

# HAIC – HIWC SCIENCE MEETING



New York, USA

9-11 Mar 2015

R Potts



**Australian Government**  
Bureau of Meteorology

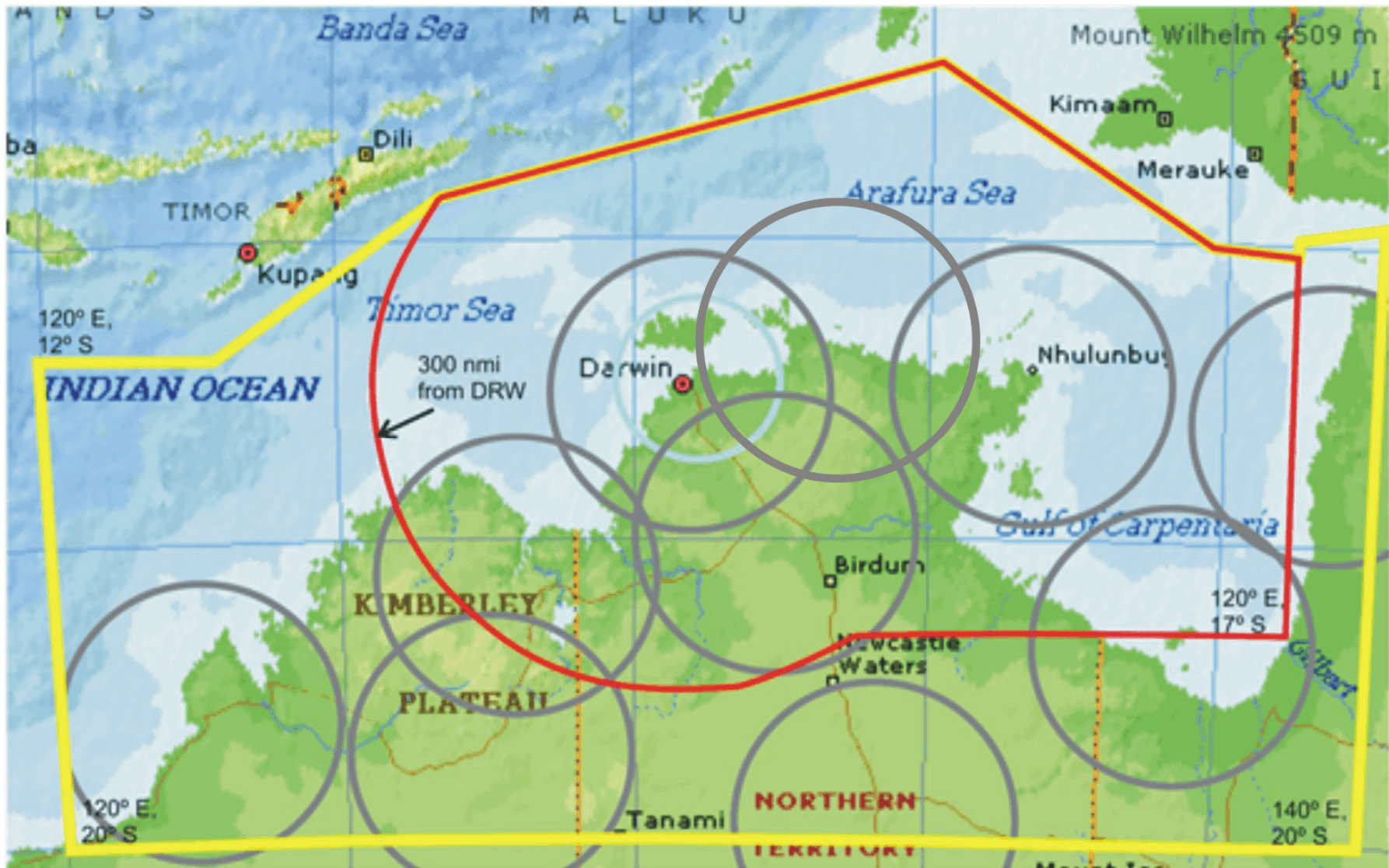
The Centre for Australian Weather and Climate Research  
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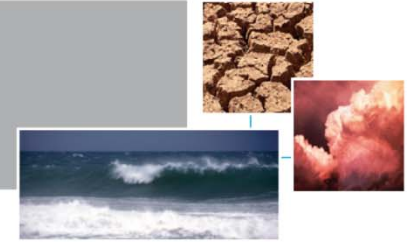
# HIWC – HAIC Campaign – operations area



