

**ALPO SATURN CENTRAL MERIDIAN  
LONGITUDES FOR SYSTEM I,  
SYSTEM II, AND SYSTEM III**

**2002**

A.L.P.O. Saturn Section

Julius L. Benton, Jr.

Date yy-mm-dd	CMI °	CMII °	CMIII °
2002 Jan 01	149.6	194.2	326.7
2002 Jan 02	274	286.2	57.5
2002 Jan 03	38.3	18.2	148.3
2002 Jan 04	162.6	110.2	239.1
2002 Jan 05	286.9	202.3	330
2002 Jan 06	51.3	294.3	60.8
2002 Jan 07	175.6	26.3	151.6
2002 Jan 08	299.9	118.3	242.4
2002 Jan 09	64.2	210.3	333.2
2002 Jan 10	188.5	302.3	64
2002 Jan 11	312.8	34.3	154.8
2002 Jan 12	77.1	126.3	245.6
2002 Jan 13	201.4	218.3	336.4
2002 Jan 14	325.7	310.3	67.2
2002 Jan 15	90	42.3	158
2002 Jan 16	214.3	134.3	248.7
2002 Jan 17	338.5	226.3	339.5
2002 Jan 18	102.8	318.3	70.3
2002 Jan 19	227.1	50.3	161.1
2002 Jan 20	351.4	142.2	251.8
2002 Jan 21	115.7	234.2	342.6
2002 Jan 22	239.9	326.2	73.4
2002 Jan 23	4.2	58.2	164.1
2002 Jan 24	128.5	150.1	254.9
2002 Jan 25	252.7	242.1	345.7
2002 Jan 26	17	334.1	76.4
2002 Jan 27	141.2	66	167.2
2002 Jan 28	265.5	158	257.9
2002 Jan 29	29.7	249.9	348.7
2002 Jan 30	154	341.9	79.4
2002 Jan 31	278.2	73.8	170.2
2002 Feb 01	42.5	165.8	260.9
2002 Feb 02	166.7	257.7	351.6
2002 Feb 03	291	349.6	82.4
2002 Feb 04	55.2	81.6	173.1
2002 Feb 05	179.4	173.5	263.8
2002 Feb 06	303.7	265.5	354.6
2002 Feb 07	67.9	357.4	85.3
2002 Feb 08	192.1	89.3	176
2002 Feb 09	316.3	181.2	266.7

2002 Feb 10	80.6	273.2	357.4
2002 Feb 11	204.8	5.1	88.2
2002 Feb 12	329	97	178.9
2002 Feb 13	93.2	188.9	269.6
2002 Feb 14	217.4	280.8	0.3
2002 Feb 15	341.6	12.7	91
2002 Feb 16	105.8	104.6	181.7
2002 Feb 17	230	196.5	272.4
2002 Feb 18	354.2	288.5	3.1
2002 Feb 19	118.4	20.4	93.8
2002 Feb 20	242.6	112.3	184.5
2002 Feb 21	6.8	204.1	275.2
2002 Feb 22	131	296	5.9
2002 Feb 23	255.2	27.9	96.5
2002 Feb 24	19.4	119.8	187.2
2002 Feb 25	143.6	211.7	277.9
2002 Feb 26	267.7	303.6	8.6
2002 Feb 27	31.9	35.5	99.3
2002 Feb 28	156.1	127.4	189.9
2002 Mar 01	280.3	219.3	280.6
2002 Mar 02	44.5	311.1	11.3
2002 Mar 03	168.6	43	102
2002 Mar 04	292.8	134.9	192.6
2002 Mar 05	57	226.8	283.3
2002 Mar 06	181.1	318.6	14
2002 Mar 07	305.3	50.5	104.6
2002 Mar 08	69.5	142.4	195.3
2002 Mar 09	193.6	234.2	285.9
2002 Mar 10	317.8	326.1	16.6
2002 Mar 11	82	58	107.3
2002 Mar 12	206.1	149.8	197.9
2002 Mar 13	330.3	241.7	288.6
2002 Mar 14	94.4	333.5	19.2
2002 Mar 15	218.6	65.4	109.9
2002 Mar 16	342.7	157.2	200.5
2002 Mar 17	106.9	249.1	291.2
2002 Mar 18	231	340.9	21.8
2002 Mar 19	355.2	72.8	112.5
2002 Mar 20	119.3	164.7	203.1
2002 Mar 21	243.5	256.5	293.7
2002 Mar 22	7.6	348.3	24.4
2002 Mar 23	131.7	80.2	115
2002 Mar 24	255.9	172	205.7
2002 Mar 25	20	263.9	296.3
2002 Mar 26	144.2	355.7	26.9
2002 Mar 27	268.3	87.6	117.6
2002 Mar 28	32.4	179.4	208.2
2002 Mar 29	156.6	271.2	298.8
2002 Mar 30	280.7	3.1	29.5
2002 Mar 31	44.9	94.9	120.1
2002 Apr 01	169	186.7	210.7

