

Red Tide off Vancouver Island July 3 2011

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Surface chlorophyll has remained high around southern Vancouver Island into early July 2011. A MERIS MCI image acquired on July 3, 2011 shows a significant surface bloom event occurring off Barkley Sound (figure 1). The presence of very high surface chlorophyll is indicated by peaks at 709nm in the spectra. Surface currents associated with the Juan de Fuca eddy appear to be moving the bloom towards the coast of Washington.

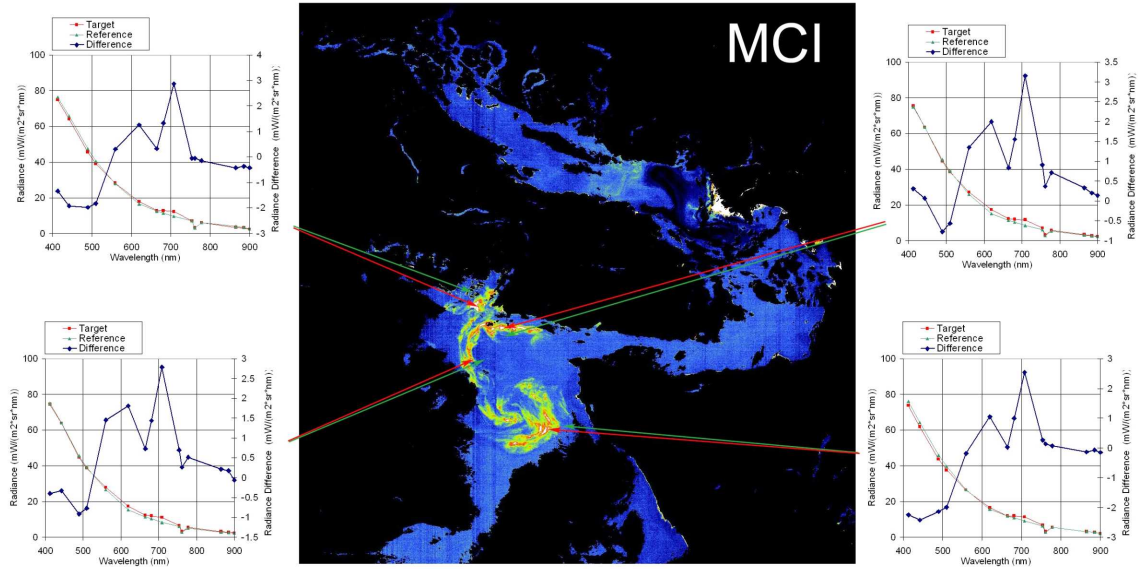


Figure 1: MCI image and spectra showing a red tide event off Barkley Sound on July 3, 2011. In all plots of spectra, a target (bloom) top-of-atmosphere spectrum is shown in red and a reference (nearby clear water) spectrum is shown in green. The difference spectrum (dark blue, right axis) shows the radiance difference caused by the bloom, in this case including the characteristic “peak” at 709nm indicating a “red tide” of visibly discoloured (reddish-brown) surface water.