

Jan 1	100	16.3	Mar 3	160	23.7	May 3	220	31.2	Jul 3	280	38.7	Sep 2	340	46.1	Nov 2	40	53.6
Jan 2	101	15.4	Mar 4	161	22.9	May 4	221	30.4	Jul 4	281	37.8	Sep 3	341	45.3	Nov 3	41	52.8
Jan 3	102	14.5	Mar 5	162	22.0	May 5	222	29.5	Jul 5	282	37.0	Sep 4	342	44.4	Nov 4	42	51.9
Jan 4	103	13.7	Mar 6	163	21.2	May 6	223	28.6	Jul 6	283	36.1	Sep 5	343	43.6	Nov 5	43	51.0
Jan 5	104	12.8	Mar 7	164	20.3	May 7	224	27.8	Jul 7	284	35.2	Sep 6	344	42.7	Nov 6	44	50.2
Jan 6	105	12.0	Mar 8	165	19.4	May 8	225	26.9	Jul 8	285	34.4	Sep 7	345	41.8	Nov 7	45	49.3
Jan 7	106	11.1	Mar 9	166	18.6	May 9	226	26.0	Jul 9	286	33.5	Sep 8	346	41.0	Nov 8	46	48.5
Jan 8	107	10.2	Mar 10	167	17.7	May 10	227	25.2	Jul 10	287	32.7	Sep 9	347	40.1	Nov 9	47	47.6
Jan 9	108	9.4	Mar 11	168	16.8	May 11	228	24.3	Jul 11	288	31.8	Sep 10	348	39.3	Nov 10	48	46.7
Jan 10	109	8.5	Mar 12	169	16.0	May 12	229	23.5	Jul 12	289	30.9	Sep 11	349	38.4	Nov 11	49	45.9
Jan 11	110	7.6	Mar 13	170	15.1	May 13	230	22.6	Jul 13	290	30.1	Sep 12	350	37.5	Nov 12	50	45.0
Jan 12	111	6.8	Mar 14	171	14.3	May 14	231	21.7	Jul 14	291	29.2	Sep 13	351	36.7	Nov 13	51	44.1
Jan 13	112	5.9	Mar 15	172	13.4	May 15	232	20.9	Jul 15	292	28.3	Sep 14	352	35.8	Nov 14	52	43.3
Jan 14	113	5.1	Mar 16	173	12.5	May 16	233	20.0	Jul 16	293	27.5	Sep 15	353	35.0	Nov 15	53	42.4
Jan 15	114	4.2	Mar 17	174	11.7	May 17	234	19.2	Jul 17	294	26.6	Sep 16	354	34.1	Nov 16	54	41.6
Jan 16	115	3.3	Mar 18	175	10.8	May 18	235	18.3	Jul 18	295	25.8	Sep 17	355	33.2	Nov 17	55	40.7
Jan 17	116	2.5	Mar 19	176	10.0	May 19	236	17.4	Jul 19	296	24.9	Sep 18	356	32.4	Nov 18	56	39.8
Jan 18	117	1.6	Mar 20	177	9.1	May 20	237	16.6	Jul 20	297	24.0	Sep 19	357	31.5	Nov 19	57	39.0
Jan 19	118	0.8	Mar 21	178	8.2	May 21	238	15.7	Jul 21	298	23.2	Sep 20	358	30.6	Nov 20	58	38.1
Jan 20	118	59.9	Mar 22	179	7.4	May 22	239	14.9	Jul 22	299	22.3	Sep 21	359	29.8	Nov 21	59	37.3
Jan 21	119	59.0	Mar 23	180	6.5	May 23	240	14.0	Jul 23	300	21.5	Sep 22	0	28.9	Nov 22	60	36.4
Jan 22	120	58.2	Mar 24	181	5.7	May 24	241	13.1	Jul 24	301	20.6	Sep 23	1	28.1	Nov 23	61	35.5
Jan 23	121	57.3	Mar 25	182	4.8	May 25	242	12.3	Jul 25	302	19.7	Sep 24	2	27.2	Nov 24	62	34.7
Jan 24	122	56.5	Mar 26	183	3.9	May 26	243	11.4	Jul 26	303	18.9	Sep 25	3	26.3	Nov 25	63	33.8
Jan 25	123	55.6	Mar 27	184	3.1	May 27	244	10.5	Jul 27	304	18.0	Sep 26	4	25.5	Nov 26	64	33.0
Jan 26	124	54.7	Mar 28	185	2.2	May 28	245	9.7	Jul 28	305	17.2	Sep 27	5	24.6	Nov 27	65	32.1
Jan 27	125	53.9	Mar 29	186	1.3	May 29	246	8.8	Jul 29	306	16.3	Sep 28	6	23.8	Nov 28	66	31.2
Jan 28	126	53.0	Mar 30	187	0.5	May 30	247	8.0	Jul 30	307	15.4	Sep 29	7	22.9	Nov 29	67	30.4
Jan 29	127	52.1	Mar 31	187	59.6	May 31	248	7.1	Jul 31	308	14.6	Sep 30	8	22.0	Nov 30	68	29.5
Jan 30	128	51.3	Apr 1	188	58.8	Jun 1	249	6.2	Aug 1	309	13.7	Oct 1	9	21.2	Dec 1	69	28.7
Jan 31	129	50.4	Apr 2	189	57.9	Jun 2	250	5.4	Aug 2	310	12.8	Oct 2	10	20.3	Dec 2	70	27.8
