

2004

GHA Aries

Jan 1	100	0.0	Mar 2	160	7.5	May 2	220	15.0	Jul 2	280	22.4	Sep 1	340	29.9	Nov 1	40	37.4
Jan 2	100	59.2	Mar 3	161	6.6	May 3	221	14.1	Jul 3	281	21.6	Sep 2	341	29.0	Nov 2	41	36.5
Jan 3	101	58.3	Mar 4	162	5.8	May 4	222	13.2	Jul 4	282	20.7	Sep 3	342	28.2	Nov 3	42	35.6
Jan 4	102	57.4	Mar 5	163	4.9	May 5	223	12.4	Jul 5	283	19.9	Sep 4	343	27.3	Nov 4	43	34.8
Jan 5	103	56.6	Mar 6	164	4.0	May 6	224	11.5	Jul 6	284	19.0	Sep 5	344	26.5	Nov 5	44	33.9
Jan 6	104	55.7	Mar 7	165	3.2	May 7	225	10.7	Jul 7	285	18.1	Sep 6	345	25.6	Nov 6	45	33.1
Jan 7	105	54.8	Mar 8	166	2.3	May 8	226	9.8	Jul 8	286	17.3	Sep 7	346	24.7	Nov 7	46	32.2
Jan 8	106	54.0	Mar 9	167	1.5	May 9	227	8.9	Jul 9	287	16.4	Sep 8	347	23.9	Nov 8	47	31.3
Jan 9	107	53.1	Mar 10	168	0.6	May 10	228	8.1	Jul 10	288	15.5	Sep 9	348	23.0	Nov 9	48	30.5
Jan 10	108	52.3	Mar 11	168	59.7	May 11	229	7.2	Jul 11	289	14.7	Sep 10	349	22.1	Nov 10	49	29.6
Jan 11	109	51.4	Mar 12	169	58.9	May 12	230	6.4	Jul 12	290	13.8	Sep 11	350	21.3	Nov 11	50	28.8
Jan 12	110	50.5	Mar 13	170	58.0	May 13	231	5.5	Jul 13	291	13.0	Sep 12	351	20.4	Nov 12	51	27.9
Jan 13	111	49.7	Mar 14	171	57.2	May 14	232	4.6	Jul 14	292	12.1	Sep 13	352	19.6	Nov 13	52	27.0
Jan 14	112	48.8	Mar 15	172	56.3	May 15	233	3.8	Jul 15	293	11.2	Sep 14	353	18.7	Nov 14	53	26.2
Jan 15	113	48.0	Mar 16	173	55.4	May 16	234	2.9	Jul 16	294	10.4	Sep 15	354	17.8	Nov 15	54	25.3
Jan 16	114	47.1	Mar 17	174	54.6	May 17	235	2.1	Jul 17	295	9.5	Sep 16	355	17.0	Nov 16	55	24.5
Jan 17	115	46.2	Mar 18	175	53.7	May 18	236	1.2	Jul 18	296	8.7	Sep 17	356	16.1	Nov 17	56	23.6
Jan 18	116	45.4	Mar 19	176	52.9	May 19	237	0.3	Jul 19	297	7.8	Sep 18	357	15.3	Nov 18	57	22.7
Jan 19	117	44.5	Mar 20	177	52.0	May 20	237	59.5	Jul 20	298	6.9	Sep 19	358	14.4	Nov 19	58	21.9
Jan 20	118	43.7	Mar 21	178	51.1	May 21	238	58.6	Jul 21	299	6.1	Sep 20	359	13.5	Nov 20	59	21.0
Jan 21	119	42.8	Mar 22	179	50.3	May 22	239	57.7	Jul 22	300	5.2	Sep 21	0	12.7	Nov 21	60	20.1
Jan 22	120	41.9	Mar 23	180	49.4	May 23	240	56.9	Jul 23	301	4.3	Sep 22	1	11.8	Nov 22	61	19.3
Jan 23	121	41.1	Mar 24	181	48.5	May 24	241	56.0	Jul 24	302	3.5	Sep 23	2	10.9	Nov 23	62	18.4
Jan 24	122	40.2	Mar 25	182	47.7	May 25	242	55.2	Jul 25	303	2.6	Sep 24	3	10.1	Nov 24	63	17.6
Jan 25	123	39.3	Mar 26	183	46.8	May 26	243	54.3	Jul 26	304	1.8	Sep 25	4	9.2	Nov 25	64	16.7
Jan 26	124	38.5	Mar 27	184	46.0	May 27	244	53.4	Jul 27	305	0.9	Sep 26	5	8.4	Nov 26	65	15.8
Jan 27	125	37.6	Mar 28	185	45.1	May 28	245	52.6	Jul 28	306	0.0	Sep 27	6	7.5	Nov 27	66	15.0
Jan 28	126	36.8	Mar 29	186	44.2	May 29	246	51.7	Jul 29	306	59.2	Sep 28	7	6.6	Nov 28	67	14.1
Jan 29	127	35.9	Mar 30	187	43.4	May 30	247	50.9	Jul 30	307	58.3	Sep 29	8	5.8	Nov 29	68	13.3
Jan 30	128	35.0	Mar 31	188	42.5	May 31	248	50.0	Jul 31	308	57.5	Sep 30	9	4.9	Nov 30	69	12.4
Jan 31	129	34.2	Apr 1	189	41.7	Jun 1	249	49.1	Aug 1	309	56.6	Oct 1	10	4.1	Dec 1	70	11.5
