



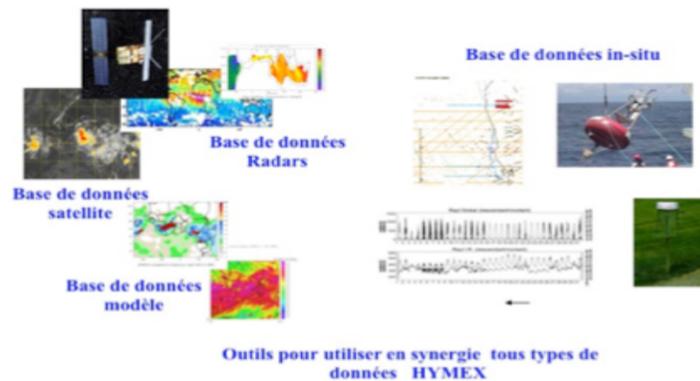
AERIS

DATA AND SERVICES FOR ATMOSPHERE

Nicole Papineau



Why AERIS?



- Processes studies
- Climatology analyses
- Modeling validation
- Data assimilation



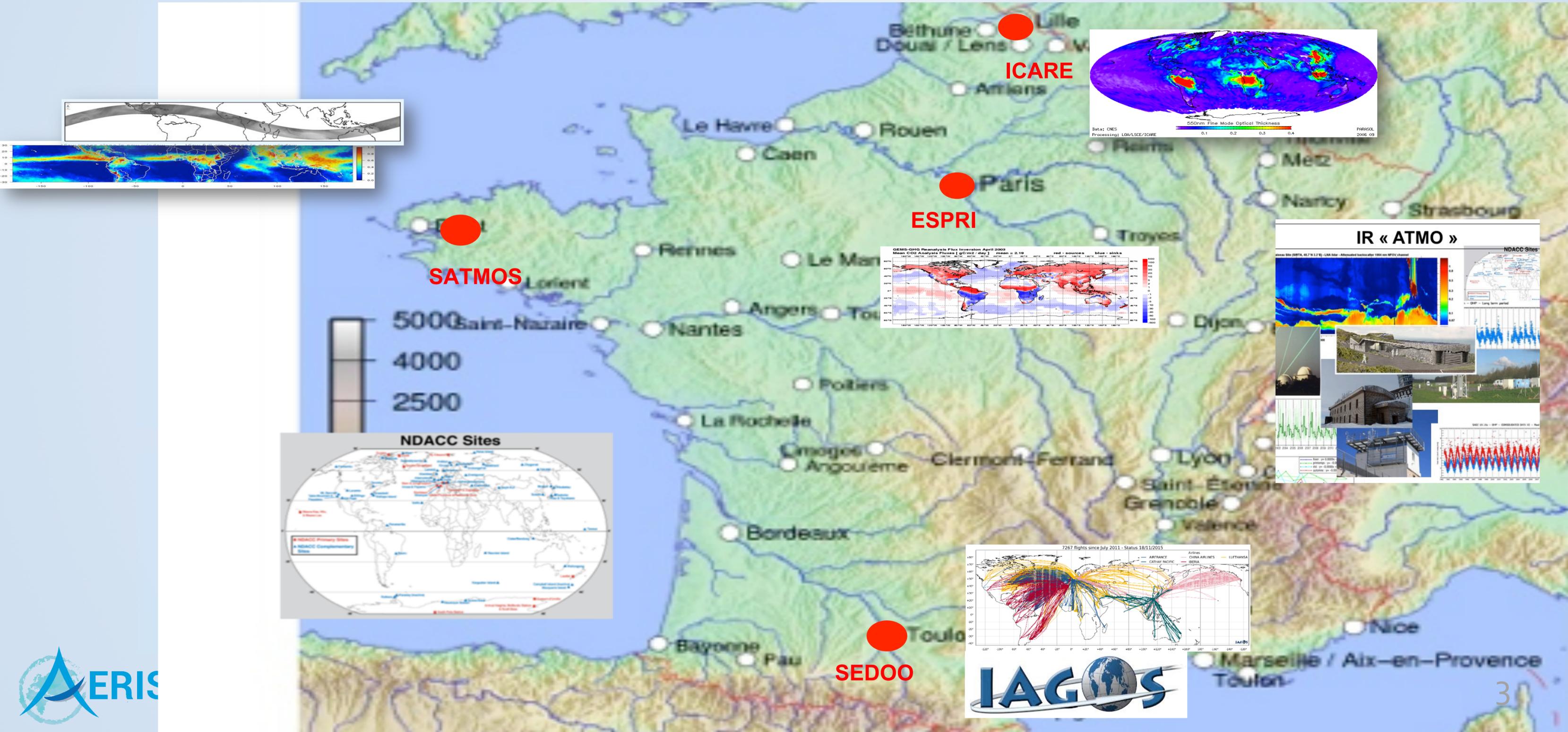
Need to :

