



# 15103 - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

Cycle: 25, Proposal Category: GO

(JWST Initiative)

(Availability Mode: SUPPORTED)

## INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
<b>Dr. Stephane De Barros (PI) (ESA Member) (Contact)</b>	<b>Observatoire de Geneve</b>	<b>stephane.debarros@unige.ch</b>
Prof. Pascal Oesch (CoI) (ESA Member)	Observatoire de Geneve	pascal.oesch@unige.ch
Dr. Rychard Bouwens (CoI) (ESA Member)	Universiteit Leiden	bouwens@strw.leidenuniv.nl
Prof. Garth D. Illingworth (CoI) (AdminUSPI)	University of California - Santa Cruz	gdi@ucolick.org
Dr. Ivo Labbe (CoI) (ESA Member)	Universiteit Leiden	ivolabbe@gmail.com
Dr. Renske Smit (CoI) (ESA Member)	University of Cambridge	rs940@cam.ac.uk
Dr. Mauro Stefanon (CoI) (ESA Member)	Universiteit Leiden	stefanon@strw.leidenuniv.nl
Prof. J. Stuart B. Wyithe (CoI)	University of Melbourne	swyithe@unimelb.edu.au
Simon Mutch (CoI)	University of Melbourne	smutch@unimelb.edu.au
Prof. Richard S. Ellis (CoI) (ESA Member)	University College London	richard.ellis@ucl.ac.uk
Dr. Adi Zitrin (CoI)	Ben Gurion University of the Negev	adizitrin@gmail.com
Mr. Guido Roberts-Borsani (CoI) (ESA Member)	University College London (UCL)	guidowroberts@gmail.com
Prof. Daniel P. Stark (CoI)	University of Arizona	dpstark@email.arizona.edu
Dr. Nicolas Laporte (CoI) (ESA Member)	University College London (UCL)	n.laporte@ucl.ac.uk

## 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) EGS-ZS8-1 ANY	ACS/WFC WFC3/IR	2	18-Dec-2018 15:00:24.0	yes
02	(1) EGS-ZS8-1 ANY	ACS/WFC WFC3/IR	2	18-Dec-2018 15:00:27.0	yes
03	(1) EGS-ZS8-1 ANY	ACS/WFC WFC3/IR	2	18-Dec-2018 15:00:29.0	yes
04	(2) EGS-ZS8-2 ANY	ACS/WFC WFC3/IR	2	18-Dec-2018 15:00:32.0	yes
05	(2) EGS-ZS8-2 ANY	ACS/WFC WFC3/IR	2	18-Dec-2018 15:00:34.0	yes
06	(2) EGS-ZS8-2 ANY	ACS/WFC WFC3/IR	2	18-Dec-2018 15:00:37.0	yes
07	(4) EGSY-8P7-OFF ANY	ACS/WFC WFC3/IR	2	18-Dec-2018 15:00:39.0	yes
08	(4) EGSY-8P7-OFF ANY	ACS/WFC WFC3/IR	2	18-Dec-2018 15:00:42.0	yes
09	(4) EGSY-8P7-OFF ANY	ACS/WFC WFC3/IR	2	18-Dec-2018 15:00:44.0	yes

18 Total Orbits Used

## **ABSTRACT**

One of the major unresolved problems in modern cosmology is when and how the universe was ionized. The consensus scenario is that ultra-faint, low-mass galaxies contributed most to the UV background at high-redshift and that reionization was an inhomogeneous process, with ionized bubbles created first around galaxy overdensities. The very surprising discovery of Ly-alpha emission lines around a large fraction of the most luminous galaxies at  $z=7.4-8.7$ , when we expect the universe to be highly neutral, could thus be explained by the fact that they lie in large HII bubbles which were ionized thanks to yet undetected fainter neighbors. Theoretical models indeed predict a boost of up to 6x larger galaxy counts around the brightest sources compared to the general field, when probing down to luminosities as faint as  $0.1L_{UV}$  of the central source. Here we propose a direct test of these models by searching for fainter neighbors around three bright  $z>7.4$  galaxies emitting Ly-alpha, including two sources

Proposal 15103 (STScI Edit Number: 2, Created: Tuesday, December 18, 2018 at 3:00:45 PM Eastern Standard Time) - Overview that lie only 9 Mpc from each other and could share the same ionized bubble, as well as the most distant confirmed Ly-alpha emitter EGSY-8p7 at  $z=8.68$ . Given the expected overdensities, we have the opportunity to detect 20 (and up to 50) new  $z\sim 7-9$  galaxies with only a modest investment of HST time. These observations are thus maximally efficient at providing a large number of precious high-redshift targets for early JWST spectroscopy to directly study the galaxies that are in the process of ionizing the universe. Our imaging will further enhance the legacy of the CANDELS/EGS field, and we will make the reduced data available to the community immediately for JWST follow-up.

## **OBSERVING DESCRIPTION**

This program is aimed at the discovery of fainter neighbors around three, very luminous  $z>7$  galaxies in the CANDELS/EGS field that were first discovered in Roberts-Borsani et al. (2015). It will provide 6 orbit WFC3/IR imaging split over three filters, as well as ACS F435W parallels back over the CANDELS field, whenever possible by scheduling. These data will be extremely valuable for the community to select targets for JWST spectroscopy follow-up, which is why we waive the proprietary time and submitted the proposal as JWST-initiative. It would be important to be able to schedule these data \*before\* the JWST cycle 1 deadline. The orient constraints were relaxed somewhat in order to allow for efficient scheduling early on in the HST cycle, meaning that the overlap with the parallel data and the original CANDELS imaging may not be 100%.

For each of the three targets we submit three visits of 2 orbits each. The orbits are broken up into 4 WFC3/IR exposures and 4 ACS parallel exposures. In order to minimize the impact of a time-variable background due to excess Earth-glow (ISR WFC3-2014-03), we only take F105W images in the middle of each orbit, and F125W or F160W at the beginning and the end. To ensure that the exposures are taken in this sequence within one physical orbit, we packaged each orbit into a Non-Int sequence.

This results in the required total exposure time of 3 orbits in F105W and 1.5 orbits in F125W and F160W, that is optimal for the selection of high-redshift galaxies.

We use POSTARGs to dither each exposure. The dither pattern was chosen as a combination of WFC3-IR-DITHER-BLOB and a 3 point line dither. This ensures that both the WFC3/IR images as well as the ACS parallels are well dithered, and we step across the ACS chip gap. The same pattern is repeated with a 1.5 pixel offset in the second half of the orbits for each target in order to improve the sampling of the PSF of the F105W images (which are taken in all visits).

The pointing of the last target (EGSY8p7), which lies close to the border of the CANDELS imaging, was offset slightly in order to ensure maximal overlap with the existing data.

Proposal 15103 - zs81-125 (01) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

