



15357 - Active Asteroid (3200) Phaethon during its unusually close approach to Earth

Cycle: 25, Proposal Category: GO
(Availability Mode: SUPPORTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
Dr. Quan-Zhi Ye (PI) (Contact)	California Institute of Technology	qye@caltech.edu
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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) PHAETHON-CLONE	ACS/WFC	1	27-Nov-2017 11:03:22.0	yes
02	(1) PHAETHON-CLONE	ACS/WFC	1	27-Nov-2017 11:03:23.0	yes
03	(1) PHAETHON-CLONE	ACS/WFC S/C	1	27-Nov-2017 11:03:24.0	yes
04	(1) PHAETHON-CLONE	ACS/WFC S/C	1	27-Nov-2017 11:03:25.0	yes
13	(1) PHAETHON-CLONE	ACS/WFC S/C	1	27-Nov-2017 11:03:27.0	yes
14	(1) PHAETHON-CLONE	ACS/WFC S/C	1	27-Nov-2017 11:03:29.0	yes

6 Total Orbits Used

ABSTRACT

The unusual asteroid and possible dormant comet (3200) Phaethon will pass 0.069 AU (27 lunar distances) from the Earth in Dec 2017, the closest since its discovery in 1983 and also until 2093. Phaethon is classified as an asteroid but has been associated with the strong Geminid meteor shower, implying significant mass loss during its previous orbits of which the mechanism remains poorly understood. We hereby request two HST GO orbits to observe Phaethon with HST/ACS during its flyby in Dec 2017. Our goal is to look for accompanying meter-sized fragments as well as to detect the associated dust (meteoroid) dust trail. The proposed observation will provide valuable information for the origin of Phaethon's mass loss. HST's high angular resolution and sensitivity is critical for achieving the maximum science return from this unprecedented close approach.

OBSERVING DESCRIPTION

The main goal of this program is to search for meter-sized fragments from Phaethon (point sources). The images will also enable search for Phaethon's associated dust trail (extended source) which will be done on a best-effort basis.

Orbital elements are derived from an ensemble of synthetic fragments, represented by an artificial object, "Phaethon-clone". The position of Phaethon-clone at the observation window is roughly RA=265 deg, Dec=+55 deg. The probability ellipse is oriented along 27 deg (N=0 deg) and is about 10' wide, 6 deg long. We use pos-targ to offset the two visits; however, the on-sky orientation depends on the orientation of HST focal plane, which is unknown at this point. The pos-targ parameters are subjected to update when the orientation of the HST focal plane is known. In the worst case scenario that the pos-targ are perpendicular to the ellipse axis, the images are still within the probability ellipse and are therefore useful for science.

We plan to use 2 orbits to image a total of two positions (each position include its respective dithering) with ACS/WFC, covering a 6'-wide section within the probability ellipse. For each visit, we will take four 545-s exposures, dithering between two points that are 10 pixels apart in both x and y directions, in order to mitigate the effects of cosmic rays and contamination of background star trails. We plan to use Broadband V (F606W) filter in order to derive spectral information of any detected fragments. We set FLASH=3 in order to correct for poor charge transfer efficiency (CTE). The ACS Exposure Time Calculator indicates that a signal-to noise ratio of 4 can be reached in 545 s exposure, assuming a solar-type spectrum point source at V=27.0, corresponding to a 1-m-sized object (assuming a geometric albedo of 0.10 similar to Phaethon).

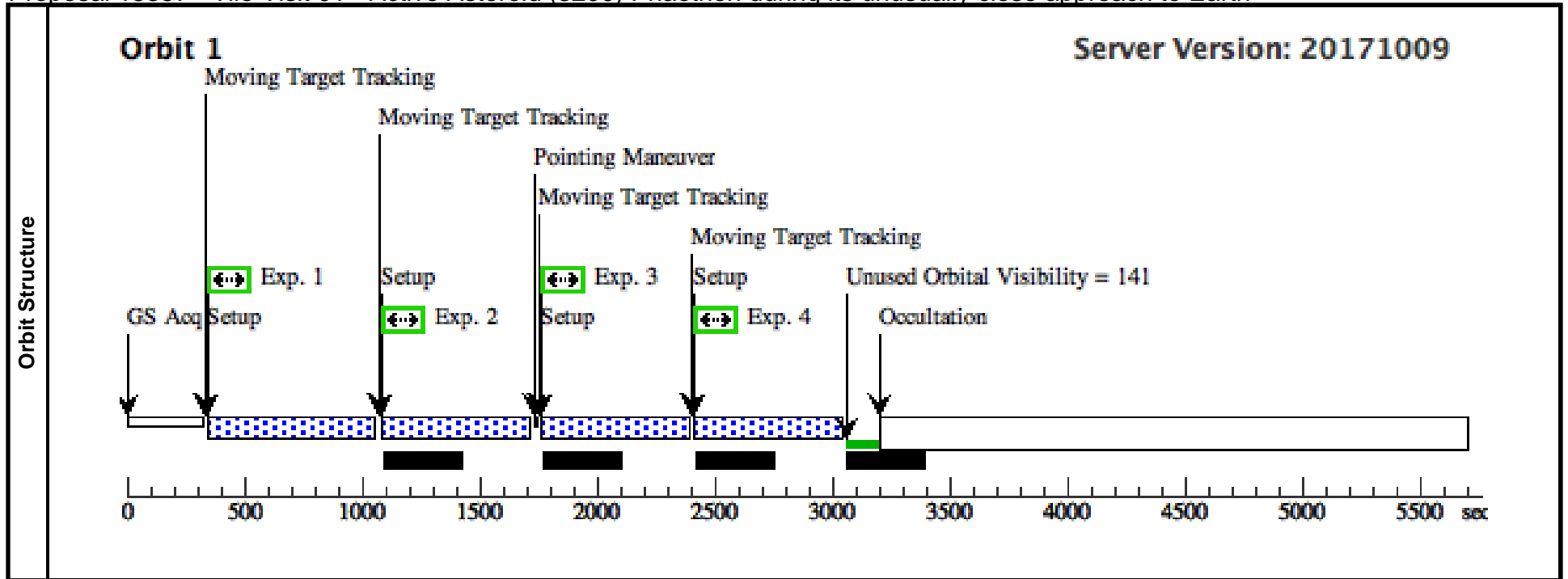
Proposal 15357 (STScI Edit Number: 0, Created: Monday, November 27, 2017 11:03:31 AM EST) - Overview

