



3979 - Are dark, red, small KBOs devoid of volatiles?

Cycle: 2, Proposal Category: GO

INVESTIGATORS

| <i>Name</i> | <i>Institution</i> |
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| Dr. Wesley C Fraser (CoI) (CSA Member) (CoPI) | Dominion Astrophysical Observatory |
| Dr. Will M. Grundy (CoI) | Lowell Observatory |
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OBSERVATIONS

| <i>Folder</i> | <i>Observation</i> | <i>Label</i> | <i>Observing Template</i> | <i>Science Target</i> |
|--------------------|--------------------|--------------|---------------------------|-----------------------|
| Observation Folder | | | | |
| | 2 | Arawn | NIRCam Imaging | (1) ARAWN |
| | 7 | 2011 HK103 | NIRCam Imaging | (2) 2011HK103 |
| | 23 | 2011 HJ103 | NIRCam Imaging | (9) 2011HJ103 |
| | 18 | 2012 HZ84 | NIRCam Imaging | (5) 2012HZ84 |
| | 9 | 2011 JY31 | NIRCam Imaging | (4) 2011JY31 |
| | 20 | 2012HE85 | NIRCam Imaging | (6) 2012HE85 |
| | 21 | 2011HZ102 | NIRCam Imaging | (7) 2011HZ102 |
| | 22 | 2011 JX31 | NIRCam Imaging | (3) 2011JX31 |

ABSTRACT

As the New Horizons (NH) spacecraft transects the Kuiper belt it has been obtaining unique solar phase curves, lightcurves, and other information on numerous Kuiper belt objects (KBOs) not possible to obtain with Earth-based facilities. In this proposal we seek to use JWST/NIRCAM to fill out the spectro-photometric information available for these objects investigating for the first time their dominant surface compositions from 0.5-5 μ m, a wavelength region not yet explored due to ground-based instrument faintness limits and telluric contamination. This project asks the question: Are dark, red, small KBOs devoid of volatiles? It samples objects from $d \sim 60$ -120km assuming an albedo of 0.1 and will be the only dataset available for many years to come with measured shapes and microphysical properties (acquired through high-phase angle NH observations) with which to correlate against compositional properties. The proposed observations include KBOs from all the dynamical classes and as a full sample they will provide key context and constraints for KBO formation models.

OBSERVING DESCRIPTION

This is an imaging program using NIRCAM simultaneously in 3 pairs of filters: (1) F115W (short) & F300M (long), (2) F200W (short) & F444W (long), and (3) F070W (short) & F274W (long) to obtain spectro-photometric colors of 8 Kuiper Belt objects aimed at distinguishing between organic, silicate and water-ice dominated surfaces. Integrations are calculated such that S/N is 30 for each object in the long bandpass.

Proposal 3979 - Targets - Are dark, red, small KBOs devoid of volatiles?

