



3662 - Imaging shepherding and carving planets in debris disks

Cycle: 2, Proposal Category: GO

INVESTIGATORS

| <i>Name</i> | <i>Institution</i> |
|--|---|
| Dr. Anne-Marie Lagrange (PI) (ESA Member) | Observatoire de Paris - Section de Meudon |
| Dr. Clement Perrot (CoI) (ESA Member) (CoPI) | Observatoire de Paris - Section de Meudon |
| Dr. Julien Milli (CoI) (ESA Member) | Institut de Planetologie et d'Astrophysique de Grenoble |
| Dr. Quentin Kral (CoI) (ESA Member) | Observatoire de Paris |
| Dr. Philippe Thebault (CoI) (ESA Member) | Observatoire de Paris - Section de Meudon |
| Dr. Herve Beust (CoI) (ESA Member) | Universite de Grenoble I |
| Dr. Anthony Boccaletti (CoI) (ESA Member) | Observatoire de Paris - Section de Meudon |
| Dr. Pascal Rubini (CoI) (ESA Member) | Pixyl S.A. |
| Mr. Antoine Chomez (CoI) (ESA Member) | Observatoire de Paris - Section de Meudon |
| Mrs. Mathilde Malin (CoI) (US Admin CoI) | The Johns Hopkins University |

OBSERVATIONS

| <i>Folder</i> | <i>Observation</i> | <i>Label</i> | <i>Observing Template</i> | <i>Science Target</i> |
|---------------|--------------------|--------------------------------------|----------------------------|---------------------------|
| TWA7 | | | | |
| | 1 | TWA7 F1140C roll 1 | MIRI Coronagraphic Imaging | (1) TWA7 |
| | 2 | TWA7 F1140C roll 2 | MIRI Coronagraphic Imaging | (1) TWA7 |
| | 3 | TWA7 F1140C Backgr ound | MIRI Coronagraphic Imaging | (2) TWA7-BACKGROUND |
| | 4 | Ref CD-23-9765 F1140 C | MIRI Coronagraphic Imaging | (3) CD-23-9765 |
| | 5 | Ref CD-23-9765 F1140 C background | MIRI Coronagraphic Imaging | (4) CD-23-9765-BACKGROUND |
| HD181327 | | | | |

| <i>Folder</i> | <i>Observation</i> | <i>Label</i> | <i>Observing Template</i> | <i>Science Target</i> |
|---------------|--------------------|-------------------------------------|----------------------------|---------------------------|
| | 6 | HD 181327 F1140C rol l 1 | MIRI Coronagraphic Imaging | (5) HD-181327 |
| | 7 | HD 181327 F1140C rol l 2 | MIRI Coronagraphic Imaging | (5) HD-181327 |
| | 8 | HD 181327 F1140C ba ckground | MIRI Coronagraphic Imaging | (6) HD-181327-BACKGROUND |
| | 9 | Ref HD 183577 F1140 C | MIRI Coronagraphic Imaging | (9) HD-203010 |
| | 10 | Ref HD 183577 F1140 C background | MIRI Coronagraphic Imaging | (10) HD-203010-background |

ABSTRACT

Since the discovery of the first debris disk four decades ago, dozens of such disks have been resolved at optical and near IR, or at mm wavelengths with ALMA. These disks often show structures (sharp edges, rings, gaps, warps) that are often attributed to planets. Young debris disks offer then exquisite opportunities for studies of planetary systems formation and early evolution. Yet, shepherding or gap carving planets are still to be detected to definitely assess the origin of the observed features.

Available high contrast imaging data suggest that, if they exist, the planets responsible for these structures have (very) low masses, less than typ 1-5 MJup, probably down to 0.1 MJup. Only JWST/MIRI can detect such low mass planets, in well selected disks. Once detected, these planets will offer unique opportunities to study disk-planets interactions, early dynamical evolution of planetary systems, and to reveal the properties of pristine, non irradiated, sub-Jupiters.

Applying specific selection criteria to maximize the chances to find these shepherding/carving planets in regions where our solar system giants are located, we identified two pole-on, young, close-by, structured disks. TWA7 shows three ring-like structures peaking between 25 and 100 au, and HD181327 shows one ring-like structure at 80 au. We show that a 0.15 MJup planet can carve the gap between the first two rings. JWST/MIRI observations should allow detecting this planet and will allow detecting planet(s) with masses greater than 0.15-0.3 MJup carving the inner cavity and/or shaping its inner edge. It will allow detecting similar planets with masses greater than 0.3 MJup in the case of HD181327.

OBSERVING DESCRIPTION

Many debris disks exhibit structures (warps, rings, gaps) often attributed to planets.

In this proposal, we aim at imaging, for the first time, shepherding planets, or chains of multiple, light planets responsible for disks inner cavities and

gaps, as well as sharp edges, within two carefully selected young targets, TWA 7 and HD 181327.

