# Session 8 summary: Advanced Technologies II

Friday 31<sup>st</sup> October

ILRS 19<sup>th</sup> Workshop, Annapolis, USA

We heard that stations have improved their operations with upgrades:

- Herstmonceux has upgraded its kHz laser and is hoping for a productive and more reliable system.
- Evan Hoffman described the timing system upgrades he oversaw at the Potsdam and the Riga stations.

We also heard that stations are moving forward in their operations:

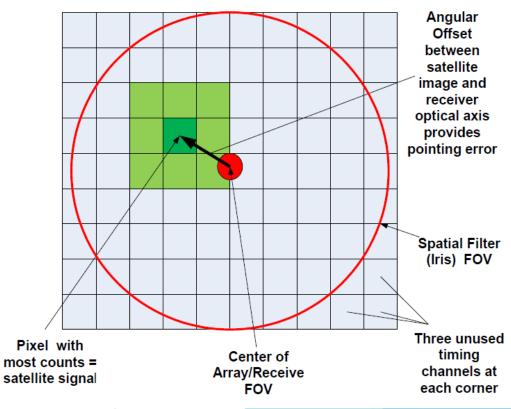
- Stefan Riepl described how the Wettzell satellite observing system is operational and has collected more than 200 pass so far in 2014.
- The station data is currently in quarantine for analysis.



We also heard that stations are moving forward in their operations:

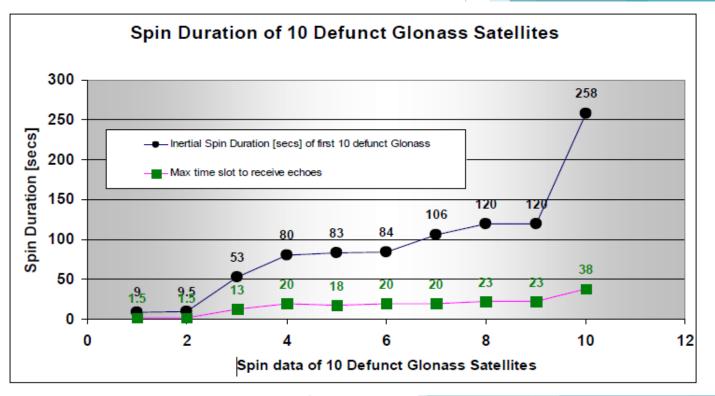
- With NGSLR moving toward a future deployment stage, John Degnan proposed an NxN segmented MCP/PMT.
- This would allow improve pointing correction and noise filtering.

#### **10x10 Array Example**



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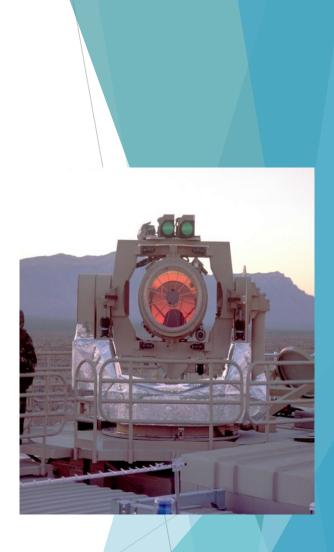
- The Graz station now tracks 110+ satellites, including defunct Glonass satellites.
- Georg Kirchner showed that each Glonass satellite is spinning at a different rate.



And we heard plans to develop a new station:

Clement in Grasse proposed a new system to:

- improve high elevation tracking
- Automate and ensure sky safety
- Improve metrological performance



New techniques is the session included:

- Herstmonceux improved their satellite search technique by making small improvements to the pointing during data tracking.
- Grasse demonstrated airplane spotting with a camera
- Wettzell are developing an aircraft safety LIDAR.