| # | Name | Level 1 | Level 2 | Level 3 |
|------------------------------|-----------|---|---------|---------|
| (1) | ARAWN | TYPE=ASTEROID,A=39.302351162101,E=0.114561 601512,I=3.800982035903,O=144.776150299684,W= 102.561179570536,M=41.250179415120,EQUINOX= J2000,EPOCH=15-JUL- 2024:00:00:00,EpochTimeScale=UTC | | |
| <i>Comments: Extended=NO</i> | | | | |
| (2) | 2011HK103 | TYPE=ASTEROID,A=53.238218434840,E=0.312756 467653,I=6.422841998594,O=121.105284322771,W= 229.606716009431,M=329.826746766426,EQUINOX= =J2000,EPOCH=15-JUL- 2024:00:00:00,EpochTimeScale=UTC | | |
| <i>Comments: Extended=NO</i> | | | | |
| (3) | 2011JX31 | TYPE=ASTEROID,A=44.844917050364,E=0.110593 265000,I=3.309251211906,O=139.107959947470,W= 18.519651333604,M=123.118415001262,EQUINOX= J2000,EPOCH=15-JUL- 2024:00:00:00,EpochTimeScale=UTC | | |
| <i>Comments: Extended=NO</i> | | | | |
| (4) | 2011JY31 | TYPE=ASTEROID,A=43.940016729415,E=0.058861 202121,I=2.607787645985,O=231.597828871697,W= 111.972727080901,M=315.319879909900,EQUINOX= =J2000,EPOCH=15-JUL- 2024:00:00:00,EpochTimeScale=UTC | | |
| <i>Comments: Extended=NO</i> | | | | |
| (5) | 2012HZ84 | TYPE=ASTEROID,A=45.922511349469,E=0.194547 668036,I=5.461494179094,O=257.238458661559,W= 88.598333504997,M=325.582100564367,EQUINOX= J2000,EPOCH=15-JUL- 2024:00:00:00,EpochTimeScale=UTC | | |
| <i>Comments: Extended=NO</i> | | | | |
| (6) | 2012HE85 | TYPE=ASTEROID,A=44.440637152136,E=0.095760 172008,I=3.028501515418,O=235.346793811888,W= 38.386902821281,M=18.030914910943,EQUINOX=J 2000,EPOCH=15-JUL- 2024:00:00:00,EpochTimeScale=UTC | | |
| <i>Comments: Extended=NO</i> | | | | |
| (7) | 2011HZ102 | TYPE=ASTEROID,A=43.124797539088,E=0.005563 695867,I=2.392841707343,O=154.702050467756,W= 34.653881207401,M=103.369821592105,EQUINOX= J2000,EPOCH=15-JUL- 2024:00:00:00,EpochTimeScale=UTC | | |
| <i>Comments: Extended=NO</i> | | | | |
| (9) | 2011HJ103 | TYPE=ASTEROID,A=46.512121790935,E=0.155146 274343,I=5.341529094039,O=126.354968994218,W= 191.162846785886,M=344.582520425868,EQUINOX= =J2000,EPOCH=15-JUL- 2024:00:00:00,EpochTimeScale=UTC | | |
| <i>Comments: Extended=NO</i> | | | | |

Solar System Targets

Proposal 3979 - Observation 2 - Are dark, red, small KBOs devoid of volatiles?

Thu Mar 28 17:00:13 GMT 2024

| | | | | | | | | | | |
|-----------------------------|--|---------------------|---|----------------------|------------------|------------------------------|--------------------|---------------|---------------------|------------------|
| Observation | <p>Proposal 3979, Observation 2: Arawn Diagnostic Status: Warning Observing Template: NIRCam Imaging</p> | | | | | | | | | |
| Diagnostics | <p>(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (Visit 2:1) Warning (Form): Visit schedulable, but most scheduling windows are when JWST is pointed in direction of greatest micrometeoroid impact risk. This is likely due to scheduling special requirements. (Arawn (Obs 2)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p> | | | | | | | | | |
| Solar System Targets | # | Name | Level 1 | Level 2 | Level 3 | | | | | |
| | (1) | ARAWN | TYPE=ASTEROID,A=39.302351162101,E=0.114561 601512,I=3.800982035903,O=144.776150299684,W= 102.561179570536,M=41.250179415120,EQUINOX= J2000,EPOCH=15-JUL- 2024:00:00:00,EpochTimeScale=UTC | | | <i>Comments: Extended=NO</i> | | | | |
| Template | Module | Subarray | | | Target Placement | | | | | |
| | B | FULL | | | Module Gap | | | | | |
| Dithers | # | Primary Dither Type | Primary Dithers | Subpixel Dither Type | Dither Size | Subpixel Positions | | | | |
| | 1 | NONE | | STANDARD | | 4 | | | | |
| Spectral Elements | # | Short Filter | Long Filter | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Dithers | Total Exposure Time | ETC Wkbk.Calc ID |
| | 1 | F115W | F444W | RAPID | 10 | 1 | 4 | 4 | 429.471 | |
| | 2 | F200W | F356W | RAPID | 5 | 1 | 4 | 4 | 214.735 | |
| | 3 | F070W | F277W | BRIGHT1 | 7 | 1 | 4 | 4 | 558.312 | |
| Special Requirements | <p>Between Dates 15-APR-2024:00:00:00 and 18-APR-2024:12:00:00 DEFAULT WINDOW: ANGULAR RATE ARAWN FROM JWST LESS THAN 0.075</p> | | | | | | | | | |

Proposal 3979 - Observation 7 - Are dark, red, small KBOs devoid of volatiles?