- Have more integrated facilities
- Simplifying data access and services



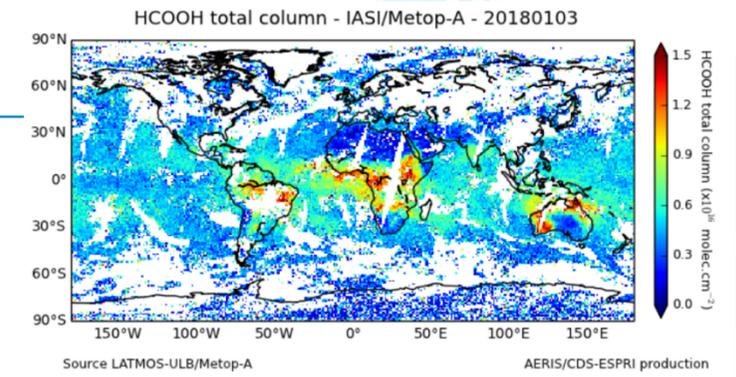
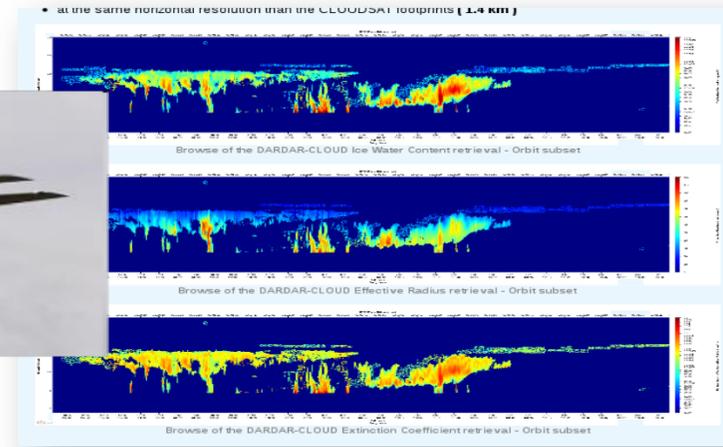
For all type of observations : satellite, ground based observations, campaigns, balloons

