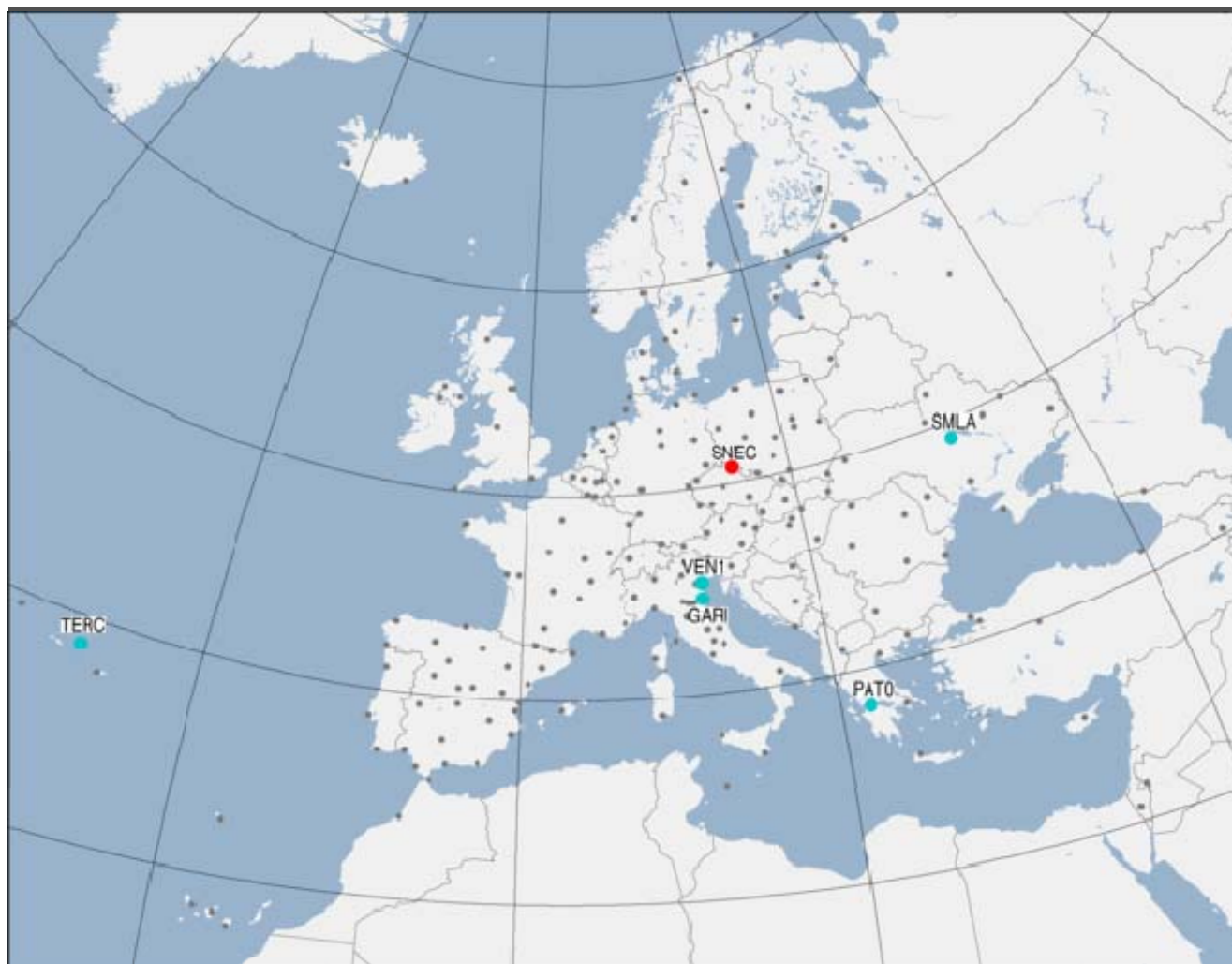


EPN Status Report

C. Bruyninx

*EPN Central Bureau
Royal Observatory of Belgium*

CHANGES SINCE EUREF2009



NEW

| 4char | Location | GLONASS | GALILEO | RT | ECGN | Inclusion date |
|-------|-----------------------------|---------|---------|-----|------|----------------|
| GARI | Porto Garibaldi, Italy | yes | yes | – | – | 08-11-2009 |
| PAT0 | Patras, Greece | yes | – | – | – | 14-06-2009 |
| SMILA | Smila, Ukraine | yes | – | – | – | 01-11-2009 |
| TERC | Angra do Heroismo, Portugal | yes | – | yes | – | 03-01-2010 |
| VEN1 | Venezia, Italy | yes | – | yes | – | 13-12-2009 |

