



# The Rete Integrata Nazionale GPS



**WG4 GSAC-EPOS**  
Covilhã 2014



**WG4 GSAC-EPOS**  
Covilhã 2014



GSAC - WG4  
EPOS Meeting  
March 31st and April 1st,  
2014

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Gianpaolo Cecere



# The Rete Integrata Nazionale GPS

## What is RING



- 170 co-located seismometers, accelerometers and **CGPS**
- Real Time acquisition
- 20-30 km station distance
- 1s data stream still at few stations



# The Rete Integrata Nazionale GPS

**Broad band  
Sismometer**



**Accelerometer**

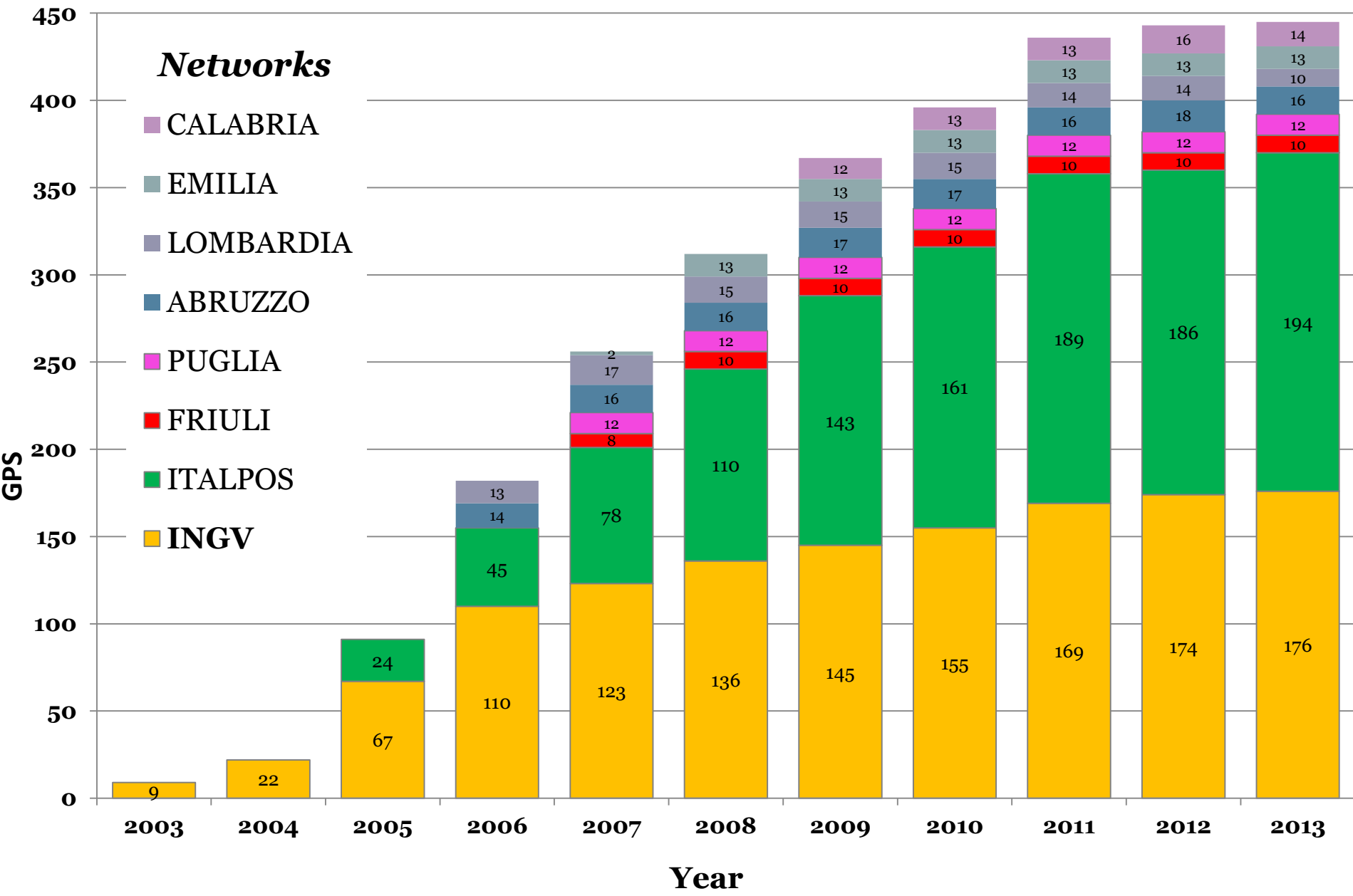


**GPS**



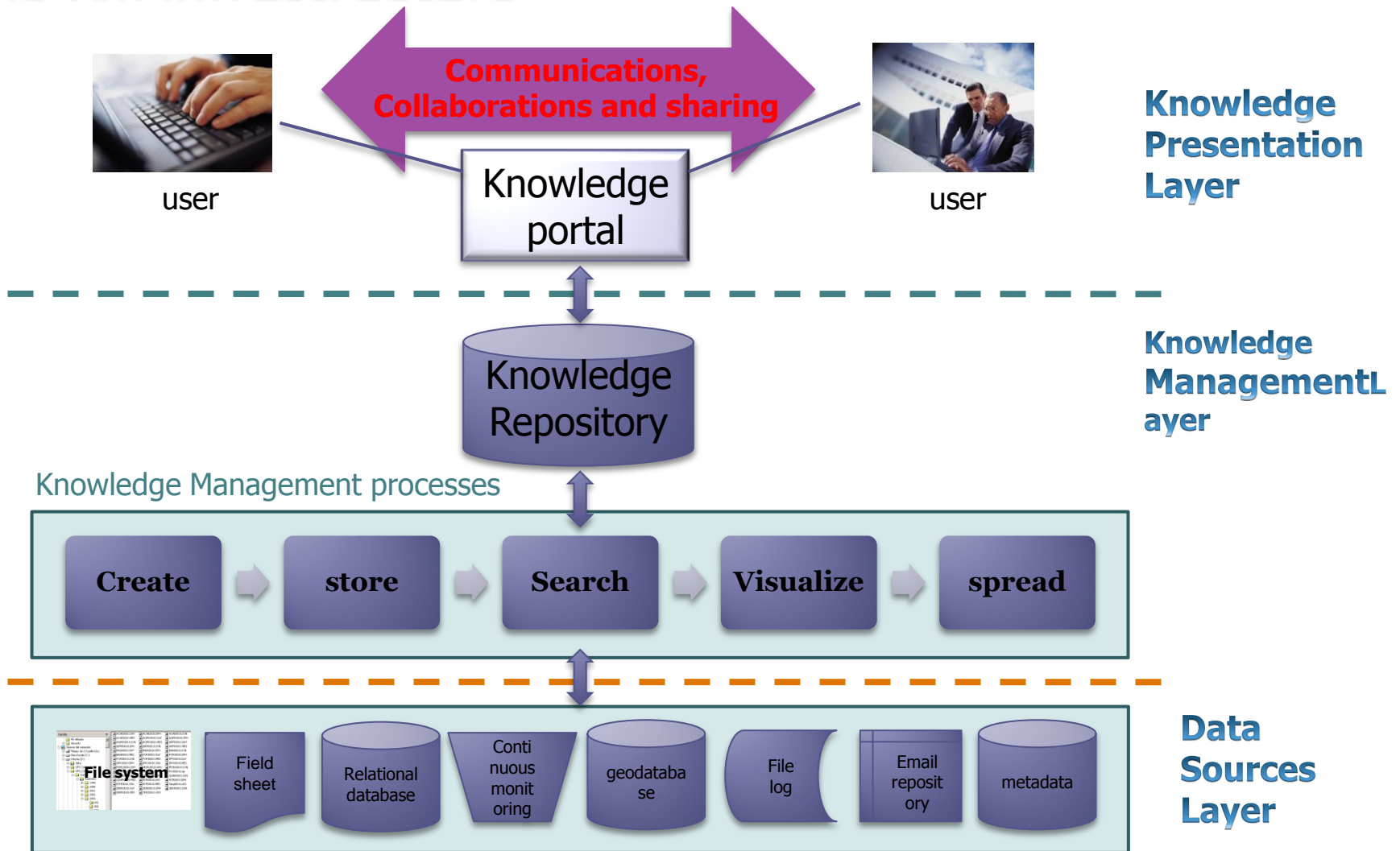


# The Rete Integrata Nazionale GPS





# The KM infrastructure





# The KM infrastructure

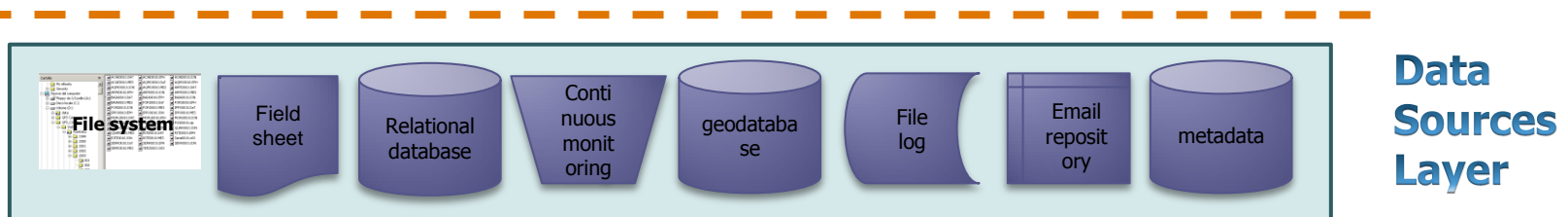
We combine different **Technology of Knowledge Storing (TKS)** :

**File system** for “**no or semi structured resources**”. For example: the GPS registration file (*raw data* and Rinex file) from which is not possible (or not suited) to extract the informative content

**Relational database** for “**resources to be well structured**”. For example: information about sites and instrument that can be well structured in the database object.

