



14710 - Multiple Stellar Populations in Young Magellanic Cloud Clusters

Cycle: 24, 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>
01	(1) NGC-1818	ACS/WFC WFC3/UVIS	1	16-Nov-2016 07:05:41.0	yes
02	(2) NGC-1805	ACS/WFC WFC3/UVIS	1	16-Nov-2016 07:05:43.0	yes

<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>
03	(3) NGC-330	ACS/WFC WFC3/UVIS	1	16-Nov-2016 07:05:44.0	yes
04	(4) NGC-2164	ACS/WFC WFC3/UVIS	1	16-Nov-2016 07:05:45.0	yes
05	(5) NGC-1953	ACS/WFC WFC3/UVIS	2	16-Nov-2016 07:05:47.0	yes
06	(6) NGC-294	ACS/WFC WFC3/UVIS	2	16-Nov-2016 07:05:50.0	yes
07	(7) NGC-1868	ACS/WFC WFC3/UVIS	2	16-Nov-2016 07:05:51.0	yes
08	(8) NGC-1801	ACS/WFC WFC3/UVIS	2	16-Nov-2016 07:05:53.0	yes
09	(9) OGLE-CL-SMC-104	ACS/WFC WFC3/UVIS	2	16-Nov-2016 07:05:56.0	yes

14 Total Orbits Used

ABSTRACT

The finding that most intermediate-age (~1-2 Gyr old) star clusters in both Magellanic Clouds (MCs) exhibit an extended main-sequence turn off (eMSTO) has been one of the most-intriguing discoveries made by HST in the field of stellar astrophysics. A huge effort has been undertaken to understand the eMSTO but the physical mechanism that is responsible for the eMSTO is still unknown. Several authors have suggested that the eMSTO is due to an age spread of ~100-500 Myr and that the intermediate-age MC clusters are the young counterparts of the old Galactic globular clusters (GCs) with multiple populations. This scenario would imply that the eMSTO is present in massive GCs only. As an alternative, the eMSTO could be due to coeval stellar populations with different rotation rates. In that case the eMSTO should be unrelated to the mass of the host GC. Our recent discovery that three ~1-300 Myr-old LMC clusters exhibit not only an eMSTO but also a split MS may provide a new angle to investigate the multiple-population phenomenon. We propose to observe 9 GCs in the LMC and the SMC with ages between ~20 and ~600 Myr and masses between ~3,000 and 50,000 solar masses. This interval of masses and ages is almost unexplored to date. We plan to obtain deep imaging in the F336W and F814W bands. These are very efficient filters to search for eMSTOs and split MSs and to constrain the internal variation of age and/or the rotation rates of the distinct populations. Moreover, we will use the F656N filter to detect any H-alpha emission either due to pre-MS stars or fast-

rotating Be-stars. We will thus understand to what extent age, rotation, and GC mass are responsible for the eMSTO.

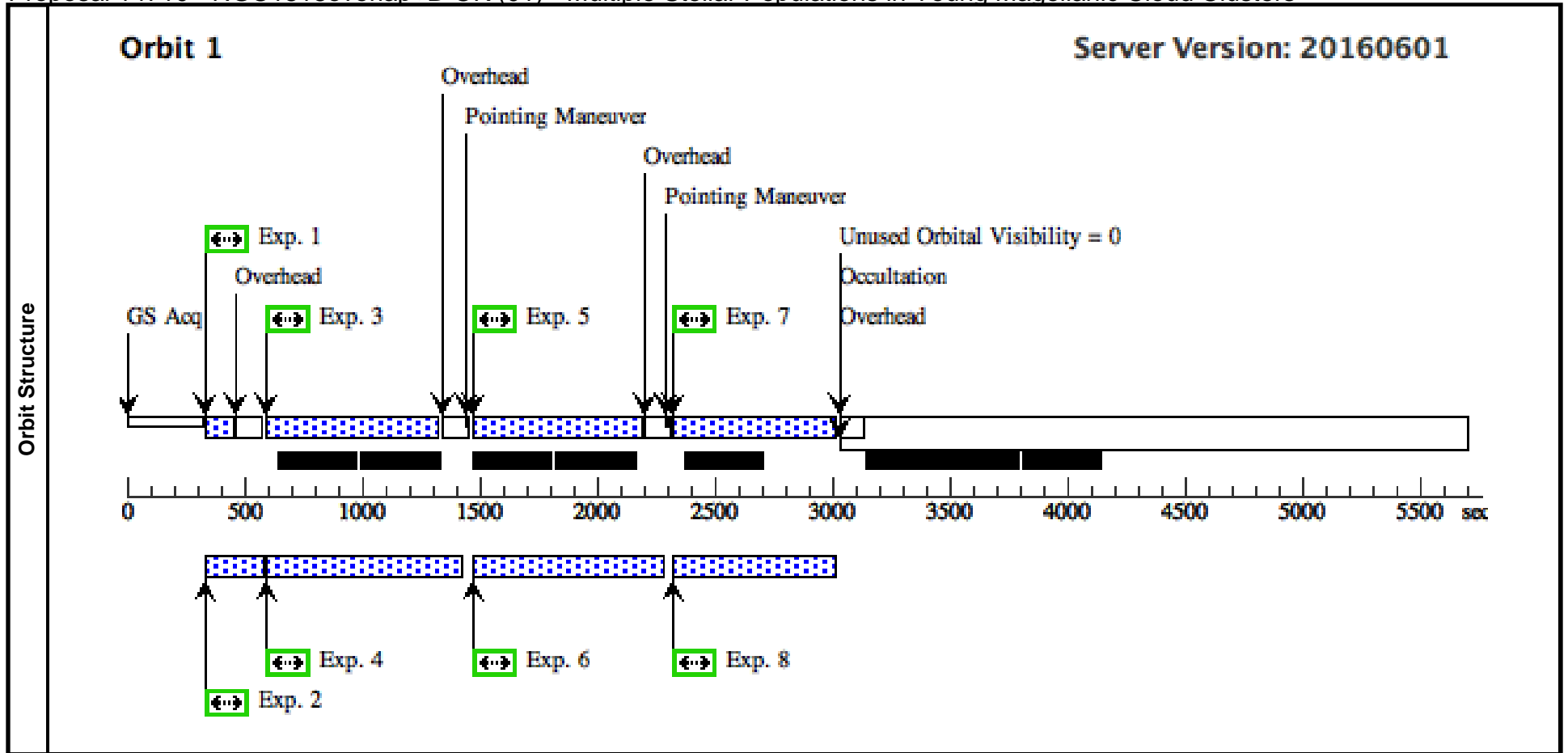
OBSERVING DESCRIPTION

Imaging with WFC3/UVIS in F336W, F656N, F814W of star clusters in the small and the large magellanic cloud. ACS/WFC imaging in F475W and F814W of parallel fields.

Proposal 14710 - NGC1818overlap+B-OK (01) - Multiple Stellar Populations in Young Magellanic Cloud Clusters