Four Centers for Data access and services

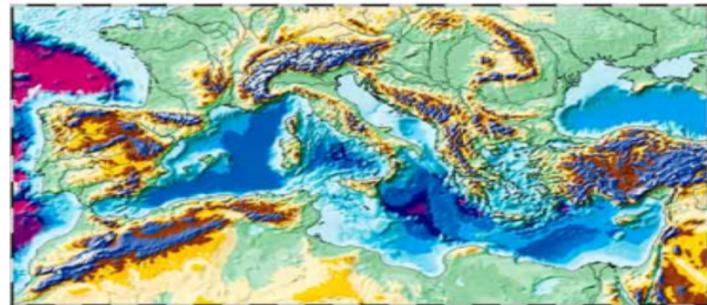


AERIS

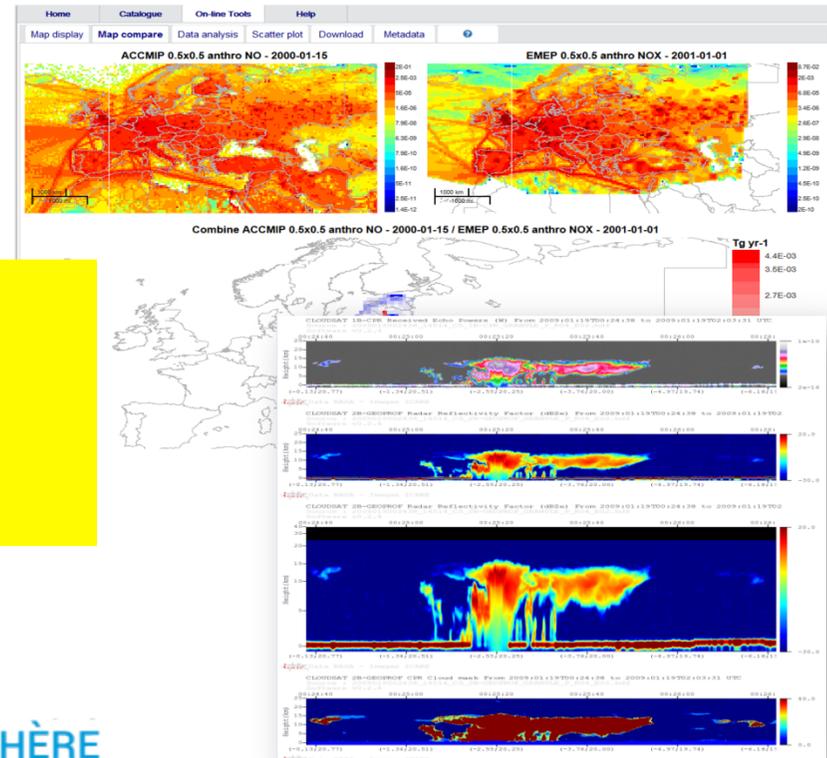
Campaign support tools



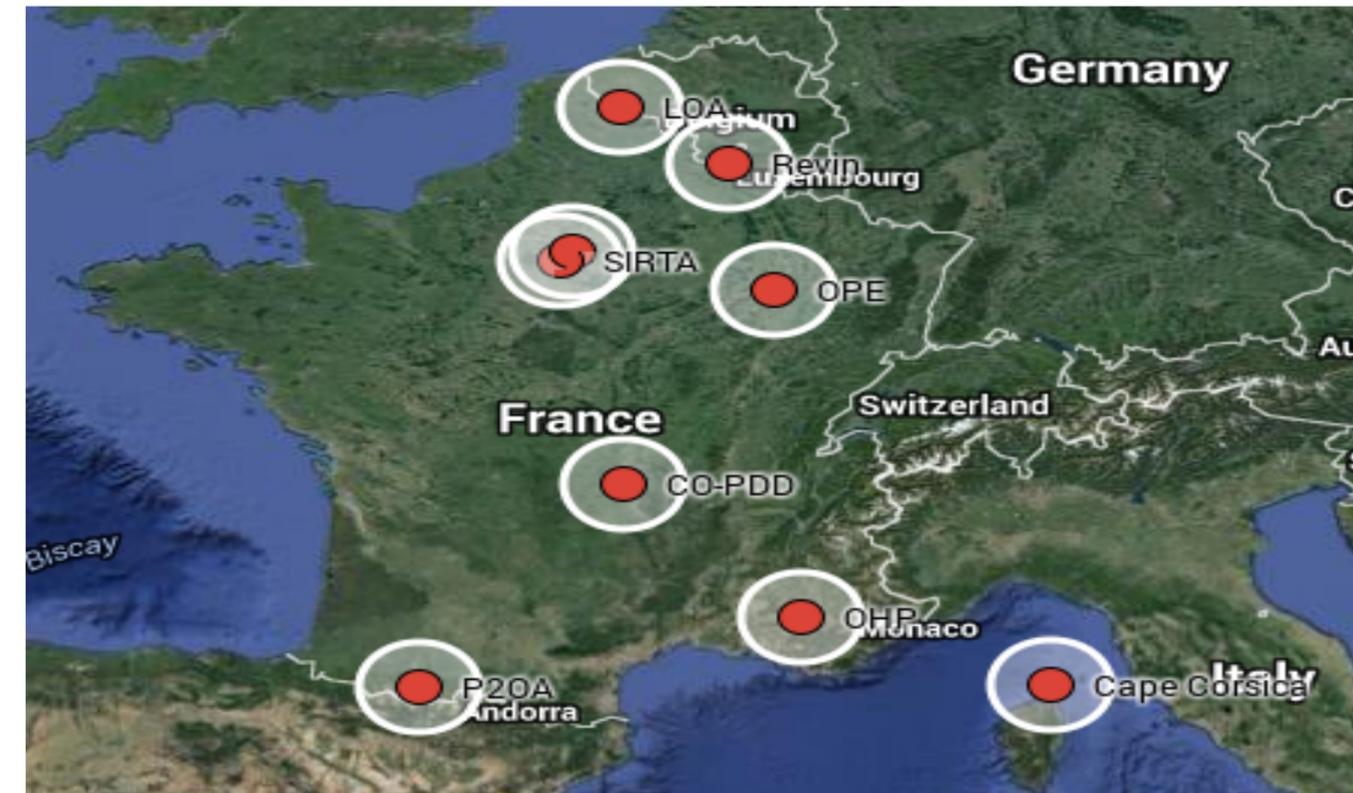
MIMOSA ARLETTY GIRAFE
REPROBUS
Radiative transfert codes



