

Jan 1	100	48.7	Mar 3	160	56.2	May 3	221	3.7	Jul 3	281	11.2	Sep 2	341	18.6	Nov 2	41	26.1
Jan 2	101	47.9	Mar 4	161	55.4	May 4	222	2.8	Jul 4	282	10.3	Sep 3	342	17.8	Nov 3	42	25.2
Jan 3	102	47.0	Mar 5	162	54.5	May 5	223	2.0	Jul 5	283	9.5	Sep 4	343	16.9	Nov 4	43	24.4
Jan 4	103	46.2	Mar 6	163	53.6	May 6	224	1.1	Jul 6	284	8.6	Sep 5	344	16.1	Nov 5	44	23.5
Jan 5	104	45.3	Mar 7	164	52.8	May 7	225	0.3	Jul 7	285	7.7	Sep 6	345	15.2	Nov 6	45	22.7
Jan 6	105	44.4	Mar 8	165	51.9	May 8	225	59.4	Jul 8	286	6.9	Sep 7	346	14.3	Nov 7	46	21.8
Jan 7	106	43.6	Mar 9	166	51.1	May 9	226	58.5	Jul 9	287	6.0	Sep 8	347	13.5	Nov 8	47	20.9
Jan 8	107	42.7	Mar 10	167	50.2	May 10	227	57.7	Jul 10	288	5.1	Sep 9	348	12.6	Nov 9	48	20.1
Jan 9	108	41.9	Mar 11	168	49.3	May 11	228	56.8	Jul 11	289	4.3	Sep 10	349	11.7	Nov 10	49	19.2
Jan 10	109	41.0	Mar 12	169	48.5	May 12	229	56.0	Jul 12	290	3.4	Sep 11	350	10.9	Nov 11	50	18.4
Jan 11	110	40.1	Mar 13	170	47.6	May 13	230	55.1	Jul 13	291	2.6	Sep 12	351	10.0	Nov 12	51	17.5
Jan 12	111	39.3	Mar 14	171	46.8	May 14	231	54.2	Jul 14	292	1.7	Sep 13	352	9.2	Nov 13	52	16.6
Jan 13	112	38.4	Mar 15	172	45.9	May 15	232	53.4	Jul 15	293	0.8	Sep 14	353	8.3	Nov 14	53	15.8
Jan 14	113	37.6	Mar 16	173	45.0	May 16	233	52.5	Jul 16	293	60.0	Sep 15	354	7.4	Nov 15	54	14.9
Jan 15	114	36.7	Mar 17	174	44.2	May 17	234	51.6	Jul 17	294	59.1	Sep 16	355	6.6	Nov 16	55	14.1
Jan 16	115	35.8	Mar 18	175	43.3	May 18	235	50.8	Jul 18	295	58.3	Sep 17	356	5.7	Nov 17	56	13.2
Jan 17	116	35.0	Mar 19	176	42.4	May 19	236	49.9	Jul 19	296	57.4	Sep 18	357	4.9	Nov 18	57	12.3
Jan 18	117	34.1	Mar 20	177	41.6	May 20	237	49.1	Jul 20	297	56.5	Sep 19	358	4.0	Nov 19	58	11.5
Jan 19	118	33.2	Mar 21	178	40.7	May 21	238	48.2	Jul 21	298	55.7	Sep 20	359	3.1	Nov 20	59	10.6
Jan 20	119	32.4	Mar 22	179	39.9	May 22	239	47.3	Jul 22	299	54.8	Sep 21	0	2.3	Nov 21	60	9.8
Jan 21	120	31.5	Mar 23	180	39.0	May 23	240	46.5	Jul 23	300	53.9	Sep 22	1	1.4	Nov 22	61	8.9
Jan 22	121	30.7	Mar 24	181	38.1	May 24	241	45.6	Jul 24	301	53.1	Sep 23	2	0.6	Nov 23	62	8.0
Jan 23	122	29.8	Mar 25	182	37.3	May 25	242	44.8	Jul 25	302	52.2	Sep 24	2	59.7	Nov 24	63	7.2
Jan 24	123	28.9	Mar 26	183	36.4	May 26	243	43.9	Jul 26	303	51.4	Sep 25	3	58.8	Nov 25	64	6.3
Jan 25	124	28.1	Mar 27	184	35.6	May 27	244	43.0	Jul 27	304	50.5	Sep 26	4	58.0	Nov 26	65	5.4
Jan 26	125	27.2	Mar 28	185	34.7	May 28	245	42.2	Jul 28	305	49.6	Sep 27	5	57.1	Nov 27	66	4.6
