IGS Governing Board Meeting, San Francisco, December 2008

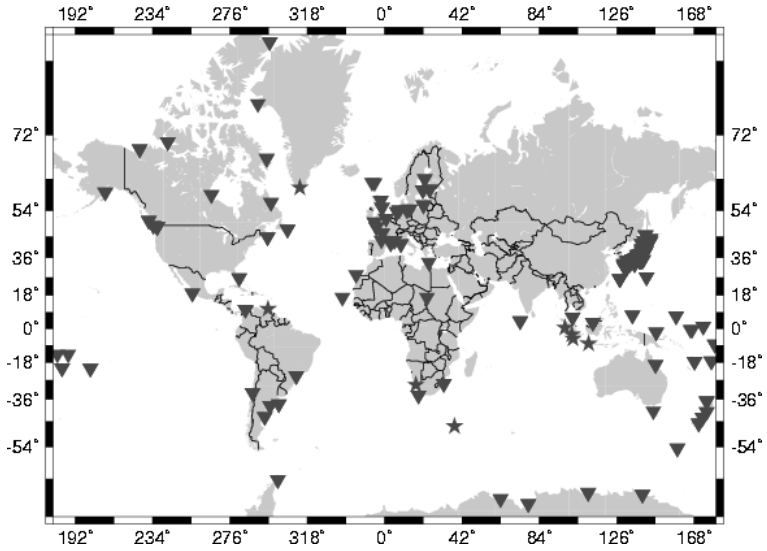
Tide Gauge Benchmark Monitoring Report

Active Participants

Geoscience Australia, EUREF through BKG, CTA through ANU, Deutsches Geodätisches Forschungszentrum München, GeoForschungsZentrum Potsdam, University La Rochelle

Network Status

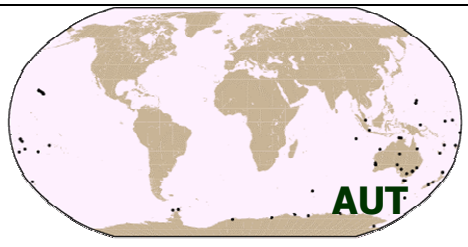
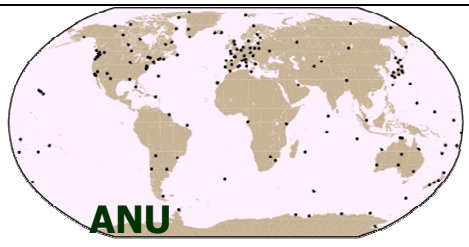
The current network remains constant with around 100 stations. A few stations are proposed for network extension (Indonesia, Marion Island), but no data or TOS forms are available so far. Attempts at the biannual GLOSS meetings as well as individual calls to all tide gauge operators have not been improved the participation.



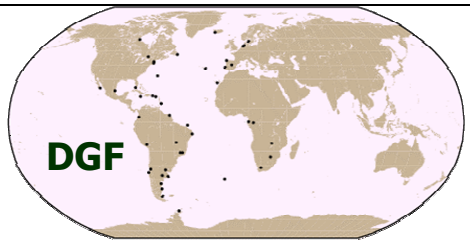
Activities have been planned for the next GLOSS GE XI workshop (May 2009). A one day splinter meeting will identify possible areas for densification based on the scientific revenue. The document can be used to approach operating agencies as well as possible funding agencies.

Reprocessing Activities

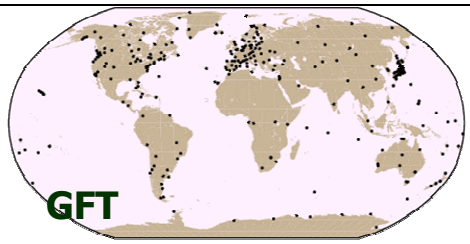
Reprocessing is performed on a continuous basis by EUREF (BKG) only. All other centers are providing data on varying dates with no particular weekly order. The so far longest time series was provided by Geoscience Australia, recently extended to week 1502. CTA/ANU solution is not officially released, but already used for the combination studies. DGFI provided the second largest reprocessed series, followed by ULR. ULR is currently performing a reprocessing using a later GAMIT version, with improved solution strategies. GFZ is half-way and is continuing. Activities are coordinated with IGS reprocessing.

	
GEOSCIENCE Australia	Australian National University, may replace the CTA solution, but not officially yet

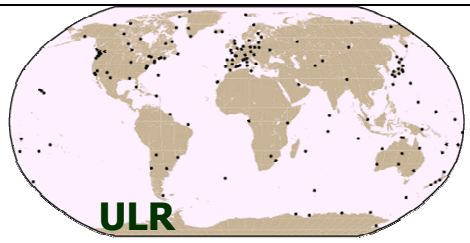
EUREF Contribution



DGFI München



GFZ Potsdam



University of La Rochelle

AC	First week	Last week	Time span	# weeks available	# weeks missing
AUT	0887	1502	616 weeks	616	0
(ANU) CTA	1201	1423	224 weeks	218	6
DGF	1043	1492	450 weeks	447	3
ETG	1400	1505	105 weeks	103	2
GFT	0960	1459	500 weeks	338	162
ULR	0992	1341	350 weeks	308	42

Table: Numbers and time span of available TIGA-SINEX files, using relative PCV's. Data is available at http://adsc.gfz-potsdam.de/tiga or via FTP.

Combination

A first combination based on a reduced set of contributions has been carried out in mid 2008. Due to the limited number of common stations, the results have not been made public. Currently a new combination is in preparation and may be completed by end of 2008. This combination will be provided to TAC'S and TAAC's for evaluation. However, the combination needs to be regularly repeated due to the unpredictable availability of additional or reprocessed solutions. The manpower restrictions at GFZ for doing the combination does not allow for a continuous, but for infrequent updates only.

Recent developments

Mention above is the planed cGPS@TG meeting during the forthcoming GLOSS GE meeting. A draft agenda for the tide gauge aspects is currently prepared by Gery Mitchum (GLOSS Technical advisory group chair) and Mark Merrifield (GLOSS GE chair). The workshop will focus on the improvement of the network structure and the broadening of participation.

A workshop is planned for 2009 focusing on GPS aspects of TIGA and the scientific benefits of TIGA. The agenda needs to be coordinated with the above mentioned workshop. Date and venue is open.

TIGA remains very much science driven and has not yet developed into a service function.