

Table with columns: GMT, ARIES, VENUS, MARS, JUPITER, SATURN, STARS, SUN, MOON, Lat, Twilight (Nautical, Civil), Sunrise, 17, Moonrise (18, 19). Rows include planetary data for Aries, Venus, Mars, Jupiter, Saturn, and a detailed star/sun/moon section for days 17, 18, and 19.

**2012 June 20, 21, 22 (Wed, Thur, Fri)**

GMT	ARIES			VENUS			MARS			JUPITER			SATURN			STARS			SUN			MOON						Lat		Twilight		Sunrise		Moonrise					
																										Nautical	Civil		20	21	22	20	21	22					
		GHA	GHA	Dec	GHA	Dec	GHA	Dec	GHA	Dec	Name	SHA	Dec	GHA	Dec	GHA	v	Dec	d	HP	N 72°	-	-	-	-	-	-	-	-	-	-	-	04:00						
<b>20</b>	00	268°36'.6	201°14'.7	18°58'.6 N	94°37'.2	3°18'.3 N	208°40'.8	18°46'.6 N	66°33'.6	6°26'.7 S	Acamar	315°19'.2	40°15'.1 S	179°36'.7	23°26'.0 N	175°07'.2	10'.9	20°54'.7 N	3'.3	54.8	N 70°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02:36	04:41		
	01	283°39'.1	216°17'.9	58'.1	109°38'.6	17.8	223°42'.7	67.8	81°36'.1	26.7	Acnhar	335°27'.5	57°10'.1 S	189°37'.1	11'.0	51'.4	3'.3				68°	-	-	-	-	-	-	-	-	-	-	01:45	03:26	05:09					
	02	298°41'.5	231°21'.1	57.6	124°40'.0	17.3	238°44'.6	46.8	96°38'.6	26.7	Acrux	173°10'.0	63°10'.5 S	209°36'.5	26.0	204°07'.1	10'.9	48.1	3'.5		66°	-	-	-	-	-	-	-	-	-	-	02:33	03:58	05:30					
	03	313°44'.0	246°24'.2	57.1	139°41'.4	16.7	253°46'.4	46.9	111°41'.1	26.7	Adhara	255°13'.4	28°59'.5 S	218°37'.1	26.0	218°37'.0	11'.0	44.6	3'.5	54.9	64°	-	-	-	-	-	-	-	-	-	-	-	01:31	03:03	04:21	05:47			
	04	328°46'.4	261°27'.4	56.5	154°42'.7	16.2	268°48'.3	47.1	126°43'.6	26.7	Aldebaran	290°50'.5	16°31'.9 N	239°36'.2	26.0	233°07.0	11'.0	41.1	3.7		62°	-	-	-	-	-	-	-	-	-	-	02:09	03:26	04:40	06:00				
	05	343°48.9	279°30'.6	56.0	169°44'.1	15.7	283°50'.2	47.2	141°46'.1	26.8				254°36'.0	26.1	247°37'.0	11'.0	37.4	3.8		60°	-	-	-	-	-	-	-	-	-	-	-	-	-	00:49	02:36	03:45	04:55	06:12
	06	358°51'.4	291°33'.7	55.5	184°45'.5	15.1	298°52'.1	47.3	156°48'.6	26.8	Alioth	166°21'.1	55°53'.7 N	269°35'.9	26.1	262°07.0	11'.0	33.6	3.8		N 58°	-	-	-	-	-	-	-	-	-	-	-	01:40	02:56	04:00	05:08	06:22		
	07	13°53'.8	306°36'.9	55.0	199°46'.9	14.6	313°54'.0	47.4	171°51'.0	26.8	Alkaid	152°59'.2	49°15'.2 N	284°35.8	26.1	276°37.0	11'.0	29.8	4.0		56°	-	-	-	-	-	-	-	-	-	-	-	02:10	03:13	04:13	05:19	06:31		
	08	28°56'.3	321°40'.0	54.5	214°48'.2	14.1	328°55'.9	47.5	186°53'.5	26.8	Alnair	27°44'.3	46°53'.7 S	299°35.6	26.1	291°07.0	11'.0	25.8	4.1		54°	00.45	02:33	03:27	04:24	05:29	06:38												
