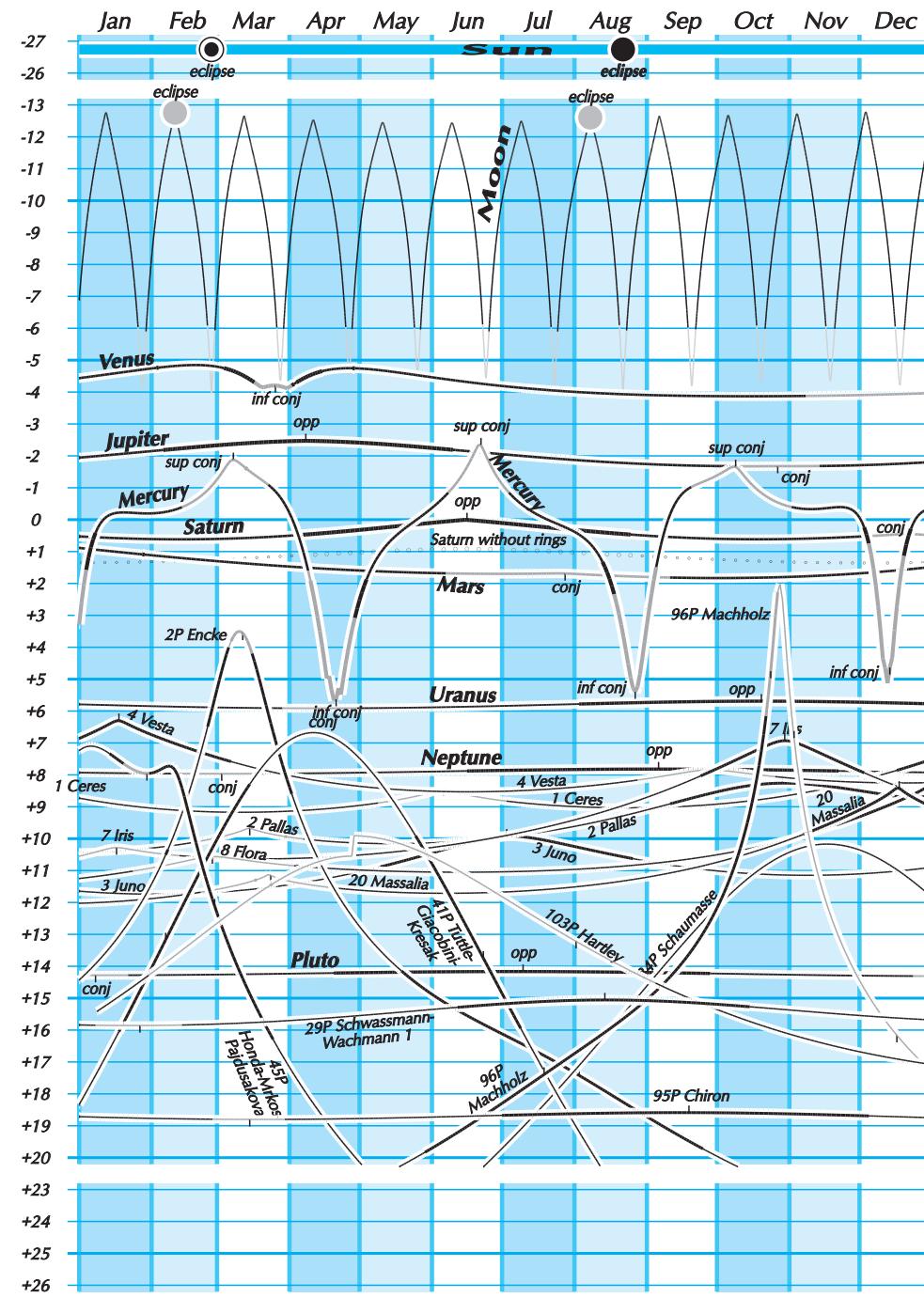


## BLOCK CALENDAR

Julian Date at 0 UT between months		2017						
Sun	Mon	Tue	Wed	Thu	Fri	Sat		
January	2457754.5	1	2	3	4	5	6	7
		8	9	10	11	12	13	14
		15	16	17	18	19	20	21
		22	23	24	25	26	27	28
	2457785.5	29	30	31	1	2	3	4
February		5	6	7	8	9	10	11
		12	13	14	15	16	17	18
		19	20	21	22	23	24	25
	2457813.5	26	27	28	1	2	3	4
		5	6	7	8	9	10	11
March		12	13	14	15	16	17	18
		19	20	21	22	23	24	25
	2457844.5	26	27	28	29	30	31	1
		2	3	4	5	6	7	8
		9	10	11	12	13	14	15
April		16	17	18	19	20	21	22
		23	24	25	26	27	28	29
	2457874.5	30	1	2	3	4	5	6
		7	8	9	10	11	12	13
		14	15	16	17	18	19	20
May		21	22	23	24	25	26	27
	2457905.5	28	29	30	31	1	2	3
		4	5	6	7	8	9	10
		11	12	13	14	15	16	17
		18	19	20	21	22	23	24
June	2457935.5	25	26	27	28	29	30	1
		2	3	4	5	6	7	8
		9	10	11	12	13	14	15
		16	17	18	19	20	21	22
		23	24	25	26	27	28	29
July	2457966.5	30	31	1	2	3	4	5
		6	7	8	9	10	11	12
		13	14	15	16	17	18	19
		20	21	22	23	24	25	26
