

2000 Activities Report of Fortaleza Station

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Abstract

This report summarizes the activities performed at Fortaleza Station (ROEN: Rádio Observatório Espacial do Nordeste), Eusébio, CE, Brazil, managed by CRAAE (Centro de Rádio Astronomia e Aplicações Espaciais) in agreement with INPE (Instituto Nacional de Pesquisas Espaciais), in the time period starting March 1, 1999 and ending December 31, 2000.

1. Geodetic VLBI Observations

Fortaleza participated in 123 geodetic VLBI experiments as detailed in the table below:

Experiment	Number of Sessions
NEOS-A	91
IRIS-S	19
CORE-B	08
CORE-OHIG1	04
CRF	01

2. Development and Maintenance Activities

1. Replacement and alignment of magnetic heads of the tape recorder.
2. Antenna drives electrical alignment including controller card, high power amplifier, DC motor and tachometer for the elevation antenna axis.
3. Installation of a new and updated FS computer.
4. Replacement of the cold-head refrigerator of the cryogenic system.
5. Repairs on the following circuits, modules, or systems: Mark III video converters, Mark III decoder module, Mark III power supply module II, DC motor of elevation axis, UPS battery system, monitoring system of receiver, noise calibration diodes controller, hydrogen maser, the controller of motor-generator group, and the cryogenic system.
6. Creation of an english version of web site (<http://www.roen.inpe.br>) about ROEN activities.

3. GPS Operation

The IGS network GPS receiver operated regularly all the days. Data were collected and uploaded to the IGS computer.

4. Research

Continuation of Washington correlator data analysis on various celestial sources. Significant progresses obtained on structure of source 1803+784.