16535 - Cycle 29 COS/NUV Detector Dark Monitor

Cycle: 29, Proposal Category: CAL/COS
(Availability Mode: RESTRICTED)

INVESTIGATORS

<table>
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<tr>
<th>Name</th>
<th>Institution</th>
<th>E-Mail</th>
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<tr>
<td>Dzhuliya &quot;Julia&quot; Dashtamirova (PI) (Contact)</td>
<td>Space Telescope Science Institute</td>
<td><a href="mailto:dashtamirova@stsci.edu">dashtamirova@stsci.edu</a></td>
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<tr>
<td>Elaine M Frazer (Col) (Contact)</td>
<td>Space Telescope Science Institute</td>
<td><a href="mailto:efrazer@stsci.edu">efrazer@stsci.edu</a></td>
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<tr>
<td>Kate Rowlands (Col) (Contact)</td>
<td>Space Telescope Science Institute</td>
<td><a href="mailto:krowlands@stsci.edu">krowlands@stsci.edu</a></td>
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VISITS

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Proposal 16535 (STScI Edit Number: 4, Created: Friday, June 18, 2021 at 6:00:30 AM Eastern Standard Time) - Overview

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52 Total Orbits Used

**ABSTRACT**

Perform routine monitoring of NUV MAMA detector dark rate. The main purpose is to look for evidence of a change in the dark rate, both to track on-orbit time dependence and to check for a detector problem developing. Variations of count rates as a function of orbital positions will be analyzed to study the effect of SAA. Stacked images will help us study the spatial distribution of dark rates on the detector.

**OBSERVING DESCRIPTION**
Monitor the NUV detector dark rate by taking science exposures with no light on the detector. Twice every other week a 22-min exposure is taken with the NUV detector with the shutter closed. The length of the exposures is chosen to make them fit in Earth occultations.

-------- Realtime Justification --------

------ Calibration Justification ------

-------- Additional Comments --------
Proposal 16535 - Visit 01 - Cycle 29 COS/NUV Detector Dark Monitor

Visit
Proposal 16535, Visit 01
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: BETWEEN 01-NOV-2021:00:00:00 AND 07-NOV-2021:23:59:59

Exposures

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Unused Orbital Visibility = 3142

Exp. 1
Home
Occultation

Server Version: 20200619

Fri Jun 18 11:00:30 GMT 2021
Proposal 16535 - Visit 02 - Cycle 29 COS/NUV Detector Dark Monitor

Visit
Proposal 16535, Visit 02
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: AFTER 01 BY 5.5 Orbits TO 8.5 Orbits

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**Visit**
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- Diagnostic Status: No Diagnostics
- Scientific Instruments: COS/NUV
- Special Requirements: BETWEEN 15-NOV-2021:00:00:00 AND 21-NOV-2021:23:59:59

**Orbit Structure**

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Exp. 1

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Occultation

Server Version: 20200619
**Proposal 16535 - Visit 04 - Cycle 29 COS/NUV Detector Dark Monitor**

Visit

- **Proposal 16535, Visit 04**
- **Diagnostic Status:** No Diagnostics
- **Scientific Instruments:** COS/NUV
- **Special Requirements:** AFTER 03 BY 5.5 Orbits TO 8.5 Orbits

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- **Home**
- **Occupation**

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*Server Version: 20200619*
Proposal 16535 - Visit 05 - Cycle 29 COS/NUV Detector Dark Monitor

Visit

Scientific Instruments: COS/NUV

Special Requirements: BETWEEN 29-NOV-2021:00:00:00 AND 05-DEC-2021:23:59:59

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Orbit Structure

Unused Orbital Visibility = 3142

Exp. 1

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Occultation

Server Version: 20200619
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Orbit Structure

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Exp. 1

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Occultation

Server Version: 20200619
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Occultation

Server Version: 20200619
### Proposal 16535 - Visit 08 - Cycle 29 COS/NUV Detector Dark Monitor

**Visit**

- Proposal 16535, Visit 08
- Diagnostic Status: No Diagnostics
- Scientific Instruments: COS/NUV
- Special Requirements: AFTER 07 BY 5.5 Orbits TO 8.5 Orbits

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- Occultation

Server Version: 20200619
Proposal 16535 - Visit 09 - Cycle 29 COS/NUV Detector Dark Monitor

