



## 13292 - Dissecting star formation in N159

Cycle: 21, Proposal Category: GO

(Availability Mode: SUPPORTED)

### INVESTIGATORS

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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>
05	(1) N159-E (4) OFF-POINT	ACS/WFC WFC3/IR WFC3/UVIS	2	24-Sep-2013 21:03:35.0	yes
06	(1) N159-E (4) OFF-POINT	ACS/WFC WFC3/IR WFC3/UVIS	2	24-Sep-2013 21:04:00.0	yes
07	(2) N159-S (3) N159-W	ACS/WFC WFC3/IR WFC3/UVIS	2	24-Sep-2013 21:04:22.0	yes
08	(2) N159-S (3) N159-W	ACS/WFC WFC3/IR WFC3/UVIS	2	24-Sep-2013 21:04:43.0	yes

8 Total Orbits Used

## **ABSTRACT**

We propose to investigate star formation as a function of time, space, and mass in the Large Magellanic Cloud star formation region N159. We will combine HST photometry in V, I, J, H, and H $\alpha$  equivalent filters with our already scheduled Atacama Large (sub) Millimeter Array (ALMA; PI Fukui) and our existing Australia Telescope Compact Array (ATCA; PI Seale and PI Chen) observations. These datasets will allow us for the first time to completely characterize protostars, HII regions, and molecular gas in this reduced-metallicity region. The region is a remarkable laboratory, containing at once a spontaneously cluster-forming giant molecular cloud (GMC), an arguably triggered star-forming GMC, and a more quiescent GMC.

We will use color-magnitude diagram (CMD) and spectral energy distribution (SED) modeling to separate reddening, circumstellar dust emission, and pre-main-sequence spectral type for each star, mapping not only current star formation activity but its history (over the last 50Myr using pre-main-sequence stars, and over a Hubble time using classical CMD fitting). We will use H $\alpha$  excess to further characterize the HII regions and all currently accreting protostars with ages up to 50 Myr. We will resolve many limitations of previous Spitzer-based star formation studies, and search for variations in the stellar initial mass function. We will test whether there is a gas density threshold for star formation, and investigate the extent to which environment and feedback also play a role in how galaxies evolve by turning gas into stars.

**OBSERVING DESCRIPTION**

goals: same observing time on all 4 targets N159 E,W,S and OFF.

~1 full orbit of F656N, F814W, F555W,

~0.5 orbit of each of F160W, F125W.

organized with dithering and the shortest possible IR exposures to reduce persistence.

Proposal 13292 - E/O (05) - Dissecting star formation in N159

Wed Sep 25 01:04:58 GMT 2013

<b>Visit</b>	<b>Proposal 13292, E/O (05), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 260D TO 265 D					
	<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>
	(1)	N159-E	RA: 05 40 8.8000 (85.0366667d) Dec: -69 44 39.00 (-69.74417d) Equinox: J2000		V=14.5	Reference Frame: ICRS
	(4)	OFF-POINT	RA: 05 41 0.2156 (85.2508983d) Dec: -69 48 20.46 (-69.80568d) Equinox: J2000		V=14.3	Reference Frame: ICRS

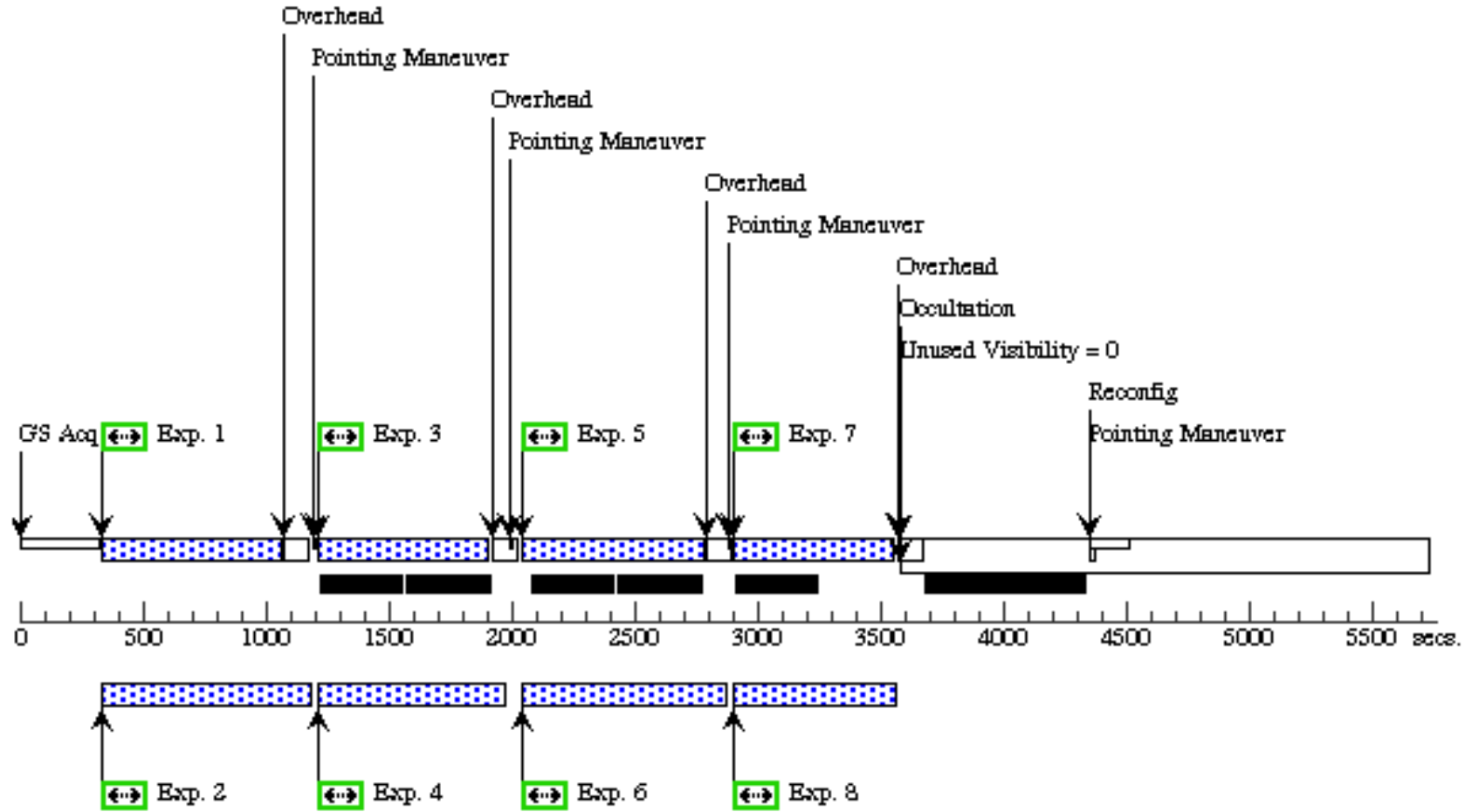
Proposal 13292 - E/O (05) - Dissecting star formation in N159

