Release Notes for Opsim2.6.1 Aug. 30, 2012
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New fix:
* Fixed bug that disabled twilight visits by the end of some nights, due to poorly implemented reuse count in a per proposal basis. The suggestObservation loop in ObsScheduler was rewritten, using a single global reuse count, and only one targets table.

Release Notes for Opsim2.6 Jul. 19, 2012
==========
New feature:
* New Database access layer
  Using a single connection variable to the database.
* Improved repeatability
  Sorted keys in dictionaries for handling targets.
* Nested Sub-sequences
  A subsequence can have a nested subsequence for new deep-drilling science programs.
* Telescope model optimizations
  Transform activity tree building from dynamic to static.
* Added functionality for different filters to have different exposure times
  By adding a new parameter in Filters.conf

Release Notes for Opsim2.5-Michelle Jul. 19, 2012
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rTag :
* rTagging version with all of Michelle's changes

Release Notes for OpSim2.5 Jul. 6, 2011
==========
New feature: Scheduled downtime
* Added scheduled downtime into the scheduling code, replacing our stopgap solution of static downtimes injected into the weather dataset.
* The timing and duration of scheduled downtimes is now user-settable with a configuration file, schedDown.conf. The default file meets the frequency specified by Chuck Claver.
* Removed old classes that are no longer used, namely NonObsScheduler, NonObsHistory, NOB, and Operations.
* Removed code that creates the weather data with injected scheduled downtime.

New feature: Random downtime
* Added a tool to generate a sequence of random downtimes in the format of an OpSim config file. A user can then choose which file to use in a given simulation.
* Created a new downtime table in database, downHist, so NOBHist can be deprecated without breaking backwards compatibility with previous releases.
* Scheduled downtime is given precedence in the case of conflicting downtime events. Random downtime is allowed to finish the fraction of time remaining, if any, after scheduled downtime completes.

New feature: Optimization of cloud and seeing accesses
* Replaced a database read for every call to get cloudiness and seeing with an access to in-core data dictionaries of clouds and seeing for

the night.
* The structures are built at the start of night.

Minor changes and bug fixes:
* Separated system-level seeing degradation components. Only telescope component degrades with zenith distance.
* Fix problem with exclusive block sequence code interacting with reuse ranking by proposal code.
* Corrected assumption that more than one filter will be used by survey. A simulation using just one filter can now be run.
* Fixed performance problem introduced by reuse ranking by proposal change. getSeeing() and getTransparency() were being called for every observation instead of every reuseCount observations.

KNOWN Problems:
* Sometimes when completing a sequence, we try to remove the fieldID of the completed sequence from Supernova deep drilling proposal's self.tonightTargets[] and find it has already been deleted. Added debugging in this release to help track how this is happening.

Release Notes for OpSim2.4 Jun. 16, 2010

New feature: NEO Sweet Spot proposal
* Added hiatus to next night parameter to turn a proposal off for X nights.
* Track and report solar elongation of observation. Observe if within limits for NEO Sweet Spot proposals. Added solar elongation parameter.
* Fast revist times require reuse=1 or reuse=2, which slows simulation past useable. Rewrote scheduling to allow each proposal to set its own level of reuse so proposals with lengthy or no revisit needs can have many observations taken without needing to be reranked.

Minor changes:
* Local sidereal time should always be postive.
* Change name of SCP Galactic proposal (south celestial pole).
* Track and record count of nights with each observation (ObsHistory) and in TimeHistory.
* Code cleanup to remove extra calls and unused code.
* Bringing NearEarthProp.py to running state with current code base. It has been unused.

Release Notes for OpSim2.3.2 Aug. 14, 2009

Minor changes and bug fixes have been made.
* Change seeing degradation from telescope/camera from stretch goal to design goal and multiply effect by airmass to 3/5ths.
* Correct 'y' sky brightness in twilight to be the same as 'z'.
* Reset camera rotator to zero position during a filter change.
* Add sort to suggested observations list for low airmass, dark sky brightness, and fieldID to help with reproducible runs (initial commit).
* Correct error in accessing weather table that kept opsim from using the last year of weather data.

Release Notes for OpSim2.3.1 Apr. 22, 2009

Minor changes and bug fixes have been made.

* Add scheduled downtime to 10-year and 3-year weather datasets, creating cloudTololoSD and cloud3yrTololoSD tables respectively.
* Record OPSIM_VERSION in run log.
* New Installation Guide.
* New post-processing tool to calculate filter sky brightness and ETC sky brightness.
* Calculate and store actual airmass at time of observation.
* Remove sky brightness cache to enforce minimum distance to moon limit on observing.
* Change post-processing movie-making script to create a frame every X days and update documentation.
* Cleanup unneeded configuration saving routines.
* Add usage string for --startup_comment command-line option to main.py.
* Fix airmass cache to use correct parameters and set to off.
* Update configuration files to new baseline run (opsim1.29).

Release Notes for OpSim2.3 Jan. 9, 2008

Only minor changes have been made to the Operations Simulator since the last release OpSim2.2.

* Script that dumps sql table and data in a form that allows the table to be reconstructed.
* Run tracking. Production runs require a description.
* Enhance precision of time accounting (exposure vs. slew, end of night).
* Flush sky brightness cache at both twilight/dark time boundaries to get crisp switch to or from twilight filters.
* Account for moon down in filter sky brightness calculations.
* Account for crawling motion of the dome in azimuth slew model.
* Tag each run with the code version that generated it
* Add a backup proposal to make sure telescope always has targets to observe.
* Better tessellation of sky into fields.
* Account for scheduled downtime by changing the cloud tables.
* External library updates.