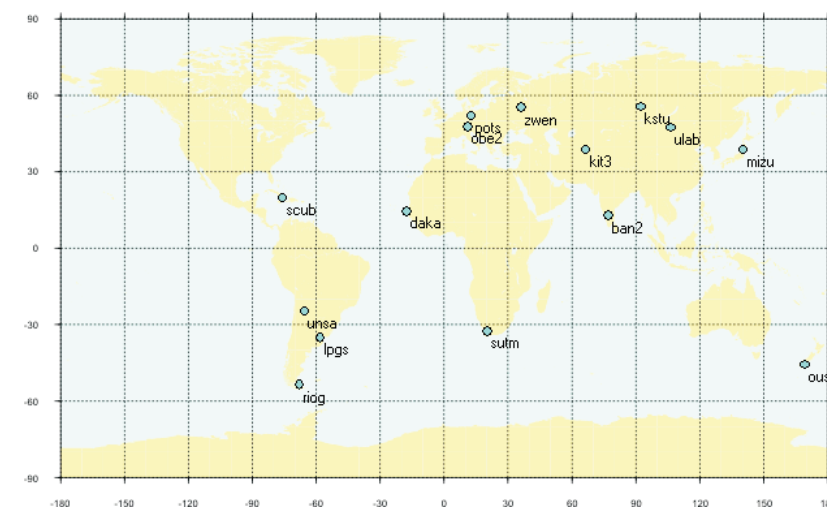


Around 170 globally distributed GPS stations with hourly data output are available at GFZ.

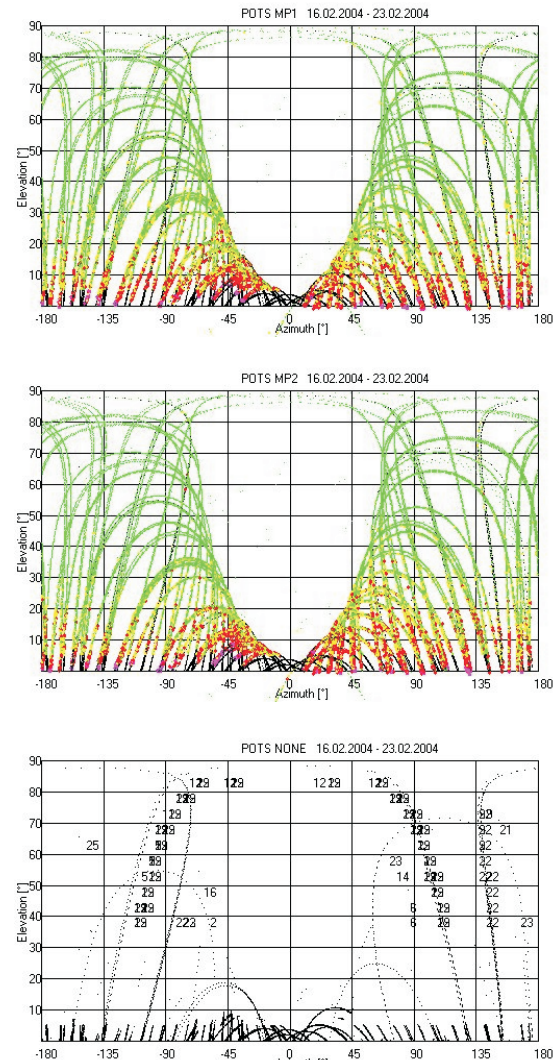
All hourly RINEX data is checked for integrity and correct format. Files which do not meet the requirements are rejected and stored in an error directory. The GPS observation files are then subject to a TEQC quality check. The QC output file is scanned for values of interest and archived.