Wed Nov 16 12:05:57 GMT 2016

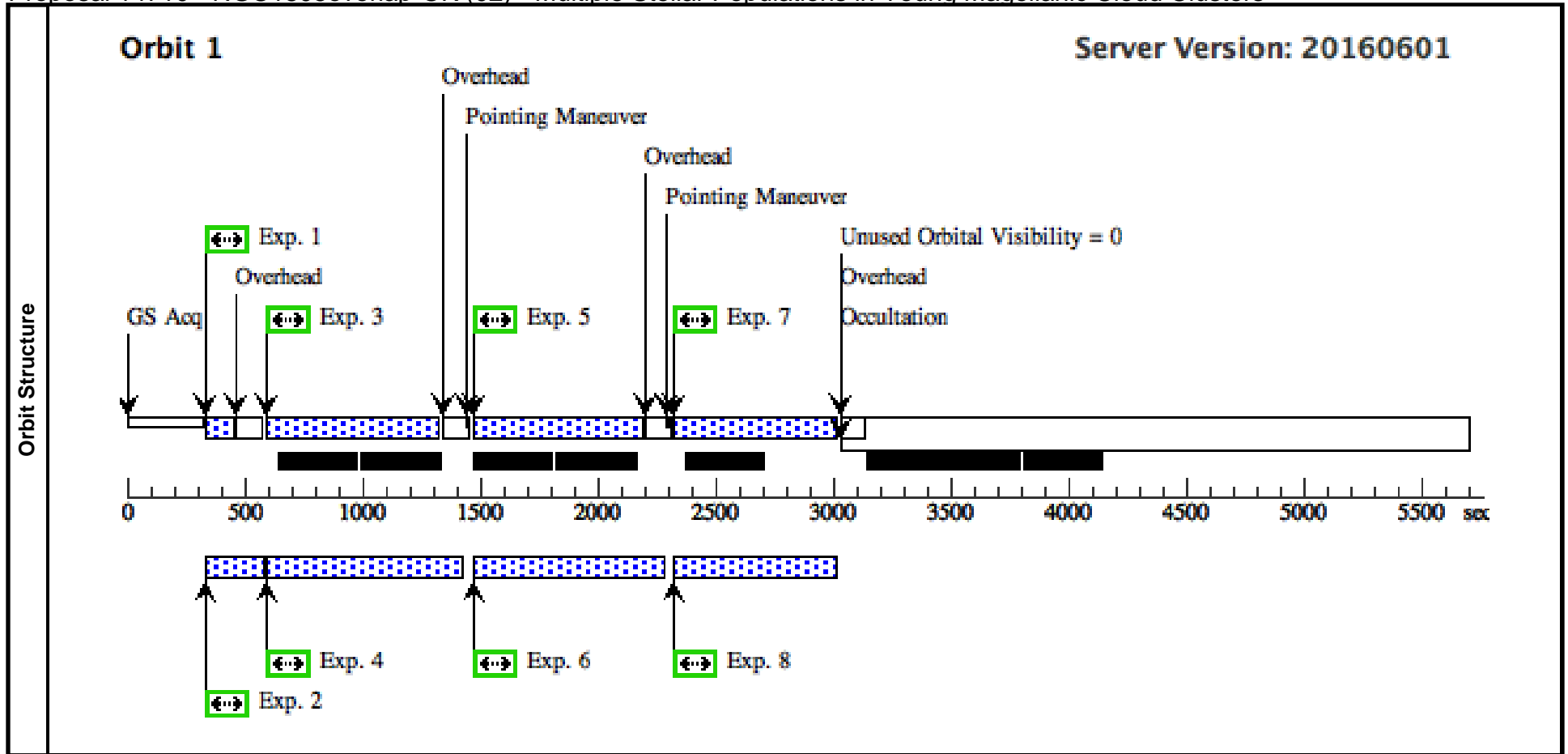
Visit	Proposal 14710, NGC1818overlap+B-OK (01), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 100%; ORIENT 61D TO 63 D Comments: NGC-1818 - part 1									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	NGC-1818	RA: 05 04 13.8000 (76.0575000d) Dec: -66 26 2.00 (-66.43389d) Equinox: J2000		V=10.5	Reference Frame: SIMBAD				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Extended=YES									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(1) NGC-1818	(1) NGC-1818	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 1-2 in NGC1818overlap+B-OK (01)	90 Secs (90 Secs) [==>]	[1]
	2	(1) NGC-1818	(1) NGC-1818	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-2 in NGC1818overlap+B-OK (01)	42 Secs (42 Secs) [==>]	[1]
	3	(1) NGC-1818	(1) NGC-1818	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 3-4 in NGC1818overlap+B-OK (01)	720 Secs (720 Secs) [==>]	[1]
	4	(1) NGC-1818	(1) NGC-1818	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 3-4 in NGC1818overlap+B-OK (01)	667 Secs (667 Secs) [==>]	[1]
	5	(1) NGC-1818	(1) NGC-1818	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG 0,0	Prime + Parallel Group 5-6 in NGC1818overlap+B-OK (01)	720 Secs (720 Secs) [==>]	[1]
	6	(1) NGC-1818	(1) NGC-1818	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 5-6 in NGC1818overlap+B-OK (01)	690 Secs (690 Secs) [==>]	[1]
	7	(1) NGC-1818	(1) NGC-1818	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W		POS TARG +3,+3	Prime + Parallel Group 7-8 in NGC1818overlap+B-OK (01)	666 Secs (666 Secs) [==>]	[1]
	8	(1) NGC-1818	(1) NGC-1818	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 7-8 in NGC1818overlap+B-OK (01)	530 Secs (530 Secs) [==>]	[1]



Proposal 14710 - NGC1805overlap-OK (02) - Multiple Stellar Populations in Young Magellanic Cloud Clusters

Wed Nov 16 12:05:57 GMT 2016

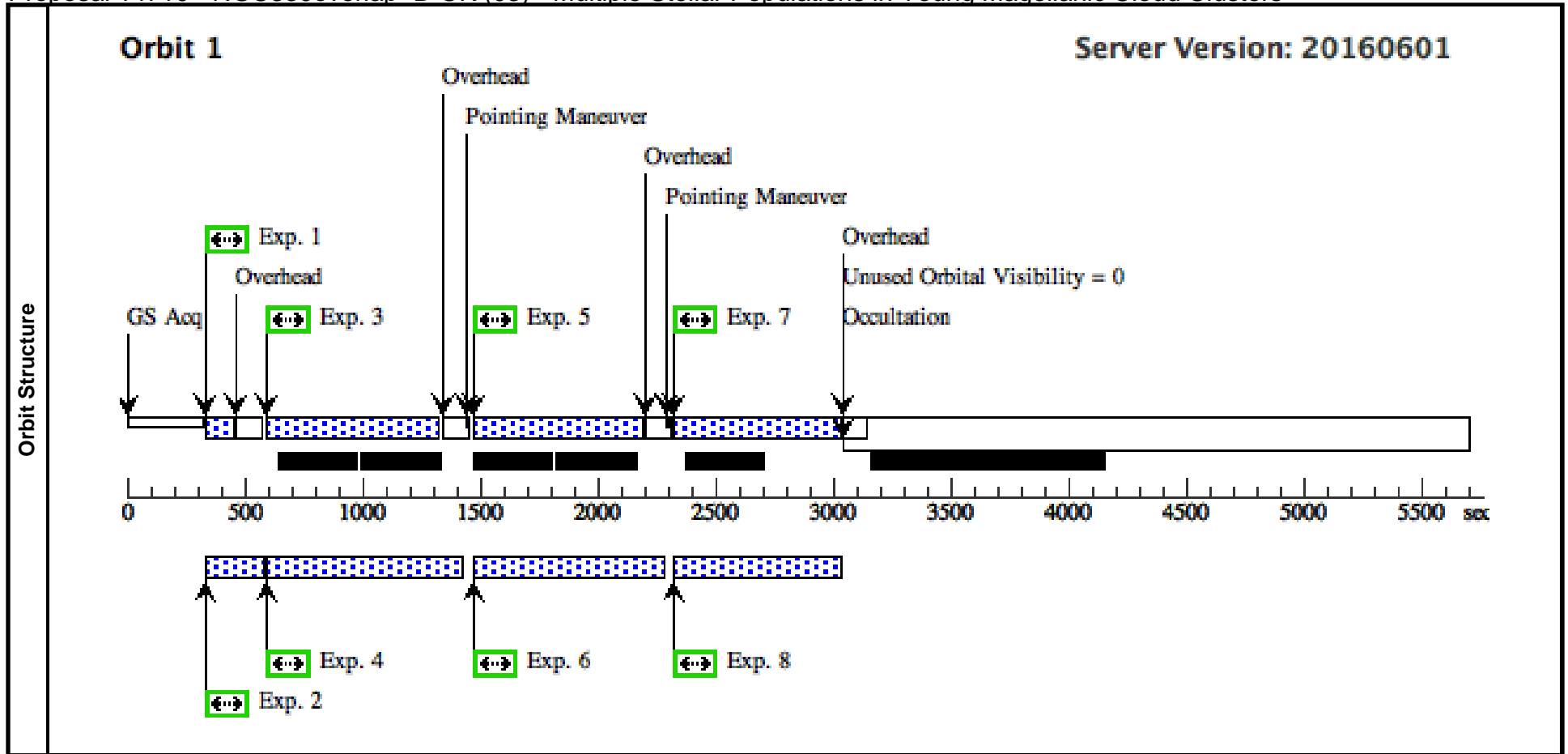
Visit	Proposal 14710, NGC1805overlap-OK (02), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 100%; ORIENT 317.3D TO 317.3 D Comments: NGC-1805 - part 1									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	NGC-1805	RA: 05 02 21.0000 (75.5875000d) Dec: -66 07 0.00 (-66.11667d) Equinox: J2000		V=10.7	Reference Frame: SIMBAD				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Extended=YES									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) NGC-1805	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 1-2 in NGC1805overlap-OK (02)	90 Secs (90 Secs) [==>]	[1]
	2		(2) NGC-1805	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-2 in NGC1805overlap-OK (02)	42 Secs (42 Secs) [==>]	[1]
	3		(2) NGC-1805	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 3-4 in NGC1805overlap-OK (02)	720 Secs (720 Secs) [==>]	[1]
	4		(2) NGC-1805	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 3-4 in NGC1805overlap-OK (02)	667 Secs (667 Secs) [==>]	[1]
	5		(2) NGC-1805	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG 0,0	Prime + Parallel Group 5-6 in NGC1805overlap-OK (02)	720 Secs (720 Secs) [==>]	[1]
	6		(2) NGC-1805	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 5-6 in NGC1805overlap-OK (02)	690 Secs (690 Secs) [==>]	[1]
	7		(2) NGC-1805	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W		POS TARG +3,+3	Prime + Parallel Group 7-8 in NGC1805overlap-OK (02)	666 Secs (666 Secs) [==>]	[1]
	8		(2) NGC-1805	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 7-8 in NGC1805overlap-OK (02)	530 Secs (530 Secs) [==>]	[1]



