

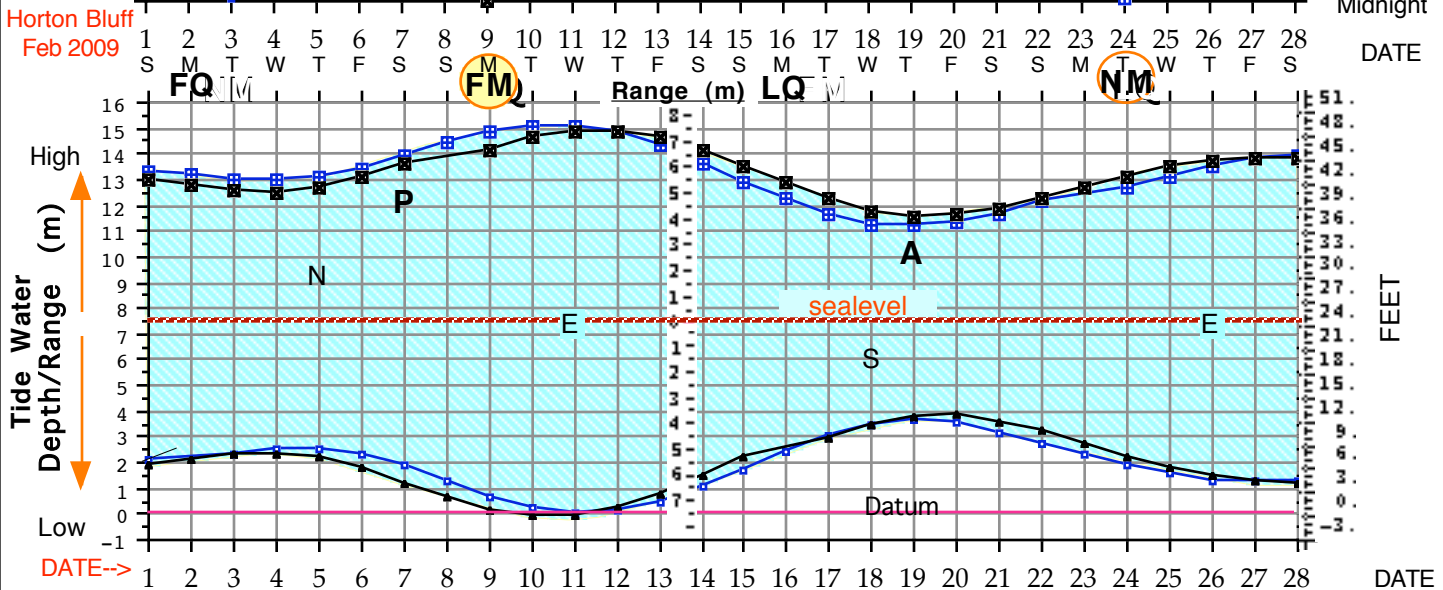
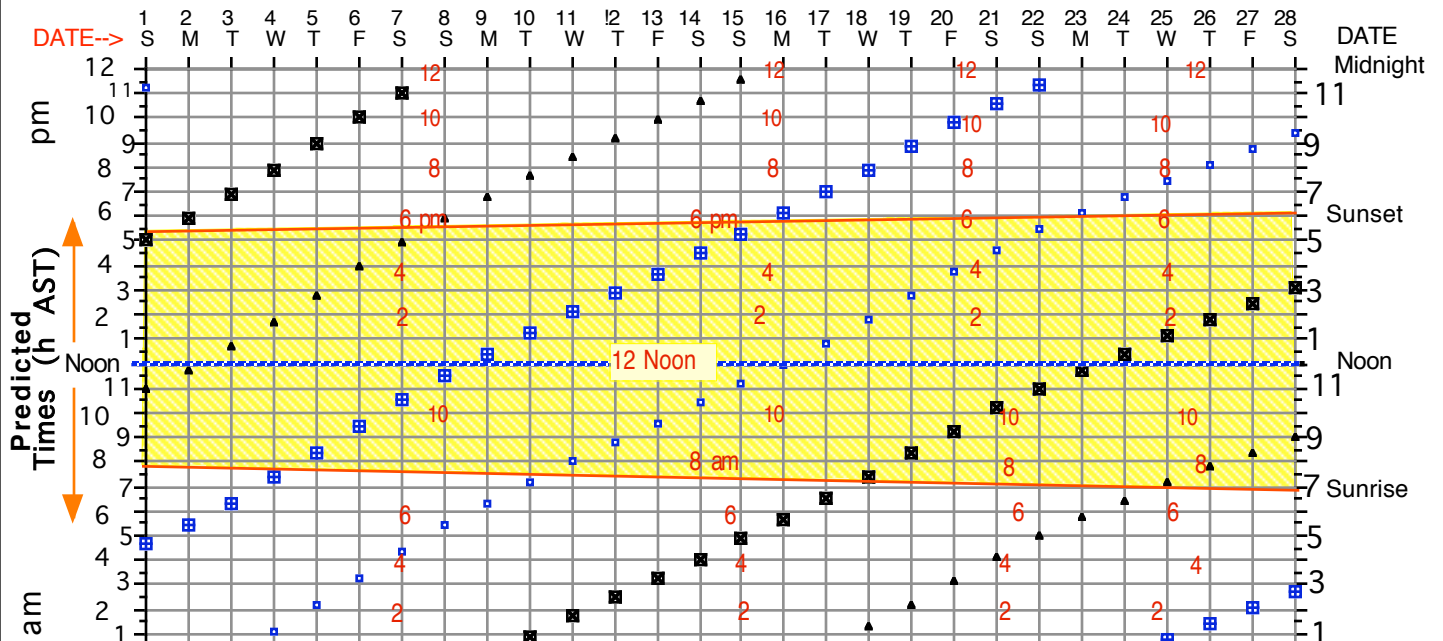
# TIDES, HORTON BLUFF, Minas Basin, N.S., for FEBRUARY 2009

