SAN JOSE AMATEUR ASTRONOMERS, INC.
MONTHLY BULLETIN
MARCH 1972

PRES: David Erickson 269-4838 SECR: Jerry Rattley 262-5350
VICE-PRES: Tom Halliday 296-3169 TRES: Emmet Murphy 287-6378

MARCH 3, REGULAR MEETING

The March meeting will be held at the Community Bank Building, second floor in the executive conference room (enter from the rear). Starting at eight o'clock Ralph Bridge will discuss "The Calendar and Proposal for an Eight-Day Week," followed by Dave Aguilar and "How Stars are Born and Croak."

MARCH 10, BOARD MEETING

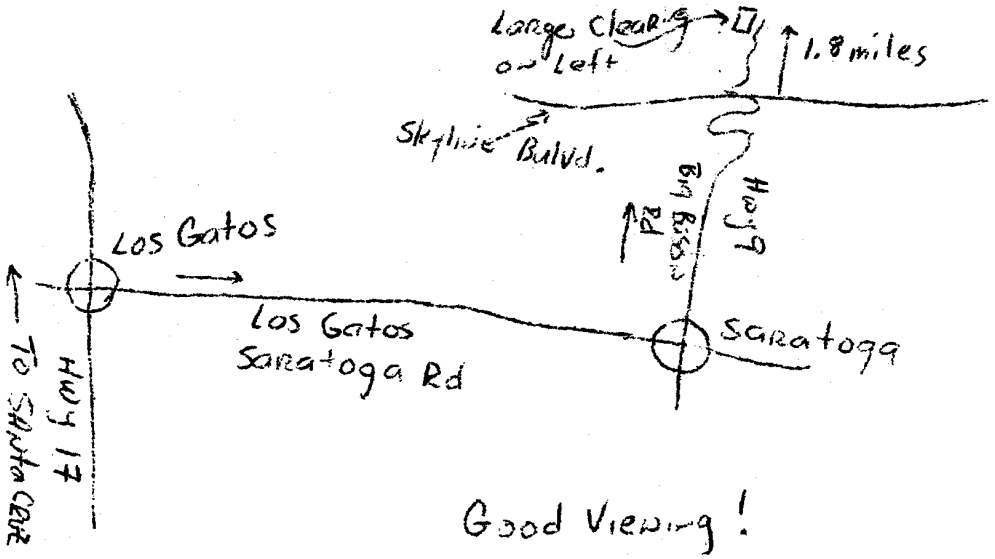
The March board meeting will be held at Dr. A.B. Gregory's, 5480 Fairway Dr., San Jose, beginning at eight o'clock. The spring calendar of events will be discussed. All interested persons are urged to attend. For directions call Dr. Gregory at 258-6095.

MARCH 18, STARPARTY

For the next few months club starparties will be held at a more convenient location. The March starparty will be held at our Skyline site on Hwy. 9, 1.8 miles past Skyline Blvd. on the left. (Refer to the map for directions).

ANNOUNCEMENT OF TWO UPCOMING CONFERENCES

The Astronomical Association of Northern California is having a conference and telescope competition in September. Also Star Observers of Marin are having their eighth annual "Bay Area Astronomical Meeting" Saturday, April 15, 1972. For more information contact Dave at a meeting or call 269-4838.

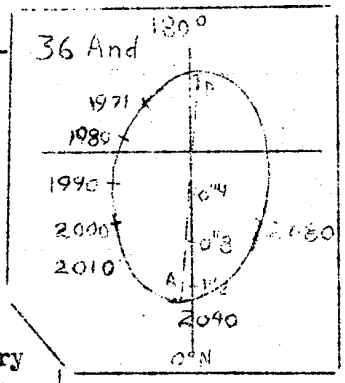


ORBITS OF VISUAL BINARY STARS--part 3 contributed by Jerry Rattley

Elements of the orbits as listed in the Smithsonian Physical Atlas Catalogue

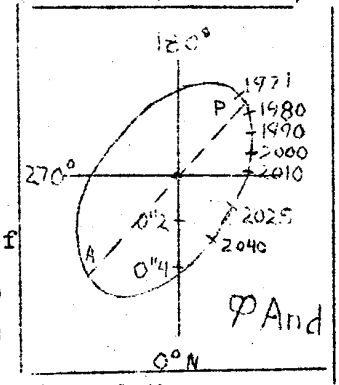
star name	RA 1950	dec pos	P yrs	T	e	a "	i o	Ω o	ω o	l-y	calculator name	date
36 And	00 52	+23 22	165	1957	.31	1.01	46	5	172	163	P.Muller	1956
φ And	01 07	+46 59	314	1974	.16	0.51	127	14	147	466	Vidal	1956
γ^2 And	02 01	+42 06	61	1952	.93	0.30	111	171	104	163	P.Muller	1957
Σ228 And	02 11	+47 15	145	1898	.26	0.91	63	321	98	150	W.D.Heintz	1954

