

PHOTOELECTRIC PHOTOMETRY OPPORTUNITIES DECEMBER 1983 - APRIL 1984

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The table below lists asteroids which come to opposition during the months of December 1983 - April 1984 that represent useful targets for photoelectric photometry observations. Observations are needed because the asteroid has either an unknown or ambiguous rotational period or because the asteroid will be observable at a very low phase angle. Asteroids which are planned as targets of radar observations are also included in the table (see the article in this issue by Ostro.) The table gives (in order of opposition dates) the asteroid number and name, opposition date, opposition B magnitude, (the V magnitude is about 0.8 brighter), the rotational period (in hours), the estimated lightcurve amplitude (in magnitudes), and the designation PER if observations are needed to determine the rotational period. PHA indicates observations of the phase curve are desired and RAD indicates the object is a radar target. Question marks are used to denote uncertain or unknown values. Recommended observational procedures are given in MPB 10, No. 1, pages 1-2. Ephemerides for 9 Metis, 30 Urania, 230 Athamantis, and 409 Aspasia are included in this issue. Ephemerides for all other asteroids appeared in the previous issue. Several of these objects will likely be included in finder charts prepared by Dr. J. U. Gunter, 1411 N. Mangum St., Durham, NC 27701, which are free for a self-addressed stamped envelope.

Of particular note for the objects below is 230 Athamantis which appears to have a period of 24.00 hours! This determination may be ambiguous, i.e. the period could really be 12.00 hours. In any case, the commensurate period makes observations of the complete rotational phase impossible from any single observatory. Observers (especially Europeans) who would be interested in a coordinated campaign to observe Athamantis are invited to contact me.

Asteroid	Opp'n Date	Opp'n B Mag	Per	Amp	
74 Galatia	Dec 15	12.4	?	?	PER
60 Echo	Feb 10	11.4	52?	0.2?	PER*
202 Chryseis	Feb 14	12.0	?	?	PER
116 Sirona	Feb 19	11.5	13.7?	0.3	PER
27 Euterpe	Mar 9	10.3	8.50	0.15	PHA*
105 Artemis	Mar 19	11.4	>24	>0.1	PER
9 Metis	Mar 22	10.5	5.04	0.3	RAD*
64 Angelina	Mar 23	11.4	8.75	0.3	PHA
409 Aspasia	Apr 11	11.4	?	>0.05	PER
30 Urania	Apr 11	11.9	13.69	0.45	PHA
230 Athamantis	Apr 25	11.6	24.00	0.25	PER

* = also a radar target

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		R. A. (1950.00)			DEC.		MAG	
DATE		HR	MIN	SEC	DEG	' "	B	
Minor Planet		9 Metis						
1984 Feb	25	12	27	36.88	6	34 39.6	10.65	
Mar	6	12	20	14.22	7	33 46.2	10.46	
	16	12	11	8.14	8	32 45.7	10.26	
	26	12	1	27.04	9	23 17.2	10.35	
Apr	5	11	52	24.81	9	58 28.5	10.61	
	15	11	45	5.20	10	14 19.1	10.85	
	25	11	40	8.86	10	9 59.2	11.09	
May	5	11	37	52.71	9	46 50.4	11.33	
Minor Planet		30 Urania						
1984 Feb	25	13	39	55.60	-13	7 48.1	12.86	
Mar	6	13	37	8.12	-13	4 18.5	12.64	
	16	13	31	43.87	-12	44 43.3	12.42	
	26	13	24	7.12	-12	9 49.1	12.19	
Apr	5	13	15	2.51	-11	22 24.5	11.90	
	15	13	5	31.28	-10	27 35.1	11.87	
	25	12	56	38.08	-9	31 50.3	12.18	
May	5	12	49	18.71	-8	41 43.0	12.41	
	15	12	44	11.38	-8	2 28.2	12.64	
	25	12	41	34.03	-7	37 15.9	12.87	
Minor Planet		230 Athamantis						
Mar	6	14	26	51.52	-22	47 50.6	12.43	
	16	14	25	55.71	-22	44 16.9	12.24	
	26	14	22	8.58	-22	21 19.7	12.05	
Apr	5	14	15	47.12	-21	37 41.1	11.87	
	15	14	7	32.08	-20	34 13.5	11.65	
	25	13	58	23.91	-19	14 53.6	11.44	
May	5	13	49	32.82	-17	46 45.5	11.64	
	15	13	42	4.68	-16	18 41.5	11.83	
	25	13	36	46.72	-14	58 59.2	12.01	
Jun	4	13	34	4.33	-13	53 41.0	12.19	
	14	13	34	3.70	-13	5 59.4	12.37	
	24	13	36	37.83	-12	36 33.9	12.54	
Minor Planet		409 Aspasia						
1984 Feb	25	13	17	15.52	-22	20 59.1	12.33	
Mar	6	13	15	15.24	-22	28 51.8	12.09	
	16	13	10	37.69	-22	11 30.3	11.85	
	26	13	3	52.38	-21	27 14.5	11.62	
Apr	5	12	55	51.55	-20	17 33.5	11.42	
	15	12	47	44.10	-18	48 11.2	11.40	
	25	12	40	39.18	-17	8 20.7	11.56	
May	5	12	35	32.14	-15	28 36.8	11.77	
	15	12	32	57.26	-13	58 26.8	11.99	
	25	12	33	6.14	-12	44 15.1	12.22	
Jun	4	12	35	54.37	-11	49 13.6	12.43	

ASTEROID NEWS NOTES

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New Names

Rarely do the newly named asteroids outnumber the newly numbered ones in any given month, but such was the case in September when 26 asteroids received names. Included was (1717) Arlon, the lowest numbered object without a name, until now. The distinction now falls on (1787) 1950 SK. Three objects in the 1800's still lack names. The highest numbered object to be named is (2906) Caltech, named after... you guessed it!