



6650 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Cycle: 3, Proposal Category: CAL/NIRSPEC

INVESTIGATORS

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OBSERVATIONS

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
EXAMPLE - for reference only				
	1	Exposures with current masks applied (control)	NIRSpec Internal Lamp	NONE
	2	Application of test mask 1	NIRSpec MSA Masking	NONE
	3	Exposures with test mask 1 applied	NIRSpec Internal Lamp	NONE
	4	Application of test mask 2	NIRSpec MSA Masking	NONE
	5	Exposures with test mask 2 applied	NIRSpec Internal Lamp	NONE
	6	Application of test mask 3	NIRSpec MSA Masking	NONE
	7	Exposures with test mask 3 applied	NIRSpec Internal Lamp	NONE
	8	Application of test mask 4	NIRSpec MSA Masking	NONE
	9	Exposures with test mask 4 applied	NIRSpec Internal Lamp	NONE

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
	10	Restoration of original masks	NIRSpec MSA Masking	NONE
Mar-2024-Q4-short				
	11	Exposures with current masks applied (control)	NIRSpec Internal Lamp	NONE
	12	Application of test mask 1	NIRSpec MSA Masking	NONE
	13	Exposures with test mask 1 applied	NIRSpec Internal Lamp	NONE
	14	Application of test mask 2	NIRSpec MSA Masking	NONE
	15	Exposures with test mask 2 applied	NIRSpec Internal Lamp	NONE
	16	Application of test mask 3	NIRSpec MSA Masking	NONE
	17	Exposures with test mask 3 applied	NIRSpec Internal Lamp	NONE
	18	Application of test mask 4	NIRSpec MSA Masking	NONE
	19	Exposures with test mask 4 applied	NIRSpec Internal Lamp	NONE
	20	Restoration of original masks	NIRSpec MSA Masking	NONE

ABSTRACT

Contingency program for MSA OSD. When a new MSA short appears, if it is *not* detectable in telemetry, OSD diagnostic exposures should be executed in combination with test short masks in order to locate the short and mask the shutter row/column as necessary.

This calibration program may change in response to system developments and the final Cycle 3 science program.

OBSERVING DESCRIPTION

OBJECTIVE: The MSA control electronics (MCE) sporadically suffer electrical shorts, in which an unintended (and perhaps temporary) pathway bridges circuitry from a quadrant row or column (generically referred to as a line) to the substrate or another line. When a new short appears, the

JWST Proposal 6650 (Created: Friday, July 26, 2024 at 11:00:38 AM Eastern Standard Time) - Overview

affected line should be identified and then masked, adding a full quadrant line to a dedicated mask in the MCE, effectively removing all the shutters in that line (171 or 365) from operations (this cannot be overruled by an MSA user pattern). If the short does not give rise to an elevation in quadrant current telemetry but is visible as thermal emission in the detector data, then the Optical Shorts Detection (OSD) should be executed: CAL-NRS-316. (If the short is seen in telemetry, ESD can be executed instead: CAL-NRS-315).

METHOD: OSD is a combination OP-driven and manual procedure in which detector data, together with knowledge of the configured MSA patterns, are analyzed to pinpoint the location of the short within the affected quadrant. Existing data generally narrows down the culprit line to a set of 3–6 possibilities (e.g. +/-1 shutter in both row/column axes). A set of test short masks are constructed, each including one of these possibilities. The onboard portion of OSD then systematically activates each test short mask in turn, for each executing a small number of dark exposures through special diagnostic MSA patterns (usually the two CHKBD3x3 patterns that ensure every line is probed in isolation). Once the exposure data is downlinked and available to the instrument team, analysis merely involves identifying the test mask for which neither CHKBD3x3 pattern causes the glow.

JUSTIFICATION: Shorts may cause unsafe currents on the MCE, contaminate the NIRSpec detector output with bright thermal emission and/or result in unpredictable shutter behavior that could degrade science data. Furthermore, bright shorts may even contaminate NIRCcam detector output. Masking the location of known shorts is a reliable method to prevent the short reoccurring and mitigate symptoms.

PREVIOUS CALIBRATIONS: Within the Cycle 1 general shorts detection contingency program (PID 1490), OSD was executed once, leading to the masking of one short (spanning two lines). The Cycle 2 OSD contingency program (PID 4467) is expected to be executed once to locate a persistent low-level short for reference and documentation purposes.

