2nd May 2014

Notes from the 2 May 2014 meeting of the simulations group.

Attendance was taken by asking all people on the phone to log on to the HipChat simulations room. This mechanism worked fairly well. Those who were not able to log on to the chat room were able to indicate their presence by voice. Please update the list if I missed anyone.

Attendees: Jim C., Srini, Mario, Lynne, Richard, Chris W., Steve R., Cathy, Kem, Kirk G., Michael, Debbie, Heather, Peter, Simon

Breakout suggestions:

Title: Systems Engineering Integrated System Database

Description: This is a meeting to talk about how to build a database that can contain and version all the information needed to describe the LSST system. There will be interfaces so that all subsystems of the project can use the same parameterization of the overall LSST system.

Organizer: AJC

Number of hours needed: 3

Who: Representative from simulations (opsim/phosim/catsim), systems engineering, camera, data management,

telescope How many: 15

Constraints on schedule: None

Title: Applications of PhoSim for Wavefront Sensing & Optical Performance Simulation

Description: Organizer: JRP

Number of hours needed: 2

Who: phosim, wave front sensing team, camera, T&S, DM

How many: 15

Constraints on schedule: None

Title: Applications of PhoSim for Sensor Simulation

Description: Organizer: JRP

Number of hours needed: 2 Who: PhoSim, Sensor, Camera, DM How many: 15

Constraints on schedule: None

Title: PhoSim Science Applications & Tutorial

Description: There was a question about whether the time allotted is enough. From Debbie's experience 2 hrs

is just enough time to get up and running. Anything more will require more time.

Organizer: JRP

Number of hours needed: 2

Who: PhoSim, DM, Science collaboration members

How many: 25

Constraints on schedule: None

Title: Bridging the gap between algorithm development simulations and DM

Description: There is a lot of work going on simulating simulator effects and on the algorithms to correct for them. Much of this work is outside of DM, but the algorithms will inform DM and results from DM processing will feed back into algorithm development and simulation fidelity. What is the process for directing the feedback between these three systems?

Organizer: I'm putting Chris Walter down since he brought it up.

Number of hours needed: 3

Who: Camera, PhoSim, DM, Others working on algorithm development

How many: 10

Constraints on schedule: None

Title: Integration of DM CameraGeom into other work

Description: Many subsystems need to know about they layout of the camera relative to other coordinate systems (pixels, focal plane, pupil). DM has worked on solving the problem of mapping from one system to another and others may be interested in making use of this work.

Organizer: KSK

Number of hours needed: 2 Who: CatSim, PhoSim, Camera, DM

How many: 10

Constraints on schedule: None

Title: Development requirements on project wide models (Sky, sensor properties, cloud, etc.)<U+2028>Description: Description: There are many models in use in different simulation efforts (cloud, sky, sensor), but currently none of them have project wide implementations. This breakout will discuss the models that need to be project controlled and what the interfaces are for those models. We do not intend to discuss the implementation of the models.

Organizer: KSK or Lynne Jones Number of hours needed: 3

Who: PhoSim, CalSim, CatSim, DM, Camera

How many: 15

Constraints on schedule: None

Title: PhoSim Users Group

Description: Complimentary to the other PhoSim users meeting, this breakout will be an introduction to the

PhoSim users group as well as provide a venue for sharing results aquired by using the PhoSim

Organizer: Kirk Gilmore, Debbie Bard

Number of hours needed: 3

Who: PhoSim, CatSim, Science Collaboration

How many: 20

Constraints on schedule: Broadcast at wide scientific audience.

Title: MAF breakout; Tutorial

Description: There is an intro session on Monday morning. Should there be another breakout?

Organizer: Lynne Jones Number of hours: 3 Who: Science Collaboration,

How Many: 15

Constraints on schedule: None

Title: Dealing with data from test instruments at Cerro Pachon an Cerro Tololo **Description**: Functionally, how do we handle taking the data. What interfaces need to be in place to be able to use the data that come from instruments installed on the summit?

Organizer: Chuck?, Lynne? Number of hours needed: 2 Who: PhoSim, DM, Simulations, T&S How many: 10

Constraints on schedule: None

Title: Incorporating the Sky (and cloud?) Camera into Simulations Models

Description: This is may be included in the previous breakout. Not only does the data need to make it into the hands of the people how can use it, but it also needs to be incorporated into models. How do we use these data to simulate calibrations and do the end to end tests validated by data from

the test instruments?

Organizer: MWV, T&S, Lynne (someone else?)

Number of hours needed: 3

Who: System Engineering, T&S, PhoSim, CalSim, DM,

How many: 10-15?

Constraints: After the breakout that discusses the functional aspects of taking the test instrument data.