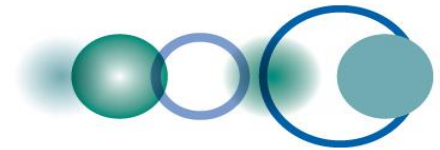


AUSTRALIAN GEOSS REPORT

5th GEOSS Asia-Pacific Symposium

Dr. Miriam Baltuck





Australian activities: outline

- National and Regional Coordination
- GFOI - Global Forest Observation Initiative
- GEO-GLAM
- Global Drought Monitoring
- RAPIDCAST
- Other communications activities
 - Remote Sensing
 - Digital Broadcasting
- Collaborative activities



GEOSS: Australian National and Regional coordination processes

- Australia has been a Participant/Member since EOS-I (Washington, 2003)
- Member of GEO Executive Committee from 2007 - 2011
 - Representing Asia-Oceania
 - Finance Informal Task Team
- National coordination in GEO
 - For government agencies: via inter-departmental process
 - Building on established approach to integration since 1990's
 - Nationally coordinated approach to GCOS/GOOS/GTOS
 - Integrate plans for ocean, terrestrial and atmospheric observations
 - For non-government community:
 - Starting to develop plans to engage Earth Observations from Space (EOS) community



The Global Forest Observation Initiative (GFOI) builds on the accomplishments of the Forest Carbon Tracking Task

The Australian-led GFOI Implementation Plan was approved at the November 2011 GEO Plenary.

GFOI aims to:

- **foster the sustained availability of observations in support of national forest information systems**
- **support countries in the use of observations in national forest information systems and reporting commitments – respecting national choices of data and tools**

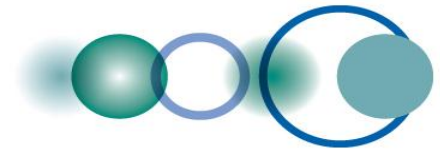
The three country co-leads for GFOI are Australia, Norway and the US

First GFOI Task Force meeting in January 2012

Third Science Data Summit in Tanzania February 2012; Australia will host the 4th in 2013

First meeting of the Space Data Coordination Group March 2012

Come to our FCT-GFOI session tomorrow!



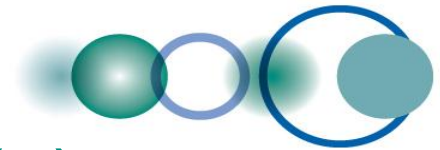
GEO-GLAM

Integrated Crop Forecasting Workshop

- Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) Workshop held on 13 - 14 February 2012
- Paper to be released in June

Rangelands Monitoring

- CSIRO leads for Australia and ABARES participates in the sub-task through involvement in land and ground cover research and projects. Currently the sub-task is scoping out activities centring on biomass production and condition; and has proposed that rangelands and pasture monitoring be included through establishment of an Australian pasture-based GEO Joint Experiments for Crop Assessment and Monitoring (JECAM) site.

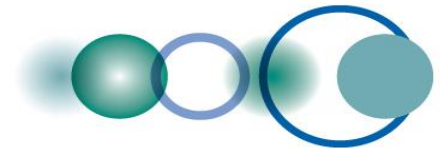


Global Drought Monitoring (1)

The Global Drought Monitor (GDM) is being established to effectively deal with transnational droughts. The GDM effort is focussed on comparing soil moisture observations from remote sensing with model-derived values.

- **ABARES contribution:**

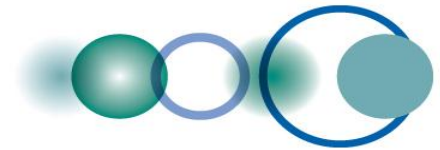
- providing data to a pilot study on drought in Australia
- since 2010 ABARES has participated via an email network and teleconference with technical experts engaged in the development of the GEO GDM
- The infrastructure for deployment of the Global Drought Monitoring Portal (GDMP) is being set up by the US National Integrated Drought Information System (NIDIS) and NOAA. The ABARES “Monitor” website is contributing “web services” on rainfall and soil moisture percentiles for deployment in the GDMP.
- As part of the efforts to establish a GDM a workshop has been organised in partnership with collaborating organisations in April 2012 in which ABARES will participate.



Global Drought Monitoring (2)

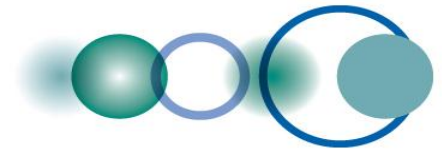
Potential long term benefits for Australia include:

- Increased modelling capacity;
- Drought and drought policy reform which are key DAFF priorities and participating in and learning from what is happening on a global scale enhances our capacity to respond and advance these issues for Australia.
- Priority Actions from the Australia-USA Joint Commission Meeting last year include collaborating on early warning information system development, including collaboration on regionally-specific pilots that focus on- data integration, impacts assessments, and cross-sectoral collaboration contributing commitment to this area.



