

EXPLANATION OF TABLE OF STAR RISINGS, TRANSITS, and SETTINGS

Stars were selected which are bright (magnitude 1.5 or brighter, or 2.5 if the star's declination is close to HVO's latitude), and not too close to the poles (never sets, or never rises). Listed below are each star's name, magnitude, Right Ascension in hours and minutes, declination, and the constellation in which the star is located.

Star	Magnitude	R.A. hh:min	Decl. deg:min	Constellation
Almach	2.01	2:05	42:25	Andromeda
Algol	2.09	3:09	41:01	Perseus
Aldebaran	0.85	4:37	16:33	Taurus
Rigel	0.12	5:15	-8:11	Orion
Capella	0.08	5:18	46:01	Auriga
Betelgeuse	0.45	5:56	7:24	Orion
Menkalinan	1.90	6:01	44:57	Auriga
Sirius	-1.46	6:46	-16:45	Canis Major
Adhara	1.50	6:59	-29:00	Canis Major
Procyron	0.38	7:40	5:11	Canis Major
Pollux	1.14	7:46	27:59	Gemini
Regulus	1.35	10:09	11:53	Leo
Spica	0.98	13:26	-11:15	Virgo
Arcturus	-0.04	14:17	19:05	Bootes
Antares	0.96	16:31	-26:28	Scorpius
Vega	0.03	18:38	38:48	Lyra
Altair	0.77	19:52	8:55	Aquila
Sadr	2.23	20:23	40:19	Cygnus
Deneb	1.25	20:42	45:21	Cygnus
Fomalhaut	1.16	22:59	-29:31	Piscis Austrinus

Each line of data pertains to one day of time on a clock reading Mountain Standard Time (never MDT). The column labeled "Midnight" gives the difference between the actual time of local midnight and 12:00:00 AM MST. For example, on 12/2/2018 the listing supplies -0:17:31 meaning that midnight, closest to zero hours on 12/2/2018 is 23:42:29 on the first of December. This, in turn, tells you that Aldebaran, that night, transits fairly close to local midnight.

For each star, for each day, the time (MST – never MDT) when the star transits the meridian of HVO (103.297573 degrees West) is listed, and immediately under the name of the star the approximate offset between the transit time and the rising or setting time is listed.

The times listed depend on several factors, the least predictable of which is the difference between atomic time and UT1. For dates in the future, this can only be estimated. However, the errors in the listed times over the listed period should generally be less than one or two seconds.

The rising and setting times calculated from the transit times will be off by a minute or two from the start, and up to several minutes in addition to that because of weather and the topography of the horizon. However, the table should give users a good idea of when a given constellation may be viewed.