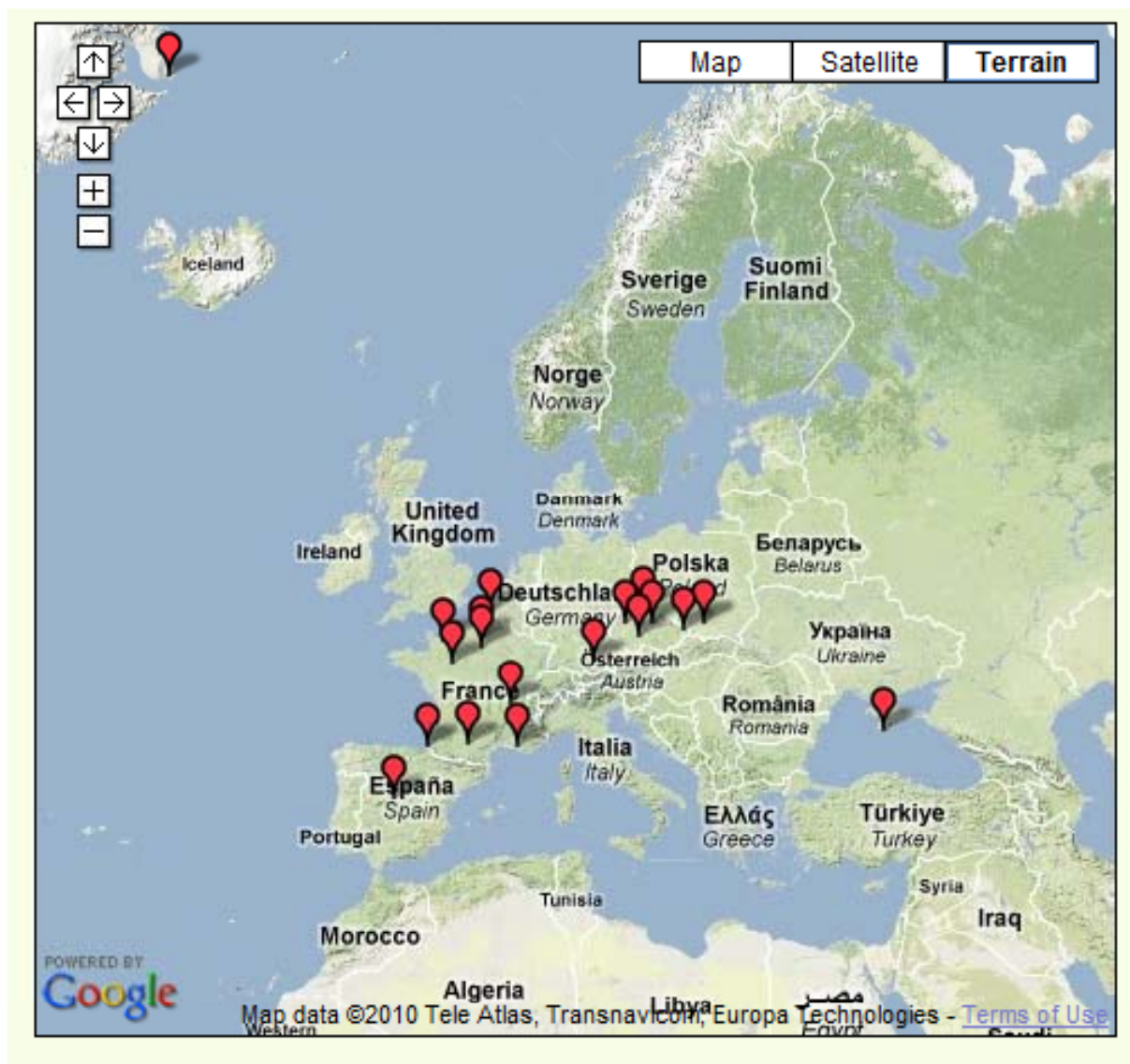
INACTIVE

| 4char | Location | From | To | Why |
|-------|---|------------|------------|---|
| AQUI | L'Aquila, Italy | 18-10-2009 | 27-12-2009 | very strong earthquake |
| ELBA | San Piero Campo Nell'Elba - Elba, Italy | 06-09-2009 | - | station PC and communication line |
| EVPA | Evpatoria, Ukraine | 06-09-2009 | 27-12-2009 | unstable receiver |
| LAMP | Lampedusa, Italy | 10-01-2010 | - | maintenance works on the roof hosting the antenna |

