

## AppH1 MIRI AperName population rules

| Program,<br>Obs(.Exposure_Spec)                           | Comment   |
|---|---|
| ** is what is really populated by APT versus requirements |   |
| MIRI Imaging Template                                     |   |
| 301 01  | miri_templates.subarray=FULL MIRIM_ILLUM  |
| 301 02  | miri_templates.subarray=BRIGHTSKY MIRIM_BRIGHTSKY   |
| 301 03  | miri_templates.subarray=SUB256 MIRIM_SUB256   |
| 301 05  | miri_templates.subarray=SUB128 MIRIM_SUB128   |
| 301 06  | miri_templates.subarray=SUB64 MIRIM_SUB64   |
| 301 07  | miri_templates.subarray=SUBPRISM<br>MIRIM_SLITLESSUPPER, MIRIM_SLITLESSLOWER<br>**MIRIM_SLITLESSPRISM** |
|   | Note Pure Parallel has NULL for AperName  |
| MIRI Low Resolution Spectroscopy Template                 |   |
| target acq  |   |
| 602 01  | miri_templates.subarray=FULL MIRIM_TALRS  |
| 602 07, 2 TACQs   | miri_templates.subarray=SUBPRISM MIRIM_TASLITLESSPRISM<br>**MIRIM_TABLOCK then MIRIM_TASLITLESSPRISM**  |
| science   |   |
| 602 01  | miri_templates.subarray=FULL MIRIM_SLIT   |
| 602 07  | miri_templates.subarray=SUBPRISM<br>MIRIM_SLITLESSUPPER, MIRIM_SLITLESSLOWER<br>**MIRIM_SLITLESSPRISM** |
| MIRI Medium Resolution Spectroscopy Template              |   |
| target acq  |   |
| 603 01  | always MIRIM_TAMRS  |
| science   |   |
| 603 01  | miri_templates.primary_channel=ALL MIRIFU_CHANNEL1A   |
| 603 02  | miri_templates.primary_channel=CHANNEL1<br>MIRIFU_CHANNEL1A   |
| 603 03  | miri_templates.primary_channel=CHANNEL2<br>MIRIFU_CHANNEL2A   |
| 603 04  | miri_templates.primary_channel=CHANNEL3<br>MIRIFU_CHANNEL3A   |
| 603 05  | miri_templates.primary_channel=CHANNEL4<br>MIRIFU_CHANNEL4A   |
| MIRI Coronagraphic Imaging Template                       |   |

current requirements wrong, see PR 90020

| implicit_exposure | pointing_type      | AperName         |
|-------------------|--------------------|------------------|
| N                 | TARGET_ACQUISITION | MIRIM_TABLOCK    |
| Y                 | TARGET_ACQUISITION | MIRIM_TAaaaa_qq  |
| Y                 | TARGET_ACQUISITION | MIRIM_TAaaaa_Cqq |
| N                 | SCIENCE            | MIRIM_MASKaaaa   |

where qq is

| quadrant | qq |
|----------|----|
| 1        | UR |
| 2        | UL |
| 3        | LL |
| 4        | LR |

and aaaa is miri\_templates.coronagraph/miri\_exposure\_specification.filter

| Coron Mask/Filter | aaaa |
|-------------------|------|
| 4QPM/F1065C       | 1065 |
| 4QPM/F1140C       | 1140 |
| 4QPM/F1550C       | 1550 |
| LYOT/F2300C       | LYOT |

target acq

|                |  |
|----------------|--|
| 604 11, 3 TAQs | LYOT/F2300C MIRIM_TABLOCK<br>**MIRIM_TABLOCK, MIRIM_TALYOT_LL, MIRIM_TALYOT_CLL**  |
| 604 09, 3 TAQs | 4QPM/F1550C MIRIM_TABLOCK<br>**MIRIM_TABLOCK, MIRIM_TA1550_UR, MIRIM_TA1550_CUR**  |
| 604 04, 3 TAQs | 4QCPM/F1140C MIRIM_TABLOCK<br>**MIRIM_TABLOCK, MIRIM_TA1140_LR, MIRIM_TA1140_CLR** |
| 604 02, 3 TAQs | 4QPM/F1065C MIRIM_TABLOCK<br>**MIRIM_TABLOCK, MIRIM_TA1065_UL, MIRIM_TA1065_CUL**  |

science

|        |                            |
|--------|----------------------------|
| 604 11 | LYOT/F2300C MIRIM_MASKLYOT |
| 604 09 | 4QPM/F1550C MIRIM_MASK1550 |
| 604 04 | 4QPM/F1150C MIRIM_MASK1140 |
| 604 02 | 4QPM/F1065C MIRIM_MASK1065 |

MIRI MIMF Template

|        |                                      |
|--------|--------------------------------------|
| 609 01 | always MIRIM_FULL<br>**MIRIM_ILLUM** |
|--------|--------------------------------------|

MIRI CPC Template

current requirements

|                   |                |
|-------------------|----------------|
| SCIENCE           | MIRIM_MASKaaaa |
| aaaa              | is             |
| Coron Mask/Filter | aaaa           |
| 4QPM/F1065C       | 1065           |
| 4QPM/F1140C       | 1140           |
| 4QPM/F1550C       | 1550           |
| LYOT/F2300C       | LYOT           |

|        |                            |
|--------|----------------------------|
| 610 04 | LYOT/F2300C MIRIM_MASKLYOT |
| 610 01 | 4QPM/F1550C MIRIM_MASK1550 |
| 610 03 | 4QPM/F1150C MIRIM_MASK1140 |
| 610 02 | 4QPM/F1065C MIRIM_MASK1065 |

|  |   |
|--|---|
| MIRI MRS Cross Grating Engineering - NOT IN DOCUMENT |   |
| 621 01   | always MIRIFU_CHANNEL1A   |
| MIRI External Flat - NOT IN DOCUMENT                 |   |
| 606 21   | miri_templates.subarray=FULL MIRIM_ILLUM  |
| 606 22   | miri_templates.subarray=BRIGHTSKY MIRIM_BRIGHTSKY   |
| 606 23   | miri_templates.subarray=SUB256 MIRIM_SUB256   |
| 606 24   | miri_templates.subarray=SUB128 MIRIM_SUB128   |
| 606 25   | miri_templates.subarray=SUB64 MIRIM_SUB64   |
| 606 26   | miri_templates.subarray=SUBPRISM<br>MIRIM_SLITLESSUPPER, MIRIM_SLITLESSLOWER<br>**MIRIM_SLITLESSPRISM** |
| 606 30   | LYOT/F2300C MIRIM_MASKLYOT  |
| 606 29   | 4QPM/F1550C MIRIM_MASK1550  |
| 606 28   | 4QPM/F1150C MIRIM_MASK1140  |
| 606 27   | 4QPM/F1065C MIRIM_MASK1065  |
| 607 06   | miri_templates.detector=MRS MIRIFU_CHANNEL1A  |