

Star Transit Times

Figure 1-3 in the Field Guide is a Graphic Timetable of the heavens giving the transit times of the bright stars. Use it to find the following¹⁰

Date	Star	Transit Time
September 1	Deneb	11 pm EDT
April 1	Vega	7 am EDT
May 1	Vega	5 am EDT
June 1	Vega	3 am EDT
July 1	Vega	1 am EDT
August 1	Vega	11 pm EDT
September 1	Vega	9 pm EDT
May 15	Altair	5 am EDT
September 15	Betelgeuse	7 am EDT
February 1	Aldebaran	8 pm EST
March 1	Aldebaran	6 pm EST

What pattern do you see in the transit times of Vega through the spring and summer?³

It transits 2 hours earlier at the beginning of each month.

Assuming a month is 30 days, how many minutes earlier does Vega transit each day?³

2 hours earlier each month $\Rightarrow$ 2 hours earlier each 30 days
 $\Rightarrow$ 1 hour earlier each 15 days $\Rightarrow$ 60 minutes earlier each 15 days
 $\Rightarrow$ 4 minutes earlier each 1 days

$$\frac{60 \text{ minutes earlier}}{15 \text{ days}} = \frac{60 \text{ minutes earlier}}{15 \text{ day}} = 4 \frac{\text{minutes earlier}}{\text{day}}$$

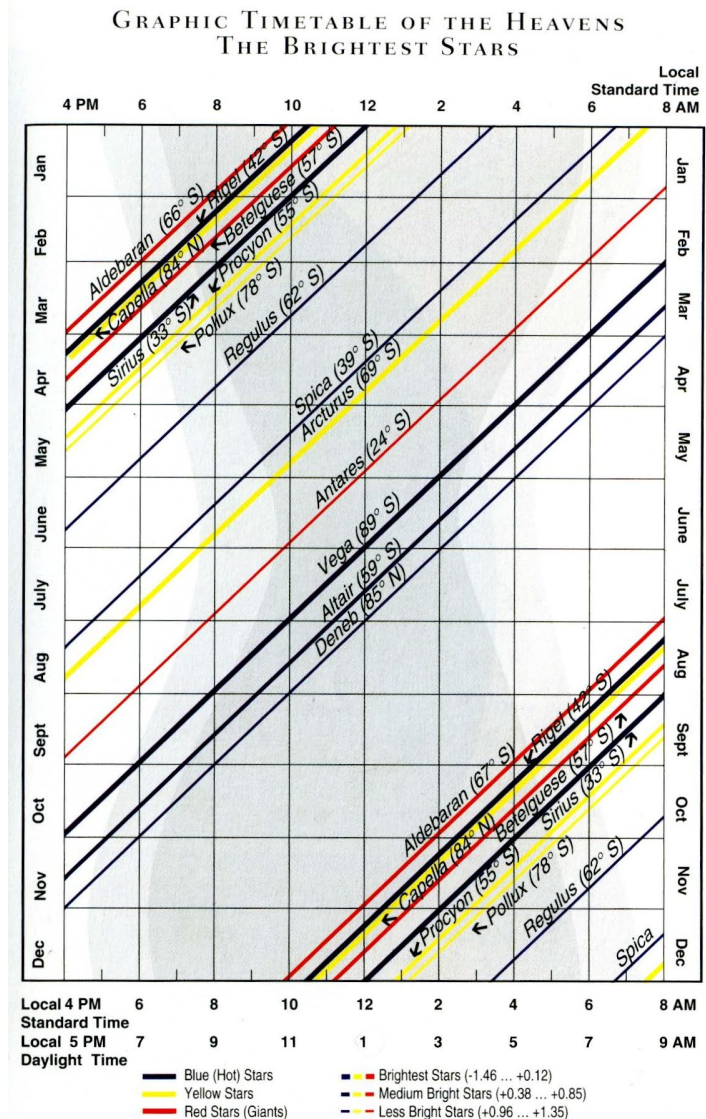


Fig. 1-3 Graphic Timetable of the Brightest Stars, showing when they transit. (© 2000 Scientia, Inc.)