## A Graphic Guide for High & Low Tide Times, Tide Range and Sunrise/Sunset

Predictions are for Horton Bluff (near Avonport, N.S.) and are computer generated using the tidal harmonic tables for Burntcoat Head, N.S. These times are a good guide ( $\pm 15$  min or less) for most locations around the **Minas Basin**.

Adjustments were made relative to observations recorded at Horton Bluff. Results compare favourably with values obtained using the *Canadian Tide and Current Tables, 2009* on Saint John, N.B. References for astronomical events: *Observer's Handbook 2009* Royal Astronomical Society of Canada and *Starry Night*, a sky simulation program by Sienna Software, Toronto, Ont. This chart **not** designed for navigating at sea.

### The INTERNATIONAL YEAR of ASTRONOMY ( IYA 2009 )



SUN & MOON POSITIONS

**High Tide**, Moon near Meridian above south  
 **High Tide**, Moon near Anti-meridian below north  
 **Low Tide**, Moon near Western horizon -setting  
 **Low Tide**, Moon near Eastern horizon -rising  
**Moon's Declination to the Equator**  
**N** -Maximum declination North:  $+28^\circ + 27^\circ$   
**E** -Declination is  $0^\circ$  (on the Equator)  
**S** -Maximum declination South:  $-27^\circ$

**NM** -New Moon  
**FM** -Full Moon  
**P** =Perigee: Moon nearest Earth (361 488 km)  
**LQ** -Last Quarter Moon  
**FQ** -First Quarter Moon  
**A** =Apogee: Moon farthest from Earth (405 129 km)  
**Datum** = lowest point below which the tide seldom falls.

Factors which increase the vertical range of tide, especially when **perigee is close to New or Full Moon [SPRING TIDES]**  
**Note:** Weather conditions can significantly affect tide range.  
 Factors which decrease the vertical range of tide, especially when apogee is close to Quarter Moon **[NEAP TIDES]**

Sunrise / Sunset Daylight gains about 84min

To get the predicted tide time or height, select a date, follow the vertical line to the event, read time(hours) or height (metres) along the horizontal line to the scale on the left.

Designed© and prepared by Sherman Williams, Avonport, N.S.

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