



SVV workflow : analysis_tools, JIRA, tech. notes, etc

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Focal plane commissioning workshop
LAPP, 27-29 March 2024



U.S. DEPARTMENT OF
ENERGY

SLAC



JIRA - Tickets - Pull Requests - Reviews

- JIRA is the project management tool used by Rubin
 - Related to Agile practices for software development
 - Iterative, incremental and evolutionary development
 - Each task is segmented in a set of (sub-)sub-tasks that can be completed in a short time scale.
- Any action, development, bug should be documented within a JIRA ticket
- The status of a ticket is evolving according to a simple workflow:
todo → acknowledged → in progress → in review → reviewed → done

Note: The Rubin JIRA system recently moved to the cloud : <https://rubinobs.atlassian.net>

Example from the M1M3 commissioning

Jira Software Your work ▾ Projects ▾ Filters ▾ Dashboards ▾ Teams ▾ Apps ▾ Create

Search

SITCOM Work Managem...
Software project

PLANNING

- SITCOM Performance ... Board
- Timeline
- Kanban board
- Reports
- Goals
- Issues
- Components NEW

DEVELOPMENT

- Security
- Releases

OPERATIONS

- Deployments
- Project pages
- Calendar
- ScriptRunner Enhanced ...
- Zephyr Scale

Projects / SITCOM Work Managem... / SITCOM-741

M1M3 Verifi. with Surrogate on TMA WITH Motion - Data Analysis

Attach Add a child issue Link issue Summary Panel Clone Plus Link goals

Description

M1M3 Verification with the Surrogate Mirror on the TMA WITH Motion - Data Collection

Test Plan is: <https://jira.lsstcorp.org/secure/Tests.jspa#/testPlan/LVV-P94>

Test Cases are here in this Cycle:
<https://jira.lsstcorp.org/secure/Tests.jspa#/testCycle/LVV-C242>

Child issues Order by ... + 73% Done

SITCOM-797	M1M3 - Slewing analysis - Positioning	DONE
SITCOM-798	M1M3 - Settling Time After a Slew	DONE
SITCOM-799	M1M3 - Axial Breakaway During Slew	DONE
SITCOM-809	Create new function in notebooks_vandy to confirm end of a slew	DEPRECATED
SITCOM-811	Analyze data of the error from test case 018 of M1M3	DEPRECATED
SITCOM-841	M1M3 Force Balance System Reaction to its own weight - Data Analysis	DEPRECATED
SITCOM-854	Update LVV-T235 notebook	DONE
SITCOM-858	Create notebook to verify M1M3 look-up tables	DONE
SITCOM-899	create slew utilities in notebooks_vandy based off axis_motion_stat and in_position	DEPRECATED
SITCOM-989	Plots to evaluate performance of the M1M3 Inertia Compensation System	DONE

Add a comment...

Pro tip: press M to comment

In Progress Actions

Details

Assignee: Bruno Quint
[Assign to me](#)

Reporter: Holger Drass

Development: [Create branch](#)
[Create commit](#)

Releases

Labels: None

Supports Milestone Completion: Yes

Start date (migrated): Jun 01, 2023

End date: Dec 15, 2023

Reviewers: None

Approved By: None

Components: System Verification

Priority: Medium (migrated)

Epic Name: M1M3 Verifi. with Surrogate on TMA WITH Motion - Data Analysis

More fields Story Points, Original estimate, Time tracking, Sprint

Automation Rule executions

Summary Panel Show

Example from the M1M3 commissioning

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Q Search

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You're in a company-managed project

Projects / SITCOM Work Managem... / SITCOM-741 / SITCOM-1189

Update Technote sitcomtn-084 with results from SITCOM-1159

Attach Link issue ▾ Clone Plus Zephyr Scale

Description

We need to update the technote sitcomtn-084 with results obtained in [SITCOM-1159: M1M3 - Take TMA settle time into account when analyzing mirror position repeatability](#) **DONE** (take settle time into account when checking mirror position / rotation after a slew)

Linked issues

relates to

- [SITCOM-1159](#) M1M3 - Take TMA settle time into account when analyzing mirror position repeatability **DONE**

Activity

Show: All Comments History Work log Newest first

Add a comment...