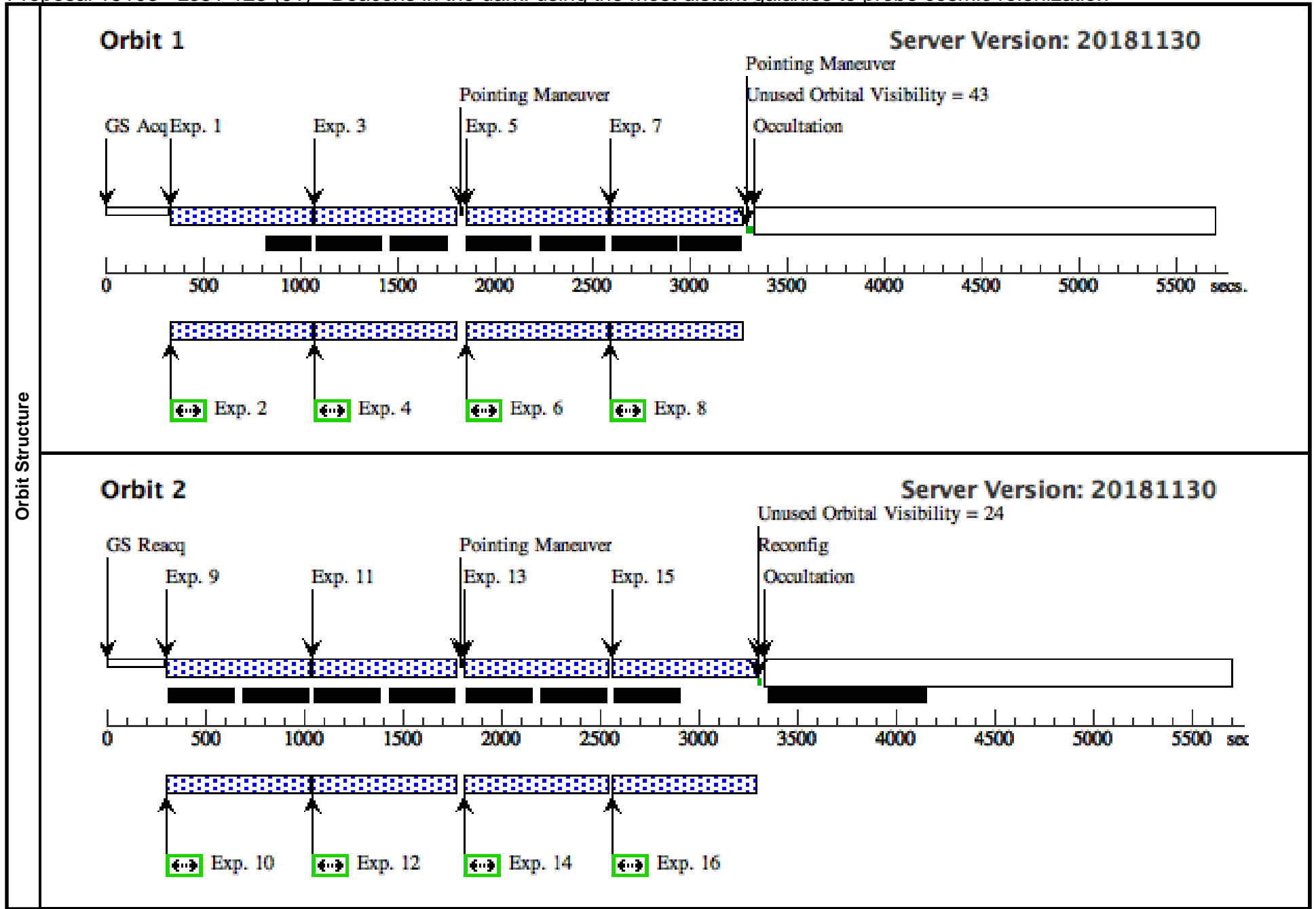
<b>Visit</b>	Proposal 15103, zs81-125 (01), scheduling <span style="float: right;">Tue Dec 18 20:00:45 GMT 2018</span> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: ORIENT 331D TO 45 D; ORIENT 125D TO 201 D					
	<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>
(1)		EGS-ZS8-1	RA: 14 20 34.8900 (215.1453750d) Dec: +53 00 15.40 (53.00428d) Equinox: J2000		V=(?) H-band mag: 25	Reference Frame: SIMBAD
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

Proposal 15103 - zs81-125 (01) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -1.93,-1.729; GS ACQ SCENARI O BASE1B3	Sequence 1-8 Non-Int in zs81-125 (01) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in zs81-125 (01)	702.938605 Secs (702.939 Secs) [==>]	[1]
	2	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs81-125 (01) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in zs81-125 (01)	325.0 Secs (525 Secs) [==>525.0 Secs ]	[1]
	3	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -1.93,-1.729	Sequence 1-8 Non-Int in zs81-125 (01) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in zs81-125 (01)	702.938605 Secs (702.939 Secs) [==>]	[1]
	4	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs81-125 (01) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in zs81-125 (01)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	5	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.930,1.729	Sequence 1-8 Non-Int in zs81-125 (01) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in zs81-125 (01)	702.938605 Secs (702.939 Secs) [==>]	[1]
	6	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs81-125 (01) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in zs81-125 (01)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	7	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=14; SAMP-SEQ=SPAR S50	POS TARG 1.930,1.729	Sequence 1-8 Non-Int in zs81-125 (01) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in zs81-125 (01)	652.938154 Secs (652.938 Secs) [==>]	[1]
	8	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs81-125 (01) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in zs81-125 (01)	457.0 Secs (557 Secs) [==>557.0 Secs ]	[1]
	9	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.381,-1.326	Sequence 9-16 Non-Int in zs81-125 (01) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs81-125 (01)	702.938605 Secs (702.939 Secs) [==>]	[2]

Proposal 15103 - zs81-125 (01) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

10	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs81-125 (01) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs81-125 (01)	325.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
11	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.381,- 1.326	Sequence 9-16 Non-Int in zs81-125 (01) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs81-125 (01)	702.938605 Secs (702.939 Secs) [==>]	[2]
12	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs81-125 (01) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs81-125 (01)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
13	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.479,2. 132	Sequence 9-16 Non-Int in zs81-125 (01) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs81-125 (01)	702.938605 Secs (702.939 Secs) [==>]	[2]
14	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs81-125 (01) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs81-125 (01)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
15	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.479,2. 132	Sequence 9-16 Non-Int in zs81-125 (01) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs81-125 (01)	702.938605 Secs (702.939 Secs) [==>]	[2]
16	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs81-125 (01) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs81-125 (01)	457.0 Secs (607 Secs) [==>607.0 Secs ]	[2]



Proposal 15103 - zs81-mix (02) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

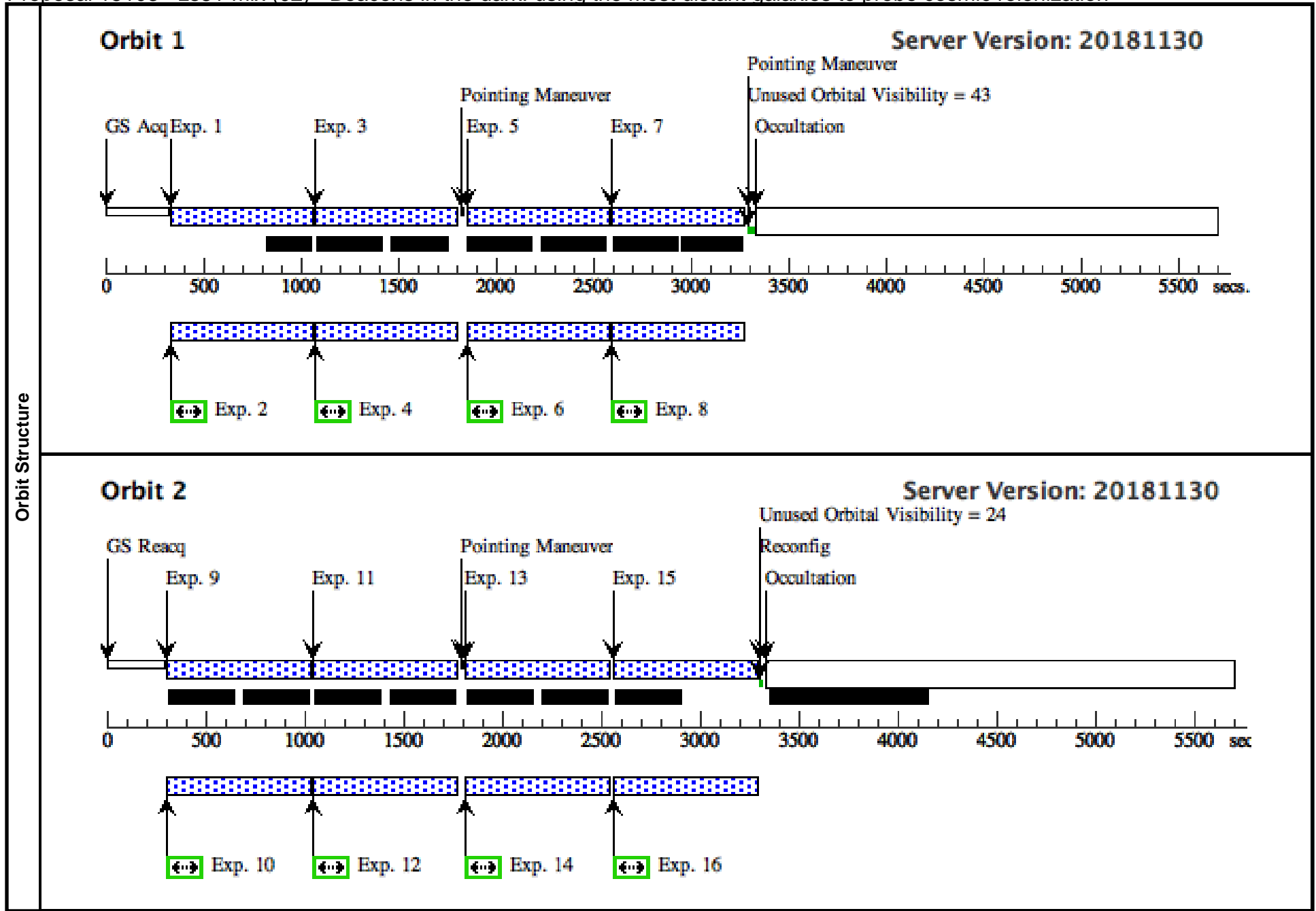
<b>Visit</b>	Proposal 15103, zs81-mix (02), scheduling <span style="float: right;">Tue Dec 18 20:00:45 GMT 2018</span> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: ORIENT -1D TO 1D FROM 01					
	<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>
(1)		EGS-ZS8-1	RA: 14 20 34.8900 (215.1453750d) Dec: +53 00 15.40 (53.00428d) Equinox: J2000		V=(?) H-band mag: 25	Reference Frame: SIMBAD
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