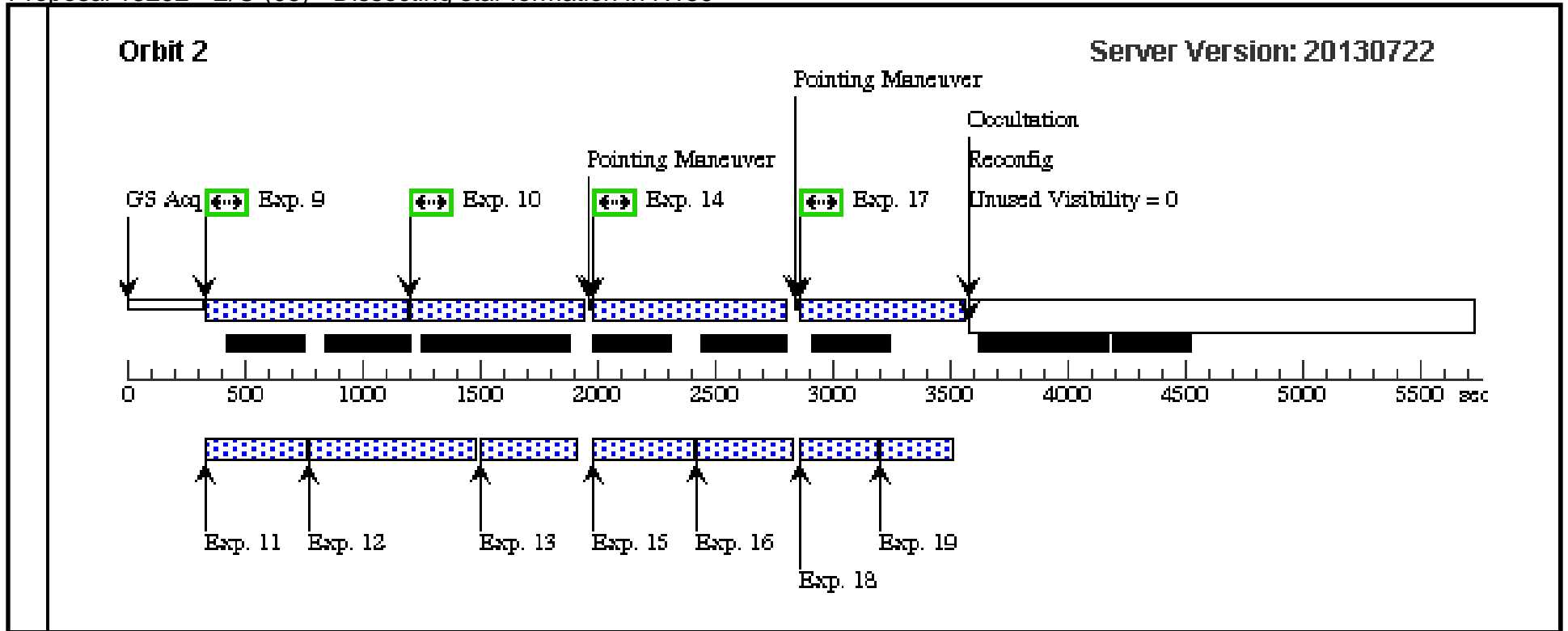
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
Exposures	1	656N:E	(1) N159-E	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N		Prime + Parallel Group 1-2 in E/O (05)	697 Secs (697 Secs)	[1]	
	2	814W:O	(4) OFF-POINT	ACS/WFC, ACCUM, WFC	F814W		Prime + Parallel Group 1-2 in E/O (05)	640 Secs (640 Secs)	[1]	
	3	656N:E	(1) N159-E	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	POS TARG 0.3,1.7	Prime + Parallel Group 3-4 in E/O (05)	697 Secs (697 Secs)	[1]	
	4	814W:O	(4) OFF-POINT	ACS/WFC, ACCUM, WFC	F814W		Prime + Parallel Group 3-4 in E/O (05)	640 Secs (640 Secs)	[1]	
	5	656N:E	(1) N159-E	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	POS TARG -0.2,0.0 5	Prime + Parallel Group 5-6 in E/O (05)	740 Secs (740 Secs)	[1]	
	6	555W:O	(4) OFF-POINT	ACS/WFC, ACCUM, WFC	F555W		Prime + Parallel Group 5-6 in E/O (05)	668 Secs (668 Secs)	[1]	
	7	656N:E	(1) N159-E	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	POS TARG 0.1,1.75	Prime + Parallel Group 7-8 in E/O (05)	650 Secs (650 Secs)	[1]	
	8	555W:O	(4) OFF-POINT	ACS/WFC, ACCUM, WFC	F555W		Prime + Parallel Group 7-8 in E/O (05)	536 Secs (536 Secs)	[1]	
	9	555W:O	(4) OFF-POINT	ACS/WFC, ACCUM, WFC	F555W		Prime + Parallel Group 9-13 in E/O (05)	650 Secs (650 Secs)	[2]	
	10	814W:O	(4) OFF-POINT	ACS/WFC, ACCUM, WFC	F814W		Prime + Parallel Group 9-13 in E/O (05)	581 Secs (581 Secs)	[2]	
	11	160W:E	(1) N159-E	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=10; SAMP-SEQ=STEP100	Prime + Parallel Group 9-13 in E/O (05)	399.231646 Secs (399.232 Secs)	[2]	
	12	F125W:E	(1) N159-E	WFC3/IR, MULTIACCUM, IR	F125W	SAMP-SEQ=STEP100; NSAMP=13	Prime + Parallel Group 9-13 in E/O (05)	699.232615 Secs (699.233 Secs)	[2]	
	13	160W:E	(1) N159-E	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=10; SAMP-SEQ=STEP100	Prime + Parallel Group 9-13 in E/O (05)	399.231646 Secs (399.232 Secs)	[2]	
	14	814W:O	(4) OFF-POINT	ACS/WFC, ACCUM, WFC	F814W	POS TARG -0.5,0.2 5	Prime + Parallel Group 14-16 in E/O (05)	700 Secs (700 Secs)	[2]	
	15	160W:E longer	(1) N159-E	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=10; SAMP-SEQ=STEP100	Prime + Parallel Group 14-16 in E/O (05)	399.231646 Secs (399.232 Secs)	[2]	
	16	F125W:E longer	(1) N159-E	WFC3/IR, MULTIACCUM, IR	F125W	SAMP-SEQ=STEP100; NSAMP=10	Prime + Parallel Group 14-16 in E/O (05)	399.231646 Secs (399.232 Secs)	[2]	
	17	555W:O	(4) OFF-POINT	ACS/WFC, ACCUM, WFC	F555W	POS TARG 0.25,-0.5	Prime + Parallel Group 17-19 in E/O (05)	536 Secs (536 Secs)	[2]	
	18	125W:E shorter	(1) N159-E	WFC3/IR, MULTIACCUM, IR	F125W	NSAMP=9; SAMP-SEQ=STEP100	Prime + Parallel Group 17-19 in E/O (05)	299.231323 Secs (299.231 Secs)	[2]	
	19	160W:E shorter	(1) N159-E	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=9; SAMP-SEQ=STEP100	Prime + Parallel Group 17-19 in E/O (05)	299.231323 Secs (299.231 Secs)	[2]	

