

# **A Tale of Comet Holmes**



**Astronomy Picture of the Day (2007 Oct. 29)**

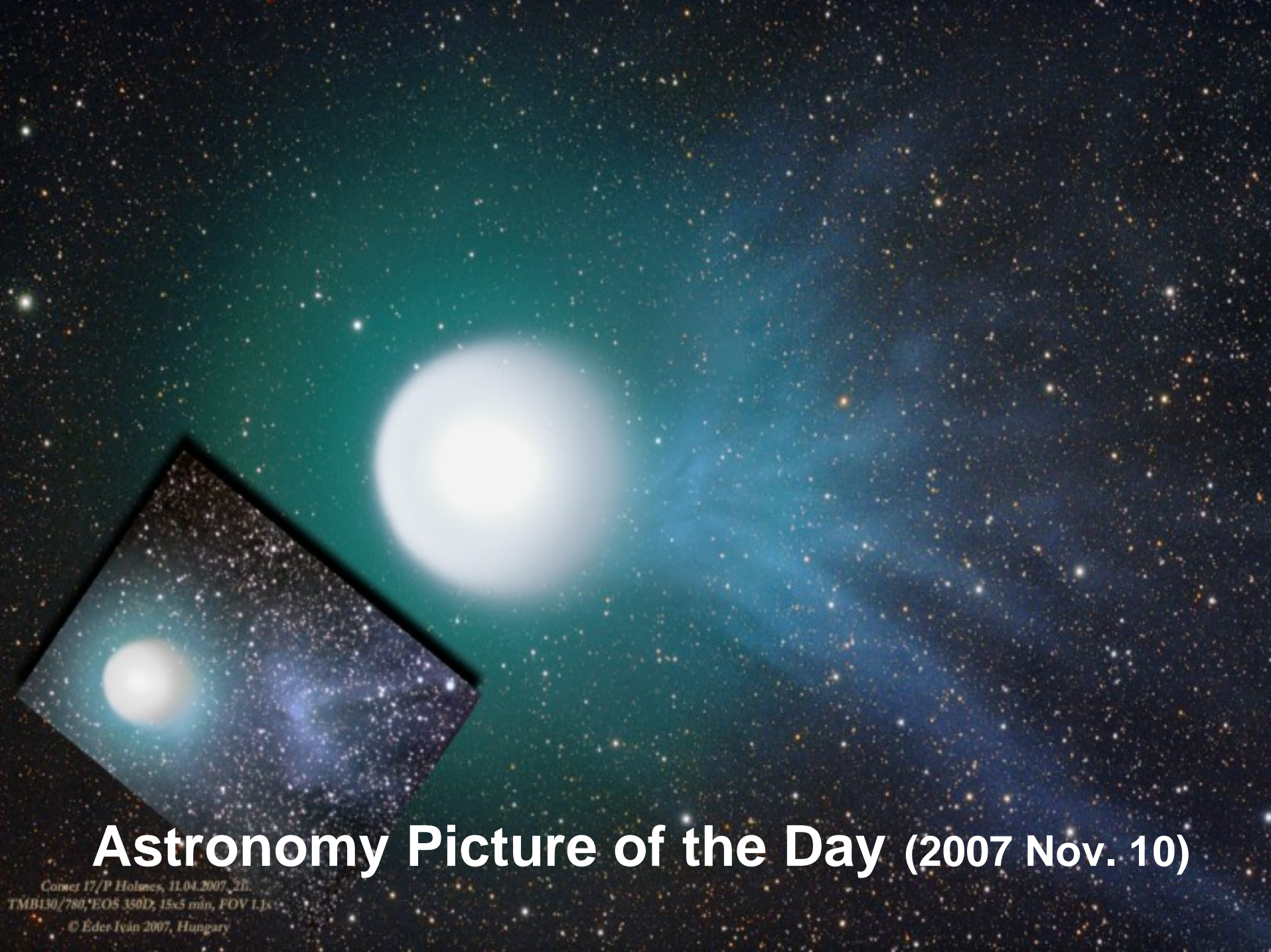
**Erupting Comet Holmes**



**Astronomy Picture of the Day (2007 Nov. 5)**

**Comet Holmes Grows a Tail**





# Astronomy Picture of the Day (2007 Nov. 10)

Comet 17/P Holmes, 11.04.2007, 2E.

TMB130/780, EOS 350D, 15x5 min, FOV 1.1x

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**Astronomy Picture of the Day (2007 Nov. 13)**  
**The Inner Coma of Comet Holmes**

November 1, 2007  
A. Dyer, Alberta, Canada



November 4, 2007  
HST/WFPC2

**Comet 17P/Holmes**  
*Hubble Space Telescope • WFPC2*

# Advanced Question

Chap. 12, Q36 in P326

Jupiter was at opposition on June 5, 2007. On that date Jupiter appeared to be in constellation Ophiuchus. Approximately when will Jupiter next be at opposition in this same region of the celestial sphere? Explain your answer?

# Advanced Question

## Chap. 12, Q36 in P326

Answer:

Jupiter's sidereal period is about 12 years, which means that Jupiter will be again at exactly the same position in about 12 years, or 2019.

However, for the next opposition as seen from the Earth, it takes only a little more than one year.

In one year, Earth moves about  $360^\circ$ , and Jupiter moves about  $30^\circ$ .

It takes about another 30 days for the Earth to catch up the  $30^\circ$  that Jupiter has moved.

Therefore, Jupiter will be at next opposition in about 395 days.

The exact synodic period of Jupiter is 398.9 days