Proposal 15103 - zs81-mix (02) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.832,- 0.923	Sequence 1-8 Non-Int in zs81-mix (02)  Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in zs81-mix (02)	702.938605 Secs (702.939 Secs) [==>]	[1]
	2	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs81-mix (02)  Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in zs81-mix (02)	325.0 Secs (525 Secs) [==>525.0 Secs ]	[1]
	3	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.832,- 0.923	Sequence 1-8 Non-Int in zs81-mix (02)  Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in zs81-mix (02)	702.938605 Secs (702.939 Secs) [==>]	[1]
	4	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs81-mix (02)  Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in zs81-mix (02)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	5	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.028,2. 535	Sequence 1-8 Non-Int in zs81-mix (02)  Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in zs81-mix (02)	702.938605 Secs (702.939 Secs) [==>]	[1]
	6	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs81-mix (02)  Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in zs81-mix (02)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	7	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=14; SAMP-SEQ=SPAR S50	POS TARG 1.028,2. 535	Sequence 1-8 Non-Int in zs81-mix (02)  Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in zs81-mix (02)	652.938154 Secs (652.938 Secs) [==>]	[1]
	8	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs81-mix (02)  Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in zs81-mix (02)	457.0 Secs (557 Secs) [==>557.0 Secs ]	[1]
	9	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.133,- 1.729; GS ACQ SCENARI O BASE1B3	Sequence 9-16 Non-Int in zs81-mix (02)  Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs81-mix (02)	702.938605 Secs (702.939 Secs) [==>]	[2]

Proposal 15103 - zs81-mix (02) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

10	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs81-mix (02) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs81-mix (02)	325.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
11	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.133,- 1.729	Sequence 9-16 Non-Int in zs81-mix (02) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs81-mix (02)	702.938605 Secs (702.939 Secs) [==>]	[2]
12	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs81-mix (02) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs81-mix (02)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
13	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.727,1. 729	Sequence 9-16 Non-Int in zs81-mix (02) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs81-mix (02)	702.938605 Secs (702.939 Secs) [==>]	[2]
14	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs81-mix (02) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs81-mix (02)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
15	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.727,1. 729	Sequence 9-16 Non-Int in zs81-mix (02) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs81-mix (02)	702.938605 Secs (702.939 Secs) [==>]	[2]
16	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs81-mix (02) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs81-mix (02)	457.0 Secs (607 Secs) [==>607.0 Secs ]	[2]



Proposal 15103 - zs81-160 (03) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

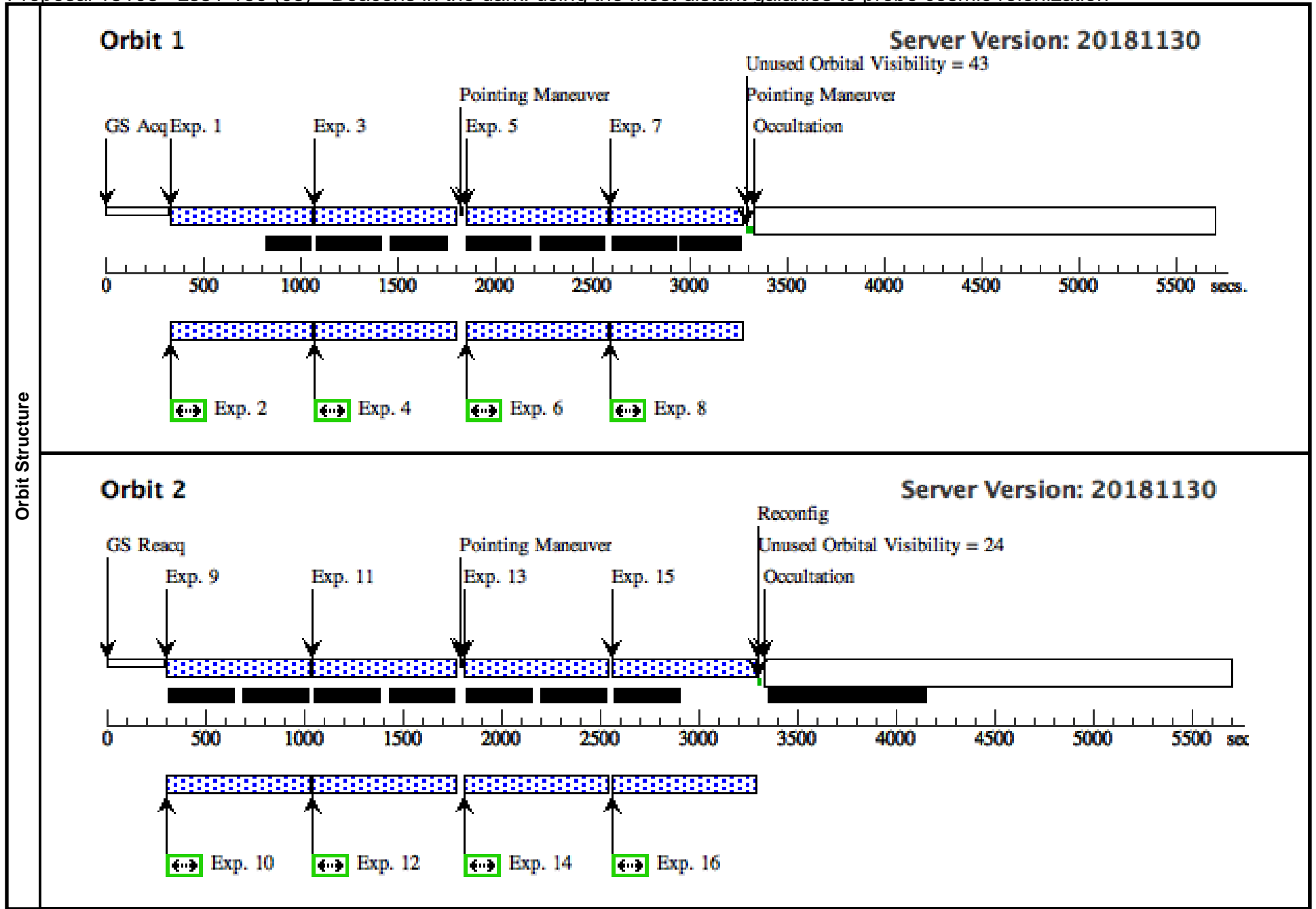
<b>Visit</b>	<b>Proposal 15103, zs81-160 (03), scheduling</b> <span style="float: right;">Tue Dec 18 20:00:45 GMT 2018</span> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: ORIENT -1D TO 1D FROM 01												
	<b>Fixed Targets</b>	<table border="1"> <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>EGS-ZS8-1</td> <td>                     RA: 14 20 34.8900 (215.1453750d)                      Dec: +53 00 15.40 (53.00428d)                      Equinox: J2000                 </td> <td></td> <td>                     V=(?)                      H-band mag: 25                 </td> <td>Reference Frame: SIMBAD</td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>                  Category=GALAXY                  Description=[HIGH REDSHIFT GALAXY]</p>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	EGS-ZS8-1	RA: 14 20 34.8900 (215.1453750d) Dec: +53 00 15.40 (53.00428d) Equinox: J2000		V=(?) H-band mag: 25
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous								
(1)	EGS-ZS8-1	RA: 14 20 34.8900 (215.1453750d) Dec: +53 00 15.40 (53.00428d) Equinox: J2000		V=(?) H-band mag: 25	Reference Frame: SIMBAD								

