



# *GEONETCast Americas*

*A GEOSS Environmental Data Dissemination System*

**Paul Seymour**

**Office of Satellite Data Processing and Distribution (OSDPD)**

**and**

**Martin Medina and George Jungbluth**

**International and Interagency Affairs Office (IIA)**

**Satellite and Information Service (NESDIS)**

**National Oceanic and Atmospheric Administration (NOAA)**



Delivering Environmental Data to Users Worldwide



# GEONETCast is a GEO Task

---

*Establish GEONETCast as a distribution system for GEOSS related data, information and products using communications satellites and low cost, self contained, stand alone off-the-shelf reception stations.*

FZNT23 KNHC 121458  
OFFNT3  
OFFSHORE WATERS  
FORECAST FOR THE SW AND TROPICAL N  
ATLANTIC AND  
CARIBBEAN SEA  
NWS TPC/NATIONAL HURRICANE CENTER MIAMI  
FL  
1130 AM EDT SUN JUL 12 2009  
OFFSHORE WATERS FORECAST FOR THE SW AND  
TROPICAL N ATLC FROM 07N  
TO 22N BETWEEN 55W AND 65W

U. S. NOAA National Weather Service



Delivering Environmental Data to Users Worldwide



# What is GEONETCast?

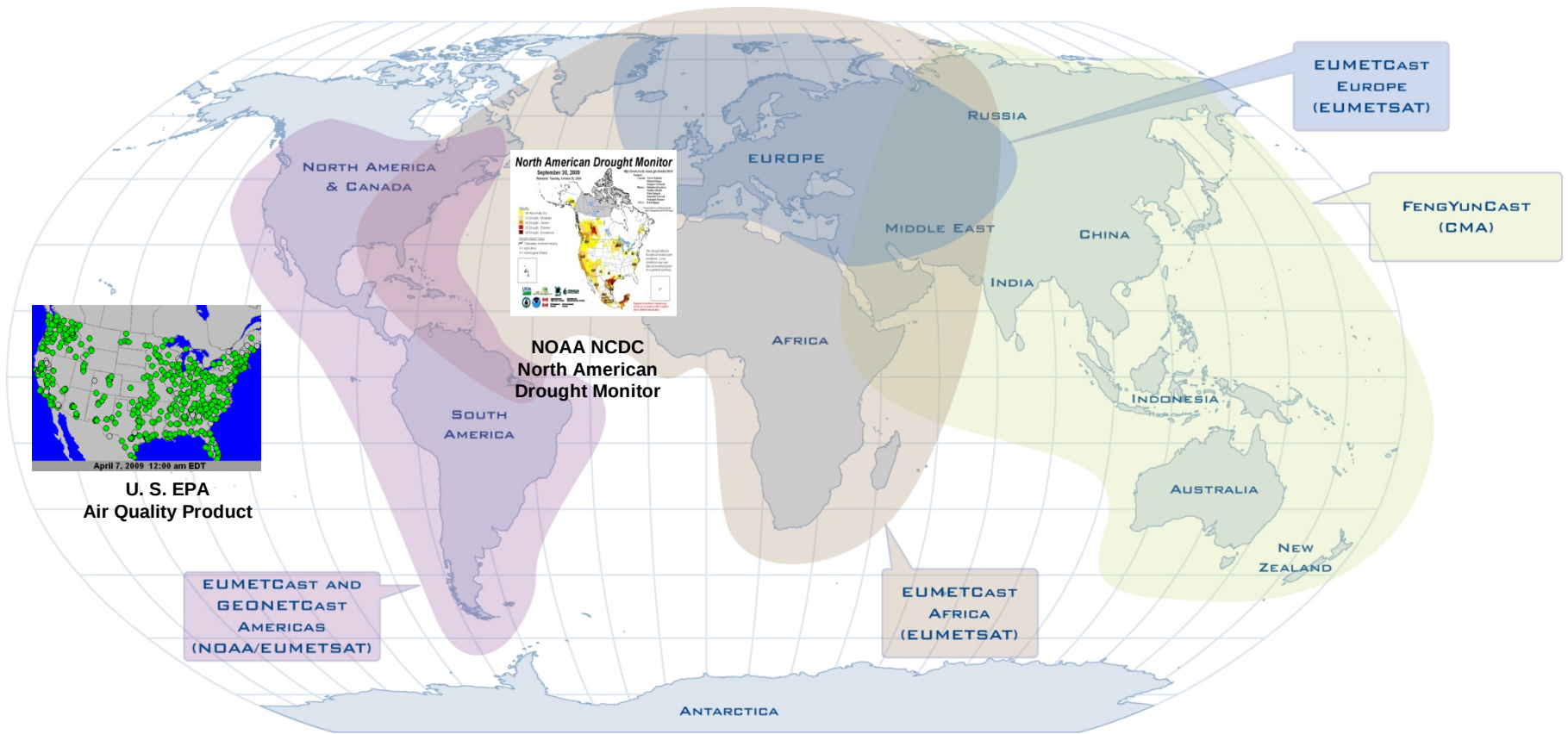
- Worldwide information dissemination system by which satellite and *in situ* data, products and services are transmitted to users through commercial communications satellites.
- Receiving stations use low-cost, off the shelf DVB-S broadcast technology – Receive station cost ~ \$2,000 - \$4,000.
- Information includes climate, weather, agriculture, air quality, disasters, and more, in support of GEOSS Societal Benefit Areas.
- No internet connection required by users
- No format restriction for providers or users. Components will be standard commercial off-the-shelf components to keep user costs lower



