Servicio Meteorológico Nacional

Training Program for the New Generation of Geostationary Satellites at NMS Argentina

Goal

Preparing NMS's forecasters to face the challenges of handling the New Generation of Geostationary Satellites imagery analysis and interpretation

Course developers and trainers:

Luciano Vidal[1]	Diana M. Rodríguez[1]
María Paula Hobouchian[1]	Pablo Irurzun[2]
Martín Rugna[1]	Manuela Sánchez Marino[2]
Sebastián Pérez[2]	José M. Gálvez[3]

Capacity building-NMS Argentina

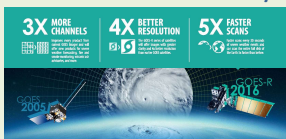|	
Cecilia Bacci	Inés Donnerstag

1: Research + Development NMS Argentina
2: Forecasters NMS Argentina   3: SRG/NWS/NOAA

- **Access to GOES-16 data through PDA (Product Distribution and Access) system (no reception satellite station installed yet).**
- **Use of typical RA-III weather scenarios, GOES-16 ABI and GLM data as examples.**
- **Local examples from Argentina using ABI and MODIS data for RGB products.**
- **Resources were based on COMET, SPORT; RAMMB-CIRA modules in English and in Spanish.**
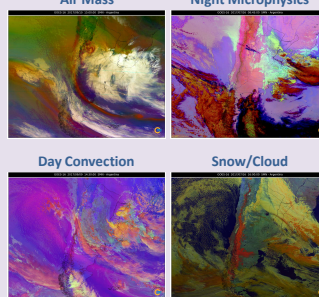
Part I: e-learning modules developed in Spanish

Module 1
GOES-13 transition to GOES-R/16

3X MORE CHANNELS   **4X BETTER RESOLUTION**   **5X FASTER SCANS**

www.nesdis.noaa.gov

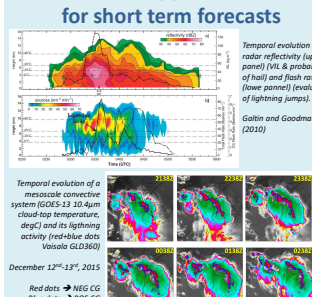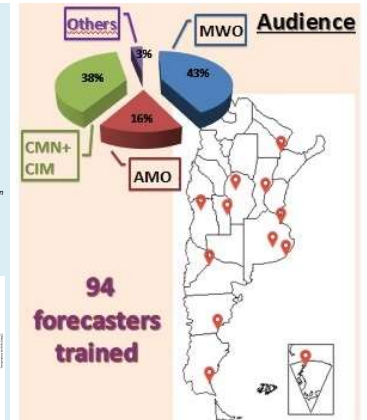|	ABI/GOES-R	Imager/GOES-13
Spectral Coverage	16 channels	5 channels
Spatial Resolution		
- 0.64μm VIS	0.5 km	1 km
- Near Infrared / Other VIS	1 km	Not available
- IR bands	2 km	4 km
Temporal Resolution		
- Full Disk	Every 15 min (4 per hour)	Every 3 hours (default)
- South America	Included in Full Disk	Every 30 minutes
- CONUS	Every 5 min (12 per hour)	Every 15 minutes
- Mesoscale sectors	Every 30 seconds	Not available
On-board calibration	Yes	No

Module 2
RGB compositions

Air Mass   **Night Microphysics**

Day Convection   **Snow/Cloud**

Module 3
Introduction to the GLM sensor and its applications for short term forecasts

Temporal evolution of radar reflectivity (upper panel) (VIL & probability of hail) and flash rate (lower pannel) (evaluation of lightning jumps).

Gatlin and Goodman (2010)

Temporal evolution of a mesoscale convective system (GOES-13 10.4μm cloud-top temperature, degC) and its lightning activity (red+blue dots Vaisala GLD360)

December 12nd-13rd, 2015

Red dots = NEG CG
Blue dots = POS CG

Audience

Others
MWO 43%
38%
16%
CMN+CIM
AMO

94 forecasters trained

Part II: face-to-face Workshop

Workshop: "Analysis of typical situations affecting Southeastern South America"

Invited expert from NOAA: José M Gálvez   Local coordinators: Luciano Vidal & Diana Rodríguez

A **"research to operation style"** focused on the operational handling of the new satellite data and products

NMS-Argentina, Buenos Aires, 21st to 24th Nov 2017

Capacity Building

Future actions (2018):
- Contribution to Global Campus
- Coordination with RA-III countries to elaborate a new edition

Dorrego 4019 (C1425GBE) · Buenos Aires · Argentina
Tel: (+54 11) 5167.6767 · smn@smn.gov.ar
www.smn.gov.ar

smn.prensa   @smn_argentina   smn_argentina   smnprensa

2017 | Año de las Energías Renovables

Ministerio de Defensa
Presidencia de la Nación