To achieve this goal, we will use the JWST/MIRI Four-Quadrant Phase Mask Coronagraph, with F1140C.

JWST/MIRI Four-Quadrant Phase Mask Coronagraph is the only instrument allowing to image sub-Jupiter mass planets, with masses down to less than 0.2 MJup. Such detection limits are indeed necessary to image the cavities and gap forming planets.

Proposal 3662 - Targets - Imaging shepherding and carving planets in debris disks

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|-----------------------|--|--|---------------|
| (1) | TWA7 | RA: 10 42 29.9544 (160.6248100d) Dec: -33 40 16.53 (-33.67126d) Equinox: J2000 | Proper Motion RA: -0.00951264807897104 sec of time/yr Proper Motion Dec: -0.019647999988592346 arcsec/yr Epoch of Position: 2015.5 | |
| <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Star</i> <i>Description=[Disk stars, Exoplanet Systems, Exoplanets, M stars]</i></p> | | | | |
| (2) | TWA7-BACKGROUND | RA: 10 42 39.0000 (160.6625000d) Dec: -33 43 0.00 (-33.71667d) Equinox: J2000 | Epoch of Position: 2015.5 | |
| <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Calibration</i> <i>Description=[Telescope/sky background]</i></p> | | | | |
| (3) | CD-23-9765 | RA: 11 09 30.4388 (167.3768283d) Dec: -24 36 2.04 (-24.60057d) Equinox: J2000 | Proper Motion RA: -0.05845798154551711 sec of time/yr Proper Motion Dec: -0.4467029999659644 arcsec/yr Epoch of Position: 2015.5 | |
| <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Reference star for TWA 7</i> <i>Category=Calibration</i> <i>Description=[Coronagraphic]</i></p> | | | | |
| (4) | CD-23-9765-BACKGROUND | RA: 11 09 43.0000 (167.4291667d) Dec: -24 35 50.00 (-24.59722d) Equinox: J2000 | Epoch of Position: 2015.5 | |
| <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Calibration</i> <i>Description=[Coronagraphic]</i></p> | | | | |
| (5) | HD-181327 | RA: 19 22 58.9872 (290.7457800d) Dec: -54 32 18.25 (-54.53840d) Equinox: J2000 | Proper Motion RA: 0.0028041826814863948 sec of time/yr Proper Motion Dec: -0.08218600000873266 arcsec/yr Epoch of Position: 2015.5 | |
| <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Star</i> <i>Description=[F stars]</i></p> | | | | |
| (6) | HD-181327-BACKGROUND | RA: 19 22 45.0000 (290.6875000d) Dec: -54 32 55.00 (-54.54861d) Equinox: J2000 | Epoch of Position: 2015.5 | |
| <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Calibration</i> <i>Description=[Telescope/sky background]</i></p> | | | | |
| (9) | HD-203010 | RA: 21 21 16.6006 (320.3191692d) Dec: -49 56 17.69 (-49.93825d) Equinox: J2000 | Proper Motion RA: -2.345 mas/yr Proper Motion Dec: -161.67000001132692 mas/yr Epoch of Position: 2000 | |
| <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Star</i> <i>Description=[K stars]</i></p> | | | | |

Fixed Targets

Proposal 3662 - Targets - Imaging shepherding and carving planets in debris disks

| | | | |
|------|----------------------|---|---|
| (10) | HD-203010-background | RA: 21 21 30.0000 (320.3750000d) Dec: -49 55 0.00 (-49.91667d) Equinox: J2000 | Proper Motion RA: -2.345 mas/yr Proper Motion Dec: -161.67000001132692 mas/yr Epoch of Position: 2000 |
|------|----------------------|---|---|

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=Calibration
Description=[Telescope/sky background]

Proposal 3662 - Observation 1 - Imaging shepherding and carving planets in debris disks

