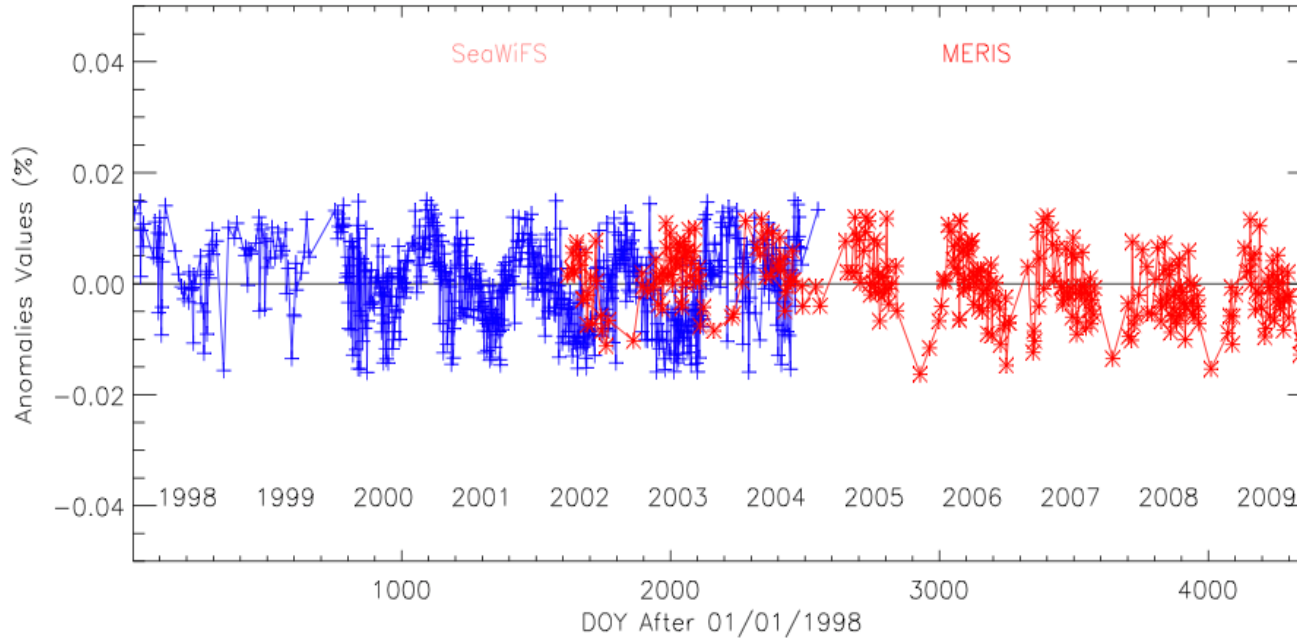
Copyright ESA 2010 (processed by ESRIN G-POD)