	2457997.5	27	28	29	30	31	1	2
September		3	4	5	6	7	8	9
		10	11	12	13	14	15	16
		17	18	19	20	21	22	23
		24	25	26	27	28	29	30
	2458027.5	1	2	3	4	5	6	7
October		8	9	10	11	12	13	14
		15	16	17	18	19	20	21
		22	23	24	25	26	27	28
	2458058.5	29	30	31	1	2	3	4
		5	6	7	8	9	10	11
November		12	13	14	15	16	17	18
		19	20	21	22	23	24	25
	2458088.5	26	27	28	29	30	1	2
		3	4	5	6	7	8	9
		10	11	12	13	14	15	16
December		17	18	19	20	21	22	23
		24	25	26	27	28	29	30
	2458119.5	31	1					

Darker blue means less moonlight in the following night.

**MAGNITUDE**

-1.4 **Sirius**  
-0.7 **Canopus** naked-eye in daytime sky?  
0.0 **Arcturus, Vega, Capella**

1.4 **Regulus**

2.1 **Polaris**

3.5 naked-eye limit, in cities

5 —average conditions

6.5 —good conditions

8.6 —through blackened tube  
9 2-inch binoc., 1-inch tel.

10.5 2-inch (5-cm) telescope

11 Proxima Centauri

11.4 3-inch (8-cm) telescope

12.9 6-inch (15-cm)

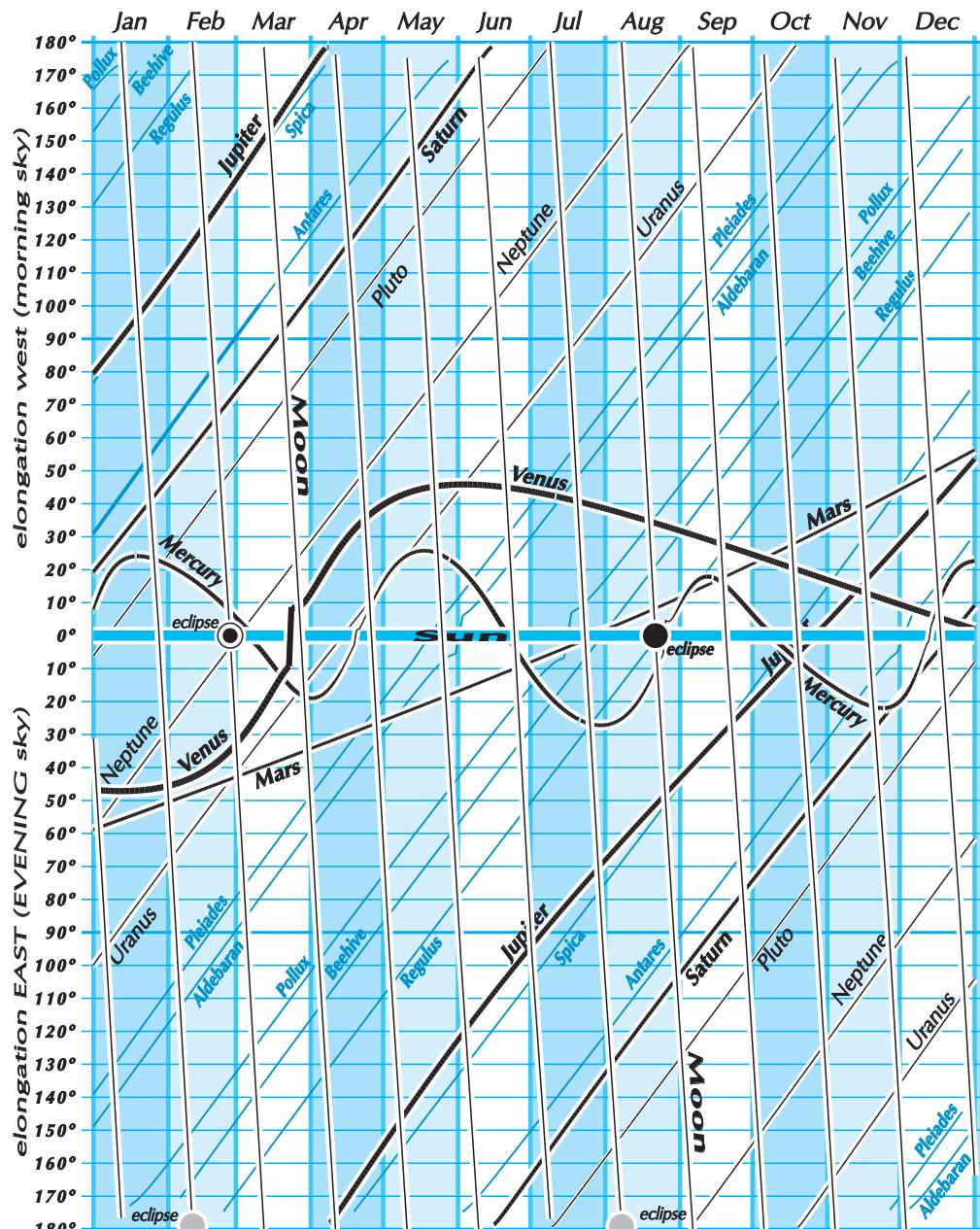
13.5 8-inch (20-cm)

