

**TABLE 1.1. Three Authors' Lists of Reliable Pretelescopic Eclipses**

	DATE	PLACE	AUTHOR*
B.C.	2165? 1948?	China	Needham
	1375 May 3	Ugarit	SC, M
	1330 June 14	An-Yang	M
	1131 Sept 30	Gibeon	M
	763 June 15	Nineveh	M, N
	709 July 17	Chu-Fu	M, N, SC
	601 Sept 20	Ying	M, N, SC
	549 June 12	Chu-Fu	N, SC
	442 March 11	China	N
	431 Aug 3	Athens	N
	424 March 21	Athens	N
	392 Aug 14	Chaldonea	N
	382 July 3	China	N
	364 July 13	Thebes	N
	322 Sept 26	Babylon	M
	310 Aug 15	Sicily	N
	300 July 26	China	N
	198 Aug 7	Chang-An	M, SC
	188 July 17	China	N
	181 March 4	Chang-An	N, SC
	147 Nov 10	Chang-An	N
	136 April 15	Babylon	M, N, SC
	89 Sept 29	China	N
	80 Sept 20	China	N
	28 June 19	China	N
	2 Feb 5	China	N
A.D.	2 Nov 23	China	N
	59 April 30	Armenia	N
	65 Dec 6	Kuang Ling	M, N, SC
	120 Jan 18	Lo Yang	M, N, SC
	243 June 5	China	N
	360 Aug 28	China	N
	429 Dec 12	China	N
	484 Jan 14	Athens	M, N
	516 April 18	Nan-Ching	M, N
	522 Jan 10	Nan-Ching	M, SC
	590 Oct 4	Mediterranean	N
	840 May 5	Bergamo	N, SC
	912 June 17	Cordoba	SC
	916 June 17	Cordoba	M
	968 Dec 12	Constantinople	M, N, SC
	975 Aug 10	Kyoto	SC
	1033 June 29	Europe	N
	1079 July 1	Alcobaca	M

(continued)

#### 4 TOTAL ECLIPSES OF THE SUN

TABLE 1.1 (cont.)

DATE	PLACE	AUTHOR*
1093 Sept 23	Mideast	N
1124 Aug 11	Novgorod	M, SC
1133 Aug 2	Salzburg	M, N, SC
1140 March 20	Europe	N
1147 Oct 26	Europe	N
1176 April 11	Antioch	SC
1178 Sept 13	Vigeois	M, N, SC
1185 May 1	Europe	N
1187 Sept 4	Europe	N
1191 June 23	W. Asia	N
1207 Feb 28	Europe	N
1221 May 23	Kerulen R.	M, SC
1239 June 3	Mediterranean	M, N, SC
1241 Oct 6	Stade	M, N, SC
1263 Aug 5	Mideast	N
1267 May 25	Constantinople	M, SC
1310 Jan 31	Europe	N
1361 May 5	Mt. Sumelas	M
1406 June 16	Braunschweig	SC
1415 June 7	Prague	SC
1485 March 16	Melk	SC
1560 Aug 21	Coimbra	M, SC
1567 April 9	Rome	M, SC

\*M = P. M. Muller

N = R. R. Newton

SC = F. Stephenson

J. Needham wrote *Science and Civilization in China*. (See the "Suggested Reading List" at the end of this chapter).

might imagine that the Egyptians would have been the first to note such an event, since their historical records date back to at least 4000 B.C., but for some reason the Egyptians are not even in the running. As Table 1.1 shows, all the candidates for the oldest eclipse record are Chinese or middle eastern.

The oldest of all dates to the time of the Hsia dynasty (2183 to 1751 B.C.). It appears in *Shu-chin* (literally, "The Book"), and is associated with the story of two astronomers, Hsi and Ho, who failed to predict a solar eclipse and were punished by decapitation. This story has come down to us through Gaubil's *Treatise on Chinese Astronomy*, which dates from A.D. 1732. To this very day, scholars argue whether the event of this date was an eclipse, and whether in fact the event oc-