

Jan 1	100	2.0	Mar 2	160	9.4	May 2	220	16.9	Jul 2	280	24.4	Sep 1	340	31.8	Nov 1	40	39.3
Jan 2	101	1.1	Mar 3	161	8.6	May 3	221	16.1	Jul 3	281	23.5	Sep 2	341	31.0	Nov 2	41	38.5
Jan 3	102	0.2	Mar 4	162	7.7	May 4	222	15.2	Jul 4	282	22.7	Sep 3	342	30.1	Nov 3	42	37.6
Jan 4	102	59.4	Mar 5	163	6.9	May 5	223	14.3	Jul 5	283	21.8	Sep 4	343	29.3	Nov 4	43	36.7
Jan 5	103	58.5	Mar 6	164	6.0	May 6	224	13.5	Jul 6	284	20.9	Sep 5	344	28.4	Nov 5	44	35.9
Jan 6	104	57.7	Mar 7	165	5.1	May 7	225	12.6	Jul 7	285	20.1	Sep 6	345	27.5	Nov 6	45	35.0
Jan 7	105	56.8	Mar 8	166	4.3	May 8	226	11.7	Jul 8	286	19.2	Sep 7	346	26.7	Nov 7	46	34.2
Jan 8	106	55.9	Mar 9	167	3.4	May 9	227	10.9	Jul 9	287	18.4	Sep 8	347	25.8	Nov 8	47	33.3
Jan 9	107	55.1	Mar 10	168	2.5	May 10	228	10.0	Jul 10	288	17.5	Sep 9	348	25.0	Nov 9	48	32.4
Jan 10	108	54.2	Mar 11	169	1.7	May 11	229	9.2	Jul 11	289	16.6	Sep 10	349	24.1	Nov 10	49	31.6
Jan 11	109	53.3	Mar 12	170	0.8	May 12	230	8.3	Jul 12	290	15.8	Sep 11	350	23.2	Nov 11	50	30.7
Jan 12	110	52.5	Mar 13	170	60.0	May 13	231	7.4	Jul 13	291	14.9	Sep 12	351	22.4	Nov 12	51	29.9
Jan 13	111	51.6	Mar 14	171	59.1	May 14	232	6.6	Jul 14	292	14.1	Sep 13	352	21.5	Nov 13	52	29.0
Jan 14	112	50.8	Mar 15	172	58.2	May 15	233	5.7	Jul 15	293	13.2	Sep 14	353	20.7	Nov 14	53	28.1
Jan 15	113	49.9	Mar 16	173	57.4	May 16	234	4.9	Jul 16	294	12.3	Sep 15	354	19.8	Nov 15	54	27.3
Jan 16	114	49.0	Mar 17	174	56.5	May 17	235	4.0	Jul 17	295	11.5	Sep 16	355	18.9	Nov 16	55	26.4
Jan 17	115	48.2	Mar 18	175	55.7	May 18	236	3.1	Jul 18	296	10.6	Sep 17	356	18.1	Nov 17	56	25.5
Jan 18	116	47.3	Mar 19	176	54.8	May 19	237	2.3	Jul 19	297	9.7	Sep 18	357	17.2	Nov 18	57	24.7
Jan 19	117	46.5	Mar 20	177	53.9	May 20	238	1.4	Jul 20	298	8.9	Sep 19	358	16.3	Nov 19	58	23.8
Jan 20	118	45.6	Mar 21	178	53.1	May 21	239	0.6	Jul 21	299	8.0	Sep 20	359	15.5	Nov 20	59	23.0
Jan 21	119	44.7	Mar 22	179	52.2	May 22	239	59.7	Jul 22	300	7.2	Sep 21	0	14.6	Nov 21	60	22.1
Jan 22	120	43.9	Mar 23	180	51.4	May 23	240	58.8	Jul 23	301	6.3	Sep 22	1	13.8	Nov 22	61	21.2
Jan 23	121	43.0	Mar 24	181	50.5	May 24	241	58.0	Jul 24	302	5.4	Sep 23	2	12.9	Nov 23	62	20.4
Jan 24	122	42.2	Mar 25	182	49.6	May 25	242	57.1	Jul 25	303	4.6	Sep 24	3	12.0	Nov 24	63	19.5
Jan 25	123	41.3	Mar 26	183	48.8	May 26	243	56.2	Jul 26	304	3.7	Sep 25	4	11.2	Nov 25	64	18.7
Jan 26	124	40.4	Mar 27	184	47.9	May 27	244	55.4	Jul 27	305	2.9	Sep 26	5	10.3	Nov 26	65	17.8
Jan 27	125	39.6	Mar 28	185	47.0	May 28	245	54.5	Jul 28	306	2.0	Sep 27	6	9.5	Nov 27	66	16.9
Jan 28	126	38.7	Mar 29	186	46.2	May 29	246	53.7	Jul 29	307	1.1	Sep 28	7	8.6	Nov 28	67	16.1
Jan 29	127	37.9	Mar 30	187	45.3	May 30	247	52.8	Jul 30	308	0.3	Sep 29	8	7.7	Nov 29	68	15.2
Jan 30	128	37.0	Mar 31	188	44.5	May 31	248	51.9	Jul 31	308	59.4	Sep 30	9	6.9	Nov 30	69	14.4
Jan 31	129	36.1	Apr 1	189	43.6	Jun 1	249	51.1	Aug 1	309	58.5	Oct 1	10	6.0	Dec 1	70	13.5