Feb 1	130	49.6	Apr 3	190	57.0	Jun 3	251	4.5	Aug 3	311	12.0	Oct 3	11	19.5	Dec 3	71	26.9
Feb 2	131	48.7	Apr 4	191	56.2	Jun 4	252	3.7	Aug 4	312	11.1	Oct 4	12	18.6	Dec 4	72	26.1
Feb 3	132	47.8	Apr 5	192	55.3	Jun 5	253	2.8	Aug 5	313	10.3	Oct 5	13	17.7	Dec 5	73	25.2
Feb 4	133	47.0	Apr 6	193	54.5	Jun 6	254	1.9	Aug 6	314	9.4	Oct 6	14	16.9	Dec 6	74	24.3
Feb 5	134	46.1	Apr 7	194	53.6	Jun 7	255	1.1	Aug 7	315	8.5	Oct 7	15	16.0	Dec 7	75	23.5
Feb 6	135	45.3	Apr 8	195	52.7	Jun 8	256	0.2	Aug 8	316	7.7	Oct 8	16	15.1	Dec 8	76	22.6
Feb 7	136	44.4	Apr 9	196	51.9	Jun 9	256	59.4	Aug 9	317	6.8	Oct 9	17	14.3	Dec 9	77	21.8
Feb 8	137	43.5	Apr 10	197	51.0	Jun 10	257	58.5	Aug 10	318	6.0	Oct 10	18	13.4	Dec 10	78	20.9
Feb 9	138	42.7	Apr 11	198	50.2	Jun 11	258	57.6	Aug 11	319	5.1	Oct 11	19	12.6	Dec 11	79	20.0
Feb 10	139	41.8	Apr 12	199	49.3	Jun 12	259	56.8	Aug 12	320	4.2	Oct 12	20	11.7	Dec 12	80	19.2
Feb 11	140	41.0	Apr 13	200	48.4	Jun 13	260	55.9	Aug 13	321	3.4	Oct 13	21	10.8	Dec 13	81	18.3
Feb 12	141	40.1	Apr 14	201	47.6	Jun 14	261	55.0	Aug 14	322	2.5	Oct 14	22	10.0	Dec 14	82	17.5
Feb 13	142	39.2	Apr 15	202	46.7	Jun 15	262	54.2	Aug 15	323	1.6	Oct 15	23	9.1	Dec 15	83	16.6
Feb 14	143	38.4	Apr 16	203	45.8	Jun 16	263	53.3	Aug 16	324	0.8	Oct 16	24	8.3	Dec 16	84	15.7
Feb 15	144	37.5	Apr 17	204	45.0	Jun 17	264	52.5	Aug 17	324	59.9	Oct 17	25	7.4	Dec 17	85	14.9
Feb 16	145	36.6	Apr 18	205	44.1	Jun 18	265	51.6	Aug 18	325	59.1	Oct 18	26	6.5	Dec 18	86	14.0
Feb 17	146	35.8	Apr 19	206	43.3	Jun 19	266	50.7	Aug 19	326	58.2	Oct 19	27	5.7	Dec 19	87	13.2
Feb 18	147	34.9	Apr 20	207	42.4	Jun 20	267	49.9	Aug 20	327	57.3	Oct 20	28	4.8	Dec 20	88	12.3
Feb 19	148	34.1	Apr 21	208	41.5	Jun 21	268	49.0	Aug 21	328	56.5	Oct 21	29	4.0	Dec 21	89	11.4
Feb 20	149	33.2	Apr 22	209	40.7	Jun 22	269	48.2	Aug 22	329	55.6	Oct 22	30	3.1	Dec 22	90	10.6
Feb 21	150	32.3	Apr 23	210	39.8	Jun 23	270	47.3	Aug 23	330	54.8	Oct 23	31	2.2	Dec 23	91	9.7
Feb 22	151	31.5	Apr 24	211	39.0	Jun 24	271	46.4	Aug 24	331	53.9	Oct 24	32	1.4	Dec 24	92	8.8
Feb 23	152	30.6	Apr 25	212	38.1	Jun 25	272	45.6	Aug 25	332	53.0	Oct 25	33	0.5	Dec 25	93	8.0
Feb 24	153	29.8	Apr 26	213	37.2	Jun 26	273	44.7	Aug 26	333	52.2	Oct 26	33	59.6	Dec 26	94	7.1
Feb 25	154	28.9	Apr 27	214	36.4	Jun 27	274	43.9	Aug 27	334	51.3	Oct 27	34	58.8	Dec 27	95	6.3
Feb 26	155	28.0	Apr 28	215	35.5	Jun 28	275	43.0	Aug 28	335	50.5	Oct 28	35	57.9	Dec 28	96	5.4
Feb 27	156	27.2	Apr 29	216	34.7	Jun 29	276	42.1	Aug 29	336	49.6	Oct 29	36	57.1	Dec 29	97	4.5
Feb 28	157	26.3	Apr 30	217	33.8	Jun 30	277	41.3	Aug 30	337	48.7	Oct 30	37	56.2	Dec 30	98	3.7
Mar 1	158	25.5	May 1	218	32.9	Jul 1	278	40.4	Aug 31	338	47.9	Oct 31	38	55.3	Dec 31	99	2.8
Mar 2	159	24.6	May 2	219	32.1	Jul 2	279	39.5	Sep 1	339	47.0	Nov 1	39	54.5	Jan 1	100	2.0

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