



11421 - WFC3 Channel Select Mechanism Test

Cycle: 17, Proposal Category: SM4/WFC3

(Availability Mode: RESTRICTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
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VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) NGC3031 DARK	WFC3/IR WFC3/UVIS	1	16-Jun-2009 21:02:24.0	yes
02	TUNGSTEN	WFC3/IR	1	16-Jun-2009 21:02:27.0	yes

2 Total Orbits Used

ABSTRACT

The operation and positioning of the Channel Select Mechanism (CSM) will be verified for the WFC3 UVIS and IR channels. An extended target will be observed in both channels to verify that the field of view is not blocked or vignetted in any way when the CSM is set for UVIS and IR channel operations. Internal IR flat field images will also be used to verify the correct positioning of the IR diffuser paddle. This proposal corresponds to activity ID WFC3-08.

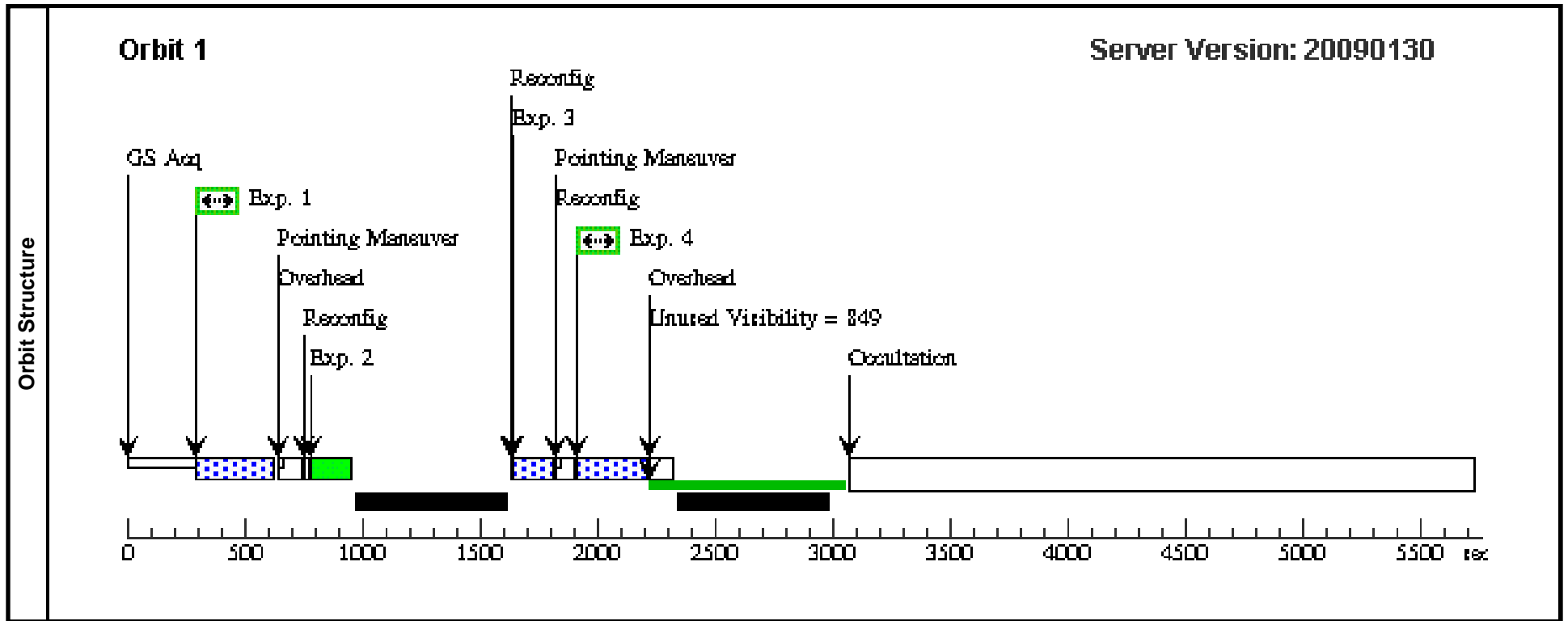
OBSERVING DESCRIPTION

Full-frame UVIS and IR images of the galaxy NGC 3031 (M81) will be obtained in order to verify the correct operation of the CSM for both WFC3 channels. The CSM should be fully retracted from the incoming beam for UVIS operations, resulting in a completely unblocked and unvignetted field for the UVIS external exposure. The CSM should fully redirect the incoming beam for the IR external exposure, again resulting in a field of view that is completely filled and unvignetted. The large angular size of NGC 3031 will more than fill the WFC3 FOV, thus making it possible to verify that no part of the FOV is obscured. The UVIS exposure will be a full-frame pair of images bracketing the IR exposures, while the IR will be a single full-frame MultiAccum-mode exposure. Two IR internal flat field images, using the F098M and F160W filters, will be used to verify the correct positioning of the IR diffuser paddle for IR internal flats. Each IR internal flat observation will consist of a single MultiAccum exposure.

Proposal 11421 - Visit 01 - WFC3 Channel Select Mechanism Test

Wed Jun 17 01:02:29 GMT 2009

Visit	Proposal 11421, Visit 01, implementation Diagnostic Status: Warning Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none) <i>Comments: Schedule after WF06 UVIS Detector Functional, prop 11419, and after WF07 IR Detector Functional, prop 11420.</i>																																																																										
	Diagnosics (UVIS external field (01.001) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.																																																																										
Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>NGC3031 Alt Name1: M81</td> <td>RA: 09 55 33.1700 (148.8882083d) Dec: +69 03 55.10 (69.06531d) Equinox: J2000</td> <td>Radial Velocity: -34 km/sec</td> <td>V=6.9</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	NGC3031 Alt Name1: M81	RA: 09 55 33.1700 (148.8882083d) Dec: +69 03 55.10 (69.06531d) Equinox: J2000	Radial Velocity: -34 km/sec	V=6.9	Reference Frame: ICRS																																																														
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Proposal 11421 - Visit 02 - WFC3 Channel Select Mechanism Test

Wed Jun 17 01:02:30 GMT 2009

Visit	Proposal 11421, Visit 02, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)																														
Exposures	<table border="1"> <thead> <tr> <th>#</th> <th>Label</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>IR Internal F lat 1</td> <td>TUNGSTEN</td> <td>WFC3/IR, MULTIACCUM, IR</td> <td>F098M</td> <td>SAMP-SEQ=STEP1 00; NSAMP=8</td> <td></td> <td></td> <td>[==>]</td> <td>[1]</td> </tr> <tr> <td>2</td> <td>IR Internal F lat 2</td> <td>TUNGSTEN</td> <td>WFC3/IR, MULTIACCUM, IR</td> <td>F160W</td> <td>SAMP-SEQ=SPARS 25; NSAMP=6</td> <td></td> <td></td> <td>[==>]</td> <td>[1]</td> </tr> </tbody> </table>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	1	IR Internal F lat 1	TUNGSTEN	WFC3/IR, MULTIACCUM, IR	F098M	SAMP-SEQ=STEP1 00; NSAMP=8			[==>]	[1]	2	IR Internal F lat 2	TUNGSTEN	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 25; NSAMP=6			[==>]	[1]
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Orbit Structure	<div style="display: flex; justify-content: space-between;"> <div data-bbox="226 500 541 568"> <p>Orbit 1 Unused Visibility = 3028</p> </div> <div data-bbox="1423 500 1848 535"> <p>Server Version: 20090130</p> </div> </div> <p>The diagram illustrates the orbit structure for Orbit 1. The x-axis represents time in seconds, ranging from 0 to 5500. The timeline is primarily green, indicating active observation. A black bar between 500 and 750 seconds represents a period of unused visibility. Key events are marked with arrows: 'Exp. 1' at 0s, 'Exp. 2' at approximately 250s, 'Reconfig' at approximately 400s, and 'Occultation' at 3000s. A white bar extends from 3000s to 5500s, likely representing a period of non-visibility or a different observation mode.</p>																														