Feb 1	130	35.3	Apr 2	190	42.7	Jun 2	250	50.2	Aug 2	310	57.7	Oct 2	11	5.2	Dec 2	71	12.6
Feb 2	131	34.4	Apr 3	191	41.9	Jun 3	251	49.4	Aug 3	311	56.8	Oct 3	12	4.3	Dec 3	72	11.8
Feb 3	132	33.5	Apr 4	192	41.0	Jun 4	252	48.5	Aug 4	312	56.0	Oct 4	13	3.4	Dec 4	73	10.9
Feb 4	133	32.7	Apr 5	193	40.2	Jun 5	253	47.6	Aug 5	313	55.1	Oct 5	14	2.6	Dec 5	74	10.0
Feb 5	134	31.8	Apr 6	194	39.3	Jun 6	254	46.8	Aug 6	314	54.2	Oct 6	15	1.7	Dec 6	75	9.2
Feb 6	135	31.0	Apr 7	195	38.4	Jun 7	255	45.9	Aug 7	315	53.4	Oct 7	16	0.8	Dec 7	76	8.3
Feb 7	136	30.1	Apr 8	196	37.6	Jun 8	256	45.1	Aug 8	316	52.5	Oct 8	16	60.0	Dec 8	77	7.5
Feb 8	137	29.2	Apr 9	197	36.7	Jun 9	257	44.2	Aug 9	317	51.7	Oct 9	17	59.1	Dec 9	78	6.6
Feb 9	138	28.4	Apr 10	198	35.9	Jun 10	258	43.3	Aug 10	318	50.8	Oct 10	18	58.3	Dec 10	79	5.7
Feb 10	139	27.5	Apr 11	199	35.0	Jun 11	259	42.5	Aug 11	319	49.9	Oct 11	19	57.4	Dec 11	80	4.9
Feb 11	140	26.7	Apr 12	200	34.1	Jun 12	260	41.6	Aug 12	320	49.1	Oct 12	20	56.5	Dec 12	81	4.0
Feb 12	141	25.8	Apr 13	201	33.3	Jun 13	261	40.7	Aug 13	321	48.2	Oct 13	21	55.7	Dec 13	82	3.2
Feb 13	142	24.9	Apr 14	202	32.4	Jun 14	262	39.9	Aug 14	322	47.4	Oct 14	22	54.8	Dec 14	83	2.3
Feb 14	143	24.1	Apr 15	203	31.6	Jun 15	263	39.0	Aug 15	323	46.5	Oct 15	23	54.0	Dec 15	84	1.4
Feb 15	144	23.2	Apr 16	204	30.7	Jun 16	264	38.2	Aug 16	324	45.6	Oct 16	24	53.1	Dec 16	85	0.6
Feb 16	145	22.4	Apr 17	205	29.8	Jun 17	265	37.3	Aug 17	325	44.8	Oct 17	25	52.2	Dec 17	85	59.7
Feb 17	146	21.5	Apr 18	206	29.0	Jun 18	266	36.4	Aug 18	326	43.9	Oct 18	26	51.4	Dec 18	86	58.9
Feb 18	147	20.6	Apr 19	207	28.1	Jun 19	267	35.6	Aug 19	327	43.0	Oct 19	27	50.5	Dec 19	87	58.0
Feb 19	148	19.8	Apr 20	208	27.2	Jun 20	268	34.7	Aug 20	328	42.2	Oct 20	28	49.7	Dec 20	88	57.1
Feb 20	149	18.9	Apr 21	209	26.4	Jun 21	269	33.9	Aug 21	329	41.3	Oct 21	29	48.8	Dec 21	89	56.3
Feb 21	150	18.0	Apr 22	210	25.5	Jun 22	270	33.0	Aug 22	330	40.5	Oct 22	30	47.9	Dec 22	90	55.4
Feb 22	151	17.2	Apr 23	211	24.7	Jun 23	271	32.1	Aug 23	331	39.6	Oct 23	31	47.1	Dec 23	91	54.6
Feb 23	152	16.3	Apr 24	212	23.8	Jun 24	272	31.3	Aug 24	332	38.7	Oct 24	32	46.2	Dec 24	92	53.7
Feb 24	153	15.5	Apr 25	213	22.9	Jun 25	273	30.4	Aug 25	333	37.9	Oct 25	33	45.3	Dec 25	93	52.8
Feb 25	154	14.6	Apr 26	214	22.1	Jun 26	274	29.6	Aug 26	334	37.0	Oct 26	34	44.5	Dec 26	94	52.0
Feb 26	155	13.7	Apr 27	215	21.2	Jun 27	275	28.7	Aug 27	335	36.2	Oct 27	35	43.6	Dec 27	95	51.1
Feb 27	156	12.9	Apr 28	216	20.4	Jun 28	276	27.8	Aug 28	336	35.3	Oct 28	36	42.8	Dec 28	96	50.2
Feb 28	157	12.0	Apr 29	217	19.5	Jun 29	277	27.0	Aug 29	337	34.4	Oct 29	37	41.9	Dec 29	97	49.4
Feb 29	158	11.2	Apr 30	218	18.6	Jun 30	278	26.1	Aug 30	338	33.6	Oct 30	38	41.0	Dec 30	98	48.5
Mar 1	159	10.3	May 1	219	17.8	Jul 1	279	25.2	Aug 31	339	32.7	Oct 31	39	40.2	Dec 31	99	47.7

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