2002 Apr 02	293.1	278.6	301.4
2002 Apr 03	57.3	10.4	32
2002 Apr 04	181.4	102.3	122.6
2002 Apr 05	305.5	194.1	213.2
2002 Apr 06	69.7	285.9	303.9
2002 Apr 07	193.8	17.8	34.5
2002 Apr 08	317.9	109.6	125.1
2002 Apr 09	82	201.4	215.8
2002 Apr 10	206.2	293.3	306.4
2002 Apr 11	330.3	25.1	37
2002 Apr 12	94.4	116.9	127.6
2002 Apr 13	218.6	208.7	218.3
2002 Apr 14	342.7	300.6	308.9
2002 Apr 15	106.8	32.4	39.5
2002 Apr 16	230.9	124.2	130.1
2002 Apr 17	355.1	216.1	220.7
2002 Apr 18	119.2	307.9	311.4
2002 Apr 19	243.3	39.7	42
2002 Apr 20	7.4	131.5	132.6
2002 Apr 21	131.6	223.4	223.2
2002 Apr 22	255.7	315.2	313.9
2002 Apr 23	19.8	47	44.5
2002 Apr 24	143.9	138.9	135.1
2002 Apr 25	268.1	230.7	225.7
2002 Apr 26	32.2	322.5	316.3
2002 Apr 27	156.3	54.3	47
2002 Apr 28	280.4	146.2	137.6
2002 Apr 29	44.6	238	228.2
2002 Apr 30	168.7	329.8	318.8
2002 May 01	292.8	61.6	49.4
2002 May 02	56.9	153.5	140.1
2002 May 03	181.1	245.3	230.7
2002 May 04	305.2	337.1	321.3
2002 May 05	69.3	69	51.9
2002 May 06	193.5	160.8	142.6
2002 May 07	317.6	252.6	233.2
2002 May 08	81.7	344.4	323.8
2002 May 09	205.8	76.3	54.4
2002 May 10	330	168.1	145.1
2002 May 11	94.1	259.9	235.7
2002 May 12	218.2	351.8	326.3
2002 May 13	342.4	83.6	56.9
2002 May 14	106.5	175.4	147.6
2002 May 15	230.6	267.3	238.2
2002 May 16	354.7	359.1	328.8
2002 May 17	118.9	90.9	59.4
2002 May 18	243	182.8	150.1
2002 May 19	7.1	274.6	240.7
2002 May 20	131.3	6.4	331.3
2002 May 21	255.4	98.3	62
2002 May 22	19.6	190.1	152.6

