

**THE  
ASTRONOMICAL  
ALMANAC**

**FOR THE YEAR  
2023**

*Data for Astronomy, Space Sciences, Geodesy,  
Surveying, Navigation and other applications*

# Astronomical Almanac The

**Sean E. Urban, P. Kenneth Seidelmann**

## **Astronomical Almanac The:**

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Observatory,1988     **The Astronomical Almanac (2015-2019)** Richard Bartlett,2014-09-17 Designed for astronomers worldwide the almanac provides details of thousands of astronomical events from 2015 through to 2019 Written by a former freelance writer for Astronomy magazine the guide includes almost daily data and information on the Moon and planets as well as Pluto Ceres Pallas Juno and Vesta The phases of the Moon Conjunctions between the Moon planets and asteroids including angular separations Lunar and Solar eclipses Annual summaries of when to observe the planets and asteroids Annual summaries of notable planetary conjunctions Peak dates for the major meteor showers including corresponding lunar phases Dates of perihelion aphelion perigee and apogee of the planets and asteroids Inferior and Superior conjunction dates for Mercury and Venus Eastern and Western elongation dates for Mercury and Venus Opposition and solar conjunction dates for the outer planets and asteroids Apparent diameter changes for the planets Magnitude changes for the planets and asteroids Constellation changes for the Sun planets and asteroids Whether you re an expert astronomer or a casual star gazer the almanac is the essential guide for observers everywhere     **The Astronomical Almanac for the Year ... (majalah) American Ephemeris and Nautical Almanac (majalah) Astronomical Ephemeris ( ,1968     The Astronomical Almanac for the Year 1986 Gran Bretagna. Royal Greenwich Observatory. Nautical Almanac Office,Stati Uniti d' America. Department of the Navy. Naval observatory,United States Naval Observatory,Raymond A. Vohden,United States Naval Observatory. Nautical Almanac Office,1991     **GP100-24 ASTRONOMICAL ALMANAC 2024 ,2023     The Astronomical Almanac, 1981-** United States Naval Observatory. Nautical Almanac Office,1980**

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