14.4 12-inch (30-cm)

19.5 200-inch (508-cm), visual

23.5 —photographic

(28) faintest objects photographed  
(31) faintest objects recorded with Hubble Space Tel.

**ELONGATION**

## FAVORABLE TIMES

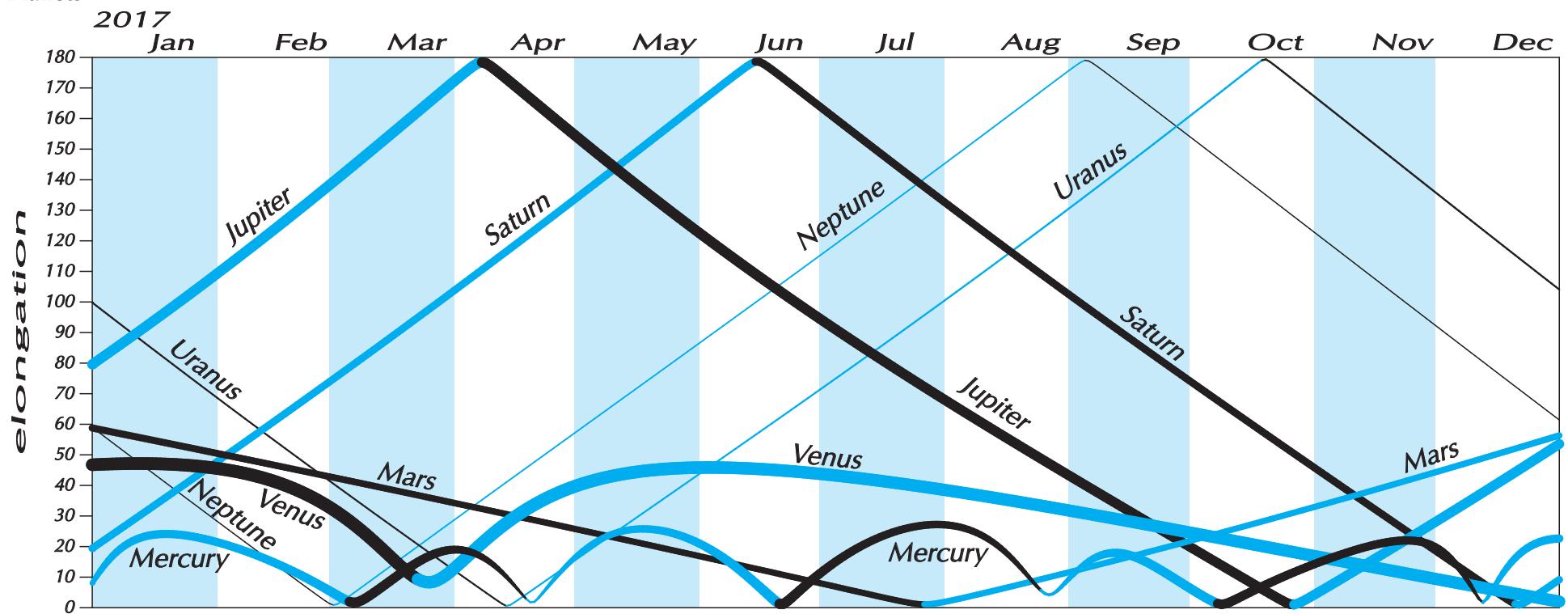
These graphs show times of the year when moving bodies of the solar system are better observable.

