

Jan 1	100	3.9	Mar 2	160	11.4	May 2	220	18.9	Jul 2	280	26.3	Sep 1	340	33.8	Nov 1	40	41.3
Jan 2	101	3.0	Mar 3	161	10.5	May 3	221	18.0	Jul 3	281	25.5	Sep 2	341	32.9	Nov 2	41	40.4
Jan 3	102	2.2	Mar 4	162	9.7	May 4	222	17.1	Jul 4	282	24.6	Sep 3	342	32.1	Nov 3	42	39.5
Jan 4	103	1.3	Mar 5	163	8.8	May 5	223	16.3	Jul 5	283	23.7	Sep 4	343	31.2	Nov 4	43	38.7
Jan 5	104	0.5	Mar 6	164	7.9	May 6	224	15.4	Jul 6	284	22.9	Sep 5	344	30.4	Nov 5	44	37.8
Jan 6	104	59.6	Mar 7	165	7.1	May 7	225	14.6	Jul 7	285	22.0	Sep 6	345	29.5	Nov 6	45	37.0
Jan 7	105	58.7	Mar 8	166	6.2	May 8	226	13.7	Jul 8	286	21.2	Sep 7	346	28.6	Nov 7	46	36.1
Jan 8	106	57.9	Mar 9	167	5.4	May 9	227	12.8	Jul 9	287	20.3	Sep 8	347	27.8	Nov 8	47	35.2
Jan 9	107	57.0	Mar 10	168	4.5	May 10	228	12.0	Jul 10	288	19.4	Sep 9	348	26.9	Nov 9	48	34.4
Jan 10	108	56.2	Mar 11	169	3.6	May 11	229	11.1	Jul 11	289	18.6	Sep 10	349	26.0	Nov 10	49	33.5
Jan 11	109	55.3	Mar 12	170	2.8	May 12	230	10.3	Jul 12	290	17.7	Sep 11	350	25.2	Nov 11	50	32.7
Jan 12	110	54.4	Mar 13	171	1.9	May 13	231	9.4	Jul 13	291	16.9	Sep 12	351	24.3	Nov 12	51	31.8
Jan 13	111	53.6	Mar 14	172	1.1	May 14	232	8.5	Jul 14	292	16.0	Sep 13	352	23.5	Nov 13	52	30.9
Jan 14	112	52.7	Mar 15	173	0.2	May 15	233	7.7	Jul 15	293	15.1	Sep 14	353	22.6	Nov 14	53	30.1
Jan 15	113	51.9	Mar 16	173	59.3	May 16	234	6.8	Jul 16	294	14.3	Sep 15	354	21.7	Nov 15	54	29.2
Jan 16	114	51.0	Mar 17	174	58.5	May 17	235	5.9	Jul 17	295	13.4	Sep 16	355	20.9	Nov 16	55	28.4
Jan 17	115	50.1	Mar 18	175	57.6	May 18	236	5.1	Jul 18	296	12.6	Sep 17	356	20.0	Nov 17	56	27.5
Jan 18	116	49.3	Mar 19	176	56.7	May 19	237	4.2	Jul 19	297	11.7	Sep 18	357	19.2	Nov 18	57	26.6
Jan 19	117	48.4	Mar 20	177	55.9	May 20	238	3.4	Jul 20	298	10.8	Sep 19	358	18.3	Nov 19	58	25.8
Jan 20	118	47.5	Mar 21	178	55.0	May 21	239	2.5	Jul 21	299	10.0	Sep 20	359	17.4	Nov 20	59	24.9
Jan 21	119	46.7	Mar 22	179	54.2	May 22	240	1.6	Jul 22	300	9.1	Sep 21	0	16.6	Nov 21	60	24.0
Jan 22	120	45.8	Mar 23	180	53.3	May 23	241	0.8	Jul 23	301	8.2	Sep 22	1	15.7	Nov 22	61	23.2
Jan 23	121	45.0	Mar 24	181	52.4	May 24	241	59.9	Jul 24	302	7.4	Sep 23	2	14.9	Nov 23	62	22.3
Jan 24	122	44.1	Mar 25	182	51.6	May 25	242	59.1	Jul 25	303	6.5	Sep 24	3	14.0	Nov 24	63	21.5
Jan 25	123	43.2	Mar 26	183	50.7	May 26	243	58.2	Jul 26	304	5.7	Sep 25	4	13.1	Nov 25	64	20.6
Jan 26	124	42.4	Mar 27	184	49.9	May 27	244	57.3	Jul 27	305	4.8	Sep 26	5	12.3	Nov 26	65	19.7
Jan 27	125	41.5	Mar 28	185	49.0	May 28	245	56.5	Jul 28	306	3.9	Sep 27	6	11.4	Nov 27	66	18.9
Jan 28	126	40.7	Mar 29	186	48.1	May 29	246	55.6	Jul 29	307	3.1	Sep 28	7	10.5	Nov 28	67	18.0
Jan 29	127	39.8	Mar 30	187	47.3	May 30	247	54.8	Jul 30	308	2.2	Sep 29	8	9.7	Nov 29	68	17.2
Jan 30	128	38.9	Mar 31	188	46.4	May 31	248	53.9	Jul 31	309	1.4	Sep 30	9	8.8	Nov 30	69	16.3
Jan 31	129	38.1	Apr 1	189	45.6	Jun 1	249	53.0	Aug 1	310	0.5	Oct 1	10	8.0	Dec 1	70	15.4