Observations are planned for a 4-hour window near 2017 Dec 14 14:00 UT, the time that the Earth passes the minimum orbit intersection distance (MOID) point of which the fragments near this position are closest (~ 0.02 au). This position is far from Phaethon itself on the sky plane (more than tens of degrees) due to the geometry caused by the close approach, therefore Phaethon will not be in the images and cannot be used as an acquisition target.

Proposal 15357 - Tile Visit 01 - Active Asteroid (3200) Phaethon during its unusually close approach to Earth

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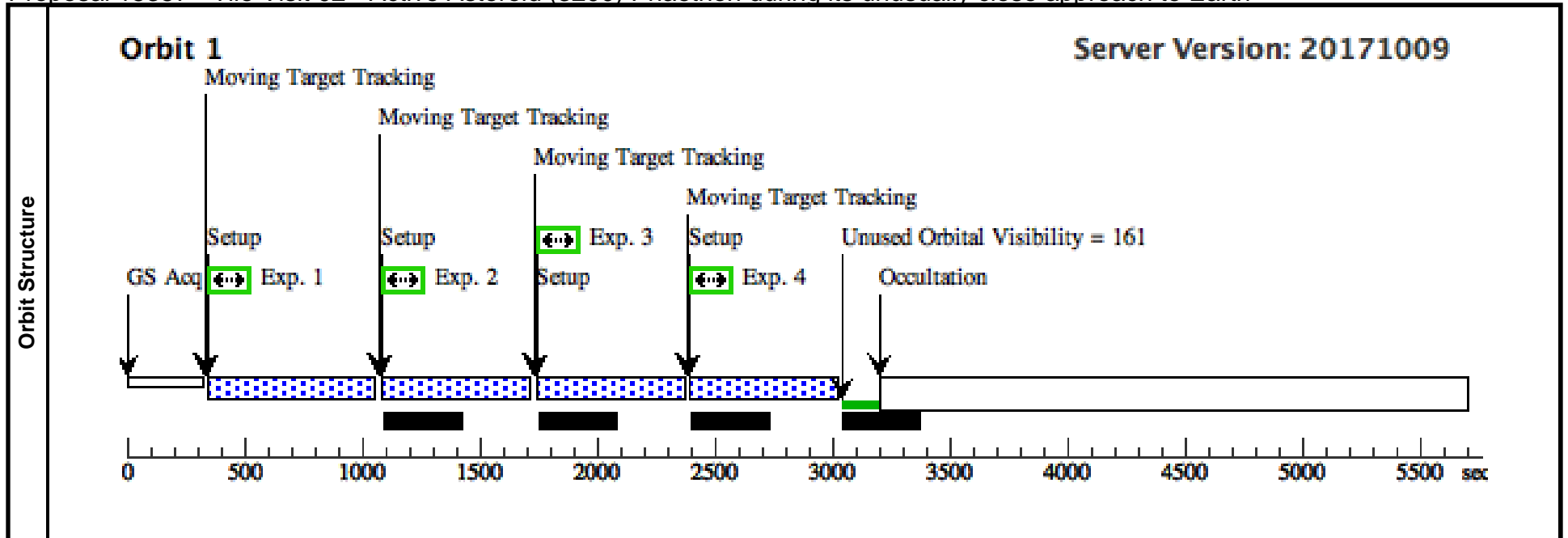
Visit	Proposal 15357, Tile Visit 01, withdrawn Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: BETWEEN 14-DEC-2017:12:00:00 AND 14-DEC-2017:16:00:00									
	Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center		
	(1)	PHAETHON-CLONE	TYPE=ASTEROID,A=1.271005134,E=0.888991227,I=22.253726,O=265.22932,W=322.17133,M=304.57093,EQUI NOX=J2000,EPOCH=01-NOV-2017:12:00:00,EpochTimeScale=TDB					HUBBLE		
	<i>Comments: Extended=NO</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) PHAETHON-CLONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG -102.11 211890107228,-7.14 0374935548657; NEW ALIGNMENT		500 Secs (500 Secs) [==>]	[1]
	2		(1) PHAETHON-CLONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG -102.11 211890107228,-7.14 0374935548657; NEW ALIGNMENT		500 Secs (500 Secs) [==>]	[1]
	3		(1) PHAETHON-CLONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG -101.61 211890107228,-6.64 0374935548657; NEW ALIGNMENT		500 Secs (500 Secs) [==>]	[1]
	4		(1) PHAETHON-CLONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG -101.61 211890107228,-6.64 0374935548657; NEW ALIGNMENT		500 Secs (500 Secs) [==>]	[1]