Proposal 14710 - NGC330overlap+B-OK (03) - Multiple Stellar Populations in Young Magellanic Cloud Clusters

Wed Nov 16 12:05:57 GMT 2016

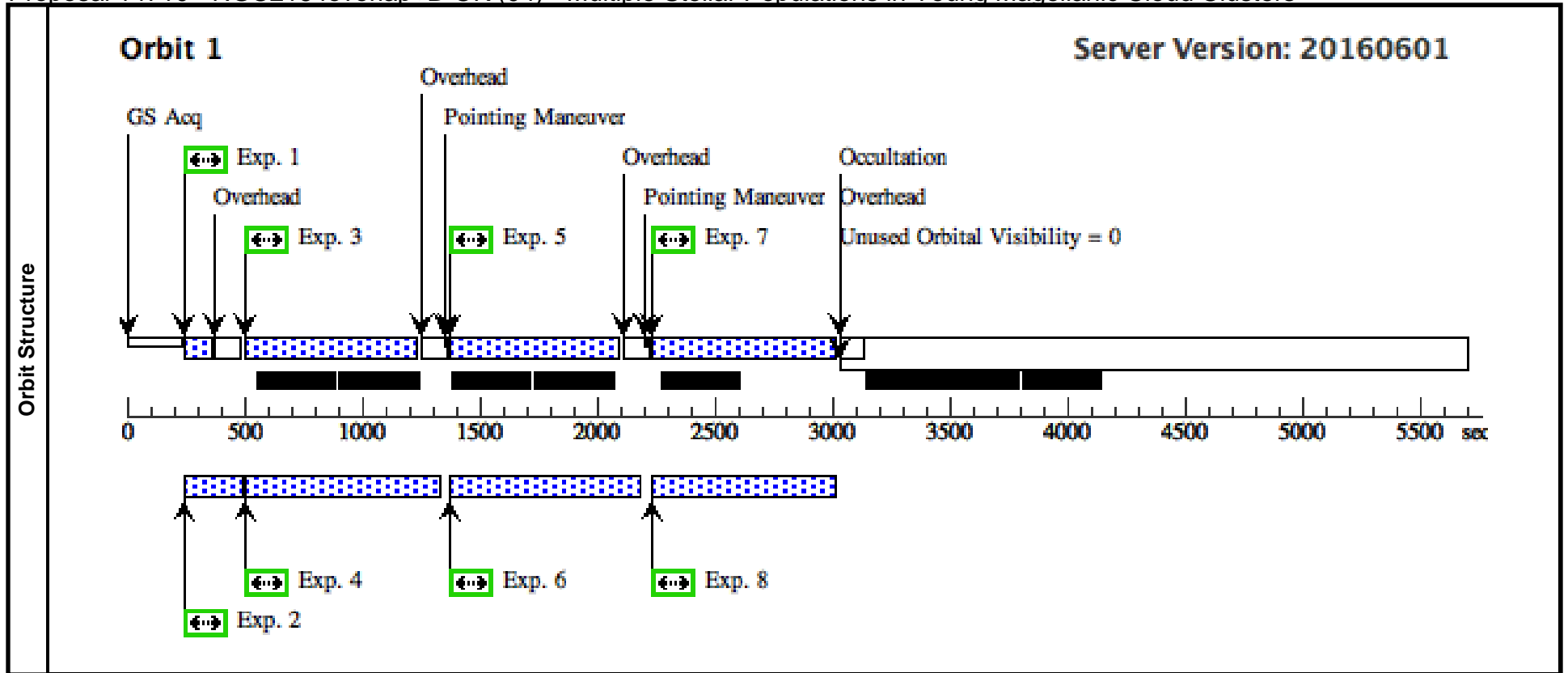
Visit	Proposal 14710, NGC330overlap+B-OK (03), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 100%; ORIENT 284.5D TO 284.5 D Comments: NGC-330 - part 1									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(3)	NGC-330	RA: 00 56 20.2177 (14.0842404d) Dec: -72 28 5.05 (-72.46807d) Equinox: J2000		V=9.55	Reference Frame: SIMBAD				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Extended=YES									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(3) NGC-330		WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 1-2 in NGC330overlap+B-OK (03)	90 Secs (90 Secs) [==>]	[1]
	2	(3) NGC-330		ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-2 in NGC330overlap+B-OK (03)	42 Secs (42 Secs) [==>]	[1]
	3	(3) NGC-330		WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 3-4 in NGC330overlap+B-OK (03)	720 Secs (720 Secs) [==>]	[1]
	4	(3) NGC-330		ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 3-4 in NGC330overlap+B-OK (03)	667 Secs (667 Secs) [==>]	[1]
	5	(3) NGC-330		WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG 0,0	Prime + Parallel Group 5-6 in NGC330overlap+B-OK (03)	720 Secs (720 Secs) [==>]	[1]
	6	(3) NGC-330		ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 5-6 in NGC330overlap+B-OK (03)	690 Secs (690 Secs) [==>]	[1]
	7	(3) NGC-330		WFC3/UVIS, ACCUM, UVIS-CENTER	F814W		POS TARG +3,+3	Prime + Parallel Group 7-8 in NGC330overlap+B-OK (03)	680 Secs (680 Secs) [==>]	[1]
	8	(3) NGC-330		ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 7-8 in NGC330overlap+B-OK (03)	544 Secs (544 Secs) [==>]	[1]



Proposal 14710 - NGC2164overlap+B-OK (04) - Multiple Stellar Populations in Young Magellanic Cloud Clusters