The values of interest (e. g. multipath, mean elevation, delay) are stored in a data base for easy access. Presently this data base covers roughly two years of GPS quality check so that time variations can be investigated. This is currently done on a 100 days basis. The findings are visualized and daily updated on the web. All IGS related findings can be found from this starting point:

http://www.gfz-potsdam.de/pb1/igs/igs_stat/Global_IGS_100.htm

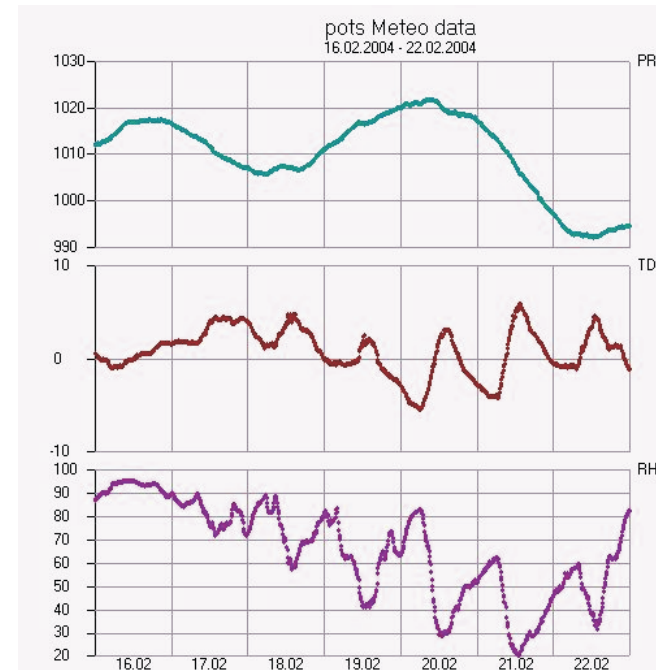
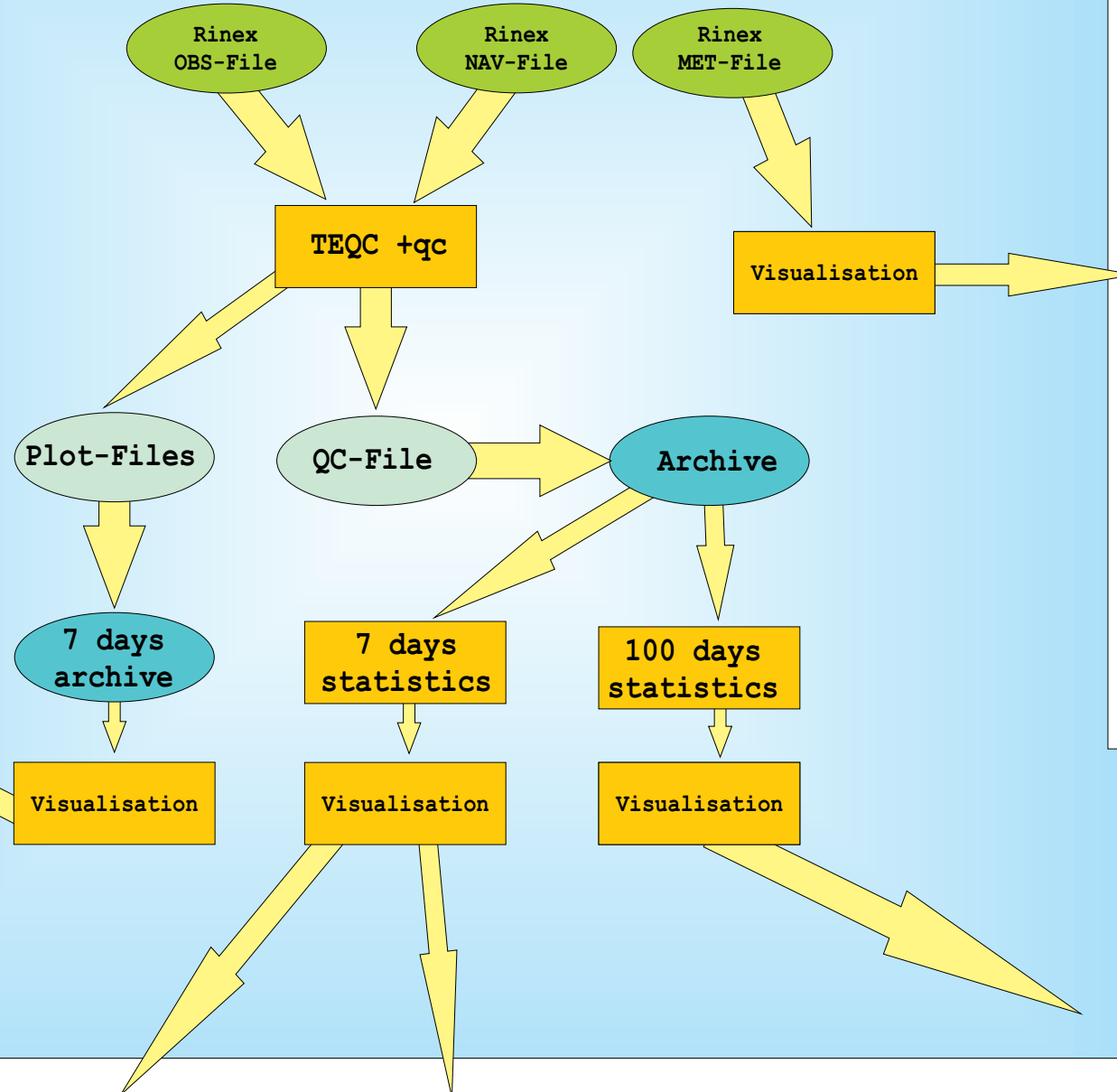