Visit
Proposal 16535, Visit 09
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: BETWEEN 27-DEC-2021:00:00:00 AND 02-JAN-2022:23:59:59

Fri Jun 18 11:00:30 GMT 2021

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Orbit Structure

Orbit 1

Exp. 1

Unused Orbital Visibility = 3142

Home  Occultation
Proposal 16535 - Visit 0A - Cycle 29 COS/NUV Detector Dark Monitor

Visit 0A
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: AFTER 09 BY 5.5 Orbits TO 8.5 Orbits

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Orbit Structure

Unused Orbital Visibility = 3142  Home  Occultation
### Proposal 16535 - Visit 0B - Cycle 29 COS/NUV Detector Dark Monitor

**Visit**
- Proposal 16535, Visit 0B
- Diagnostic Status: No Diagnostics
- Scientific Instruments: COS/NUV
- Special Requirements: BETWEEN 10-JAN-2022:00:00:00 AND 16-JAN-2022:23:59:59

**Orbit Structure**
- Unused Orbital Visibility = 3142
- Home
- Occultation

### Exposures

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Proposal 16535 - Visit 0C - Cycle 29 COS/NUV Detector Dark Monitor

Visit
---
Proposal 16535, Visit 0C
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: AFTER 0B BY 5.5 Orbits TO 8.5 Orbits

Fri Jun 18 11:00:30 GMT 2021

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**Exposures**

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**Orbit Structure**

Orbit 1
Exp. 1
Unused Orbital Visibility = 3142  Home  Occultation

Server Version: 20200619
Proposal 16535 - Visit 0D - Cycle 29 COS/NUV Detector Dark Monitor

Visit 0D
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: BETWEEN 24-JAN-2022:00:00:00 AND 30-JAN-2022:23:59:59

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**Orbit Structure**

[Diagram of Orbit 1 showing Unused Orbital Visibility = 3142 Home and Occultation]
Proposal 16535 - Visit 0E - Cycle 29 COS/NUV Detector Dark Monitor

Visit
Proposal 16535, Visit 0E
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: AFTER 0D BY 5.5 Orbits TO 8.5 Orbits

Exposures

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Orbit Structure

Server Version: 20200619
Proposal 16535 - Visit 0F - Cycle 29 COS/NUV Detector Dark Monitor

Visit
Proposal 16535, Visit 0F
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: BETWEEN 07-FEB-2022:00:00:00 AND 13-FEB-2022:23:59:59

Fri Jun 18 11:00:30 GMT 2021

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Orbit Structure
Unused Orbital Visibility = 3142

Home

Occultation

Server Version: 20200619
**Proposal 16535 - Visit 0G - Cycle 29 COS/NUV Detector Dark Monitor**

**Visit**
- Proposal 16535, Visit 0G
- Diagnostic Status: No Diagnostics
- Scientific Instruments: COS/NUV
- Special Requirements: AFTER 0F BY 5.5 Orbits TO 8.5 Orbits

**Exposures**

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**Orbit Structure**

Unused Orbital Visibility = 3142

- Exp. 1
- Home
- Occultation

Server Version: 20200619
## Proposal 16535 - Visit 0H - Cycle 29 COS/NUV Detector Dark Monitor

### Visit
- **Proposal 16535, Visit 0H**
- **Diagnostic Status:** No Diagnostics
- **Scientific Instruments:** COS/NUV
- **Special Requirements:** BETWEEN 21-FEB-2022:00:00:00 AND 27-FEB-2022:23:59:59

### Exposures

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### Orbit Structure

![Orbit Structure Diagram](image-url)

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**Server Version:** 20200619

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Fri Jun 18 11:00:30 GMT 2021
## Proposal 16535 - Visit 0I - Cycle 29 COS/NUV Detector Dark Monitor

**Visit**
- Proposal 16535, Visit 0I
- Diagnostic Status: No Diagnostics
- Scientific Instruments: COS/NUV
- Special Requirements: AFTER 0H BY 5.5 Orbits TO 8.5 Orbits

**Exposures**

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**Orbit Structure**

- Orbit 1
- Unused Orbital Visibility = 3142
- Exp. 1: Home, Occultation

Server Version: 20200619
Proposal 16535 - Visit 0J - Cycle 29 COS/NUV Detector Dark Monitor