Thu Mar 28 17:00:13 GMT 2024

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|-------------------------------------|---|----------------------------|--|-----------------------------|-------------------------|---------------------------|---------------------------|----------------------|----------------------------|-------------------------|
| Observation | <p>Proposal 3979, Observation 7: 2011 HK103</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Imaging</p> | | | | | | | | | |
| | <p>(Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(Visit 7:1) Warning (Form): Visit schedulable, but most scheduling windows are when JWST is pointed in direction of greatest micrometeoroid impact risk. This is likely due to scheduling special requirements.</p> <p>(2011 HK103 (Obs 7)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p> | | | | | | | | | |
| Diagnostics | | | | | | | | | | |
| | | | | | | | | | | |
| Solar System Targets | # | Name | Level 1 | Level 2 | Level 3 | | | | | |
| | (2) | 2011HK103 | TYPE=ASTEROID,A=53.238218434840,E=0.312756 467653,I=6.422841998594,O=121.105284322771,W= 229.606716009431,M=329.826746766426,EQUINOX =J2000,EPOCH=15-JUL- 2024:00:00:00,EpochTimeScale=UTC | | | | | | | |
| <p><i>Comments: Extended=NO</i></p> | | | | | | | | | | |
| Template | Module | Subarray | | | Target Placement | | | | | |
| | B | FULL | | | Module Gap | | | | | |
| Dithers | # | Primary Dither Type | Primary Dithers | Subpixel Dither Type | Dither Size | Subpixel Positions | | | | |
| | 1 | NONE | | STANDARD | | 4 | | | | |
| Spectral Elements | # | Short Filter | Long Filter | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Dithers | Total Exposure Time | ETC Wkbk.Calc ID |
| | 1 | F115W | F444W | SHALLOW2 | 9 | 1 | 4 | 4 | 1803.777 | |
| | 2 | F200W | F356W | BRIGHT1 | 9 | 1 | 4 | 4 | 730.1 | |
| | 3 | F070W | F277W | SHALLOW2 | 7 | 1 | 4 | 4 | 1374.307 | |
| Special Requirements | <p>Between Dates 10-APR-2024:00:00:00 and 14-APR-2024:00:00:00</p> <p>Between Dates 19-APR-2024:00:00:00 and 22-APR-2024:00:00:00</p> <p>DEFAULT WINDOW: ANGULAR RATE 2011HK103 FROM JWST LESS THAN 0.075</p> | | | | | | | | | |
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Proposal 3979 - Observation 23 - Are dark, red, small KBOs devoid of volatiles?

Thu Mar 28 17:00:13 GMT 2024

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|-----------------------------|--|---------------------|--|----------------------|------------------|--------------------|--------------------|---------------|---------------------|------------------|
| Observation | <p>Proposal 3979, Observation 23: 2011 HJ103</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCIm Imaging</p> | | | | | | | | | |
| Diagnostics | <p>(Visit 23:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(Visit 23:1) Warning (Form): Visit schedulable, but most scheduling windows are when JWST is pointed in direction of greatest micrometeoroid impact risk. This is likely due to scheduling special requirements.</p> <p>(2011 HJ103 (Obs 23)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p> | | | | | | | | | |
| Solar System Targets | # | Name | Level 1 | Level 2 | Level 3 | | | | | |
| | (9) | 2011HJ103 | TYPE=ASTEROID,A=46.512121790935,E=0.155146 274343,I=5.341529094039,O=126.354968994218,W= 191.162846785886,M=344.582520425868,EQUINOX =J2000,EPOCH=15-JUL- 2024:00:00:00,EpochTimeScale=UTC | | | | | | | |
| | <i>Comments: Extended=NO</i> | | | | | | | | | |
| Template | Module | Subarray | | | Target Placement | | | | | |
| | B | FULL | | | Module Gap | | | | | |
| Dithers | # | Primary Dither Type | Primary Dithers | Subpixel Dither Type | Dither Size | Subpixel Positions | | | | |
| | 1 | NONE | | STANDARD | | 4 | | | | |
| Spectral Elements | # | Short Filter | Long Filter | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Dithers | Total Exposure Time | ETC Wkbk.Calc ID |
| | 1 | F115W | F444W | BRIGHT1 | 9 | 1 | 4 | 4 | 730.1 | |
| | 2 | F200W | F356W | RAPID | 9 | 1 | 4 | 4 | 386.524 | |
| | 3 | F070W | F277W | BRIGHT1 | 8 | 1 | 4 | 4 | 644.206 | |
| Special Requirements | <p>Between Dates 12-APR-2024:12:00:00 and 15-APR-2024:12:00:00</p> <p>Between Dates 19-APR-2024:00:00:00 and 22-APR-2024:00:00:00</p> <p>DEFAULT WINDOW: ANGULAR RATE 2011HJ103 FROM JWST LESS THAN 0.075</p> | | | | | | | | | |

Proposal 3979 - Observation 18 - Are dark, red, small KBOs devoid of volatiles?