Wed Jun 12 16:00:23 GMT 2024

| | | | | | | | | | | | | | |
|--|---|--------------------------|--|-----------------|------------------------|---|-------------------------|---------------------------|----------------------------|-------------------------|---------------------------|----------------------------|-------------------------|
| Observation | <p>Proposal 3662, Observation 1: TWA7 F1140C roll 1</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observations:[TWA7 F1140C roll 2 (Obs 2), TWA7 F1140C Background (Obs 3)]</p> | | | | | | | | | | | | |
| | <p>(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(TWA7 F1140C roll 1 (Obs 1)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p> | | | | | | | | | | | | |
| Diagnosics | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Fixed Targets | # | Name | Target Coordinates | | | Targ. Coord. Corrections | | | Miscellaneous | | | | |
| | (1) | TWA7 | RA: 10 42 29.9544 (160.6248100d) Dec: -33 40 16.53 (-33.67126d) Equinox: J2000 | | | Proper Motion RA: -0.00951264807897104 sec of time/yr Proper Motion Dec: -0.01964799988592346 arcsec/yr Epoch of Position: 2015.5 | | | | | | | |
| <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[Disk stars, Exoplanet Systems, Exoplanets, M stars]</i></p> | | | | | | | | | | | | | |
| Acquisition | # | Target | Filter | Quadrant | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | | | |
| | 1 | SAME | FND | 1 | FAST | 98 | 1 | 1 | 23.489 | 141720.10 | | | |
| Template | Repeat observation | | | | | | | | | | | | |
| | NO | | | | | | | | | | | | |
| Dithers | # | Dither Type | | | | | | | | | | | |
| | 1 | NONE | | | | | | | | | | | |
| Spectral Elements | # | Coron Mask/Filter | Subarray | Mask | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Total Dithers | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID |
| | 1 | 4QPM/F1140C | MASK1140 | 4QPM | F1140C | FASTR1 | 500 | 60 | 1 | 1 | 60 | 7204.541 | 141720.13 |
| PSF References | Ref CD-23-9765 F1140C (Obs 4) (PSF Reference; Filters [F1140C]) | | | | | | | | | | | | |
| | Additional Justification: false | | | | | | | | | | | | |

Proposal 3662 - Observation 1 - Imaging shepherding and carving planets in debris disks

Special Requirements

No Parallel Attachments

Sequence Observations 1, 2, 3, 4, 5, Non-interruptible

Aperture PA Offset 2 from 1 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3662 - Observation 2 - Imaging shepherding and carving planets in debris disks

Wed Jun 12 16:00:23 GMT 2024

| Observation | Proposal 3662, Observation 2: TWA7 F1140C roll 2 Diagnostic Status: Warning Observing Template: MIRI Coronagraphic Imaging Background Observations:[TWA7 F1140C roll 1 (Obs 1), TWA7 F1140C Background (Obs 3)] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|---|--------------------------|---------------|------------------|--------------------|---------------------|------------------|---------------|--------------------|---------------------|------------------|-------------------|--------------------|--------------------------|---------------|------------------|--------------------|--|---|---------------|--------------------|---------------------|------------------|------|-------------|----------|------|--------|-----------|-----|----|---|---|----|----------|-----------|
| | (Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (TWA7 F1140C roll 2 (Obs 2)) Informational (Form): The Visit Planner and Spike may produce different schedulability results. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fixed Targets | <table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>TWA7</td> <td>RA: 10 42 29.9544 (160.6248100d) Dec: -33 40 16.53 (-33.67126d) Equinox: J2000</td> <td>Proper Motion RA: -0.00951264807897104 sec of time/yr Proper Motion Dec: -0.01964799988592346 arcsec/yr Epoch of Position: 2015.5</td> <td></td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=Star Description=[Disk stars, Exoplanet Systems, Exoplanets, M stars]</p> | | | | | | | | | | | | # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous | (1) | TWA7 | RA: 10 42 29.9544 (160.6248100d) Dec: -33 40 16.53 (-33.67126d) Equinox: J2000 | Proper Motion RA: -0.00951264807897104 sec of time/yr Proper Motion Dec: -0.01964799988592346 arcsec/yr Epoch of Position: 2015.5 | | | | | | | | | | | | | | | | | |
| | # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (1) | TWA7 | RA: 10 42 29.9544 (160.6248100d) Dec: -33 40 16.53 (-33.67126d) Equinox: J2000 | Proper Motion RA: -0.00951264807897104 sec of time/yr Proper Motion Dec: -0.01964799988592346 arcsec/yr Epoch of Position: 2015.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>#</th> <th>Target</th> <th>Filter</th> <th>Quadrant</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Total Integrations</th> <th>Total Exposure Time</th> <th>ETC Wkbk.Calc ID</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>SAME</td> <td>FND</td> <td>1</td> <td>FAST</td> <td>98</td> <td>1</td> <td>1</td> <td>23.489</td> <td>141720.10</td> </tr> </tbody> </table> | | | | | | | | | | | | # | Target | Filter | Quadrant | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | 1 | SAME | FND | 1 | FAST | 98 | 1 | 1 | 23.489 | 141720.10 | | | | | | | |
| # | Target | Filter | Quadrant | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | SAME | FND | 1 | FAST | 98 | 1 | 1 | 23.489 | 141720.10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Template | Repeat observation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dithers | # | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 Dither Type NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spectral Elements | <table border="1"> <thead> <tr> <th>#</th> <th>Coron Mask/Filter</th> <th>Subarray</th> <th>Mask</th> <th>Filter</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Exposures/Dith</th> <th>Total Dithers</th> <th>Total Integrations</th> <th>Total Exposure Time</th> <th>ETC Wkbk.Calc ID</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>4QPM/F1140C</td> <td>MASK1140</td> <td>4QPM</td> <td>F1140C</td> <td>FASTR1</td> <td>500</td> <td>60</td> <td>1</td> <td>1</td> <td>60</td> <td>7204.541</td> <td>141720.13</td> </tr> </tbody> </table> | | | | | | | | | | | | # | Coron Mask/Filter | Subarray | Mask | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Total Dithers | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | 1 | 4QPM/F1140C | MASK1140 | 4QPM | F1140C | FASTR1 | 500 | 60 | 1 | 1 | 60 | 7204.541 | 141720.13 |
| | # | Coron Mask/Filter | Subarray | Mask | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Total Dithers | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 4QPM/F1140C | MASK1140 | 4QPM | F1140C | FASTR1 | 500 | 60 | 1 | 1 | 60 | 7204.541 | 141720.13 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PSF References | Ref CD-23-9765 F1140C (Obs 4) (PSF Reference; Filters [F1140C]) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Additional Justification: false | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Proposal 3662 - Observation 2 - Imaging shepherding and carving planets in debris disks