Jan 27	126	26.4	Mar 29	186	33.8	May 29	246	41.3	Jul 29	306	48.8	Sep 28	6	56.2	Nov 28	67	3.7
Jan 28	127	25.5	Mar 30	187	33.0	May 30	247	40.5	Jul 30	307	47.9	Sep 29	7	55.4	Nov 29	68	2.9
Jan 29	128	24.6	Mar 31	188	32.1	May 31	248	39.6	Jul 31	308	47.1	Sep 30	8	54.5	Nov 30	69	2.0
Jan 30	129	23.8	Apr 1	189	31.3	Jun 1	249	38.7	Aug 1	309	46.2	Oct 1	9	53.7	Dec 1	70	1.1
Jan 31	130	22.9	Apr 2	190	30.4	Jun 2	250	37.9	Aug 2	310	45.3	Oct 2	10	52.8	Dec 2	71	0.3
Feb 1	131	22.1	Apr 3	191	29.5	Jun 3	251	37.0	Aug 3	311	44.5	Oct 3	11	51.9	Dec 3	71	59.4
Feb 2	132	21.2	Apr 4	192	28.7	Jun 4	252	36.1	Aug 4	312	43.6	Oct 4	12	51.1	Dec 4	72	58.6
Feb 3	133	20.3	Apr 5	193	27.8	Jun 5	253	35.3	Aug 5	313	42.8	Oct 5	13	50.2	Dec 5	73	57.7
Feb 4	134	19.5	Apr 6	194	26.9	Jun 6	254	34.4	Aug 6	314	41.9	Oct 6	14	49.4	Dec 6	74	56.8
Feb 5	135	18.6	Apr 7	195	26.1	Jun 7	255	33.6	Aug 7	315	41.0	Oct 7	15	48.5	Dec 7	75	56.0
Feb 6	136	17.7	Apr 8	196	25.2	Jun 8	256	32.7	Aug 8	316	40.2	Oct 8	16	47.6	Dec 8	76	55.1
Feb 7	137	16.9	Apr 9	197	24.4	Jun 9	257	31.8	Aug 9	317	39.3	Oct 9	17	46.8	Dec 9	77	54.3
Feb 8	138	16.0	Apr 10	198	23.5	Jun 10	258	31.0	Aug 10	318	38.4	Oct 10	18	45.9	Dec 10	78	53.4
Feb 9	139	15.2	Apr 11	199	22.6	Jun 11	259	30.1	Aug 11	319	37.6	Oct 11	19	45.1	Dec 11	79	52.5
Feb 10	140	14.3	Apr 12	200	21.8	Jun 12	260	29.3	Aug 12	320	36.7	Oct 12	20	44.2	Dec 12	80	51.7
Feb 11	141	13.4	Apr 13	201	20.9	Jun 13	261	28.4	Aug 13	321	35.9	Oct 13	21	43.3	Dec 13	81	50.8
Feb 12	142	12.6	Apr 14	202	20.1	Jun 14	262	27.5	Aug 14	322	35.0	Oct 14	22	42.5	Dec 14	82	49.9
Feb 13	143	11.7	Apr 15	203	19.2	Jun 15	263	26.7	Aug 15	323	34.1	Oct 15	23	41.6	Dec 15	83	49.1
Feb 14	144	10.9	Apr 16	204	18.3	Jun 16	264	25.8	Aug 16	324	33.3	Oct 16	24	40.7	Dec 16	84	48.2
Feb 15	145	10.0	Apr 17	205	17.5	Jun 17	265	25.0	Aug 17	325	32.4	Oct 17	25	39.9	Dec 17	85	47.4
Feb 16	146	9.1	Apr 18	206	16.6	Jun 18	266	24.1	Aug 18	326	31.6	Oct 18	26	39.0	Dec 18	86	46.5
Feb 17	147	8.3	Apr 19	207	15.8	Jun 19	267	23.2	Aug 19	327	30.7	Oct 19	27	38.2	Dec 19	87	45.6
Feb 18	148	7.4	Apr 20	208	14.9	Jun 20	268	22.4	Aug 20	328	29.8	Oct 20	28	37.3	Dec 20	88	44.8
Feb 19	149	6.6	Apr 21	209	14.0	Jun 21	269	21.5	Aug 21	329	29.0	Oct 21	29	36.4	Dec 21	89	43.9
Feb 20	150	5.7	Apr 22	210	13.2	Jun 22	270	20.6	Aug 22	330	28.1	Oct 22	30	35.6	Dec 22	90	43.1