Proposal 15103 - zs81-160 (03) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.584,- 1.326	Sequence 1-8 Non-Int in zs81-160 (03)  Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in zs81-160 (03)	702.938605 Secs (702.939 Secs) [==>]	[1]
	2	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs81-160 (03)  Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in zs81-160 (03)	325.0 Secs (525 Secs) [==>525.0 Secs ]	[1]
	3	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.584,- 1.326	Sequence 1-8 Non-Int in zs81-160 (03)  Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in zs81-160 (03)	702.938605 Secs (702.939 Secs) [==>]	[1]
	4	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs81-160 (03)  Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in zs81-160 (03)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	5	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.276,2. 132	Sequence 1-8 Non-Int in zs81-160 (03)  Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in zs81-160 (03)	702.938605 Secs (702.939 Secs) [==>]	[1]
	6	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs81-160 (03)  Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in zs81-160 (03)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	7	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S50	POS TARG 1.276,2. 132	Sequence 1-8 Non-Int in zs81-160 (03)  Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in zs81-160 (03)	652.938154 Secs (652.938 Secs) [==>]	[1]
	8	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs81-160 (03)  Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in zs81-160 (03)	457.0 Secs (557 Secs) [==>557.0 Secs ]	[1]
	9	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -3.035,- 0.923	Sequence 9-16 Non-Int in zs81-160 (03)  Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs81-160 (03)	702.938605 Secs (702.939 Secs) [==>]	[2]

Proposal 15103 - zs81-160 (03) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

10	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs81-160 (03) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs81-160 (03)	325.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
11	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -3.035,- 0.923	Sequence 9-16 Non-Int in zs81-160 (03) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs81-160 (03)	702.938605 Secs (702.939 Secs) [==>]	[2]
12	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs81-160 (03) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs81-160 (03)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
13	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 0.825,2. 535	Sequence 9-16 Non-Int in zs81-160 (03) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs81-160 (03)	702.938605 Secs (702.939 Secs) [==>]	[2]
14	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs81-160 (03) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs81-160 (03)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
15	(1) EGS-ZS8-1	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 0.825,2. 535	Sequence 9-16 Non-Int in zs81-160 (03) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs81-160 (03)	702.938605 Secs (702.939 Secs) [==>]	[2]
16	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs81-160 (03) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs81-160 (03)	457.0 Secs (607 Secs) [==>607.0 Secs ]	[2]



Proposal 15103 - zs82-125 (04) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

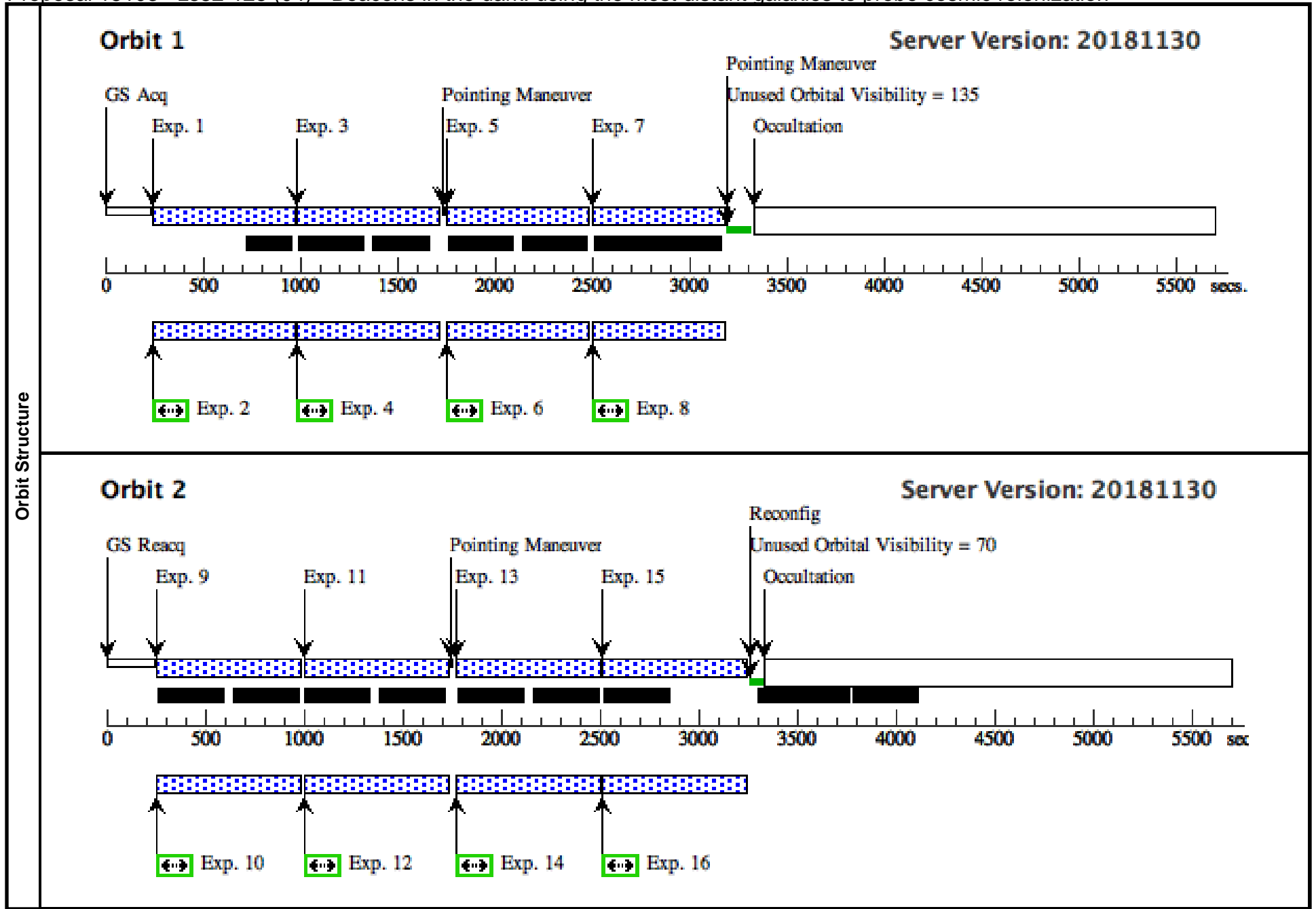
<b>Visit</b>	<b>Proposal 15103, zs82-125 (04), implementation</b> <span style="float: right;">Tue Dec 18 20:00:45 GMT 2018</span>					
	<b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: ORIENT 165D TO 14 D					
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(2)	EGS-ZS8-2	RA: 14 20 12.0900 (215.0503750d) Dec: +53 00 26.97 (53.00749d) Equinox: J2000		V=(?) H-band mag: 25	Reference Frame: SIMBAD
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

Proposal 15103 - zs82-125 (04) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -1.93,-1.729; GS ACQ SCENARIO SINGLE	Sequence 1-8 Non-Int in zs82-125 (04) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in zs82-125 (04)	702.938605 Secs (702.939 Secs) [==>]	[1]
	2	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs82-125 (04) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in zs82-125 (04)	325.0 Secs (525 Secs) [==>525.0 Secs ]	[1]
	3	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -1.93,-1.729	Sequence 1-8 Non-Int in zs82-125 (04) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in zs82-125 (04)	702.938605 Secs (702.939 Secs) [==>]	[1]
	4	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs82-125 (04) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in zs82-125 (04)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	5	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.930,1.729	Sequence 1-8 Non-Int in zs82-125 (04) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in zs82-125 (04)	702.938605 Secs (702.939 Secs) [==>]	[1]
	6	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs82-125 (04) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in zs82-125 (04)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	7	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=14; SAMP-SEQ=SPAR S50	POS TARG 1.930,1.729	Sequence 1-8 Non-Int in zs82-125 (04) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in zs82-125 (04)	652.938154 Secs (652.938 Secs) [==>]	[1]
	8	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs82-125 (04) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in zs82-125 (04)	457.0 Secs (557 Secs) [==>557.0 Secs ]	[1]
	9	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.381,-1.326	Sequence 9-16 Non-Int in zs82-125 (04) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs82-125 (04)	702.938605 Secs (702.939 Secs) [==>]	[2]

