Australian Bureau of Meteorology Satellite Data Exchange and Use

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The Australian Bureau of Meteorology has recently improved its use of locally-received ATOVS data in NWP, with significant positive impact. Additionally, the Bureau both supplies and receives Asia Pacific Regional ATOVS Retransmission Service (AP-RARS) data. This data also has shown positive impact on local and international NWP, and is produced using AAPP. The AP-RARS network has expanded, with stations added from New Zealand, Singapore, Japan (Siyowa in Antarctica), Korea and Hong Kong, in addition to stations in Australia, Japan and China. During 2008, additional AP-RARS stations are expected to include Townsville (Australia), Casey and Davis (Antarctica). Provision of AP-RARS data from Noumea and Tahiti has been announced for some future date, and data from Fiji, Honolulu, and either Guam or the Marshall Islands is under investigation. The WMO goal for ATOVS availability on the various RARS networks is 90% global coverage with less than 30 minutes latency. The Bureau is also implementing X-band reception sites in Melbourne (Crib Point, March 2008), Darwin (June 2008) and Casey (summer 2008/9). Satellite data should be received from terra, aqua, NPP, NPOESS, FY3 and possibly other satellites. One of the drivers of this program is to improve the timely availability of hyperspectral satellite data for NWP. The data is also expected to be used for oceanography and other purposes. GPS precipitable water estimates are in test production, while production and NWP use of GPS RO soundings are under investigation.