Proposal 15357 - Tile Visit 02 - Active Asteroid (3200) Phaethon during its unusually close approach to Earth

Mon Nov 27 16:03:31 GMT 2017

Visit	Proposal 15357, Tile Visit 02, withdrawn Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: BETWEEN 14-DEC-2017:12:00:00 AND 14-DEC-2017:16:00:00										
	Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(1)	PHAETHON-CLONE		TYPE=ASTEROID,A=1.271005134,E=0.88891227,I=22.253726,O=265.22932,W=322.17133,M=304.57093,EQUI NOX=J2000,EPOCH=01-NOV-2017:12:00:00,EpochTimeScale=TDB				HUBBLE	<i>Comments: Extended=NO</i>		
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1		(1) PHAETHON-CLONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG 102.112 11890107228,7.1403 74935548657; NEW ALIGNMENT		500 Secs (500 Secs) [==>]	[1]	
	<i>Comments: Spectral Element for both exposures should be CLEAR.</i>										
	2		(1) PHAETHON-CLONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG 102.112 11890107228,7.1403 74935548657; NEW ALIGNMENT		500 Secs (500 Secs) [==>]	[1]	
	<i>Comments: Spectral Element for both exposures should be CLEAR.</i>										
3		(1) PHAETHON-CLONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG 102.112 11890107228,7.1403 74935548657; NEW ALIGNMENT		500 Secs (500 Secs) [==>]	[1]		
<i>Comments: Spectral Element for both exposures should be CLEAR.</i>											
4		(1) PHAETHON-CLONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG 102.112 11890107228,7.1403 74935548657; NEW ALIGNMENT		500 Secs (500 Secs) [==>]	[1]		
<i>Comments: Spectral Element for both exposures should be CLEAR.</i>											



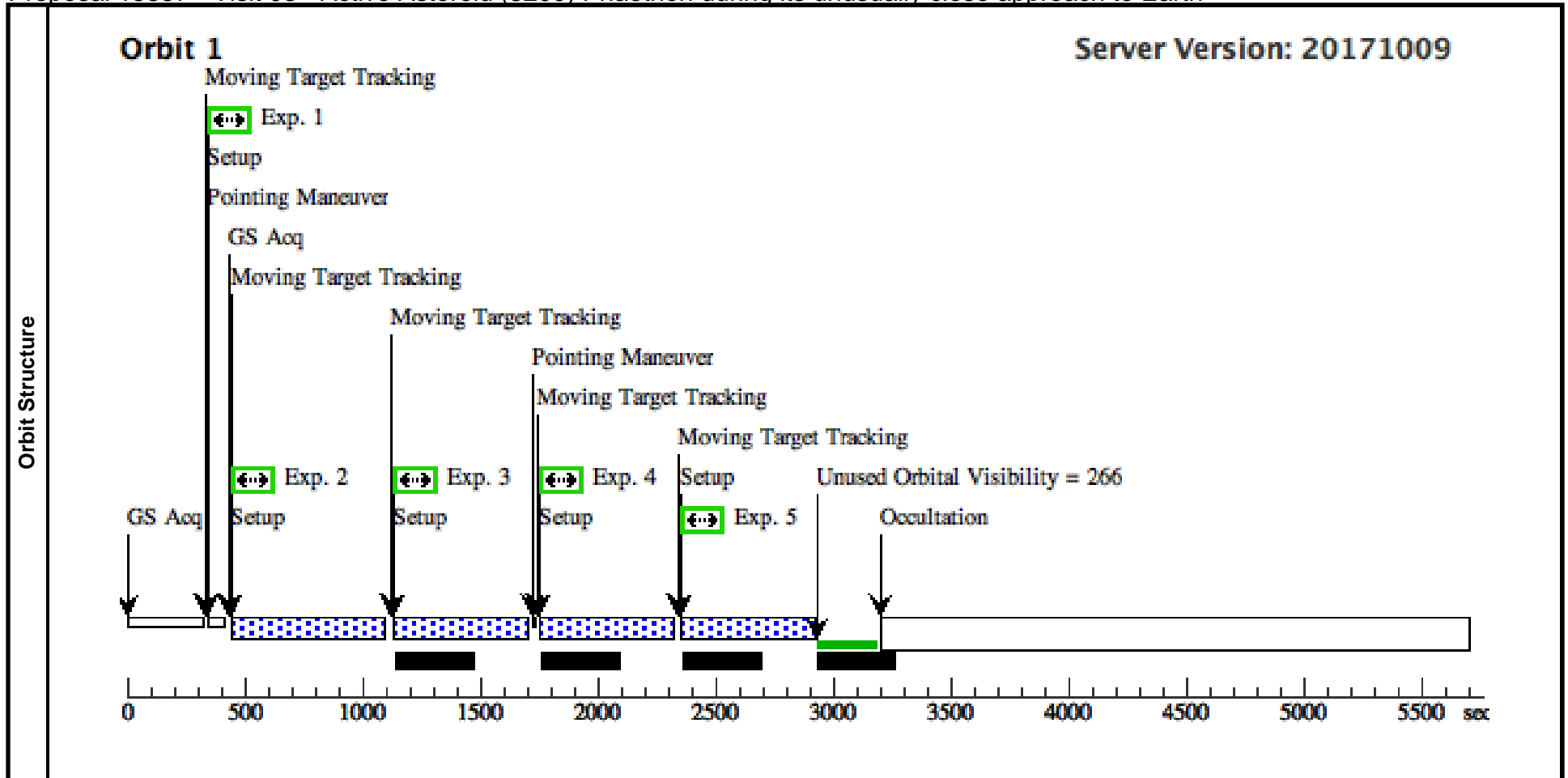
Proposal 15357 - Visit 03 - Active Asteroid (3200) Phaethon during its unusually close approach to Earth