2002 May 23	143.7	281.9	243.2
2002 May 24	267.8	13.8	333.8
2002 May 25	32	105.6	64.5
2002 May 26	156.1	197.5	155.1
2002 May 27	280.2	289.3	245.7
2002 May 28	44.4	21.1	336.4
2002 May 29	168.5	113	67
2002 May 30	292.7	204.8	157.7
2002 May 31	56.8	296.7	248.3
2002 Jun 01	181	28.5	338.9
2002 Jun 02	305.1	120.4	69.6
2002 Jun 03	69.3	212.2	160.2
2002 Jun 04	193.4	304.1	250.9
2002 Jun 05	317.5	35.9	341.5
2002 Jun 06	81.7	127.8	72.1
2002 Jun 07	205.8	219.6	162.8
2002 Jun 08	330	311.5	253.4
2002 Jun 09	94.2	43.3	344.1
2002 Jun 10	218.3	135.2	74.7
2002 Jun 11	342.5	227	165.4
2002 Jun 12	106.6	318.9	256
2002 Jun 13	230.8	50.7	346.7
2002 Jun 14	354.9	142.6	77.3
2002 Jun 15	119.1	234.5	168
2002 Jun 16	243.3	326.3	258.6
2002 Jun 17	7.4	58.2	349.3
2002 Jun 18	131.6	150	80
2002 Jun 19	255.8	241.9	170.6
2002 Jun 20	19.9	333.8	261.3
2002 Jun 21	144.1	65.6	351.9
2002 Jun 22	268.3	157.5	82.6
2002 Jun 23	32.4	249.4	173.3
2002 Jun 24	156.6	341.3	263.9
2002 Jun 25	280.8	73.1	354.6
2002 Jun 26	44.9	165	85.3
2002 Jun 27	169.1	256.9	175.9
2002 Jun 28	293.3	348.8	266.6
2002 Jun 29	57.5	80.6	357.3
2002 Jun 30	181.7	172.5	88
2002 Jul 01	305.8	264.4	178.6
2002 Jul 02	70	356.3	269.3
2002 Jul 03	194.2	88.2	360
2002 Jul 04	318.4	180	90.7
2002 Jul 05	82.6	271.9	181.3
2002 Jul 06	206.8	3.8	272
2002 Jul 07	331	95.7	2.7
2002 Jul 08	95.2	187.6	93.4
2002 Jul 09	219.4	279.5	184.1
2002 Jul 10	343.6	11.4	274.8
2002 Jul 11	107.8	103.3	5.5
2002 Jul 12	232	195.2	96.2

2002 Jul 13	356.2	287.1	186.9
2002 Jul 14	120.4	19	277.5
2002 Jul 15	244.6	110.9	8.2
2002 Jul 16	8.8	202.8	98.9
2002 Jul 17	133	294.7	189.6
2002 Jul 18	257.2	26.6	280.3
2002 Jul 19	21.4	118.5	11.1
2002 Jul 20	145.6	210.4	101.8
2002 Jul 21	269.8	302.4	192.5
2002 Jul 22	34.1	34.3	283.2
2002 Jul 23	158.3	126.2	13.9
2002 Jul 24	282.5	218.1	104.6
2002 Jul 25	46.7	310	195.3
2002 Jul 26	170.9	42	286
2002 Jul 27	295.2	133.9	16.8
2002 Jul 28	59.4	225.8	107.5
2002 Jul 29	183.6	317.7	198.2
2002 Jul 30	307.9	49.7	288.9
2002 Jul 31	72.1	141.6	19.6
2002 Aug 01	196.3	233.5	110.4
2002 Aug 02	320.6	325.5	201.1
2002 Aug 03	84.8	57.4	291.8
2002 Aug 04	209.1	149.3	22.6
2002 Aug 05	333.3	241.3	113.3
2002 Aug 06	97.5	333.2	204
2002 Aug 07	221.8	65.2	294.8
2002 Aug 08	346	157.1	25.5
2002 Aug 09	110.3	249.1	116.3
2002 Aug 10	234.5	341	207
2002 Aug 11	358.8	73	297.8
2002 Aug 12	123.1	164.9	28.5
2002 Aug 13	247.3	256.9	119.3
2002 Aug 14	11.6	348.9	210
2002 Aug 15	135.8	80.8	300.8
2002 Aug 16	260.1	172.8	31.5
2002 Aug 17	24.4	264.7	122.3
2002 Aug 18	148.6	356.7	213
2002 Aug 19	272.9	88.7	303.8
2002 Aug 20	37.2	180.6	34.6
2002 Aug 21	161.5	272.6	125.3
2002 Aug 22	285.7	4.6	216.1
2002 Aug 23	50	96.6	306.9
2002 Aug 24	174.3	188.6	37.6
2002 Aug 25	298.6	280.5	128.4
2002 Aug 26	62.9	12.5	219.2
2002 Aug 27	187.2	104.5	310
2002 Aug 28	311.5	196.5	40.8
2002 Aug 29	75.7	288.5	131.5
2002 Aug 30	200	20.5	222.3
2002 Aug 31	324.3	112.5	313.1
2002 Sep 01	88.6	204.5	43.9