FORMER

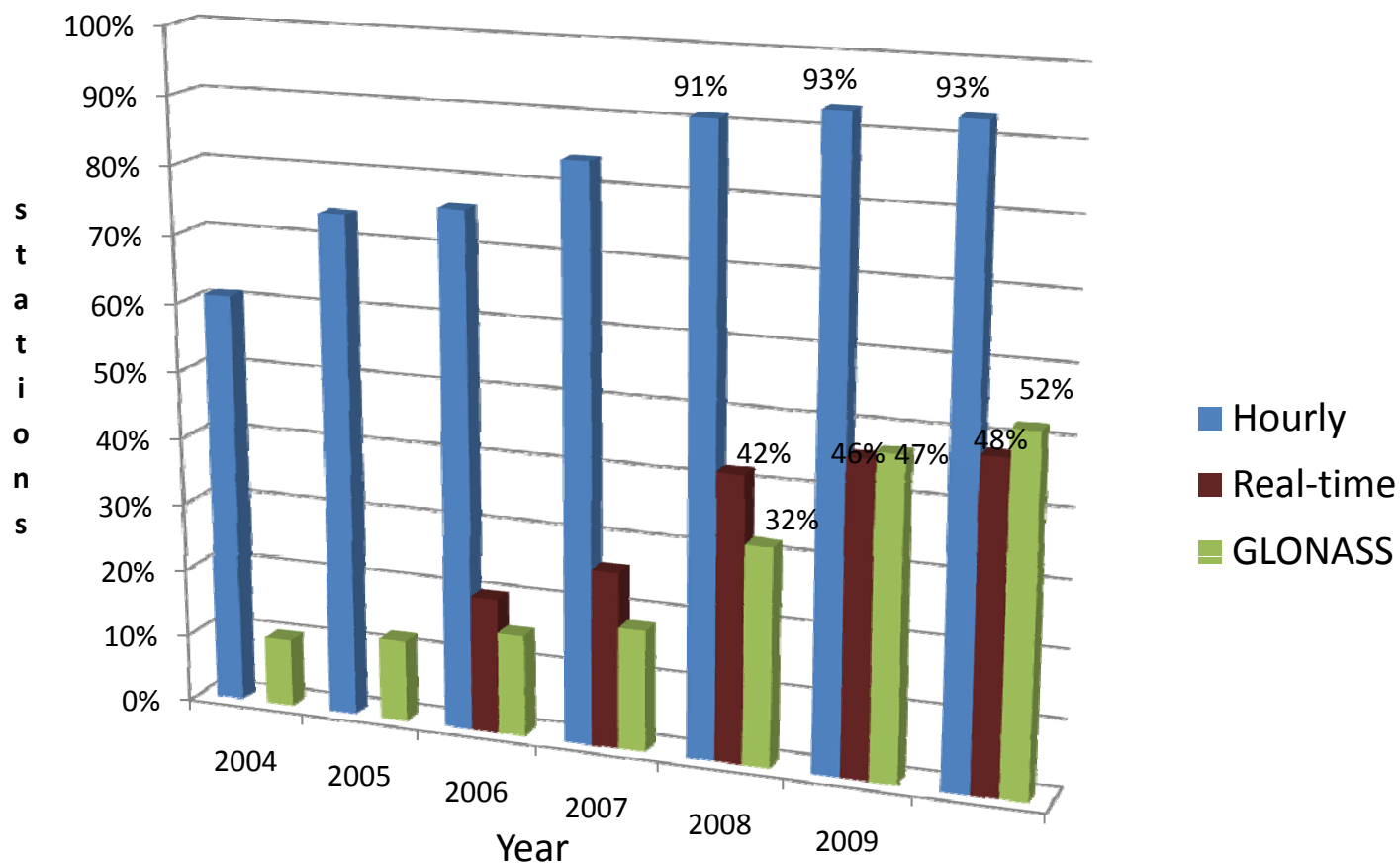
| 4char | Location | When | Why |
|-------|-----------------------------------|------------|--------------------|
| SNEC | Pec (Pod Snezkou), Czech Republic | 11-06-2009 | building destroyed |

