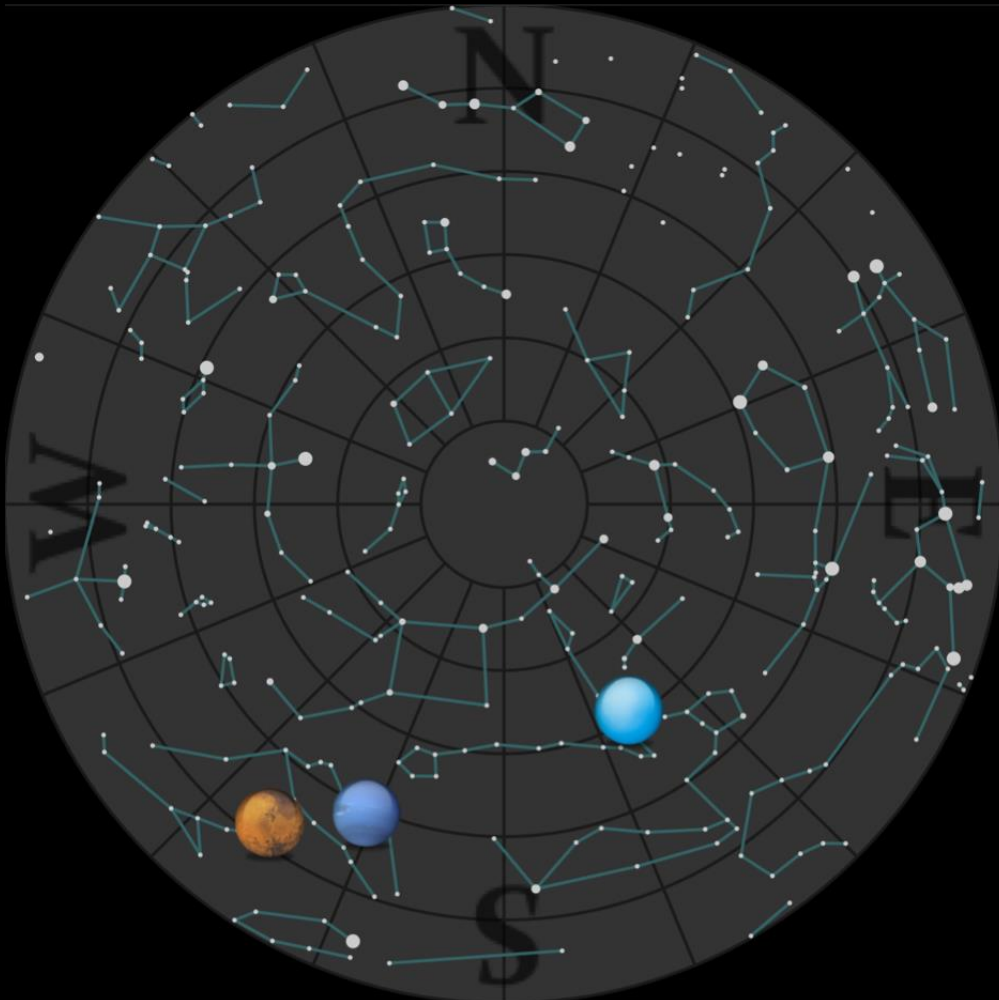


# What's Up?

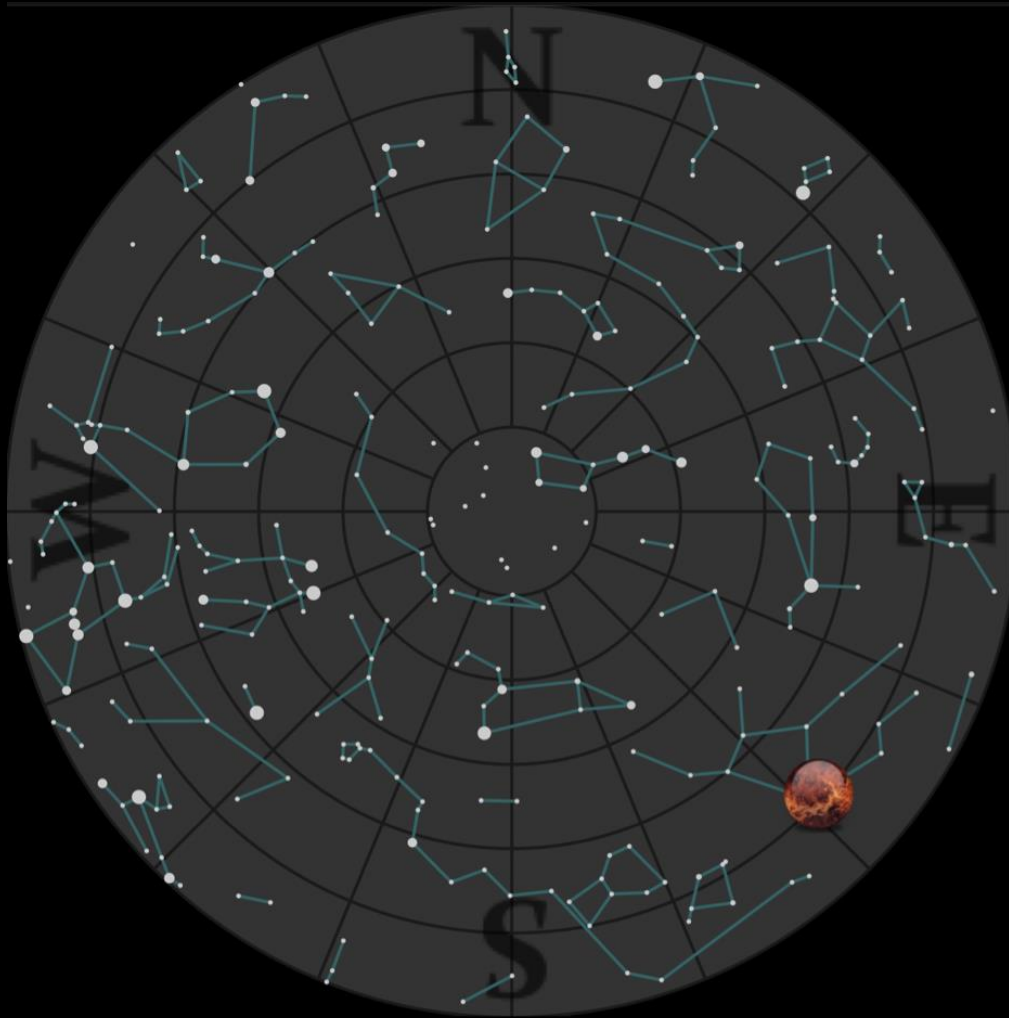
2018 November 12 to December 10

Bill Barton, FRAS

•The Sky 21:00  
Tonight






•The Sky 07:00  
Tomorrow



# Inner Solar System

- Sun
  - Declination decreasing until
  - Solstice December 21, perihelion January 04
- Mercury
  - In evening sky until the end of November, but not favourable for observation, then in morning sky in December
  - Maximum elongation from Sun was on November 6 ( $23^{\circ}$ )
  - Inferior conjunction November 27
  - currently rising 10:30, setting 17:50
- Venus
  - In morning sky following inferior conjunction on October 26
  - Greatest elongation January 6, superior conjunction August 14
  - Currently rising 06:00, setting 16:00

# Earth

- Time
  - 00:00UT  $\approx$  03:25ST today
  - Today sunrise 07:10, sunset 16:10
  - End of period sunrise 07:50, sunset 15:45
- Moon
  -  First Quarter, 15
  -  Full, 23, (Frost Moon)
  -  Last Quarter, 30
  -  New, December 07
- Eclipses
  - None this period
- Meteors
  - Geminids, peak December 14, ZHR=100+

