

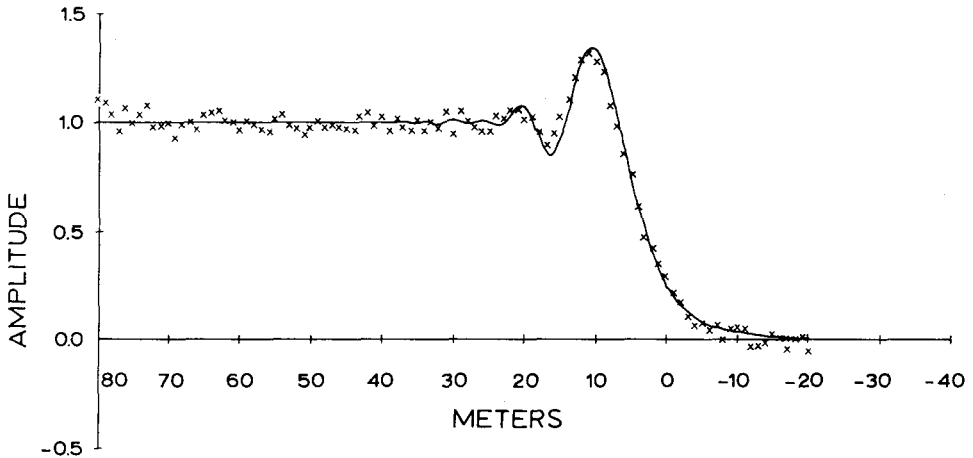
# CLOSING REMARKS

DAVID S. EVANS

*Department of Astronomy, The University of Texas, Austin, Texas*

Several things are clear from this Joint Discussion. Interest in this type of work is wide and could be wider. The subject touches on an immense range of topics from geodesy and celestial mechanics to astrophysics. Observations at different observatories do not conflict with each other, but rather reinforce one another. This is true of timings, but still more true of observations of binary stars and of stars with perceptible angular diameters. There is no real difficulty in identifying as double a wide pair with

DATE	RUN	SAO NUMBER	BD NUMBER	HD NUMBER	MAG	SP TYPE	INSTRUMENT	OBSERVER	FILTER	APERTURE									
15 MAR 70	1401	77509	+28 0878	38233	8.6	B9	MCD 36	REN. DSE	CLEAR	8 SEC ARC									
CHANNELS		MS/CH	CLOCK START	CHNL COUNT	WV OFFSET	ZERO CHNL	PHENOM												
400		2	2 37 0	27414	5.2	213	DISAPPEAR												
173	165	173	165	163	169	165	162	165	168	161	162	174	157	189	161	93	60	59	52
169	169	173	169	164	160	171	158	152	169	171	169	162	147	192	145	86	64	54	53
166	162	171	175	163	163	154	155	157	161	162	175	162	150	200	148	88	59	56	54
174	171	174	170	155	165	153	163	154	148	167	167	150	201	151	83	56	54	47	
165	168	162	171	163	168	155	161	161	156	156	157	165	150	203	143	82	55	59	46
161	172	164	167	161	160	166	157	159	165	161	164	170	151	194	133	84	56	56	46
165	165	174	153	172	166	165	163	154	156	162	160	164	148	196	143	82	57	56	46
160	169	166	153	160	161	169	159	158	161	166	171	172	154	193	138	73	53	47	43
173	177	157	171	160	159	161	170	163	156	163	157	171	169	190	126	71	53	42	49
167	168	155	160	155	152	163	165	166	172	161	152	164	163	198	115	78	66	39	61
178	168	158	154	158	155	170	156	165	176	153	161	173	158	185	124	72	59	41	53
176	170	159	166	171	172	173	163	163	153	163	155	165	166	197	120	70	53	48	56
179	165	178	162	169	166	164	160	165	160	170	155	168	177	192	103	68	48	55	53
165	174	174	163	166	161	147	156	162	161	173	161	167	173	182	107	70	47	48	50
173	181	168	166	165	160	163	163	172	154	165	157	158	177	178	102	67	56	48	49
149	164	166	158	162	166	171	165	169	163	161	159	162	173	176	101	61	50	47	48
168	168	166	160	172	164	161	160	168	157	158	157	155	173	169	99	58	59	56	43
176	177	152	151	177	167	162	160	151	158	158	157	175	182	164	100	59	59	59	41
177	177	167	154	172	149	156	159	158	163	151	165	174	197	165	95	55	55	50	43
173	171	166	154	162	145	161	166	174	166	169	169	161	185	163	95	59	59	52	0



RMS OF NOISE	0.0394	TIME OF OCCULTATION	2 37 54.6773	PREDICTED RATE	0.1567 M/MS	DERIVED RATE	0.1398 M/MS	SLOPE	-1.6
RMS OF FIT	0.0370								
BKGND	50.8	SIGNAL	111.7	25 PC CHNL	323.7	SPEC TEMP	16920	DIST (KM)	392791
						MSA/M	0.5251	LUNAR DIR	96.1
								POS ANG	21.0
								PREDICTED STRETCH	3.8890

Fig. 1.

a separation of the order of  $0''.01$ . Duplicate observations from different places are necessary if we are to infer the conventional parameters of position angle and separation for a given pair. Duplicate observations are still more essential in cases explainable as close pairs with separations less than  $0''.01$ .

We do not in any sense wish to usurp the function of the Nautical Almanac Offices, and we, for our part, will continue to send timings to them. My colleagues have computer programs which, with slight and, hopefully, temporary reservations, will determine times from traces automatically.

However, because of the desirability of correlating traces of occultations of the same star obtained at different observatories, we are going to offer to establish a data center for results of this type. We offer to reduce traces sent to us and to return to the observer a fiche of the type shown in Figure 1 which records the observation and analysis in standard form. We do not intend to publish other people's observations. We will, however, try to correlate duplicate or repeat observations and make them available for study when enough material has been accumulated. We hope that our colleagues will take advantage of this.

To conclude, we should remember that although timing accuracy now achieved may surpass that level which is at present realistic in the light of our knowledge of the lunar limb, this will not be so in the future, and present results will have an archival value to future astronomers.