As **file system** technology we have linux ext4 on LVM (Logical Volume Manager)

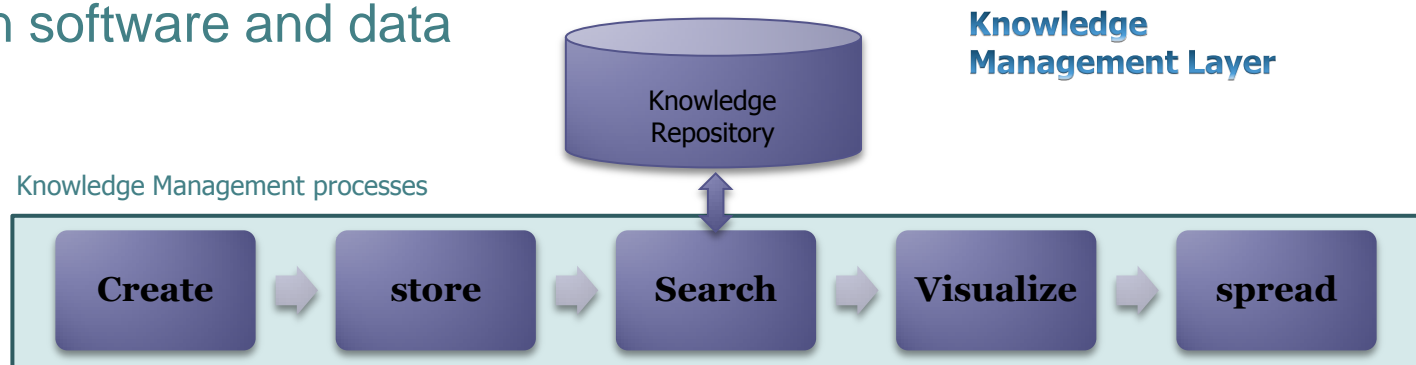
As **database** technology we have MySQL 5.5





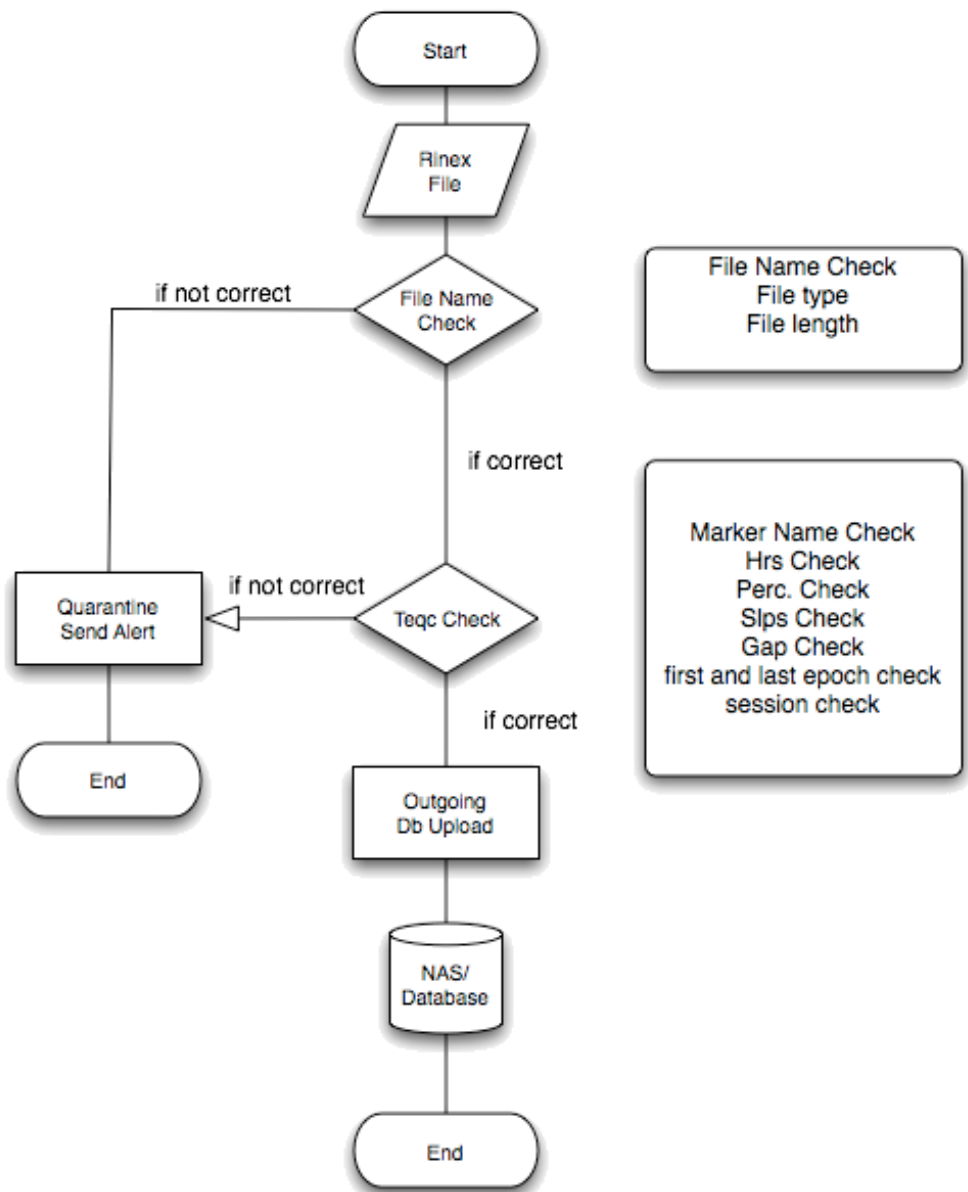
## The KM infrastructure

- *data and text mining tools (DMT)*
- Information Porting on database
- *Rawdata solution*
- *Knowledge Discovery*
- *CLINIC*
- Time Series creation and chart
- Simulation software and data analysis





