



# EUMETCast / GEONETCast

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# Outline



- **EUMETCast system**
- **EUMETCast services**
- **Products currently available**
- **GEONETCast**

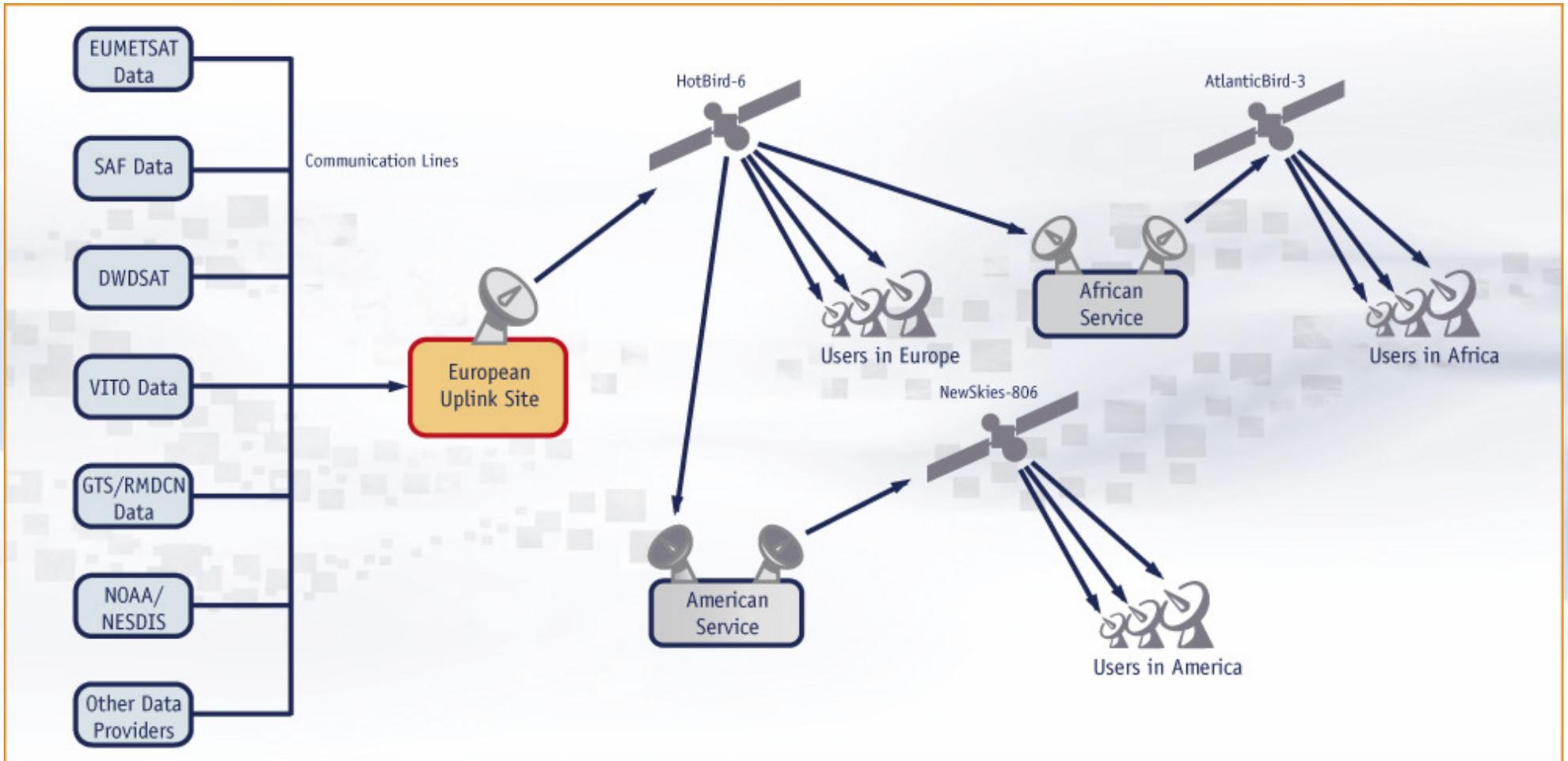


# EUMETCast – what is it?

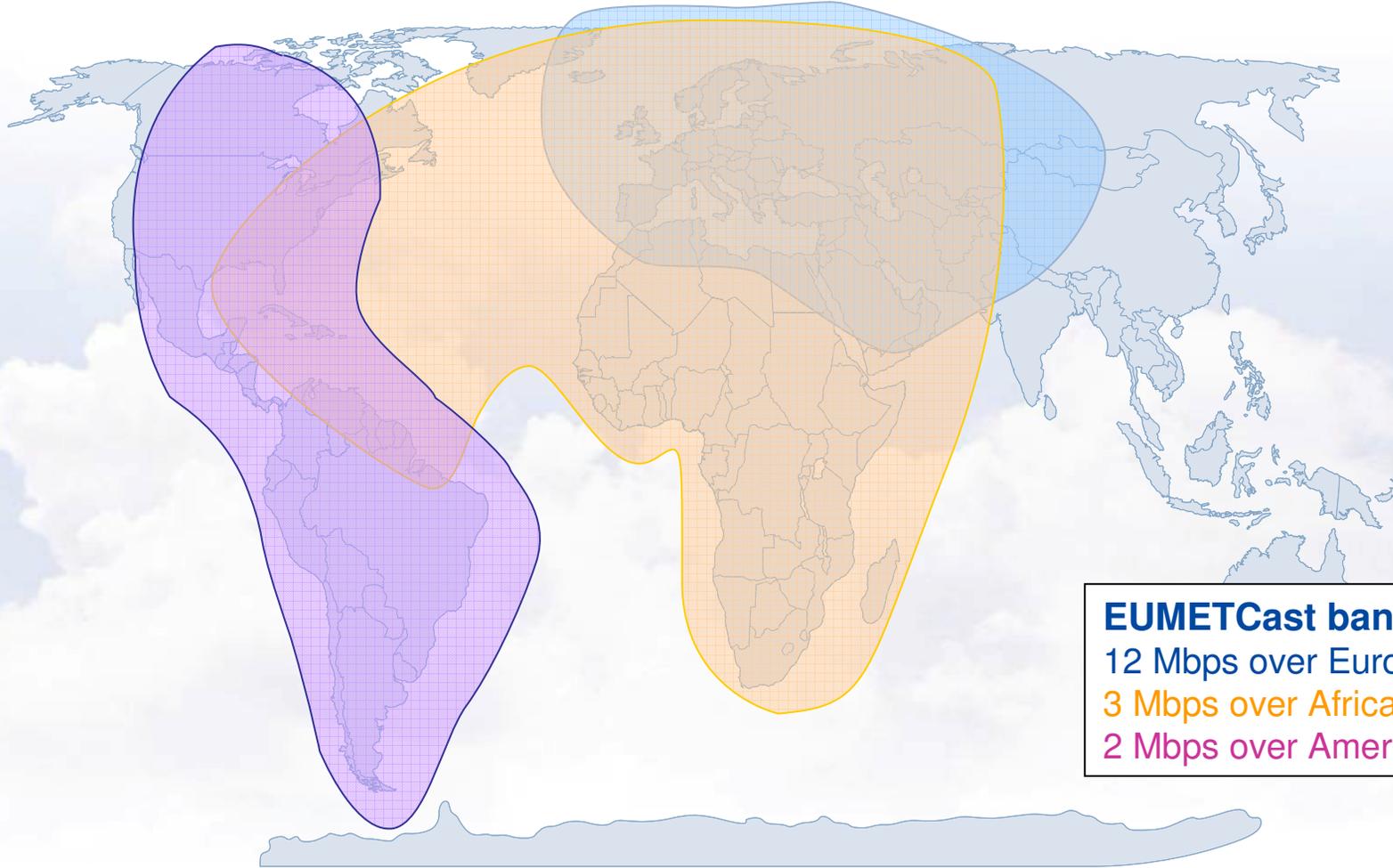
- Generic, multi-mission **dissemination system** based on IP over DVB;
- Highly scalable infrastructure by **using open standards**, commercially available systems;
- Allows the usage of **off-the shelf, inexpensive equipment** for reception;
- High service availability of 99.50% with guaranteed, mission related timeliness;
- Closed-loop product and performance monitoring;
- Secure multicast at the file and User level allows the full range of access control options to be supported (i.e. from no access control to full access control).



