IGS/BIPM Time Transfer

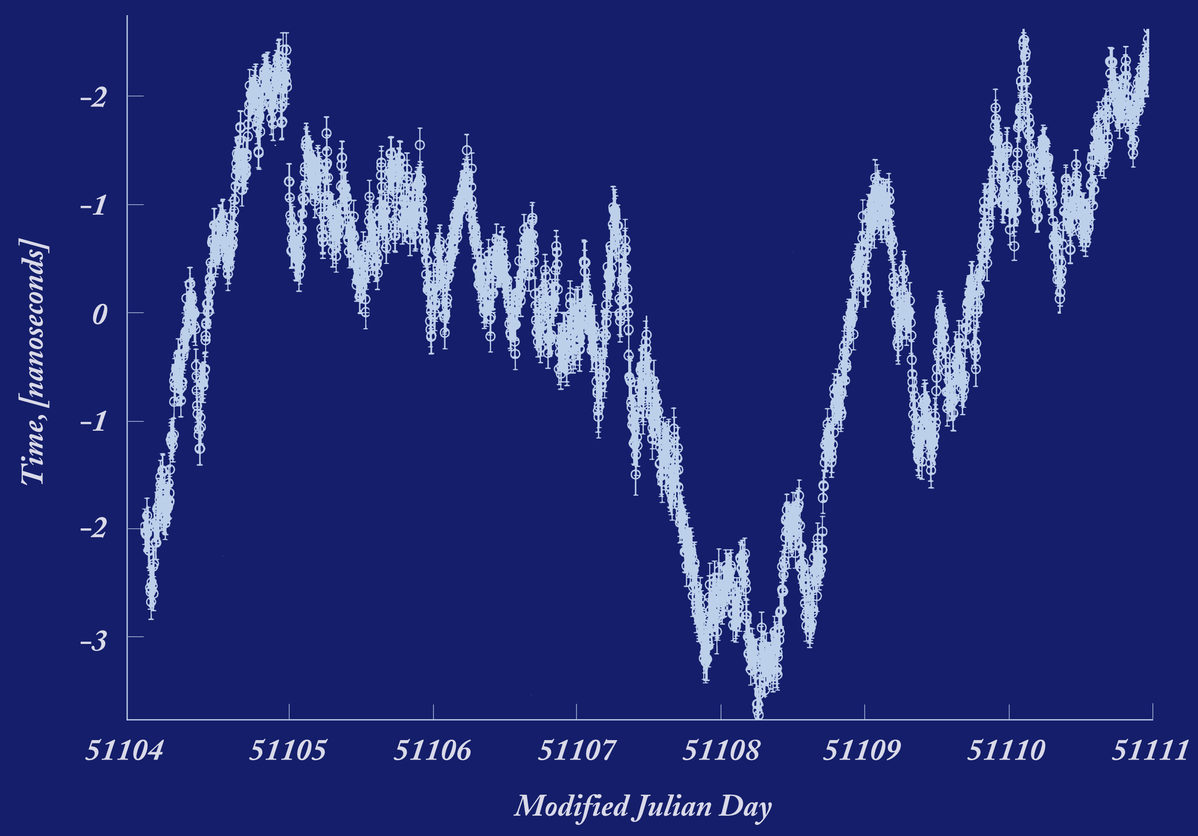
PILOT PROJECT

http://maia.usno.navy.mil/gpst.html

The goal of this Pilot Project is to investigate and develop operational strategies that will exploit GPS measurements and geodetic techniques for improving the availability of accurate time and frequency comparisons worldwide.

In an effort to improve global accessibility to accurate time and frequency using GPS, this group works toward

- Analysis of instrumental delays to relate GPS-derived clock estimates to external timing standards.
- Accurate satellite clock estimates fully consistent with other IGS products.
- Accurate station clock estimates for as many IGS sites as possible, in a manner fully consistent with other IGS products, together with accurate monitor data related to external timing standards.
- An accurate and stable reference ensemble timescale for use in IGS products to improve GPS time.



A comparison of GPS-based time differences between GRAZ (Graz, Austria), using a cesium clock, and USNO (Washington, DC), using an H-maser. The modified Julian day corresponds to GPS week 980: the calendar week of October 18–24, 1998. (Removed slope: -0.106346 E-07 seconds/day).

IGS Stations Located at BIPM Timing Laboratories

IGS SITE	TIME LAB	GPS RECEIVER	FREQUENCY STANDARD	CITY
AMC2	AMC	AOA TR with ACT	H-maser	Colorado Springs, CO, USA
BOR1	AOS	AOA TurboRogue	cesium	Borowiec, Poland
BRUS	ORB	AOA TurboRogue	H-maser	Brussels, Belgium
GRAZ	TUG	AOA TurboRogue	cesium	Graz, Austria
MDVO	IMVP	Trimble 4000SSE	H-maser	Mendeleevo, Russia
NRC1	NRC	AOA TurboRogue	H-maser	Ottawa, Canada
PENC	SGO	Trimble 4000SSE	rubidium	Penc, Hungary
SFER	ROA	Trimble 4000SSE	cesium	San Fernando, Spain
TOUL	TA(F)	AOA TurboRogue	cesium	Toulouse, France
USNO	USNO	AOA TurboRogue	H-maser	Washington, DC, USA