TIMING CONSTRAINTS: Generally, we aim to execute OSD at the start of the next uplinked OP package, or at least before the first MSA visit of that package. However, the criticality of masking a new short is actually more complex, depending on its strength (is it dangerous to hardware, or how much of the detector is affected by the thermal emission?) and its location relative to upcoming patterns (a short will only manifest when there is a potential across the fault, so not all MSA patterns will “trigger” the glow).

DURATION (total hours): A pair of dark diagnostic CHKBD3x3 exposures take 999s (0.28 hours of charged time). An example OSD with 4 test masks and the OP-driven mask handling is estimated to take 1.5 hours, now that OP-driven mask handling scripts are available. Note that because a visit using the masking template can only apply masks of one type (ZPM or TSM), the number of visits required to restore the original masks at the end of an execution of OSD depends on the number of test mask types used.

Proposal 6650 - Observation 1 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 1: Exposures with current masks applied (control)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec Internal Lamp</p>											
Diagnostics	<p>(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Spectral Elements	#	Operating Mode	Subarray	Lamp	MSA Configuration	Grating	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	IMAGE	FULL	NONE	CHKBD3x3-1	MIRROR	NRSIRS2RAPI D	5	1	1	87.533	
	2	IMAGE	FULL	NONE	CHKBD3x3-3	MIRROR	NRSIRS2RAPI D	5	1	1	87.533	
Special Requirements	<p>No Parallel Attachments On Hold Example only Required</p> <p>Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 within 3 Days, Exclusive Use Of Instrument</p>											

Proposal 6650 - Observation 2 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 2: Application of test mask 1</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec MSA Masking</p>				
Diagnostics	<p>(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>				
Template	<p>Mask Type</p> <p>ZERO_POTENTIAL</p>				
Quadrant List	<table border="1"> <thead> <tr> <th>#</th> <th>Quadrant</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Quadrant 1</td> </tr> </tbody> </table>	#	Quadrant	1	Quadrant 1
#	Quadrant				
1	Quadrant 1				
Special Requirements	<p>No Parallel Attachments On Hold Example only Special Commanding Special Commanding Approval will indicate confirmation that the MCE resolver conversion, tri-state, zero-potential masks and the predefined MSA configuration (allopen/allclosed) files needed for this visit will be in the ISIM file store before it begins. Approval will also indicate confirmation that the attached file is correct and certified.</p> <p>Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 within 3 Days, Exclusive Use Of Instrument</p>				

Proposal 6650 - Observation 3 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 3: Exposures with test mask 1 applied</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec Internal Lamp</p>											
Diagnostics	<p>(Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Spectral Elements	#	Operating Mode	Subarray	Lamp	MSA Configuration	Grating	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wbk.Calc ID
	1	IMAGE	FULL	NONE	CHKBD3x3-1	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
	2	IMAGE	FULL	NONE	CHKBD3x3-3	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
Special Requirements	<p>No Parallel Attachments On Hold Example only Required</p> <p>Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 within 3 Days, Exclusive Use Of Instrument</p>											

Proposal 6650 - Observation 4 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 4: Application of test mask 2</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec MSA Masking</p>				
Diagnostics	<p>(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>				
Template	<p>Mask Type</p> <p>ZERO_POTENTIAL</p>				
Quadrant List	<table border="1"> <thead> <tr> <th>#</th> <th>Quadrant</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Quadrant 1</td> </tr> </tbody> </table>	#	Quadrant	1	Quadrant 1
#	Quadrant				
1	Quadrant 1				
Special Requirements	<p>No Parallel Attachments On Hold Example only Special Commanding Special Commanding Approval will indicate confirmation that the MCE resolver conversion, tri-state, zero-potential masks and the predefined MSA configuration (allopen/allclosed) files needed for this visit will be in the ISIM file store before it begins. Approval will also indicate confirmation that the attached file is correct and certified.</p> <p>Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 within 3 Days, Exclusive Use Of Instrument</p>				