Pro tip: press **M** to comment

JH JOAQUÍN HERNÁNDEZ January 30, 2024 at 7:12 PM

👍 Approve 👍

Details

Assignee Dominique Boutigny

Reporter Dominique Boutigny

Development

- 1 branch
- 1 commit 2 months ago
- [Create pull request](#)
- 1 build **✓**

Releases

Labels None

Supports Epic Completion Yes

Start date (migrated) Jan 29, 2024

End date Jan 31, 2024

Reviewers JOAQUÍN HERNÁNDEZ

Approved By JOAQUÍN HERNÁNDEZ

Epic Link Replaced by Parent field

Components System Integration

Priority Undefined

Parent NEW [SITCOM-741 M1M3 Verifi. with Surrogate on ...](#)

More fields Story Points, Original estimate, Time tracking, Sprint

Example from the M1M3 commissioning

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GOALS

- Goals
- Issues
- Components **NEW**

DEVELOPMENT

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Projects / SITCOM Work Management / SITCOM Performance Analysis

SITCOM Performance Analysis

Release | Epic Sum Up | ...

Search | **AS** **AJ** **BQ** **CM** **CW** +16 | Epic | Label | Quick filters

[Insights](#) | [View settings](#)

TO DO 23	IN PROGRESS 11	IN REVIEW 5	REVIEWED 2	DONE 6
<p>▼ M2 Analysis (6 issues)</p> <div> <p>Create technote for M2 RBP analysis</p> <p>SITCOM-1088</p> </div> <div> <p>Create a Technote-096 for M2 outer control loop - closed-loop mode</p> <p>M2 VERIFY. WITH SURROGATE ON L3 AND TMA ...</p> <p>SITCOM-1105</p> </div>	<p>▼ M1M3 Analysis (21 issues)</p> <div> <p>M1M3 PSD log-scale vs fan velocity in Hz (sub-ticket to SITCOM-1131)</p> <p>SITCOM-1252</p> </div> <div> <p>M1M3 PSD comparison when mirror raised vs mirror lowered at Zenith with FCU (sub-ticket to SITCOM-...</p> <p>SITCOM-1253</p> </div> <div> <p>Identify identical slews with different configurations</p> <p>SITCOM-1002</p> </div> <div> <p>Addition of the Measurement of the Pressure vs Load in Bump Test</p> <p>M1M3 VERIFY. WITH SURROGATE ON TMA WITH...</p> <p>SITCOM-1257</p> </div> <div> <p>Characterize Bump Tests Failures</p> <p>SITCOM-1246</p> </div>	<div> <p>Update SITCOMTN-083</p> <p>SITCOM-1245</p> </div> <div> <p>Write technote on hardpoint oscillations during tma slews</p> <p>SITCOM-918</p> </div> <div> <p>Technote on Investigation into vibrations in the M1M3 due to FCUs</p> <p>SITCOM-1131</p> </div> <div> <p>M1M3 hardpoint repeatability and resolution analysis</p> <p>M1M3 VERIFY. WITH SURROGATE ON L3 AND T...</p> <p>SITCOM-756</p> </div>	<div> <p>Investigate following error and response delay on M1M3 Force Actuators</p> <p>SITCOM-1167</p> </div> <div> <p>Fill up plots in LVV-E2855 M1M3 Quasi-Static Data Collection</p> <p>M1M3 VERIFY. WITH SURROGATE ON L3 AND T...</p> <p>SITCOM-878</p> </div> <div> <p>Revisit accelerometer data prior to ComCam installation</p> <p>SITCOM-1023</p> </div>	<div> <p>Update sitcomtn095.py to reflect the content of the technote</p> <p>SITCOM-1272</p> </div> <div> <p>Technote to document the stability during the tracking of MTM3</p> <p>SITCOM-1202</p> </div> <div> <p>M1M3 bump test log error analysis and measured forces</p> <p>SITCOM-1165</p> </div>

Looking at the component "analysis_tools"

Jira Software Your work Projects Filters Dashboards Teams Apps Create

Search

Filters

New search

DEFAULT FILTERS

- My open issues
- Reported by me
- All issues
- Open issues
- Done issues
- Viewed recently
- Created recently
- Resolved recently
- Updated recently
- View all filters

Issues

Search issues Search Project: Data Management Type Status Assignee Components: analysis_tools More + Reset Save filter

1 of 185

Investigate why wperp metrics went wrong around 11 March 2024 in rc2 subset

DM-43366

Port a PSF Flux histogram to analysis_tools.

