

# Parkes 2011 IVS Report

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## Abstract

This report presents the status of the Parkes Observatory in 2011, as well as our future plans.

## 1. Status

In the second full year of IVS membership the Parkes Observatory participated in six 24-hour IVS sessions, compared to just two in the previous year. These sessions were generally successful, although one session (CRDS55) was lost to an unusual recorder problem. (This problem has since resulted in an advisory circular to all stations from the Network Coordinator, headed ‘Mark 5B/B+ “,E” scan\_check problem’, 20th March 2012).

In August 2011 the Parkes S/X receiver was modified to double the available bandwidth at X-band, in order to support sessions requiring an “IF3” observing configuration. In the first of these three sessions the improvised IF3 system proved only partially successful, but it was subsequently improved for the R1507 session in November.

Parkes also continues to support a program led by Leonid Petrov (ADNET Systems/GSFC) of hybrid astronomy/geodesy observations, refining the locations of several southern hemisphere radio stations that are equipped with neither dual S/X receiving systems nor IVS-compatible recording systems. This program also aims to identify additional calibrator sources in the Southern Hemisphere for “densification” of the ICRF in the south.

## 2. Future Plans

The outlook for 2012 is a little uncertain owing to possible scheduling constraints arising from proposed changes to the Parkes Operations model that could impact the availability of the dual S/X receiver (see [http://www.atnf.csiro.au/management/atuc/2012feb/docs/carretti\\_ATUC\\_1202.pdf](http://www.atnf.csiro.au/management/atuc/2012feb/docs/carretti_ATUC_1202.pdf) for details). In 2011 these restrictions led to the participation of Parkes in IVS sessions being confined to just two blocks of time (August and November, each comprising 3 x 24hr sessions). We are working with our Australian colleagues to ensure that the S/X receiver will continue to remain available and that the active participation of Parkes in IVS observing programs will continue to be both valued and supported.