# The KM infrastructure

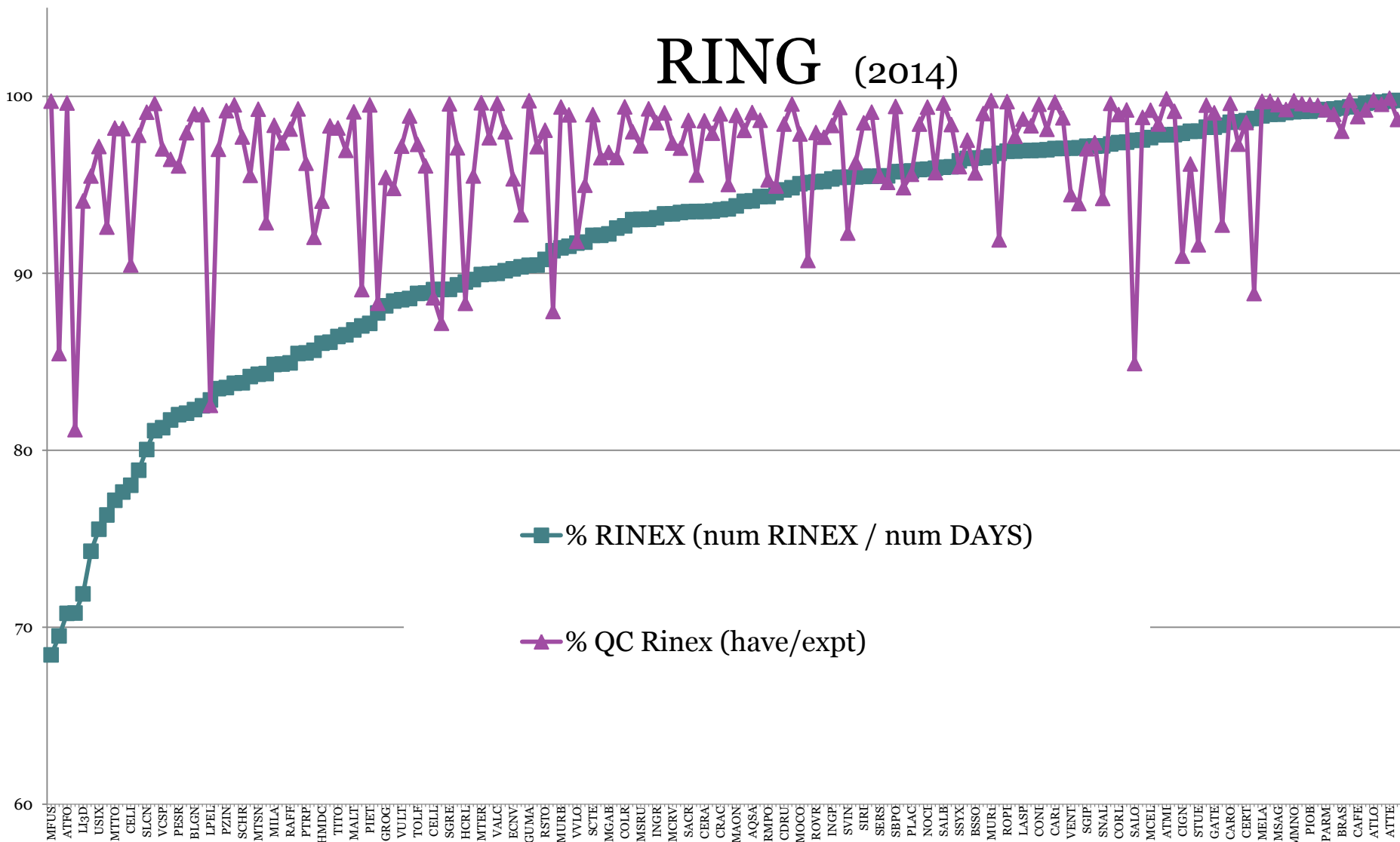






# The KM infrastructure

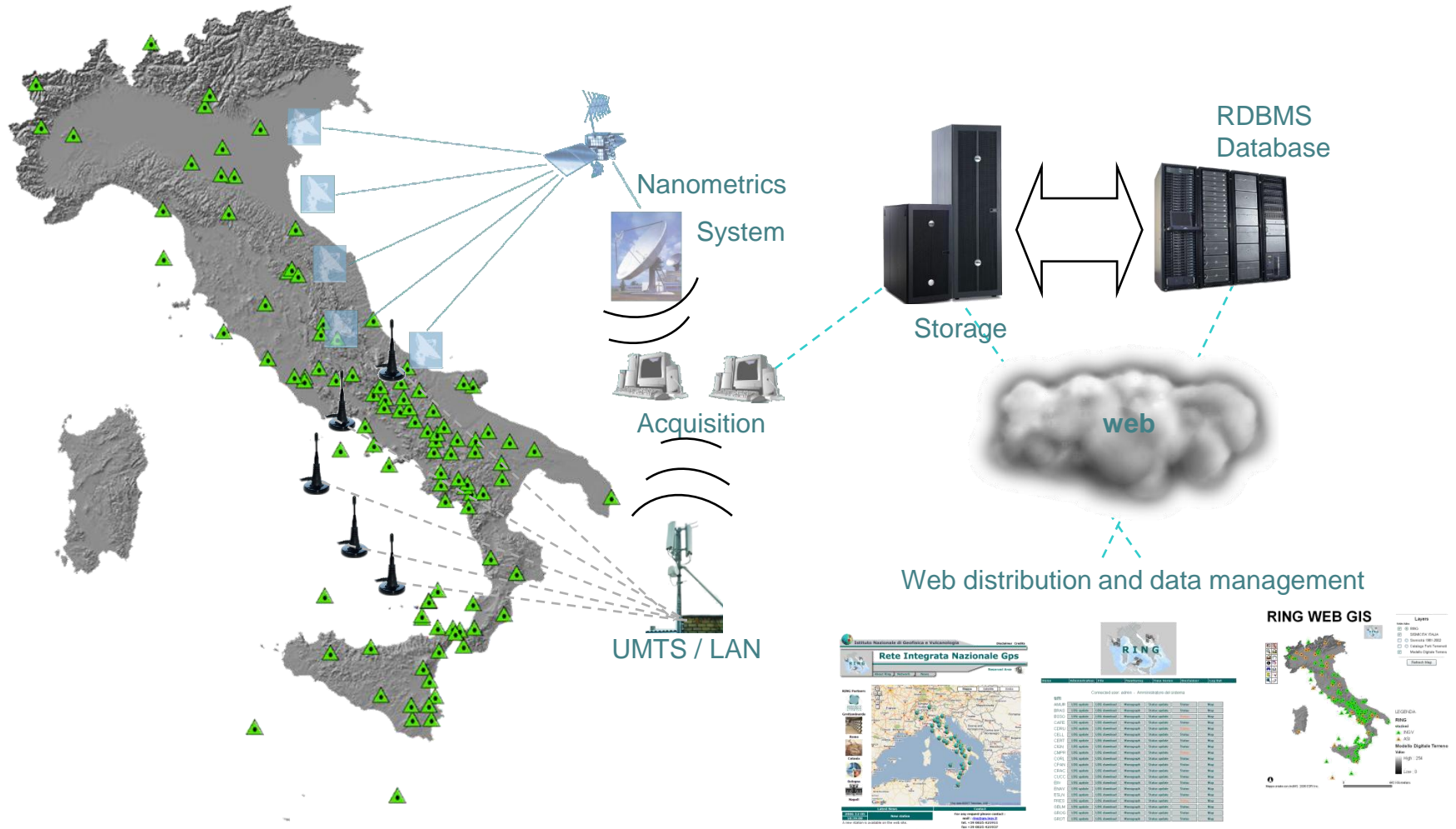
## RING (2014)





# The Rete Integrata Nazionale GPS

## RING

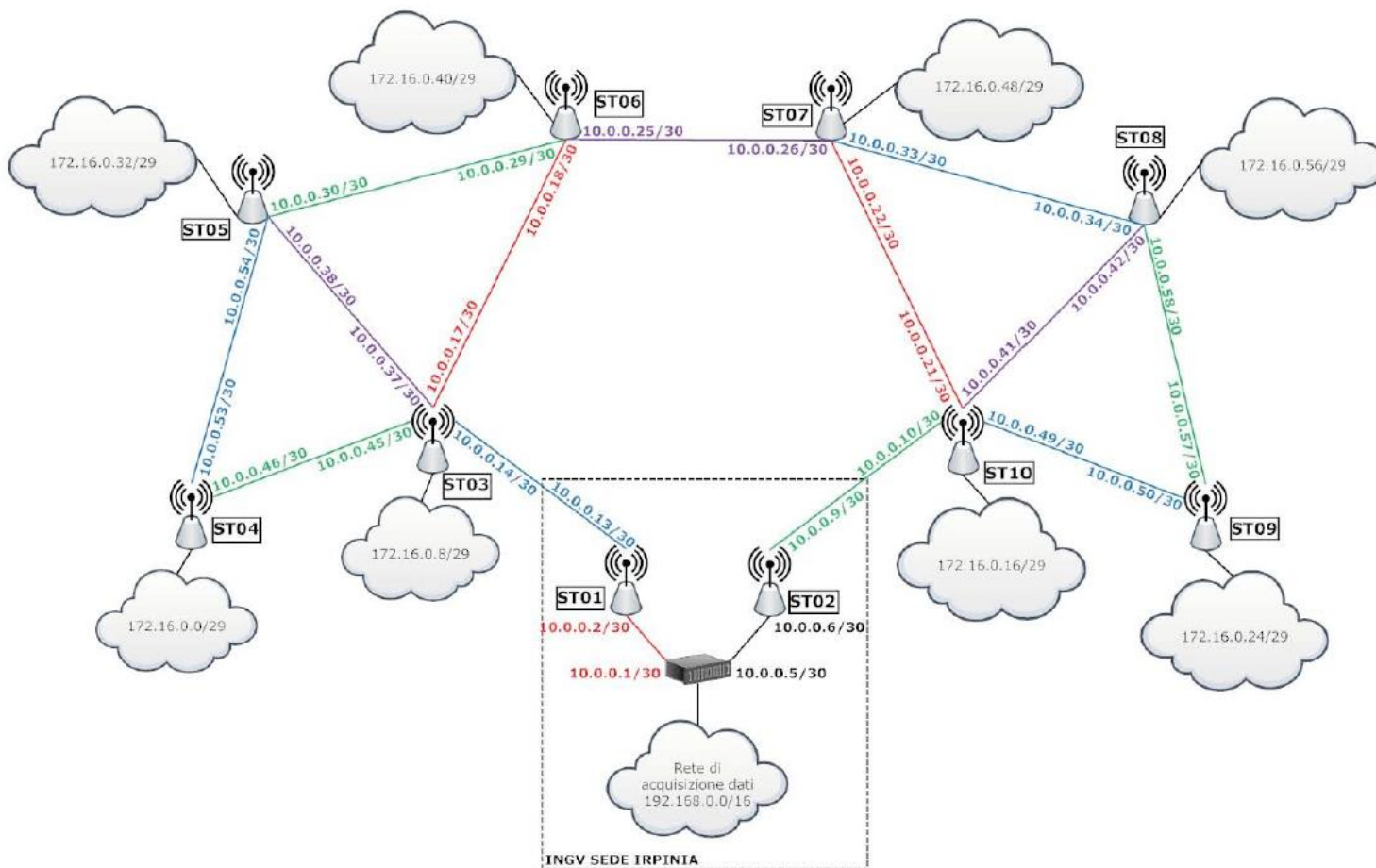




# THE TRANSMISSION SYSTEMS

We use generally these transmission systems:

## WiFi Mesh Network





# THE TRANSMISSION SYSTEMS

## Nanometrics Libra VSAT

### DATA ACQUISITION NETWORK



Istituto Nazionale di GEOFISICA e VULCANOLOGIA

#### REMOTE CYGNUS CONFIGURATION for CARINA 77

```

CYGNUS CONFIGURATION
IP LAN 10.114.0.104
IP VSAT 10.114.201.104
GATEWAY 10.114.201.104
NANO SERVER 224.1.2.3 - 10000
NANO SERVICES 0.0.0.0 - 10000
ALPHASERVER 172.16.0.1 - 10000
COMMAND SOURCE 0.0.0.0
RTX REQUEST PORT 50000
  
```

#### REMOTE CYGNUS CONFIGURATION for CARINA 79

```

CYGNUS CONFIGURATION
IP LAN 10.114.0.104
IP VSAT 10.114.201.104
GATEWAY 10.114.201.104
NANO SERVER 224.1.2.3 - 10000
NANO SERVICES 0.0.0.0 - 10000
ALPHASERVER 172.16.0.1 - 10000
COMMAND SOURCE 0.0.0.0
RTX REQUEST PORT 50000
  
```

#### REMOTE CYGNUS CONFIGURATION for CARINA 84

```

CYGNUS CONFIGURATION
IP LAN 10.114.0.104
IP VSAT 10.114.201.104
GATEWAY 10.114.201.104
NANO SERVER 224.1.2.3 - 10000
NANO SERVICES 0.0.0.0 - 10000
ALPHASERVER 172.16.0.1 - 10000
COMMAND SOURCE 0.0.0.0
RTX REQUEST PORT 50000
  