ECCAD UPAC
GEISA



Satellite co-locations
Visualisation tools



IAGOS: a major project for AERIS

Information

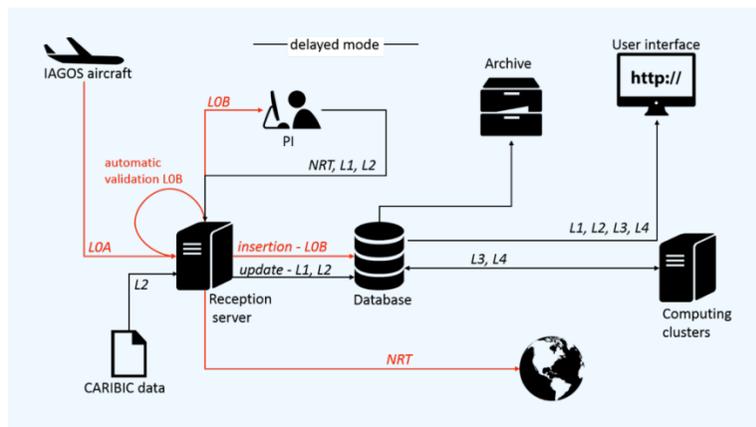
I11080222382635

Airport : Atlanta (ATL)

Date : 2011-08-02

port : Frankfurt (FRA)

te : 2011-08-03 07:25:51



- France involved in IAGOS Data base for a long time
- Strong support of CNRS, CNES, Univ. Sabatier, Meteo France
- Ether... AERIS a chance for IAGOS data base

A screenshot of the IAGOS Data Portal website. The page features the IAGOS logo at the top, navigation links for Home, DATA ACCESS, ABOUT THE DATA, and ABOUT US. Below the header is a banner image of an aircraft cockpit with the text "IAGOS DATA PORTAL" and "In-service Aircraft for a Global Observing System". The main content area includes a welcome message, navigation buttons for IAGOS central website, IAGOS-CARIBIC website, Data access, and NRT IAGOS data used in CAMS. There is a map of IAGOS flights showing a dense network of flight paths across the Atlantic and Europe. A news section on the right highlights "Ancillary data in the IAGOS data-sets" and "New IAGOS data portal". The bottom of the page shows a map of the Atlantic Ocean with coordinates: Longitude : 119.7893, Latitude : -4.5655.

AERIS Catalogue

The screenshot displays the AERIS Catalogue interface. On the left, a sidebar contains navigation icons and a search filter. The main content area shows a list of datasets, each with a 'Niveau 3' label and a description. A map of the world is visible in the background. The detailed view on the right includes a title, description, contact information, and a data download section with a table of years.

Navigation: ACCÈS AUX DONNÉES, ACTIVITÉS, APPEL À PROJETS, ORGANISATION, CONTACTS

Filter: Niveau 3

Dataset List:

- Produit nuageux Gewex pour l'instrument AIRS-LMD
- Produit nuageux Gewex pour l'instrument ATSR-GRAPE
- Produit nuageux Gewex pour l'instrument CALIPSO-GOCCP
- Produit nuageux Gewex pour l'instrument CALIPSO-GOCCP_3D
- Produit nuageux Gewex pour l'instrument CALIPSO-ST
- Produit nuageux Gewex pour l'instrument HIRS
- Produit nuageux Gewex pour l'instrument ISCCP

Dataset Detail: Produit nuageux Gewex pour l'instrument ATSR-GRAPE

Description: Produit nuageux Gewex pour l'instrument ATSR-GRAPE

Contacts:

- Point de contact: Claudia Stubenrauch (LMD/CNRS/UPMC) | stubenrauch@lmd.polytechnique.fr
- Point de contact pour les métadonnées: Cathy Boone (AERIS) | Cathy.Boone@ipsl.fr

Téléchargement: Pour télécharger les fichiers de données, ajoutez-les au panier en cliquant sur les différentes années.

| ANN. |
|------|------|------|------|------|------|------|------|------|------|
| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| ANN. | ANN. | ANN. | | | | | | | |
| 2007 | 2008 | 2009 | | | | | | | |