Proposal 15103 - zs82-125 (04) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

10	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs82-125 (04) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs82-125 (04)	325.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
11	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.381,- 1.326	Sequence 9-16 Non-Int in zs82-125 (04) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs82-125 (04)	702.938605 Secs (702.939 Secs) [==>]	[2]
12	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs82-125 (04) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs82-125 (04)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
13	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.479,2. 132	Sequence 9-16 Non-Int in zs82-125 (04) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs82-125 (04)	702.938605 Secs (702.939 Secs) [==>]	[2]
14	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs82-125 (04) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs82-125 (04)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
15	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.479,2. 132	Sequence 9-16 Non-Int in zs82-125 (04) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs82-125 (04)	702.938605 Secs (702.939 Secs) [==>]	[2]
16	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs82-125 (04) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs82-125 (04)	457.0 Secs (607 Secs) [==>607.0 Secs ]	[2]



Proposal 15103 - zs82-mix (05) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

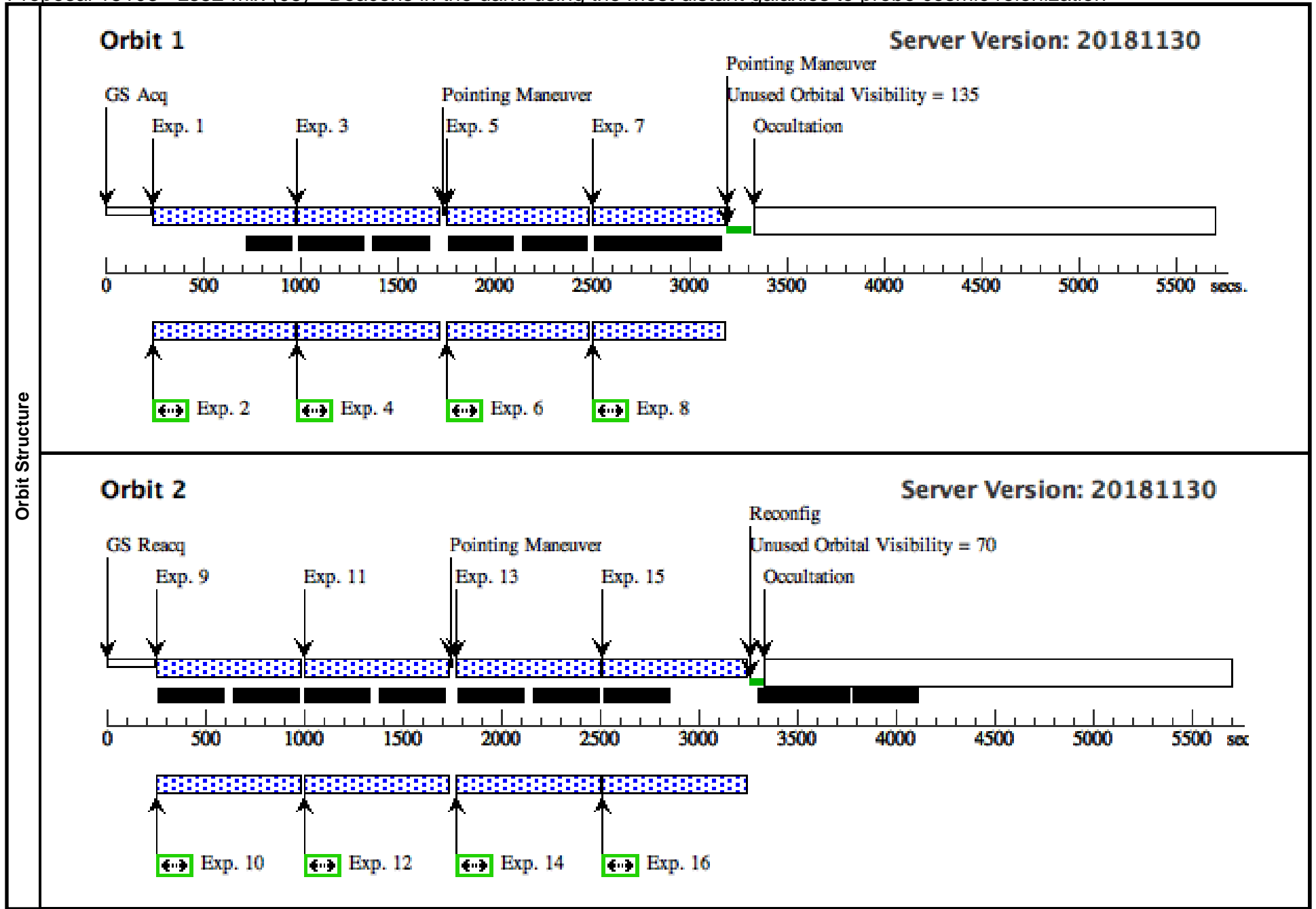
<b>Visit</b>	<b>Proposal 15103, zs82-mix (05), implementation</b> <span style="float: right;">Tue Dec 18 20:00:46 GMT 2018</span> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: ORIENT -1D TO 1D FROM 04					
	<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>
(2)		EGS-ZS8-2	RA: 14 20 12.0900 (215.0503750d) Dec: +53 00 26.97 (53.00749d) Equinox: J2000		V=(?) H-band mag: 25	Reference Frame: SIMBAD
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

Proposal 15103 - zs82-mix (05) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.832,- 0.923; GS ACQ SCENARI O SINGLE	Sequence 1-8 Non-Int in zs82-mix (05)  Prime + Parallel Gro up 1-2 in Sequence 1 -8 Non-Int in zs82-m ix (05)	702.938605 Secs (702.939 Secs) [==>]	[1]
	2	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs82-mix (05)  Prime + Parallel Gro up 1-2 in Sequence 1 -8 Non-Int in zs82-m ix (05)	325.0 Secs (525 Secs) [==>525.0 Secs ]	[1]
	3	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.832,- 0.923	Sequence 1-8 Non-Int in zs82-mix (05)  Prime + Parallel Gro up 3-4 in Sequence 1 -8 Non-Int in zs82-m ix (05)	702.938605 Secs (702.939 Secs) [==>]	[1]
	4	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs82-mix (05)  Prime + Parallel Gro up 3-4 in Sequence 1 -8 Non-Int in zs82-m ix (05)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	5	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.028,2. 535	Sequence 1-8 Non-Int in zs82-mix (05)  Prime + Parallel Gro up 5-6 in Sequence 1 -8 Non-Int in zs82-m ix (05)	702.938605 Secs (702.939 Secs) [==>]	[1]
	6	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs82-mix (05)  Prime + Parallel Gro up 5-6 in Sequence 1 -8 Non-Int in zs82-m ix (05)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	7	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=14; SAMP-SEQ=SPAR S50	POS TARG 1.028,2. 535	Sequence 1-8 Non-Int in zs82-mix (05)  Prime + Parallel Gro up 7-8 in Sequence 1 -8 Non-Int in zs82-m ix (05)	652.938154 Secs (652.938 Secs) [==>]	[1]
	8	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs82-mix (05)  Prime + Parallel Gro up 7-8 in Sequence 1 -8 Non-Int in zs82-m ix (05)	457.0 Secs (557 Secs) [==>557.0 Secs ]	[1]
	9	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.133,- 1.729	Sequence 9-16 Non-Int in zs82-mix (05)  Prime + Parallel Gro up 9-10 in Sequence 9-16 Non-Int in zs82 -mix (05)	702.938605 Secs (702.939 Secs) [==>]	[2]

Proposal 15103 - zs82-mix (05) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