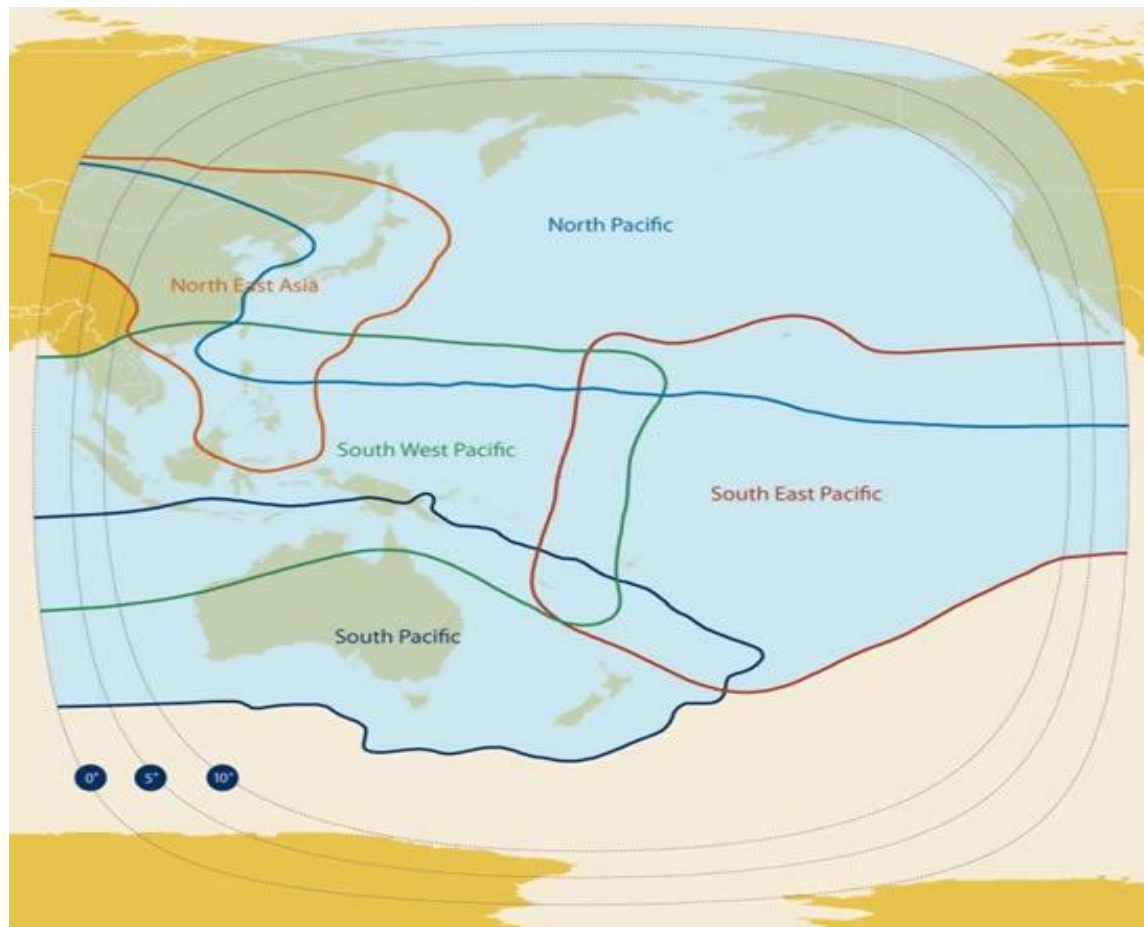
RAPIDCAST

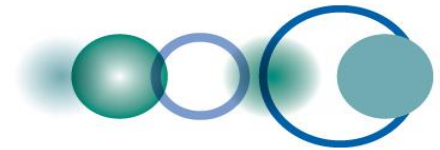
- **RAPIDCAST: RANET Asia Pacific Information and Data Broadcast**
- Modelled on GeoNetcast Americas satellite broadcast, aimed at improving remote community access to information
- USAID /NOAA Funded under RANET program, with assistance from Australian Bureau of Meteorology
- Covers Central Pacific on GE23 Satellite on KU beams
- Uses appropriate equipment for Pacific Region
- Test Transmissions June 2012 onward
- Limited bandwidth for test transmissions
- Possible GeoNetcast Pacific Pilot



RAPIDCAST Coverage

- Currently on South West and South East beams

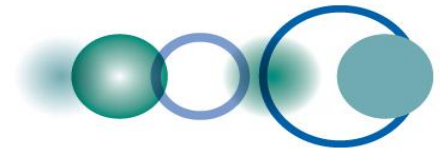




Other communications activities (1)

Remote Sensing:

- Bureau of Meteorology aims to fully convert its entire automatic weather station network (650+) sites to real time reporting
- Geographic span from Indian Ocean to Pacific Ocean
- Mixture of Satellite and Cellular technology
- Can offer GEOSS community practical expertise in the latest advances in data communications in remote sensing and message disseminations and warnings



Other communications activities (2)

Digital Broadcasting:

- Bureau of Meteorology is looking to convert its existing HF Marine Weather Broadcast (Australasian region) to a new HF Digital Standard (DRM)
- New broadcast will support enhanced warnings and significant increase in products and services
- Supports 2 voice channels and multiple data feeds
- Pilot test from July 2012 aimed at Australia and Pacific zones
- Possible GEOSS Pilot



Collaborative Activities

- Australia will host the 4th Asia-Oceania Meteorological Satellite Users Conference in 2013
- Australia is working with Japan to develop a plan for delivering Himawari-8/9 data to Pacific Island Countries
- Australia is hosting an APRSAF Climate Regional Readiness Review workshop in Perth May 24-25 to improve space data coordination aspects of climate policies in the region