Proposal 6650 - Observation 5 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 5: Exposures with test mask 2 applied</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec Internal Lamp</p>											
Diagnostics	<p>(Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Spectral Elements	#	Operating Mode	Subarray	Lamp	MSA Configuration	Grating	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	IMAGE	FULL	NONE	CHKBD3x3-1	MIRROR	NRSIRS2RAPI D	5	1	1	87.533	
	2	IMAGE	FULL	NONE	CHKBD3x3-3	MIRROR	NRSIRS2RAPI D	5	1	1	87.533	
Special Requirements	<p>No Parallel Attachments On Hold Example only Required</p> <p>Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 within 3 Days, Exclusive Use Of Instrument</p>											

Proposal 6650 - Observation 6 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 6: Application of test mask 3</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec MSA Masking</p>				
Diagnostics	<p>(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>				
Template	<p>Mask Type</p> <p>ZERO_POTENTIAL</p>				
Quadrant List	<table border="1"> <thead> <tr> <th>#</th> <th>Quadrant</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Quadrant 1</td> </tr> </tbody> </table>	#	Quadrant	1	Quadrant 1
#	Quadrant				
1	Quadrant 1				
Special Requirements	<p>No Parallel Attachments On Hold Example only Special Commanding Special Commanding Approval will indicate confirmation that the MCE resolver conversion, tri-state, zero-potential masks and the predefined MSA configuration (allopen/allclosed) files needed for this visit will be in the ISIM file store before it begins. Approval will also indicate confirmation that the attached file is correct and certified.</p> <p>Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 within 3 Days, Exclusive Use Of Instrument</p>				

Proposal 6650 - Observation 7 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 7: Exposures with test mask 3 applied</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec Internal Lamp</p>											
Diagnostics	<p>(Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Spectral Elements	#	Operating Mode	Subarray	Lamp	MSA Configuration	Grating	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wbk.Calc ID
	1	IMAGE	FULL	NONE	CHKBD3x3-1	MIRROR	NRSIRS2RAPI D	5	1	1	87.533	
	2	IMAGE	FULL	NONE	CHKBD3x3-3	MIRROR	NRSIRS2RAPI D	5	1	1	87.533	
Special Requirements	<p>No Parallel Attachments On Hold Example only Required</p> <p>Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 within 3 Days, Exclusive Use Of Instrument</p>											

Proposal 6650 - Observation 8 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 8: Application of test mask 4</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec MSA Masking</p>				
Diagnostics	<p>(Visit 8:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>				
Template	<p>Mask Type</p> <p>ZERO_POTENTIAL</p>				
Quadrant List	<table border="1"> <thead> <tr> <th>#</th> <th>Quadrant</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Quadrant 1</td> </tr> </tbody> </table>	#	Quadrant	1	Quadrant 1
#	Quadrant				
1	Quadrant 1				
Special Requirements	<p>No Parallel Attachments On Hold Example only Special Commanding Special Commanding Approval will indicate confirmation that the MCE resolver conversion, tri-state, zero-potential masks and the predefined MSA configuration (allopen/allclosed) files needed for this visit will be in the ISIM file store before it begins. Approval will also indicate confirmation that the attached file is correct and certified.</p> <p>Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 within 3 Days, Exclusive Use Of Instrument</p>				

Proposal 6650 - Observation 9 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 9: Exposures with test mask 4 applied</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec Internal Lamp</p>											
Diagnostics	<p>(Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Spectral Elements	#	Operating Mode	Subarray	Lamp	MSA Configuration	Grating	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	IMAGE	FULL	NONE	CHKBD3x3-1	MIRROR	NRSIRS2RAPI D	5	1	1	87.533	
	2	IMAGE	FULL	NONE	CHKBD3x3-3	MIRROR	NRSIRS2RAPI D	5	1	1	87.533	
Special Requirements	<p>No Parallel Attachments On Hold Example only Required</p> <p>Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 within 3 Days, Exclusive Use Of Instrument</p>											

