

Italy CNR Data Center Report

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Abstract

This report summarizes the activity of the Italy CNR VLBI Data Center. We also report about some major changes that occurred during the year 2004: we have changed the affiliation of our Institute and the location of the DC, officially starting from 1st January 2005. Modification of names and codes necessary for the IVS affiliation will be requested and performed during year 2005. A new contact person for the IVS DC will be indicated.

1. Introduction

Our geodesy section and its Data Center moved to the Bologna headquarters in 2004, leaving its former location situated at the Center of Space Geodesy, Matera. This decision partly originated from the reorganization process started in June 2003 by the Italian Government, in which the Institute of Radioastronomy (IRA) was integrated into INAF (the Italian National Institute for Astrophysics; <http://www.inaf.it>). Therefore, starting 1st January 2005, IRA is no longer part of the National Research Council (CNR). The structure of IRA, as well as its territorial organization, has changed: it is now a section of INAF, the latter being the main institute. In its constitution act, INAF is explicitly indicated as the national institute in charge of promoting, both at national and international levels, the activities related to astronomy, astrophysics and radioastronomy. The geodetic activity of IRA has been maintained within the new institute but the geodetic division has changed location and structure. At the moment, the main analysis activity and storage is concentrated in Bologna, where we store and analyze single databases, using CALC/SOLVE software. We are using f-solve regularly updated.

The IRA has started to store VLBI geodetic databases from 1989, but the databases archived in Bologna mostly contain data including European antennas, starting from 1987. In particular most of the databases available here have VLBI data with at least three European antennas. However we have also stored all the databases with Ny-Ålesund antenna observations. Since 2002, we store all the databases available on the IVS data centers, starting from 1999. All the databases have been processed and saved with the best selection of the parameters for the final arc solutions. In order to perform global solutions, we have computed and stored the superfiles for all the databases.

In some cases we have introduced the wet delay coming from GPS into the European databases (at present only for EUROPE experiments for the years 1998 and 1999), as if it was produced by a WVR. Also these databases are available and stored with a different code from the original databases. For this we have produced a modified version of DBCAL, available to external users.

2. Computer Availability and Routing Access

The main computer is an HP 785/B2600 workstation. The internet address of this computer is boira3.ira.cnr.it and the databases are stored in different directories and on different disks as well. The complete list of directories where databases are stored is the following:

- 1 = /data1/mk3/data1
- 2 = /data1/mk3/data2

4 = /data6/dbase6
6 = /data5/dbase5
5 = /data4/dbase4
7 = /data7/dbase7
8 = /data8/dbase8
9 = /data9/dbase9
10 = /geo/data
11 = /geo/1999
12 = /geo/2000

The username for accessing the database at the moment is geo. The password can be requested by sending an e-mail to negusini@ira.cnr.it.

The main computer that was formerly located in Matera, and that has been moved to Bologna, is an HP282 computer with internet address hp-j.ira.cnr.it. The databases are stored in the following directories:

7 = /data8/dbase8
8 = /data10/dbase10

The superfiles are stored in different directories:

/data2/super
/data10/super10
/data9/super9
/data8/super8

The list of superfiles is stored in the file /data6/solve_files/SUPCAT. The area for data storage has a capacity of up to 250 gigabytes with the installation of an external server. The data can be accessed using the username geo, and the password can be requested writing to negusini@ira.cnr.it.