Special Requirements

No Parallel Attachments

Sequence Observations 1, 2, 3, 4, 5, Non-interruptible

Aperture PA Offset 2 from 1 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3662 - Observation 3 - Imaging shepherding and carving planets in debris disks

Wed Jun 12 16:00:23 GMT 2024

| | | | | | | | | | | | | | |
|--------------------------|---|--------------------|---|------|--------|-----------------|---------------------------|---------------------|---------------|---------------|--------------------|---------------------|------------------|
| Observation | <p>Proposal 3662, Observation 3: TWA7 F1140C Background</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observation For: [TWA7 F1140C roll 1 (Obs 1), TWA7 F1140C roll 2 (Obs 2)]</p> | | | | | | | | | | | | |
| Diagnostics | (Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. | | | | | | | | | | | | |
| Fixed Targets | # | Name | Target Coordinates | | | | Targ. Coord. Corrections | | | Miscellaneous | | | |
| | (2) | TWA7-BACKGROUND | RA: 10 42 39.0000 (160.6625000d) Dec: -33 43 0.00 (-33.71667d) Equinox: J2000 | | | | Epoch of Position: 2015.5 | | | | | | |
| | <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Telescope/sky background]</i></p> | | | | | | | | | | | | |
| Acquisition | # | | | | | | | | | | | Target | |
| | 1 | | | | | | | | | | | NONE | |
| Template | AcqFilter | Repeat observation | | | | | | Background Quadrant | | | | | |
| | FND | YES | | | | | | 1 | | | | | |
| Dithers | # | | | | | | | | | | | Dither Type | |
| | 1 | | | | | | | | | | | BACKGROUND | |
| Spectral Elements | # | Coron Mask/Filter | Subarray | Mask | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dit | Total Dithers | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID |
| | 1 | 4QPM/F1140C | MASK1140 | 4QPM | F1140C | FASTR1 | 500 | 60 | 1 | 2 | 120 | 14409.082 | 141720 |
| PSF References | Additional Justification: false | | | | | | | | | | | | |

Proposal 3662 - Observation 3 - Imaging shepherding and carving planets in debris disks

Special Requirements

No Parallel Attachments

Sequence Observations 1, 2, 3, 4, 5, Non-interruptible

Proposal 3662 - Observation 4 - Imaging shepherding and carving planets in debris disks

| | |
|-----------------------------|---|
| PSF References | PSF Reference: true |
| Special Requirements | No Parallel Attachments Sequence Observations 1, 2, 3, 4, 5, Non-interruptible |

Proposal 3662 - Observation 5 - Imaging shepherding and carving planets in debris disks