Thu Mar 28 17:00:13 GMT 2024

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|-----------------------------|--|----------------------------|---|-----------------------------|--------------------|---------------------------|---------------------------|----------------------|----------------------------|-------------------------|
| Observation | Proposal 3979, Observation 18: 2012 HZ84 Diagnostic Status: Warning Observing Template: NIRCcam Imaging | | | | | | | | | |
| | (Visit 18:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (Visit 18:1) Warning (Form): Visit schedulable, but most scheduling windows are when JWST is pointed in direction of greatest micrometeoroid impact risk. This is likely due to scheduling special requirements. (2012 HZ84 (Obs 18)) Informational (Form): The Visit Planner and Spike may produce different schedulability results. | | | | | | | | | |
| Diagnostics | | | | | | | | | | |
| | | | | | | | | | | |
| Solar System Targets | # | Name | Level 1 | Level 2 | Level 3 | | | | | |
| | (5) | 2012HZ84 | TYPE=ASTEROID,A=45.922511349469,E=0.194547 668036,I=5.461494179094,O=257.238458661559,W=88.598333504997,M=325.582100564367,EQUINOX=J2000,EPOCH=15-JUL-2024:00:00:00,EpochTimeScale=UTC | | | | Comments: Extended=NO | | | |
| Template | Module | Subarray | Target Placement | | | | | | | |
| | B | FULL | Module Gap | | | | | | | |
| Dithers | # | Primary Dither Type | Primary Dithers | Subpixel Dither Type | Dither Size | Subpixel Positions | | | | |
| | 1 | NONE | | STANDARD | | 4 | | | | |
| Spectral Elements | # | Short Filter | Long Filter | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Dithers | Total Exposure Time | ETC Wkbk.Calc ID |
| | 1 | F115W | F444W | SHALLOW2 | 9 | 1 | 4 | 4 | 1803.777 | |
| | 2 | F200W | F356W | BRIGHT1 | 9 | 1 | 4 | 4 | 730.1 | |
| | 3 | F070W | F277W | BRIGHT1 | 10 | 1 | 4 | 4 | 815.995 | |
| Special Requirements | Between Dates 13-APR-2024:00:00:00 and 15-APR-2024:00:00:00 Between Dates 17-APR-2024:00:00:00 and 19-APR-2024:00:00:00 Between Dates 20-APR-2024:00:00:00 and 21-APR-2024:00:00:00 DEFAULT WINDOW: ANGULAR RATE 2012HZ84 FROM JWST LESS THAN 0.075 | | | | | | | | | |
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Proposal 3979 - Observation 9 - Are dark, red, small KBOs devoid of volatiles?