2002 Sep 02	212.9	296.5	134.7
2002 Sep 03	337.2	28.5	225.5
2002 Sep 04	101.5	120.5	316.3
2002 Sep 05	225.8	212.5	47.1
2002 Sep 06	350.2	304.5	137.9
2002 Sep 07	114.5	36.5	228.7
2002 Sep 08	238.8	128.5	319.5
2002 Sep 09	3.1	220.5	50.3
2002 Sep 10	127.4	312.5	141.1
2002 Sep 11	251.7	44.5	231.9
2002 Sep 12	16	136.5	322.7
2002 Sep 13	140.4	228.6	53.5
2002 Sep 14	264.7	320.6	144.3
2002 Sep 15	29	52.6	235.2
2002 Sep 16	153.4	144.6	326
2002 Sep 17	277.7	236.7	56.8
2002 Sep 18	42	328.7	147.6
2002 Sep 19	166.3	60.7	238.5
2002 Sep 20	290.7	152.7	329.3
2002 Sep 21	55	244.8	60.1
2002 Sep 22	179.4	336.8	150.9
2002 Sep 23	303.7	68.9	241.8
2002 Sep 24	68.1	160.9	332.6
2002 Sep 25	192.4	253	63.5
2002 Sep 26	316.8	345	154.3
2002 Sep 27	81.1	77	245.1
2002 Sep 28	205.5	169.1	336
2002 Sep 29	329.8	261.1	66.8
2002 Sep 30	94.2	353.2	157.7
2002 Oct 01	218.5	85.2	248.5
2002 Oct 02	342.9	177.3	339.4
2002 Oct 03	107.2	269.4	70.2
2002 Oct 04	231.6	1.4	161.1
2002 Oct 05	356	93.5	251.9
2002 Oct 06	120.3	185.5	342.8
2002 Oct 07	244.7	277.6	73.6
2002 Oct 08	9.1	9.7	164.5
2002 Oct 09	133.4	101.7	255.4
2002 Oct 10	257.8	193.8	346.2
2002 Oct 11	22.2	285.9	77.1
2002 Oct 12	146.6	18	168
2002 Oct 13	270.9	110	258.8
2002 Oct 14	35.3	202.1	349.7
2002 Oct 15	159.7	294.2	80.6
2002 Oct 16	284.1	26.3	171.4
2002 Oct 17	48.5	118.4	262.3
2002 Oct 18	172.9	210.4	353.2
2002 Oct 19	297.2	302.5	84.1
2002 Oct 20	61.6	34.6	174.9
2002 Oct 21	186	126.7	265.8
2002 Oct 22	310.4	218.8	356.7

