Matera GeoDAF Data Center

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Abstract

This report describes the Matera GeoDAF activities and characteristics. At the moment, this Data Center is focused on GPS data and analysis products archive and distribution, but the system was designed to manage VLBI analysis products and data too.

1. General

GeoDAF (Geodetical Data Archive Facility) is located at the Italian Space Agency "Centro di Geodesia Spaziale" (CGS) near Matera, a small town in the South of Italy. At the same location a SLR system (SAO-1), a VLBI Station and a GPS receiver are operated. CGS also controls and manages the Italian GPS Network. In order to archive and distribute these RINEX GPS data and the analysis solutions performed by CGS Analysis Group, the GeoDAF facility was set up in 1985. It was designed to manage SLR and VLBI data too, even if these features were never fully exploited. All these activities are managed on behalf of ASI, by Telespazio S.p.A.

2. Technical/Scientific

GeoDAF is hosted on a HP/G40 server running HP-UX 10.01 (controllare con Maria) and NCSA 1.5.2a HTTPD Web Server. A set of CGI scripts was developed to interface the archive to the users and to manage the file requests for off-line data. The disk data storage capacity is 10 Gb, for off-line storage, DAT, EXABYTE, CD-R AND 9-TRACK TAPE are available also. Fig 1 shows the GPS data flow for the full system.

3. Staff

The list of the GeoDAF staff is provided in Table 1.

Table 1. Matera GeoDAF staff members

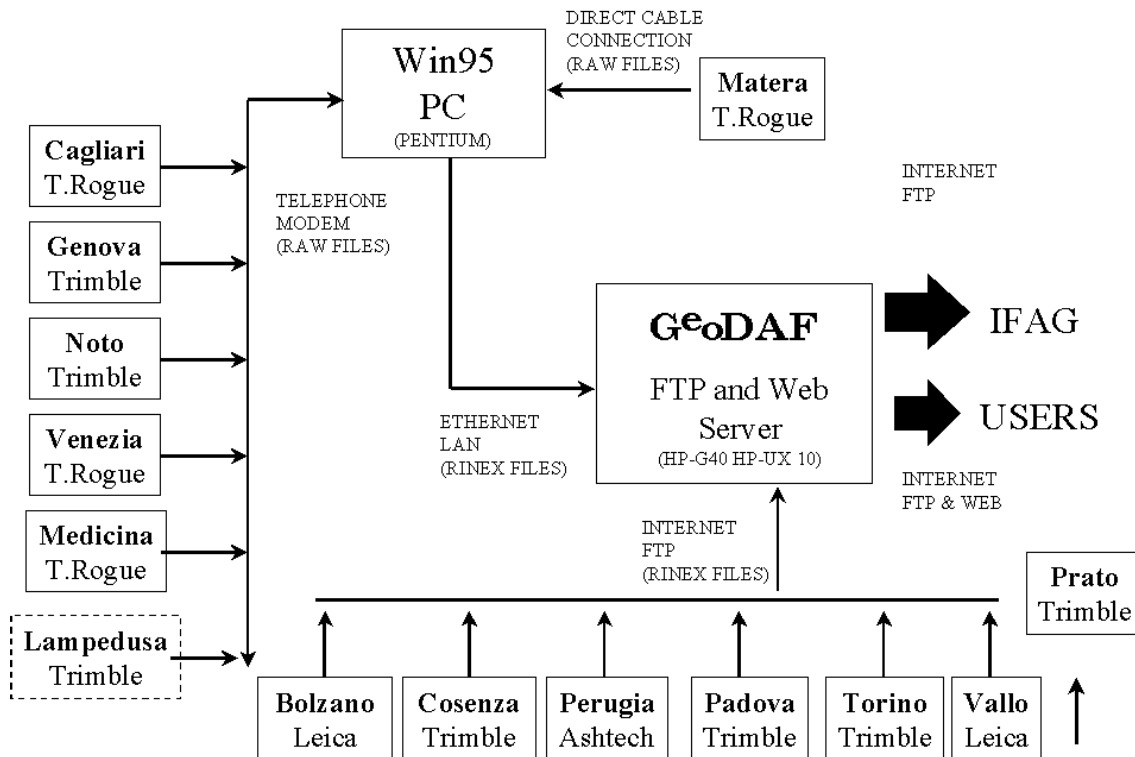| Name	Agency	Activity	E-Mail
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Figure 1. The Matera GeoDAF Data Center

4. Status

The access to GeoDAF services is provided by ANONYMOUS FTP and by Web interface. Currently the GPS data files are available on-line ready to transfer for six months and then they are put off-line on DATs. To obtain these off-line data files, users can simply send e-mails to the GeoDAF user interface account (web@geodaf.mt.asi.it). Also an automated data request system was set up, but this method is not managed by the system at this moment. GeoDAF is completely free, but the users are encouraged to "register" themselves by an on-line Web managed form. Up to June 1998 the registered users are 230, mainly from Italy and other European countries.

5. Outlook

The following upgrade activities are planned in order to improve the performance of GeoDAF:

* apache web server instead NCSA (no longer under development)

* new web pages look and optimization

* increase disk storage capacity (eventually)

* increase Internet connection (eventually)

* test of the SLR and VLBI data management features