

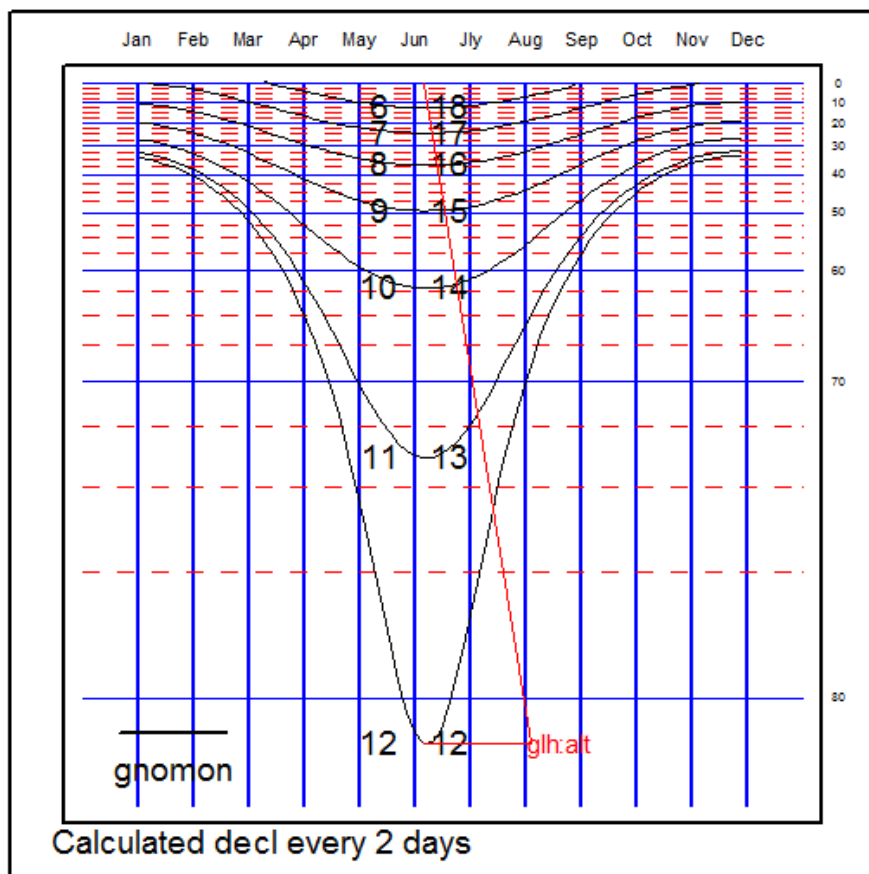
SOLAR DECLINATION FOR EVERY TEN DAYS & HOURLY SOLAR ALTITUDE
 LATTITUDE: 32.75 Shepherd gnomon:chart ratio: 0.16 6.10

Date	decl	am altitude								Julian	EOT
		600	700	800	900	1000	1100	1200			
1/1	-23.1			10.1	19.6	27.3	32.4	34.2	1	3.24	
1/10	-22.1			10.7	20.4	28.1	33.3	35.2	10	7.11	
1/20	-20.3		0.9	11.9	21.7	29.7	35.0	36.9	20	10.38	
2/1	-17.3		2.7	13.9	24.0	32.3	37.9	39.9	32	13.22	
2/10	-14.6		4.3	15.7	26.0	34.6	40.5	42.6	41	14.13	
2/20	-11.2		6.2	17.9	28.6	37.5	43.8	46.0	51	13.57	
3/1	-7.9		8.1	20.0	31.0	40.3	46.9	49.4	60	12.43	
3/10	-4.4		10.1	22.2	33.5	43.2	50.2	52.8	69	10.43	
3/20	-0.5		12.3	24.6	36.2	46.4	53.9	56.8	79	7.51	
4/1	4.2	2.3	14.9	27.3	39.3	50.0	58.2	61.5	91	4.03	
4/10	7.7	4.1	16.7	29.3	41.4	52.6	61.3	64.9	100	1.20	
4/20	11.2	6.1	18.6	31.2	43.5	55.1	64.5	68.5	110	-1.15	
5/1	14.8	8.0	20.4	33.0	45.5	57.4	67.5	72.1	121	-3.11	
5/10	17.4	9.3	21.7	34.3	46.8	59.0	69.6	74.7	130	-3.57	
5/20	19.8	10.6	22.8	35.4	48.0	60.3	71.4	77.1	140	-3.52	
6/1	21.9	11.7	23.8	36.3	48.9	61.4	72.9	79.2	152	-2.38	
6/10	23.0	12.2	24.3	36.7	49.3	61.8	73.5	80.2	161	-1.06	
6/20	23.4	12.4	24.5	36.9	49.5	62.1	73.9	80.7	171	0.56	
7/1	23.2	12.3	24.4	36.8	49.4	61.9	73.7	80.4	182	3.10	
7/10	22.4	11.9	24.0	36.5	49.1	61.6	73.2	79.6	191	4.39	
7/20	20.8	11.1	23.3	35.8	48.4	60.8	72.1	78.1	201	5.40	
8/1	18.2	9.7	22.1	34.7	47.2	59.4	70.2	75.5	213	5.41	
8/10	15.8	8.5	20.9	33.5	46.0	58.0	68.3	73.0	222	4.44	
8/20	12.7	6.8	19.4	32.0	44.4	56.1	65.7	70.0	232	2.43	
9/1	8.6	4.6	17.2	29.8	42.0	53.2	62.1	65.8	244	-0.48	
9/10	5.2	2.8	15.4	27.9	39.9	50.8	59.1	62.5	253	-3.57	
9/20	1.4	0.8	13.4	25.7	37.4	47.9	55.6	58.7	263	-7.39	
10/1	-2.9		11.0	23.1	34.5	44.5	51.7	54.4	274	-11.27	
10/10	-6.3		9.0	21.0	32.1	41.6	48.4	50.9	283	-14.01	
10/20	-10.1		6.9	18.6	29.4	38.5	44.9	47.2	293	-15.58	
11/1	-14.2		4.5	16.0	26.4	35.0	40.9	43.1	305	-16.43	
11/10	-16.9		2.9	14.2	24.3	32.6	38.3	40.3	314	-16.00	
11/20	-19.5		1.4	12.4	22.3	30.4	35.8	37.7	324	-13.58	
12/1	-21.7		0.1	11.0	20.6	28.5	33.7	35.6	335	-10.25	
12/10	-22.8			10.2	19.8	27.5	32.6	34.4	344	-6.43	
12/20	-23.4			9.8	19.3	27.0	32.0	33.8	354	-2.09	
	decl	1800	1700	1600	1500	1400	1300	1200	Julian	mm.ss	

