

# Apps Status Report for June 15, 2010

## Guide on Reporting Percentage Completed:

For software development tasks,

- use 0% if the solution is still being designed;
- use 25% if the solution's design is completed;
- use 50% if the solution is implemented and tested within the Ticket branch;
- use 75% if the implementation review is complete, the Ticket branch has been merged onto the Trunk branch, and the Ticket is closed.
- use 100% if the affected Trunk packages are tagged and released.

For other tasks, still use these increments, but apply their meaning as best as possible.

**Note:** Please place an asterisk (\*) after the percent if you updated this value in this report.

## Allsman Robyn

Reported 17 June 2010

ID	Percent	Task	Comments
APP200	79%*	validate initial integration run successfully completed	

\*Percent updated in this report

Comments:

- The lsst cluster pipeline status including orchestration from ISR through SFM has not changed from last month. We still await the handshake necessary to integrate the final sub-pipeline (SrcAssociation?) into the full pipeline.
- The pipeline on ABE is not integrated with orchestration; the hand-orchestrated SST pipeline from ISR to SFM is operational on ABE.

## Other Activities

- In preparation of resuming source standards verification, the LSST environment on the Parasoft host system was rebuilt.
- The upgrade to Enterprise Architect 8.0 permitted the inclusion of Jeff Bartel's new LSST tools supporting automatic generation of integration test descriptions from use cases and activity diagram, and supporting automatic simplification of reverse engineered logical diagrams. Exercising the new LSST tools has uncovered an Enterprise Architect bug. A (tedious) workaround was developed.
- Two weeks of vacation was also much appreciated.

## Axelrod Tim

Reported xx/xx/xx

ID	Percent	Task	Comments
APP155	0%	photometric self calibration	<i>not started</i>
APP56	80%	defining units	
APP261	20%	create calibration catalogs for CFHTLS	
APP291	0%	create input data for <u>ImSim</u>	<i>not started</i>
APP263	50%	identify set of images for compression tests	
APP260	90%	define DC3b data quality requirements	
APP204	0%	identify scientists to analyze stage output	<i>not started</i>
APP199	0%	PT1 best efforts science data analysis/validation	<i>not started</i>
APP191	50%	Provide special case simulation needs (Axelrod)	

\*Percent updated in this report

Comments:

### Other Activities

## Becker Andy

Reported xx/xx/xx

ID	Percent	Task	Comments
APP246	25%	update Diff-Im post design review (ticket 1176)	
APP245	25%	implement correlation function for spatial kernel fit (ticket 1140)	
APP100	0%	test difference imaging coadds	<i>not started</i>
APP247	40%	code to measure quality of difference imaging coadds	
APP123	0%	find CFHT fringe frames and move to NCSA	<i>not started</i>

\*Percent updated in this report

Comments:

### Other Activities

## Becla Jacek

Reported 06/18/10

ID	Percent	Task	Comments
APP54	50%	schema updates for all exposure related tables	
APP55	0%	synthetic sources of data	<i>not started</i>
APP56	80%	defining units	

\*Percent updated in this report

Comments:

See middleware report

## Other Activities

### Bickerton Steve

Reported xx/xx/xx

ID	Percent	Task	Comments
APP295	25%	stellar photometry	
APP256	0%	compute statistics on a sky pixel masked image	<i>not started</i>

\*Percent updated in this report

Comments:

## Other Activities

### Dubcovsky Martin

Reported 06/17/10

APP108	100%*	implement convolved Sersic models	<i>Done</i>
APP118	75%*	implement multifit pipeline which leverages multifit API and image access framework	<i>waiting on resolutions of issues in image access</i>
APP119	75%*	implement pipeline stage for extracting ellipse parameters, flux, and bounding box from detections	<i>All C++ code for this stage done</i>
APP117	100%*	implement constrained models for forced photometry	<i>Done</i>
APP116	10%*	create LSST stages for photometry	<i>All C++ code for this stage done</i>

\*Percent updated in this report

Comments:

## Other Activities

### Good John

Reported xx/xx/xx

ID	Percent	Task	Comments
APP226	0%	code PT1 SUI tools	<i>not started</i>

\*Percent updated in this report

Comments:

## Other Activities

### Jarvis Mike

Reported 06/17/01

ID	Percent	Task	Comments
APP105	50%	PSF for deep detection	

\*Percent updated in this report

Comments:

## Other Activities

### Jones Lynne

Reported xx/xx/xx

ID	Percent	Task	Comments
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\*Percent updated in this report

Comments:

## Other Activities

### Krughoff Simon

Reported 06/18/2010

ID	Percent	Task	Comments
APP84	0%	apply fringe frame correction	<i>not started</i>
APP83	*100%	develop camera state classes (CCDinfo and Ampinfo)	With RHL's camera geometry classes, I think this is no longer needed
APP82	*100%	develop calibration products database classes	KTL's butler classes do this job
APP253	*100%	implement ccd assembly code with appropriate stage code	
APP252	*100%	test camera geometry classess with <u>ImSim</u> LSST focal plane model	
APP251	18%	implement <code>datarel.IsrStageUnit?</code> Test	
APP250	*100%	write stage dictionaries and unit tests for <code>ValidateMetaData?</code> and <code>CalibrationDataProducts?</code>	There is no longer a validate metadata stage
APP249	*100%	create policy files for <u>ImSim</u> camera geometry	
APP254	*100%	move saturation and defect correction to the CCD assembly stage	

\*Percent updated in this report

## Other Activities

Comments:

## Other Activities

### Laher Russ

Reported 6/18/10

ID	Percent	Task	Comments
APP90	25%*	implement SDQA tool functionality to support DC3b goals	Thoth, v. 0.3 is available
APP89	25%*	query metadata and package in C++ container	ISR harvester stage at AMP and CCD levels are in PT1
APP88	0%	implement threshold comparison	<i>not started</i>
APP211	50%	WCS verification code	
APP210	75%	ATpy evaluation	
APP283	25%*	identify existing sdqa metrics	Got list of ISR metrics from Simon
APP282	0%	code to validate ISR pipeline outputs	<i>not started</i>
APP281	5%*	code to validate IC pipeline outputs	Wrote C code to locate cosmic-ray pixels in <u>ImSim</u> images; sent source code to RHL
APP280	0%	code to validate image subtraction	<i>not started</i>
APP288	0%	code to validate detection of sources in subtracted image	<i>not started</i>
APP290	0%	code to validate association pipeline	<i>not started</i>
APP287	0%	code to validate deep detection and measurement pipeline	<i>not started</i>

\*Percent updated in this report

Comments:

## Other Activities

Trac tickets [#1308](#) and [#1310](#) implemented. Worked on ant build script for Thoth.

### Levine Deborah

Reported 06/18/10

ID	Percent	Task	Comments
APP90	0%	implement SDQA tool functionality to support DC3b goals	<i>not started</i>
APP229	85%	identify tools to support PT1 data analysis	
APP227	50%	manage PT1 data access tools task	<i>not started</i>
APP235	0%	design and document SUI in UML	<i>not started</i>

\*Percent updated in this report

Comments: Continue working with John Good on Gator (catalog search tool) interface for PT1. Interface is working and under test by IPAC science staff.

### Other Activities

## Lim KT

Reported xx/xx/xx

ID	Percent	Task	Comments
APP6	0%	interslice communications	<i>not started</i>
APP7	0%	post spatial matching (stretch goal)	<i>not started</i>
APP192	75%	translate overall production into pipeline, stages, and policies	

\*Percent updated in this report

Comments:

### Other Activities

## Lupton Robert

Reported xx/xx/xx

ID	Percent	Task	Comments
APP139	0%	integrate HEALPix into software stack	<i>not started</i>
APP100	0%	test difference imaging coadds	<i>not started</i>
APP121	50%	adapt astrometry code for DC3b use	

\*Percent updated in this report

Comments:

### Other Activities

## Mannings Vince

Reported 06/18/10

ID	Percent	Task	Comments
APP235	0%	design and document SUI in UML	<i>not started</i>

\*Percent updated in this report

Comments:

1. helped with Gator and Thoth testing
2. prep work for PT1 evaluation

## Other Activities

# Monet Dave

Reported xx/xx/xx

ID	Percent	Task	Comments
APP121	50%	adapt astrometry code for DC3b use	

\*Percent updated in this report

Comments:

## Other Activities

# Monkewitz Serge

Reported xx/xx/xx

ID	Percent	Task	Comments
APP144	0%	move applications code out of stage code	<i>not started</i>
APP162	0%	modify stage code to conform with new MW API	<i>not started</i>
APP244	0%	implement/wrap OPTICS source clustering algorithm	<i>not started</i>
APP243	0%	implement Detection/Source? association	<i>not started</i>
APP6	0%	interslice communications	<i>not started</i>
APP7	0%	post spatial matching (stretch goal)	<i>not started</i>
APP74	0%	characterization of and improvements to association cosmic ray rejection performance	<i>not started</i>

\*Percent updated in this report

Comments:

## Other Activities

# Mullally Fergal

Reported xx/xx/xx

ID	Percent	Task	Comments
APP86	60%	implement improvements for WCS	
APP151	60%	implement stage structure for support astrometry code	

\*Percent updated in this report

Comments:

## Other Activities

### Myers Jon

Reported xx/xx/xx

ID	Percent	Task	Comments
APP140	25%	integrate MOPS stages with new C++ KD-Tree tools	
APP129	35%	run DayMOPS with solar system model	
APP141	75%	write linkTracklets and unit tests	
APP267	0%	update DayMOPS for new DIASource Table	<i>not started</i>
APP266	0%	Fix C-linkTracklets Python bindings	<i>not started</i>
APP265	0%	make DIASource the smallest unit of Tracks and MovingObject??	<i>not started</i>
APP264	0%	update DayMOPS to stop using template tables	<i>not started</i>
APP270	0%	remove DIASourceForTonight table, pass DIASource on clipboard	<i>not started</i>
APP269	0%	pass Tracks on clipboard rather than via Tracks table	<i>not started</i>
APP268	0%	made a new initial stage which gets night numbers from Policy	<i>not started</i>
APP271	0%	add debug printing to C find/linkTracklets and stage code for storing	<i>not started</i>

\*Percent updated in this report

Comments:

## Other Activities

### Owen Russell

Reported 6/18/2010

ID	Percent	Task	Comments
APP77	100%	fix ticket <a href="#">#873</a>	
APP139	0%	integrate HEALPix into software stack	<i>not started</i>
APP94	25%	code to warp images to/from sky pixel representation	
APP209	50%	implement outlier rejection	
APP98	50%	code to create PSF-matched difference imaging coadds (no outlier rejection)	
APP257	50%	code to create deep monochromatic coadds	
APP104	75%	code to detect chi-squared deep detection coadds (no outlier rejection)	
APP103	0%	create a set of chi-squared deep detection coadds	<i>not started</i>
APP102	0%	code to measure quality of deep detection coadds	<i>not started</i>

\*Percent updated in this report

Comments:



## Other Activities

# Pierfederici Francesco

Reported xx/xx/xx

ID	Percent	Task	Comments
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\*Percent updated in this report

Comments:

## Other Activities

# Shaw Dick

Reported 6/18/2010

ID	Percent	Task	Comments
APP240	*20%	DC3b User Guide	
APP242	0%	create uesr training program	<i>not started</i>
APP234	0%	develop Use Cases for SUI	<i>not started</i>
APP239	*100%	CFHT-LS Calibration Reference Files	<i>done</i>
APP208	*100%	define CFHT to be used	"done"

\*Percent updated in this report

Comments:

## Other Activities

Wrote (w/Co-authors) and submitted a paper on SDQA for the SPIE Astro2010 meeting (7740-18). Drafted PPT slides for SPIE talk.

# Van Dyk Schuyler

Reported 06/17/10

ID	Percent	Task	Comments
APP229	75%	identify tools to support PT1 data analysis	
APP240	8%	DC3b User Guide	
APP296	50%	set up helpdesk system	<i>not started</i>
APP234	0%	develop Use Cases for SUI	<i>not started</i>
APP235	0%	design and document SUI in UML	<i>not started</i>
APP260	75%	define DC3b data quality requirements	
APP230	60%	complete DM system data product quality metrics document	
APP199	0%	PT1 best efforts science data analysis/validation	<i>not started</i>

\*Percent updated in this report

Other Activities

Comments:

### **Other Activities**

PT1 analysis/validation plan is 75% done. Ready for PT1 production run data when it comes.

## **Major Accomplishments**

Significant breakthroughs, issues resolved.

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## **Objectives for the Next Period**

What you expect to accomplish.

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## **Problems Encountered and Solutions Being Pursued**

Budget or schedule variance, technical issues, management issues.