# EUMETCast – components



# EUMETCast – coverage



**EUMETCast bandwidth:**  
12 Mbps over Europe  
3 Mbps over Africa  
2 Mbps over Americas





# EUMETCast User Reception Terminal Cost

DVB Standard Hardware	
LNB Ku-/C-band & Satellite Dish	200/1500 EUR
DVB PCI Card	100 EUR
DVB Multicast Client Software	60 EUR
EUMETCast Key Unit (EKU)	40 EUR
PC, Hard Disk, Ethernet	1000 EUR
	1.400/2700 EUR



# EUMETCast – delivery platform

- **Meteosat 1st and 2nd generation level 1**
- **MetOp and NOAA-18 level 0 and 1 satellite global data**
- **Other satellite data (e.g. GOES-E&W, MTSAT, Jason-1, FY-2)**
- **In Situ and Forecast Data (ECMWF, DWD, UK MetOffice, MDD, BMD, DCP)**
- **Regional products from Metop and NOAA-18**
- **Products from EUMETSAT and the Satellite Application Facilities (Land, Ocean and Sea-Ice, Ozone, GRAS)**
- **SPOT Vegetation products from VITO**
- **NOAA/NESDIS products as part of the GEONETCast trial service**
- **CMA satellite data and products as part of the GEONETCast trial**

**For other products: Provider and User Feedback form**



# EUMETCast - Product Navigator



Address <http://www.eumetsat.int/products/indexer.html?page=1&search=&category=Marine&benefit=-1&provider=-1&parameter=-1&coverage=-1&dissemination=-1&status=-1&recent=false>



[Product Navigator Home](#) | 
 [Navigator User Manual \(pdf, 21 KB\)](#) | 
 [GEONETCast channels \(pdf, 13 KB\)](#)

Search by words

Type:  | 
 Societal Benefit:  | 
 Product Provider:  | 
 Parameter:  | 
 Coverage:  | 
 Dissemination:  | 
 Status:

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## www.eumetsat.int/products

### Surface Wind Vector (Wind)

Product Provider	Societal Benefit Area	Status
KNMI	Water, Weather	Operational

**Description**  
 The EARS ERS Wind Product contains measurements of the wind direction and wind speed above the sea surface. The measurements are obtained through the processing of scatterometer data originating from the AMI instrument on ESA's ERS-2 satellite

[more >>](#)

### Surface Wind Vector (SeaWinds 100km)

Product Provider	Societal Benefit Area	Status
OSI SAF	Water, Weather	Pre-operational

**Description**  
 Estimation of wind vectors from Scatterometer data (ASCAT/Seawinds) over the Atlantic Ocean at 10m height. The scatterometer wind products coming from the SeaWinds instrument on board the QuikSCAT satellite are processed towards a 100 km product at KNMI for the EUMETSAT OSI SAF. Details are described in the SeaWinds Product Manual. The OSI SAF 100 km product is developed for assimilation in numerical weather prediction models.

[more >>](#)

### Surface Wind Vector (SeaWinds 25km)

Product Provider	Societal Benefit Area	Status
OSI SAF	Water, Climate	Development

**Description**  
 Estimation of wind vectors from Scatterometer data (ASCAT/Seawinds) over the Atlantic Ocean at 10 m height. The scatterometer wind products coming from the SeaWinds instrument on board the QuikSCAT satellite are processed towards a 25 km product at KNMI for the EUMETSAT OSI SAF. Details are described in the SeaWinds Product Manual.

[more >>](#)

Slide



# EUMETCast - Atmosphere related data

- **More than 111 Atmosphere-related data and products are available at EUEMTSAT**
  - **Satellite products (IASI...) , aerosol, ozone, radiative flux...**
- **50 of these products are disseminated via EUMETCast**





# GEONECast

an initiative under GEOSS  
networking environmental data  
dissemination infrastructure



# GEONETCast – the systems

- ***EUMETCast***, operated by EUMETSAT, providing coverage of Europe, Middle East, Africa and the Americas;
- ***FENGYUNCast***, operated by CMA, providing coverage of Asia/pacific region;
- ***GEONETCast Americas***, operated by NOAA, soon to provide coverage of the Americas (due to enter initial operations Nov/Dec '07);



