

11.2: Variable Stars

Sometimes a star will change luminosity not due to an eclipse, but due to some sort of physical characteristic. These are called **variable stars** or **variables**. These changes in brightness can range from 1/1000 of a magnitude to 20 magnitudes over a period of a fraction of a second to many years. Over 150,000 variables are known, and many others are suspected to be variables.

There are two major classes of variable stars: **Pulsating Variables** and **Cataclysmic Variables**. **Pulsating variable stars** swell and shrink, which affects the star's brightness. One important class of pulsating variable stars is the **Cepheid Variables**.



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