Mon Nov 27 16:03:31 GMT 2017

Visit	<p>Proposal 15357, Visit 03, withdrawn</p> <p>Diagnostic Status: Error</p> <p>Scientific Instruments: ACS/WFC, S/C</p> <p>Special Requirements: BETWEEN 14-DEC-2017:16:00:00 AND 14-DEC-2017:20:30:00</p>																										
	Diagnostics	<p>(Exposure 1 (Sequence 1-5 Non-Int in Visit 03)) Error (Form): Illegal selection: S/C.</p> <p>(Exposure 1 (Sequence 1-5 Non-Int in Visit 03)) Error (Form): POINTING is not a valid selection.</p> <p>(Exposure 1 (Sequence 1-5 Non-Int in Visit 03)) Error (Form): This attribute is not allowed to have this value: Aperture = V1 It is an Available option and cannot normally be used in a GO proposal.</p> <p>(Exposure 1 (Sequence 1-5 Non-Int in Visit 03)) Error (Form): This attribute is not allowed to have this value: Config = S/C It is an Available option and cannot normally be used in a GO proposal.</p> <p>(Exposure 1 (Sequence 1-5 Non-Int in Visit 03)) Error (Form): This attribute is not allowed to have this value: Mode = POINTING It is an Available option and cannot normally be used in a GO proposal.</p> <p>(Exposure 1 (Sequence 1-5 Non-Int in Visit 03)) Error (Form): V1 is not a valid selection.</p> <p>(Exposure 1 (Sequence 1-5 Non-Int in Visit 03) special requirements) Error (Form): Special Requirement SAA CONTOUR is not allowed for this exposure.</p> <p>(Visit 03) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 03) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p>																									
Solar System Targets		<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Level 1</th> <th>Level 2</th> <th>Level 3</th> <th>Window</th> <th>Ephem Center</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>PHAETHON-CLONE</td> <td>TYPE=ASTEROID,A=1.271005134,E=0.888991227,I=22.253726,O=265.22932,W=322.17133,M=304.57093,EQUI</td> <td>NOX=J2000,EPOCH=01-NOV-2017:12:00:00,EpochTimeScale=TDB</td> <td></td> <td></td> <td>HUBBLE</td> </tr> <tr> <td colspan="7"><i>Comments: Extended=NO</i></td> </tr> </tbody> </table>						#	Name	Level 1	Level 2	Level 3	Window	Ephem Center	(1)	PHAETHON-CLONE	TYPE=ASTEROID,A=1.271005134,E=0.888991227,I=22.253726,O=265.22932,W=322.17133,M=304.57093,EQUI	NOX=J2000,EPOCH=01-NOV-2017:12:00:00,EpochTimeScale=TDB			HUBBLE	<i>Comments: Extended=NO</i>					
	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center																				
(1)	PHAETHON-CLONE	TYPE=ASTEROID,A=1.271005134,E=0.888991227,I=22.253726,O=265.22932,W=322.17133,M=304.57093,EQUI	NOX=J2000,EPOCH=01-NOV-2017:12:00:00,EpochTimeScale=TDB			HUBBLE																					
<i>Comments: Extended=NO</i>																											

Proposal 15357 - Visit 03 - Active Asteroid (3200) Phaethon during its unusually close approach to Earth