- Campaign 15 January – 14 March 2014, based in Darwin, NT



# HIWC – HAIC Field Campaign



## Observations network

- Rapid scan MTSAT-1R satellite data
- BOM weather radar data
- ACCESS NWP data
- Lightning data – gpats lightning network
- Work underway to establish thredds data server providing access to MTSAT-1R data, radar data, ACCESS NWP data
  - <http://dap.nci.org.au/thredds/catalog.html>
  
- Rodney Potts ([r.potts@bom.gov.au](mailto:r.potts@bom.gov.au))

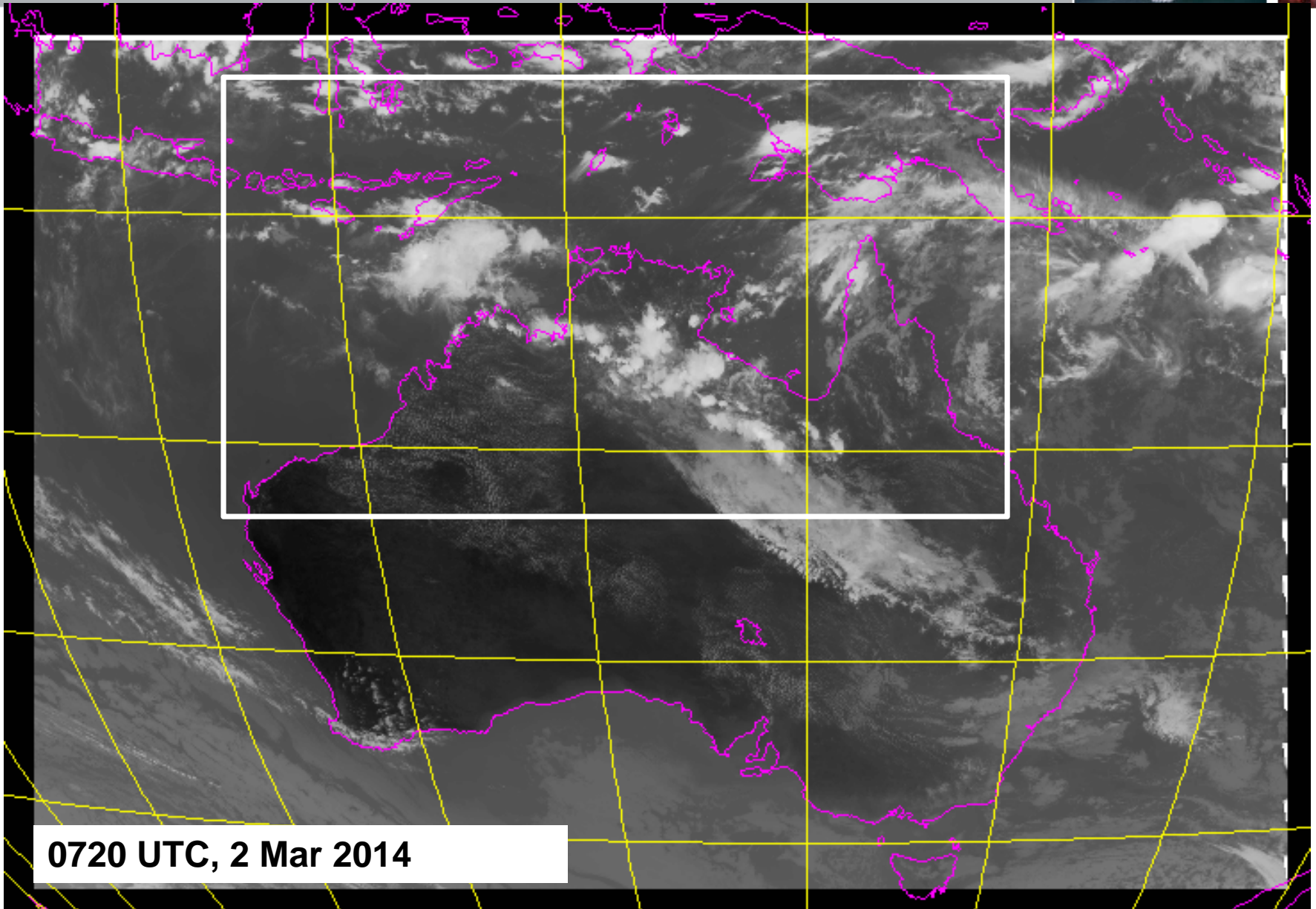