```

#### REMOTE CYGNUS CONFIGURATION for CARINA 76

```

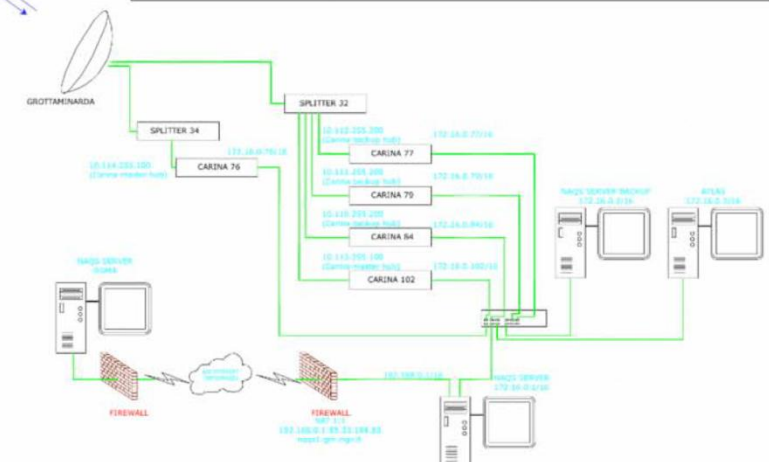
CYGNUS CONFIGURATION
IP LAN 10.114.0.104
IP VSAT 10.114.201.104
GATEWAY 10.114.201.104
NANO SERVER 224.1.2.3 - 10000
NANO SERVICES 0.0.0.0 - 10000
ALPHASERVER 172.16.0.1 - 10000
COMMAND SOURCE 0.0.0.0
RTX REQUEST PORT 50000
  
```

#### REMOTE CYGNUS CONFIGURATION for CARINA 102

```

CYGNUS CONFIGURATION
IP LAN 10.114.0.104
IP VSAT 10.114.201.104
GATEWAY 10.114.201.104
NANO SERVER 224.1.2.3 - 10000
NANO SERVICES 0.0.0.0 - 10000
ALPHASERVER 172.16.0.1 - 10000
COMMAND SOURCE 0.0.0.0
RTX REQUEST PORT 50000
  
```

<b>CARINA 77</b> IP LAN 172.16.0.70/16 IP VSAT 10.114.201.100/16 GATEWAY 172.16.0.1 NANO SERVER 224.1.2.3 - 10000 NANO SERVICES 0.0.0.0 - 10000 ALPHASERVER 172.16.0.1 - 10000 COMMAND SOURCE 0.0.0.0 RTX REQUEST PORT 50000	<b>CARINA 84</b> IP LAN 172.16.0.84/16 IP VSAT 10.114.201.100/16 GATEWAY 172.16.0.1 NANO SERVER 224.1.2.3 - 10000 NANO SERVICES 0.0.0.0 - 10000 ALPHASERVER 172.16.0.1 - 10000 COMMAND SOURCE 0.0.0.0 RTX REQUEST PORT 50000	<b>CARINA 102</b> IP LAN 172.16.0.102/16 IP VSAT 10.114.201.100/16 GATEWAY 172.16.0.1 NANO SERVER 224.1.2.3 - 10000 NANO SERVICES 0.0.0.0 - 10000 ALPHASERVER 172.16.0.1 - 10000 COMMAND SOURCE 0.0.0.0 RTX REQUEST PORT 50000
<b>CARINA 79</b> IP LAN 172.16.0.79/16 IP VSAT 10.114.201.100/16 GATEWAY 172.16.0.1 NANO SERVER 224.1.2.3 - 10000 NANO SERVICES 0.0.0.0 - 10000 ALPHASERVER 172.16.0.1 - 10000 COMMAND SOURCE 0.0.0.0 RTX REQUEST PORT 50000	<b>CARINA 76</b> IP LAN 172.16.0.76/16 IP VSAT 10.114.201.100/16 GATEWAY 172.16.0.1 NANO SERVER 224.1.2.3 - 10000 NANO SERVICES 0.0.0.0 - 10000 ALPHASERVER 172.16.0.1 - 10000 COMMAND SOURCE 0.0.0.0 RTX REQUEST PORT 50000	