Wed Jun 12 16:00:23 GMT 2024

| | | | | | | | | | | | | | |
|---|---|---------------------------|--|-------------|---------------|------------------------|---------------------------------|----------------------------|------------------------|----------------------|---------------------------|----------------------------|-------------------------|
| Observation | Proposal 3662, Observation 5: Ref CD-23-9765 F1140C background Diagnostic Status: Warning Observing Template: MIRI Coronagraphic Imaging Background Observation For: [Ref CD-23-9765 F1140C (Obs 4)] | | | | | | | | | | | | |
| | (Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. | | | | | | | | | | | | |
| Diagnosics | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Fixed Targets | # | Name | Target Coordinates | | | | Targ. Coord. Corrections | | | Miscellaneous | | | |
| | (4) | CD-23-9765-BACKGROUND | RA: 11 09 43.0000 (167.4291667d) Dec: -24 35 50.00 (-24.59722d) Equinox: J2000 | | | | Epoch of Position: 2015.5 | | | | | | |
| <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Calibration</i> <i>Description=[Coronagraphic]</i> | | | | | | | | | | | | | |
| Acquisition | # | | | | | | | | | | | Target | |
| | 1 | | | | | | | | | | | NONE | |
| Template | AcqFilter | Repeat observation | | | | | | Background Quadrant | | | | | |
| | FND | YES | | | | | | 1 | | | | | |
| Dithers | # | Dither Type | | | | | | | | | | | |
| | 1 | BACKGROUND | | | | | | | | | | | |
| Spectral Elements | # | Coron Mask/Filter | Subarray | Mask | Filter | Readout Pattern | Groups/Int | Integrations/E xp | Exposures/Dit h | Total Dithers | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID |
| | 1 | 4QPM/F1140C | MASK1140 | 4QPM | F1140C | FASTR1 | 300 | 6 | 1 | 2 | 12 | 865.245 | 141720 |
| PSF References | Additional Justification: false | | | | | | | | | | | | |

Proposal 3662 - Observation 5 - Imaging shepherding and carving planets in debris disks

Special Requirements

No Parallel Attachments

Sequence Observations 1, 2, 3, 4, 5, Non-interruptible

Proposal 3662 - Observation 6 - Imaging shepherding and carving planets in debris disks

Wed Jun 12 16:00:23 GMT 2024

| Observation | <p>Proposal 3662, Observation 6: HD 181327 F1140C roll 1</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observations:[HD 181327 F1140C roll 2 (Obs 7), HD 181327 F1140C background (Obs 8)]</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|--|--|--|-----------------|-----------------|------------------|--------------------|---------------------|------------------|--------------------|---------------------|------------------|---|-------------------|--------------------|--------------------------|-----------------|-----------------|------------------|--|--|------------------|--------------------|---------------------|------------------|---|-------------|----------|------|--------|--------|-----------|----|---|---|----|----------|----------|
| Diagnostics | <p>(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(HD 181327 F1140C roll 1 (Obs 6)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fixed Targets | <table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(5)</td> <td>HD-181327</td> <td>RA: 19 22 58.9872 (290.7457800d) Dec: -54 32 18.25 (-54.53840d) Equinox: J2000</td> <td>Proper Motion RA: 0.0028041826814863948 sec of time/yr Proper Motion Dec: -0.08218600000873266 arcsec/yr Epoch of Position: 2015.5</td> <td></td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p>Category=Star Description=[F stars]</p> | | | | | | | | | | | | # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous | (5) | HD-181327 | RA: 19 22 58.9872 (290.7457800d) Dec: -54 32 18.25 (-54.53840d) Equinox: J2000 | Proper Motion RA: 0.0028041826814863948 sec of time/yr Proper Motion Dec: -0.08218600000873266 arcsec/yr Epoch of Position: 2015.5 | | | | | | | | | | | | | | | | | |
| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (5) | HD-181327 | RA: 19 22 58.9872 (290.7457800d) Dec: -54 32 18.25 (-54.53840d) Equinox: J2000 | Proper Motion RA: 0.0028041826814863948 sec of time/yr Proper Motion Dec: -0.08218600000873266 arcsec/yr Epoch of Position: 2015.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acquisition | <table border="1"> <thead> <tr> <th>#</th> <th>Target</th> <th>Filter</th> <th>Quadrant</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Total Integrations</th> <th>Total Exposure Time</th> <th>ETC Wkbk.Calc ID</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>SAME</td> <td>FND</td> <td>1</td> <td>FAST</td> <td>98</td> <td>1</td> <td>1</td> <td>23.489</td> <td>142578.10</td> </tr> </tbody> </table> | | | | | | | | | | | | # | Target | Filter | Quadrant | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | 1 | SAME | FND | 1 | FAST | 98 | 1 | 1 | 23.489 | 142578.10 | | | | | | |
| # | Target | Filter | Quadrant | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | SAME | FND | 1 | FAST | 98 | 1 | 1 | 23.489 | 142578.10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Template | <p>Repeat observation</p> <p>NO</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dithers | <table border="1"> <thead> <tr> <th>#</th> <th>Dither Type</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NONE</td> </tr> </tbody> </table> | | | | | | | | | | | | # | Dither Type | 1 | NONE | | | | | | | | | | | | | | | | | | | | | | |
| # | Dither Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spectral Elements | <table border="1"> <thead> <tr> <th>#</th> <th>Coron Mask/Filter</th> <th>Subarray</th> <th>Mask</th> <th>Filter</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Exposures/Dith</th> <th>Total Dithers</th> <th>Total Integrations</th> <th>Total Exposure Time</th> <th>ETC Wkbk.Calc ID</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>4QPM/F1140C</td> <td>MASK1140</td> <td>4QPM</td> <td>F1140C</td> <td>FASTR1</td> <td>500</td> <td>60</td> <td>1</td> <td>1</td> <td>60</td> <td>7204.541</td> <td>142578.1</td> </tr> </tbody> </table> | | | | | | | | | | | | # | Coron Mask/Filter | Subarray | Mask | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Total Dithers | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | 1 | 4QPM/F1140C | MASK1140 | 4QPM | F1140C | FASTR1 | 500 | 60 | 1 | 1 | 60 | 7204.541 | 142578.1 |
| # | Coron Mask/Filter | Subarray | Mask | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Total Dithers | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 4QPM/F1140C | MASK1140 | 4QPM | F1140C | FASTR1 | 500 | 60 | 1 | 1 | 60 | 7204.541 | 142578.1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PSF References | <p>Ref HD 183577 F1140C (Obs 9) (PSF Reference; Filters [F1140C])</p> <p>Additional Justification: false</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Proposal 3662 - Observation 6 - Imaging shepherding and carving planets in debris disks