Wed Nov 16 12:05:57 GMT 2016

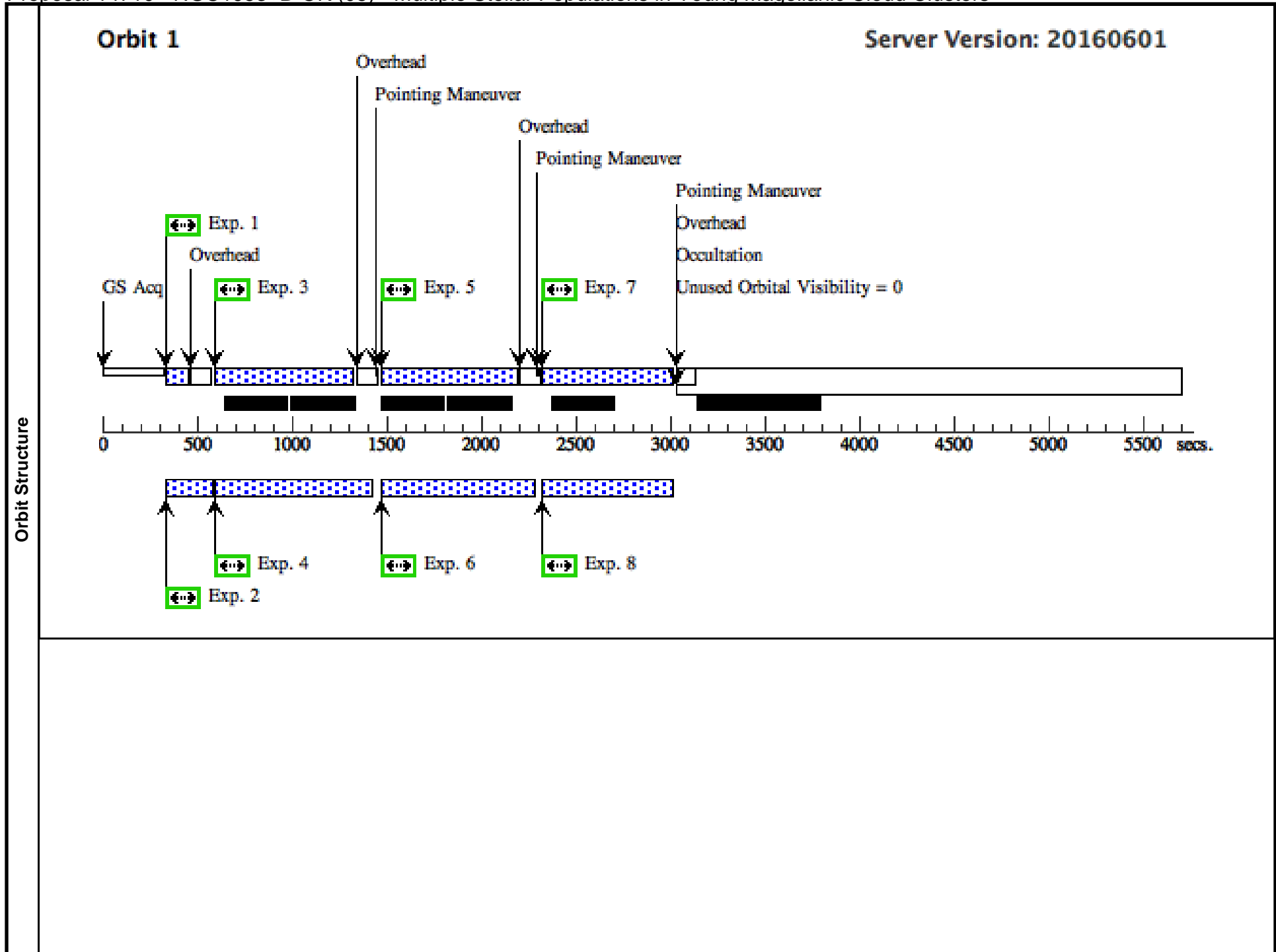
Visit	Proposal 14710, NGC2164overlap+B-OK (04), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 100%; ORIENT 65.60D TO 65.60 D Comments: NGC-2164 - part 1																																																																																											
	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>(4)</td> <td>NGC-2164</td> <td>RA: 05 58 59.2530 (89.7468875d) Dec: -68 31 1.20 (-68.51700d) Equinox: J2000</td> <td></td> <td>V=10.34</td> <td>Reference Frame: SIMBAD</td> </tr> </tbody> </table> Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Extended=YES									#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(4)	NGC-2164	RA: 05 58 59.2530 (89.7468875d) Dec: -68 31 1.20 (-68.51700d) Equinox: J2000		V=10.34	Reference Frame: SIMBAD																																																																						
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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 (Total)/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>(4) NGC-2164</td> <td>WFC3/UVIS, ACCUM, UVIS-CENTER</td> <td>F814W</td> <td>FLASH=10</td> <td>POS TARG -3,-3; GS ACQ SCENARI O ONEB1B3</td> <td>Prime + Parallel Group 1-2 in NGC2164overlap+B-OK (04)</td> <td>90 Secs (90 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>2</td> <td>(4) NGC-2164</td> <td>ACS/WFC, ACCUM, WFCENTER</td> <td>F814W</td> <td></td> <td></td> <td>Prime + Parallel Group 1-2 in NGC2164overlap+B-OK (04)</td> <td>42 Secs (42 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>3</td> <td>(4) NGC-2164</td> <td>WFC3/UVIS, ACCUM, UVIS-CENTER</td> <td>F656N</td> <td>FLASH=10</td> <td>POS TARG -3,-3</td> <td>Prime + Parallel Group 3-4 in NGC2164overlap+B-OK (04)</td> <td>720 Secs (720 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>4</td> <td>(4) NGC-2164</td> <td>ACS/WFC, ACCUM, WFCENTER</td> <td>F475W</td> <td></td> <td></td> <td>Prime + Parallel Group 3-4 in NGC2164overlap+B-OK (04)</td> <td>667 Secs (667 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>5</td> <td>(4) NGC-2164</td> <td>WFC3/UVIS, ACCUM, UVIS-CENTER</td> <td>F656N</td> <td>FLASH=10</td> <td>POS TARG 0,0</td> <td>Prime + Parallel Group 5-6 in NGC2164overlap+B-OK (04)</td> <td>720 Secs (720 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>6</td> <td>(4) NGC-2164</td> <td>ACS/WFC, ACCUM, WFCENTER</td> <td>F475W</td> <td></td> <td></td> <td>Prime + Parallel Group 5-6 in NGC2164overlap+B-OK (04)</td> <td>690 Secs (690 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>7</td> <td>(4) NGC-2164</td> <td>WFC3/UVIS, ACCUM, UVIS-CENTER</td> <td>F814W</td> <td></td> <td>POS TARG +3,+3</td> <td>Prime + Parallel Group 7-8 in NGC2164overlap+B-OK (04)</td> <td>758 Secs (758 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>8</td> <td>(4) NGC-2164</td> <td>ACS/WFC, ACCUM, WFCENTER</td> <td>F814W</td> <td></td> <td></td> <td>Prime + Parallel Group 7-8 in NGC2164overlap+B-OK (04)</td> <td>622 Secs (622 Secs) [==>]</td> <td>[1]</td> </tr> </tbody> </table>										#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	1	(4) NGC-2164	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=10	POS TARG -3,-3; GS ACQ SCENARI O ONEB1B3	Prime + Parallel Group 1-2 in NGC2164overlap+B-OK (04)	90 Secs (90 Secs) [==>]	[1]	2	(4) NGC-2164	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-2 in NGC2164overlap+B-OK (04)	42 Secs (42 Secs) [==>]	[1]	3	(4) NGC-2164	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 3-4 in NGC2164overlap+B-OK (04)	720 Secs (720 Secs) [==>]	[1]	4	(4) NGC-2164	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 3-4 in NGC2164overlap+B-OK (04)	667 Secs (667 Secs) [==>]	[1]	5	(4) NGC-2164	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG 0,0	Prime + Parallel Group 5-6 in NGC2164overlap+B-OK (04)	720 Secs (720 Secs) [==>]	[1]	6	(4) NGC-2164	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 5-6 in NGC2164overlap+B-OK (04)	690 Secs (690 Secs) [==>]	[1]	7	(4) NGC-2164	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W		POS TARG +3,+3	Prime + Parallel Group 7-8 in NGC2164overlap+B-OK (04)	758 Secs (758 Secs) [==>]	[1]	8	(4) NGC-2164	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 7-8 in NGC2164overlap+B-OK (04)	622 Secs (622 Secs) [==>]	[1]
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																																																																																			
1	(4) NGC-2164	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=10	POS TARG -3,-3; GS ACQ SCENARI O ONEB1B3	Prime + Parallel Group 1-2 in NGC2164overlap+B-OK (04)	90 Secs (90 Secs) [==>]	[1]																																																																																				
2	(4) NGC-2164	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-2 in NGC2164overlap+B-OK (04)	42 Secs (42 Secs) [==>]	[1]																																																																																				
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5	(4) NGC-2164	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG 0,0	Prime + Parallel Group 5-6 in NGC2164overlap+B-OK (04)	720 Secs (720 Secs) [==>]	[1]																																																																																				
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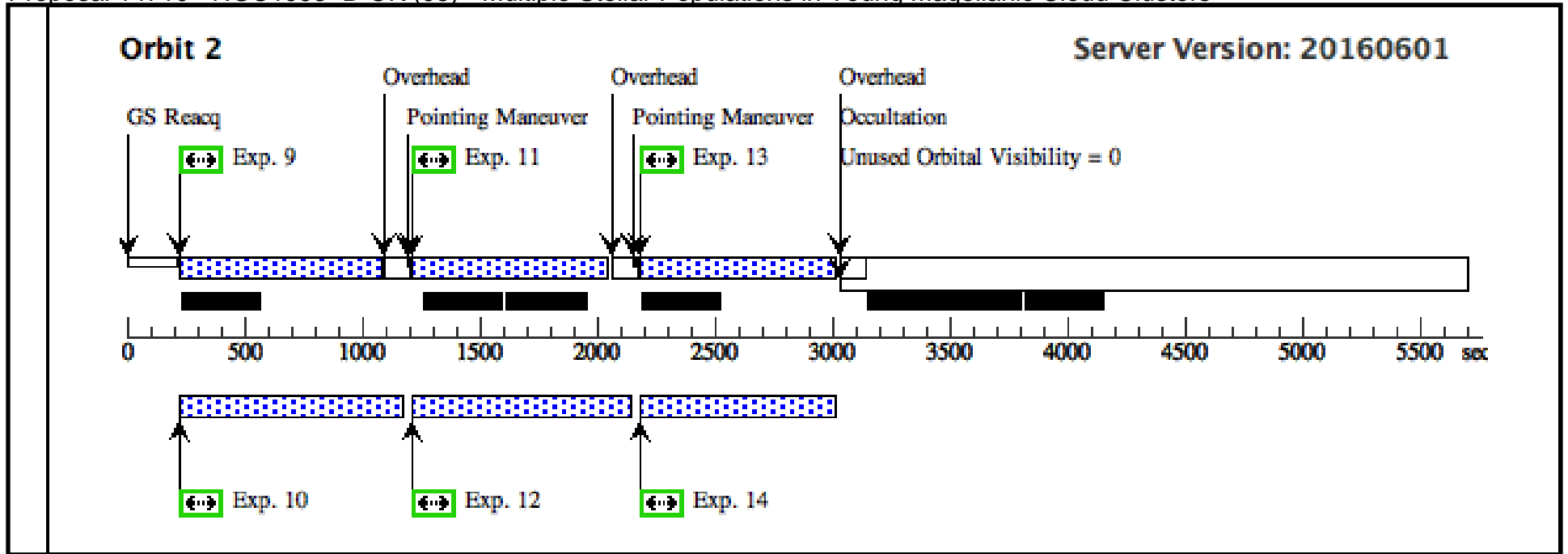


