



CPTEC

Centro de Previsão de Tempo e Estudos Climáticos

# DevCoCast PROJECT

## AT



**INSTITUTO NACIONAL DE PESQUISAS  
ESPACIAIS (INPE - BRASIL)**

**(May/2008 - Sept/2011)**



# WORK DONE AT DEVCOCAST

## >>>Uploading of Environmental Satellite Products

(Making use of GEONETCAST Broadcasting Network)

- Fire Detection (from NOAA and GOES)
- Rainfall Satellite
- Fortrack Images (tracking of convective systems)
- Number of Days Without Rain
- Lightning Discharge Images
- GOES/MSG Composites
- Ultraviolet Index
- Vegetation Index
- CBERS CCD-HRC Color Composite

# INPE Products: Surface Products

Obtaining images CHC: merging images from the CCD and HRC instruments.

CCD



HRC



+

=

CHC



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Objective: To color the panchromatic image sensor HRC with a color composite CCD sensor image (bands 3,4,2).

## Training - Capacity Building

- South Africa Training (Marine-component)
- ITC Regional Workshop at Argentina
- ITC-INPE Regional Workshop in BRAZIL
- ITC Advanced Training (**8 Brazilian participants**)  
(Biomass Monitoring, Crop Yield Monitoring; Water Management; Evapotranspiration; Ground Receiving Setup and Processing Tools.
- Workshop DevCoCast “Capacity building” (based on ITC advanced training
- TRANSLATION OF TRAINING MANUAL

# Positive Impact of DevCoCast Activities

- Training
- Capacity Building towards Applications
- GEONETCast/DevCoCast fully successful on establishing the physical means for efficient satellite broadcasting, improving access and usefulness of satellite products
- Consolidation of System Concept and Products Availability (low cost, efficient, very easy to use, reliable, efficient tools)
- Experiment with high quality practices for capacity building to be further improved on next phases (Special emphasis on the tools ILWIS and SIGMACAST)



# Difficulties

- Delays/failures on delivering the products

(the expectation would be less than 5% failures)

Actual performance: (failures around 15%).

- General causes:  
firewall problems; network 'off the air' ; dropped links; servers breakdown;  
GOES Satellite eclipses;
- Difficulties in preparing product documentation according with proposed template.
- Lack of formal evaluation on one of the virtual training courses