Special Requirements

No Parallel Attachments

Sequence Observations 6, 7, 8, 9, 10, Non-interruptible

Aperture PA Offset 7 from 6 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3662 - Observation 7 - Imaging shepherding and carving planets in debris disks

Wed Jun 12 16:00:23 GMT 2024

| Observation | <p>Proposal 3662, Observation 7: HD 181327 F1140C roll 2</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observations:[HD 181327 F1140C roll 1 (Obs 6), HD 181327 F1140C background (Obs 8)]</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|--|--|--|-----------------|-----------------|------------------|--------------------|---------------------|------------------|--------------------|---------------------|------------------|---|-------------------|--------------------|--------------------------|-----------------|-----------------|------------------|--|--|------------------|--------------------|---------------------|------------------|---|-------------|----------|------|--------|--------|-----------|----|---|---|----|----------|----------|
| Diagnostics | <p>(Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(HD 181327 F1140C roll 2 (Obs 7)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fixed Targets | <table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(5)</td> <td>HD-181327</td> <td>RA: 19 22 58.9872 (290.7457800d) Dec: -54 32 18.25 (-54.53840d) Equinox: J2000</td> <td>Proper Motion RA: 0.0028041826814863948 sec of time/yr Proper Motion Dec: -0.08218600000873266 arcsec/yr Epoch of Position: 2015.5</td> <td></td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p>Category=Star Description=[F stars]</p> | | | | | | | | | | | | # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous | (5) | HD-181327 | RA: 19 22 58.9872 (290.7457800d) Dec: -54 32 18.25 (-54.53840d) Equinox: J2000 | Proper Motion RA: 0.0028041826814863948 sec of time/yr Proper Motion Dec: -0.08218600000873266 arcsec/yr Epoch of Position: 2015.5 | | | | | | | | | | | | | | | | | |
| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (5) | HD-181327 | RA: 19 22 58.9872 (290.7457800d) Dec: -54 32 18.25 (-54.53840d) Equinox: J2000 | Proper Motion RA: 0.0028041826814863948 sec of time/yr Proper Motion Dec: -0.08218600000873266 arcsec/yr Epoch of Position: 2015.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acquisition | <table border="1"> <thead> <tr> <th>#</th> <th>Target</th> <th>Filter</th> <th>Quadrant</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Total Integrations</th> <th>Total Exposure Time</th> <th>ETC Wkbk.Calc ID</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>SAME</td> <td>FND</td> <td>1</td> <td>FAST</td> <td>98</td> <td>1</td> <td>1</td> <td>23.489</td> <td>142578.10</td> </tr> </tbody> </table> | | | | | | | | | | | | # | Target | Filter | Quadrant | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | 1 | SAME | FND | 1 | FAST | 98 | 1 | 1 | 23.489 | 142578.10 | | | | | | |
| # | Target | Filter | Quadrant | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | SAME | FND | 1 | FAST | 98 | 1 | 1 | 23.489 | 142578.10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Template | <p>Repeat observation</p> <p>NO</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dithers | <table border="1"> <thead> <tr> <th>#</th> <th>Dither Type</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NONE</td> </tr> </tbody> </table> | | | | | | | | | | | | # | Dither Type | 1 | NONE | | | | | | | | | | | | | | | | | | | | | | |
| # | Dither Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spectral Elements | <table border="1"> <thead> <tr> <th>#</th> <th>Coron Mask/Filter</th> <th>Subarray</th> <th>Mask</th> <th>Filter</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Exposures/Dith</th> <th>Total Dithers</th> <th>Total Integrations</th> <th>Total Exposure Time</th> <th>ETC Wkbk.Calc ID</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>4QPM/F1140C</td> <td>MASK1140</td> <td>4QPM</td> <td>F1140C</td> <td>FASTR1</td> <td>500</td> <td>60</td> <td>1</td> <td>1</td> <td>60</td> <td>7204.541</td> <td>142578.1</td> </tr> </tbody> </table> | | | | | | | | | | | | # | Coron Mask/Filter | Subarray | Mask | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Total Dithers | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | 1 | 4QPM/F1140C | MASK1140 | 4QPM | F1140C | FASTR1 | 500 | 60 | 1 | 1 | 60 | 7204.541 | 142578.1 |
| # | Coron Mask/Filter | Subarray | Mask | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Total Dithers | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 4QPM/F1140C | MASK1140 | 4QPM | F1140C | FASTR1 | 500 | 60 | 1 | 1 | 60 | 7204.541 | 142578.1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PSF References | <p>Ref HD 183577 F1140C (Obs 9) (PSF Reference; Filters [F1140C])</p> <p>Additional Justification: false</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Proposal 3662 - Observation 7 - Imaging shepherding and carving planets in debris disks