# Lunar Occultations

- None of note this period

# Grazing Lunar Occultations

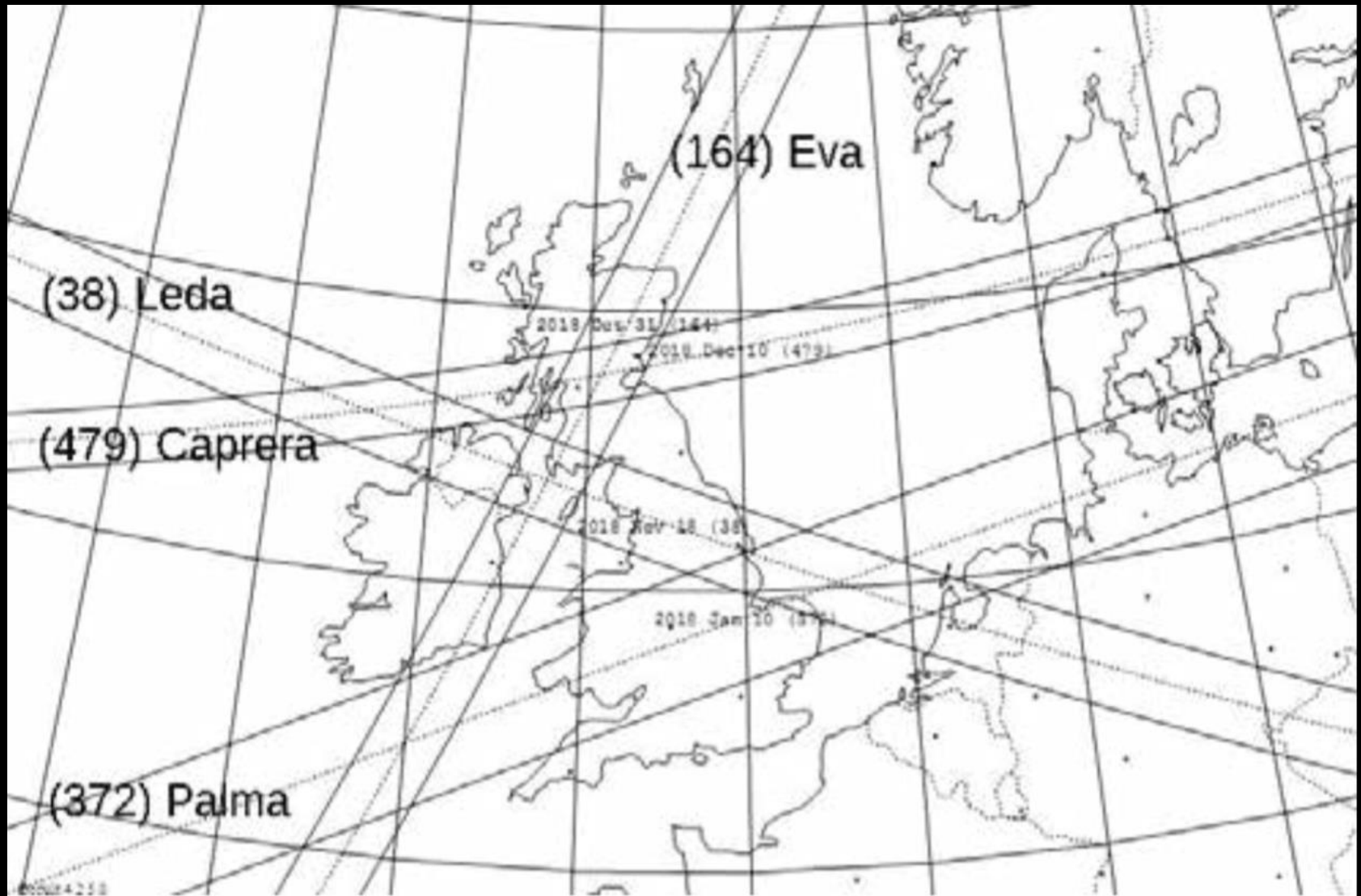
- November 27
  - 85 Geminorum, 04:04, south limb, Lunar alt  $57^{\circ}$
  - $\delta$  Cancri, 22:14, south limb, Lunar alt  $14^{\circ}$

# Asteroid Occultations

- November 18
  - 38, Leda (116km dia) & UCAC4-606-13842 (mag 9.8)
  - 04:37, 1.7 mag drop, max dur 13.3s
- December 10
  - 479, Caprera (70km dia) & UCAC4-514-35495 (mag 7.8)
  - 20:47, 5.1 mag drop, max dur 9.8s