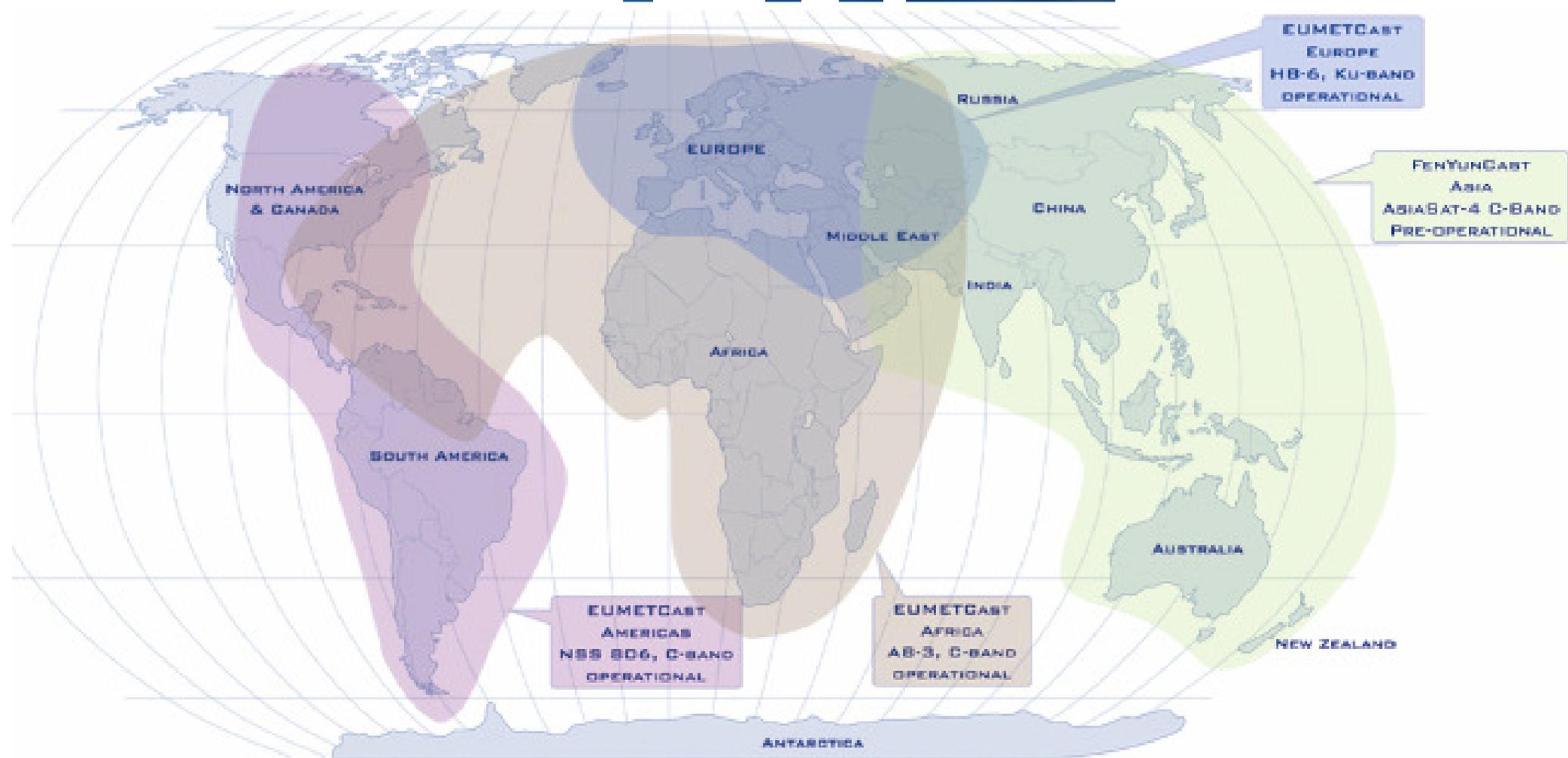
# GEONETCast – the Implementation Group

- The group consists of CMA, EUM, NOAA and WMO;
- And convene (teleconference) every two weeks basis;
- Set of basic GEONETCast documents describes scope of activities:
  - Implementation Plan
  - Design Concept
  - Product Guide
- Currently working on an Interface Document for Data Exchange between Network Centres
- And possibly on a draft ‘GEONETCast Partnership Agreement’;
- GEONETCast is recognised as one of the early achievement of GEO



