

Star & Planet sights are available

Sun, Moon, Planet & Star Data Valid @ Position Shown Below

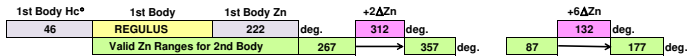
Date & Zone Time @ DR Position  
18-May-03 21:28:24

Altitude of the Sun on the Prime Vertical Circle 26 deg. 52.19 min.

Date & Mean Time @ Greenwich  
19-May-03 4:28:24

DR L 48 deg. 8.50 min. N  
DR Lo 123 deg. 26.00 min. W

Use "Nav Bodies" Worksheet to specify DR Position, Date & Time



The Ideal Zn values for a 2nd Body of a 2 Body Fix are shown in the mauve cells labeled +2ΔZn & +6ΔZn

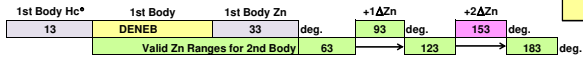
Select Bodies for a Two Body Fix

Altitude of the Sun -6.07 deg.

Bodies flagged as "Valid for Sight Taking" sorted by Zn value

Crossing Angle of LOPs From Body 1 & Body 2 is 88 deg.

Sight Planning Select Bodies from Dropdown List associated with Yellow Cells



The Ideal Zn values for a 2nd & 3rd body of a 3 body fix are shown in the mauve cells labeled +2ΔZn & +4ΔZn

Select Bodies for a Three Body Fix

Azimuth Spread 238 deg.

Valid Zn Ranges for a 3rd Body 63 to 126 deg., 243 to 306 deg., -- to -- deg., -- to -- deg., -- to -- deg.

Note: The Valid Zn Ranges for a 3rd Body are not valid until you run the "ValidZnRanges" macro by clicking on this box.

This must be done each time after entering a new name for either the "1st Body" and/or the "2nd Body".

Crossing Angle of LOPs From Body 1 & Body 2 is 57 deg.

Crossing Angle of LOPs From Body 1 & Body 3 is 59 deg.

Crossing Angle of LOPs From Body 2 & Body 3 is 64 deg.

HO 2102-D Star Finder

Zn (deg.)	HO 249 Vol. I Star	Names of Bodies Flagged as Valid for Sight Taking	Hc (deg.)	Hc (min.)	Visual Magnitude	GHA (deg.)	GHA (min.)	Dec (deg.)	Dec (min.)	Dec N S	Lunar Distance (deg.)	Lunar Distance (min.)
20.6	Yes	Kochab	58	17.13	2.1	80	50.35	74	8.60	N		
33.4	Yes	DENEBO	13	2.72	1.3	353	9.03	45	17.16	N		
41.5	Yes	Alioth	78	39.92	1.8	109	59.22	55	56.73	N		
50.4	-	Eltanin	36	7.18	2.2	34	21.56	51	29.07	N		
56.4	Yes	VEGA	22	33.71	0.0	24	16.22	38	46.94	N		
76.2	Yes	Alkaid	72	21.66	1.9	96	36.76	49	17.93	N		
86.2	Yes	Rasalhague	13	30.90	2.1	39	45.72	12	33.31	N		
97.5	-	Alphecca	43	30.07	2.2	69	49.53	26	42.16	N		
124.8	Yes	ARCTURUS	50	10.29	0.0	89	34.84	19	9.92	N		
137.5	-	Zubenelgenubi	15	23.93	2.8	80	46.14	16	3.41	S		
156.3	Yes	SPICA	27	45.55	1.0	102	11.61	11	10.77	S		
175.9	-	Gienah	24	12.28	2.6	119	32.55	17	33.69	S		
184.9	Yes	Denebola	56	20.03	2.1	126	13.77	14	33.30	N		
222.0	Yes	Alphard	23	58.36	2.0	161	36.16	8	40.40	S		
222.2	Yes	REGULUS	46	57.34	1.4	151	24.13	11	57.16	N		
247.9	-	JUPITER	42	6.17	-2.0	169	48.86	18	15.23	N		
254.5	Yes	PROCYON	20	14.70	0.4	188	40.44	5	13.03	N		
271.6	Yes	POLLUX	37	38.05	1.1	187	9.92	28	1.24	N		
275.9	Yes	BETELGEUSE	4	39.87	0.5	214	42.40	7	24.47	N		
287.0	-	SATURN	15	11.19	1.1	215	38.81	22	33.70	N		
295.6	-	Elnath	15	40.54	1.7	221	55.25	28	36.65	N		
310.3	Yes	CAPELLA	26	38.01	0.1	224	18.90	46	0.15	N		
328.3	-	Mirfak	17	23.69	1.8	252	24.59	49	52.29	N		
334.8	Yes	Dubhe	74	14.66	1.8	137	33.13	61	44.33	N		
354.3	Yes	Schedar	15	1.62	2.2	293	22.43	56	33.01	N		

Using the HO 2102-D Star Finder & Identifier

LHA of Aries 180.10 deg.

GHA of Aries 303.54 deg.

Date & Mean Time @ Greenwich

19-May-03 4:28:24

Zone Time of Rise	Body	Zone Time of MT	Right Ascension	Declination	SHA	GHA	Zone Time of Set
5:30	Sun	13:10	55.54 deg.	19.67 deg. N	304.46 deg.	247.00 deg.	20:50
0:15	Moon	3:59	281.02 deg.	26.50 deg. S	78.97 deg.	22.51 deg.	7:42
4:27	Venus	11:21	31.64 deg.	11.11 deg. N	328.36 deg.	271.90 deg.	18:15
1:52	Mars	6:30	318.86 deg.	18.19 deg. S	41.14 deg.	344.68 deg.	11:08
10:39	Jupiter	18:09	133.72 deg.	18.25 deg. N	226.28 deg.	169.81 deg.	1:40
7:11	Saturn	15:06	87.89 deg.	22.56 deg. N	272.11 deg.	215.65 deg.	23:01

Note: If the Rise event or Set event displays --- the event does not occur at the DR position on the specified date.

A Sun ~ Moon 2 Body Fix may be possible around the dates shown in Cells V42 & V43

Δ Moon Cycle 0  
New Moon 1-May-03 First Quarter 9-May-03  
Full Moon 16-May-03 Last Quarter 23-May-03

See notes attached to Cells V39 & V40 for additional information.

Moon's Age 18 Days

Waning Gibbous Moon