# Asteroid Occultations

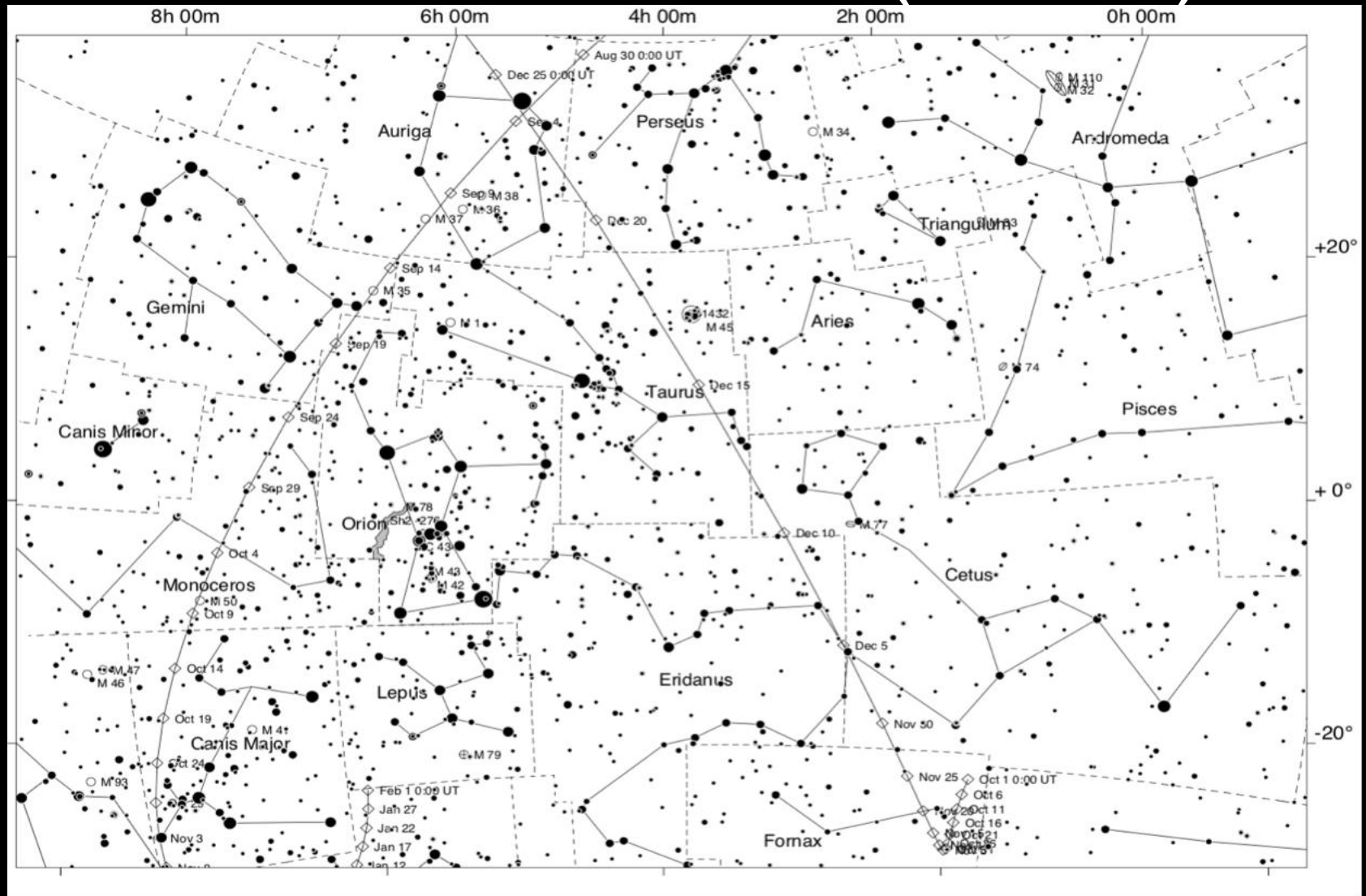


# Comet Wirtanen

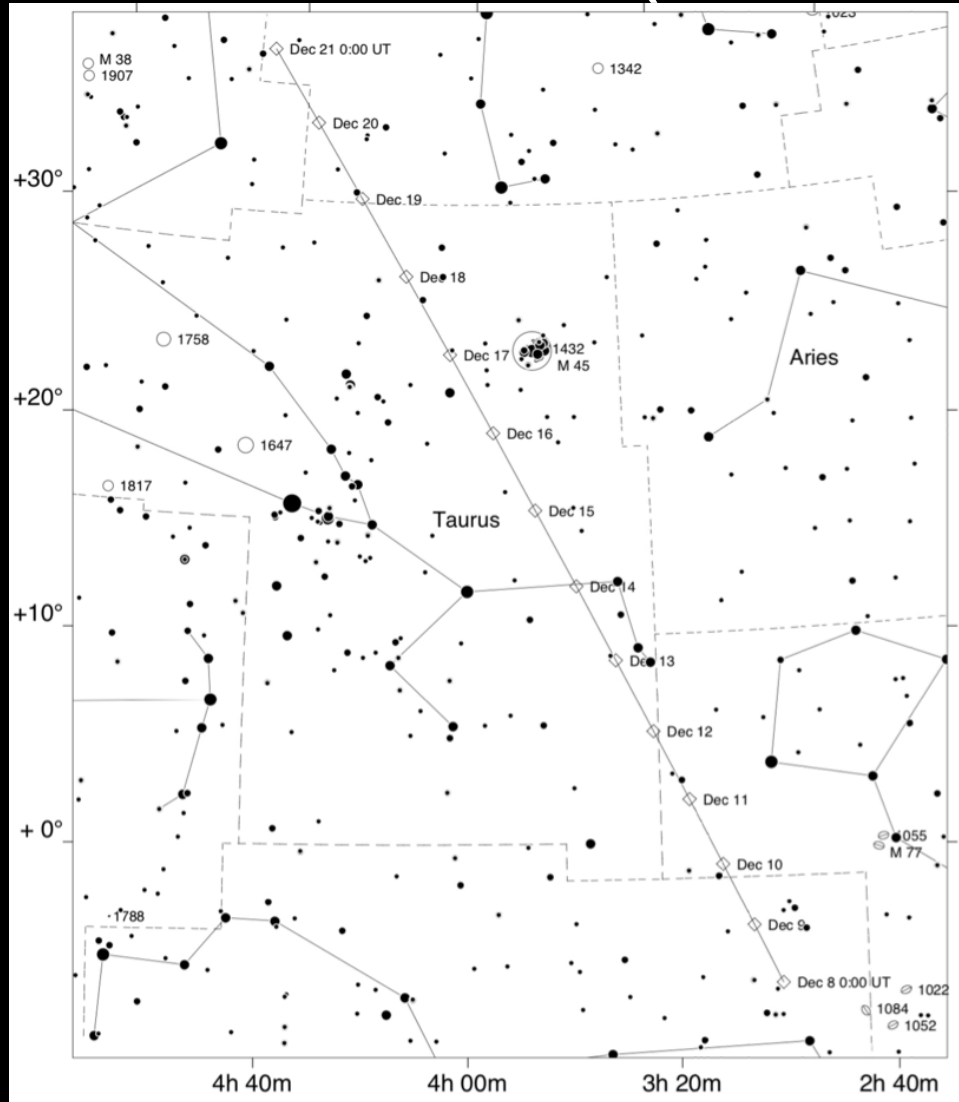
- Discovered in 1948 by Carl Wirtanen (11 November 1910-1990) at the Lick Observatory
- Orbit period 5.4 years
- Perihelion 12 December 2018
- Closest approach to Earth 16 December (30 times Earth Moon distance)
- Magnitude  $\approx 4$ , but 1-2<sup>0</sup> diameter (similar to the Andromeda Nebula)



# Comet Wirtanen (Oct→)



# Comet Wirtanen (December)



# Outer Solar System

- Mars
  - Currently rising 14:40, setting 00:20. Perihelic Opposition was on July 27, conjunction September 02 2019
- Jupiter
  - Currently rising 09:10, setting 17:40. Solar Conjunction November 26, opposition June 10 2019
- Saturn
  - Currently rising 12:00, setting 19:50. Opposition was on June 27, 2018, conjunction January 02 2019
- Uranus
  - Currently rising 16:20, setting 06:20. Opposition was on October 24, 2018
- Neptune
  - Currently rising 15:05, setting 02:00. Opposition was on September 7, 2018

# Society Events

- Lecture Meeting
  - Friday November 23, 8:00pm, St Augustines Church Hall, Bucklesham Road, Ipswich. 'Imaging with a Dobsonian Telescope', Martin Lewis
- Committee Meeting