Visit
Proposal 16535, Visit 0J
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: BETWEEN 07-MAR-2022:00:00:00 AND 13-MAR-2022:23:59:59

Fri Jun 18 11:00:31 GMT 2021

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Orbit Structure

Orbit 1

Unused Orbital Visibility = 3142  Home  Occultation

Server Version: 20200619
Proposal 16535 - Visit 0K - Cycle 29 COS/NUV Detector Dark Monitor

Visit
Proposal 16535, Visit 0K
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: AFTER 0J BY 5.5 Orbits TO 8.5 Orbits

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Orbit Structure

Orbit 1
Unused Orbital Visibility = 3142

Exp. 1
Home
Occultation

Server Version: 20200619
## Proposal 16535 - Visit 0L - Cycle 29 COS/NUV Detector Dark Monitor

**Visit**
- Proposal 16535, Visit 0L
- Diagnostic Status: No Diagnostics
- Scientific Instruments: COS/NUV
- Special Requirements: BETWEEN 21-MAR-2022:00:00:00 AND 27-MAR-2022:23:59:59

### Exposures

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### Orbit Structure

Unused Orbital Visibility = 3142

[Image of Orbit Structure]

Server Version: 20200619
**Proposal 16535 - Visit 0M - Cycle 29 COS/NUV Detector Dark Monitor**

**Visit**

- **Diagnostic Status:** No Diagnostics
- **Scientific Instruments:** COS/NUV
- **Special Requirements:** AFTER 0L BY 5.5 Orbits TO 8.5 Orbits

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**Orbit Structure**

unused Orbital Visibility = 3142

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**Server Version:** 20200619
Proposal 16535 - Visit 0N - Cycle 29 COS/NUV Detector Dark Monitor

Visit
Proposal 16535, Visit 0N
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: BETWEEN 04-APR-2022:00:00:00 AND 10-APR-2022:23:59:59

Fri Jun 18 11:00:31 GMT 2021

Exposures

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Orbit Structure

Orbit 1
Unused Orbital Visibility = 3142
Exp. 1

Home
Occultation

Server Version: 20200619
## Visit 0O - Cycle 29 COS/NUV Detector Dark Monitor

### Proposal 16535, Visit 0O

**Diagnostic Status:** No Diagnostics  
**Scientific Instruments:** COS/NUV  
**Special Requirements:** AFTER 0N BY 5.5 Orbits TO 8.5 Orbits

### Exposures

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### Orbit Structure

Unused Orbital Visibility = 3142

**Exp. 1**

- Home
- Occultation

**Server Version:** 20200619
Proposal 16535 - Visit 0P - Cycle 29 COS/NUV Detector Dark Monitor

Visit Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: BETWEEN 18-APR-2022:00:00:00 AND 24-APR-2022:23:59:59

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Server Version: 20200619

Orbit Structure

Unused Orbital Visibility = 3142

Exp. 1 Home Occultation
### Visit

**Proposal 16535, Visit 0Q**
- **Diagnostic Status:** No Diagnostics
- **Scientific Instruments:** COS/NUV
- **Special Requirements:** AFTER 0P BY 5.5 Orbits TO 8.5 Orbits

### Exposures

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### Orbit Structure

- **Orbit 1**
  - Unused Orbital Visibility = 3142
  - Exp. 1
  - Home
  - Occultation

*Server Version: 20200619*
## Proposal 16535 - Visit 0R - Cycle 29 COS/NUV Detector Dark Monitor

**Visit**
- Proposal 16535, Visit 0R
- Diagnostic Status: No Diagnostics
- Scientific Instruments: COS/NUV
- Special Requirements: BETWEEN 02-MAY-2022:00:00:00 AND 08-MAY-2022:23:59:59

**Exposures**

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**Orbit Structure**

Orbit 1
Unused Orbital Visibility = 3142

Exposure:
- Home
- Occultation

Server Version: 20200619
Proposal 16535 - Visit 0S - Cycle 29 COS/NUV Detector Dark Monitor

Visit 
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: AFTER 0R BY 5.5 Orbits TO 8.5 Orbits

Exposures

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Orbit Structure

Unused Orbital Visibility = 3142

Server Version: 20200619
### Proposal 16535 - Visit 0T - Cycle 29 COS/NUV Detector Dark Monitor