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(1) PHAETHON-CL ONE	S/C, POINTING, V1			POS TARG 159.208 212,255.030697; SAA CONTOUR 27; GS ACQ SCENARI O BASE1B3	Sequence 1-5 Non-Int in Visit 03	1 Secs (1 Secs) [==>]	[1]
	2	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG -102.11 2119,-7.140375; NEW OBSET; EXP PCS MODE G YRO	Sequence 1-5 Non-Int in Visit 03	442 Secs (442 Secs) [==>]	[1]
	3	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG -102.11 2119,-7.140375; NEW ALIGNMENT ; EXP PCS MODE G YRO	Sequence 1-5 Non-Int in Visit 03	442 Secs (442 Secs) [==>]	[1]
	4	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG -101.61 2119,7.640370; NEW ALIGNMENT ; EXP PCS MODE G YRO	Sequence 1-5 Non-Int in Visit 03	442 Secs (442 Secs) [==>]	[1]
	5	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG -101.61 2119,7.640370; NEW ALIGNMENT ; EXP PCS MODE G YRO	Sequence 1-5 Non-Int in Visit 03	442 Secs (442 Secs) [==>]	[1]



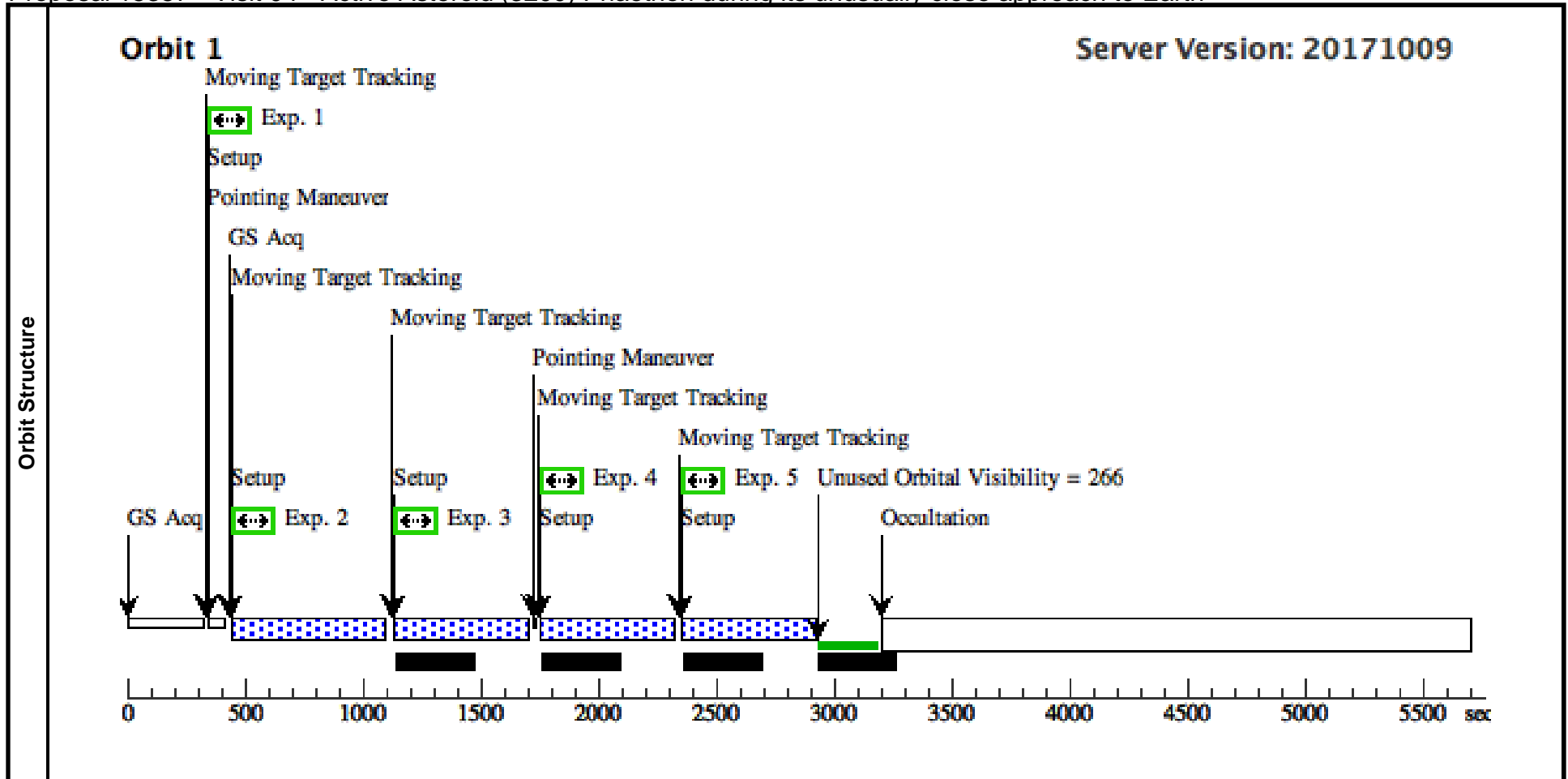
Proposal 15357 - Visit 04 - Active Asteroid (3200) Phaethon during its unusually close approach to Earth

