Matera VLBI Station
Status Report

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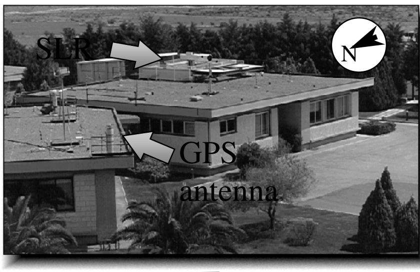
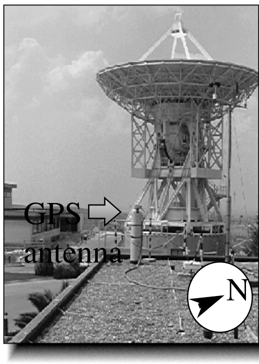
The System

- The Matera VLBI system is operated, on behalf of Italian Space Agency (**ASI**), by ~~Nuova~~ Telespazio at **Centro di Geodesia Spaziale (CGS)** of Matera.
- The **CGS** came into operation on 1983 in the framework of an agreement with the Basilicata Regional Government and **ASI**.
- A fixed SLR system and a network of permanent GPS receivers (including one at Matera site) are also operated at **CGS**.
- The Matera VLBI system includes
  - X/S bands receiver
  - 20 meter diameter cassegrain antenna;
  - MARK-III D.A.T. and VLBA Recorder;





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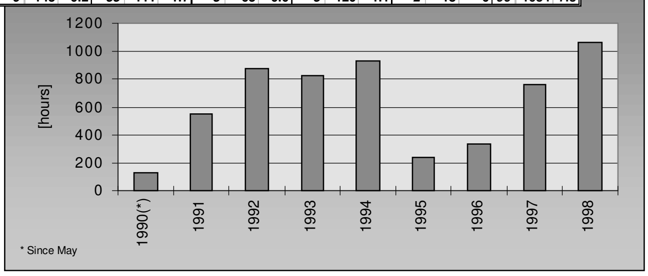
1998	Core-A			Europe			Intensive			Iris			Neos-A			Astron.			TOT.		
	#	Tot. [hh]	Lost [hh]	#	Tot. [hh]	Lost [hh]	#	Tot. [hh]	Lost [hh]	#	Tot. [hh]	Lost [hh]	#	Tot. [hh]	Lost [hh]	#	Tot. [hh]	Lost [hh]	#	Tot. [hh]	Lost [hh]
January	*2*	48	1.3																*2*	48	1.3
February	*1*	24		*1*	24														*2*	48	0.0
March	*2*	48					*14*	29	1.3	*1*	21		*2*	48					*19*	146	1.3
April	*2*	48		*1*	21		*21*	42	0.4	*1*	21		*2*	48	1.1				*27*	180	1.5
May	*2*	48					*16*	31		*1*	21		*1*	24					*20*	124	0.0
June	*3*	72		*1*	24														*4*	96	0.0
July	*2*	48	0.5																*2*	48	0.5
August	*2*	48		*1*	24														*3*	72	0.0
September	*2*	48	0.4													*1*	9		*3*	57	0.4
October	*2*	48	2.2	*1*	24	0.2	*4*	9								*1*	9		*8*	90	2.3
November	*2*	48																	*2*	48	0.0
December	*3*	72		*1*	26														*4*	98	0.0
Tot.	*25*	600	4.3	*6*	143	0.2	*55*	111	1.7	*3*	63	0.0	*5*	120	1.1	*2*	18	0	*96*	1054	7.3



Performed Upgrade

- In December 1996, in order to upgrade the system to the NASA Wide Band Standard, a new receiver (by ATSC) front end was installed.
  - Input frequencies:
    - S-band 2210 MHz to 2450 MHz
    - X-band 8180 MHz to 8980 MHz
- In January 1999 Linux FS 9.3.23 PC has been installed; the Antenna Control SW has been ported on the new platform by Telespazio. The new system is now ready to go.

Planned Upgrade

- In April 1999 Mark-IV upgrade (DAT and Recorder) will be performed by MIT Haystack.

Most Significant System Failures

January	Cryogenic System Rotary Vane Vacuum Pump failure.
February	Cryogenic System failure.
Marc	P.C. Field System Hard Disk failure.
May	MAT board failure in V/C s/n 294.
June	RS 232-422 board failure due to thunderstorm.
July	VLBI recorder failure. Replaced relay on dual reel servo amplifier board.
September	Replaced cable from Antenna Unit to Ground Unit of Calibrator Delay with spares one.
October	Cryogenic System failure.
October	Elevation motor brake failure.
December	Local Oscillator failure on VC s/n 298. (Reported by Jim Martin of Washington correlator). Replaced by VC spare part.
January ‘99	Headstack/inchworm failure. Repaired by Haystack.

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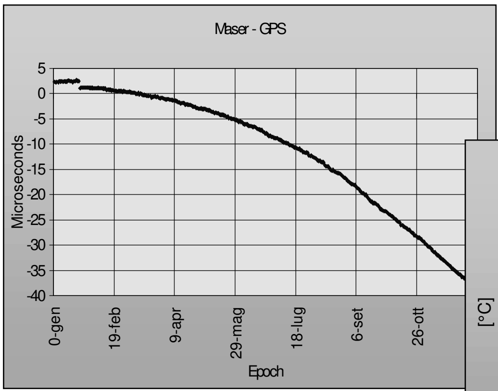
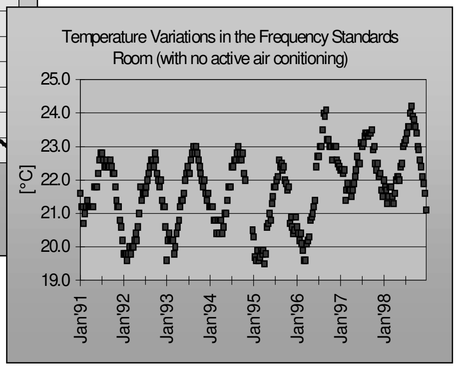
H-Maser





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On-line resource and contact points

GeoDAF http://geodaf.mt.asi.it

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