Development Plans Fall 2014

Development Highlights for Fall 2014

All:

- Write up the simulation framework codes into papers: papers will be based off the SPIE versions (ie expanded). This would provide a set of refereed papers for opsim, catsim, maf that people can cite.

Peter:

- Sky Model
  - Start with Chuck's data and generates sky variations as a function of time
  - Evaluate ESO model
- Calibration sims (as needed)
- Community support of MAF
- Dust maps
  - Implement in healpix (update photutils)

Lynne:

- Solar system
  - Implement solar system metric
- Visualization
  - Freeze the current web interface and then give to Cathy to write more opsim development metrics and plots
  - Mozilla work on iteractive viz
  - Nan-Chen work on collaborative viz

Scott:

- Complete catsim clean up
- Implement variability model
- Implement footprint model in catsim then MAF

Bryce

- Finish bulge star density evaluation and write up (internal report then paper)
- Finish PCA on stars/galaxies and implement for cats and phosim (write up as a paper)

Cathy

- Finalize what functionality needs to be in MAF to replace SSTAR
- Learn to write metrics and implement any required metrics for opsim in MAF
- Implement new plots in MAF required for evaluation of Tier 1 runs

Francisco

- Generate a breakdown of tasks for the refactoring of opsim to produce telemetry data and to modularize the scheduler component
- Produce a design for the OCS/Opsim framework and submit for design review (including libraries, data structures, api and methodology for the communication)
- Start the refactoring

New Hire

- Learn the opsim code base and LSST tools
- Work with Francisco and support the OCS/Scheduler development plan

Kem

- LSE-190, Scheduler Requirements.
- Scheduler experts workshop
- Evaluate Tier 1 and rerun if necessary

Veljko:

- Event Broker
  - Generate small number of diasources based on variability (nominal catalog vs time specific catalog) - base off variabilityReferenceCatalog.py
  - Create initial voevent package and broadcast locally for the brightest sources (small numbers)
  - Visualize output (e.g. distribution on sky) using existing voevent tools
  - Modify the output parameters for the catalogs to reflect the object schema (or diasource schema) that DM expects