Orbit 1

Server Version: 20130722

Orbit Structure





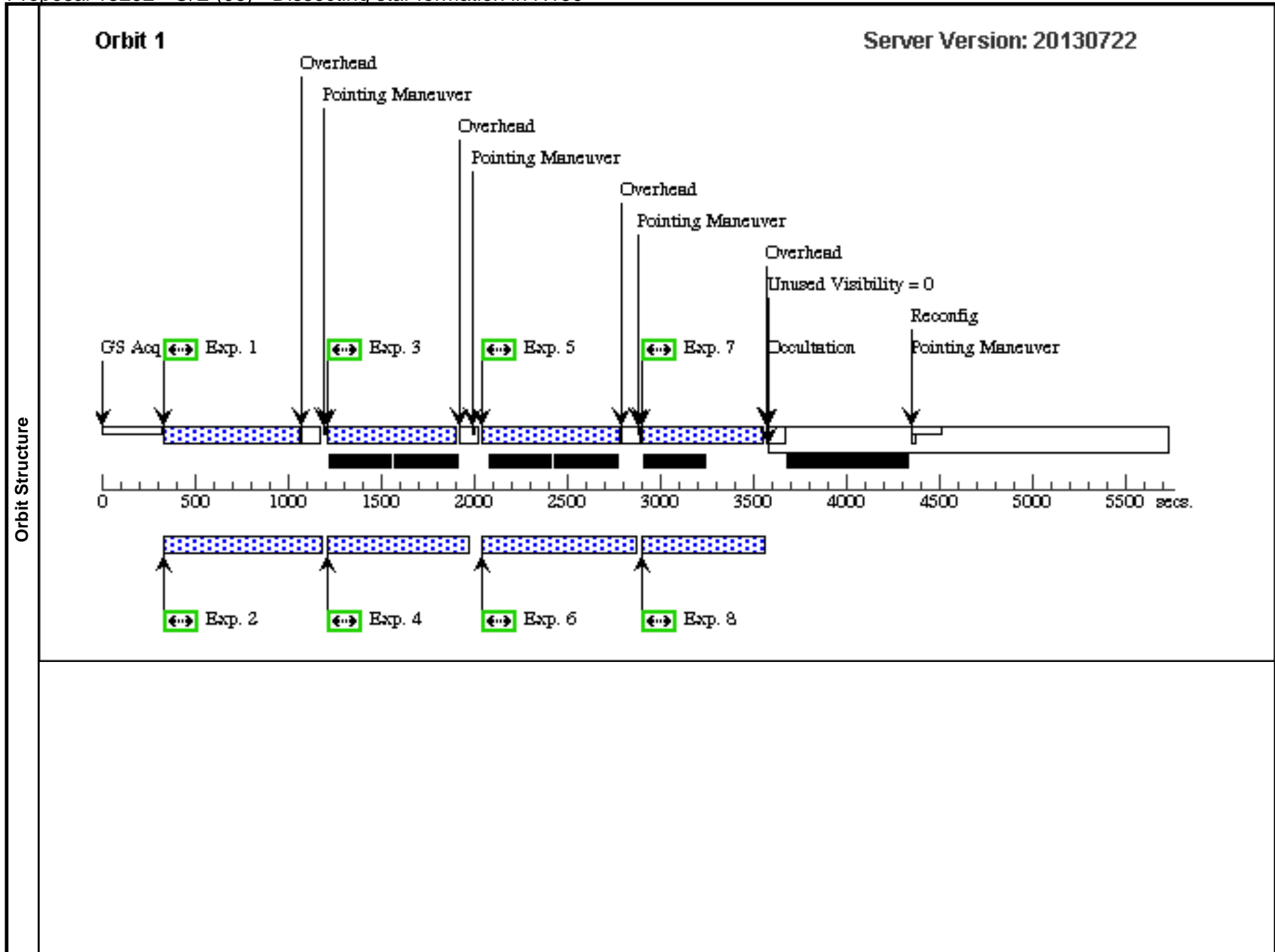
Proposal 13292 - O/E (06) - Dissecting star formation in N159