Feb 21	151	4.8	Apr 23	211	12.3	Jun 23	271	19.8	Aug 23	331	27.2	Oct 23	31	34.7	Dec 23	91	42.2
Feb 22	152	4.0	Apr 24	212	11.5	Jun 24	272	18.9	Aug 24	332	26.4	Oct 24	32	33.9	Dec 24	92	41.3
Feb 23	153	3.1	Apr 25	213	10.6	Jun 25	273	18.1	Aug 25	333	25.5	Oct 25	33	33.0	Dec 25	93	40.5
Feb 24	154	2.3	Apr 26	214	9.7	Jun 26	274	17.2	Aug 26	334	24.7	Oct 26	34	32.1	Dec 26	94	39.6
Feb 25	155	1.4	Apr 27	215	8.9	Jun 27	275	16.3	Aug 27	335	23.8	Oct 27	35	31.3	Dec 27	95	38.8
Feb 26	156	0.5	Apr 28	216	8.0	Jun 28	276	15.5	Aug 28	336	22.9	Oct 28	36	30.4	Dec 28	96	37.9
Feb 27	156	59.7	Apr 29	217	7.1	Jun 29	277	14.6	Aug 29	337	22.1	Oct 29	37	29.6	Dec 29	97	37.0
Feb 28	157	58.8	Apr 30	218	6.3	Jun 30	278	13.8	Aug 30	338	21.2	Oct 30	38	28.7	Dec 30	98	36.2
Mar 1	158	57.9	May 1	219	5.4	Jul 1	279	12.9	Aug 31	339	20.4	Oct 31	39	27.8	Dec 31	99	35.3
Mar 2	159	57.1	May 2	220	4.6	Jul 2	280	12.0	Sep 1	340	19.5	Nov 1	40	27.0	Jan 1	100	34.4

GHA Aries Increments							
hours UT	°	'	minutes UT	°	'	seconds UT	'
1	15	2.5	1	0	15.0	1	0.3
2	30	4.9	2	0	30.1	2	0.5
3	45	7.4	3	0	45.1	3	0.8
4	60	9.9	4	1	0.2	4	1.0
5	75	12.3	5	1	15.2	5	1.3
6	90	14.8	6	1	30.2	6	1.5
7	105	17.2	7	1	45.3	7	1.8
8	120	19.7	8	2	0.3	8	2.0
9	135	22.2	9	2	15.4	9	2.3
10	150	24.6	10	2	30.4	10	2.5
11	165	27.1	11	2	45.5	11	2.8
12	180	29.6	12	3	0.5	12	3.0
13	195	32.0	13	3	15.5	13	3.3
14	210	34.5	14	3	30.6	14	3.5
15	225	37.0	15	3	45.6	15	3.8
16	240	39.4	16	4	0.7	16	4.0
17	255	41.9	17	4	15.7	17	4.3
18	270	44.4	18	4	30.7	18	4.5
19	285	46.8	19	4	45.8	19	4.8
20	300	49.3	20	5	0.8	20	5.0
21	315	51.7	21	5	15.9	21	5.3
22	330	54.2	22	5	30.9	22	5.5
23	345	56.7	23	5	45.9	23	5.8
24	360	59.1	24	6	1.0	24	6.0
			25	6	16.0	25	6.3
			26	6	31.1	26	6.5
			27	6	46.1	27	6.8
			28	7	1.1	28	7.0
			29	7	16.2	29	7.3
			30	7	31.2	30	7.5
			31	7	46.3	31	7.8
			32	8	1.3	32	8.0
			33	8	16.4	33	8.3
			34	8	31.4	34	8.5
			35	8	46.4	35	8.8
			36	9	1.5	36	9.0
			37	9	16.5	37	9.3
			38	9	31.6	38	9.5
			39	9	46.6	39	9.8
			40	10	1.6	40	10.0
			41	10	16.7	41	10.3
			42	10	31.7	42	10.5
			43	10	46.8	43	10.8
			44	11	1.8	44	11.0
			45	11	16.8	45	11.3
			46	11	31.9	46	11.5
			47	11	46.9	47	11.8
			48	12	2.0	48	12.0
			49	12	17.0	49	12.3
			50	12	32.1	50	12.5
			51	12	47.1	51	12.8
			52	13	2.1	52	13.0
			53	13	17.2	53	13.3
			54	13	32.2	54	13.5
			55	13	47.3	55	13.8
			56	14	2.3	56	14.0
			57	14	17.3	57	14.3
			58	14	32.4	58	14.5
			59	14	47.4	59	14.8
			60	15	2.5	60	15.0