Charte de données:

If the data from the GEWEX Cloud Assessment are used in any publication, we request referencing the article of Stubenrauch et al. 2012. In addition, each dataset used should be specifically referenced (see Table 1 of the article or dataset descriptions for details). We also request to include the following acknowledgment:

The GEWEX Cloud Assessment data were obtained from the ClimServ Data Center of IPSL/CNRS

Visualisation tools for common use of satellite and ground-based data

Pinboard visualization tool

<http://www.icare.univ-lille1.fr/browse/atmos>

User-driven “pinboard” approach to visualize heterogeneous material available for a given geographic location or region (ground-based observations, satellite observations, model forecasts/analyses)

Multi-sensor browse interface

<http://www.icare.univ-lille1.fr/browse>

Designed for direct satellite-to-satellite or satellite-to-model comparison (2D/2D)

Direct access to AERONET-Europe sunphotometer observations

ATMOS/AERIS/ICARE Pinboard Visualization Tool
Location: Lille - Villeneuve d'Ascq (France)
Date: 2014-04-15 (YYYY-MM-DD)

- MSG/SEVIRI - Top-of-the-atmosphere Reflectance (ICARE)
- MODIS/Aqua - NRT True-color Corrected Reflectance (NASA)
- Lille Lidar - STRAT Mixing Layer Depth (LOA)
- AERONET/Photons Sunphotometer - Aerosol Optical Depth (LOA)
- Lille Lidar - BASIC Aerosol Optical Depth (LOA)

Multi-sensor browse interface
Date: 2010/02/18 (2010/049)

- PARASOL / POLDER3
- MODIS
- Geostationary
- CALIPSO IR / WFC
- CALIPSO / CloudSat Profiles

AERONET/PHOTONS active sites (L2.0 data) (last update: 2010/10/11 - most recent data: 2010/08/19)

PARASOL orbit tracks (predicted ephemeris)

AQUA orbit tracks (predicted ephemeris)

CALIPSO orbit tracks (predicted ephemeris)

Cloudsat orbit tracks (predicted ephemeris)

Spatial subsetting: North: 45.0432, West: 5.184, East: 38.016, South: 29.8368

Map: Santa Cruz Tenerife (Photons Network) t=08:55:48 aot550=0.083 t=12:05:11 aot550=0.091 t=14:05:11 aot550=0.108