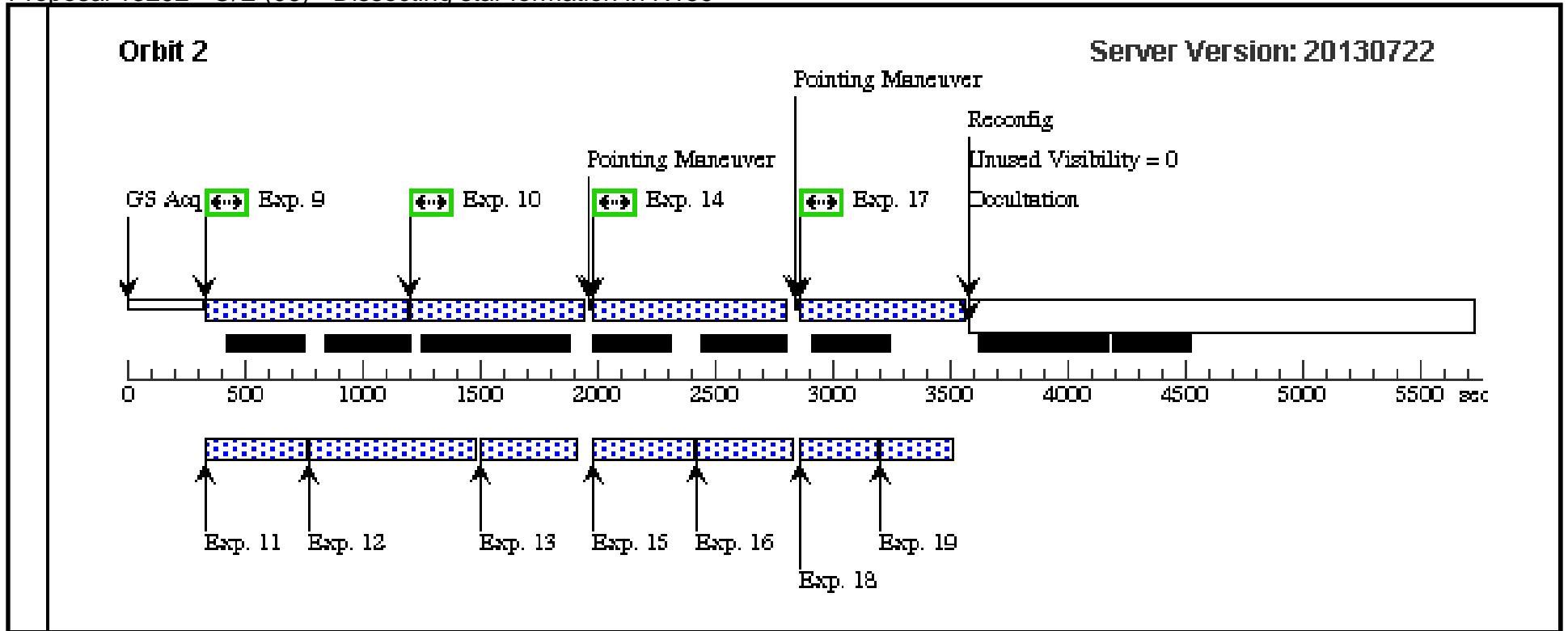
Wed Sep 25 01:05:02 GMT 2013

<b>Visit</b>	<b>Proposal 13292, O/E (06), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 80D TO 85 D					
	<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>
(1)		N159-E	RA: 05 40 8.8000 (85.0366667d) Dec: -69 44 39.00 (-69.74417d) Equinox: J2000		V=14.5	Reference Frame: ICRS
(4)		OFF-POINT	RA: 05 41 0.2156 (85.2508983d) Dec: -69 48 20.46 (-69.80568d) Equinox: J2000		V=14.3	Reference Frame: ICRS

Proposal 13292 - O/E (06) - Dissecting star formation in N159

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
Exposures	1	656N:O	(4) OFF-POINT	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N		Prime + Parallel Group 1-2 in O/E (06)	697 Secs (697 Secs)	[1]	
	2	814W:E	(1) N159-E	ACS/WFC, ACCUM, WFC	F814W		Prime + Parallel Group 1-2 in O/E (06)	640 Secs (640 Secs)	[1]	
	3	656N:O	(4) OFF-POINT	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	POS TARG 0.3,1.7	Prime + Parallel Group 3-4 in O/E (06)	697 Secs (697 Secs)	[1]	
	4	814W:E	(1) N159-E	ACS/WFC, ACCUM, WFC	F814W		Prime + Parallel Group 3-4 in O/E (06)	640 Secs (640 Secs)	[1]	
	5	656N:O	(4) OFF-POINT	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	POS TARG -0.2,0.0 5	Prime + Parallel Group 5-6 in O/E (06)	740 Secs (740 Secs)	[1]	
	6	555W:E	(1) N159-E	ACS/WFC, ACCUM, WFC	F555W		Prime + Parallel Group 5-6 in O/E (06)	668 Secs (668 Secs)	[1]	
	7	656N:O	(4) OFF-POINT	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	POS TARG 0.1,1.75	Prime + Parallel Group 7-8 in O/E (06)	650 Secs (650 Secs)	[1]	
	8	555W:E	(1) N159-E	ACS/WFC, ACCUM, WFC	F555W		Prime + Parallel Group 7-8 in O/E (06)	536 Secs (536 Secs)	[1]	