# JMA – rapid-scan MTSAT-1R data



- JMA provided rapid-scan MTSAT-1R observation in the period 19 Dec 2013 – 18 Mar 2014 every 10 minutes/24 hrs.
- Area of coverage – 6S – 46S, 105E – 165E
- Data format
  - Raw HRIT format – can be viewed in McIDAS via ADDE server
  - netCDF format
- No scan daily at hh:50 every 2 hours – navigation check
- No scan daily 16:30 – 17:00
- Subset of netCDF data made available to Atmosphere group for PLANET (visible channel and 1 x IR channel)
- Data archived by BoM

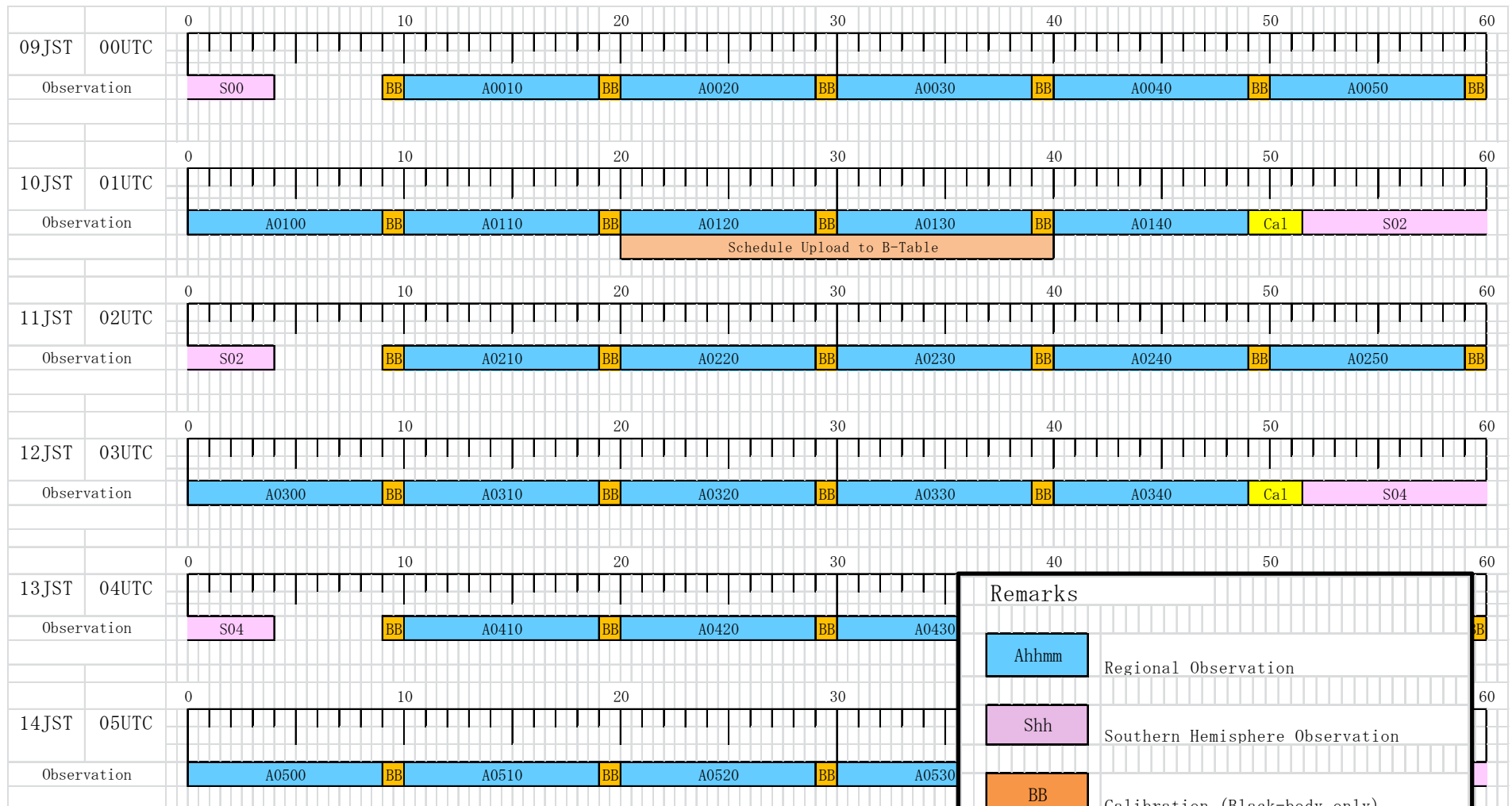
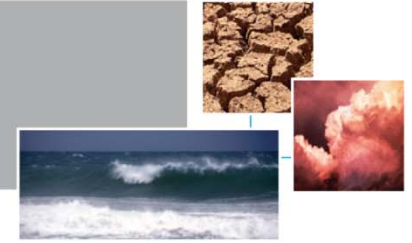