10	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs82-mix (05) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs82-mix (05)	325.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
11	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.133,- 1.729	Sequence 9-16 Non-Int in zs82-mix (05) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs82-mix (05)	702.938605 Secs (702.939 Secs) [==>]	[2]
12	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs82-mix (05) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs82-mix (05)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
13	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.727,1. 729	Sequence 9-16 Non-Int in zs82-mix (05) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs82-mix (05)	702.938605 Secs (702.939 Secs) [==>]	[2]
14	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs82-mix (05) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs82-mix (05)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
15	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.727,1. 729	Sequence 9-16 Non-Int in zs82-mix (05) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs82-mix (05)	702.938605 Secs (702.939 Secs) [==>]	[2]
16	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs82-mix (05) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs82-mix (05)	457.0 Secs (607 Secs) [==>607.0 Secs ]	[2]



Proposal 15103 - zs82-160 (06) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

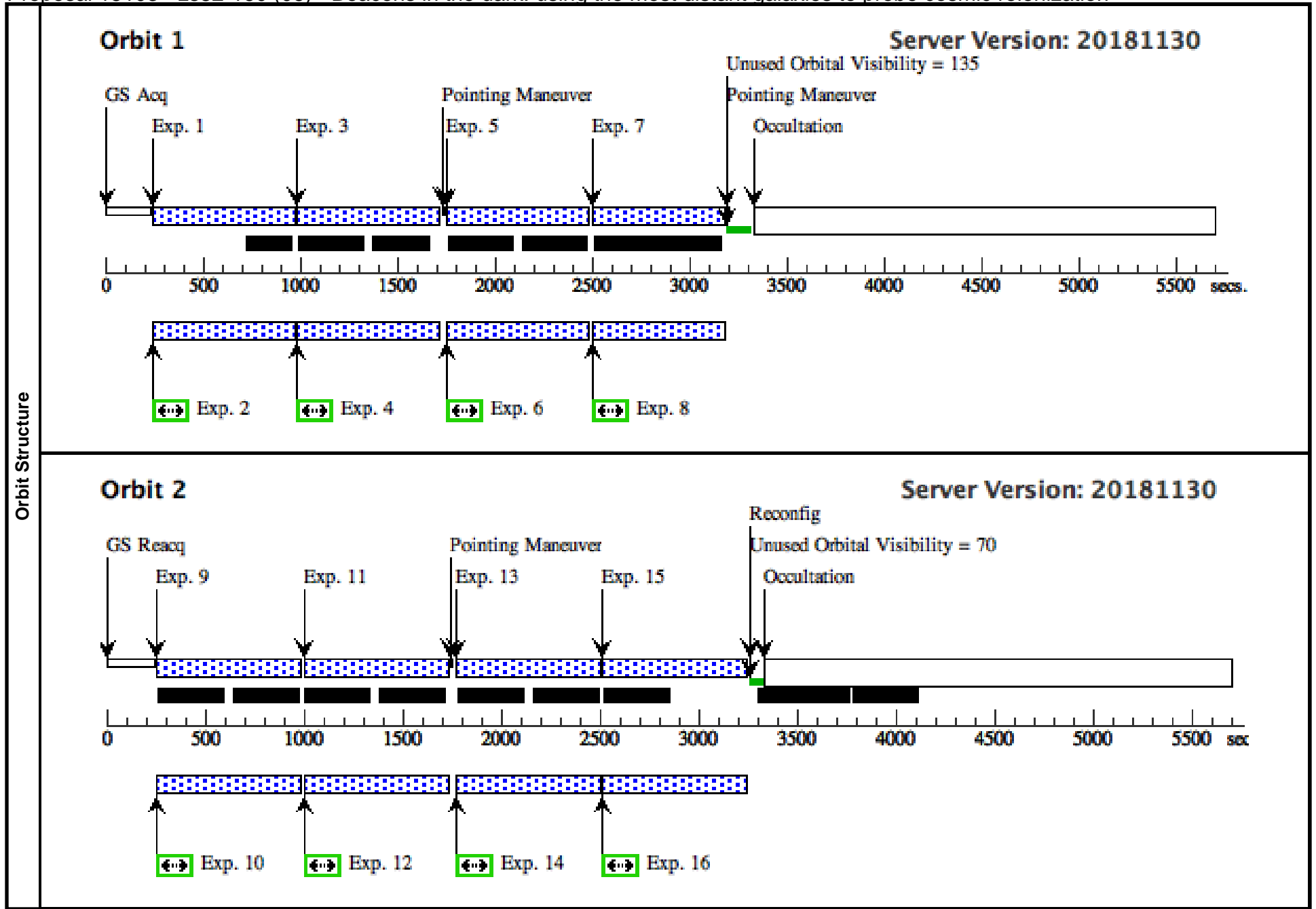
<b>Visit</b>	<b>Proposal 15103, zs82-160 (06), implementation</b> <span style="float: right;">Tue Dec 18 20:00:46 GMT 2018</span> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: ORIENT -1D TO 1D FROM 04					
	<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>
(2)		EGS-ZS8-2	RA: 14 20 12.0900 (215.0503750d) Dec: +53 00 26.97 (53.00749d) Equinox: J2000		V=(?) H-band mag: 25	Reference Frame: SIMBAD
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

Proposal 15103 - zs82-160 (06) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.584,- 1.326; GS ACQ SCENARI O SINGLE	Sequence 1-8 Non-Int in zs82-160 (06) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in zs82-160 (06)	702.938605 Secs (702.939 Secs) [==>]	[1]
	2	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs82-160 (06) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in zs82-160 (06)	325.0 Secs (525 Secs) [==>525.0 Secs ]	[1]
	3	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.584,- 1.326	Sequence 1-8 Non-Int in zs82-160 (06) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in zs82-160 (06)	702.938605 Secs (702.939 Secs) [==>]	[1]
	4	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs82-160 (06) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in zs82-160 (06)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	5	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.276,2. 132	Sequence 1-8 Non-Int in zs82-160 (06) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in zs82-160 (06)	702.938605 Secs (702.939 Secs) [==>]	[1]
	6	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs82-160 (06) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in zs82-160 (06)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	7	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S50	POS TARG 1.276,2. 132	Sequence 1-8 Non-Int in zs82-160 (06) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in zs82-160 (06)	652.938154 Secs (652.938 Secs) [==>]	[1]
	8	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs82-160 (06) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in zs82-160 (06)	457.0 Secs (557 Secs) [==>557.0 Secs ]	[1]
	9	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -3.035,- 0.923	Sequence 9-16 Non-Int in zs82-160 (06) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs82-160 (06)	702.938605 Secs (702.939 Secs) [==>]	[2]

Proposal 15103 - zs82-160 (06) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

10	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs82-160 (06) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs82-160 (06)	325.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
11	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -3.035,- 0.923	Sequence 9-16 Non-Int in zs82-160 (06) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs82-160 (06)	702.938605 Secs (702.939 Secs) [==>]	[2]
12	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs82-160 (06) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs82-160 (06)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
13	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 0.825,2. 535	Sequence 9-16 Non-Int in zs82-160 (06) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs82-160 (06)	702.938605 Secs (702.939 Secs) [==>]	[2]
14	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs82-160 (06) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs82-160 (06)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
15	(2) EGS-ZS8-2	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 0.825,2. 535	Sequence 9-16 Non-Int in zs82-160 (06) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs82-160 (06)	702.938605 Secs (702.939 Secs) [==>]	[2]
16	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs82-160 (06) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs82-160 (06)	457.0 Secs (607 Secs) [==>607.0 Secs ]	[2]



Proposal 15103 - zs9-125 (07) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