2002 Oct 23	74.8	310.9	87.6
2002 Oct 24	199.2	43	178.5
2002 Oct 25	323.6	135.1	269.4
2002 Oct 26	88	227.1	0.3
2002 Oct 27	212.4	319.2	91.1
2002 Oct 28	336.8	51.3	182
2002 Oct 29	101.2	143.4	272.9
2002 Oct 30	225.6	235.5	3.8
2002 Oct 31	350	327.6	94.7
2002 Nov 01	114.4	59.7	185.6
2002 Nov 02	238.8	151.8	276.5
2002 Nov 03	3.2	243.9	7.4
2002 Nov 04	127.6	336	98.3
2002 Nov 05	252	68.1	189.2
2002 Nov 06	16.4	160.2	280.1
2002 Nov 07	140.8	252.4	11
2002 Nov 08	265.2	344.5	101.9
2002 Nov 09	29.6	76.6	192.8
2002 Nov 10	154	168.7	283.7
2002 Nov 11	278.5	260.8	14.6
2002 Nov 12	42.9	352.9	105.5
2002 Nov 13	167.3	85	196.4
2002 Nov 14	291.7	177.1	287.3
2002 Nov 15	56.1	269.2	18.2
2002 Nov 16	180.5	1.3	109.1
2002 Nov 17	304.9	93.4	200
2002 Nov 18	69.3	185.5	290.9
2002 Nov 19	193.8	277.7	21.8
2002 Nov 20	318.2	9.8	112.7
2002 Nov 21	82.6	101.9	203.6
2002 Nov 22	207	194	294.5
2002 Nov 23	331.4	286.1	25.4
2002 Nov 24	95.8	18.2	116.3
2002 Nov 25	220.2	110.3	207.2
2002 Nov 26	344.6	202.4	298.2
2002 Nov 27	109.1	294.5	29.1
2002 Nov 28	233.5	26.7	120
2002 Nov 29	357.9	118.8	210.9
2002 Nov 30	122.3	210.9	301.8
2002 Dec 01	246.7	303	32.7
2002 Dec 02	11.1	35.1	123.6
2002 Dec 03	135.5	127.2	214.5
2002 Dec 04	259.9	219.3	305.4
2002 Dec 05	24.3	311.4	36.3
2002 Dec 06	148.7	43.5	127.2
2002 Dec 07	273.1	135.6	218.1
2002 Dec 08	37.5	227.7	309
2002 Dec 09	161.9	319.8	39.9
2002 Dec 10	286.3	51.9	130.8
2002 Dec 11	50.8	144	221.7
2002 Dec 12	175.2	236.1	312.6

2002 Dec 13	299.5	328.2	43.4
2002 Dec 14	63.9	60.3	134.3
2002 Dec 15	188.3	152.4	225.2
2002 Dec 16	312.7	244.5	316.1
2002 Dec 17	77.1	336.6	47
2002 Dec 18	201.5	68.7	137.9
2002 Dec 19	325.9	160.8	228.8
2002 Dec 20	90.3	252.9	319.7
2002 Dec 21	214.7	345	50.5
2002 Dec 22	339.1	77.1	141.4
2002 Dec 23	103.5	169.1	232.3
2002 Dec 24	227.8	261.2	323.2
2002 Dec 25	352.2	353.3	54
2002 Dec 26	116.6	85.4	144.9
2002 Dec 27	241	177.5	235.8
2002 Dec 28	5.3	269.5	326.7
2002 Dec 29	129.7	1.6	57.5
2002 Dec 30	254.1	93.7	148.4
2002 Dec 31	18.5	185.7	239.2

**Change in Longitude in Intervals of Mean Time for System I**

System I (NEBs, EZ, SEBn)

h	°	m	°	m	°
1	35.2	10	5.9	1	0.6
2	70.4	20	11.7	2	1.2
3	105.6	30	17.6	3	1.8
4	140.8	40	23.5	4	2.3
5	176.0	50	29.3	5	2.9
6	211.2	60	35.2	6	3.5
7	246.4			7	4.1
8	281.6			8	4.7
9	316.8			9	5.3
10	352.0			10	5.9

**Change in Longitude in Intervals of Mean Time for System II**

System II (Areas N or S of System I)

h	°	m	°	m	°
1	33.8	10	5.6	1	0.6
2	67.7	20	11.3	2	1.1
3	101.5	30	16.9	3	1.7
4	135.3	40	22.6	4	2.3
5	169.2	50	28.2	5	2.8
6	203.0	60	33.8	6	3.4
7	236.8			7	3.9
8	270.7			8	4.5
9	304.5			9	5.1



10      338.3

10      5.6

**Change in Longitude in Intervals of Mean Time for System III**

**System III (Origin of Radio Emissions)**

h	°	m	°	m	°
1	33.8	10	5.6	1	0.6
2	67.6	20	11.3	2	1.1
3	101.3	30	16.9	3	1.7
4	135.1	40	22.5	4	2.3
5	168.9	50	28.2	5	2.8
6	202.7	60	33.8	6	3.4
7	236.5	236.5		7	3.9
8	270.3	270.3		8	4.5
9	304.0	304.0		9	5.1
10	337.8	337.8		10	5.6

*Credits: Ephemerides generated using WIMP v4.3 By Jeff Beish*