Proposal 14710 - NGC1953+B-OK (05) - Multiple Stellar Populations in Young Magellanic Cloud Clusters

Wed Nov 16 12:05:57 GMT 2016

Visit	Proposal 14710, NGC1953+B-OK (05), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 100%; ORIENT 218.2D TO 218.2 D Comments: NGC-1953 - part 1									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(5)	NGC-1953	RA: 05 25 27.0000 (81.3625000d) Dec: -68 50 18.00 (-68.83833d) Equinox: J2000		V=11.74	Reference Frame: SIMBAD				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Extended=YES									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(5) NGC-1953	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 1-2 in NGC1953+B-OK (05)	90 Secs (90 Secs) [==>]	[1]
	2		(5) NGC-1953	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-2 in NGC1953+B-OK (05)	42 Secs (42 Secs) [==>]	[1]
	3		(5) NGC-1953	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 3-4 in NGC1953+B-OK (05)	720 Secs (720 Secs) [==>]	[1]
	4		(5) NGC-1953	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 3-4 in NGC1953+B-OK (05)	667 Secs (667 Secs) [==>]	[1]
	5		(5) NGC-1953	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG 0,0	Prime + Parallel Group 5-6 in NGC1953+B-OK (05)	720 Secs (720 Secs) [==>]	[1]
	6		(5) NGC-1953	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 5-6 in NGC1953+B-OK (05)	690 Secs (690 Secs) [==>]	[1]
	7		(5) NGC-1953	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W		POS TARG +3,+3	Prime + Parallel Group 7-8 in NGC1953+B-OK (05)	666 Secs (666 Secs) [==>]	[1]
	8		(5) NGC-1953	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 7-8 in NGC1953+B-OK (05)	530 Secs (530 Secs) [==>]	[1]
	9		(5) NGC-1953	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 9-10 in NGC1953+B-OK (05)	835 Secs (835 Secs) [==>]	[2]
	10		(5) NGC-1953	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 9-10 in NGC1953+B-OK (05)	831 Secs (831 Secs) [==>]	[2]
	11		(5) NGC-1953	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=10	POS TARG 0,0	Prime + Parallel Group 11-12 in NGC1953+B-OK (05)	834 Secs (834 Secs) [==>]	[2]
	12		(5) NGC-1953	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 11-12 in NGC1953+B-OK (05)	764 Secs (764 Secs) [==>]	[2]
	13		(5) NGC-1953	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=10	POS TARG 3,3	Prime + Parallel Group 13-14 in NGC1953+B-OK (05)	834 Secs (834 Secs) [==>]	[2]
14		(5) NGC-1953	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 13-14 in NGC1953+B-OK (05)	708 Secs (708 Secs) [==>]	[2]	





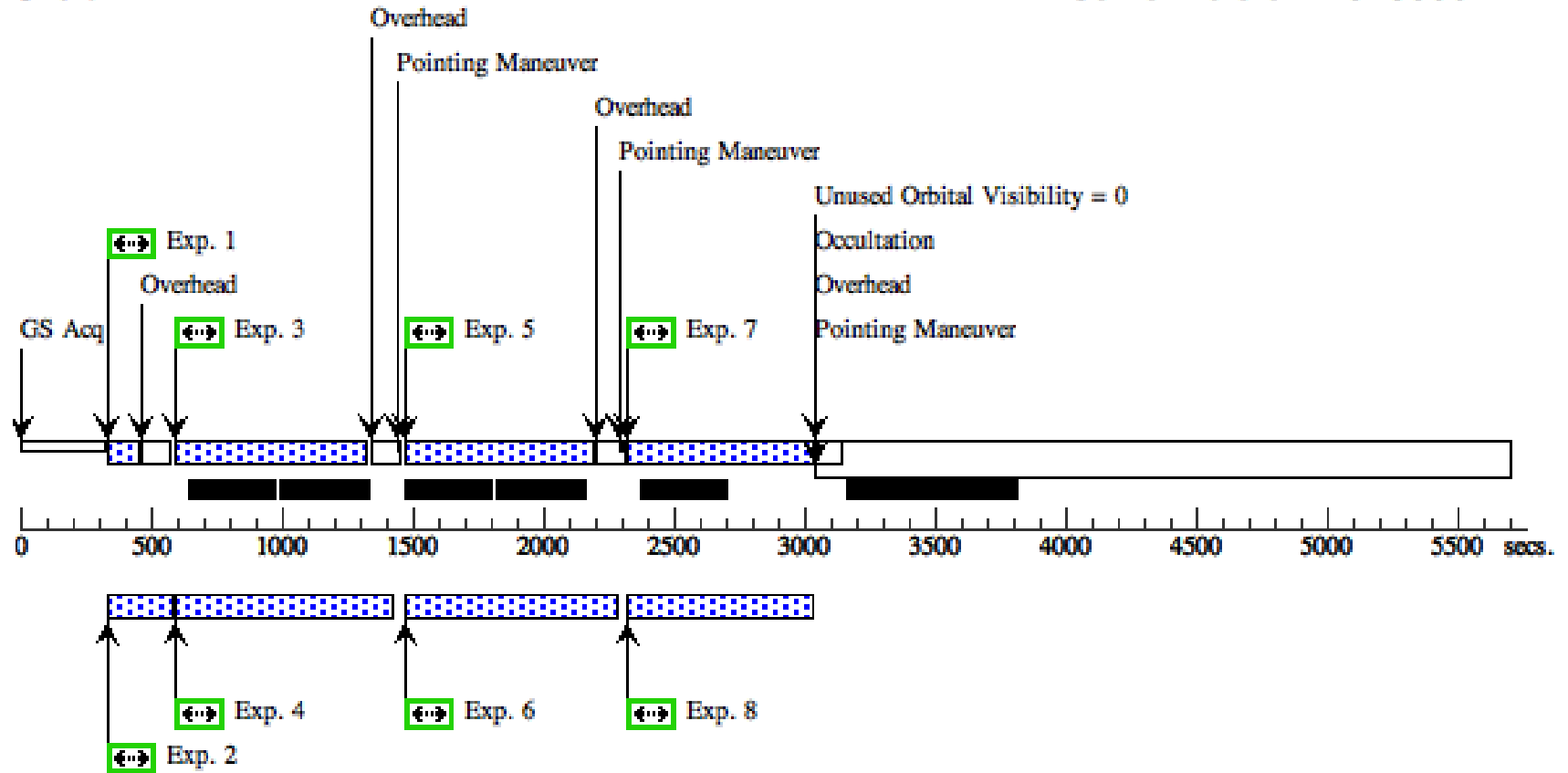
Proposal 14710 - NGC294-OK (06) - Multiple Stellar Populations in Young Magellanic Cloud Clusters

