The LSST Scheduler Overview and Performance

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ABSTRACT

This is a paper about the LSST scheduler, how it works, how we've determined the survey strategy, and how well we expect the survey strategy to do in reaching the LSST survey goals.

1. INTRODUCTION

2. OVERVIEW OF TELESCOPE SCHEDULING

Summary of the general requirements for LSST scheduling (autonomous, reconfigurable, responsive to conditions, etc) this section should show what the problem was that we were trying to solve

3. SURVEY STRATEGY GOALS

Tag: Lynne SRD goals, science goals .. overview and reference other material, but this section should show what we're trying to do for our survey

4. LSST SURVEY SIMULATOR

Tag: Tiago Environment for testing the scheduler - weather and telescope model. And how they'll be used in operations too.

5. LSST SCHEDULER

Tag: Peter How does the scheduler work? What IS that double rainbow thing in the sky? What is the general idea?

5.1. Surveys and Basis functions

What are we balancing in the scheduler for most observations?

5.2. Scripted surveys

What do we do when it's more specific?

6. LSST SURVEY STRATEGY

Tag: Lynne How we've configured the scheduler to achieve our goals. How well we think we'll do answering all the astronomy questions.

6.1. Process for determining best strategy

Metrics and community and SCOC and SAC

6.2. Adjusting survey strategy

How can we adjust the strategy if it doesn't seem to be working or we change our goals?

7. VERIFICATION??

Does the separate Verification During Commissioning paper exist (or should it?) Should that go here?

8. CONCLUSIONS

APPENDIX

A. REFERENCES

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Acronym	Description
DAQ	Data Acquisition System
DM	Data Management
EPO	Education and Public Outreach
IS	Interface Scientist
LPM	LSST Project Management (Document Handle)
LSE	LSST Systems Engineering (Document Handle)
LSST	Large Synoptic Survey Telescope
LaTeX	(Leslie) Lamport TeX (document markup language and document preparation system)
NEO	Near-Earth Object
OpSim	Operations Simulation
SAC	Science Advisory Committee
SRD	LSST Science Requirements; LPM-17
TBD	To Be Defined (Determined)

B. ACRONYMS