# Rapid-Scan MTSAT – area of coverage



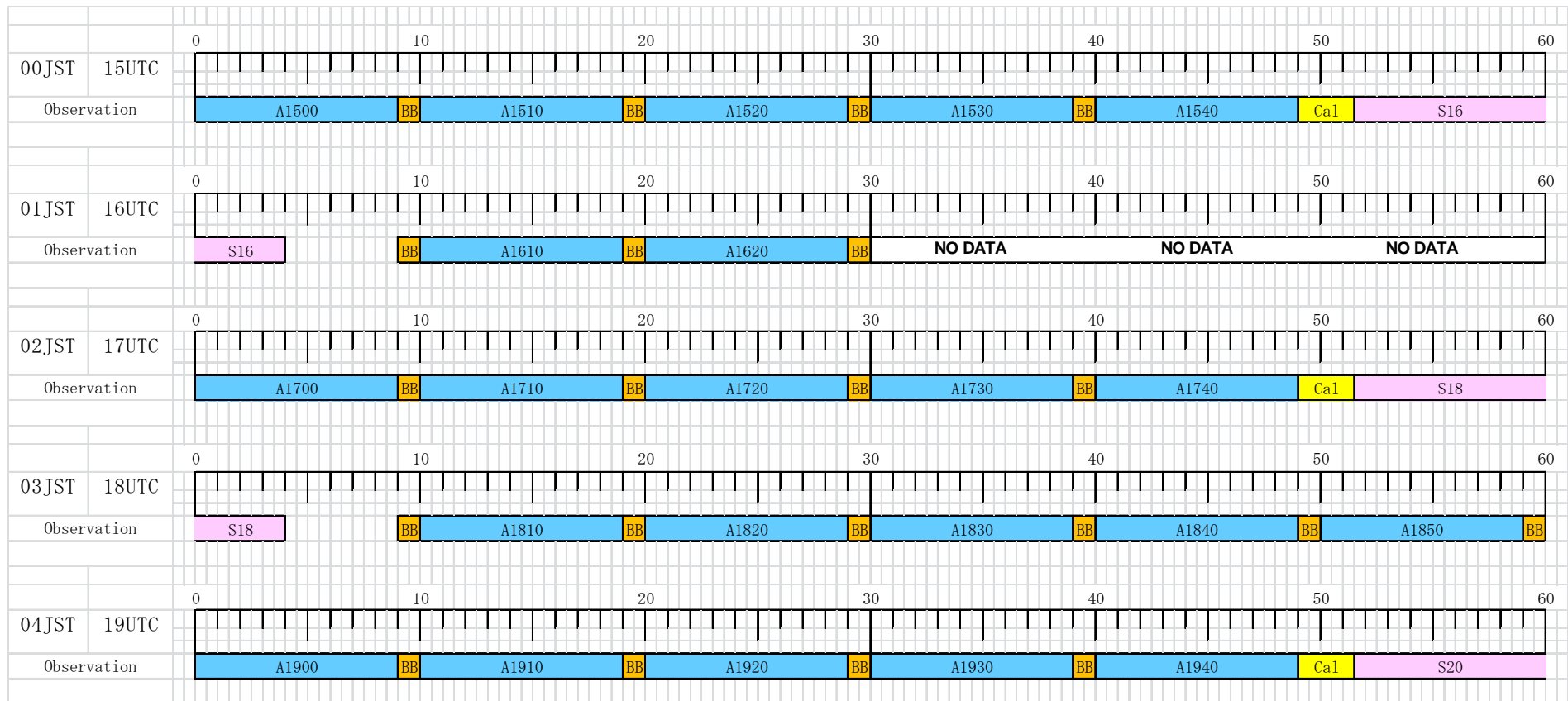
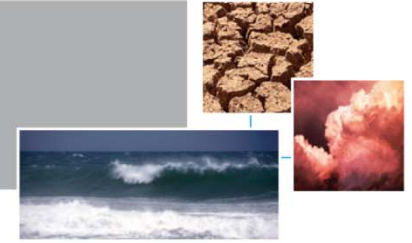
**0720 UTC, 2 Mar 2014**