Proposal 6650 - Observation 10 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 10: Restoration of original masks</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec MSA Masking</p>				
Diagnostics	<p>(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>				
Template	<p>Mask Type</p> <p>ZERO_POTENTIAL</p>				
Quadrant List	<table border="1"> <thead> <tr> <th>#</th> <th>Quadrant</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Quadrant 1</td> </tr> </tbody> </table>	#	Quadrant	1	Quadrant 1
#	Quadrant				
1	Quadrant 1				
Special Requirements	<p>No Parallel Attachments On Hold Example only Special Commanding Special Commanding Approval will indicate confirmation that the MCE resolver conversion, tri-state, zero-potential masks and the predefined MSA configuration (allopen/allclosed) files needed for this visit will be in the ISIM file store before it begins.</p> <p>Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 within 3 Days, Exclusive Use Of Instrument</p>				

Proposal 6650 - Observation 11 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 11: Exposures with current masks applied (control)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec Internal Lamp</p>											
Diagnostics	<p>(Visit 11:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Spectral Elements	#	Operating Mode	Subarray	Lamp	MSA Configuration	Grating	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	IMAGE	FULL	NONE	CHKBD3x3-1	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
	2	IMAGE	FULL	NONE	CHKBD3x3-3	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
	3	IMAGE	FULL	NONE	duplicate of V0121300100101	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
Special Requirements	<p>After Date 02-JUL-2024:00:00:00</p> <p>No Parallel Attachments</p>											

Proposal 6650 - Observation 12 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 12: Application of test mask 1</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec MSA Masking</p>				
Diagnostics	<p>(Application of test mask 1 (Obs 12)) Warning (Mask File Name): The mask file name should contain '171' and 'Q<n>' where <n> is the selected quadrant number.</p> <p>(Visit 12:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>				
Template	<p>Mask Type</p> <p>ZERO_POTENTIAL</p>				
Quadrant List	<table border="1"> <thead> <tr> <th>#</th> <th>Quadrant</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Quadrant 4</td> </tr> </tbody> </table>	#	Quadrant	1	Quadrant 4
#	Quadrant				
1	Quadrant 4				
Special Requirements	<p>No Parallel Attachments</p> <p>Special Commanding Special Commanding Approval will indicate confirmation that the MCE resolver conversion, tri-state, zero-potential masks and the predefined MSA configuration (allopen/allclosed) files needed for this visit will be in the ISIM file store before it begins. Approval will also indicate confirmation that the attached file is correct and certified.</p>				

Proposal 6650 - Observation 13 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 13: Exposures with test mask 1 applied</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec Internal Lamp</p>											
Diagnostics	<p>(Visit 13:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Spectral Elements	#	Operating Mode	Subarray	Lamp	MSA Configuration	Grating	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	IMAGE	FULL	NONE	CHKBD3x3-1	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
	2	IMAGE	FULL	NONE	CHKBD3x3-3	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
	3	IMAGE	FULL	NONE	duplicate of V0121300100101	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
Special Requirements	<p>No Parallel Attachments</p>											

Proposal 6650 - Observation 14 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 14: Application of test mask 2</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec MSA Masking</p>				
Diagnostics	<p>(Application of test mask 2 (Obs 14)) Warning (Mask File Name): The mask file name should contain '365' and 'Q<n>' where <n> is the selected quadrant number.</p> <p>(Visit 14:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>				
Template	<p>Mask Type</p> <p>ZERO_POTENTIAL</p>				
Quadrant List	<table border="1"> <thead> <tr> <th>#</th> <th>Quadrant</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Quadrant 4</td> </tr> </tbody> </table>	#	Quadrant	1	Quadrant 4
#	Quadrant				
1	Quadrant 4				
Special Requirements	<p>No Parallel Attachments</p> <p>Special Commanding Special Commanding Approval will indicate confirmation that the MCE resolver conversion, tri-state, zero-potential masks and the predefined MSA configuration (allopen/allclosed) files needed for this visit will be in the ISIM file store before it begins. Approval will also indicate confirmation that the attached file is correct and certified.</p>				

Proposal 6650 - Observation 15 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 15: Exposures with test mask 2 applied</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec Internal Lamp</p>											
Diagnostics	<p>(Visit 15:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Spectral Elements	#	Operating Mode	Subarray	Lamp	MSA Configuration	Grating	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	IMAGE	FULL	NONE	CHKBD3x3-1	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
	2	IMAGE	FULL	NONE	CHKBD3x3-3	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
	3	IMAGE	FULL	NONE	duplicate of V0121300100101	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
Special Requirements	<p>No Parallel Attachments</p>											