*April 2002 onwards*

Red Band Over Ceos Calibration Site

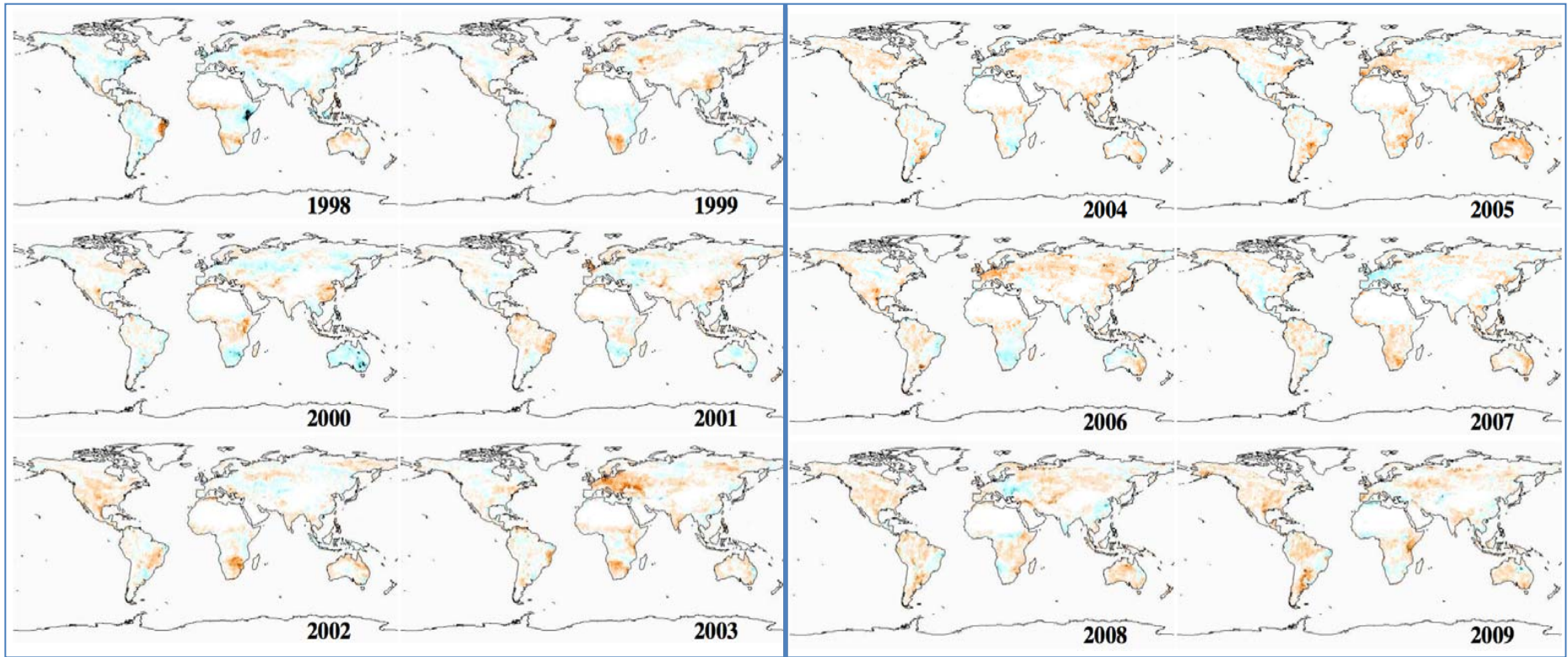


Near-InfraRed Band Over Ceos Calibration Site