	09	43°58'.8	336°43'.2	54.0	229°49'.8	13.6	343°59'.6	47.6	314°35'.0	26.8	Alnilam	275°47'.4	1°11'.8 S	314°35.0	26.1	305°37.0	11'.1	21.7	4.1	55.0	52°	01.32	02:51	03:40	04:34	05:37	06:45												
	10	59°01'.2	351°46'.3	53.4	244°51'.0	13.0	358°59'.6	47.7	216°58'.5	26.8	Alphard	217°57.0	8°43'.0 S	329°35.4	26.1	320°07'.1	11'.0	17.6	4.3		50°	02.00	03:06	03:51	04:43	05:45	06:51												
	11	74°03'.7	6°49'.4	52.9	259°52'.3	12.5	14°01'.5	47.8	232°01'.0	26.8				344°35'.2	26.1	334°37'.1	11'.1	13.3	4.4		45°	02.46	03:36	04:13	05:02	06:02	07:05												
	12	89°06'.2	21°52'.6	18°52'.4 N	274°53'.7	3°12'.0 N	29°03'.4	19°48'.0 N	247°03'.5	6°26'.8 S	Alphecca	126°11'.3	26°40'.5 N	359°35.1	23°26.1 N	349°07.2	11'.0	20°08'.9 N	4'.5	55.0	N 40°	03:17	03:58	04:31	05:17	06:15	07:16												
	13	104°08'.6	36°55'.7	51.9	289°55'.1	11.5	44°05'.3	48.1	262°06.0	26.8	Alpheratz	357°44'.2	29°09'.5 N	14°35.0	26.1	3°37'.2	11'.1	04.4	4.5		35°	03.40	04:17	04:46	05:30	06:26	07:25												
	14	119°11'.1	51°58'.8	51.4	304°56'.5	10.9	59°07'.2	48.2	27°08'.5	26.8	Altair	62°08'.6	8°54'.2 N	29°34.0	26.1	18°07.3	11'.1	19°59.9 N	4'.7		30°	03.59	04:32	04:59	05:41	06:36	07:33												
	15	134°13'.6	67°01'.9	50.9	319°57'.8	10.4	74°09'.1	48.3	292°10.9	26.8	Ankaa	353°16'.4	42°14'.0 S	44°34'.7	26.1	32°37'.4	11'.1	55.2	4.8	55.1	20°	04.28	04:57	05:22	06:01	06:54	07:47												
	16	149°16.0	82°05'.1	50.4	334°59'.2	09.9	89°11'.0	48.4	307°13'.4	26.8	Antares	112°26'.7	26°27'.5 S	59°34'.5	26.2	47°07.5	11'.1	50.4	4.9		N 10°	04.50	05:18	05:41	06:17	07:09	08:00												
	17	164°18'.5	97°08'.2	49.9	350°00'.6	09.3	104°12'.8	48.5	322°15'.9	26.8				74°34.4	26.2	61°37.6	11'.2	45.5	5.0		0°	05.09	05:36	05:58	06:33	07:22	08:11												
	18	179°20'.9	112°11'.3	49.4	5°02'.0	08.8	119°14'.7	48.6	337°18'.4	26.8	Arcturus	145°56'.1	19°07'.1 N	89°34.3	26.2	76°07.8	11'.1	40.5	5.0		S 10°	05.26	05:53	06:16	06:49	07:36	08:22												
	19	194°23.4	127°14'.4	48.3	20°03'.3	08.3	134°16'.6	48.7	352°20'.9	26.8	Atria	107°28'.6	69°03'.0 S	104°34.0	26.2	90°37.9	11'.2	35.5	5.2		20°	05.43	06:10	06:34	07:05	07:51	08:35												
	20	209°25.9	142°17'.5	48.4	35°04'.7	07.7	149°18'.5	48.8	7°23'.4	26.8	Avior	234°18'.8	59°33'.3 S	119°34.0	26.2	105°08'.1	11'.2	30.3	5.3		30°	05.59	06:29	06:55	07:25	08:08	08:49												
