|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Type** | **QRaFT modules used** |  |
|  | ADAPT\_THRESH | A | - |  |
|  | ADAPT\_TREND\_RANGE | A | RECT\_TO\_POLAR |  |
|  | ATAN2 | M | - |  |
|  | BLOB\_FILTERING | A | THRESH\_IMAGE |  |
|  | COLOR\_BAR | G | - |  |
|  | COMPUTE\_FEATURE\_COORD | A | SCALE\_ARRAY, ATAN2 |  |
|  | DETECT\_FEATURES | A | ELLIPSE\_DECOMP, POLYFIT\_DECOMP, COMPUTE\_FEATURE\_COORD |  |
|  | ELLIPSE\_DECOMP | A | MASK\_IMAGE |  |
|  | EMPTYLABELS | G | - |  |
|  | ENHANCE\_IMAGE\_ANGULAR | A | RADIAL\_DETRENDING |  |
|  | ENHANCE\_IMAGE\_POLAR | A | RADIAL\_DETRENDING,  RECT\_TO\_POLAR, ENHANCE\_IMAGE\_ANGULAR, BLOB\_FILTERING |  |
|  | EXTRACT\_PARAMETER | I/O | SETKEYWORD |  |
|  | FILTER\_FEATURES | A | RECT\_TO\_POLAR |  |
|  | FILTER\_FEATURES\_MANUAL | A | MINMAX, FIND\_CLOSEST\_FEATURE, PLOT\_FEATURES |  |
|  | FIND\_CLOSEST\_FEATURE | A | - |  |
|  | GET\_COORDINATES | A | - |  |
|  | IMAGE\_PLOT\_1 | G | SETKEYWORD, LIMITRANGE1, COLOR\_BAR, EMPTYLABELS, PLOTFRAME |  |
|  | LIMITRANGE1 | M | - |  |
|  | MASK\_IMAGE | A | - |  |
|  | MINMAX | M | - |  |
|  | OPEN\_FILE | I/O | SCALE\_ARRAY, REMOVE\_OCCULT |  |
|  | PLOTFRAME | G | - |  |
|  | PLOT\_FEATURES | A | IMAGE\_PLOT\_1, SETCOLORS, SETBW |  |
|  | POLYFIT\_DECOMP | A | GET\_COORDINATES, MASK\_IMAGE |  |
|  | PROCESS\_CORONA | A | SETKEYWORD, READ\_PARAMETERS, OPEN\_FILE, ENHANCE\_IMAGE\_ANGULAR, ENHANCE\_IMAGE\_POLAR, ADAPT\_THRESH, ADAPT\_TREND\_RANGE, DETECT\_FEATURES, FILTER\_FEATURES, PLOT\_FEATURES, MINMAX, FILTER\_FEATURES\_MANUAL |  |
|  | RADIAL\_DETRENDING | A | - |  |
|  | READ\_PARAMETERS | I/O | EXTRACT\_PARAMETER |  |
|  | RECT\_TO\_POLAR | A | GET\_COORDINATES |  |
|  | REMOVE\_OCCULT | A | - |  |
|  | SCALE\_ARRAY | M | - |  |
|  | SETBW | G | - |  |
|  | SETCOLORS | G | - |  |
|  | SETKEYWORD | M | - |  |
|  | THRESH\_IMAGE | A | - |  |

Module types: A – analysis (primary modules), G – graphics, I/O – input/output, M – math and utility subroutines.

**MAIN ANALYSIS and I/O MODULES ONLY**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Name** | **Type** | **QRaFT modules used** |  |
|  | ADAPT\_THRESH | A | - |  |
|  | ADAPT\_TREND\_RANGE | A | RECT\_TO\_POLAR |  |
|  | BLOB\_FILTERING | A | THRESH\_IMAGE |  |
|  | COMPUTE\_FEATURE\_COORD | A | - |  |
|  | DETECT\_FEATURES | A | ELLIPSE\_DECOMP POLYFIT\_DECOMP COMPUTE\_FEATURE\_COORD |  |
|  | ELLIPSE\_DECOMP | A | MASK\_IMAGE |  |
|  | ENHANCE\_IMAGE\_ANGULAR | A | RADIAL\_DETRENDING |  |
|  | ENHANCE\_IMAGE\_POLAR | A | RADIAL\_DETRENDING  RECT\_TO\_POLAR ENHANCE\_IMAGE\_ANGULAR BLOB\_FILTERING |  |
|  | EXTRACT\_PARAMETER | I/O | - |  |
|  | FILTER\_FEATURES | A | RECT\_TO\_POLAR |  |
|  | FILTER\_FEATURES\_MANUAL | A | PLOT\_FEATURES FIND\_CLOSEST\_FEATURE |  |
|  | FIND\_CLOSEST\_FEATURE | A | - |  |
|  | GET\_COORDINATES | A | - |  |
|  | MASK\_IMAGE | A | - |  |
|  | OPEN\_FILE | I/O | REMOVE\_OCCULT |  |
|  | PLOT\_FEATURES | A |  |  |
|  | POLYFIT\_DECOMP | A | GET\_COORDINATES MASK\_IMAGE |  |
|  | PROCESS\_CORONA | A | READ\_PARAMETERS  OPEN\_FILE ENHANCE\_IMAGE\_ANGULAR ENHANCE\_IMAGE\_POLAR ADAPT\_THRESH ADAPT\_TREND\_RANGE DETECT\_FEATURES FILTER\_FEATURES PLOT\_FEATURES FILTER\_FEATURES\_MANUAL |  |
|  | RADIAL\_DETRENDING | A | - |  |
|  | READ\_PARAMETERS | I/O | EXTRACT\_PARAMETER |  |
|  | RECT\_TO\_POLAR | A | GET\_COORDINATES |  |
|  | REMOVE\_OCCULT | A | - |  |
|  | THRESH\_IMAGE | A | - |  |