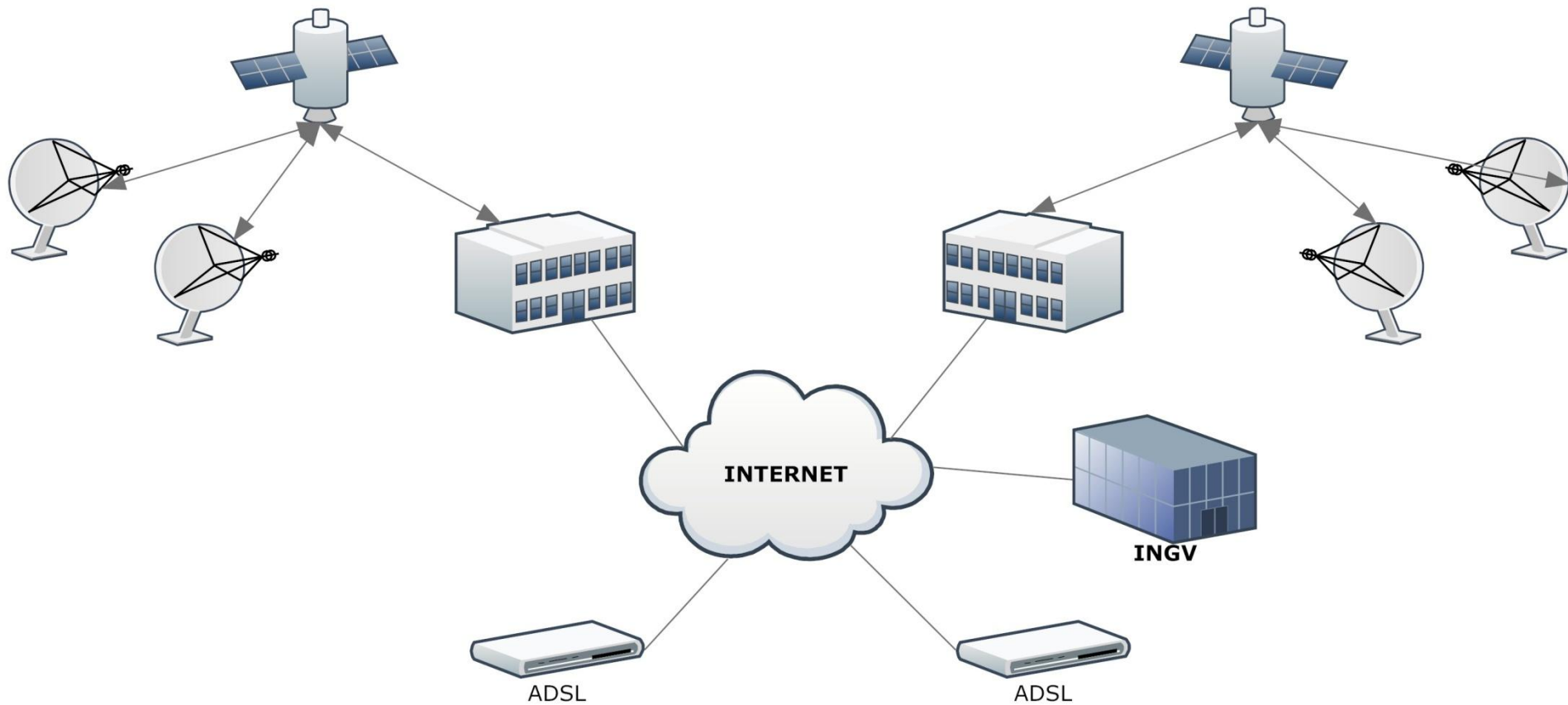
CENTRO PER LA SISMOLOGIA E L'INGEGNERIA SISMICA GROTTAMINARDA (AV) - ITALY





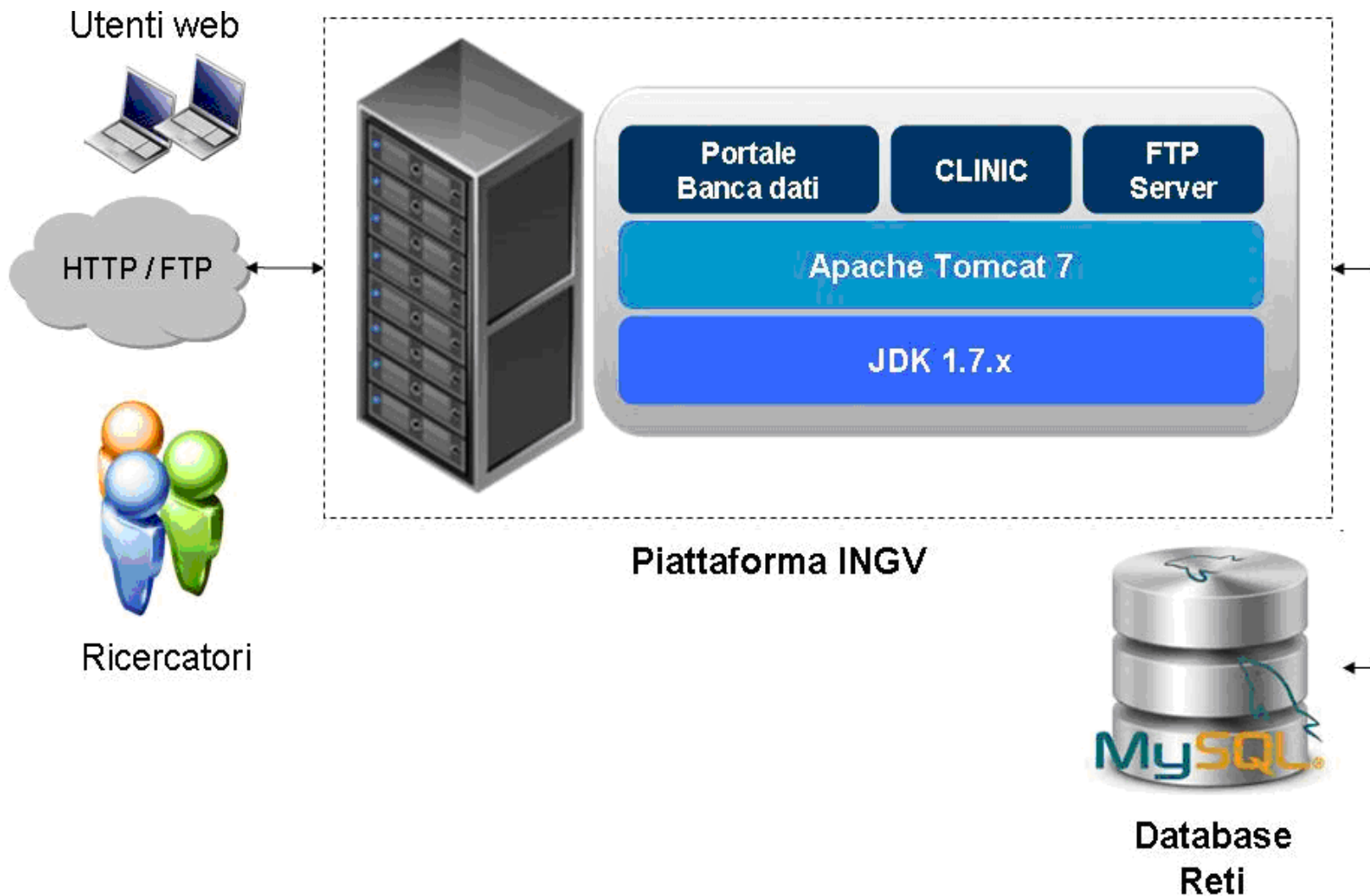
# THE TRANSMISSION SYSTEMS

## INTERNET ACCESS ( via cable or via SAT)





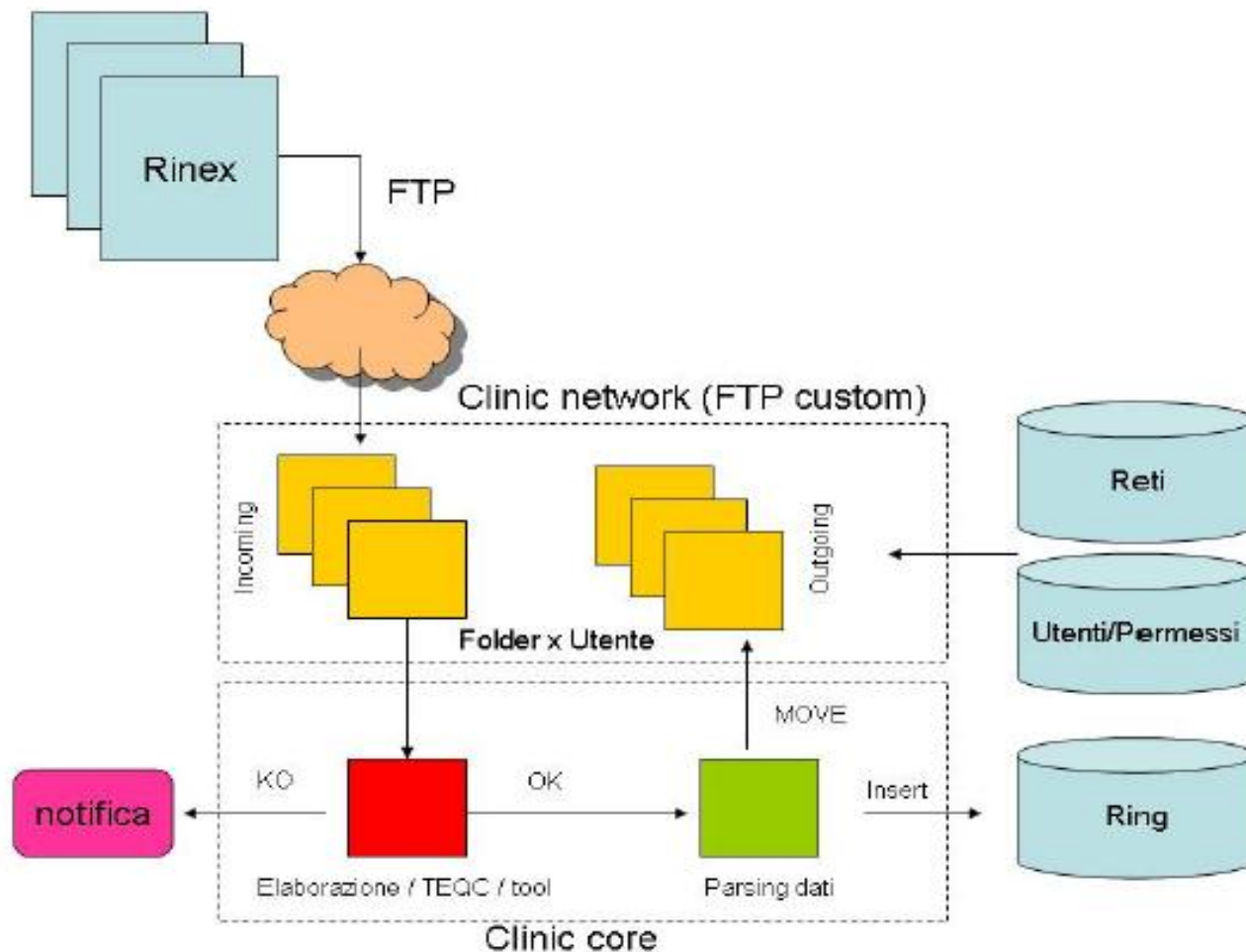
# RING INFRASTRUCTURE





# CLINIC

CLINIC is an embedded software composed by 2 modules: custom FTP SERVER (Clinic network) and processing module (Clinic core)

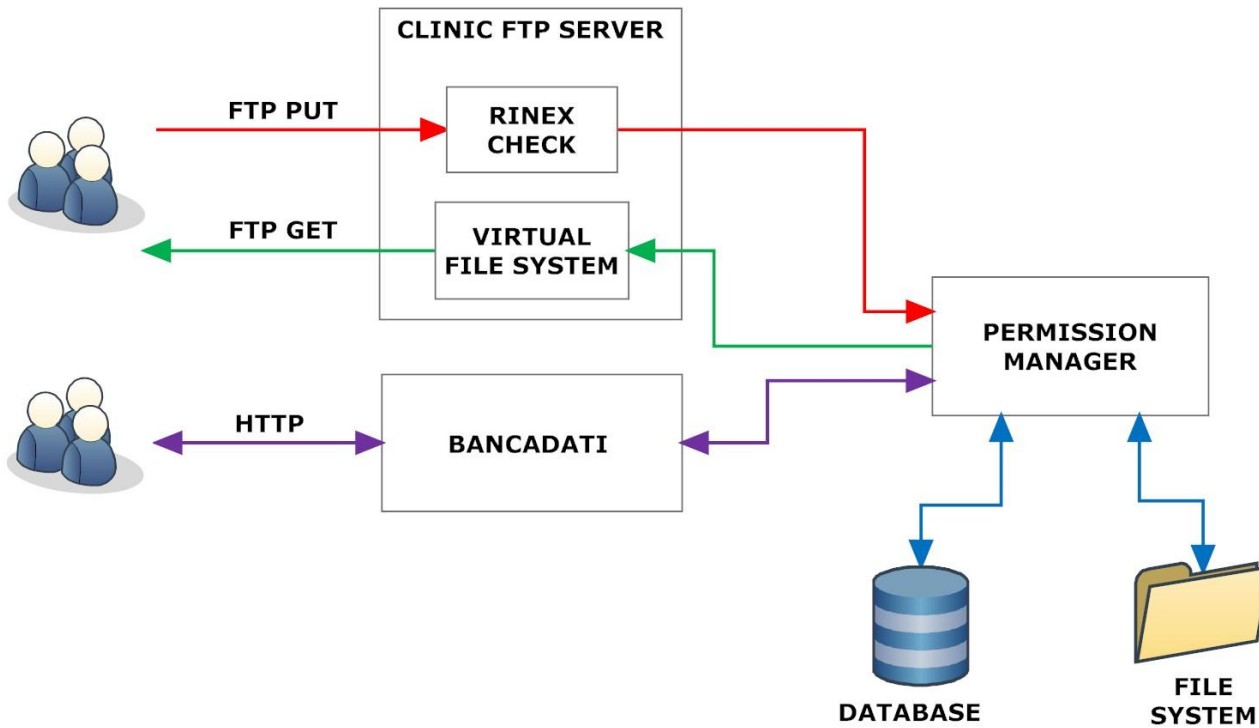






# PERMISSION MANAGER

Integration of Clinic and Bancadati in user management, FTP access and WEB access through implementation of a Permission Manager





# PERMISSION MANAGER CONFIG

Permission manager allow us to limiting user access to certain station rinex through FTP server or limiting access of station log file management through web pages

Action


Filter

17 FTP_DOWNLOAD_SITI_OPEN	\OUTGOING\RINEX30\RING\	MOCO[2006290-*],FRES[2006259-*],CUCC[2006249-*],BRAS[2006060-*],GROG[2006202-*],BSSO[2006014-*],GROT[2005145-*],MRLC[2005328-*],SERS[2006260-*],TOLF[2005075-*],USIX[2006290-*],VAGA[2006074-*],LASP[2006171-*],MODE[2006338-*],CDRU[2006245-*],AMUR[2006223-*],PARM[2006289-*],RSMN[2005331-*],TEOL[2005100-*],MALT[2006157-*],MURB[2005177-*],ENAV[2005001-*],INGR[2003001-*],SBPO[2006143-*],SGIP[2006140-*],INGP[2004267-*],MAON[2006118-*],MONC[2006113-*],MRGE[2006251-*],STUE[2006290-*],RSTO[2003001-*],EIIV[2006001-*],SVIN[2006001-*],HMDC[2006183-*],MSRU[2006215-*],MAGA[2009001-*],TITO[2009001-*],KLOK[2008199-*]	Update	Delete
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# NEW INFRASTRUCTURE

