

# Medicina Station Status Report

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**Abstract** General information about the Medicina Radio Astronomy Station, the 32-m antenna status, and the staff in charge of VLBI observations are provided. Updates to the hardware were performed and are briefly described.

## 1 The Medicina 32-m Antenna: General Information

The Medicina 32-m antenna is located at the Medicina Radio Astronomy Station. The station is run by the Istituto di Radioastronomia and is located approximately 33 km east of Bologna. The Consiglio Nazionale delle Ricerche was the funding agency of the Istituto di Radioastronomia until the end of 2004. Since January 1, 2005, the funding agency has been the Istituto Nazionale di Astrofisica (INAF). The antenna, which was inaugurated in 1983, has regularly taken part in IVS observations since 1985 and is an element of the European VLBI network.

A permanent GPS station (MEDI), which is a part of the IGS network, is installed in the vicinity. Another GPS system (MSEL) is installed near the VLBI telescope and is part of the EUREF network.

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## 2 Current Status and Activities

- Antenna - A long period of maintenance started on April 2014 and was completed on January 2015. One antenna wheel was repaired; the elevation rack and gear was completely replaced; a new lift system for the antenna was installed; the subreflector and the primary focus receiver box has now a new driving system, and mechanical maintenance at the primary focus equipment was completed.
- DBBC + FILA10G - Medicina has completed the tests (including the Mark 5C, see below) to qualify this module for observing. The incoming astronomical VLBI session will be performed using it, while we are on the way to verify the proper functioning of the acquisition system in the geodetic observations.
- Mark 5C - All the known problems at this date have been fixed.
- Field System - Release 9.11.7 was installed and tested.

## 3 Geodetic VLBI Observations

In 2014, due to the long period of maintenance, Medicina took part in five 24-hour routine geodetic sessions, only (namely three IVS-R4 and two EUROPE experiments).