# MTSAT 1R – rapid-scan schedule

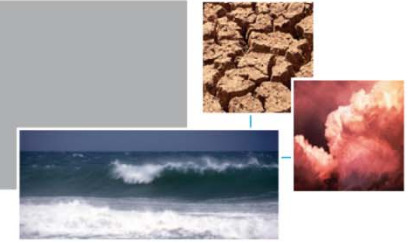


Remarks	
	Ahhmm Regional Observation
	Shh Southern Hemisphere Observation
	BB Calibration (Black-body only)
	Cal Calibration

# MTSAT 1R – rapid-scan schedule



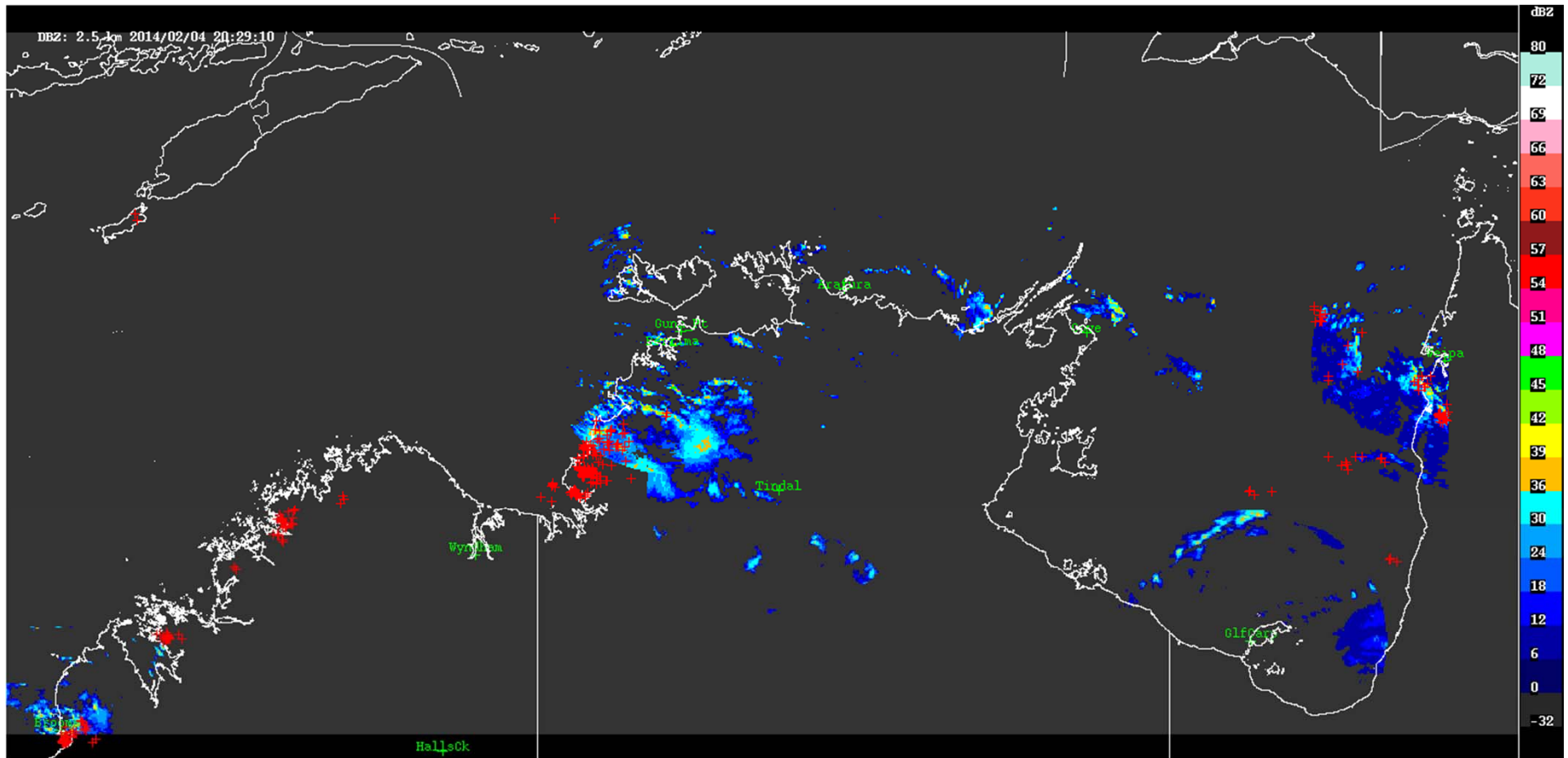
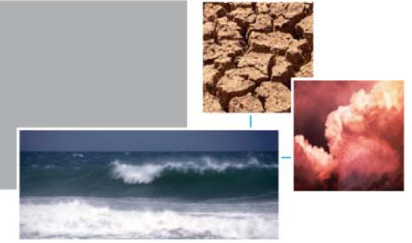
# Radar data



- Volumetric radar data - Broome\*, Berrimah, Gunn Pt (CPOL), Arafura, Tindal, Gove, Weipa, Gulf Carp
  - \* Broome radar added 16 Jan 2014
- Wyndham radar – low level scans only
- Raw data format – rapic
- N\_Aust merge – merged radar data for above
  - Area -8 to -18 degS, 121 to 142 degE
  - Data format – netCDF, mdv