## NEW BANCADATI - HOME PAGE AFTER LOGIN - NETWORK LIST

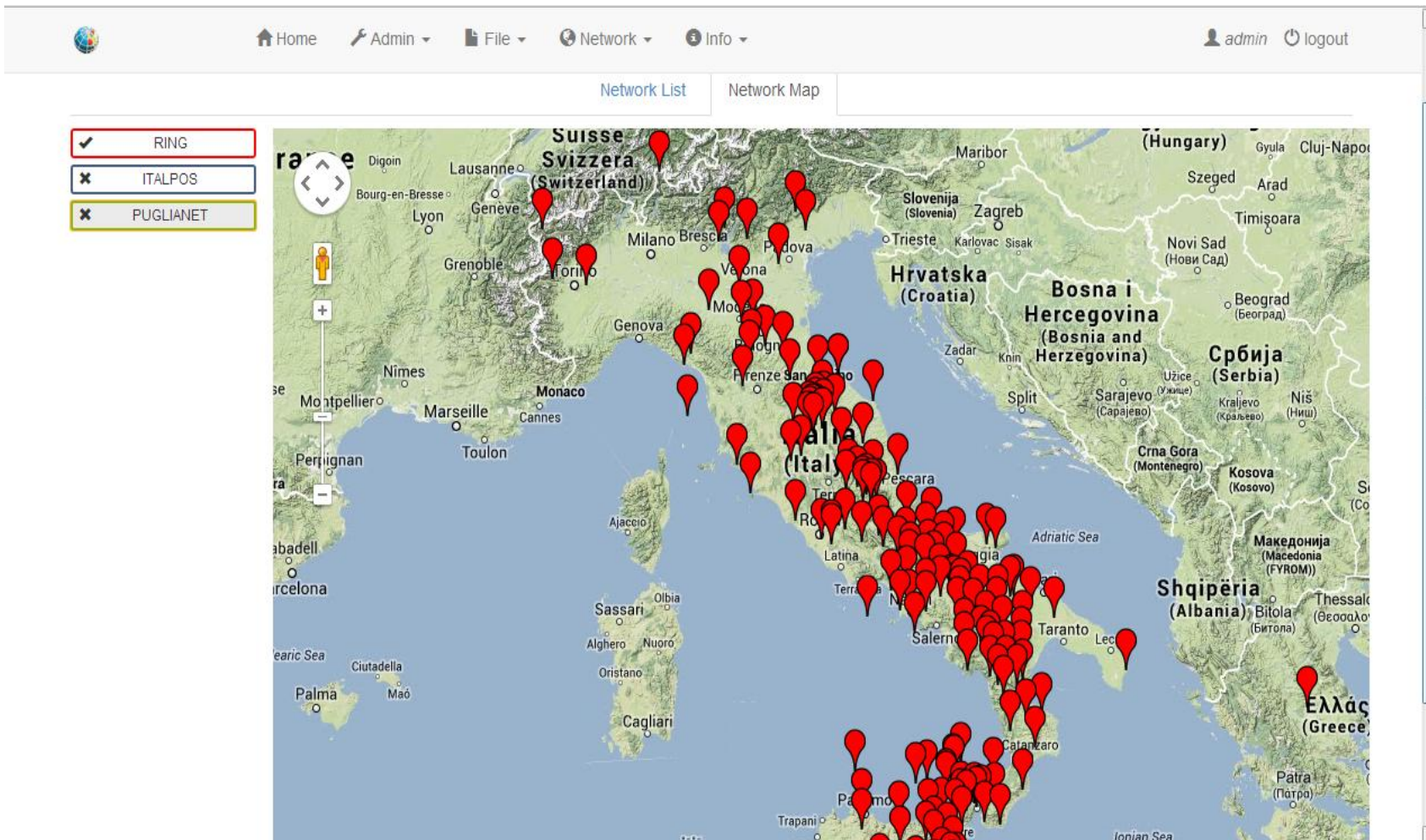
 [Home](#) [Admin](#) [File](#) [Network](#) [Info](#) admin [logout](#)

SIGLA	DESCRIZIONE	REFERENTE	NOTE ACQUISIZIONE
RING	Rete Integrata Nazionale GPS	INGV Grottaminarda	
ITALPOS	Rete LEICA	LEICA (FI)	Nessuna
PUGLIANET	Rete Regione PUGLIA	Regione Puglia	Nessuna



# NEW INFRASTRUCTURE

## NEW BANCADATI - STATIONS GROUPED IN NETWORK ON MAP





# NEW INFRASTRUCTURE

## NEW BANCADATI - GRID VIEW STATIONS OF A NETWORK

Home / RING

Home Admin File Network Info admin logout

Grid Map List Task

ACER	ALBI	AMUR	ANCN	AQSA	ATBU	ATFO	ATLO	ATMI	ATTE	AULL	SARS	BGDR	BLGN	BRAS	BRIS
BSSO	BULG	CADM	CAFE	CAPI	CAOC	CAR1	CARO	CASP	CDRU	CELI	CELL	CERA	CERT	CESI	CIGN
CMFR	COLR	CONI	CORL	CPAN	CRAC	CRMI	CSSB	CUCC	ECNV	EIIV	ENAV	ESLN	FAVR	FRES	FRES
FRUL	GALF	GATE	GBLM	GNAL	GROI	GROG	GROT	GRZM	GUAR	GUMA	HAGA	HAVL	HCRL	HLNI	HMDC
HPAC	HSCI	HVZN	IACL	IFIL	INGP	INGR	IPRO	JOPF	KLOK	LASF	LI3D	LICO	LNGN	LNSS	LOSV
LPEL	MAGA	MALT	MAON	MCEL	MCRV	MCSR	MELA	MESS	MFUS	MGAB	MGRD	MILA	MLAG	MMME	MMNO
MNOV	MOCO	MODE	MODR	MONC	MPAZ	MFNC	MRGE	MRLC	MRVN	MSAG	MSFR	MSRU	MT01	MTER	MTRZ
MTSN	MTTG	MTTO	MUCR	MUR1	MURB	MVAL	NOCI	PACA	PALZ	PAOL	PARM	PESA	PESR	PIET	PIGN
PING	PIOB	PIPA	PLAC	POFI	PSBI	PTRJ	PTRP	PZIN	RAFF	RDPI	RESU	RMPO	RNI2	ROPI	ROVR
RSMN	RSPX	RSTO	SACR	SACS	SALB	SALO	SBPO	SCHR	SCTE	SERS	SGIP	SGRE	SGRT	SGTA	SIRI
SLCN	SNAL	SSYX	STUE	SVIN	SVTO	TEOL	TITO	TOLF	TRIV	UMBE	USIX	VAGA	VALC	VCSP	VENT
VIGG	VLSG	VULT	VVLO												