SOLAR DECLINATION FOR EVERY TEN DAYS AND HOURLY SOLAR AZIMUTH
 THIS TABLE IS FOR LATTITUDE: 32.75

Date	declination	am								Julian	EOT
		600	700	800	900	1000	1100	1200			
1/1	-23.1	70.3	62.7	54.0	43.7	31.2	16.4	0.0	1	3.24	
1/10	-22.1	71.2	63.5	54.8	44.3	31.7	16.7	0.0	10	7.11	
1/20	-20.3	72.7	65.0	56.1	45.6	32.7	17.2	0.0	20	10.38	
2/1	-17.3	75.3	67.4	58.4	47.6	34.4	18.2	0.0	32	13.22	
2/10	-14.6	77.6	69.6	60.5	49.6	36.0	19.2	0.0	41	14.13	
2/20	-11.2	80.5	72.4	63.2	52.2	38.2	20.6	0.0	51	13.57	
3/1	-7.9	83.4	75.1	65.9	54.8	40.5	22.1	0.0	60	12.43	
3/10	-4.4	86.3	78.0	68.8	57.7	43.2	23.8	0.0	69	10.43	
3/20	-0.5	89.6	81.4	72.2	61.2	46.5	26.1	0.0	79	7.51	
4/1	4.2	93.6	85.4	76.5	65.6	50.9	29.4	0.0	91	4.03	
4/10	7.7	96.4	88.4	79.7	69.1	54.6	32.3	0.0	100	1.20	
4/20	11.2	99.5	91.6	83.2	73.1	58.9	36.1	0.0	110	-1.15	
5/1	14.8	102.6	94.9	86.8	77.3	63.8	40.8	0.0	121	-3.11	
5/10	17.4	104.8	97.3	89.5	80.5	67.7	45.0	0.0	130	-3.57	
5/20	19.8	106.9	99.6	92.1	83.6	71.7	49.7	0.0	140	-3.52	
6/1	21.9	108.7	101.6	94.5	86.5	75.5	54.6	0.0	152	-2.38	
6/10	23.0	109.6	102.6	95.7	87.9	77.4	57.3	0.0	161	-1.06	
6/20	23.4	110.0	103.1	96.2	88.6	78.3	58.6	0.0	171	0.56	
7/1	23.2	109.8	102.8	95.9	88.2	77.8	57.9	0.0	182	3.10	
7/10	22.4	109.1	102.0	95.0	87.0	76.2	55.7	0.0	191	4.39	
7/20	20.8	107.7	100.5	93.3	84.9	73.4	51.9	0.0	201	5.40	
8/1	18.2	105.5	98.1	90.4	81.5	69.0	46.5	0.0	213	5.41	
8/10	15.8	103.4	95.8	87.8	78.4	65.2	42.3	0.0	222	4.44	
8/20	12.7	100.7	92.9	84.7	74.7	60.9	37.9	0.0	232	2.43	
9/1	8.6	97.2	89.2	80.6	70.1	55.6	33.2	0.0	244	-0.48	
9/10	5.2	94.4	86.3	77.4	66.6	52.0	30.2	0.0	253	-3.57	
9/20	1.4	91.2	83.0	73.9	62.9	48.2	27.3	0.0	263	-7.39	
10/1	-2.9	87.6	79.3	70.2	59.0	44.4	24.6	0.0	274	-11.27	
10/10	-6.3	84.7	76.4	67.2	56.1	41.7	22.8	0.0	283	-14.01	
10/20	-10.1	81.5	73.3	64.1	53.1	39.0	21.1	0.0	293	-15.58	
11/1	-14.2	78.0	69.9	60.8	49.9	36.3	19.4	0.0	305	-16.43	
11/10	-16.9	75.6	67.7	58.7	47.9	34.6	18.4	0.0	314	-16.00	
11/20	-19.5	73.4	65.6	56.7	46.1	33.1	17.5	0.0	324	-13.58	
12/1	-21.7	71.5	63.8	55.1	44.6	31.9	16.8	0.0	335	-10.25	
12/10	-22.8	70.5	62.9	54.2	43.8	31.3	16.4	0.0	344	-6.43	
12/20	-23.4	70.0	62.4	53.8	43.4	31.0	16.3	0.0	354	-2.09	
	decl	6pm	5pm	4pm	3pm	2pm	1pm	noon		mm.ss	

S-DIAL Lat: 32.8 For dual gnomon use: choice #2



Z-DIAL Lat: 32 Long: 108 ref: 105

