

## GMES

- What is GMES ?
- Implementation
- Architecture
- Services and the role of Pleiades
- Observation systems
- Data access

## **GMES: a multi purpose tool in support of European policies**

**Joint initiative EC - ESA - MS to establish a European capacity of acquiring, processing, interpreting and distributing useful information to support:**

- European policies, such as environment, CAP, security (Common Foreign and security Policy)...
- Europe' international commitments (Kyoto protocol)
- for implementation at European, national and regional, levels.

**by providing the users with pertinent information.**

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3

## **Implementation**

- **GMES is a complex system of systems involving:**
  - space-borne and in situ observation systems,
  - provision of user-tailored services.
- **GMES is an EU-led initiative, in which:**
  - ESA will implement the space component
  - the Commission will manage actions for identifying and developing services relying both on in-situ and space remote sensing data.

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4

## **Implementation**

**GMES is an user-driven initiative based on existing capacities:**

- gradual implementation based on the maximum use of existing EO and in situ systems**
- harmonisation of current initiatives**
- support of the development of new capacities, if and where needed.**

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5

## **GMES on tracks**

**After several years of R&D under the support of EC/FP and ESA/GSE, and also of national contributions, we have now a better idea of:**

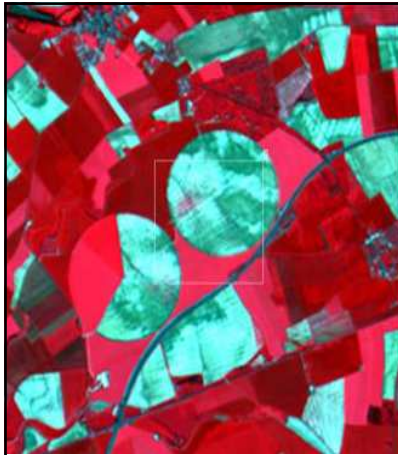
- the priorities (fast tracks services concept)**
- the space component**
- the GMES governance**

**Ten years later this initiative is becoming concrete with:**

- the set up of the sentinel's space segment,**
- the initiation of the Fast Track Services.**
- the study of the overall GMES architecture.**

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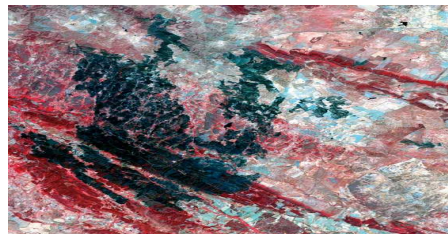
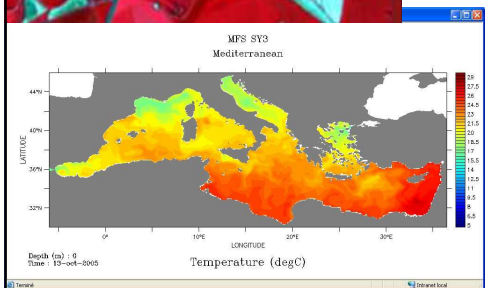
## The services

The “output” of GMES will be user-oriented, sustainable and operational services.

These can be seen as divided in two groups:

- core services (the first of which – the Fast-Track services – will start their operational phase in 2008)

- Downstream services.