	9	555W:E	(1) N159-E	ACS/WFC, ACCUM, WFC	F555W		Prime + Parallel Group 9-13 in O/E (06)	650 Secs (650 Secs)	[2]	
	10	814W:E	(1) N159-E	ACS/WFC, ACCUM, WFC	F814W		Prime + Parallel Group 9-13 in O/E (06)	581 Secs (581 Secs)	[2]	
	11	160W:O	(4) OFF-POINT	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=10; SAMP-SEQ=STEP100	Prime + Parallel Group 9-13 in O/E (06)	399.231646 Secs (399.232 Secs)	[2]	
	12	F125W:O	(4) OFF-POINT	WFC3/IR, MULTIACCUM, IR	F125W	SAMP-SEQ=STEP100; NSAMP=13	Prime + Parallel Group 9-13 in O/E (06)	699.232615 Secs (699.233 Secs)	[2]	
	13	160W:O	(4) OFF-POINT	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=10; SAMP-SEQ=STEP100	Prime + Parallel Group 9-13 in O/E (06)	399.231646 Secs (399.232 Secs)	[2]	
	14	814W:E	(1) N159-E	ACS/WFC, ACCUM, WFC	F814W	POS TARG -0.5,0.2 5	Prime + Parallel Group 14-16 in O/E (06)	700 Secs (700 Secs)	[2]	
	15	160W:O longer	(4) OFF-POINT	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=10; SAMP-SEQ=STEP100	Prime + Parallel Group 14-16 in O/E (06)	399.231646 Secs (399.232 Secs)	[2]	
	16	F125W:O longer	(4) OFF-POINT	WFC3/IR, MULTIACCUM, IR	F125W	SAMP-SEQ=STEP100; NSAMP=10	Prime + Parallel Group 14-16 in O/E (06)	399.231646 Secs (399.232 Secs)	[2]	
	17	555W:E	(1) N159-E	ACS/WFC, ACCUM, WFC	F555W	POS TARG 0.25,-0.5	Prime + Parallel Group 17-19 in O/E (06)	536 Secs (536 Secs)	[2]	
	18	125W:O shorter	(4) OFF-POINT	WFC3/IR, MULTIACCUM, IR	F125W	NSAMP=9; SAMP-SEQ=STEP100	Prime + Parallel Group 17-19 in O/E (06)	299.231323 Secs (299.231 Secs)	[2]	
	19	160W:O shorter	(4) OFF-POINT	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=9; SAMP-SEQ=STEP100	Prime + Parallel Group 17-19 in O/E (06)	299.231323 Secs (299.231 Secs)	[2]	