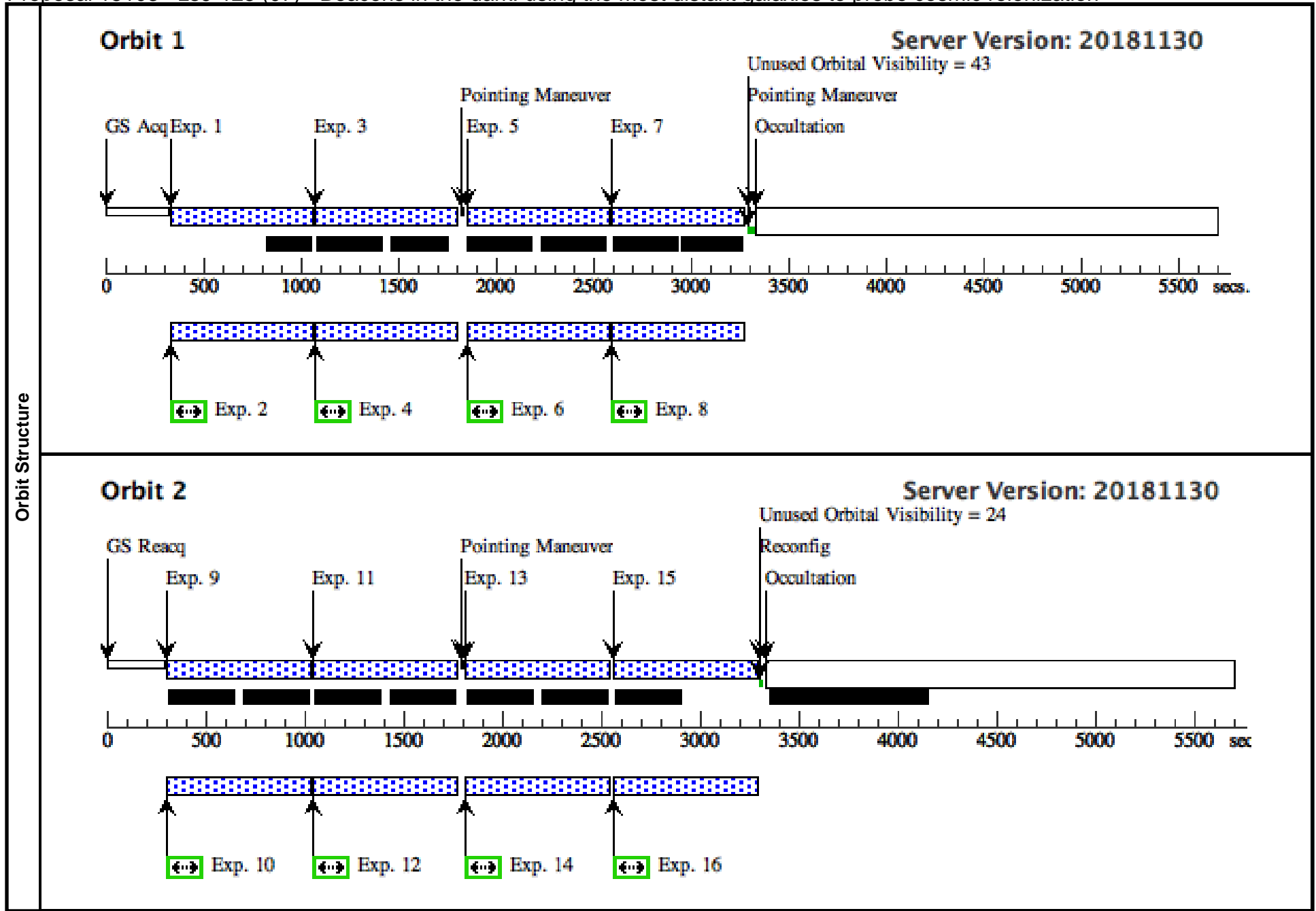
<b>Visit</b>	Proposal 15103, zs9-125 (07), scheduling <span style="float: right;">Tue Dec 18 20:00:46 GMT 2018</span> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: ORIENT 340D TO 192 D					
	<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>
(4)		EGSY-8P7-OFF	RA: 14 20 7.0000 (215.0291667d) Dec: +52 53 40.00 (52.89444d) Equinox: J2000		V=(?) H-band mag: 25	Reference Frame: SIMBAD
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

Proposal 15103 - zs9-125 (07) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -1.93,-1.729; GS ACQ SCENARI O BASE1B3	Sequence 1-8 Non-Int in zs9-125 (07) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in zs9-125 (07)	702.938605 Secs (702.939 Secs) [==>]	[1]
	2	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs9-125 (07) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in zs9-125 (07)	325.0 Secs (525 Secs) [==>525.0 Secs ]	[1]
	3	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -1.93,-1.729	Sequence 1-8 Non-Int in zs9-125 (07) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in zs9-125 (07)	702.938605 Secs (702.939 Secs) [==>]	[1]
	4	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs9-125 (07) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in zs9-125 (07)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	5	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.930,1.729	Sequence 1-8 Non-Int in zs9-125 (07) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in zs9-125 (07)	702.938605 Secs (702.939 Secs) [==>]	[1]
	6	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs9-125 (07) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in zs9-125 (07)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	7	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=14; SAMP-SEQ=SPAR S50	POS TARG 1.930,1.729	Sequence 1-8 Non-Int in zs9-125 (07) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in zs9-125 (07)	652.938154 Secs (652.938 Secs) [==>]	[1]
	8	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs9-125 (07) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in zs9-125 (07)	457.0 Secs (557 Secs) [==>557.0 Secs ]	[1]
	9	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.381,-1.326	Sequence 9-16 Non-Int in zs9-125 (07) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs9-125 (07)	702.938605 Secs (702.939 Secs) [==>]	[2]

Proposal 15103 - zs9-125 (07) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

10	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs9-125 (07) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs9-125 (07)	325.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
11	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.381,- 1.326	Sequence 9-16 Non-Int in zs9-125 (07) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs9-125 (07)	702.938605 Secs (702.939 Secs) [==>]	[2]
12	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs9-125 (07) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs9-125 (07)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
13	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.479,2. 132	Sequence 9-16 Non-Int in zs9-125 (07) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs9-125 (07)	702.938605 Secs (702.939 Secs) [==>]	[2]
14	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs9-125 (07) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs9-125 (07)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
15	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.479,2. 132	Sequence 9-16 Non-Int in zs9-125 (07) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs9-125 (07)	702.938605 Secs (702.939 Secs) [==>]	[2]
16	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs9-125 (07) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs9-125 (07)	457.0 Secs (607 Secs) [==>607.0 Secs ]	[2]



Proposal 15103 - zs9-mix (08) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

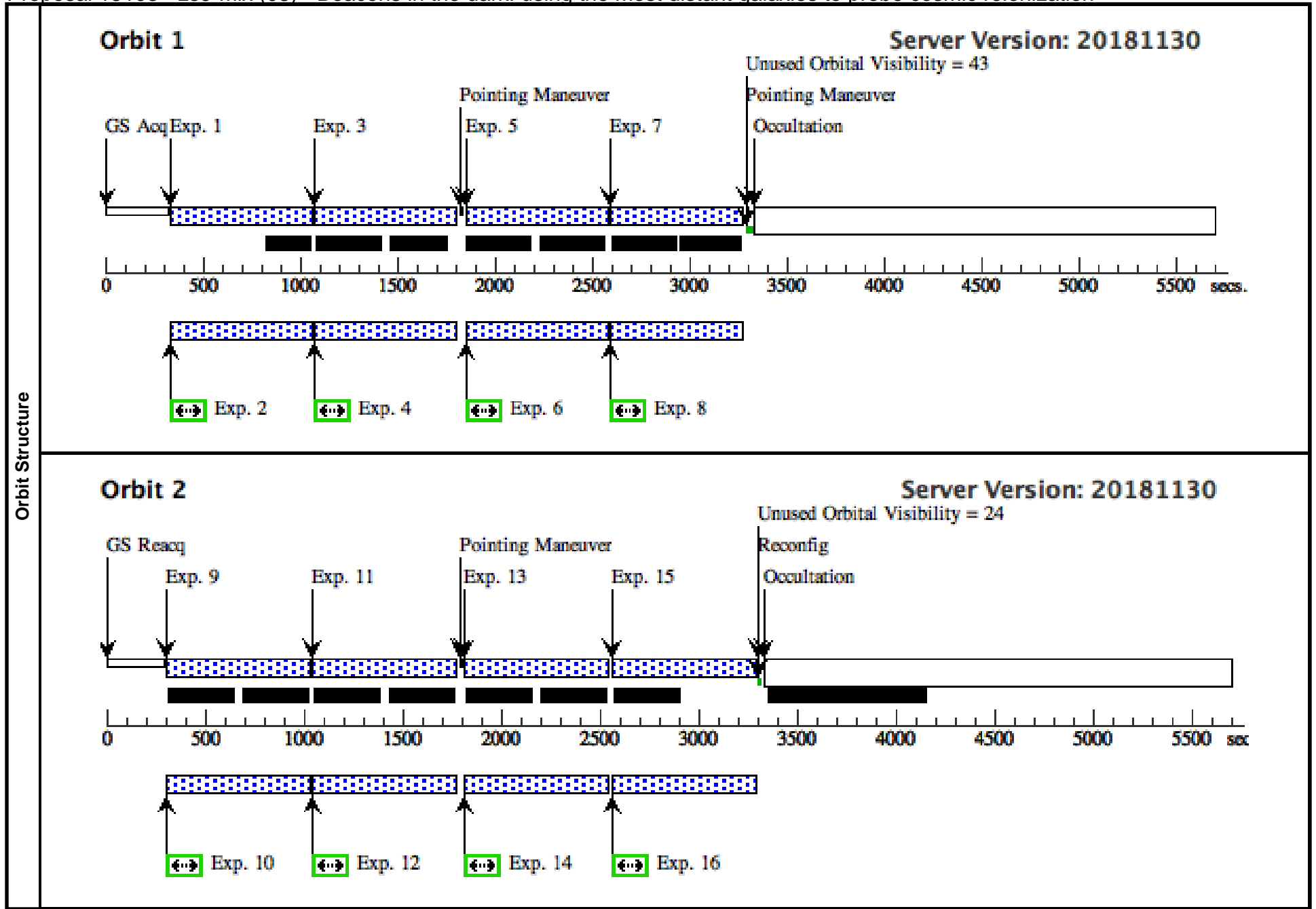
<b>Visit</b>	Proposal 15103, zs9-mix (08), scheduling <span style="float: right;">Tue Dec 18 20:00:46 GMT 2018</span> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: ORIENT -1D TO 1D FROM 07					
	<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>
(4)		EGSY-8P7-OFF	RA: 14 20 7.0000 (215.0291667d) Dec: +52 53 40.00 (52.89444d) Equinox: J2000		V=(?) H-band mag: 25	Reference Frame: SIMBAD
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