GFZ Potsdam operates GPS stations distributed worldwide of which 15 are delivering NRT data to the IGS.



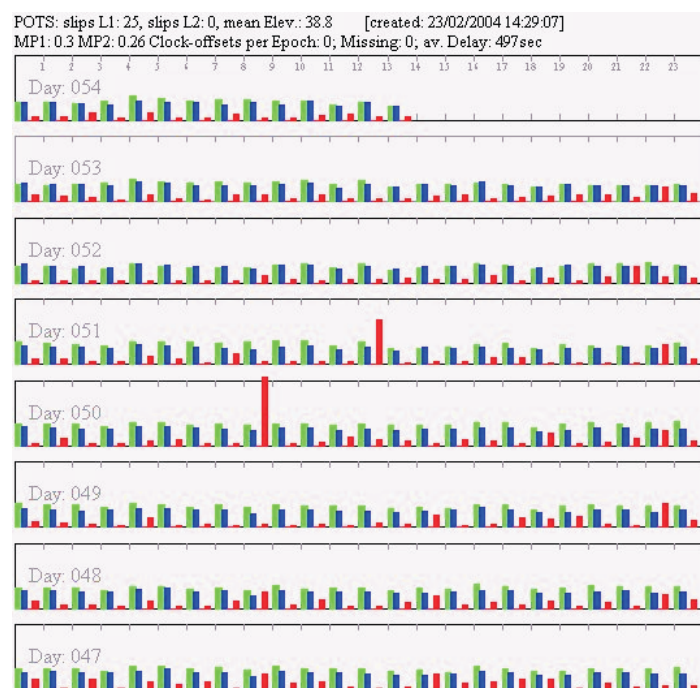
The TEQC plot files are resampled to a 5 minute rate and merged to weekly files. The weekly information is then plotted for multipath (Mp1, Mp2), signal to noise ratio (S/N on L1 and L2), IOD (derivative of ionospheric delay observables), ION (ionospheric delay observables) and satellites not tracked.

Shown here is a sample output for MP1 and MP2 as well as the satellites not tracked for the station POTS (Potsdam), green: <0.4 m, yellow: < 0.8 m, red: > 0.8 m, magenta: >2.5 m.