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Visit	<p>Proposal 15357, Visit 04, withdrawn</p> <p>Diagnostic Status: Error</p> <p>Scientific Instruments: ACS/WFC, S/C</p> <p>Special Requirements: SAME ORIENT AS 03; BETWEEN 14-DEC-2017:16:00:00 AND 14-DEC-2017:20:30:00</p>																										
	Diagnostics	<p>(Exposure 1 (Sequence 1-5 Non-Int in Visit 04)) Error (Form): Illegal selection: S/C.</p> <p>(Exposure 1 (Sequence 1-5 Non-Int in Visit 04)) Error (Form): POINTING is not a valid selection.</p> <p>(Exposure 1 (Sequence 1-5 Non-Int in Visit 04)) Error (Form): This attribute is not allowed to have this value: Aperture = V1 It is an Available option and cannot normally be used in a GO proposal.</p> <p>(Exposure 1 (Sequence 1-5 Non-Int in Visit 04)) Error (Form): This attribute is not allowed to have this value: Config = S/C It is an Available option and cannot normally be used in a GO proposal.</p> <p>(Exposure 1 (Sequence 1-5 Non-Int in Visit 04)) Error (Form): This attribute is not allowed to have this value: Mode = POINTING It is an Available option and cannot normally be used in a GO proposal.</p> <p>(Exposure 1 (Sequence 1-5 Non-Int in Visit 04)) Error (Form): V1 is not a valid selection.</p> <p>(Visit 04) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 04) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p>																									
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	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center																				
(1)	PHAETHON-CLONE	TYPE=ASTEROID,A=1.271005134,E=0.88991227,I=22.253726,O=265.22932,W=322.17133,M=304.57093,EQUI	NOX=J2000,EPOCH=01-NOV-2017:12:00:00,EpochTimeScale=TDB			HUBBLE																					
<i>Comments: Extended=NO</i>																											

Proposal 15357 - Visit 04 - Active Asteroid (3200) Phaethon during its unusually close approach to Earth

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	(1) PHAETHON-CL ONE	S/C, POINTING, V1			POS TARG 363.858 388,249.573103; GS ACQ SCENARI O BASE1B3	Sequence 1-5 Non-Int in Visit 04	1 Secs (1 Secs) [==>]	[1]	
	2	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG 102.112 119,7.140375; NEW OBSET; EXP PCS MODE G YRO	Sequence 1-5 Non-Int in Visit 04	442 Secs (442 Secs) [==>]	[1]	
	<i>Comments: Spectral Element for both exposures should be CLEAR.</i>									
	3	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG 102.112 119,7.140375; NEW ALIGNMENT ; EXP PCS MODE G YRO	Sequence 1-5 Non-Int in Visit 04	442 Secs (442 Secs) [==>]	[1]	
	<i>Comments: Spectral Element for both exposures should be CLEAR.</i>									
4	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG 102.612 120,7.640370; NEW ALIGNMENT ; EXP PCS MODE G YRO	Sequence 1-5 Non-Int in Visit 04	442 Secs (442 Secs) [==>]	[1]		
<i>Comments: Spectral Element for both exposures should be CLEAR.</i>										
5	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFCENTER	F606W	FLASH=3	POS TARG 102.612 120,7.640370; NEW ALIGNMENT ; EXP PCS MODE G YRO	Sequence 1-5 Non-Int in Visit 04	442 Secs (442 Secs) [==>]	[1]		
<i>Comments: Spectral Element for both exposures should be CLEAR.</i>										



Proposal 15357 - Visit 13 - Active Asteroid (3200) Phaethon during its unusually close approach to Earth