36 Andromedae (ADS 755); located between Zeta and Eta Andromedae, this fine binary has components of magnitudes 6.2 & 6.6, both being golden-orange stars of spectral type K1. A minimum separation of 0"57 is due in 1975, after which the system will slowly open to a maximum of 1"54 in 2035. The motion in this system is direct. Ephimerides:



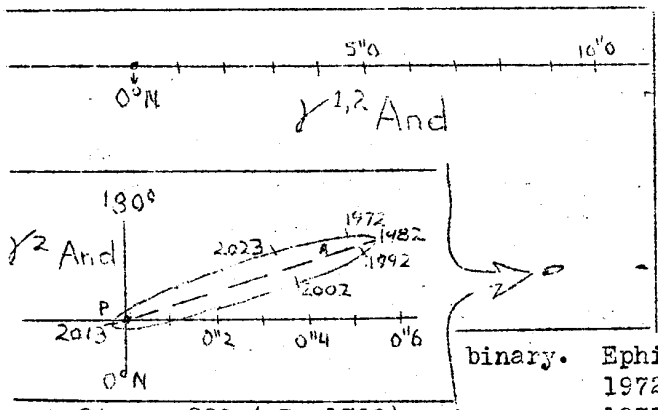
1971	226°	0"58	1985	278°	0"66	2000	314°	0"95
1975	241	0.57	1990	295	0.77	2010	334	1.17
1980	261	0.61	1995	305	0.86	2055	550	1.54

Phi Andromedae (ADS 940); located east of the midpoint of a line drawn from Beta Andromedae to Alpha Cassiopeiae, this binary is a popular test for larger amateur telescopes, 10 to 12 inches. Its components are of magnitudes 4.8 & 5.4, both bluish of spectral class B8. The P.A. as well as the separation are decreasing, with periastron passage due in 1974 and a minimum separation of 0"27 to be reached in 2023. The greatest separation of 0"58 will not occur until about the year 2100. Ephimerides: 0"53



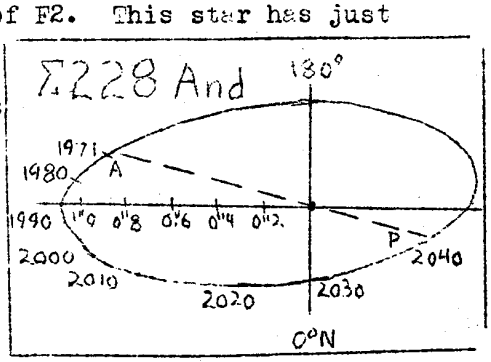
1971 143° 0"44; 1980 132° 0"41; 1990 119° 0"37; 2000 106°

Gamma^2 Andromedae (ADS 1630); γ^1 and γ^2 are, of course, one of the most famous and beautiful doubles in the heavens. γ^1 being a golden (K-type) star of magnitude 2.3, and γ^2, located at P.A. 65° separation 10"0 from γ^1, is a close binary system, both components being bluish, A-type stars of magnitudes 5.5 and 6.3. The motion of this system is retrograde and the companion is at present well situated for observation. For the next 12 years the distance & P.A. will change little, with maximum separation of 0"57 to occur in 1982. Then the companion will rapidly fall toward the primary, and will not reach the outer parts of its orbit again until about 2025. γ And (Almach) is a quadruple system as the A and B-C components are physically connected with cpm, and the B star is a spectroscopic binary. Ephimerides:



1972	111°	0"52	1987	108°	0"56
1977	109	0.56	1992	106	0.54
1982	108	0.57	1997	104	0.47
			2002	102	0.38

Struve 228 (ADS 1709); located north-east of Gamma Andromedae, this small but lovely binary has components of magnitudes 6.5 and 7.1 which are both creamy white in colour having spectra of F2. This star has just passed apastron and is now heading for a maximum of 1"07 in about 1990. The next minimum (.5) is not due until 2032. Motion of the companion in this system is direct. Ephimerides:



1971	256°	0"91	1990	272°	1"07
1980	264	1.02	2000	279	1.02
			2010	290	0.84