Feb 1	130	37.2	Apr 2	190	44.7	Jun 2	250	52.2	Aug 2	310	59.6	Oct 2	11	7.1	Dec 2	71	14.6
Feb 2	131	36.4	Apr 3	191	43.8	Jun 3	251	51.3	Aug 3	311	58.8	Oct 3	12	6.2	Dec 3	72	13.7
Feb 3	132	35.5	Apr 4	192	43.0	Jun 4	252	50.4	Aug 4	312	57.9	Oct 4	13	5.4	Dec 4	73	12.9
Feb 4	133	34.6	Apr 5	193	42.1	Jun 5	253	49.6	Aug 5	313	57.1	Oct 5	14	4.5	Dec 5	74	12.0
Feb 5	134	33.8	Apr 6	194	41.2	Jun 6	254	48.7	Aug 6	314	56.2	Oct 6	15	3.7	Dec 6	75	11.1
Feb 6	135	32.9	Apr 7	195	40.4	Jun 7	255	47.9	Aug 7	315	55.3	Oct 7	16	2.8	Dec 7	76	10.3
Feb 7	136	32.0	Apr 8	196	39.5	Jun 8	256	47.0	Aug 8	316	54.5	Oct 8	17	1.9	Dec 8	77	9.4
Feb 8	137	31.2	Apr 9	197	38.7	Jun 9	257	46.1	Aug 9	317	53.6	Oct 9	18	1.1	Dec 9	78	8.6
Feb 9	138	30.3	Apr 10	198	37.8	Jun 10	258	45.3	Aug 10	318	52.7	Oct 10	19	0.2	Dec 10	79	7.7
Feb 10	139	29.5	Apr 11	199	36.9	Jun 11	259	44.4	Aug 11	319	51.9	Oct 11	19	59.4	Dec 11	80	6.8
Feb 11	140	28.6	Apr 12	200	36.1	Jun 12	260	43.6	Aug 12	320	51.0	Oct 12	20	58.5	Dec 12	81	6.0
Feb 12	141	27.7	Apr 13	201	35.2	Jun 13	261	42.7	Aug 13	321	50.2	Oct 13	21	57.6	Dec 13	82	5.1
Feb 13	142	26.9	Apr 14	202	34.4	Jun 14	262	41.8	Aug 14	322	49.3	Oct 14	22	56.8	Dec 14	83	4.2
Feb 14	143	26.0	Apr 15	203	33.5	Jun 15	263	41.0	Aug 15	323	48.4	Oct 15	23	55.9	Dec 15	84	3.4
Feb 15	144	25.2	Apr 16	204	32.6	Jun 16	264	40.1	Aug 16	324	47.6	Oct 16	24	55.0	Dec 16	85	2.5
Feb 16	145	24.3	Apr 17	205	31.8	Jun 17	265	39.3	Aug 17	325	46.7	Oct 17	25	54.2	Dec 17	86	1.7
Feb 17	146	23.4	Apr 18	206	30.9	Jun 18	266	38.4	Aug 18	326	45.9	Oct 18	26	53.3	Dec 18	87	0.8
Feb 18	147	22.6	Apr 19	207	30.1	Jun 19	267	37.5	Aug 19	327	45.0	Oct 19	27	52.5	Dec 19	87	59.9
Feb 19	148	21.7	Apr 20	208	29.2	Jun 20	268	36.7	Aug 20	328	44.1	Oct 20	28	51.6	Dec 20	88	59.1
Feb 20	149	20.9	Apr 21	209	28.3	Jun 21	269	35.8	Aug 21	329	43.3	Oct 21	29	50.7	Dec 21	89	58.2
Feb 21	150	20.0	Apr 22	210	27.5	Jun 22	270	34.9	Aug 22	330	42.4	Oct 22	30	49.9	Dec 22	90	57.4
Feb 22	151	19.1	Apr 23	211	26.6	Jun 23	271	34.1	Aug 23	331	41.5	Oct 23	31	49.0	Dec 23	91	56.5
Feb 23	152	18.3	Apr 24	212	25.7	Jun 24	272	33.2	Aug 24	332	40.7	Oct 24	32	48.2	Dec 24	92	55.6
Feb 24	153	17.4	Apr 25	213	24.9	Jun 25	273	32.4	Aug 25	333	39.8	Oct 25	33	47.3	Dec 25	93	54.8
Feb 25	154	16.5	Apr 26	214	24.0	Jun 26	274	31.5	Aug 26	334	39.0	Oct 26	34	46.4	Dec 26	94	53.9
Feb 26	155	15.7	Apr 27	215	23.2	Jun 27	275	30.6	Aug 27	335	38.1	Oct 27	35	45.6	Dec 27	95	53.1
Feb 27	156	14.8	Apr 28	216	22.3	Jun 28	276	29.8	Aug 28	336	37.2	Oct 28	36	44.7	Dec 28	96	52.2
Feb 28	157	14.0	Apr 29	217	21.4	Jun 29	277	28.9	Aug 29	337	36.4	Oct 29	37	43.9	Dec 29	97	51.3
Feb 29	158	13.1	Apr 30	218	20.6	Jun 30	278	28.1	Aug 30	338	35.5	Oct 30	38	43.0	Dec 30	98	50.5
Mar 1	159	12.2	May 1	219	19.7	Jul 1	279	27.2	Aug 31	339	34.7	Oct 31	39	42.1	Dec 31	99	49.6

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