Station Operational Issues - an analysis perspective

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Input

• The aim is to open a discussion between the Network and its analysis customers to lead to a more informed and hence more productive use of tracking opportunities.

• Analysts, particularly the Analysis Working Group, provided general comments and responses to the following broad (brainstorming) issues;
Issues addressed (1)

Number of normal points and/or time-distribution of normal points within the pass;

_ Minimum number of normal points per pass? Ideally AOS, PCA, LOS
_ What is still useful? Any GOOD data!

Dedication of stations for specific satellites or missions

_ In dense clusters like Europe:
  • Does it make sense to have all stations abandon Lageos to track Ajisai, Starlette, etc? Really only need AOS, PCA, LOS for science, but whole pass for QC
  • should we do some optimization using the real-time status exchange capabilities? This would be very useful:
Optimisation of tracking

• Rotate stations/satellites – achieve a mix relative to stations;
• Encourage the most able stations to tackle the difficult targets;
• Simultaneous tracking is only of marginal value;
• Develop a history of global tracking based on EUROLAS display – rising priority for a satellite not tracked for \( n \) time-units;
• Consider a dynamic, graphical indication of current priorities.
Issues addressed (2)

Submission of np data to the data centers or directly to prediction centres:
- To whom and how fast for quick improvement of predictions/time bias functions Provided passes are not missed due to poor predictions, current process should remain - must maximize data yield

What is more important? Small single shot RMS or large number of single shots per normal point
Minimization of systematics is of prime concern - not precision, but accuracy!
- both result in the same RMS of the normal point
- Important to know for future on-site investments
Issues addressed (3)

Single photon vs multi-photon.

_ What do the analysts prefer Minimization of systematics is of prime concern- stay in one regime!

Dual-wavelength data:

_ What can be done with it; Almost certainly of value, not fully exploited (by analysts) yet _ stations to be encouraged. What should be avoided; what is essential. Get the data to the centres.

Where are the current limitations in the analysis capabilities?

_ Limited by: All of the below! Global distribution is now getting much better, with good S. Hemisphere sites.
  • Data quality, quantity, spatial distribution?
_ Where could the Network/Stations do better? For general discussion