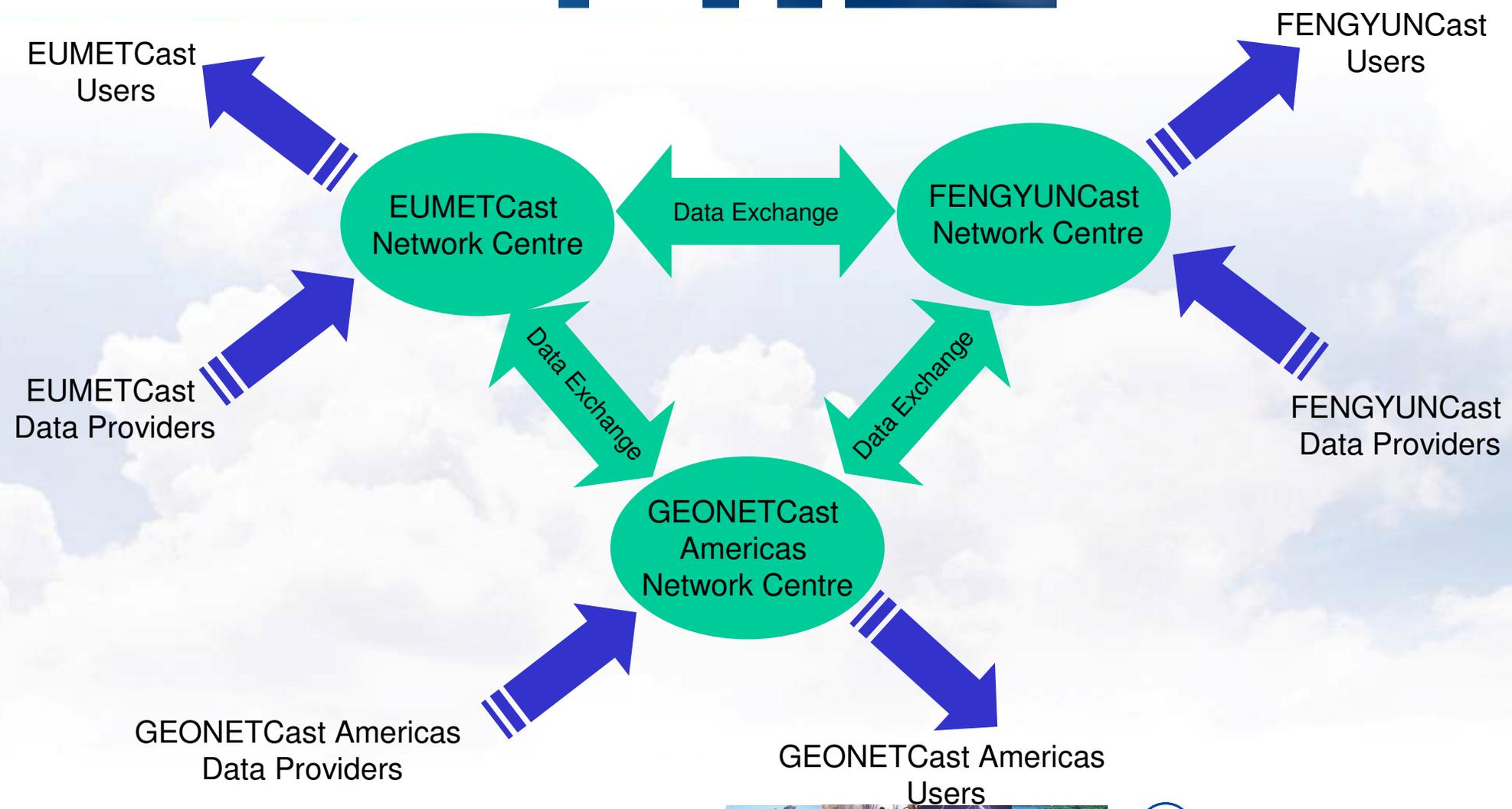


# GEONETCast – Global Coverage





# GEONETCast – components



# Opportunities



## **GEONECast:**

**disseminating environmental data to user worldwide**

- **Possibility for data providers or users to request access to GEONETCast (Feedback Form)**
- **Already including numerous atmosphere related data**





# Contacts and Further Info

- **GEONETCast further information from GEO**  
*[www.geonetcast.org](http://www.geonetcast.org)*
- **GEONETCast collaboration wiki**  
*[wiki.geonetcast.org](http://wiki.geonetcast.org)*
- **Product Navigator**  
*[www.eumetsat.int/products](http://www.eumetsat.int/products)*
- **EUMETCast further information from EUMETSAT**  
*[www.eumetsat.int/home/main/what\\_we\\_do/EUMETCast](http://www.eumetsat.int/home/main/what_we_do/EUMETCast)*
- **EUMETSAT User Helpdesk**  
*[ops@eumetsat.int](mailto:ops@eumetsat.int)*





# Thank you for your attention!

Space Tools and Solutions for Monitoring the Atmosphere  
in Support of Sustainable Development, Graz, Austria, 11-14 September 2007