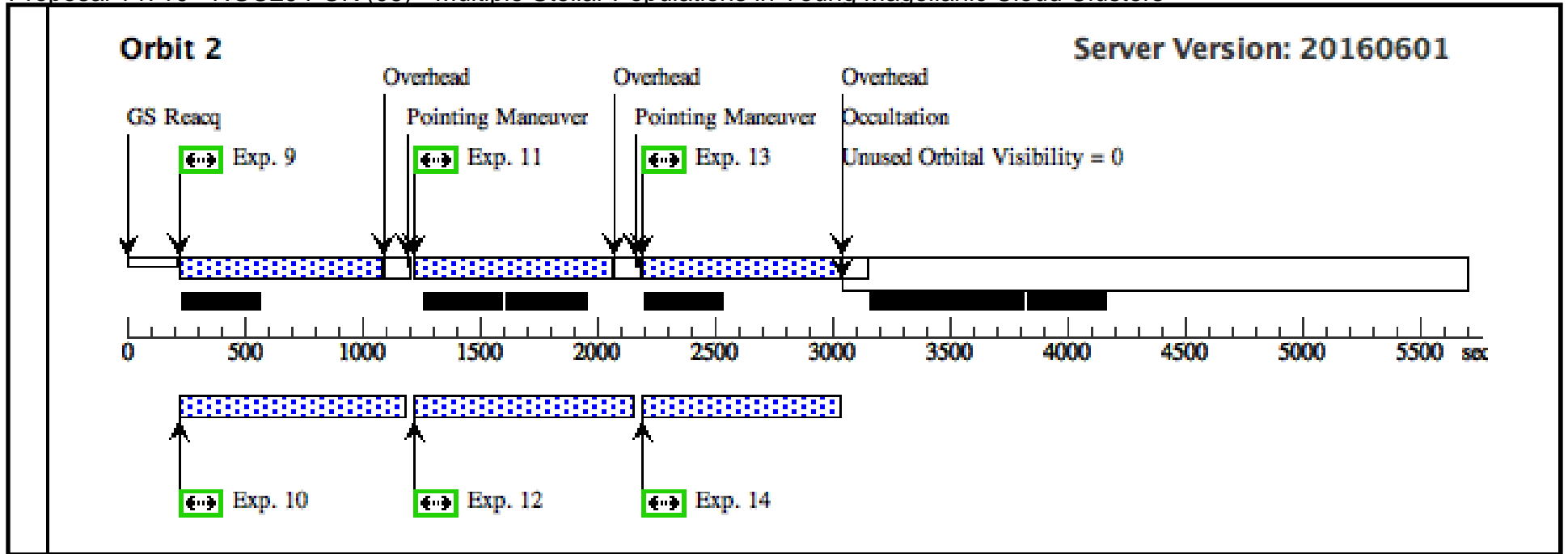
Wed Nov 16 12:05:57 GMT 2016

Visit	Proposal 14710, NGC294-OK (06), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 100%; ORIENT 0D TO 359.9 D Comments: NGC-294 - part 1									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(6)	NGC-294	RA: 00 53 5.5100 (13.2729583d) Dec: -73 22 48.00 (-73.38000d) Equinox: J2000		V=12.24	Reference Frame: SIMBAD				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Extended=YES									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(6) NGC-294	(6) NGC-294	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 1-2 in NGC294-OK (06)	90 Secs (90 Secs) [==>]	[1]
	2	(6) NGC-294	(6) NGC-294	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-2 in NGC294-OK (06)	42 Secs (42 Secs) [==>]	[1]
	3	(6) NGC-294	(6) NGC-294	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 3-4 in NGC294-OK (06)	720 Secs (720 Secs) [==>]	[1]
	4	(6) NGC-294	(6) NGC-294	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 3-4 in NGC294-OK (06)	667 Secs (667 Secs) [==>]	[1]
	5	(6) NGC-294	(6) NGC-294	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG 0,0	Prime + Parallel Group 5-6 in NGC294-OK (06)	720 Secs (720 Secs) [==>]	[1]
	6	(6) NGC-294	(6) NGC-294	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 5-6 in NGC294-OK (06)	690 Secs (690 Secs) [==>]	[1]
	7	(6) NGC-294	(6) NGC-294	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W		POS TARG +3,+3	Prime + Parallel Group 7-8 in NGC294-OK (06)	680 Secs (680 Secs) [==>]	[1]
	8	(6) NGC-294	(6) NGC-294	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 7-8 in NGC294-OK (06)	544 Secs (544 Secs) [==>]	[1]
	9	(6) NGC-294	(6) NGC-294	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 9-10 in NGC294-OK (06)	839 Secs (839 Secs) [==>]	[2]
	10	(6) NGC-294	(6) NGC-294	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 9-10 in NGC294-OK (06)	835 Secs (835 Secs) [==>]	[2]
	11	(6) NGC-294	(6) NGC-294	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=10	POS TARG 0,0	Prime + Parallel Group 11-12 in NGC294-OK (06)	839 Secs (839 Secs) [==>]	[2]
	12	(6) NGC-294	(6) NGC-294	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 11-12 in NGC294-OK (06)	769 Secs (769 Secs) [==>]	[2]
	13	(6) NGC-294	(6) NGC-294	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=10	POS TARG 3,3	Prime + Parallel Group 13-14 in NGC294-OK (06)	839 Secs (839 Secs) [==>]	[2]
14	(6) NGC-294	(6) NGC-294	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 13-14 in NGC294-OK (06)	712 Secs (712 Secs) [==>]	[2]	

Orbit 1

Orbit Structure





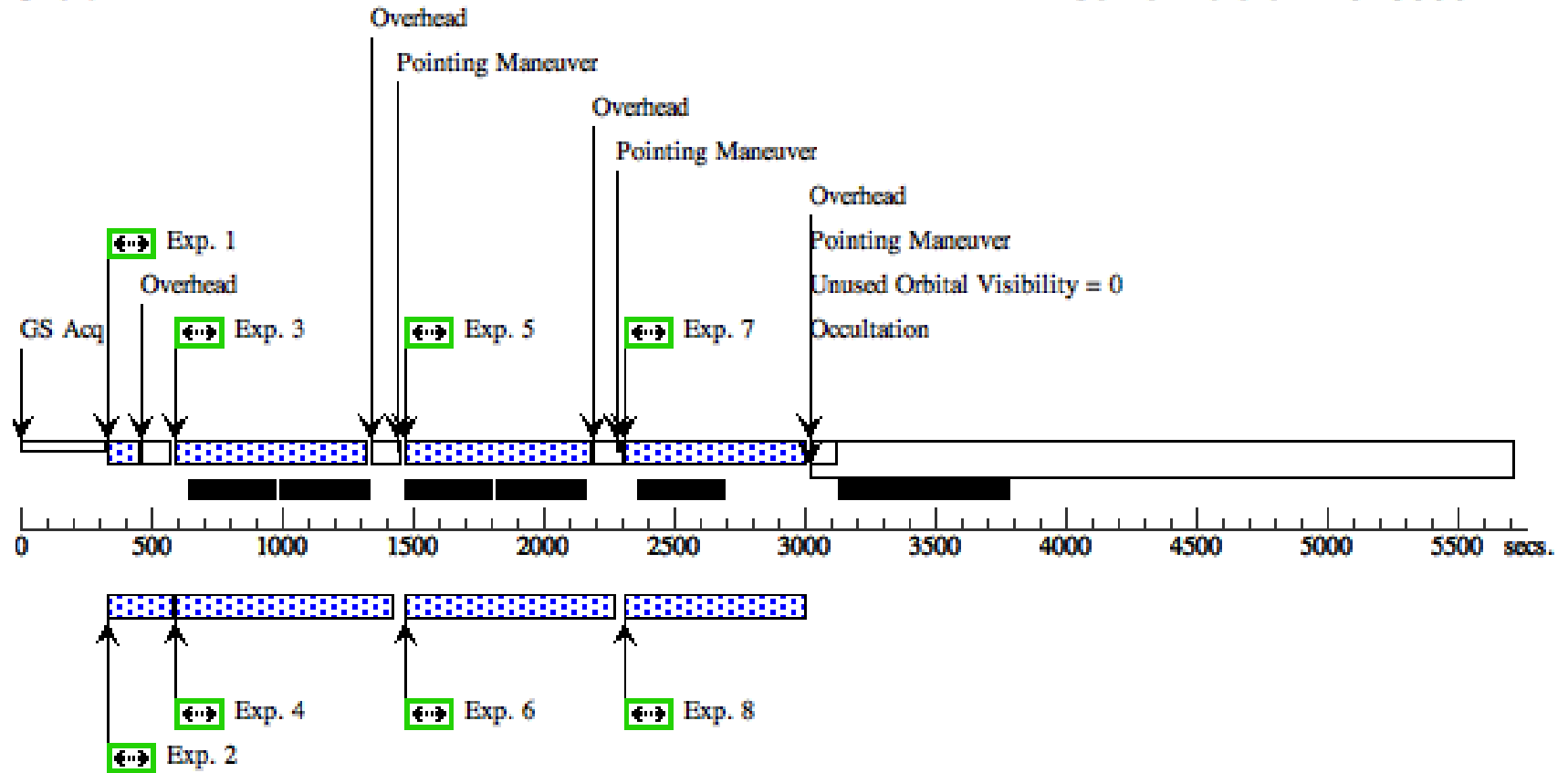
Proposal 14710 - NGC1868-OK (07) - Multiple Stellar Populations in Young Magellanic Cloud Clusters