Map: MSG/SEVIRI AER_OC Daily Mean Aerosol Optical Depth over Ocean

Map: ECMWF GEMS/MACC-AER 12-hr Forecast - Total Aerosol Optical Depth 550nm

Contribution to ESFRI Projects



ESFRI Projects

- AERIS the data center for IAGOS
- Important implication in ACTRIS data center



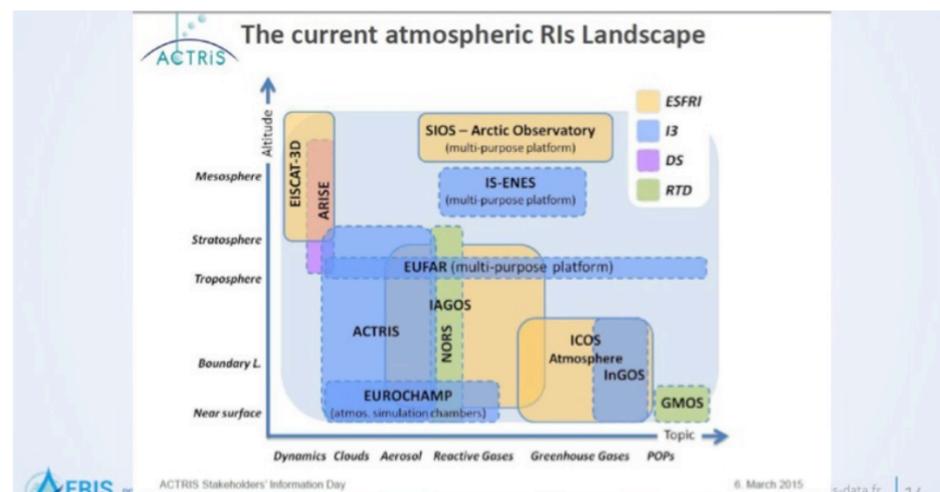
EUROCHAMP, HEMERA, EUFAR

- More recent involvement of AERIS



ENVRI+ ENVRI Fair

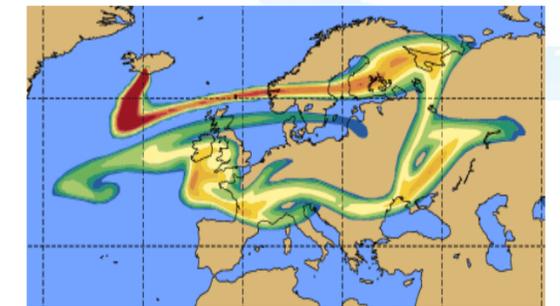
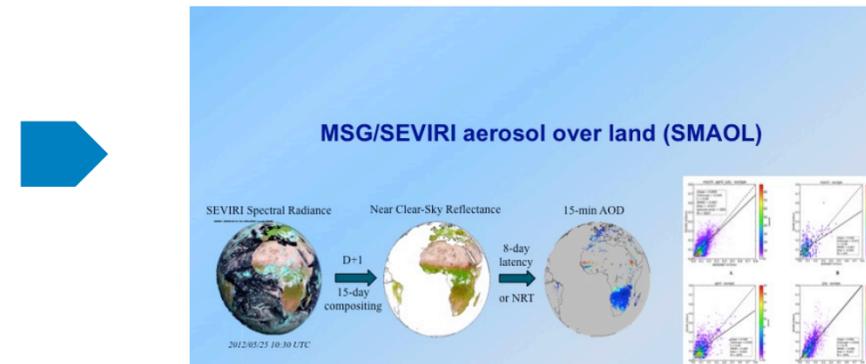
- Importance at UE level to have common rules, for all Environnement IR



AERIS contribution

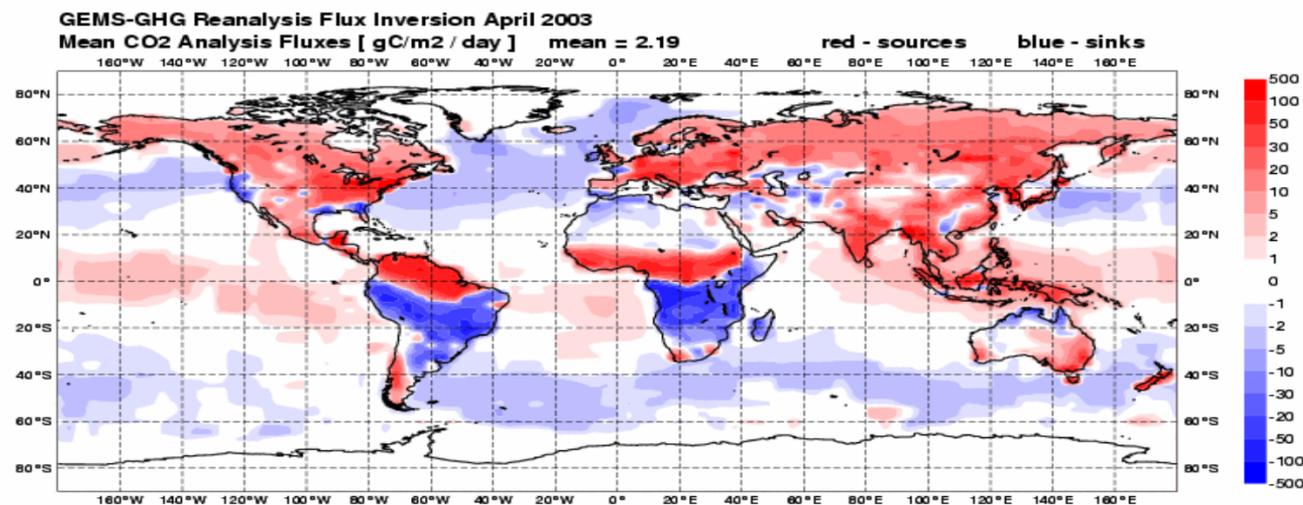


- Could process data in short delays , to be mobilise in case of crisis(volcano)



- Complementary of ESA,EUMETSAT for satellite data which are unique and not produced by space agencies

Contribution for ground based and aircraft data to IAGOS, ACTRIS...



Conclusion



- ▶ **AERIS French Data & Services Center for a better visibility in France, Europe and international**
- ▶ **AERIS data processing and access to all type of data and services for the scientific community**
Mutualisation of tools, services
- ▶ **Strong involvement in Copernicus, ESFRI IR**





Merci de votre attention

www.aeris-data.fr