

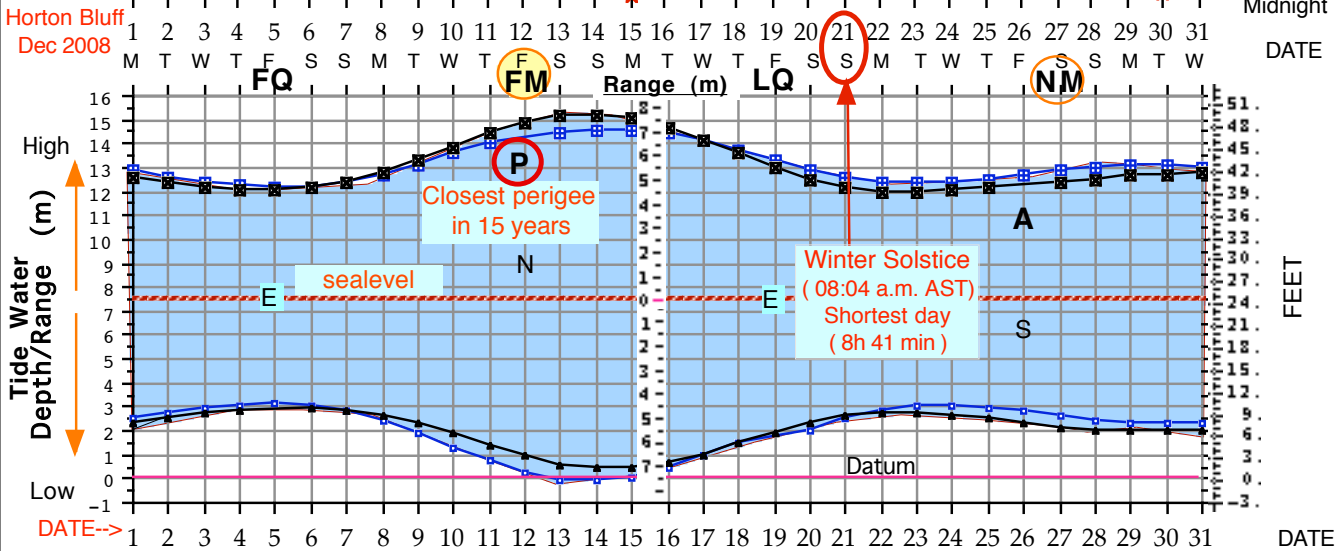
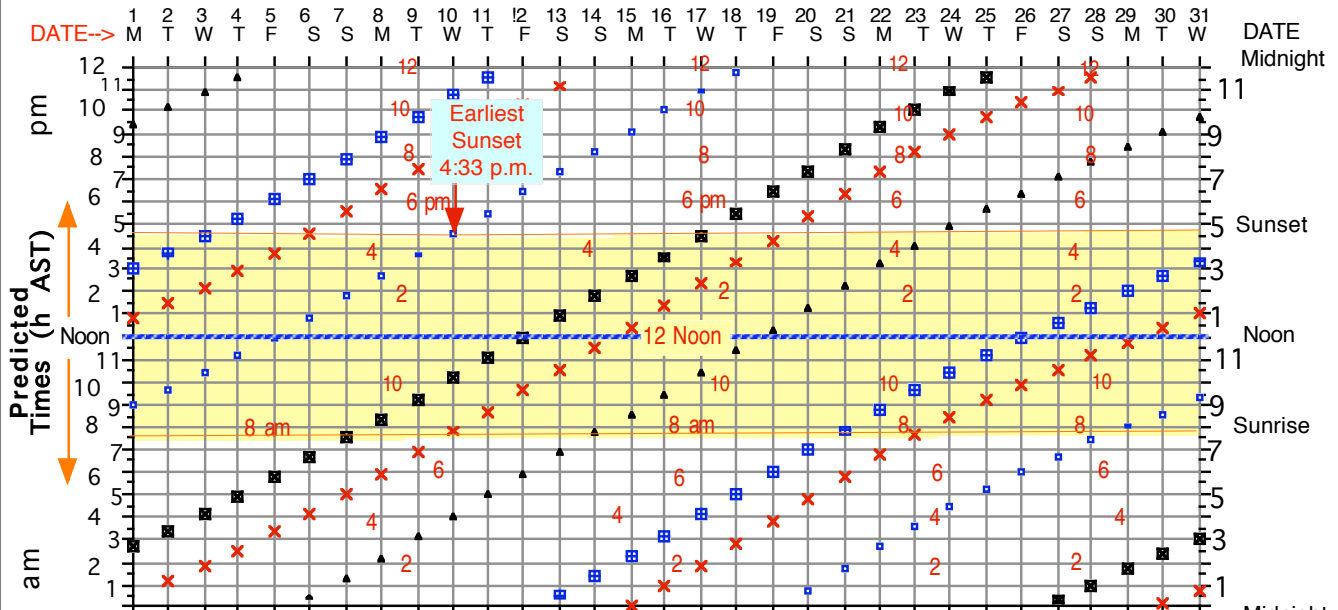
# DECEMBER 2008

# TIDES: Minas Basin at HORTON BLUFF, N.S.

## 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, 2008* on Saint John, N.B. References for astronomical events: *Observer's Handbook 2008* Royal Astronomical Society of Canada and *Starry Night*, a sky simulation program by Sienna Software, Toronto, Ont. This chart is not designed for navigating at sea.



SYMBOLS	<ul style="list-style-type: none"> <li>High Tide, Moon near Meridian above south</li> <li>High Tide, Moon near Anti-meridian below north</li> <li>Low Tide, Moon near Western horizon -setting</li> <li>Low Tide, Moon near Eastern horizon -rising</li> </ul>	<ul style="list-style-type: none"> <li>NM -New Moon</li> <li>FM -Full Moon</li> <li>P =Perigee: Moon nearest Earth (356 566 km closest of yr.)</li> <li>LQ -Last Quarter Moon</li> <li>FQ -First Quarter Moon</li> <li>A =Apogee: Moon farthest from Earth (406 601 km)</li> </ul>	<ul style="list-style-type: none"> <li>Factors which increase the vertical range of tide, especially when perigee is close to New or Full Moon [<b>SPRING TIDES</b>]</li> <li>Note: Weather conditions can significantly affect tide range.</li> <li>Factors which decrease the vertical range of tide, especially when apogee is close to Quarter Moon [<b>NEAP TIDES</b>]</li> </ul>
	<ul style="list-style-type: none"> <li>Moon's Declination to the Equator</li> <li>N -Maximum declination North: <math>+28^\circ + 27^\circ</math></li> <li>E -Declination is <math>0^\circ</math> (on the Equator)</li> <li>S -Maximum declination South: <math>- 27^\circ</math></li> </ul>	<ul style="list-style-type: none"> <li>Datum = lowest point below which the tide seldom falls.</li> <li>Sunrise / Sunset</li> <li>Tidal Bore in view from the bridge, Mantua, Hants Co.</li> </ul>	
	<ul style="list-style-type: none"> <li>To Dec 22 daylight loses about 16 min then gains 5 min.</li> <li>Dec 21 is the shortest day (8h 41 min)</li> </ul>		
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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.