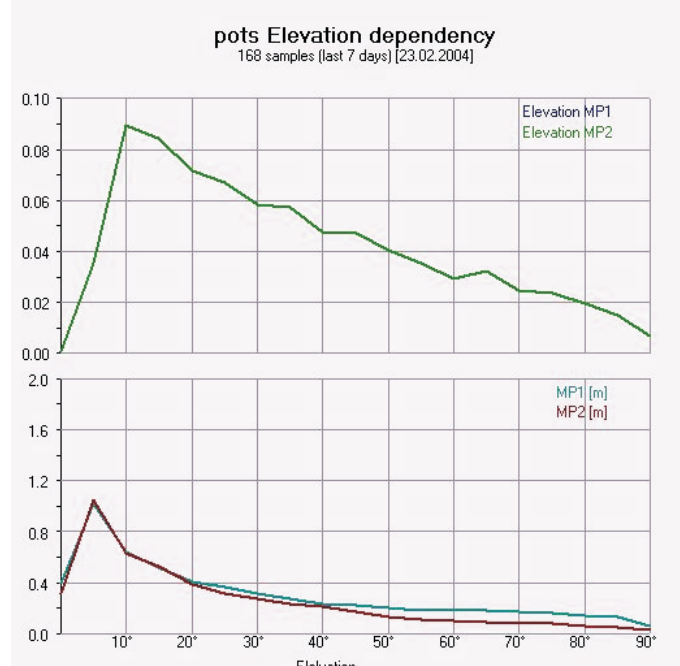


The meteo data for the last 7 days are plotted versus time to allow an easy visual check of the consistency of data.

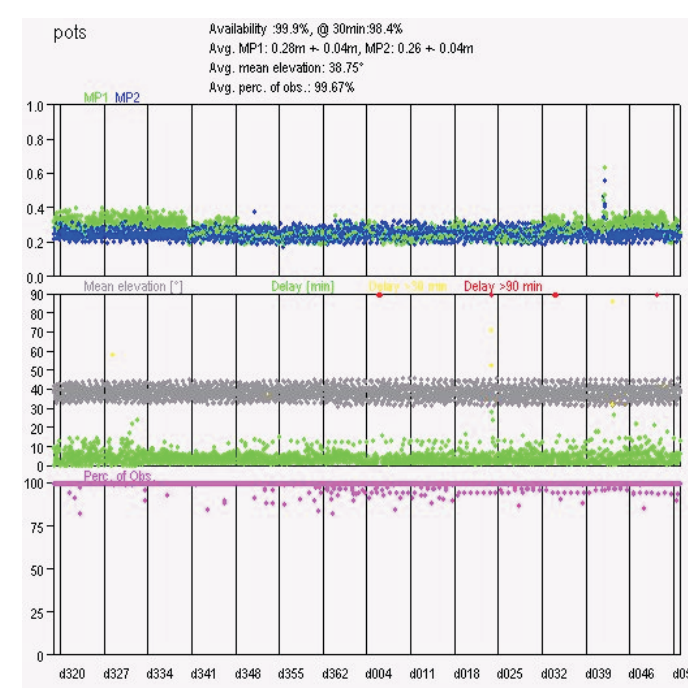
Top: air pressure [hPa],
Middle: temperature [°C],
Bottom: humidity [%]



This figure shows the data arrivals of the last 7 complete days plus the current day, each box represents one day of data (DoY 047 to 054). Each daily box is divided by ticks into the hours of day where up to 4 bars can be found (green: MP1 [0...1m], blue: MP2 [0...1m], light red cycle [0...10] slips, red: delay [0...1h]). The station shows an overall good multipath, no cycle slips and only one delay of more than 1 hour (DoY 050).



Top: readings versus elevation. Y-axis is scaled by readings per epoch per channel to allow the comparison of receivers with different numbers of channels.
Bottom: multipath versus elevation for both frequencies, Y-axis is scaled in meter.



100 days history of the GPS station Potsdam.
Top: multipath MP1 (green) and MP2 (blue), scale is meter
Middle: mean elevation (grey), scale: degree
Bottom: percentage of taken observation versus expected, elevation above 10°