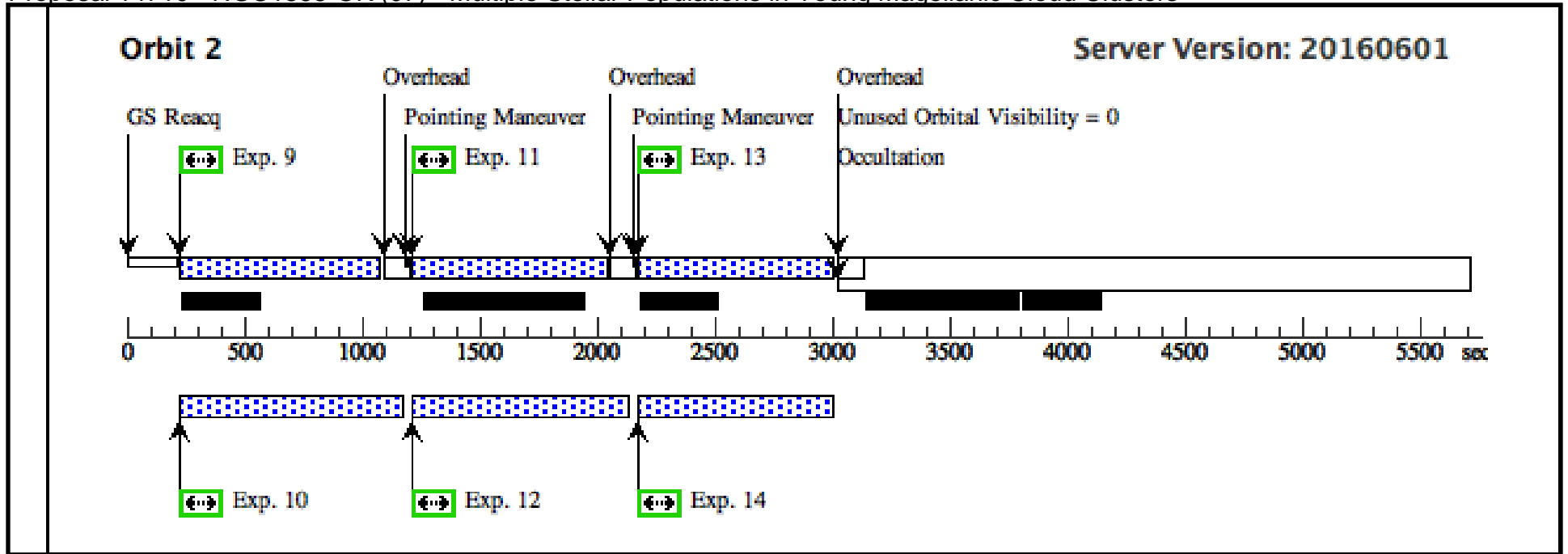
Wed Nov 16 12:05:58 GMT 2016

Visit	Proposal 14710, NGC1868-OK (07), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 100%; ORIENT 0D TO 359.9 D Comments: NGC-1868 - part 1										
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	NGC-1868	RA: 05 14 36.0000 (78.6500000d) Dec: -63 57 18.00 (-63.95500d) Equinox: J2000			V=11.57	Reference Frame: SIMBAD				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Extended=YES										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1		(7) NGC-1868	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 1-2 in NGC1868-OK (07)	90 Secs (90 Secs) [==>]	[1]	
	2		(7) NGC-1868	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-2 in NGC1868-OK (07)	42 Secs (42 Secs) [==>]	[1]	
	3		(7) NGC-1868	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 3-4 in NGC1868-OK (07)	720 Secs (720 Secs) [==>]	[1]	
	4		(7) NGC-1868	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 3-4 in NGC1868-OK (07)	667 Secs (667 Secs) [==>]	[1]	
	5		(7) NGC-1868	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG 0,0	Prime + Parallel Group 5-6 in NGC1868-OK (07)	709 Secs (709 Secs) [==>]	[1]	
	6		(7) NGC-1868	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 5-6 in NGC1868-OK (07)	679 Secs (679 Secs) [==>]	[1]	
	7		(7) NGC-1868	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W		POS TARG +3,+3	Prime + Parallel Group 7-8 in NGC1868-OK (07)	666 Secs (666 Secs) [==>]	[1]	
	8		(7) NGC-1868	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 7-8 in NGC1868-OK (07)	530 Secs (530 Secs) [==>]	[1]	
	9		(7) NGC-1868	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 9-10 in NGC1868-OK (07)	831 Secs (831 Secs) [==>]	[2]	
	10		(7) NGC-1868	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 9-10 in NGC1868-OK (07)	827 Secs (827 Secs) [==>]	[2]	
	11		(7) NGC-1868	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=10	POS TARG 0,0	Prime + Parallel Group 11-12 in NGC1868-OK (07)	831 Secs (831 Secs) [==>]	[2]	
	12		(7) NGC-1868	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 11-12 in NGC1868-OK (07)	760 Secs (760 Secs) [==>]	[2]	
	13		(7) NGC-1868	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=10	POS TARG 3,3	Prime + Parallel Group 13-14 in NGC1868-OK (07)	830 Secs (830 Secs) [==>]	[2]	
	14		(7) NGC-1868	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 13-14 in NGC1868-OK (07)	703 Secs (703 Secs) [==>]	[2]	