## The services

### Core services:

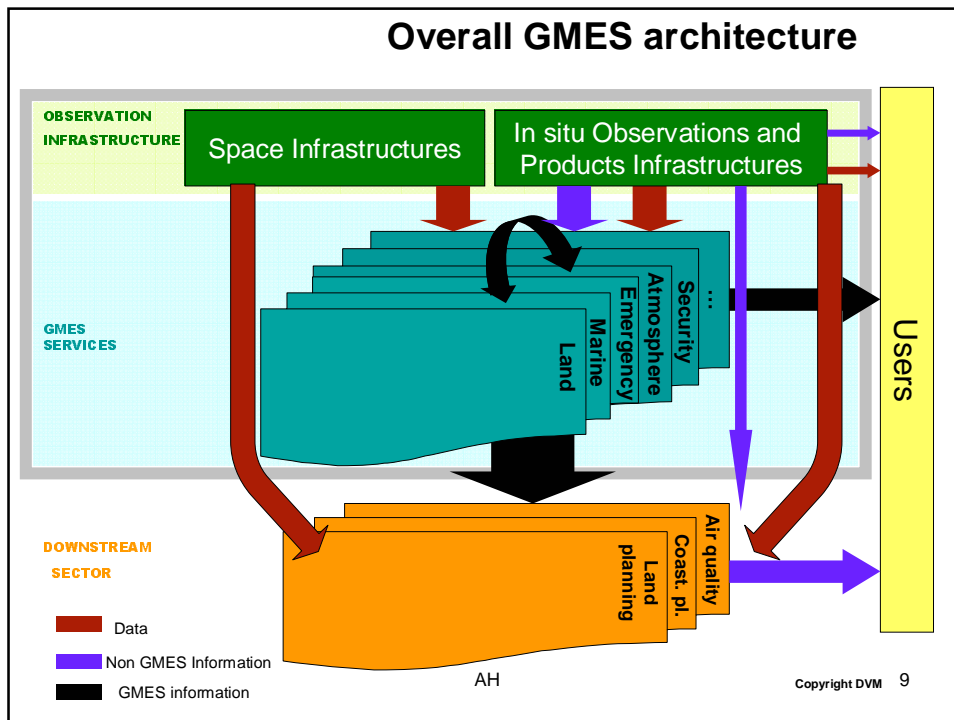
- are common multi purpose information capacities that serve European public purposes
- therefore are selected and financed by public institutions.

→ EU is directly involved in the implementation of CS

### Downstream services

- serve more specific needs (e.g. local or regional, specific thematic areas etc)
- could involve the participation and financing of the private sector

→ DS fall out the perimeter of the overall GMES governance scheme



### GMES services

The European Commission has identified a set of three *Fast-track* GMES core services:

- Land
- Marine
- Emergency

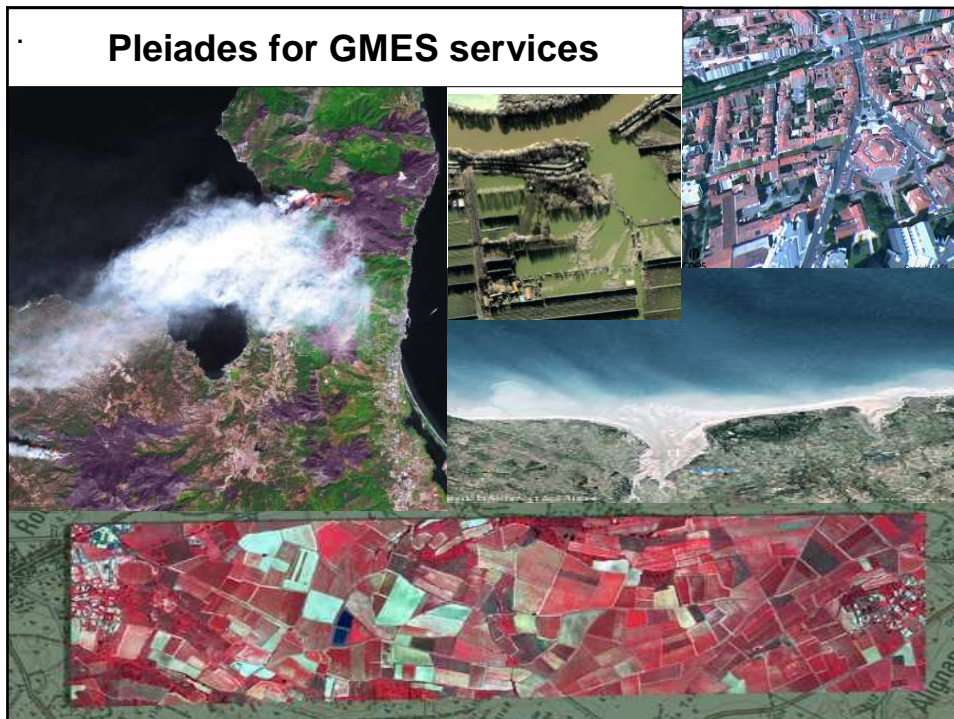
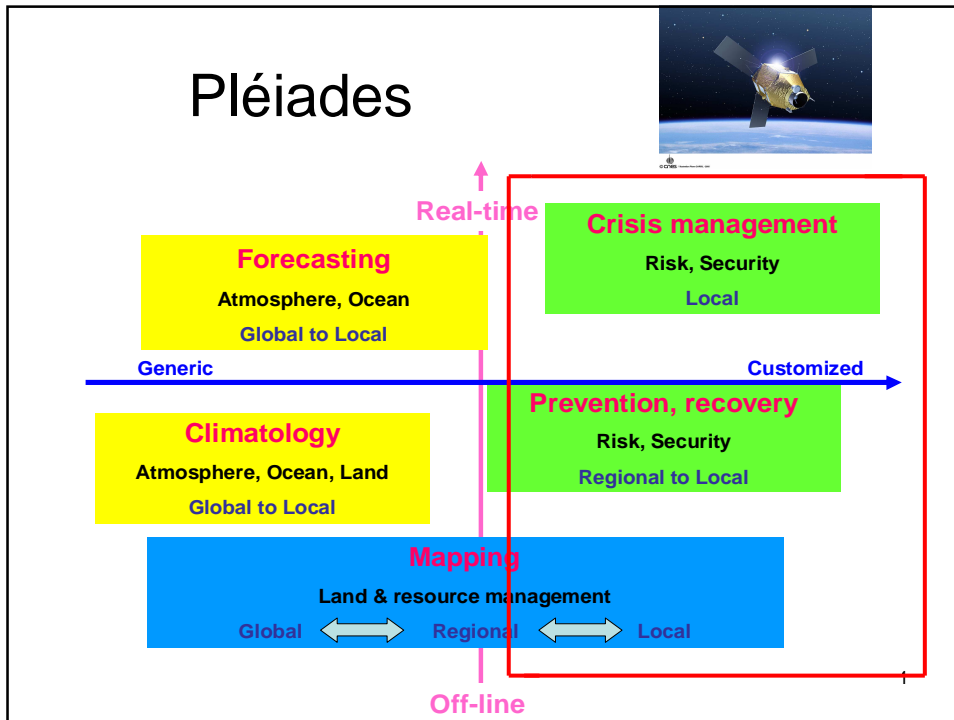
and two additional pilot services:

- Security
- Atmospheric composition

The current call (2008) foresees the development of downstream services. The projects are expected :

- to make the best use of the products the FST will provide
- to be strongly user driven

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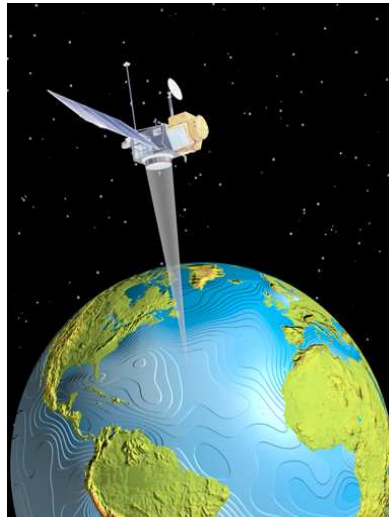
## observation systems

**In order to deliver operational services on a sustainable basis, GMES needs to have access to the data that underpin them.**

**This means that the adequate infrastructure has to be constantly available,**

- be it specific to GMES or shared
- be it space based or in situ

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## Data access

- **The EC and the ESA have signed a grant that will allow the ESA to ensure the coordinated and timely supply of satellite based Earth Observation data for the preoperational phase of GMES from 2008 to 2010**
- **Through this grant, the GMES services being developed will benefit from free of charge access to their required space data.**
- **The GMES in-situ infrastructure is an asset of the Member States (and of their local or regional authorities)**

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14