	21	224°28'.3	157°20'.6	47.9	50°06'.1	07.2	164°20.4	48.9	22°25'.9	26.8	Bellatrix	278°33'.1	6°21'.5 S	134°33.9	26.2	119°38.3	11'.2	25.0	5.4		35°	06.08	06:40	07:08	07:36	08:18	08:57												
	22	239°30'.8	172°23'.7	47.4	65°07'.4	06.7	179°22'.3	48.1	37°28'.3	26.8	Betelgeuse	271°02'.4	7°24'.4 N	149°33.7	26.2	134°08.5	11'.2	19.6	5.4		40°	06.17	06:51	07:22	07:49	08:29	09:06												
23	254°33'.3	187°26'.7	46.9	80°08'.8	06.2	194°24'.2	49.2	52°30'.8	26.8				164°33.6	26.2	148°38.7	11'.3	14.2	5.6		45°	06.28	07:05	07:39	08:04	08:42	09:16													
<b>21</b>	00	269°35'.7	202°29'.8	18°46'.4 N	95°10'.2	3°05'.6 N	209°26'.1	19°49'.3 N	67°33'.3	6°26'.8 S	Canopus	263°57.0	52°42'.3 S	179°33.4	23°26.2 N	163°09.0	11'.2	19°08'.6 N	5'.7	55.2	S 50°	06.40	07:21	08:00	08:22	08:58	09:29												
	01	284°38'.2	217°32'.9	45.9	110°11'.5	05.1	224°27'.9	49.4	82°35'.8	26.8	Capella	280°35'.9	46°00'.5 N	194°33.3	26.2	177°39.2	11'.3	02.9	5.7		52°	06.45	07:29	08:10	08:31	09:06	09:35												
	02	299°40'.7	232°36'.0	45.5	125°12'.9	04.6	239°29'.8	49.5	97°38'.3	26.8	Deneb	49°31'.6	45°19'.5 N	209°33.2	26.2	192°09.5	11'.3	18°57'.2 N	5.9		54°	06.51	07:37	08:21	08:41	09:14	09:42												
	03	314°43'.1	247°39'.0	45.0	140°14'.3	04.0	254°31'.7	49.6	112°40'.8	26.8	Denebola	182°34'.4	14°30'.1 S	224°33.0	26.2	206°39.8	11'.3	51'.3	5.9	55.3	56°	06.57	07:46	08:33	08:52	09:24	09:49												
	04	329°45'.6	262°42'.1	44.5	155°15'.6	03.5	269°33'.6	49.7	127°43'.2	26.8	Diphda	348°56'.6	17°54'.9 S	239°32.9	26.2	221°10'.1	11'.3	45.4	6.1		58°	07.04	07:56	08:48	09:04	09:34	09:57												
	05	344°48'.1	277°45'.2	44.0	170°17'.0	03.0	284°35'.5	49.8	142°45'.7	26.8				254°32.8	26.2	235°40.4	11'.4	39.3	6.1		S 60°	07.11	08:08	09:06	09:19	09:46	10:06												
	06	359°50'.5	292°48'.2	43.5	185°18'.4	02.4	299°37'.4	49.9	157°48'.2	26.8	Dubhe	193°52'.7	61°41'.2 N	269°32.6	26.2	250°10.8	11'.3	33.2	6.2		S 62°	07.20	08:22	09:27	09:37	10:00	10:17												
	07	14°53'.0	307°51'.3	43.0	200°19'.7	01.9	314°39'.3	50.1	172°50'.7	26.8	El Nath	278°13'.9	28°36'.9 N	284°32.5	26.1	264°41'.1	11'.4	27.0	6.4																				
	08	29°55'.4	322°54.3	42.6	215°21'.1	01.4	329°41'.1	50.2	187°53'.2	26.8	Eltanin	90°45'.9	51°29'.4 N	299°32.3	26.1	279°11.5	11'.4	20.6	6.4																				
	09	44°57.9	337°57.4	42.1	230°22'.5	00.9	344°43'.0	50.3	202°55'.7	26.8																													