Thu Mar 28 17:00:13 GMT 2024

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|-----------------------------|--|---------------------|--|----------------------|------------------|-----------------------|--------------------|---------------|---------------------|------------------|
| Observation | <p>Proposal 3979, Observation 9: 2011 JY31</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Imaging</p> | | | | | | | | | |
| Diagnostics | <p>(Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(Visit 9:1) Warning (Form): Visit schedulable, but most scheduling windows are when JWST is pointed in direction of greatest micrometeoroid impact risk. This is likely due to scheduling special requirements.</p> <p>(2011 JY31 (Obs 9)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p> | | | | | | | | | |
| Solar System Targets | # | Name | Level 1 | Level 2 | Level 3 | | | | | |
| | (4) | 2011JY31 | TYPE=ASTEROID,A=43.940016729415,E=0.058861 202121,I=2.607787645985,O=231.597828871697,W=111.972727080901,M=315.319879909900,EQUINOX=J2000,EPOCH=15-JUL-2024:00:00:00,EpochTimeScale=UTC | | | Comments: Extended=NO | | | | |
| Template | Module | Subarray | | | Target Placement | | | | | |
| | B | FULL | | | Module Gap | | | | | |
| Dithers | # | Primary Dither Type | Primary Dithers | Subpixel Dither Type | Dither Size | Subpixel Positions | | | | |
| | 1 | NONE | | STANDARD | | 4 | | | | |
| Spectral Elements | # | Short Filter | Long Filter | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Dithers | Total Exposure Time | ETC Wkbk.Calc ID |
| | 1 | F115W | F444W | MEDIUM2 | 9 | 1 | 4 | 4 | 3521.661 | |
| | 2 | F200W | F356W | SHALLOW2 | 7 | 1 | 4 | 4 | 1374.307 | |
| | 3 | F070W | F277W | SHALLOW4 | 10 | 1 | 4 | 4 | 2104.407 | |
| Special Requirements | <p>Between Dates 10-APR-2024:00:00:00 and 11-APR-2024:12:00:00</p> <p>Between Dates 19-APR-2024:12:00:00 and 22-APR-2024:00:00:00</p> <p>DEFAULT WINDOW: ANGULAR RATE 2011JY31 FROM JWST LESS THAN 0.075</p> | | | | | | | | | |

Proposal 3979 - Observation 20 - Are dark, red, small KBOs devoid of volatiles?

Thu Mar 28 17:00:13 GMT 2024

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|------------------------------|--|----------------------------|--|-----------------------------|-------------------------|---------------------------|---------------------------|----------------------|----------------------------|-------------------------|
| Observation | <p>Proposal 3979, Observation 20: 2012HE85</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCam Imaging</p> | | | | | | | | | |
| | <p>(Visit 20:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(Visit 20:1) Warning (Form): Visit schedulable, but most scheduling windows are when JWST is pointed in direction of greatest micrometeoroid impact risk. This is likely due to scheduling special requirements.</p> <p>(2012HE85 (Obs 20)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p> | | | | | | | | | |
| Diagnostics | | | | | | | | | | |
| | | | | | | | | | | |
| Solar System Targets | # | Name | Level 1 | Level 2 | Level 3 | | | | | |
| | (6) | 2012HE85 | TYPE=ASTEROID,A=44.440637152136,E=0.095760 172008,I=3.028501515418,O=235.346793811888,W= 38.386902821281,M=18.030914910943,EQUINOX=J 2000,EPOCH=15-JUL- 2024:00:00:00,EpochTimeScale=UTC | | | | | | | |
| <i>Comments: Extended=NO</i> | | | | | | | | | | |
| Template | Module | Subarray | | | Target Placement | | | | | |
| | B | FULL | | | Module Gap | | | | | |
| Dithers | # | Primary Dither Type | Primary Dithers | Subpixel Dither Type | Dither Size | Subpixel Positions | | | | |
| | 1 | NONE | | STANDARD | | 4 | | | | |
| Spectral Elements | # | Short Filter | Long Filter | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Dithers | Total Exposure Time | ETC Wkbk.Calc ID |
| | 1 | F115W | F444W | MEDIUM2 | 9 | 1 | 4 | 4 | 3521.661 | |
| | 2 | F200W | F356W | SHALLOW2 | 7 | 1 | 4 | 4 | 1374.307 | |
| | 3 | F070W | F277W | SHALLOW4 | 10 | 1 | 4 | 4 | 2104.407 | |
| Special Requirements | Between Dates 15-APR-2024:12:00:00 and 20-APR-2024:12:00:00 | | | | | | | | | |
| | DEFAULT WINDOW: ANGULAR RATE 2012HE85 FROM JWST LESS THAN 0.075 | | | | | | | | | |

Proposal 3979 - Observation 21 - Are dark, red, small KBOs devoid of volatiles?