Data availability of last 7 days

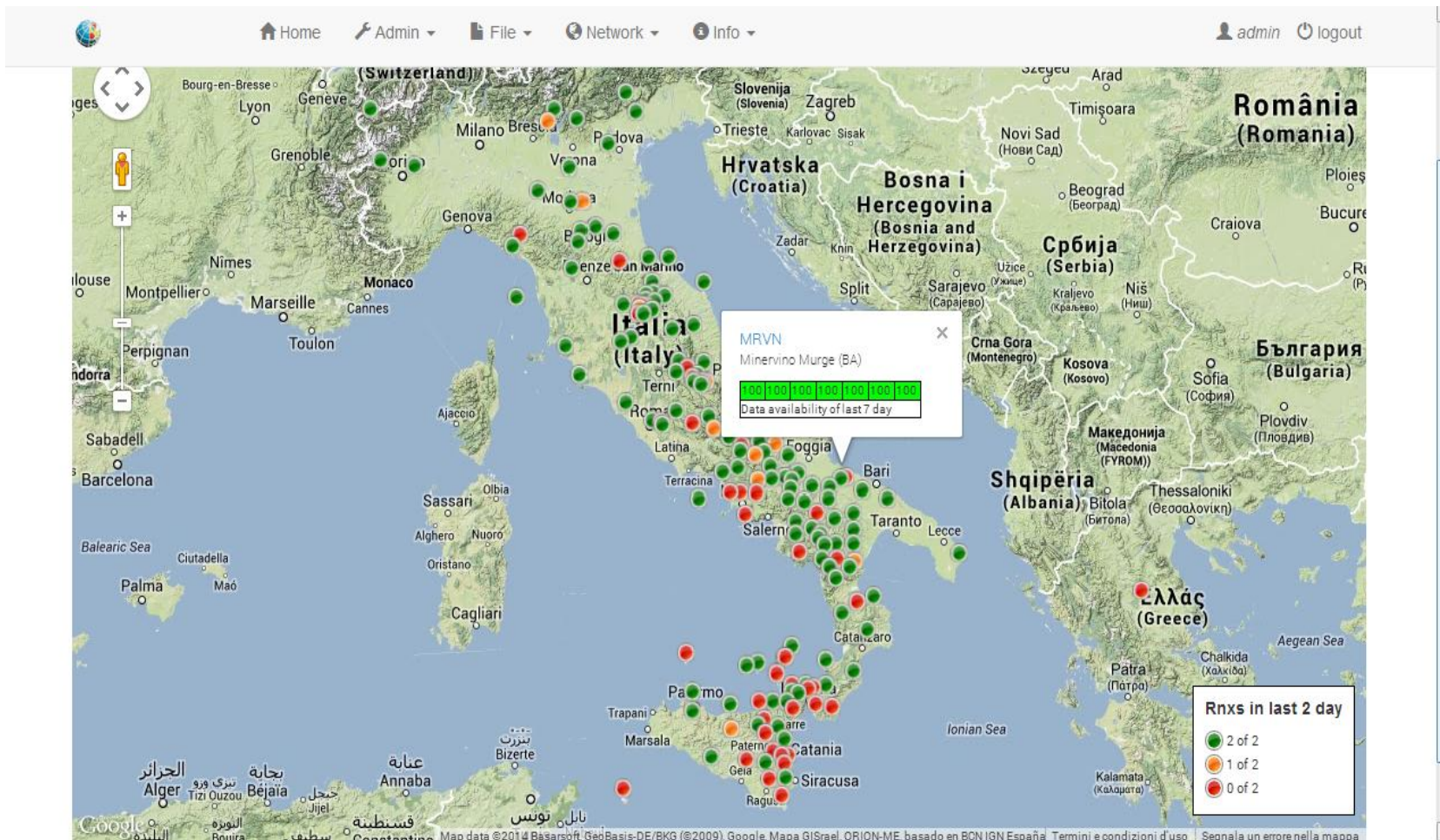
Rnx available
   
 NO DATA

CLINIC BANCA DATI - Contact WebMaster



# NEW INFRASTRUCTURE

## NEW BANCADATI - STATIONS OF A NETWORK ON MAP





## NEW INFRASTRUCTURE

## NEW BANCADATI - STATIONS LIST OF A NETWORK

Home / RING

Grid Map List Task

Nome Sito	Tipo Connettività	Connettività	Provider	Alimentazione	Task Aperti	Antenna Type	Radome A.T.	Antenna Serial Number	Receiver Type	Receiver Serial Number	Receiver Firmware
ACER	Satellite	Nanometrics	Hellasat	ENEL 220 V	1	LEIAT504	SCIT	102742	LEICA GRX1200GGPRO	352167	5.00
ALBI	Mobile	GPRS/UMTS	Vodafone	Pannelli solari	0	LEIAT504GG	SCIT	201098	LEICA GRX1200+GNSS	495872	8.10
AMUR	Satellite	Nanometrics	Intelsat	Pannelli solari	1	LEIAT504	SCIT	102741	LEICA GRX1200+GNSS	495879	8.2
ANCN	WI-FI	MarcheWay	RegioneMarche	ENEL 220 V	0	LEIAT504	SCIT	103479	LEICA GRX1200GGPRO	356058	7.80
AQSA	WI-FI	WiFi	WinGate	Pannelli solari	0	LEIAT504GG	SCIT	201120	LEICA GRX1200+GNSS	495879	8.20/4.004
ATBU	WI-FI	MarcheWay	RegioneMarche	Pannelli solari	0	LEIAT504GG	SCIT	200557	LEICA GRX1200PRO	355460	5.60
ATFO	WI-FI	MarcheWay	RegioneMarche	Pannelli solari	0	LEIAT504GG	SCIT	200543	LEICA GRX1200PRO	355461	5.60
ATLO	WI-FI	MarcheWay	RegioneMarche	Pannelli solari	1	LEIAT504GG	SCIT	200556	LEICA GRX1200PRO	355512	5.60
ATMI	WI-FI	MarcheWay	RegioneMarche	Pannelli solari	0	LEIAT504GG	SCIT	200562	LEICA GRX1200GGPRO	352458	5.60
ATTE	WI-FI	MarcheWay	RegioneMarche	Pannelli solari	0	LEIAT504GG	SCIT	200571	LEICA GRX1200PRO	355465	5.60
AULL	Mobile	GPRS/UMTS	Vodafone	ENEL 220 V	0	LEIAT504	none	103246	LEICA GRX1200GGPRO	352161	8.20
BARS	Mobile	GPRS/UMTS	Vodafone	Pannelli solari	1	LEIAT504GG	SCIT	201143	LEICA GRX1200+GNSS	495860	7.80/4.004



# NEW INFRASTRUCTURE

## NEW BANCADATI - TASKS OPEN FOR STATIONS OF A NETWORK

Home / RING

Grid Map List Task

Anno Intervento 2010

sito	Data Task	Segnalato Da	Descrizione	Priority	Manutenzione	Area	Data Intervento	Intervento	Personale Interventato	Note
VLSG	15/11/2010		sostituito router e contratto telefonico scuola. Occorre ricreare regole di natting su router in locale. Ricevitore in acquisizione	Media	Ordinaria		20/12/2010	ok, modificato IP ricevitore nattato su router (Ref.Informatico Scuola). Streaming OK		
INGR	13/12/2010		ricevitore non raggiungibile via TCP/IP	Media	Ordinaria		17/12/2010	acquisizione in locale OK. porta di rete non funzionante. Sostituito		
INGP	16/11/2010		Il modem analogico non si aggancia	Alta	Ordinaria		16/12/2010	modem non funzionante. Ricevitore in acquisizione (Massucci-Devoti)		
GRZM	03/12/2011		scaricati dati (presenti fino a doy 169-2010), riavviata acquisizione in locale	Media	Ordinaria		16/12/2010	trovato ricevitore spento. Sostituito ricevitore, messo pannello. Ricevitore in acquisizione locale (op. Cavaliere)		
MAON	01/09/2010		problemi trasmissione dati GPS - sismica ok - no connessione ricevitore da Cygnus	Alta	Ordinaria		01/12/2010	trovato ricevitore e antenna fulmunati - sostituita strumentazione e adeguata alimentazione (Massucci-Del Mese)		
GRZM	10/11/2010		manca corrente elettrica. Comune deve rintracciare ditta lavori (missione di A. Cavaliere). STAZIONE NON IN ACQUISIZIONE	Alta	Ordinaria		20/11/2010	stazione in acquisizione in locale		





# NEW INFRASTRUCTURE

## NEW BANCADATI - DATA AVAILABILITY FOR A GPS SITE

Home / RING / ACER - Acerenza (PZ)

- LOG
- Info
- Monograph
- Maintenance
- Map
- Charts

Percentage 80

from 2011

to 2014

GO



### DATA

	YEAR 2011												YEAR 2012												YEAR 2013												YEAR 2014											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
ACER	█												█												█												█											



# NEW INFRASTRUCTURE

## NEW BANCADATI - MONTHLY DATA AVAILABILITY FOR A SINGLE SITE

[Home](#) / [RING](#) / [ACER - Acherenza \(PZ\)](#) / Oct 2013

LOG

Info

Monograph

Maintenance

Map

Charts








<< Sep    Oct 2013    Nov >>

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
DOY	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304
	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
ACER	100	100	100	100	100	100	100	100	100	100	100	100	100	98	100	100	95	100	100	99	99	100	100	100	100	100	100	100	98	100	100



# NEW INFRASTRUCTURE

## NEW BANCADATI - QC OUTPUT OF A RINEX

 Home
  Admin
  File
  Network
  Info
  admin
  logout

FILE ACER2890.13d.z

STDOUT version: teqc 2011Oct11

```

SV+|-----|-----|-----|-----|-----|-----|-----|-----+ SV
 1|                                     _-oooooooooooooooooooo+_ | 1
 2|          _Looooooooooooo-          _-oooooooooooo+_ | 2
 3|                                     _-oooooooooooooooooooo+_ | 3
 4|          _Loooooooooooo-          _Loooooooooooo+_ | 4
 5|ooooo+_          _Looooo-          _Loooooooooooo| 5
 6|                                     _Loooooooooooooooooooo+_ | 6
 7|oo-          _Loooooooooooooooooooo| 7
 9|-oooo+_          _Loooooooooooooooooooo| 9
10|o+_          _Loooooooooooooooooooo| 10
11|                                     _-oooooooooooooooooooo+_ | 11
12|          _Loooooooooooooooooooo+_ | 12
13|          _-oooooooooooo+_          _Loooooooooooooooooooo- | 13
14|          _-oooooooooooo+_          _Mooooooooooooo- | 14
15|oooooooooooooooooooo+_          _Loooooooooooooooooooo- | 15
16|          _-ooooooooooooooooooooI          _Looooo- | 16
17|_Looooooooooooo-          _Loooooooooooo+_ | 17
18|_ -ooooo-          _Loooooooooooooooooooo- | 18
19|          _-oooooooooooooooooooo+_ | 19
20|          _Loooooooooooooooooooo+_ | 20
21|          _Loooooooooooooooooooo+_ | 21
22|          _Loooooooooooooooooooo- | 22
23|          _Loooooooooooooooooooo- | 23
24|_Loooooooooooooooooooo+_ | 24
25|          _Loooooooooooooooooooo+_ | 25
26|oooooooooooo+_          _Loooooo| 26
27|          _Loooooooooooooooooooo+_ | 27
28|oooooooooooo-          _-oooo-          _Loooooo| 28
29|          _Loooooooooooooooooooo- | 29
31|          _-oooooooooooo+_          _Loooooo- | 31
..|                                     | ..

```



# NEW INFRASTRUCTURE

## NEW BANCADATI - LOG FILE MANAGEMENT FOR A SITE

Home Admin File Network Info admin logout

PAOL 00 01 02 03 04 08 10 11 12 13 download LOG

Section: 3 - GNSS Receiver Information

	Receiver Type	Satellite System	Serial Number	Firmware Version	Elevation Cutoff Setting	Date Installed	Date Removed	Temperature Stabiliz.	Additional Information
3.1	LEICA GRX1200GGPRO	GPS	356142	5.62	10°	29/09/2009	27/02/2010	20°C +- 5°C	
3.2	LEICA GRX1200+GNSS	GPS	495119	7.53	10°	28/02/2010	12/03/2010	20°C +- 5°C	
3.3	LEICA GRX1200GGPRO	GPS	356142	5.62	10°	12/03/2010	02/07/2010	20°C +- 5°C	
3.4	LEICA GRX1200+GNSS	GPS	495119	7.53	10°	03/07/2010	26/07/2013	20°C +- 5°C	
3.5	LEICA GRX1200+GNSS	GPS	495207	8.50	10	27/07/2013		20°C +- 5°C	

New Receiver

<p>Satellite System <input type="text" value="new"/></p> <p>Temperature Stabiliz. <input type="text"/></p> <p>Date Installed (dd/mm/yyyy) <input type="text"/></p> <p>Date Removed (dd/mm/yyyy) <input type="text"/></p>	<p>Receiver Type <input type="text"/></p> <p>Serial Number <input type="text"/></p> <p>Firmware Version <input type="text"/></p> <p>Elevation Cutoff Setting <input type="text"/></p> <p>Additional Information <input type="text"/></p>
--	--

[Insert Receiver](#)



# NEW INFRASTRUCTURE


## NEW BANCADATI - GALLERY FOR A SITE

Home Admin File Network Info admin logout

[Edit Info](#)


<b>Tipo Connettività</b>	Satellite
<b>Connettività</b>	Nanometrics
<b>Provider</b>	Hellasat
<b>Info Connettività</b>	
<b>Alimentazione</b>	ENEL 220 V
<b>Referente</b>	
<b>Altre Info</b>	

*Monumento*



[Browse Image](#)