PROPOSED STATIONS



PROPOSED STATIONS

| Site | Location | Proposed at | Documentation | | | Availability (%) | | | | | Latency | | | DQ (%) | | Meta-data | | Data | | Rel. | Interested analysis centres |
|------|---------------------------------------|-------------|---------------|----|----|------------------|-----|------------|-----|----|---------------|-----|--------|--------|-----|-----------|----|------|----|------|-----------------------------|
| | | | CL | SL | SP | Daily BKG | OLG | Hourly BKG | OLG | RT | Hourly(%) BKG | OLG | RT (s) | 0° | 15° | Daily | RT | AC | DQ | | |
| AXPV | Aix En Provence, France | 23/10/2009 | ✓ | ✓ | ✓ | 100 | 100 | 80 | 85 | — | 78 | 73 | — | 92 | 100 | ✓ | — | T | ✓ | G | ROB, BKG, IGN, LPT, IGE |
| CAEN | Caen, France | 23/10/2009 | ✓ | ✓ | ✓ | 100 | 100 | 99 | 86 | — | 98 | 79 | — | 87 | 100 | ✓ | — | T | ✓ | G | ROB, IGN, IGE |
| CEBR | Cebreros, Spain | 23/06/2009 | ✗ | ✓ | ✓ | 100 | 100 | 100 | 89 | — | 100 | 84 | — | 84 | 98 | ✓ | — | T | ✓ | C | IGE, ASI, ? |
| CFRM | Frydek Mistek, Czech Republic | 06/11/2009 | ✓ | ✓ | ✓ | 89 | 93 | 99 | 94 | — | 89 | 72 | 3.0 | 89 | 99 | ✓ | ✓ | T | ✓ | | BKG, GOP, WUT |
| CLIB | Liberec, Czech Republic | 06/11/2009 | ✓ | ✓ | ✓ | 89 | 100 | 99 | 88 | — | 92 | 75 | 3.1 | 89 | 99 | ✓ | ✓ | T | ✓ | | GOP, WUT, ? |
| CPAR | Pardubice, Czech Republic | 06/11/2009 | ✓ | ✓ | ✓ | 89 | 93 | 99 | 88 | — | 93 | 76 | 3.8 | 93 | 99 | ✓ | ✓ | T | ✓ | | GOP, WUT, ? |
| CRAK | Rakovnik, Czech Republic | 06/11/2009 | ✓ | ✓ | ✓ | 89 | 96 | 99 | 88 | — | 93 | 75 | 4.4 | 91 | 99 | ✓ | ✓ | T | ✓ | | GOP, ?, ? |
| CREI | Creil, France | 23/10/2009 | ✓ | ✓ | ✓ | 100 | 100 | 99 | 85 | — | 97 | 78 | — | 90 | 100 | ✓ | — | T | ✓ | G | ROB, IGN, WUT |
| CTAB | Tabor, Czech Republic | 06/11/2009 | ✓ | ✓ | ✓ | 89 | 89 | 99 | 91 | — | 92 | 74 | 5.3 | 94 | 100 | ✓ | ✓ | T | ✓ | | GOP, WUT, ? |
| KRA1 | Krakow, Poland | 13/01/2010 | ✓ | ✓ | ✗ | 0 | 93 | 74 | 81 | — | 73 | 80 | — | 91 | 97 | ✓ | — | T | ✓ | G | ?, ?, ? |
| KTVL | Katzively, Greater Yalta, Ukraine | 08/02/2010 | ✓ | ✓ | ✓ | 100 | 100 | 76 | 76 | — | 60 | 59 | — | 88 | 99 | ✓ | — | T | ✗ | G, C | BKG, ?, ? |
| LIL2 | Lille, France | 23/10/2009 | ✓ | ✓ | ✓ | 93 | 93 | 72 | 66 | — | 69 | 56 | — | 89 | 100 | ✓ | — | T | ✓ | G | ROB, IGN, LPT |
| MAN2 | Le Mans, France | 03/04/2008 | ✓ | ✓ | ✓ | 100 | 100 | 90 | 81 | — | 88 | 75 | — | 95 | 99 | ✓ | — | T | ✓ | G | ROB, IGN, LPT, IGE |
| MDOR | Saint-Didier-au-Mont-d'Or, France | 23/10/2009 | ✓ | ✓ | ✓ | 100 | 100 | 99 | 85 | — | 97 | 77 | — | 85 | 100 | ✓ | — | T | ✓ | G | ROB, IGN, LPT, IGE |
| OBE3 | Oberpfaffenhofen, Germany | 22/02/2008 | ✓ | ✓ | ✗ | 100 | 14 | 98 | 87 | — | 94 | 77 | — | 62 | 90 | ✓ | — | T | ✗ | | BKG, ROB, BEK |
| SCOA | Ciboure, France | 23/10/2009 | ✓ | ✓ | ✓ | 100 | 100 | 99 | 85 | — | 96 | 75 | — | 91 | 100 | ✓ | — | T | ✓ | G, C | ROB, BKG, IGN, IGE |
| SCOR | Scoresbysund/Ittoqqoormiit, Greenland | 28/02/2006 | ✓ | ✓ | ✓ | 100 | 0 | 100 | 0 | — | 99 | 0 | — | 84 | 97 | ✓ | — | ✗ | ✓ | D | NKG, IGE, COE |
| SMNE | Saint-Mandé, France | 23/10/2009 | ✓ | ✓ | ✓ | 100 | 100 | 92 | 85 | — | 90 | 75 | — | 91 | 100 | ✓ | — | T | ✓ | G | ROB, IGN, LPT, IGE |
| TLMF | Toulouse, France | 23/10/2009 | ✓ | ✓ | ✓ | 100 | 100 | 90 | 85 | — | 88 | 71 | — | 91 | 100 | ✓ | — | T | ✓ | G | ROB, IGN, LPT, IGE |