Orbit 1

Orbit Structure

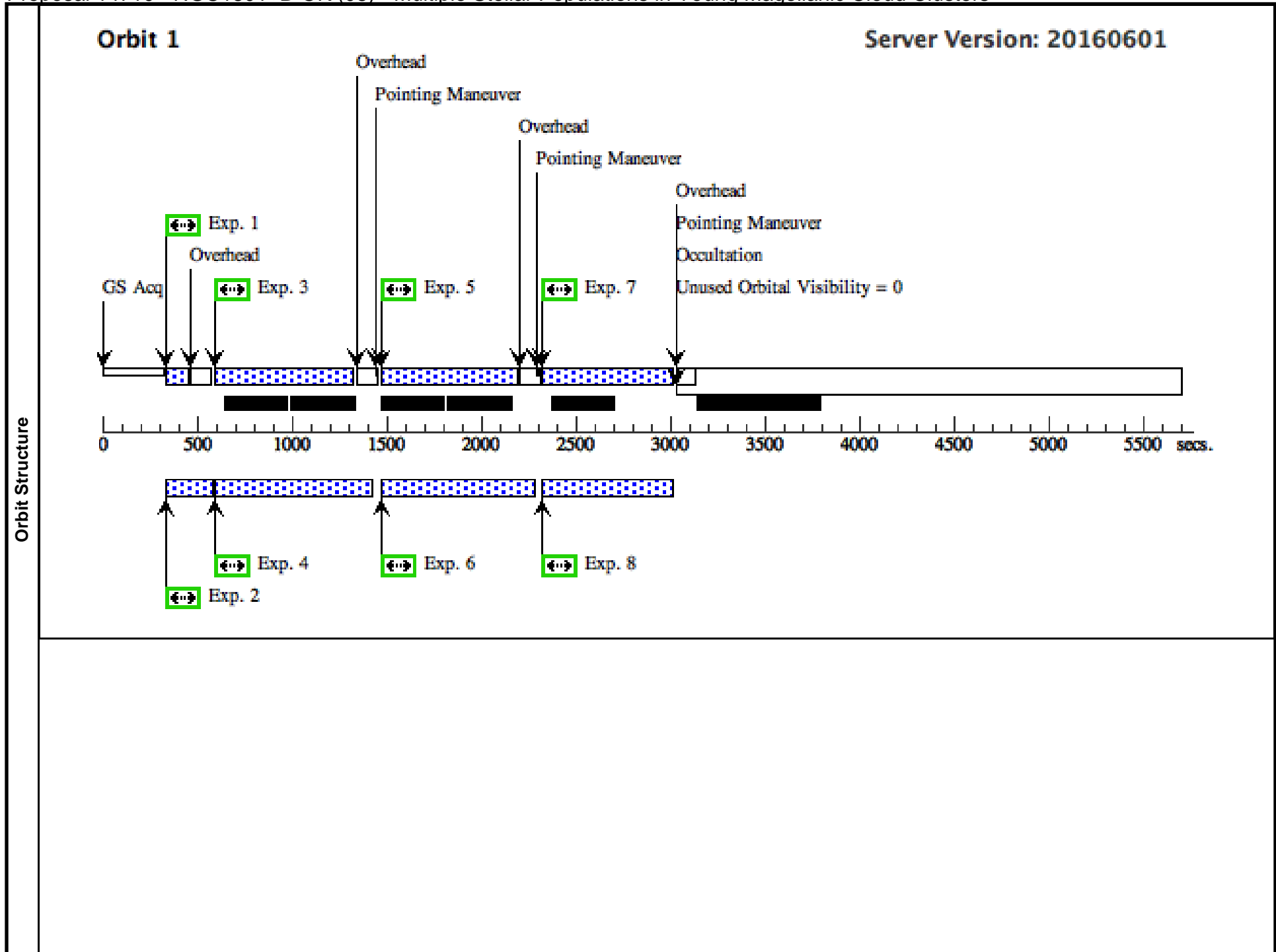


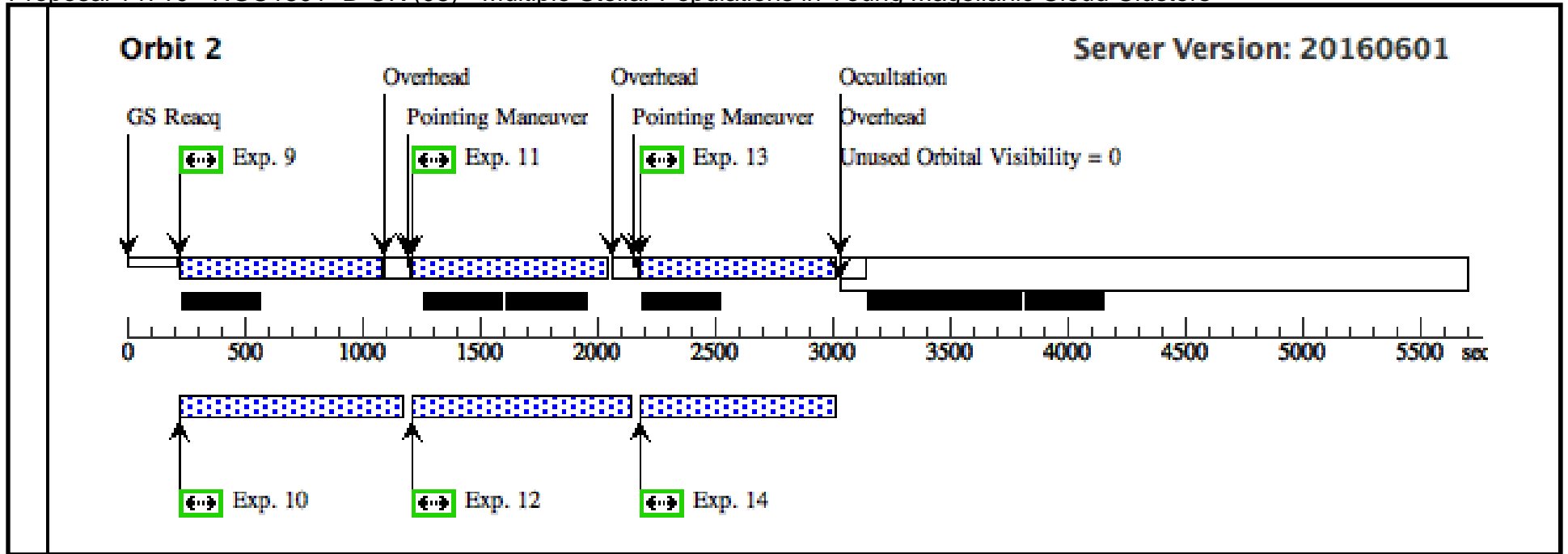


Proposal 14710 - NGC1801+B-OK (08) - Multiple Stellar Populations in Young Magellanic Cloud Clusters

Wed Nov 16 12:05:58 GMT 2016

Visit	Proposal 14710, NGC1801+B-OK (08), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 100%; ORIENT 81.5D TO 82.5 D Comments: NGC-1801 - part 1										
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(8)	NGC-1801	RA: 05 00 34.0000 (75.1416667d) Dec: -69 36 48.00 (-69.61333d) Equinox: J2000			V=12.16	Reference Frame: SIMBAD				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Extended=YES										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1		(8) NGC-1801	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 1-2 in NGC1801+B-OK (08)	90 Secs (90 Secs) [==>]	[1]	
	2		(8) NGC-1801	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-2 in NGC1801+B-OK (08)	42 Secs (42 Secs) [==>]	[1]	
	3		(8) NGC-1801	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 3-4 in NGC1801+B-OK (08)	720 Secs (720 Secs) [==>]	[1]	
	4		(8) NGC-1801	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 3-4 in NGC1801+B-OK (08)	667 Secs (667 Secs) [==>]	[1]	
	5		(8) NGC-1801	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG 0,0	Prime + Parallel Group 5-6 in NGC1801+B-OK (08)	720 Secs (720 Secs) [==>]	[1]	
	6		(8) NGC-1801	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 5-6 in NGC1801+B-OK (08)	690 Secs (690 Secs) [==>]	[1]	
	7		(8) NGC-1801	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W		POS TARG +3,+3	Prime + Parallel Group 7-8 in NGC1801+B-OK (08)	666 Secs (666 Secs) [==>]	[1]	
	8		(8) NGC-1801	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 7-8 in NGC1801+B-OK (08)	530 Secs (530 Secs) [==>]	[1]	
	9		(8) NGC-1801	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 9-10 in NGC1801+B-OK (08)	835 Secs (835 Secs) [==>]	[2]	
	10		(8) NGC-1801	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 9-10 in NGC1801+B-OK (08)	831 Secs (831 Secs) [==>]	[2]	
	11		(8) NGC-1801	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=10	POS TARG 0,0	Prime + Parallel Group 11-12 in NGC1801+B-OK (08)	834 Secs (834 Secs) [==>]	[2]	
	12		(8) NGC-1801	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 11-12 in NGC1801+B-OK (08)	764 Secs (764 Secs) [==>]	[2]	
	13		(8) NGC-1801	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=10	POS TARG 3,3	Prime + Parallel Group 13-14 in NGC1801+B-OK (08)	834 Secs (834 Secs) [==>]	[2]	
14		(8) NGC-1801	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 13-14 in NGC1801+B-OK (08)	708 Secs (708 Secs) [==>]	[2]		





Proposal 14710 - O-SMC104-OK (09) - Multiple Stellar Populations in Young Magellanic Cloud Clusters

Wed Nov 16 12:05:58 GMT 2016

Visit	Proposal 14710, O-SMC104-OK (09), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 100%; ORIENT 0D TO 359.9 D Comments: O-SMC104									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(9)	OGLE-CL-SMC-104	RA: 00 55 33.1800 (13.8882500d) Dec: -72 50 0.10 (-72.83336d) Equinox: J2000		V=12.89	Reference Frame: SIMBAD				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Extended=YES									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(9) OGLE-CL-SMC-104	(9) OGLE-CL-SMC-104	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 1-2 in O-SMC104-OK (09)	90 Secs (90 Secs) [==>]	[1]
	2	(9) OGLE-CL-SMC-104	(9) OGLE-CL-SMC-104	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-2 in O-SMC104-OK (09)	42 Secs (42 Secs) [==>]	[1]
	3	(9) OGLE-CL-SMC-104	(9) OGLE-CL-SMC-104	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 3-4 in O-SMC104-OK (09)	720 Secs (720 Secs) [==>]	[1]
	4	(9) OGLE-CL-SMC-104	(9) OGLE-CL-SMC-104	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 3-4 in O-SMC104-OK (09)	667 Secs (667 Secs) [==>]	[1]
	5	(9) OGLE-CL-SMC-104	(9) OGLE-CL-SMC-104	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=10	POS TARG 0,0	Prime + Parallel Group 5-6 in O-SMC104-OK (09)	720 Secs (720 Secs) [==>]	[1]
	6	(9) OGLE-CL-SMC-104	(9) OGLE-CL-SMC-104	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 5-6 in O-SMC104-OK (09)	690 Secs (690 Secs) [==>]	[1]
	7	(9) OGLE-CL-SMC-104	(9) OGLE-CL-SMC-104	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W		POS TARG +3,+3	Prime + Parallel Group 7-8 in O-SMC104-OK (09)	680 Secs (680 Secs) [==>]	[1]
	8	(9) OGLE-CL-SMC-104	(9) OGLE-CL-SMC-104	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 7-8 in O-SMC104-OK (09)	544 Secs (544 Secs) [==>]	[1]
	9	(9) OGLE-CL-SMC-104	(9) OGLE-CL-SMC-104	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=10	POS TARG -3,-3	Prime + Parallel Group 9-10 in O-SMC104-OK (09)	839 Secs (839 Secs) [==>]	[2]
	10	(9) OGLE-CL-SMC-104	(9) OGLE-CL-SMC-104	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 9-10 in O-SMC104-OK (09)	835 Secs (835 Secs) [==>]	[2]
	11	(9) OGLE-CL-SMC-104	(9) OGLE-CL-SMC-104	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=10	POS TARG 0,0	Prime + Parallel Group 11-12 in O-SMC104-OK (09)	839 Secs (839 Secs) [==>]	[2]
	12	(9) OGLE-CL-SMC-104	(9) OGLE-CL-SMC-104	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 11-12 in O-SMC104-OK (09)	769 Secs (769 Secs) [==>]	[2]
	13	(9) OGLE-CL-SMC-104	(9) OGLE-CL-SMC-104	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=10	POS TARG 3,3	Prime + Parallel Group 13-14 in O-SMC104-OK (09)	839 Secs (839 Secs) [==>]	[2]
14	(9) OGLE-CL-SMC-104	(9) OGLE-CL-SMC-104	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 13-14 in O-SMC104-OK (09)	713 Secs (713 Secs) [==>]	[2]	

Orbit 1

Server Version: 20160601

Orbit Structure