*Sito*



[Browse Image](#)

*Other Images*

[Add Image](#)

bancadati2.gm.ingv.it:8081/mono/info.jsp?nomeSito=ACER&id=3735#



# NEW INFRASTRUCTURE

## NEW BANCADATI - SITE MONOGRAPH

### ACER STATION INFORMATION



Fig. 1 - Remote site



Fig. 2 - Station location



Fig. 3 - GPS Monumentation

#### SITE IDENTIFICATION OF THE GNSS MONUMENT

Place:	Acerenza (PZ)	Date building:	11/07/2007
Monument Description:	Wyatt/Agnew drilled braced	Marker Description:	Top of center support screw on SCIGN D3
Height of the Monument:	1.2 m	Foundation Depth:	steel rods

#### SITE LOCATION INFORMATION

City:	Acerenza (PZ)	State:	Basilicata	Country:	Italy
Latitude:	+404711.9638	Longitude:	+0155632.4987	Altitude:	764.695

#### ON-SITE, POINT OF CONTACT AGENCY INFORMATION

Agency:	Istituto Nazionale di Geofisica e Vulcanologia - Osservatorio di Grottaminarda	Contact:	Ciriaco D'Ambrosio	Telephone:	++39-0825-446057
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# NEW INFRASTRUCTURE

## NEW BANCADATI - SITE MAINTENANCE

Home
Admin ▾
File ▾
Network ▾
Info ▾

admin logout

Active Tasks

	Date	Problem	Segnalato da	Priority
	17/06/2009	fare foto monumento		Media

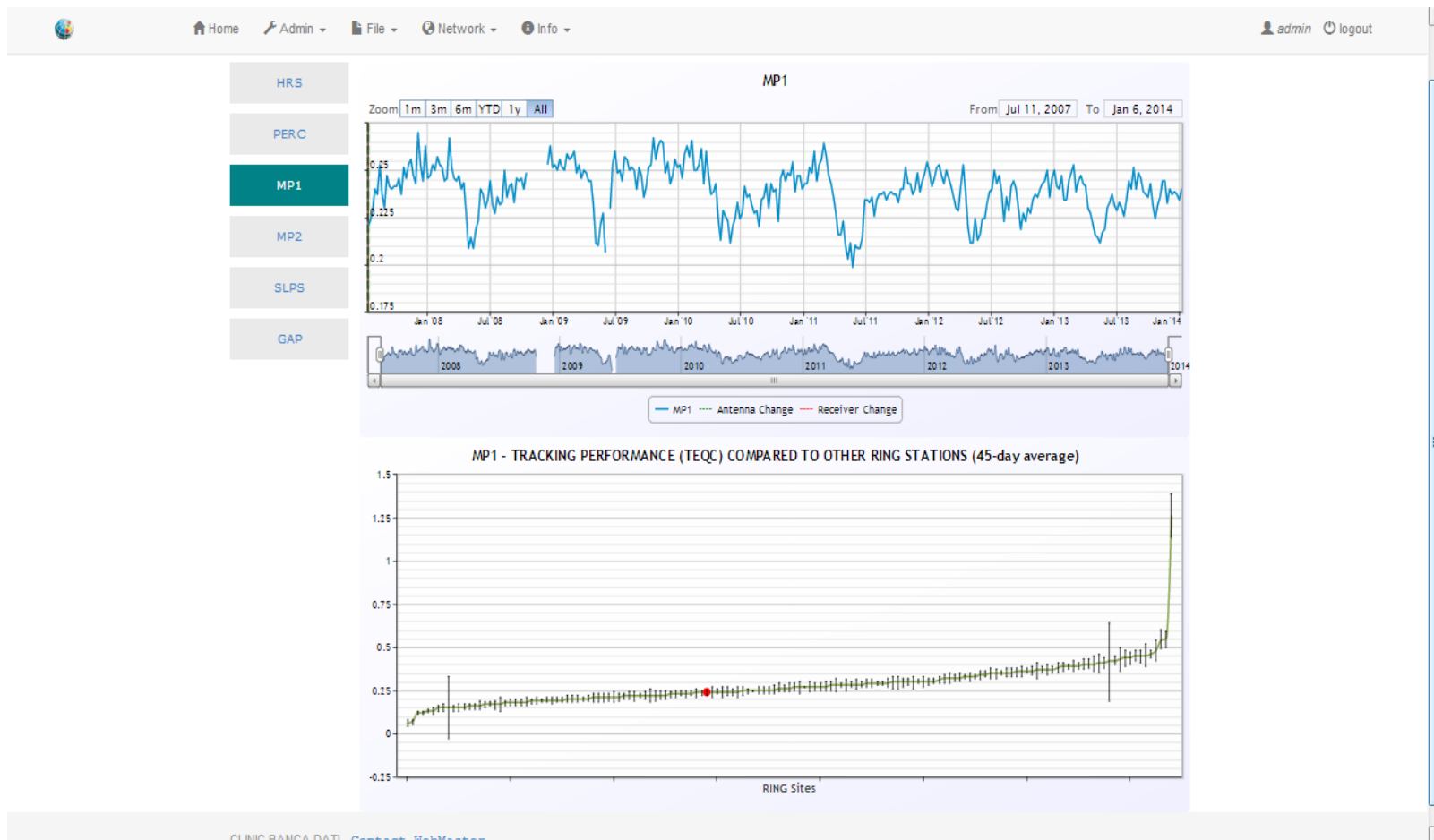
Completed Tasks

End Date	Date	Problem	Priority	Tipo Manuten.	Area di Intervento	Solution	Note
16/11/2009		16/11/2009 sistemazione quadro elettrico	Media	Ordinaria		ok	
		17/06/2009 da effettuare: sistemare colonna quadro enel con cemento-sistemare rete porta ingresso-entra acqua vano batteria e sensore-portare erbicida	Media	Ordinaria		ok	
		09/07/2008 contattare enel per anomalia display contatore-siliconare buchi superiori quadro elettrico	Media	Ordinaria		ok	
<span style="background-color: #007bff; color: white; padding: 2px 10px; border-radius: 3px; display: inline-block;">Add Image</span>							
17/06/2009		17/06/2009 interventi effett: installazione regolatore di carica-alimentatore-fissaggio cassetta aliment-cambio batteria-taglio erba-	Media	Ordinaria		ok	
		09/07/2008 batteria scarica (sostituire)-sostituire tasselli quadro elettr. von tass. perrotati-install. regolatore di acrica-install. morsetti per imp. terra-	Media	Ordinaria		ok	
10/05/2008		17/01/2008 verificare configurazione cigno	Media	Ordinaria		ok	
		14/01/2008 disattivare Glonass	Media	Ordinaria		ok	



# NEW INFRASTRUCTURE

## NEW BANCADATI - QC PARAMETER GRAPH







# NEW INFRASTRUCTURE

## NEW BANCADATI - RINEX PROCESSING LOG

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 Admin
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Time	Src File	Dest File	Operation	Result	errore
13:20:10	_1389183600210		TEQC CARTELLA	END	
13:20:10	LOSV0070.14d.Z	LOSV0070.14d.Z	COPIA FILE IN OUTGOING	SUCCESS	
13:20:10	LOSV0070.14d.Z		COPIA FILE IN OUTGOING	BEGIN	
13:20:10	LOSV0070.14d	LOSV0070.14d.Z	COMPRESSIONE FILE "lzc"	SUCCESS	
13:20:10	LOSV0070.14d	LOSV0070.14d.Z	COMPRESSIONE FILE "lzc"	BEGIN	
13:20:10	losv0070.14o	LOSV0070.14d	COMPRESSIONE FILE "hatanaka"	SUCCESS <a href="#">view detail</a>	
13:20:10	losv0070.14o	LOSV0070.14d	COMPRESSIONE FILE "hatanaka"	BEGIN	
13:20:10	losv0070.14o.newHeader	losv0070.14o	FILE RENAME	DONE	
13:20:10	losv0070.14o.newHeader		TEQC +QC -PLOT -NAV (NEW HEADER)	DONE <a href="#">view detail</a>	
13:20:10	losv0070.14o	losv0070.14o.newHeader	TEQC SCRITTURA HEADER	DONE <a href="#">view detail</a>	
13:20:10	losv0070.14o		TEQC +QC -PLOT -NAV	DONE <a href="#">view detail</a>	
13:20:09	losv0070.14o		TEST EPOCH	true	
13:20:09	losv0070.14o		TEQC +QC	DONE <a href="#">view detail</a>	
13:20:09	_1389183600210		TEQC CARTELLA	BEGIN	
13:20:09	_1389183600322		TEQC CARTELLA	END	
13:20:09	EIIV0070.14d.Z	EIIV0070.14d.Z	COPIA FILE IN OUTGOING	SUCCESS	
13:20:09	EIIV0070.14d.Z		COPIA FILE IN OUTGOING	BEGIN	
13:20:09	EIIV0070.14d	EIIV0070.14d.Z	COMPRESSIONE FILE "lzc"	SUCCESS	
13:20:09	EIIV0070.14d	EIIV0070.14d.Z	COMPRESSIONE FILE "lzc"	BEGIN	
13:20:08	eiiv0070.14o	EIIV0070.14d	COMPRESSIONE FILE "hatanaka"	SUCCESS <a href="#">view detail</a>	
13:20:08	eiiv0070.14o	EIIV0070.14d	COMPRESSIONE FILE "hatanaka"	BEGIN	
13:20:08	eiiv0070.14o.newHeader	eiiv0070.14o	FILE RENAME	DONE	
13:20:08	eiiv0070.14o.newHeader		TEQC +QC -PLOT -NAV (NEW HEADER)	DONE <a href="#">view detail</a>	
13:20:08	eiiv0070.14o	eiiv0070.14o.newHeader	TEQC SCRITTURA HEADER	DONE <a href="#">view detail</a>	



# NEW INFRASTRUCTURE

## NEW BANCADATI - REPROCESSING RINEX FEATURE



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### TEQC Reprocess

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