

Liens from the SOUL Acceptance Reviews

21-dec-2023

Summary

- At the time of the last AOG report (21-sep-2023):
 - 41 total (7 big, 7 medium, 23 small, 3 big but outside SOUL scope)
- Since then:
 - 14 items closed (4 conditional).
 - The bad frames item was broken into 4 sub-items.
 - DOC_SX_LUCI_001 was added to cover all outstanding RIX from the first acceptance review back in 2020.
 - Meeting minutes and other information were recorded on [the wiki](#).
 - Three weeks were lost to a health issue.

7 big liens #1 = L_01 Ocam bad frame issues

- We broke this into 4 sub-items:
 - Zero slopes
 - L_01A - Zero slope firmware fix
 - L_01B - Zero slope workaround (aka, "Gopt rewrite")
 - L_01C - Negative intensity
 - L_01D - Other items in JP "zoology" list
- Status of each on next 4 slides ...

7 big liens #1 = L_01A: Firmware Fix

- From EP 20dec2023 email:
 - *I received confirmation from MG that the new FW is in progress and it will be soon available. When the new FW is ready, we need to test it in daytime.*

7 big liens #1 = L_01B: Zero slope workaround (“Gopt rewrite”)

- Included in recent software release
- Closed

7 big liens #1 = L_01C: Negative Intensity

- From EP 20dec2023 email:
 - *We identified as next step the lab test in a "noisy" EM environment. With Alessandro we decided to involve an electronic expert to identify the appropriate setup. This is the current status.*

7 big liens #1 = L_01D: Other items in JP "zoology" list

- Zoology is at this [link](#).
- From EP 20dec2023 email:
 - *Is there some action required from our side?*
- Is “not live” considered as one of the liens?
- Are any others in the zoology to be considered as liens?

7 big liens #2 = L_02: Measure SR at H on LMIRCam

- From EP 20dec2023 email:
 - *Following our last meeting we split this in 2*
 - *SX -> the SR value is currently computed but is wrong. Action on SOUL team to review the SR computation.*
 - *DX -> the frames from LMIRCam are not collected into the SOUL TN due to configuration issue. Action on LBTO to debug the configuration.*

7 big liens #3 = L_04: Review Operational Constraints

- From EP 20dec2023 email:
 - *I think we mentioned a meeting to be called by Sam on this topic with me and Doug.*

7 big liens #4 = L_05: Perform flux calibrations on sky

- Data collected on 23dec2023 ECD night
- From EP 20dec2023 email:
 - *The calibration measurements have been acquired. For a complete handover I suggest that LBTO proceed to the data reduction (1 linear fit).*

7 big liens #5 = L_06: reconstructor for handling blinded subapertures

- Closed
- See [11oct20223 notes](#):
 - *As per 10oct2023 email from Guido A. to Juan Carlos, IDL has been provided.*
 - *We agreed that this item can be closed*

7 big liens #6,#7 = N_01,2: User's manual and User's Procedures

- To be done in collaboration with LBT
- Is this one in our court?

Selected other items (not part of the “big 7”)

- DOC_SX_LUCI_001: Open documentation RIX from SX LUCI review
- From EP 20dec23023 email:
 - [We] refer to rixRegisterSX-LUCI. In this spreadsheet I find 3 tabs for the RIXs:
 - SOUL doc
 - here I find 8 open AIs
 - SOUL VM
 - here there are 4 AIs referring to Request of Change.
 - I have submitted the 4 request of change by email on February 8 2023 to Mark Smithwright.
 - I consider closed these actions, at least from my side.
 - SOUL Manuals
 - Here we have a total of 89 open actions of which:
 - 54 on the SOUL team (2/3 of them are ready for the next release of the doc)
 - 35 on the LBTO team

Selected other items (not part of the “big 7”)

- Documentation Liens:
 - In addition to those mentioned on the previous slide, approximately 30 more documentation liens are called out individually in the punch list.
 - Most should be closed by the CR document drop planned for mid-February.

Selected other items (not part of the “big 7”)

- CR_DX_LBTI_098 Bin4 delay
- From EP 20dec23023 email:
 - Jenny proposed to proceed to the daytime tests.
 - At our last meeting I reported that all the code modification are done and pulled to the github.
 - We are available for further support on this if needed.

Selected other items (not part of the “big 7”)

- CR_DX_LUCI_117: Use actual values for LUCI dichroic band pass in computations
- From EP 20dec23023 email:
 - We discussed this topic at the last meeting and we clarified that the new WFS mag calibration approach is consistent by construction with the instrument dichroic. The new approach has been calibrated on Nov 23. I propose to close this action

Target Dates

- Mid-February:
 - Liens completed so that handover can proceed.
 - CR document drop.
- Mid-March:
 - Handover review.

Big Picture

- Lots of documentation – due 15 Feb
- The remaining big 5
 1. Ocam:
 - Zero Slopes = hopeful
 - Negative Intensity = biggest concern
 2. SR at H on LMIRCam = Progressing; actions on both LBT and SOUL team
 3. Operational Constraints = Awaits a meeting (?)
 4. Flux Calibration = Data collected; next step is for LBT (?)
 5. User's Manual & Procedures Doc = Needs a push (?)

Hidden Slides Follow

LBT actions (from EP email)

- 35 AIs on SOUL-Manuals --> on LBTO
- L_01A --> Telescope daytime test (Firmware for ZS problem)
- L_01C --> Lab tests in Tucson (Negative Intensity)
- L_02-DX --> Telescope daytime test (SR at H on LMIRCam)
- L_05 --> LBTO dataredux (Flux Calibration)
- CR_DX_LBTI_098 --> Daytime test (Bin4 delay)

CR_DX_LBTI_086	Software	DLM	Change all the absolute paths to paths using environment variables
CR_DX_LUCI_108	Documentation	JP	Correct refMagFlux value.
CR_DX_LUCI_111	Documentation	JP	LUCI equivalent to LBTI blinded reconstructor question + doc fix
CR_DX_LUCI_112	Documentation	JP	Document updated pupils following bin4 delay fix
L_01B	Troubleshoot	Review Panel	Ocam issue #2 = Zero Slopes work-around
VM_DX_LBTI_30	Software	BM	Create a Github PR for reset_gopt* scripts
VM_DX_LBTI_39	Troubleshoot	JP	Implement and test permanent fix for the slopes 0 error
L_06	Calibration	Review Panel	Produce the reconstructor for handling blinded subapertures
L_08	Troubleshoot	Review Panel	Investigate noise in the pupil interdistance measurement
CR_DX_LUCI_117	Software	DT	Use actual values for LUCI dichroic band pass in computations
CR_DX_LBTI_064	Troubleshoot	JC	Get a negative frames report from FLI
CR_DX_LBTI_075	Troubleshoot	DLM	Provide update on O2k.01 Slope 0 issue
VM_DX_LUCI_053	Training	SR	Share the AO simulations tools

Useful Links

- [Original list-of-ten](#)
- [CR RIX](#)
- [VM RIX](#)
- [Consolidated List](#)
- [Bad Frames Zoology](#)
- [Commissioning Report](#)
- [Verification Matrix](#)
- [SX LUCI RIX Register](#)