

Laser Ranging Ground System

- **Progress**
 - One-way system delay measurement at NGSLR completed 2/9/2009. Documentation being written. One-way (fire-side) delay is -17ns.
 - Independent timing test at NGSLR with Instrument Scientist was completed 1/12/2009. NGSLR passed.
 - End to End test with LOLA performed 1/21/2009. Everything looked good except for some data transfer and some lingering clock issues.
 - All requirements for NGSLR have been verified.
 - SCLK subroutines and documentation (for ILRS participating stations that will fire synchronously) have been delivered and are in use.
 - Herstmonceux and Zimmerwald have signed Agreements and are flowing test LR data, as is MLRS. Wettzell has turned in a proposal.
 - Training of operators at NGSLR in progress and ramping up.
- **Issues & Risks:**
 - Disruption to LRO-LR due to NENS to SCNS contract change (!)

Global LR Ground Stations

	Scheduling & Synch?	FireRate	in Earth Window	Events/second	Participation
NGSLR	YES	28Hz	28		Primary
MLRS	NO	10Hz	2 to 4		Secondary
Zimmerwald	YES	28Hz		28	Accepted
Herstmonceux	YES	7 or 14Hz	7 or 14		Accepted
Mt Stromlo	YES	28Hz		28	Proposal
Wettzell	Maybe	7 or 10Hz	2 to 7		Proposal in
MOBLAS-5&6	NO	5Hz	1 to 2		Being developed

- Instrument Scientist (Xiaoli Sun) is currently working with MLRS and will work with Mt Stromlo and Wettzell on damage concerns.

- Formal Agreements between Zimmerwald and LRO, and between Herstmonceux and LRO, have been signed.

- MOBLAS fire measurement subsystem is in development. Timing card has been tested and performance looks good. Data collection SW is being written. With any luck we'll get this completed and tested by May.