# Radar data



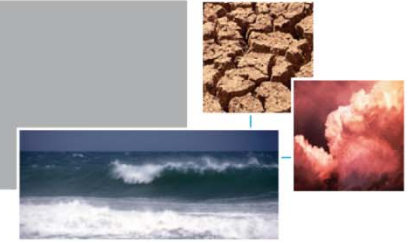
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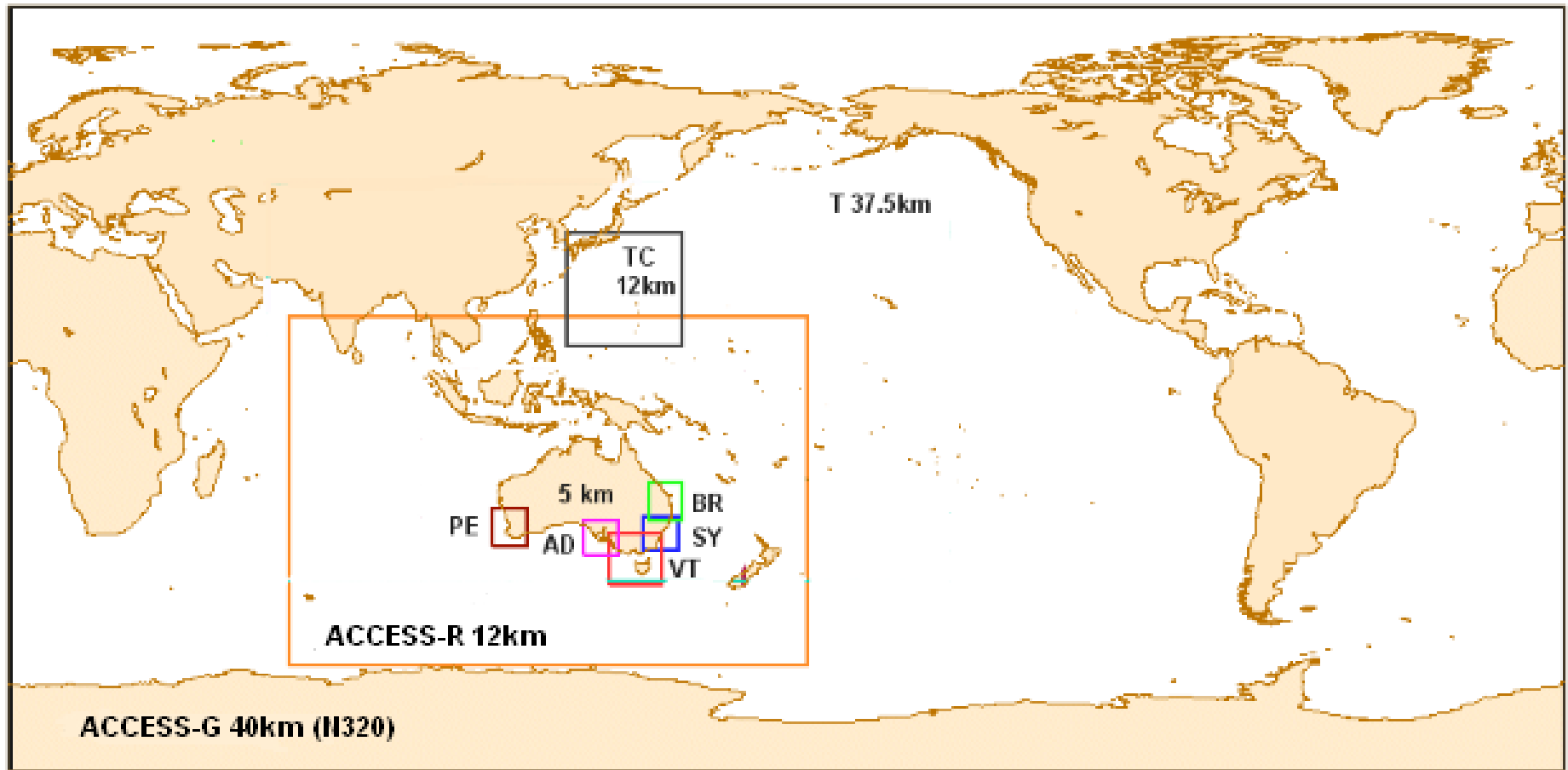
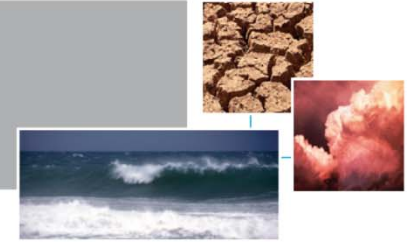
CSIRO

# ACCESS model data



- Australian Community Climate Earth System Simulator (ACCESS)
  - Release Australian Parallel Suite 1 (APS1)
- ACCESS-R
  - <http://www.bom.gov.au/australia/charts/bulletins/apob98.pdf>
- ACCESS-C (ACCESS-DA)
  - <http://www.bom.gov.au/australia/charts/bulletins/apob99.pdf>
- Above models nested within global model with details at
- <http://www.bom.gov.au/australia/charts/bulletins/apob93.pdf>

# ACCESS (APS-1) modelling suite





Thank you



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