Proposal 13292 - W/S (07) - Dissecting star formation in N159

Wed Sep 25 01:05:04 GMT 2013

<b>Visit</b>	<b>Proposal 13292, W/S (07), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 285D TO 290 D					
	<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>
	(2)	N159-S	RA: 05 40 4.0000 (85.0166667d) Dec: -69 50 56.00 (-69.84889d) Equinox: J2000		V=14.9	Reference Frame: ICRS
	(3)	N159-W	RA: 05 39 35.0000 (84.8958333d) Dec: -69 45 37.00 (-69.76028d) Equinox: J2000		V=14.2	Reference Frame: ICRS

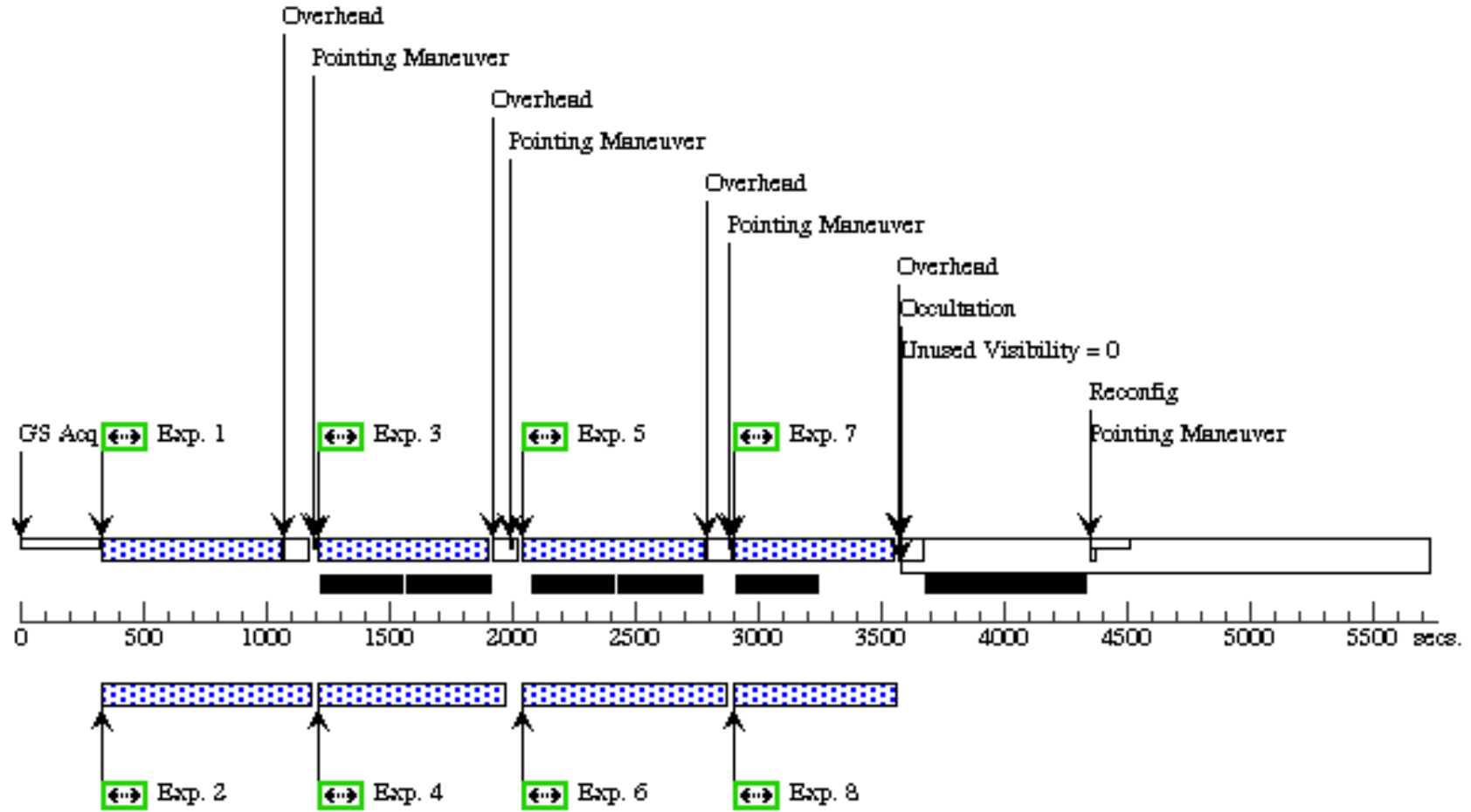
Proposal 13292 - W/S (07) - Dissecting star formation in N159