Proposal 15103 - zs9-mix (08) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.832,- 0.923	Sequence 1-8 Non-Int in zs9-mix (08)  Prime + Parallel Gro up 1-2 in Sequence 1 -8 Non-Int in zs9-mi x (08)	702.938605 Secs (702.939 Secs) [==>]	[1]
	2	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs9-mix (08)  Prime + Parallel Gro up 1-2 in Sequence 1 -8 Non-Int in zs9-mi x (08)	325.0 Secs (525 Secs) [==>525.0 Secs ]	[1]
	3	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.832,- 0.923	Sequence 1-8 Non-Int in zs9-mix (08)  Prime + Parallel Gro up 3-4 in Sequence 1 -8 Non-Int in zs9-mi x (08)	702.938605 Secs (702.939 Secs) [==>]	[1]
	4	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs9-mix (08)  Prime + Parallel Gro up 3-4 in Sequence 1 -8 Non-Int in zs9-mi x (08)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	5	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.028,2. 535	Sequence 1-8 Non-Int in zs9-mix (08)  Prime + Parallel Gro up 5-6 in Sequence 1 -8 Non-Int in zs9-mi x (08)	702.938605 Secs (702.939 Secs) [==>]	[1]
	6	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs9-mix (08)  Prime + Parallel Gro up 5-6 in Sequence 1 -8 Non-Int in zs9-mi x (08)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	7	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=14; SAMP-SEQ=SPAR S50	POS TARG 1.028,2. 535	Sequence 1-8 Non-Int in zs9-mix (08)  Prime + Parallel Gro up 7-8 in Sequence 1 -8 Non-Int in zs9-mi x (08)	652.938154 Secs (652.938 Secs) [==>]	[1]
	8	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs9-mix (08)  Prime + Parallel Gro up 7-8 in Sequence 1 -8 Non-Int in zs9-mi x (08)	457.0 Secs (557 Secs) [==>557.0 Secs ]	[1]
	9	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.133,- 1.729; GS ACQ SCENARI O BASE1B3	Sequence 9-16 Non-Int in zs9-mix (08)  Prime + Parallel Gro up 9-10 in Sequence 9-16 Non-Int in zs9- mix (08)	702.938605 Secs (702.939 Secs) [==>]	[2]

Proposal 15103 - zs9-mix (08) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

10	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs9-mix (08) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs9-mix (08)	325.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
11	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.133,- 1.729	Sequence 9-16 Non-Int in zs9-mix (08) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs9-mix (08)	702.938605 Secs (702.939 Secs) [==>]	[2]
12	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs9-mix (08) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs9-mix (08)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
13	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.727,1. 729	Sequence 9-16 Non-Int in zs9-mix (08) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs9-mix (08)	702.938605 Secs (702.939 Secs) [==>]	[2]
14	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs9-mix (08) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs9-mix (08)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
15	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.727,1. 729	Sequence 9-16 Non-Int in zs9-mix (08) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs9-mix (08)	702.938605 Secs (702.939 Secs) [==>]	[2]
16	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs9-mix (08) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs9-mix (08)	457.0 Secs (607 Secs) [==>607.0 Secs ]	[2]



Proposal 15103 - zs9-160 (09) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

<b>Visit</b>	Proposal 15103, zs9-160 (09), scheduling <span style="float: right;">Tue Dec 18 20:00:46 GMT 2018</span> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: ORIENT -1D TO 1D FROM 07					
	<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>
(4)		EGSY-8P7-OFF	RA: 14 20 7.0000 (215.0291667d) Dec: +52 53 40.00 (52.89444d) Equinox: J2000		V=(?) H-band mag: 25	Reference Frame: SIMBAD
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

Proposal 15103 - zs9-160 (09) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.584,- 1.326	Sequence 1-8 Non-Int in zs9-160 (09) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in zs9-160 (09)	702.938605 Secs (702.939 Secs) [==>]	[1]
	2	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs9-160 (09) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in zs9-160 (09)	325.0 Secs (525 Secs) [==>525.0 Secs ]	[1]
	3	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -2.584,- 1.326	Sequence 1-8 Non-Int in zs9-160 (09) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in zs9-160 (09)	702.938605 Secs (702.939 Secs) [==>]	[1]
	4	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs9-160 (09) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in zs9-160 (09)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	5	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 1.276,2. 132	Sequence 1-8 Non-Int in zs9-160 (09) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in zs9-160 (09)	702.938605 Secs (702.939 Secs) [==>]	[1]
	6	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs9-160 (09) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in zs9-160 (09)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[1]
	7	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S50	POS TARG 1.276,2. 132	Sequence 1-8 Non-Int in zs9-160 (09) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in zs9-160 (09)	652.938154 Secs (652.938 Secs) [==>]	[1]
	8	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 1-8 Non-Int in zs9-160 (09) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in zs9-160 (09)	457.0 Secs (557 Secs) [==>557.0 Secs ]	[1]
	9	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -3.035,- 0.923	Sequence 9-16 Non-Int in zs9-160 (09) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs9-160 (09)	702.938605 Secs (702.939 Secs) [==>]	[2]

Proposal 15103 - zs9-160 (09) - Beacons in the dark: using the most distant galaxies to probe cosmic reionization

10	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs9-160 (09) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in zs9-160 (09)	325.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
11	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG -3.035,- 0.923	Sequence 9-16 Non-Int in zs9-160 (09) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs9-160 (09)	702.938605 Secs (702.939 Secs) [==>]	[2]
12	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs9-160 (09) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in zs9-160 (09)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
13	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F105W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 0.825,2. 535	Sequence 9-16 Non-Int in zs9-160 (09) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs9-160 (09)	702.938605 Secs (702.939 Secs) [==>]	[2]
14	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs9-160 (09) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in zs9-160 (09)	407.0 Secs (607 Secs) [==>607.0 Secs ]	[2]
15	(4) EGSY-8P7-OFF	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S50	POS TARG 0.825,2. 535	Sequence 9-16 Non-Int in zs9-160 (09) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs9-160 (09)	702.938605 Secs (702.939 Secs) [==>]	[2]
16	ANY	ACS/WFC, ACCUM, WFC	F435W			Sequence 9-16 Non-Int in zs9-160 (09) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in zs9-160 (09)	457.0 Secs (607 Secs) [==>607.0 Secs ]	[2]