For each planet, or relatively bright asteroid or comet, the curve's height represents elongation (angular distance from the Sun). So the top of the curve is at the time of the body's

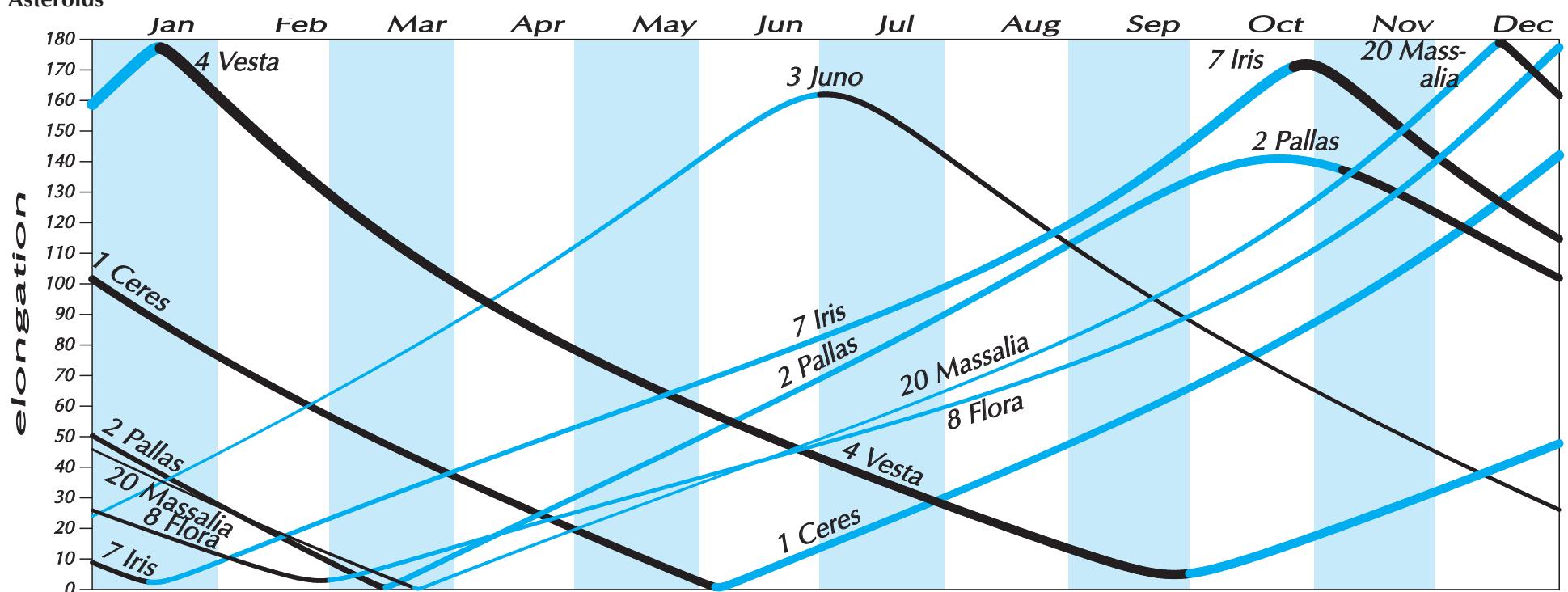
opposition (if it has one, the bottom is at the time of conjunction with the Sun. (Elongation may not quite reach 180° or 0°, because the planet may be north or south of the ecliptic.)

The curve is blue when the elongation is westward—that is, in the morning sky. And the curve's thickness is proportional to the planet's magnitude: thicker is brighter.

### Planets



### Asteroids



### Comets