Proposal 6650 - Observation 16 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 16: Application of test mask 3</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec MSA Masking</p>				
Diagnostics	<p>(Application of test mask 3 (Obs 16)) Warning (Mask File Name): The mask file name should contain '365' and 'Q<n>' where <n> is the selected quadrant number.</p> <p>(Visit 16:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>				
Template	<p>Mask Type</p> <p>ZERO_POTENTIAL</p>				
Quadrant List	<table border="1"> <thead> <tr> <th>#</th> <th>Quadrant</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Quadrant 4</td> </tr> </tbody> </table>	#	Quadrant	1	Quadrant 4
#	Quadrant				
1	Quadrant 4				
Special Requirements	<p>No Parallel Attachments</p> <p>Special Commanding Special Commanding Approval will indicate confirmation that the MCE resolver conversion, tri-state, zero-potential masks and the predefined MSA configuration (allopen/allclosed) files needed for this visit will be in the ISIM file store before it begins. Approval will also indicate confirmation that the attached file is correct and certified.</p>				

Proposal 6650 - Observation 17 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 17: Exposures with test mask 3 applied</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec Internal Lamp</p>											
Diagnostics	<p>(Visit 17:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Spectral Elements	#	Operating Mode	Subarray	Lamp	MSA Configuration	Grating	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	IMAGE	FULL	NONE	CHKBD3x3-1	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
	2	IMAGE	FULL	NONE	CHKBD3x3-3	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
	3	IMAGE	FULL	NONE	duplicate of V0121300100101	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
Special Requirements	<p>No Parallel Attachments</p>											

Proposal 6650 - Observation 18 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 18: Application of test mask 4</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec MSA Masking</p>				
Diagnostics	<p>(Application of test mask 4 (Obs 18)) Warning (Mask File Name): The mask file name should contain '365' and 'Q<n>' where <n> is the selected quadrant number.</p> <p>(Visit 18:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>				
Template	<p>Mask Type</p> <p>ZERO_POTENTIAL</p>				
Quadrant List	<table border="1"> <thead> <tr> <th>#</th> <th>Quadrant</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Quadrant 4</td> </tr> </tbody> </table>	#	Quadrant	1	Quadrant 4
#	Quadrant				
1	Quadrant 4				
Special Requirements	<p>No Parallel Attachments</p> <p>Special Commanding Special Commanding Approval will indicate confirmation that the MCE resolver conversion, tri-state, zero-potential masks and the predefined MSA configuration (allopen/allclosed) files needed for this visit will be in the ISIM file store before it begins. Approval will also indicate confirmation that the attached file is correct and certified.</p>				

Proposal 6650 - Observation 19 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 19: Exposures with test mask 4 applied</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec Internal Lamp</p>											
Diagnostics	<p>(Visit 19:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Spectral Elements	#	Operating Mode	Subarray	Lamp	MSA Configuration	Grating	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	IMAGE	FULL	NONE	CHKBD3x3-1	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
	2	IMAGE	FULL	NONE	CHKBD3x3-3	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
	3	IMAGE	FULL	NONE	duplicate of V0121300100101	MIRROR	NRSIRS2RAPID	5	1	1	87.533	
Special Requirements	<p>No Parallel Attachments</p>											

Proposal 6650 - Observation 20 - CAL-NRS-316: MSA Optical Shorts Detection (OSD)

Fri Jul 26 16:00:39 GMT 2024

Observation	<p>Proposal 6650, Observation 20: Restoration of original masks</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec MSA Masking</p>				
Diagnostics	<p>(Visit 20:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>				
Template	<p>Mask Type</p> <p>ZERO_POTENTIAL</p>				
Quadrant List	<table border="1"> <thead> <tr> <th>#</th> <th>Quadrant</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Quadrant 4</td> </tr> </tbody> </table>	#	Quadrant	1	Quadrant 4
#	Quadrant				
1	Quadrant 4				
Special Requirements	<p>No Parallel Attachments Special Commanding Special Commanding Approval will indicate confirmation that the MCE resolver conversion, tri-state, zero-potential masks and the predefined MSA configuration (allopen/allclosed) files needed for this visit will be in the ISIM file store before it begins.</p>				