Special Requirements

No Parallel Attachments

Sequence Observations 6, 7, 8, 9, 10, Non-interruptible

Aperture PA Offset 7 from 6 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3662 - Observation 8 - Imaging shepherding and carving planets in debris disks

Wed Jun 12 16:00:23 GMT 2024

| Observation | <p>Proposal 3662, Observation 8: HD 181327 F1140C background</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observation For: [HD 181327 F1140C roll 1 (Obs 6), HD 181327 F1140C roll 2 (Obs 7)]</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|--|---------------------------|---------------|-----------------|------------|------------------|----------------|---------------|--------------------|---------------------|------------------|-----------|--------------------|---------------------|--------------------------|---------------|-----------------|----------------------|--|---------------------------|---------------|--------------------|---------------------|------------------|---|-------------|----------|------|--------|--------|-----|----|---|---|-----|-----------|--------|
| Diagnostics | (Visit 8:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fixed Targets | <table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(6)</td> <td>HD-181327-BACKGROUND</td> <td>RA: 19 22 45.0000 (290.6875000d) Dec: -54 32 55.00 (-54.54861d) Equinox: J2000</td> <td>Epoch of Position: 2015.5</td> <td></td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Telescope/sky background]</i></p> | | | | | | | | | | | | # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous | (6) | HD-181327-BACKGROUND | RA: 19 22 45.0000 (290.6875000d) Dec: -54 32 55.00 (-54.54861d) Equinox: J2000 | Epoch of Position: 2015.5 | | | | | | | | | | | | | | | | | |
| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (6) | HD-181327-BACKGROUND | RA: 19 22 45.0000 (290.6875000d) Dec: -54 32 55.00 (-54.54861d) Equinox: J2000 | Epoch of Position: 2015.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acquisition | <table border="1"> <thead> <tr> <th>#</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NONE</td> </tr> </tbody> </table> | | | | | | | | | | | | # | Target | 1 | NONE | | | | | | | | | | | | | | | | | | | | | | |
| # | Target | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Template | <table border="1"> <thead> <tr> <th>AcqFilter</th> <th>Repeat observation</th> <th>Background Quadrant</th> </tr> </thead> <tbody> <tr> <td>FND</td> <td>YES</td> <td>1</td> </tr> </tbody> </table> | | | | | | | | | | | | AcqFilter | Repeat observation | Background Quadrant | FND | YES | 1 | | | | | | | | | | | | | | | | | | | | |
| AcqFilter | Repeat observation | Background Quadrant | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FND | YES | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dithers | <table border="1"> <thead> <tr> <th>#</th> <th>Dither Type</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>BACKGROUND</td> </tr> </tbody> </table> | | | | | | | | | | | | # | Dither Type | 1 | BACKGROUND | | | | | | | | | | | | | | | | | | | | | | |
| # | Dither Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | BACKGROUND | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spectral Elements | <table border="1"> <thead> <tr> <th>#</th> <th>Coron Mask/Filter</th> <th>Subarray</th> <th>Mask</th> <th>Filter</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Exposures/Dith</th> <th>Total Dithers</th> <th>Total Integrations</th> <th>Total Exposure Time</th> <th>ETC Wkbk.Calc ID</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>4QPM/F1140C</td> <td>MASK1140</td> <td>4QPM</td> <td>F1140C</td> <td>FASTR1</td> <td>500</td> <td>60</td> <td>1</td> <td>2</td> <td>120</td> <td>14409.082</td> <td>142578</td> </tr> </tbody> </table> | | | | | | | | | | | | # | Coron Mask/Filter | Subarray | Mask | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Total Dithers | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | 1 | 4QPM/F1140C | MASK1140 | 4QPM | F1140C | FASTR1 | 500 | 60 | 1 | 2 | 120 | 14409.082 | 142578 |
| # | Coron Mask/Filter | Subarray | Mask | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Total Dithers | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 4QPM/F1140C | MASK1140 | 4QPM | F1140C | FASTR1 | 500 | 60 | 1 | 2 | 120 | 14409.082 | 142578 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PSF References | Additional Justification: false | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Proposal 3662 - Observation 8 - Imaging shepherding and carving planets in debris disks