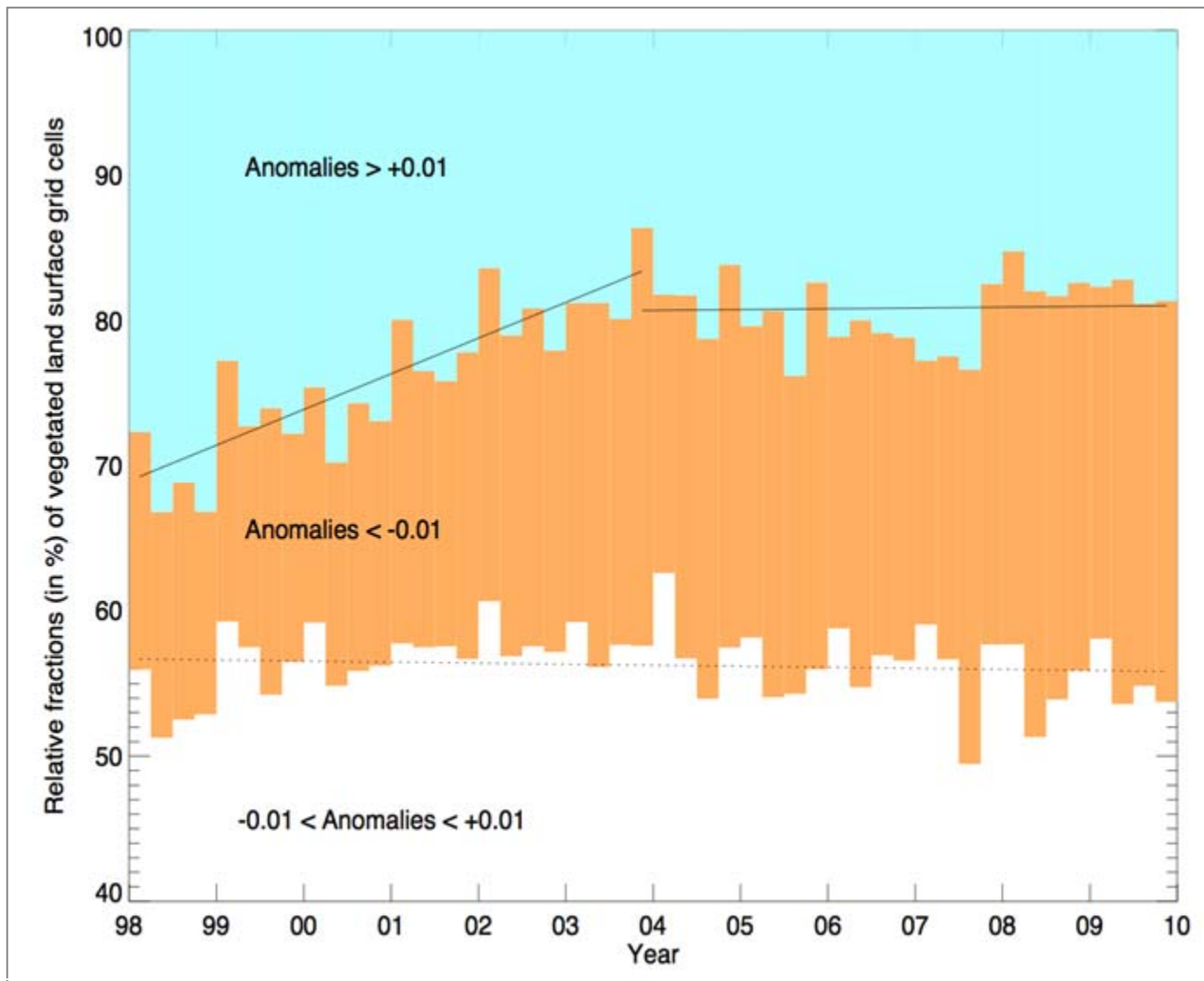


# Satellite Derived FAPAR Anomalies

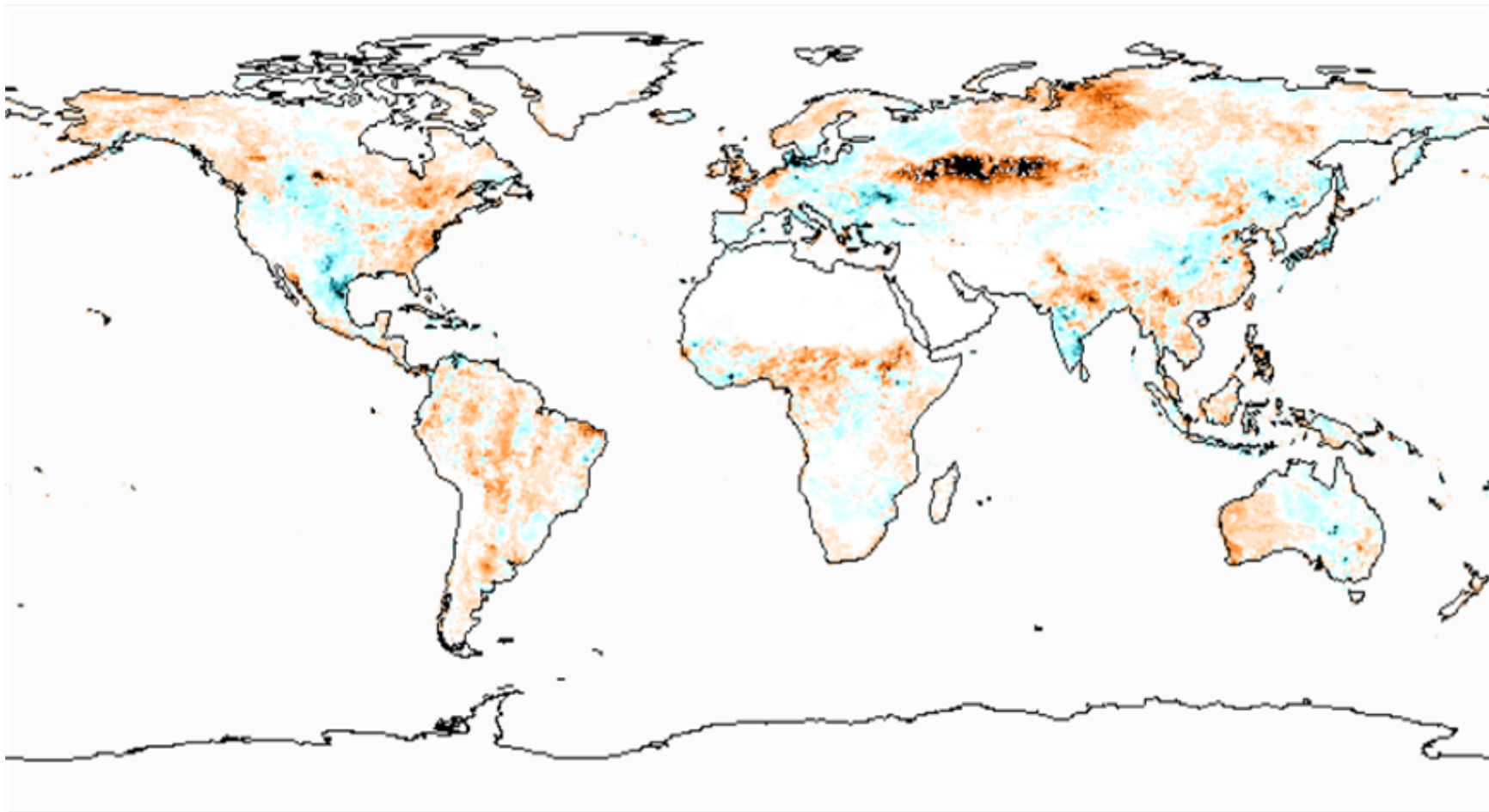
## *Anomalies 1998 - 2009 - Base period 1998 - 2010*