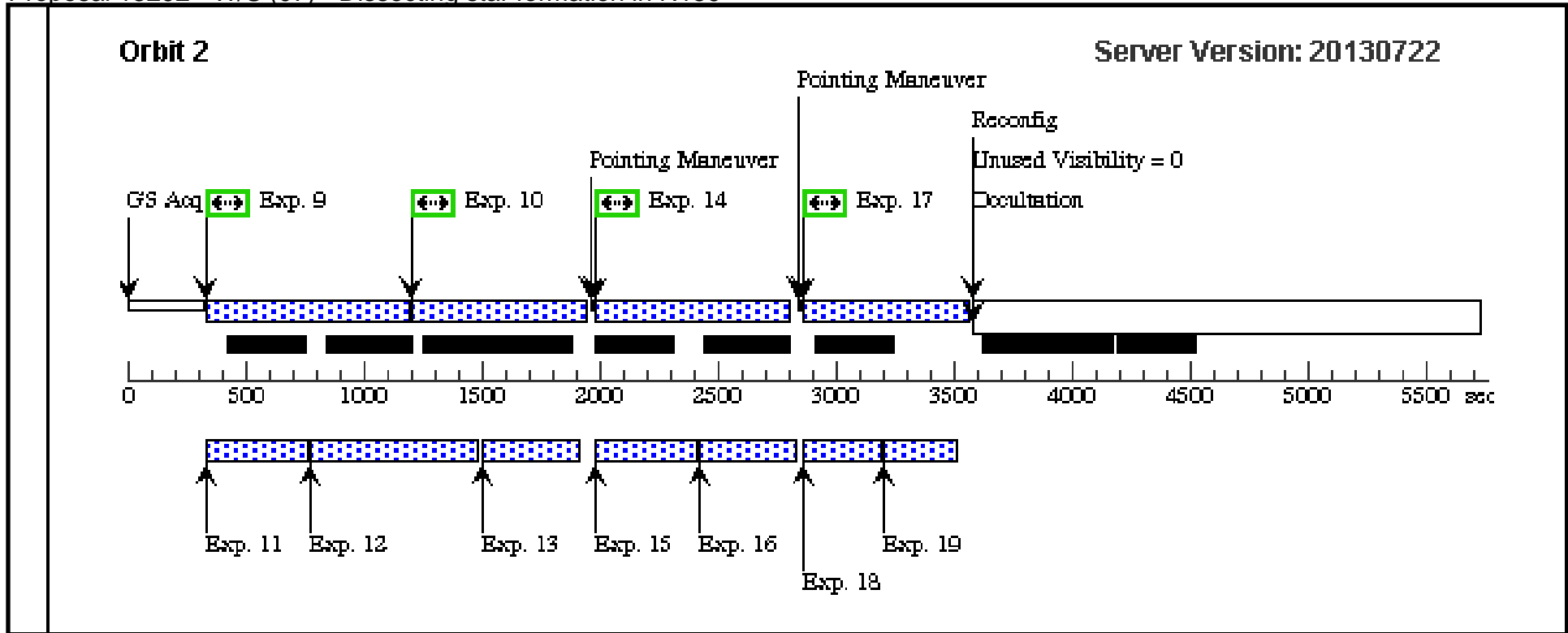
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
Exposures	1	656N:W	(3) N159-W	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N		GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 1-2 in W/S (07)	697 Secs (697 Secs)	[1]
	2	814W:S	(2) N159-S	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in W/S (07)	640 Secs (640 Secs)	[1]
	3	656N:W	(3) N159-W	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N		POS TARG 0.3,1.7	Prime + Parallel Group 3-4 in W/S (07)	697 Secs (697 Secs)	[1]
	4	814W:S	(2) N159-S	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in W/S (07)	640 Secs (640 Secs)	[1]
	5	656N:W	(3) N159-W	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N		POS TARG -0.2,0.0 5	Prime + Parallel Group 5-6 in W/S (07)	740 Secs (740 Secs)	[1]
	6	555W:S	(2) N159-S	ACS/WFC, ACCUM, WFC	F555W			Prime + Parallel Group 5-6 in W/S (07)	668 Secs (668 Secs)	[1]
	7	656N:W	(3) N159-W	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N		POS TARG 0.1,1.75	Prime + Parallel Group 7-8 in W/S (07)	650 Secs (650 Secs)	[1]
	8	555W:S	(2) N159-S	ACS/WFC, ACCUM, WFC	F555W			Prime + Parallel Group 7-8 in W/S (07)	536 Secs (536 Secs)	[1]
	9	555W:S	(2) N159-S	ACS/WFC, ACCUM, WFC	F555W		GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 9-13 in W/S (07)	650 Secs (650 Secs)	[2]
	10	814W:S	(2) N159-S	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 9-13 in W/S (07)	581 Secs (581 Secs)	[2]
	11	160W:W	(3) N159-W	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=10; SAMP-SEQ=STEP100		Prime + Parallel Group 9-13 in W/S (07)	399.231646 Secs (399.232 Secs)	[2]
	12	F125W:W	(3) N159-W	WFC3/IR, MULTIACCUM, IR	F125W	SAMP-SEQ=STEP100; NSAMP=13		Prime + Parallel Group 9-13 in W/S (07)	699.232615 Secs (699.233 Secs)	[2]
	13	160W:W	(3) N159-W	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=10; SAMP-SEQ=STEP100		Prime + Parallel Group 9-13 in W/S (07)	399.231646 Secs (399.232 Secs)	[2]
	14	814W:S	(2) N159-S	ACS/WFC, ACCUM, WFC	F814W		POS TARG -0.5,0.2 5	Prime + Parallel Group 14-16 in W/S (07)	700 Secs (700 Secs)	[2]
	15	160W:W lon ger	(3) N159-W	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=10; SAMP-SEQ=STEP100		Prime + Parallel Group 14-16 in W/S (07)	399.231646 Secs (399.232 Secs)	[2]
	16	F125W:W 1 onger	(3) N159-W	WFC3/IR, MULTIACCUM, IR	F125W	SAMP-SEQ=STEP100; NSAMP=10		Prime + Parallel Group 14-16 in W/S (07)	399.231646 Secs (399.232 Secs)	[2]
	17	555W:S	(2) N159-S	ACS/WFC, ACCUM, WFC	F555W		POS TARG 0.25,-0.5	Prime + Parallel Group 17-19 in W/S (07)	536 Secs (536 Secs)	[2]
	18	125W:W sh orter	(3) N159-W	WFC3/IR, MULTIACCUM, IR	F125W	NSAMP=9; SAMP-SEQ=STEP100		Prime + Parallel Group 17-19 in W/S (07)	299.231323 Secs (299.231 Secs)	[2]
	19	160W:W sh orter	(3) N159-W	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=9; SAMP-SEQ=STEP100		Prime + Parallel Group 17-19 in W/S (07)	299.231323 Secs (299.231 Secs)	[2]