Special Requirements

No Parallel Attachments

Sequence Observations 6, 7, 8, 9, 10, Non-interruptible

Proposal 3662 - Observation 9 - Imaging shepherding and carving planets in debris disks

Wed Jun 12 16:00:23 GMT 2024

| | | | | | | | | | | | | | |
|---|---|--|--------------------|----------|---|--------------------------|------------------|--------------------|---------------------|------------------|--------------------|---------------------|------------------|
| Observation | <p>Proposal 3662, Observation 9: Ref HD 183577 F1140C</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observations:[Ref HD 183577 F1140C background (Obs 10)]</p> | | | | | | | | | | | | |
| Diagnostics | (Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. | | | | | | | | | | | | |
| Fixed Targets | # | Name | Target Coordinates | | | Targ. Coord. Corrections | | | Miscellaneous | | | | |
| (9) | HD-203010 | RA: 21 21 16.6006 (320.3191692d) Dec: -49 56 17.69 (-49.93825d) Equinox: J2000 | | | Proper Motion RA: -2.345 mas/yr Proper Motion Dec: -161.67000001132692 mas/yr Epoch of Position: 2000 | | | | | | | | |
| <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[K stars]</i></p> | | | | | | | | | | | | | |
| Acquisition | # | Target | Filter | Quadrant | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | | | |
| 1 | SAME | FND | 1 | FAST | 22 | 1 | 1 | 5.273 | 142578.12 | | | | |
| Template | <p>Repeat observation</p> <p>NO</p> | | | | | | | | | | | | |
| Dithers | # | Dither Type | | | | | | | | | | | |
| 1 | 9-POINT-SMALL-GRID | | | | | | | | | | | | |
| Spectral Elements | # | Coron Mask/Filter | Subarray | Mask | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Total Dithers | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID |
| 1 | 4QPM/F1140C | MASK1140 | 4QPM | F1140C | FASTR1 | 500 | 3 | 1 | 9 | 27 | 3239.994 | 142578.11 | |
| PSF References | PSF Reference: true | | | | | | | | | | | | |

Proposal 3662 - Observation 9 - Imaging shepherding and carving planets in debris disks

Special Requirements

No Parallel Attachments

Sequence Observations 6, 7, 8, 9, 10, Non-interruptible

Proposal 3662 - Observation 10 - Imaging shepherding and carving planets in debris disks

Wed Jun 12 16:00:23 GMT 2024

| | | | | | | | | | | | | | |
|---|---|---|--------------------|--------|--------|---|--------------------------|---------------------|-----------------|---------------|--------------------|---------------------|------------------|
| Observation | <p>Proposal 3662, Observation 10: Ref HD 183577 F1140C background</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observation For: [Ref HD 183577 F1140C (Obs 9)]</p> | | | | | | | | | | | | |
| Diagnostics | (Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. | | | | | | | | | | | | |
| Fixed Targets | # | Name | Target Coordinates | | | | Targ. Coord. Corrections | | | Miscellaneous | | | |
| (10) | HD-203010-background | RA: 21 21 30.0000 (320.3750000d) Dec: -49 55 0.00 (-49.91667d) Equinox: J2000 | | | | Proper Motion RA: -2.345 mas/yr Proper Motion Dec: -161.67000001132692 mas/yr Epoch of Position: 2000 | | | | | | | |
| <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Telescope/sky background]</i></p> | | | | | | | | | | | | | |
| Acquisition | # | | | | | | | | | | | Target | |
| 1 | | | | | | | | | | | NONE | | |
| Template | AcqFilter | Repeat observation | | | | | | Background Quadrant | | | | | |
| FND | YES | | | | | | 1 | | | | | | |
| Dithers | # | | | | | | | | | | | Dither Type | |
| 1 | | | | | | | | | | | BACKGROUND | | |
| Spectral Elements | # | Coron Mask/Filter | Subarray | Mask | Filter | Readout Pattern | Groups/Int | Integrations/E xp | Exposures/Dit h | Total Dithers | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID |
| 1 | 4QPM/F1140C | MASK1140 | 4QPM | F1140C | FASTR1 | 500 | 3 | 1 | 2 | 6 | 719.999 | 142578 | |
| PSF References | Additional Justification: false | | | | | | | | | | | | |

Proposal 3662 - Observation 10 - Imaging shepherding and carving planets in debris disks

Special Requirements

No Parallel Attachments

Sequence Observations 6, 7, 8, 9, 10, Non-interruptible