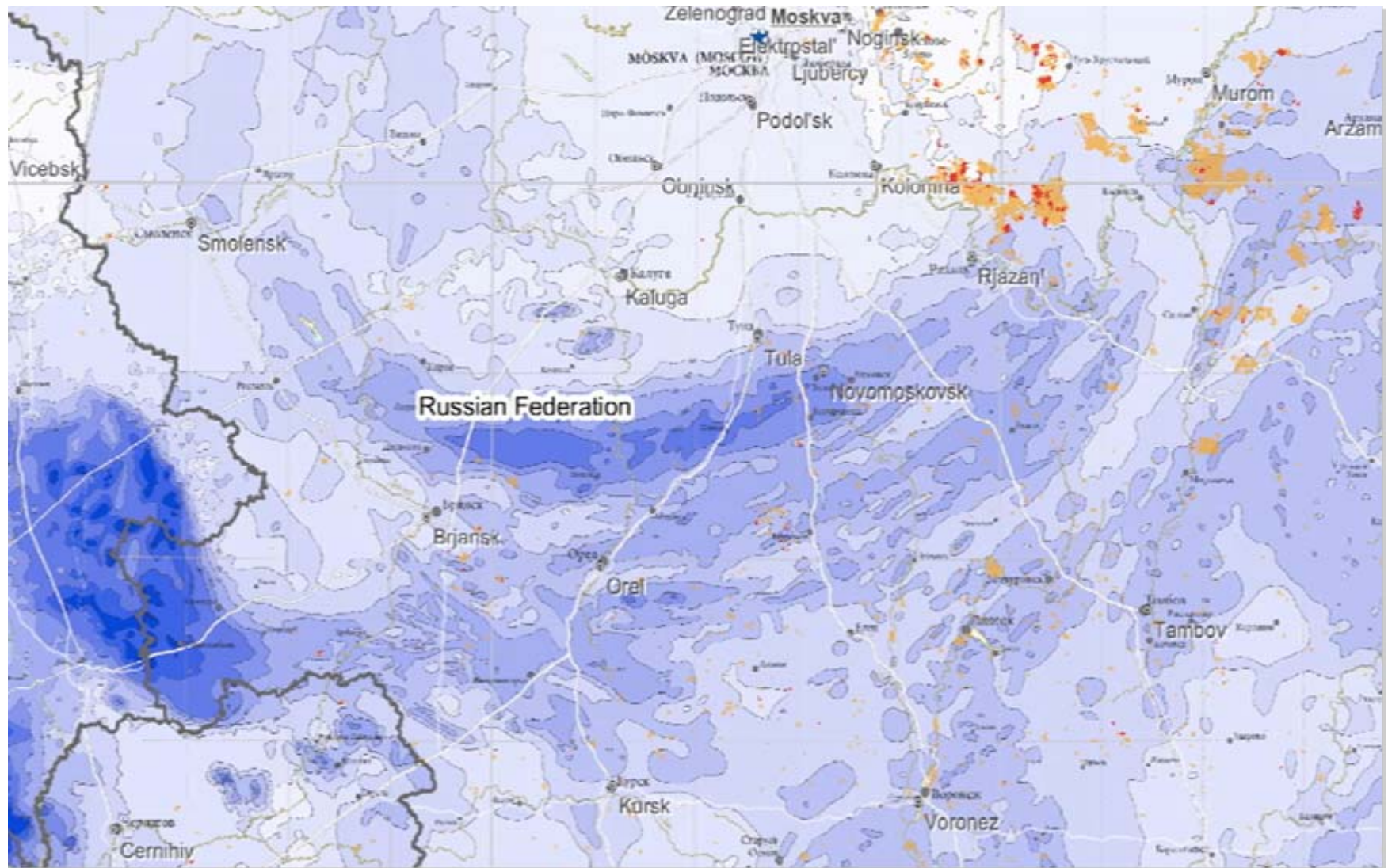
## Relative fraction of land surface showing fAPAR anomaly



## July 2010 fAPAR anomalies



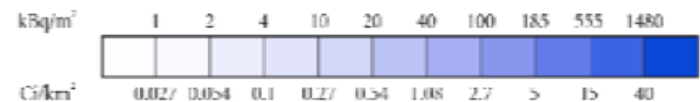
# Russia's August 2010 fires and Caesium 137 deposition



## Map Legend

- Active Fires
- Burned Areas

Total caesium-137 (nuclear weapons test, Chernobyl, ...) deposition





- Earth observation science is a key part of Europe's R&D portfolio
- Cal and Val are key activities here at JRC
- WGCV's IVOS are very warmly welcomed to the Ispra site... Have a productive, engaging and enjoyable meeting