Orbit 1

Server Version: 20130722

Orbit Structure





Proposal 13292 - S/W (08) - Dissecting star formation in N159

Wed Sep 25 01:05:05 GMT 2013

Visit	Proposal 13292, S/W (08), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 102D TO 108 D					
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
(2)		N159-S	RA: 05 40 4.0000 (85.0166667d) Dec: -69 50 56.00 (-69.84889d) Equinox: J2000		V=14.9	Reference Frame: ICRS
(3)		N159-W	RA: 05 39 35.0000 (84.8958333d) Dec: -69 45 37.00 (-69.76028d) Equinox: J2000		V=14.2	Reference Frame: ICRS

Proposal 13292 - S/W (08) - Dissecting star formation in N159

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
Exposures	1	656N:S	(2) N159-S	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N		Prime + Parallel Group 1-2 in S/W (08)	697 Secs (697 Secs)	[1]	
	2	814W:W	(3) N159-W	ACS/WFC, ACCUM, WFC	F814W		Prime + Parallel Group 1-2 in S/W (08)	640 Secs (640 Secs)	[1]	
	3	656N:S	(2) N159-S	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	POS TARG 0.3,1.7	Prime + Parallel Group 3-4 in S/W (08)	697 Secs (697 Secs)	[1]	
	4	814W:W	(3) N159-W	ACS/WFC, ACCUM, WFC	F814W		Prime + Parallel Group 3-4 in S/W (08)	640 Secs (640 Secs)	[1]	
	5	656N:S	(2) N159-S	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	POS TARG -0.2,0.0 5	Prime + Parallel Group 5-6 in S/W (08)	740 Secs (740 Secs)	[1]	
	6	555W:W	(3) N159-W	ACS/WFC, ACCUM, WFC	F555W		Prime + Parallel Group 5-6 in S/W (08)	668 Secs (668 Secs)	[1]	
	7	656N:S	(2) N159-S	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	POS TARG 0.1,1.75	Prime + Parallel Group 7-8 in S/W (08)	650 Secs (650 Secs)	[1]	
	8	555W:W	(3) N159-W	ACS/WFC, ACCUM, WFC	F555W		Prime + Parallel Group 7-8 in S/W (08)	536 Secs (536 Secs)	[1]	
	9	555W:W	(3) N159-W	ACS/WFC, ACCUM, WFC	F555W		Prime + Parallel Group 9-13 in S/W (08)	650 Secs (650 Secs)	[2]	
	10	814W:W	(3) N159-W	ACS/WFC, ACCUM, WFC	F814W		Prime + Parallel Group 9-13 in S/W (08)	581 Secs (581 Secs)	[2]	
	11	160W:S	(2) N159-S	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=10; SAMP-SEQ=STEP100	Prime + Parallel Group 9-13 in S/W (08)	399.231646 Secs (399.232 Secs)	[2]	
	12	F125W:S	(2) N159-S	WFC3/IR, MULTIACCUM, IR	F125W	SAMP-SEQ=STEP100; NSAMP=13	Prime + Parallel Group 9-13 in S/W (08)	699.232615 Secs (699.233 Secs)	[2]	
	13	160W:S	(2) N159-S	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=10; SAMP-SEQ=STEP100	Prime + Parallel Group 9-13 in S/W (08)	399.231646 Secs (399.232 Secs)	[2]	
	14	814W:W	(3) N159-W	ACS/WFC, ACCUM, WFC	F814W	POS TARG -0.5,0.2 5	Prime + Parallel Group 14-16 in S/W (08)	700 Secs (700 Secs)	[2]	
	15	160W:S longer	(2) N159-S	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=10; SAMP-SEQ=STEP100	Prime + Parallel Group 14-16 in S/W (08)	399.231646 Secs (399.232 Secs)	[2]	
	16	F125W:S longer	(2) N159-S	WFC3/IR, MULTIACCUM, IR	F125W	SAMP-SEQ=STEP100; NSAMP=10	Prime + Parallel Group 14-16 in S/W (08)	399.231646 Secs (399.232 Secs)	[2]	
	17	555W:W	(3) N159-W	ACS/WFC, ACCUM, WFC	F555W	POS TARG 0.25,-0.5	Prime + Parallel Group 17-19 in S/W (08)	536 Secs (536 Secs)	[2]	
	18	125W:S shorter	(2) N159-S	WFC3/IR, MULTIACCUM, IR	F125W	NSAMP=9; SAMP-SEQ=STEP100	Prime + Parallel Group 17-19 in S/W (08)	299.231323 Secs (299.231 Secs)	[2]	
	19	160W:S shorter	(2) N159-S	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=9; SAMP-SEQ=STEP100	Prime + Parallel Group 17-19 in S/W (08)	299.231323 Secs (299.231 Secs)	[2]	

Orbit 1

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Orbit Structure

