

# MWR status

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# New radiometers

- ECO-00664 (MWR procurement) open
- Specifications have been written and submitted
- Draft of specifications sent to vendors last month
- A few changes were incorporated after vendors feedback. Final specification document will be sent next week.

# Current operational instruments

- PWV-LWP: 12 2-channel MWR
- Temperature-humidity profile: 2 profilers operating
- Low LWP-PWV: 2 183-GHz radiometers
- Low LWP: 2 90/150-GHz radiometers

## 2-channel MWR (12)

- All instruments are working
- NSA C2 MWR is on its way back to the site

## 12-channel profiler, MWRP (2)

- **AMF** profiler worked well during the deployment in Germany
- **NSA** profiler had several hardware failures. Out July 13-Dec. 8 for V-band noise diode failure.
- New hardware failure started on ~Jan 29. Attempted fix on site on Feb. 25. Additional failure on March 7. Currently scheduled to be shipped for repairs.

# Low PWV-LWP radiometers (183-GHz)

**GVR:** Interference less intense. First attempt to introduce an RF shield to mitigate interference on Jan 17. Need a few months of data to evaluate.

If successful will build an RF shield around the instrument.

**GVRP (NEW):** 15 channels between 170 and 183.3 GHz. Deployed at the SGP. Is going to NSA this week. Ingest under development.

# Plans for GVRP

**GVRP (NEW):** Instrument at NSA until  
September 2008

Will go to Vocals, South East Pacific on the ship  
Ron Brown Sept. to Dec. 2008 (?) (P. Zuidema)

RHUBIC II in 2009

# Low LWP radiometers 90/150-GHz, MWRHF (2)

**AMF:** In transit to China

**SGP:** Out of service for hardware failure from March 2 2007 to July 7 2007. Software problems from July to November. Out of service from Nov. 27 for hardware/software upgrade.

These radiometers right now require the largest amount of resources.



# Low LWP radiometers 90/150-GHz

- New instruments. Evaluation difficult because SGP instrument out of service for extended periods of time, AMF deployment...mostly rainy days
- Hardware failures/upgrade
- Ingest still needs work. New ingest will be needed soon because new software is being developed (lv0 data)
- A plan of work is needed to deal with upcoming changes in software/data

## Some discussion point...

- Some radiometers (profilers and 90/150) are high maintenance instruments right now
- Work priorities (ingesting, archiving data)
- Data quality and documentation...
- Retrieval development (183-GHz, 90/150-GHz).  
Combined retrievals?
- Improve profiling capabilities?

- Polarization for distinguishing precipitation from cloud liquid