  - Friday November 30, 8:00pm, Museum Street Methodist Church Hall, Blackhorse Lane
- Christmas Meal
  - Wednesday December 12, 7:00pm, Coach & Horses, Melton (booking required)

# Other Events I

- DASH
  - Discussion Meeting, Sunday November 25, 7:30pm, Westleton Village Hall, 'Distances to Stars and Galaxies: How do we Measure?', Dave Green
  - Outreach Event, Coastguard Cottages, Dunwich, Friday 16 & Saturday 17 November from 6:00pm
- LYRA
  - Discussion Meeting, Tuesday November 13, 7:30pm, Coach House Room, Parkhill Hotel, Bob Argyle, Webb Society President, 'Observing Double Stars Past & Present'
  - Observing Meeting, Tuesday November 27, 7:30pm Barn Car Park, Parkhill Hotel

# Other Events II

- Athenæum Astronomical Association
  - Meeting at Nowton Park
    - Thursday November 22, 7:30pm, members meeting
    - Thursday December 6, 7:30pm, members meeting
- British Astronomical Association
  - Christmas Meeting, Saturday December 8, 2:00pm, Institute of Physics, 37 Caledonian Rd, London (already fully booked)



# And Finally...

- Today, 12 November (old style)
  - Admiral Edward Vernon's (1684-1757) birthday (he would have been 334)
    - Gregorian Calendar not adopted until 1752 when Wednesday 2<sup>nd</sup> September was followed by Thursday 14<sup>th</sup>