Feb 1	130	33.3	Apr 2	190	40.8	Jun 2	250	48.3	Aug 2	310	55.7	Oct 2	11	3.2	Dec 2	71	10.7
Feb 2	131	32.5	Apr 3	191	39.9	Jun 3	251	47.4	Aug 3	311	54.9	Oct 3	12	2.3	Dec 3	72	9.8
Feb 3	132	31.6	Apr 4	192	39.1	Jun 4	252	46.6	Aug 4	312	54.0	Oct 4	13	1.5	Dec 4	73	9.0
Feb 4	133	30.7	Apr 5	193	38.2	Jun 5	253	45.7	Aug 5	313	53.2	Oct 5	14	0.6	Dec 5	74	8.1
Feb 5	134	29.9	Apr 6	194	37.4	Jun 6	254	44.8	Aug 6	314	52.3	Oct 6	14	59.8	Dec 6	75	7.2
Feb 6	135	29.0	Apr 7	195	36.5	Jun 7	255	44.0	Aug 7	315	51.4	Oct 7	15	58.9	Dec 7	76	6.4
Feb 7	136	28.2	Apr 8	196	35.6	Jun 8	256	43.1	Aug 8	316	50.6	Oct 8	16	58.0	Dec 8	77	5.5
Feb 8	137	27.3	Apr 9	197	34.8	Jun 9	257	42.2	Aug 9	317	49.7	Oct 9	17	57.2	Dec 9	78	4.7
Feb 9	138	26.4	Apr 10	198	33.9	Jun 10	258	41.4	Aug 10	318	48.8	Oct 10	18	56.3	Dec 10	79	3.8
Feb 10	139	25.6	Apr 11	199	33.0	Jun 11	259	40.5	Aug 11	319	48.0	Oct 11	19	55.4	Dec 11	80	2.9
Feb 11	140	24.7	Apr 12	200	32.2	Jun 12	260	39.7	Aug 12	320	47.1	Oct 12	20	54.6	Dec 12	81	2.1
Feb 12	141	23.8	Apr 13	201	31.3	Jun 13	261	38.8	Aug 13	321	46.3	Oct 13	21	53.7	Dec 13	82	1.2
Feb 13	142	23.0	Apr 14	202	30.5	Jun 14	262	37.9	Aug 14	322	45.4	Oct 14	22	52.9	Dec 14	83	0.4
Feb 14	143	22.1	Apr 15	203	29.6	Jun 15	263	37.1	Aug 15	323	44.5	Oct 15	23	52.0	Dec 15	83	59.5
Feb 15	144	21.3	Apr 16	204	28.7	Jun 16	264	36.2	Aug 16	324	43.7	Oct 16	24	51.1	Dec 16	84	58.6
Feb 16	145	20.4	Apr 17	205	27.9	Jun 17	265	35.4	Aug 17	325	42.8	Oct 17	25	50.3	Dec 17	85	57.8
Feb 17	146	19.5	Apr 18	206	27.0	Jun 18	266	34.5	Aug 18	326	42.0	Oct 18	26	49.4	Dec 18	86	56.9
Feb 18	147	18.7	Apr 19	207	26.2	Jun 19	267	33.6	Aug 19	327	41.1	Oct 19	27	48.6	Dec 19	87	56.0
Feb 19	148	17.8	Apr 20	208	25.3	Jun 20	268	32.8	Aug 20	328	40.2	Oct 20	28	47.7	Dec 20	88	55.2
Feb 20	149	17.0	Apr 21	209	24.4	Jun 21	269	31.9	Aug 21	329	39.4	Oct 21	29	46.8	Dec 21	89	54.3
Feb 21	150	16.1	Apr 22	210	23.6	Jun 22	270	31.0	Aug 22	330	38.5	Oct 22	30	46.0	Dec 22	90	53.5
Feb 22	151	15.2	Apr 23	211	22.7	Jun 23	271	30.2	Aug 23	331	37.6	Oct 23	31	45.1	Dec 23	91	52.6
Feb 23	152	14.4	Apr 24	212	21.9	Jun 24	272	29.3	Aug 24	332	36.8	Oct 24	32	44.3	Dec 24	92	51.7
Feb 24	153	13.5	Apr 25	213	21.0	Jun 25	273	28.5	Aug 25	333	35.9	Oct 25	33	43.4	Dec 25	93	50.9
Feb 25	154	12.7	Apr 26	214	20.1	Jun 26	274	27.6	Aug 26	334	35.1	Oct 26	34	42.5	Dec 26	94	50.0
Feb 26	155	11.8	Apr 27	215	19.3	Jun 27	275	26.7	Aug 27	335	34.2	Oct 27	35	41.7	Dec 27	95	49.2
Feb 27	156	10.9	Apr 28	216	18.4	Jun 28	276	25.9	Aug 28	336	33.3	Oct 28	36	40.8	Dec 28	96	48.3
Feb 28	157	10.1	Apr 29	217	17.5	Jun 29	277	25.0	Aug 29	337	32.5	Oct 29	37	39.9	Dec 29	97	47.4
Feb 29	158	9.2	Apr 30	218	16.7	Jun 30	278	24.2	Aug 30	338	31.6	Oct 30	38	39.1	Dec 30	98	46.6
Mar 1	159	8.3	May 1	219	15.8	Jul 1	279	23.3	Aug 31	339	30.8	Oct 31	39	38.2	Dec 31	99	45.7

2004

## GHA Aries

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