**Visit**
- Proposal 16535, Visit 0T
- Diagnostic Status: No Diagnostics
- Scientific Instruments: COS/NUV
- Special Requirements: BETWEEN 16-MAY-2022:00:00:00 AND 22-MAY-2022:23:59:59

**Exposures**

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**Orbit Structure**

Unused Orbital Visibility = 3142

Server Version: 20200619
Proposal 16535 - Visit 0U - Cycle 29 COS/NUV Detector Dark Monitor

Visit Details:
- Proposal 16535, Visit 0U
- Diagnostic Status: No Diagnostics
- Scientific Instruments: COS/NUV
- Special Requirements: AFTER 0T BY 5.5 Orbits TO 8.5 Orbits

Exposures:

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Orbit Structure:
- Unused Orbital Visibility = 3142
- Home
- Occultation

Server Version: 20200619
Proposal 16535 - Visit 0V - Cycle 29 COS/NUV Detector Dark Monitor

**Visit**
- Proposal 16535, Visit 0V
- Diagnostic Status: No Diagnostics
- Scientific Instruments: COS/NUV
- Special Requirements: BETWEEN 30-MAY-2022:00:00:00 AND 05-JUN-2022:23:59:59

**Exposures**

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**Orbit Structure**

Unused Orbital Visibility = 3142

Exp. 1

Home

Occultation

Server Version: 20200619
## Proposal 16535 - Visit 0W - Cycle 29 COS/NUV Detector Dark Monitor

Visit Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: AFTER 0V BY 5.5 Orbits TO 8.5 Orbits

### Exposures

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### Orbit Structure

Unused Orbital Visibility = 3142

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Server Version: 20200619

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Fri Jun 18 11:00:31 GMT 2021
**Proposal 16535 - Visit 0X - Cycle 29 COS/NUV Detector Dark Monitor**

**Visit**
- Proposal 16535, Visit 0X
- Diagnostic Status: No Diagnostics
- Scientific Instruments: COS/NUV
- Special Requirements: BETWEEN 13-JUN-2022:00:00:00 AND 19-JUN-2022:23:59:59

**Exposures**

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**Orbit Structure**

- Unused Orbital Visibility = 3142
- Exp. 1
- Home
- Occultation

Server Version: 20200619
### Proposal 16535 - Visit 0Y - Cycle 29 COS/NUV Detector Dark Monitor

#### Visit Details
- **Proposal**: 16535, Visit 0Y
- **Diagnostic Status**: No Diagnostics
- **Scientific Instruments**: COS/NUV
- **Special Requirements**: AFTER 0X BY 5.5 Orbits TO 8.5 Orbits

#### Exposures

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#### Orbit Structure

*Unused Orbital Visibility = 3142*

- **Exp. 1**: Home
- **Occultation**: Server Version: 20200619

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Fri Jun 18 11:00:31 GMT 2021
Proposal 16535 - Visit 0Z - Cycle 29 COS/NUV Detector Dark Monitor

Visit 0Z

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/NUV

Special Requirements: BETWEEN 27-JUN-2022:00:00:00 AND 03-JUL-2022:23:59:59

## Exposures

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**Orbit Structure**

Unused Orbital Visibility = 3142

Exp. 1

Home → Occultation
Proposal 16535 - Visit 10 - Cycle 29 COS/NUV Detector Dark Monitor

Visit Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: AFTER 0Z BY 5.5 Orbits TO 8.5 Orbits

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Orbit Structure

Unused Orbital Visibility = 3142

Server Version: 20200619

Fri Jun 18 11:00:31 GMT 2021
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## Orbit Structure

**Orbit 1**

Unused Orbital Visibility = 3142

Exp. 1

Home

Occultation

Server Version: 20200619

Fri Jun 18 11:00:31 GMT 2021
Proposal 16535 - Visit 12 - Cycle 29 COS/NUV Detector Dark Monitor

Visit Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: AFTER 11 BY 5.5 Orbits TO 8.5 Orbits

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Orbit Structure

Server Version: 20200619
Proposal 16535 - Visit 13 - Cycle 29 COS/NUV Detector Dark Monitor

Visit
- Proposal 16535, Visit 13
- Diagnostic Status: No Diagnostics
- Scientific Instruments: COS/NUV
- Special Requirements: BETWEEN 25-JUL-2022:00:00:00 AND 31-JUL-2022:23:59:59