Mon Nov 27 16:03:31 GMT 2017

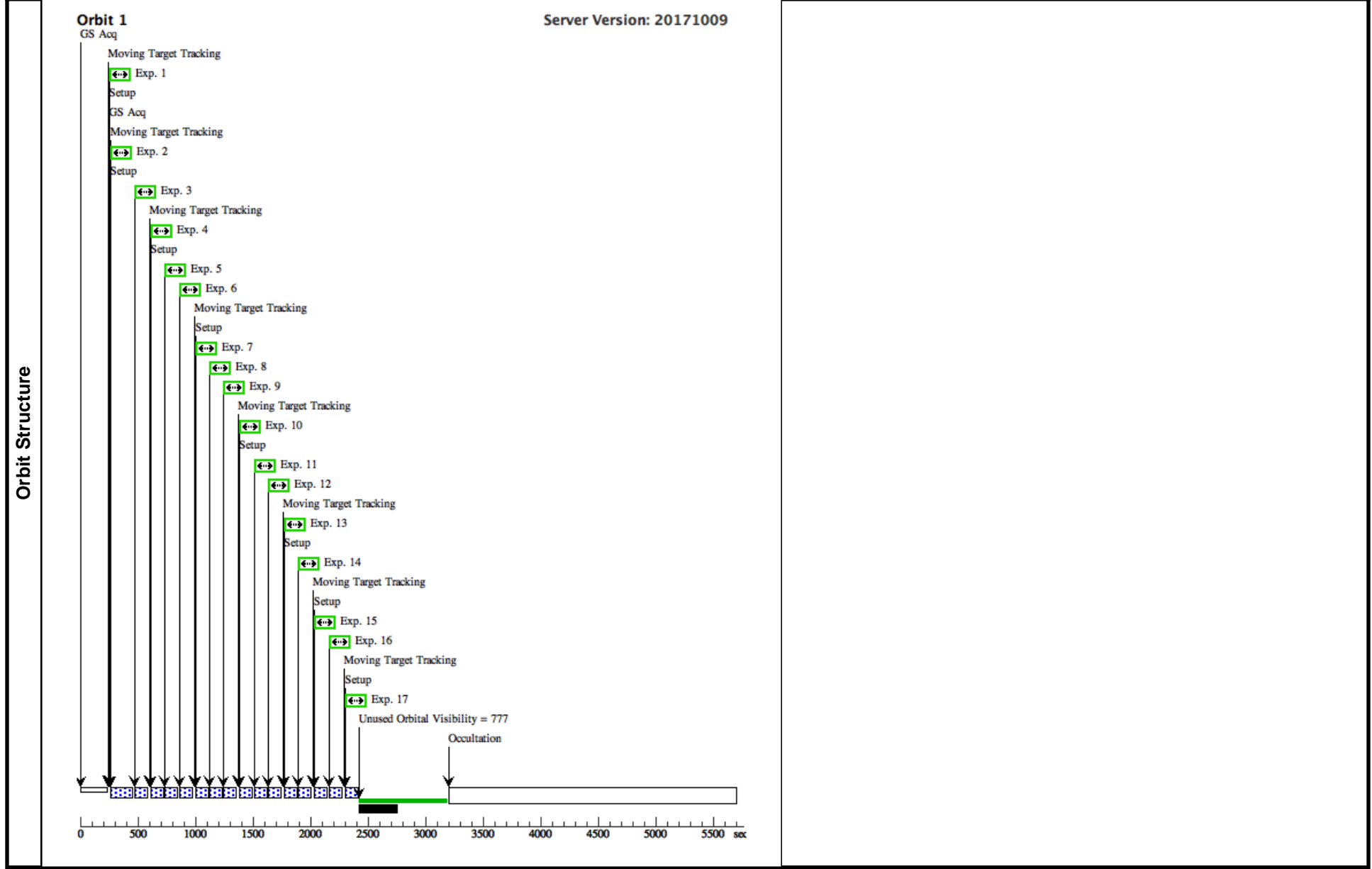
Visit	Proposal 15357, Visit 13, implementation Diagnostic Status: Error Scientific Instruments: ACS/WFC, S/C Special Requirements: ORIENT 13D TO 13 D; BETWEEN 14-DEC-2017:16:00:00 AND 14-DEC-2017:20:30:00						
	(Exposure 1 (Sequence 1-17 Non-Int in Visit 13)) Error (Form): Illegal selection: S/C. (Exposure 1 (Sequence 1-17 Non-Int in Visit 13)) Error (Form): POINTING is not a valid selection. (Exposure 1 (Sequence 1-17 Non-Int in Visit 13)) Error (Form): This attribute is not allowed to have this value: Aperture = V1 It is an Available option and cannot normally be used in a GO proposal. (Exposure 1 (Sequence 1-17 Non-Int in Visit 13)) Error (Form): This attribute is not allowed to have this value: Config = S/C It is an Available option and cannot normally be used in a GO proposal. (Exposure 1 (Sequence 1-17 Non-Int in Visit 13)) Error (Form): This attribute is not allowed to have this value: Mode = POINTING It is an Available option and cannot normally be used in a GO proposal. (Exposure 1 (Sequence 1-17 Non-Int in Visit 13)) Error (Form): V1 is not a valid selection. (Exposure 1 (Sequence 1-17 Non-Int in Visit 13) special requirements) Error (Form): Special Requirement SAA CONTOUR is not allowed for this exposure.						
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	PHAETHON-CLONE	TYPE=ASTEROID,A=1.271005134,E=0.88991227,I=22.253726,O=265.22932,W=322.17133,M=304.57093,EQUI NOX=J2000,EPOCH=01-NOV-2017:12:00:00,EpochTimeScale=TDB				HUBBLE
Comments: Extended=NO							

Proposal 15357 - Visit 13 - Active Asteroid (3200) Phaethon during its unusually close approach to Earth