DM-42824

Create FocalPlaneGeometryPlot for Dark Current

DM-42675

Add bias, dark, and flat amplifier distribution percentile plots for amplifiers to analysis_tools

DM-42668

Implement adaptive binning option in skyPlot

DM-42279

Add a QA plots for source injection to analysis_tools

DM-42072

Add trant level injected catalog

1-50 of 185

Add parent / DM-43366

Investigate why wperp metrics went wrong around 11 March 2024 in rc2 subset

Attach Create subtask Link issue Clone Plus Zephyr Scale

Description

Metrics meeting on 18-March-2024 showed that rc2_subset wPerp metrics went to 0 some time after the 11th and before the 13th. Why?

Activity

Show: All Comments History Work log

Newest first

Add a comment...

Pro tip: press M to comment

Eli Rykoff 17 hours ago

@Lee Kelvin adds that there are plots and logs:

March 11: [Index of /lskelvin/rc2_subset/d_2024_03_11/](#)

March 13: [Index of /lskelvin/rc2_subset/d_2024_03_13/](#)

In Progress Actions

Details

Assignee Eli Rykoff Assign to me

Reporter Eli Rykoff

Development Create branch Create commit

Labels None

Reviewers None

Story Points None

RubinTeam Data Release Production

Components analysis_tools

More fields Start date (migrated), End date, Original estimate...

Automation Rule executions

Calendar Events

Created 19 hours ago Updated 16 hours ago

Configure

Give feedback

Searching using JQL

Jira Software Your work Projects Filters Dashboards Teams Apps Create

Search

Filters

Issues

Apps Share Export issues LIST VIEW DETAIL VIEW

project = "DM" and component = analysis_tools ORDER BY status ASC

Reset Save filter BASIC JQL

DEFAULT FILTERS

My open issues

Reported by me

All issues

Open issues

Done issues

Viewed recently

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View all filters

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Newest first 17

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1 Like

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Assign to me

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Create branch
Create commit

Labels None

Reviewers None

Story Points None

RubinTeam Data Release Production

Components analysis_tools

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Automation Rule executions

Calendar 8 Events

Created 19 hours ago

Configure

JIRA ticket → github branch

- Any software modification / development should be documented in JIRA (i.e. DM-xxxxx)
- A corresponding github branch should be created with name ticket/DM-xxxxx

```
git clone git@github.com:lsst/.....  
git checkout -b tickets/DM-xxxxx  
git push -u origin tickets/DM-xxxxx  
    modif - modif - modif...  
git commit  
git push  
git rebase -i HEAD~5  
git push --force-with-lease
```

Some people are using *gitkraken* to re-organize the commit messages

Pull Request - Review...

- Once all the ticket is finished
- Create a Pull Request and find / assign a reviewer
 - Merge the ticket branch to main when the review is complete and Pull Request accepted
 - Merged is blocked until the PR is accepted
- Move JIRA ticket to "done"

If you realize that you have forgotten something after merging the branch
⇒ create a new ticket (do not re-open the old one)

Some useful resources

- [LSST DM Developer Guide](#)
- [PEP-8 code standard](#)
- Python script formatters:
 - [black](#)
 - [yapf](#)
 - also exists for notebook cells autoformatting

- There is a full framework to write technical notes in Rubin:
<https://documenteer.lsst.io/technotes/index.html>
- Written in reStructuredText or Markdown
- Need to be registered in authordb.yaml
 - Ask in #dm-docs-support if you aren't
 - But there is a way to start a TechNote anyway if you aren't
- TechNotes are kept in github repositories
 - Same branch mechanism as for code development
 - JIRA tickets
- Once a TechNote has been pushed in github it triggers an automatic build and the html version can be visualized.
- For instance: <https://github.com/lsst-sitcom/sitcomtn-084> → <https://sitcomtn-084.lsst.io/>
 - From there one can see all intermediate / temporary versions