

NIST STATION REPORT

TWSTFT Working Group Meeting November 16, 2005 Delft, The Netherlands

Not Much Has Changed

- New LNA and filter installed at satellite change (10.95-12.2 GHz, was 11.7-12.2)
- Equipment List
 - -3.7 meter Andrew dish, motorized
 - Miteq up-converter, U-9456-1-1K
 - Miteq down-converter, D-9408-1-1K
 - -1 watt HPA
 - SATRE 78, two channel, V4.9.67
 - SATRE 263, two channel, V4.11.15 (backup)

Not Much Has Changed

- Equipment List (Continued)
 - System fully automated
 - Monitor 8 environmental parameters plus microwave power
 - Low temperature coefficient cables (70 MHz)
 - Heater in hub (keeps temperature above 0 C)
 - Clock source for TWSTFT is UTC(NIST) (steered maser ensemble)
 - Calibration via GPS

Data Reduction

- 0.5 second time tag error corrected in 1 second data (average two adjacent points)
- Standard quadratic fit used on 120 one second data points
- 12 sessions per day
- Post ITU format file on ftp site clock.bldrdoc.gov pub/twstt/intlfmt (do not post 1 second data)