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(1) PHAETHON-CL ONE	S/C, POINTING, V1			POS TARG 313.960 6,159.3813; SAA CONTOUR 27; GSPAIR N1ZH0004 90F2000000000F0; GS ACQ SCENARI O ONEB1B3	Sequence 1-17 Non-Int in Visit 13	1 Secs (1 Secs) [==>]	[1]
	2	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1B-512	F606W	FLASH=3	NEW OBSET; EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs) [==>]	[1]
	3	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1B-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs) [==>]	[1]
	4	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1B-512	F606W	FLASH=3	NEW ALIGNMENT ; EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs) [==>]	[1]
	5	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1B-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs) [==>]	[1]
	6	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1B-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs) [==>]	[1]
	7	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1B-512	F606W	FLASH=3	NEW ALIGNMENT ; EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs) [==>]	[1]
	8	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1B-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs) [==>]	[1]
	9	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1B-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs) [==>]	[1]
	10	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1B-512	F606W	FLASH=3	NEW ALIGNMENT ; EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs) [==>]	[1]
	11	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1B-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs) [==>]	[1]
	12	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1B-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs) [==>]	[1]
	13	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1B-512	F606W	FLASH=3	NEW ALIGNMENT ; EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs) [==>]	[1]
	14	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1B-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs) [==>]	[1]
	15	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1B-512	F606W	FLASH=3	NEW ALIGNMENT ; EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs) [==>]	[1]
	16	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1B-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs) [==>]	[1]

Proposal 15357 - Visit 13 - Active Asteroid (3200) Phaethon during its unusually close approach to Earth

17	(1) PHAETHON-CL ACS/WFC, ACCUM, WFC1B-512 F606W	FLASH=3	NEW ALIGNMENT Sequence 1-17 Non-Int in Visit 13	60 Secs (60 Secs)
	ONE		EXP PCS MODE G YRO	[==>]
				[1]



Proposal 15357 - Visit 14 - Active Asteroid (3200) Phaethon during its unusually close approach to Earth

Mon Nov 27 16:03:31 GMT 2017

Visit	Proposal 15357, Visit 14, implementation Diagnostic Status: Error Scientific Instruments: ACS/WFC, S/C Special Requirements: SAME ORIENT AS 13; BETWEEN 14-DEC-2017:16:00:00 AND 14-DEC-2017:20:30:00					
	(Exposure 1 (Sequence 1-17 Non-Int in Visit 14)) Error (Form): Illegal selection: S/C. (Exposure 1 (Sequence 1-17 Non-Int in Visit 14)) Error (Form): POINTING is not a valid selection. (Exposure 1 (Sequence 1-17 Non-Int in Visit 14)) Error (Form): This attribute is not allowed to have this value: Aperture = V1 It is an Available option and cannot normally be used in a GO proposal. (Exposure 1 (Sequence 1-17 Non-Int in Visit 14)) Error (Form): This attribute is not allowed to have this value: Config = S/C It is an Available option and cannot normally be used in a GO proposal. (Exposure 1 (Sequence 1-17 Non-Int in Visit 14)) Error (Form): This attribute is not allowed to have this value: Mode = POINTING It is an Available option and cannot normally be used in a GO proposal. (Exposure 1 (Sequence 1-17 Non-Int in Visit 14)) Error (Form): V1 is not a valid selection.					
Diagnostics						
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window
	(1)	PHAETHON-CLONE	TYPE=ASTEROID,A=1.271005134,E=0.888991227,I=22.253726,O=265.22932,W=322.17133,M=304.57093,EQUI NOX=J2000,EPOCH=01-NOV-2017:12:00:00,EpochTimeScale=TDB			
Comments: Extended=NO						

Proposal 15357 - Visit 14 - Active Asteroid (3200) Phaethon during its unusually close approach to Earth

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(1) PHAETHON-CL ONE	S/C, POINTING, V1			POS TARG 213.787 2,164.2088; GSPAIR N20V0000 07F1000000000F0; GS ACQ SCENARI O ONEB1B3	Sequence 1-17 Non-Int in Visit 14	1 Secs (1 Secs) [==>]	[1]
	2	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1A-512	F606W	FLASH=3	NEW OBSET; EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	[1]
	3	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1A-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	[1]
	4	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1A-512	F606W	FLASH=3	NEW ALIGNMENT ; EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	[1]
	5	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1A-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	[1]
	6	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1A-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	[1]
	7	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1A-512	F606W	FLASH=3	NEW ALIGNMENT ; EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	[1]
	8	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1A-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	[1]
	9	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1A-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	[1]
	10	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1A-512	F606W	FLASH=3	NEW ALIGNMENT ; EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	[1]
	11	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1A-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	[1]
	12	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1A-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	[1]
	13	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1A-512	F606W	FLASH=3	NEW ALIGNMENT ; EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	[1]
	14	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1A-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	[1]
	15	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1A-512	F606W	FLASH=3	NEW ALIGNMENT ; EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	[1]
	16	(1) PHAETHON-CL ONE	ACS/WFC, ACCUM, WFC1A-512	F606W	FLASH=3	EXP PCS MODE GYRO	Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	[1]

Proposal 15357 - Visit 14 - Active Asteroid (3200) Phaethon during its unusually close approach to Earth

17	(1) PHAETHON-CL ACS/WFC, ACCUM, WFC1A-512 F606W ONE	FLASH=3	NEW ALIGNMENT Sequence 1-17 Non-Int in Visit 14	60 Secs (60 Secs) [==>]	
			EXP PCS MODE G YRO		[1]

