

## Solar System Special Requirements

Program, Obs(.Exposure_Spec)	Comment
Rules and Conventions	
18886 02	date must be geocentric date expressed in Universal Time
18886 5 visits 1,2	observation level special requirement applies to ALL visits in that observation
Supported Formats for Solar System Special Requirements	
18889 01	SEPARATION OF <object1> <object2> FROM <observer>
18889 02	DISTANCE <object1> <object2> <condition> <distance>
18889 03	ANGULAR RATE <object1> [RELATIVE <object2>] FROM <observer> <condition> <rate>
18889 04	RADIAL VELOCITY <object1> <object2> <condition> <velocity>
18889 05	APPARENT DIAMETER <object> <condition> <angle>
18889 06	SOLAR PHASE OF <object> FROM <observer> BETWEEN <min-angle> <max-angle>
18889 07	OCCULTATION OF <occulted object> BY <occluding object> FROM <observer>
18889 08	TRANSIT OF <transiting object> ACROSS <transited object> FROM <observer>
18889 09	ECLIPSE <shadow type> <completeness> OF <eclipsed object> BY <eclipsing object> FROM <observer>
18889 10	CENTRAL MERIDIAN LONGITUDE OF <object> FROM <observer> BETWEEN <min-angle> <max-angle>
18889 11	ORBITAL LONGITUDE OF <object1> [FROM <observer>] BETWEEN <min-angle> <max-angle>
Solar System Requirements Operators	
18889 04	LESS THAN
18889 01	GREATER THAN
18889 05	LOCAL MAXIMUM
18889 02	LOCAL MINIMUM
18889 01	NOT
SEPARATION	
18889 01	angle degrees
18889 12	angle arc-minutes
18889 13	angle arc-seconds
954 01	observer defaults to JWST
DISTANCE	
ANGULAR RATE	
18889 03	RELATIVE <object2>
18889 14	no object 2
954 01	observer defaults to JWST
RADIAL VELOCITY	
18889 04	positive velocity
18889 15	negative velocity
APPARENT DIAMETER	
SOLAR PHASE	
954 01	observer defaults to JWST

OCCULTATION	
954 01	observer defaults to JWST
TRANSIT	
954 01	observer defaults to JWST
ECLIPSE	
18889 09	type Penumbral
18889 16	type Umbral
18889 16	completeness Full
18889 09	completeness Partial
954 01	observer defaults to JWST
CENTRAL MERIDIAN LONGITUDE	
954 01	observer defaults to JWST
ORBITAL LONGITUDE	
18889 11 (Mars)	can be used on Level 1
18887 26 (Deimos)	or can be used on Level 2
Moving Target Implementation Flags	
18886 01	by default unpopulated/unchecked
18886 02	MOSS Planning Start <date>
18886 02	MOSS Planning End <date>
18886 02	MOSS Show Windows (check per output)
Default Target Windows *** can't be removed	
All targets in the Martian system except Mars:	
18887 02	***NOT OCCULTATION OF <target> BY MARS FROM JWST
18887 02	SEPARATION OF <target> MARS FROM JWST GREATER THAN 10"
18887 01	showing MARS doesn't have
All targets in the Jovian system except Jupiter: 04 Io, 08 Leda	
18887 04 08	***NOT OCCULTATION OF <target> BY JUPITER FROM JWST
18887 04 08	SEPARATION OF <target> JUPITER FROM JWST GREATER THAN 30"
Observations of Jupiter, Jupiter surface features, and offsets from Jupiter:	
18887 03 09 10	NOT ECLIPSE PENUMBRAL PARTIAL OF <target> BY IO FROM JWST
18887 03 09 10	NOT ECLIPSE PENUMBRAL PARTIAL OF <target> BY EUROPA FROM JWST
18887 03 09 10	NOT ECLIPSE PENUMBRAL PARTIAL OF <target> BY GANYMEDE FROM JWST
18887 03 09 10	NOT ECLIPSE PENUMBRAL PARTIAL OF <target> BY CALLISTO FROM JWST
All targets in the Jovian system except Io:	
18887 03 08	SEPARATION OF <target> IO FROM JWST GREATER THAN 10"
18887 04	showing Io doesn't have
All targets in the Jovian system except Europa:	
18887 03 08	SEPARATION OF <target> EUROPA FROM JWST GREATER THAN 10"
18887 06	showing Europa doesn't have
All targets in the Jovian system except Ganymede:	
18887 03 08	SEPARATION OF <target> GANYMEDE FROM JWST GREATER THAN 10"
18887 07	showing Ganymede doesn't have

All targets in the Jovian system except Callisto:	
18887 03 08	SEPARATION OF <target> CALLISTO FROM JWST GREATER THAN 10"
18887 05	showing Callisto doesn't have
All targets in the Saturnian system except Saturn: 13 Rhea	
18887 13	***NOT OCCULTATION OF <target> BY SATURN FROM JWST
18887 13	SEPARATION OF <target> SATURN FROM JWST GREATER THAN 45"
Observations of Saturn, Saturn surface features, and offsets from Saturn:	
18887 12	NOT ECLIPSE PENUMBRAL PARTIAL OF <target> BY TITAN FROM JWST
All targets in the Saturnian system except Rhea:	
18887 12 14 15	SEPARATION OF <target> RHEA FROM JWST GREATER THAN 10"
18887 13	showing Rhea doesn't have
All targets in the Saturnian system except Titan:	
18887 12 13 15	SEPARATION OF <target> TITAN FROM JWST GREATER THAN 10"
18887 14	showing Titan doesn't have
All targets in the Uranian system except Uranus:	
18887 17	***NOT OCCULTATION OF <target> BY URANUS FROM JWST
18887 16	showing Uranus doesn't have
All targets in the Neptunian system except Neptune:	
18887 19	***NOT OCCULTATION OF <target> BY NEPTUNE FROM JWST
18887 18	showing Neptune doesn't have
Observations of Neptune, Neptune surface features, and offsets from Neptune:	
18887 18	NOT ECLIPSE PENUMBRAL PARTIAL OF <target> BY TRITON FROM JWST
All PLANETOGRAPHIC, PLANETOCENTRIC, and MAGNETO targets:	
***NOT OCCULTATION OF <target> BY <planet body> FROM JWST	
18887 20	PLANETOGRAPHIC
18887 21	PLANETOCENTRIC
18887 22	MAGNETO
18887 23	showing POSANGLE doesn't have
18887 24	showing TORUS doesn't have
18887 25	showing SATELLITE doesn't have
Default window superseded by any similar windows specified via special requirements above, example Io and Io-Callisto separation window specified that will apply and not the default	
18886 03 no user window; 04 user window added	04 has both windows in gui (check per output)