Thu Mar 28 17:00:13 GMT 2024

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|------------------------------|--|----------------------------|---|-----------------------------|-------------------------|---------------------------|---------------------------|----------------------|----------------------------|-------------------------|
| Observation | Proposal 3979, Observation 21: 2011HZ102 Diagnostic Status: Warning Observing Template: NIRCam Imaging | | | | | | | | | |
| | (Visit 21:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (Visit 21:1) Warning (Form): Visit schedulable, but most scheduling windows are when JWST is pointed in direction of greatest micrometeoroid impact risk. This is likely due to scheduling special requirements. (2011HZ102 (Obs 21)) Informational (Form): The Visit Planner and Spike may produce different schedulability results. | | | | | | | | | |
| Diagnostics | | | | | | | | | | |
| | | | | | | | | | | |
| Solar System Targets | # | Name | Level 1 | Level 2 | Level 3 | | | | | |
| | (7) | 2011HZ102 | TYPE=ASTEROID,A=43.124797539088,E=0.005563 695867,I=2.392841707343,O=154.702050467756,W= 34.653881207401,M=103.369821592105,EQUINOX= J2000,EPOCH=15-JUL- 2024:00:00:00,EpochTimeScale=UTC | | | | | | | |
| <i>Comments: Extended=NO</i> | | | | | | | | | | |
| Template | Module | Subarray | | | Target Placement | | | | | |
| | B | FULL | | | Module Gap | | | | | |
| Dithers | # | Primary Dither Type | Primary Dithers | Subpixel Dither Type | Dither Size | Subpixel Positions | | | | |
| | 1 | NONE | | STANDARD | | 4 | | | | |
| Spectral Elements | # | Short Filter | Long Filter | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Dithers | Total Exposure Time | ETC Wkbk.Calc ID |
| | 1 | F115W | F444W | MEDIUM2 | 9 | 1 | 4 | 4 | 3521.661 | |
| | 2 | F200W | F356W | SHALLOW2 | 7 | 1 | 4 | 4 | 1374.307 | |
| | 3 | F070W | F277W | SHALLOW4 | 10 | 1 | 4 | 4 | 2104.407 | |
| Special Requirements | Between Dates 09-APR-2024:00:00:00 and 14-APR-2024:00:00:00 | | | | | | | | | |
| | DEFAULT WINDOW: ANGULAR RATE 2011HZ102 FROM JWST LESS THAN 0.075 | | | | | | | | | |

Proposal 3979 - Observation 22 - Are dark, red, small KBOs devoid of volatiles?

Thu Mar 28 17:00:13 GMT 2024

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|-----------------------------|---|---------------------|---|----------------------|------------------|--------------------|--------------------|---------------|---------------------|------------------|
| Observation | <p>Proposal 3979, Observation 22: 2011 JX31</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Imaging</p> | | | | | | | | | |
| Diagnostics | <p>(Visit 22:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(Visit 22:1) Warning (Form): Visit schedulable, but most scheduling windows are when JWST is pointed in direction of greatest micrometeoroid impact risk. This is likely due to scheduling special requirements.</p> <p>(2011 JX31 (Obs 22)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p> | | | | | | | | | |
| Solar System Targets | # | Name | Level 1 | Level 2 | Level 3 | | | | | |
| | (3) | 2011JX31 | TYPE=ASTEROID,A=44.844917050364,E=0.110593 265000,I=3.309251211906,O=139.107959947470,W= 18.519651333604,M=123.118415001262,EQUINOX= J2000,EPOCH=15-JUL- 2024:00:00:00,EpochTimeScale=UTC | | | | | | | |
| | <i>Comments: Extended=NO</i> | | | | | | | | | |
| Template | Module | Subarray | | | Target Placement | | | | | |
| | B | FULL | | | Module Gap | | | | | |
| Dithers | # | Primary Dither Type | Primary Dithers | Subpixel Dither Type | Dither Size | Subpixel Positions | | | | |
| | 1 | NONE | | STANDARD | | 4 | | | | |
| Spectral Elements | # | Short Filter | Long Filter | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Dithers | Total Exposure Time | ETC Wkbk.Calc ID |
| | 1 | F115W | F444W | MEDIUM2 | 9 | 1 | 4 | 4 | 3521.661 | |
| | 2 | F200W | F356W | SHALLOW2 | 7 | 1 | 4 | 4 | 1374.307 | |
| | 3 | F070W | F277W | SHALLOW4 | 10 | 1 | 4 | 4 | 2104.407 | |
| Special Requirements | <p>Between Dates 10-APR-2024:00:00:00 and 14-APR-2024:12:00:00</p> <p>Between Dates 18-APR-2024:12:00:00 and 21-APR-2024:12:00:00</p> <p>DEFAULT WINDOW: ANGULAR RATE 2011JX31 FROM JWST LESS THAN 0.075</p> | | | | | | | | | |