29th July 2015

Attending:

Scott Daniel

Peter Yoachim

Darko Jevremovic

Steve Ridgway

Zeljko Ivezic

Kem Cook

Simon Krughoff

Bryce Kalmbach

Cathy Petry

Michael Reuter

Rahul Biswas

Lynne Jones

George Angeli

Kem's demo of OpSim multi-visit wide-fast-deep proposal

- Implemented and tested (same configuration as enigma_1189)
- Includes Galactic, South Celestial Pole, and North Ecliptic Spur proposals.
- 10 year runs. WFD asks for either 2, 3, or 4 visits per field per night.
- Histogram of number of fields with N-visits per field per night shows expected behavior.
- More visits per field per night is harder (smaller fraction successful with 4 visits per field per night requested than 2 visits per field per night).
- Should come up with statistic that takes into account the time between visits.
- MAF analyses done on these runs.
- Mean slew time goes up as you ask for more visits per field per night.
- Total number of visits does go down as you ask for more repeat visits, but not dramatically (all about 2.4 million visits per night)
- Asking for triples and quadruples does not interfere with ability to complete WFD proposal.

Baseline cadence question

- Difference between enigma_1257 and enigma_1189: 1189 might have 2 consecutive observations of a field in SCP and Galactic Plane. This was a unintentional.
- Unclear whether this means enigma_1257 should be the baseline cadence. There are not a lot of instances where this bug comes into play.
- Zeljko would rather stick with enigma_1189 as the baseline cadence.
- Kem thinks enigma_1189 is fine.

Status of other OpSim runs

- All of the runs Zeljko requested should be done by this Friday (July 31)
- Newest version of MAF is running on these runs
- Results should be ready by Wed Aug 6

Rolling Cadence

- Bug in recent implementations of "area coverage".
- Need to wait for Francisco to return to track down the bug.
- Rolling Cadence tests have not been successfully completed.
- Have a few 1-year runs.
- "Swiss Cheese" runs complete (e.g. ops2_1102). Contains 1/10 of WFD. Did okay when run through older MAF. All of the fields complete to ~ 90% of SRD.
- WARNING: more recent run with same MAF parameters gives inconsistent output.
- Kem: User regions uses for WFD should be changed. Apparently, we have been working with an observatory location that is not Cerro Pachon. South user regions go half a degree too far north. North user regions go half a degree too far north. Observatory latitude was off by 0.5 degree, so WFD is asymmetric by 0.5 degree.
- Zeljko: should we look at ops2_1102 and analyze it? Kem: Yes. 1102 is purely WFD. It does not have other proposals. Just trying to optimize rolling cadence.
- enigma_1260, enigma_1261 may be better, but MAF says ops2_1102 is better. However, the MAF run preferring 1102 is an old MAF version. Need to run 1102 with new MAF. Compare to enigma_1260.
- Zeljko: don't yet have metrics that demonstrate Rolling Cadence runs are behaving the way they should. Need to develop that. Kem thinks Peter's transient metric might perform that function.

Lynne's moving object metric

- Not an official part of MAF, yet.
- https://github.com/rhiannonlynne/MafSSO/blob/master/ExampleMoObs.ipynb
- https://github.com/rhiannonlynne/MafSSO/blob/master/ExampleMoMetrics.ipynb