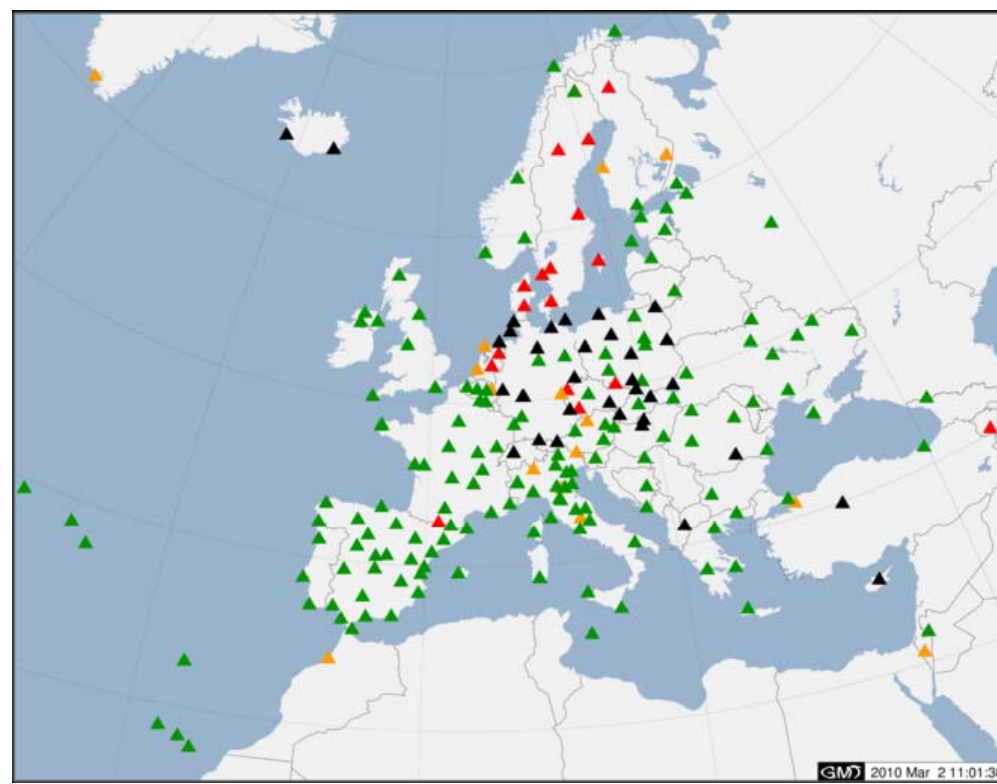
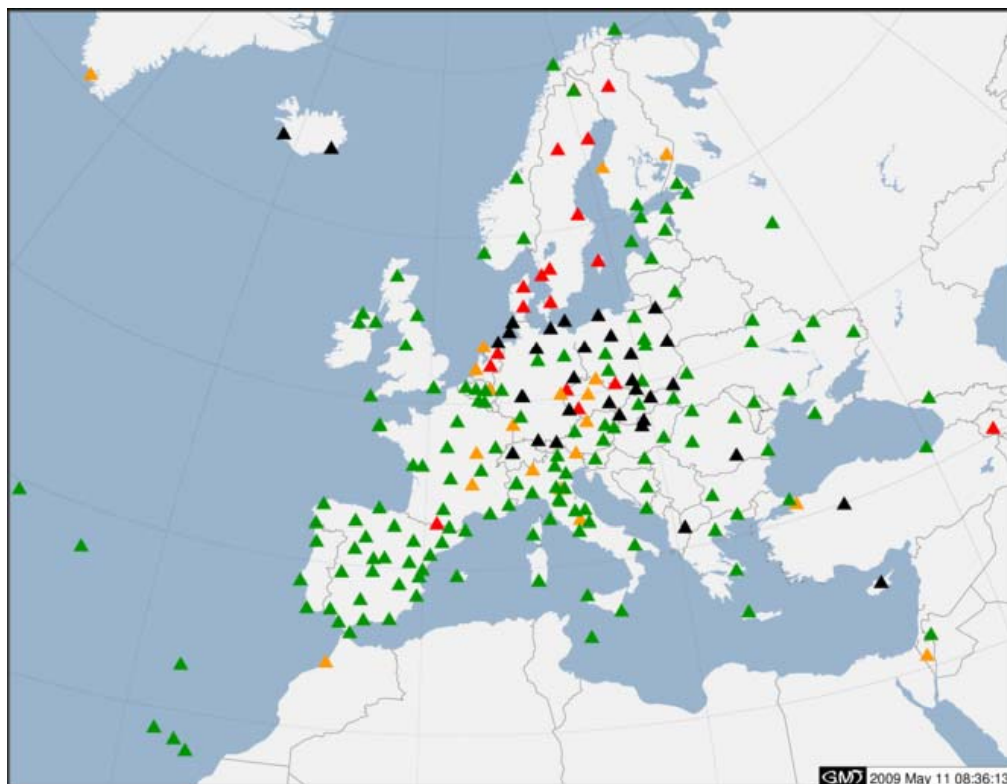
EPN ANTENNA CALIBRATIONS

May 2009

| | | |
|------------------------|------|-------|
| Indiv. abs. calib | 15 % | } 81% |
| True abs. calib | 66 % | |
| Abs. calib. from field | 9,5% | |
| No abs. calib. | 9,5% | |

March 2010

| | | |
|------------------------|------|-------|
| Indiv. abs. calib | 15 % | } 84% |
| True abs. calib | 69 % | |
| Abs. calib. from field | 7% | |
| No abs. calib. | 9% | |





EPN ANTENNA CALIBRATIONS



- Contact with GEO++ with request to make individual absolute calibrations of EPN stations freely available from EPN CB web site (now protected with user/password)
- Jan. 19, 2010: GEO++ gives EPN CB permission to make available individual calibrations using anonymous ftp
- March 1, 2010: indiv. Ant. Calibration now available from anonymous ftp area at EPN CB

- Site log validation and submission tool now active since July 2, 2009
 - Main issue: upload of existing log file instead of using on-line forms to update site log file
- Station coordinates web pages finished on Oct. 2, 2009
- On-line ETRS89/ITRS transformation opened to the public on Nov. 16, 2009
 - Bug corrected on Jan 6, 2010 (ITRF2000 -> ETRF2000)
- FUTURE: on-line web-based management of site pictures by station manager