CATHALAC/SERVIR  
Antenna Installation



# Global Coverage

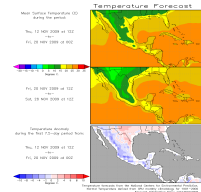


Delivering Environmental Data to Users Worldwide

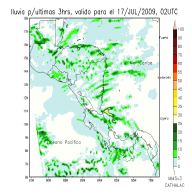


# GNC-A Providers and Offerings

- **Brazil National Institute for Space Research (INPE)**
  - Derived regional products including *fire monitoring, lightning, rainfall nowcasting, UV Index, vegetation*
- **NASA/USAID SERVIR Project**
  - *MODIS fire images* over Guatemala, and *short-term rainfall forecasts* from WRF and MM5 models
- **National Space Activities Commission (CONAE)**
  - SAC-C Imagery products in .gif format
- **National Meteorological Institute of Costa Rica**
  - Flash Flood Alert Products
- **U.S. Environmental Protection Agency**
  - Hourly animated *air quality maps* of ozone and particulates over U.S.
- **USAID/NOAA RANET Project**
  - Developmental set of products supporting several societal benefit area
- **NOAA/NCDC**
  - North American Drought Monitor
- **NOAA-NESDIS/NWS**
  - Several environmental products
  - Alerts, Watches and Warnings



NCEP Forecast from RANET Broadcast

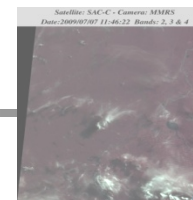


CATHALAC/SERVIR Precipitation



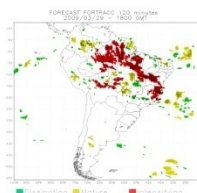
Delivering Environmental Data to Users Worldwide

# 2009/2010 Plans



CONAE - SAC-C

- User Engagement and Expansion
  - GNC Americas Coordination Group Outreach
  - Regional leadership – expert cadres at CATHALAC (Panama), INPE (Brazil), IMN (Costa Rica), CONAE (Argentina)



INPE - FORTRACC  
Convective Storms

- Pilot Projects: Leveraging Existing Regional Partnerships
  - Costa Rica Flash Flood Alert – VCP Program in coop w/ NWS
  - STAR CREST Partnerships- Bowie State, University of Puerto Rico
  - CAFTA-DR Training Workshops

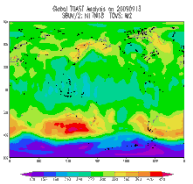


Delivering Environmental Data to Users Worldwide

# Summary



- Regional operational capability over the Americas.
- We welcome partnerships with partners, data providers and especially end users to provide a service for global environmental information users and decision makers
- GEONETCast America: <http://geonetcastamericas.noaa.gov>
- GEO's GEONETCast Web Page  
<http://www.earthobservations.org/geonetcast.shtml>



Delivering Environmental Data to Users Worldwide