Exposures

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Orbit Structure

- Unused Orbital Visibility = 3142
- Home
- Occultation

Server Version: 20200619
### Proposal 16535 - Visit 14 - Cycle 29 COS/NUV Detector Dark Monitor

**Visit**
- Proposal 16535, Visit 14
- Diagnostic Status: No Diagnostics
- Scientific Instruments: COS/NUV
- Special Requirements: AFTER 13 BY 5.5 Orbits TO 8.5 Orbits

#### Exposures

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#### Orbit Structure

- Unused Orbital Visibility = 3142
- Home
- Occultation

Server Version: 20200619
### Exposures

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### Orbit Structure

![Orbit Diagram](image-url)
Proposal 16535 - Visit 16 - Cycle 29 COS/NUV Detector Dark Monitor

Visit
Proposal 16535, Visit 16
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: AFTER 15 BY 5.5 Orbits TO 8.5 Orbits

Exposures

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Orbit Structure

Server Version: 20200619
Proposal 16535 - Visit 17 - Cycle 29 COS/NUV Detector Dark Monitor

**Visit**
- Proposal 16535, Visit 17
- Diagnostic Status: No Diagnostics
- Scientific Instruments: COS/NUV
- Special Requirements: BETWEEN 22-AUG-2022:00:00:00 AND 28-AUG-2022:23:59:59

**Exposures**

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Proposal 16535 - Visit 18 - Cycle 29 COS/NUV Detector Dark Monitor

Visit Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: AFTER 17 BY 5.5 Orbits TO 8.5 Orbits

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Orbit 1
Unused Orbital Visibility = 3142 Home
Occultation

Server Version: 20200619
**Proposal 16535 - Visit 19 - Cycle 29 COS/NUV Detector Dark Monitor**

Visit Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: BETWEEN 05-SEP-2022:00:00:00 AND 11-SEP-2022:23:59:59

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**Orbit Structure**

Unused Orbital Visibility = 3142  
Home  
Occultation  

Server Version: 20200619

Fri Jun 18 11:00:31 GMT 2021
Proposal 16535 - Visit 1A - Cycle 29 COS/NUV Detector Dark Monitor

Visit 1A

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/NUV

Special Requirements: AFTER 19 BY 5.5 Orbits TO 8.5 Orbits

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Orbit Structure

Unused Orbital Visibility = 3142

Exp. 1
Home
Occultation

Server Version: 20200619
Visit 1B - Cycle 29 COS/NUV Detector Dark Monitor

**Proposition 16535**

**Visit 1B**

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/NUV

Special Requirements: BETWEEN 19-SEP-2022:00:00:00 AND 25-SEP-2022:23:59:59

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Proposal 16535 - Visit 1C - Cycle 29 COS/NUV Detector Dark Monitor

Visit
Proposal 16535, Visit 1C
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: AFTER 1B BY 5.5 Orbits TO 8.5 Orbits

Exposures

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Orbit Structure

Server Version: 20200619
Proposal 16535, Visit 1D - Cycle 29 COS/NUV Detector Dark Monitor

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**Visit**

Visit 1D
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: BETWEEN 03-OCT-2022:00:00:00 AND 09-OCT-2022:23:59:59

**Exposures**

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**Orbit Structure**

Unused Orbital Visibility = 3142
Profile: Home
Profile: Occultation

Server Version: 20200619
### Exposures

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#### Orbit Structure

Orbit 1

Unused Orbital Visibility = 3142

- Exp. 1
- Home
- Occultation
Proposal 16535 - Visit 1F - Cycle 29 COS/NUV Detector Dark Monitor

**Visit**
- Proposal 16535, Visit 1F
- Diagnostic Status: No Diagnostics
- Scientific Instruments: COS/NUV
- Special Requirements: BETWEEN 17-OCT-2022:00:00:00 AND 23-OCT-2022:23:59:59

## Exposures

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### Orbit Structure

**Orbit 1**
- Exp. 1
- Unused Orbital Visibility = 3142
- Home
- Occultation

Server Version: 20200619
Visit 1G - Cycle 29 COS/NUV Detector Dark Monitor

Proposal 16535, Visit 1G
Diagnostic Status: No Diagnostics
Scientific Instruments: COS/NUV
Special Requirements: AFTER 1F BY 5.5 Orbits TO 8.5 Orbits

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Orbit Structure

Unused Orbital Visibility = 3142

Server Version: 20200619