

## **SEARCH Regional Sea Ice Outlook 2011 July Report**

### **Region of Interest: Western Parry Channel region of the Northwest Passage**

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#### Clearing of the Northwest Passage:

As of the end of July total sea ice area in the Western Parry Channel region of the Northwest Passage began tracking less than previous light years 2007 and 2008 but only slightly above the record low of 2010 (Figure 1a). The multi-year ice (MYI) area has remained steady and is well below the historical average and similar to 2010 (Figure 1b). July air temperatures in the Western Parry Channel were near normal for 2011 but elsewhere in the Canadian Arctic air temperatures were several degrees above normal (Figure 2). Spatially, there are high concentrations of ice in the central Western Parry Channel (Figure 3) but given the current rate of decline it does seem very likely the region will clear in the coming weeks.

## Sea ice conditions in the Western Parry Channel route of the Northwest Passage

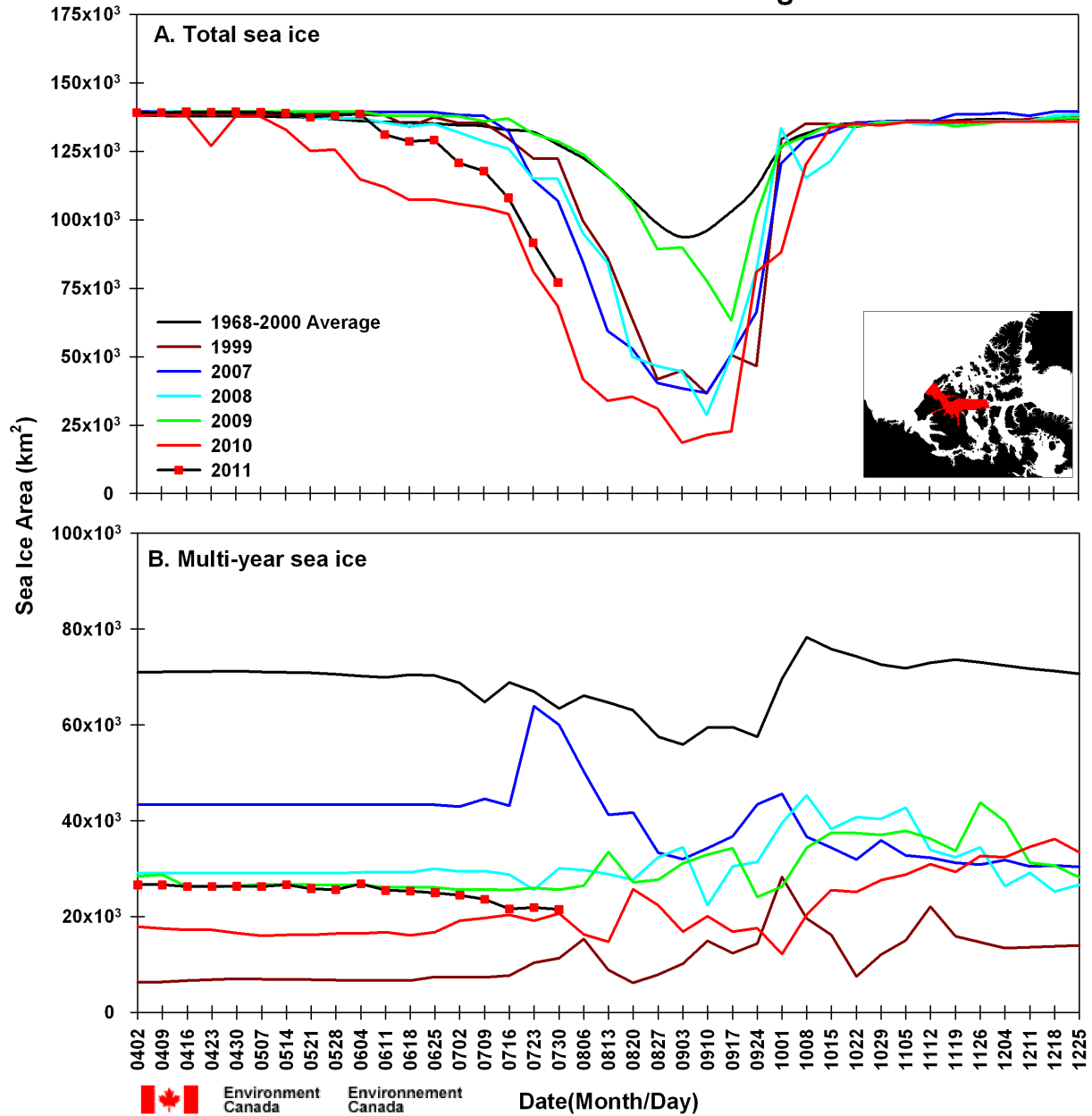


Figure 1. Time series a) total sea ice and b) multi-year ice (MYI) area for selected years within the Western Parry Channel. Data is from the Canadian Ice Service.

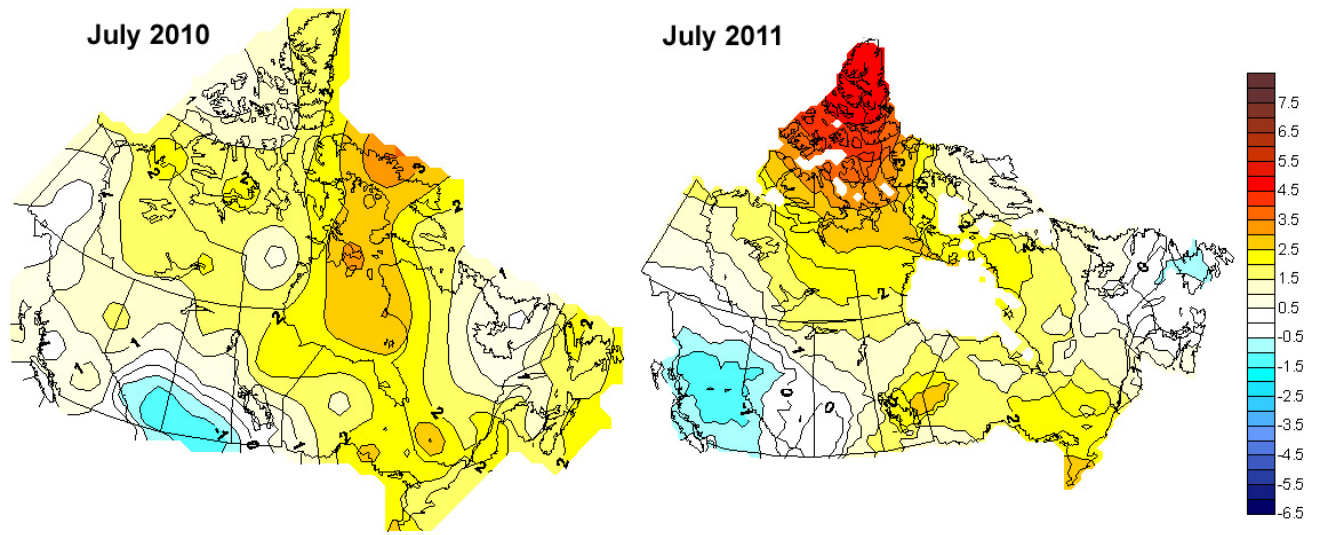


Figure 2. July 2010 (left) and July 2011 (right) surface temperature anomalies (°C) over Canada compared to the 1970-1999 average. Data is from Environment Canada.

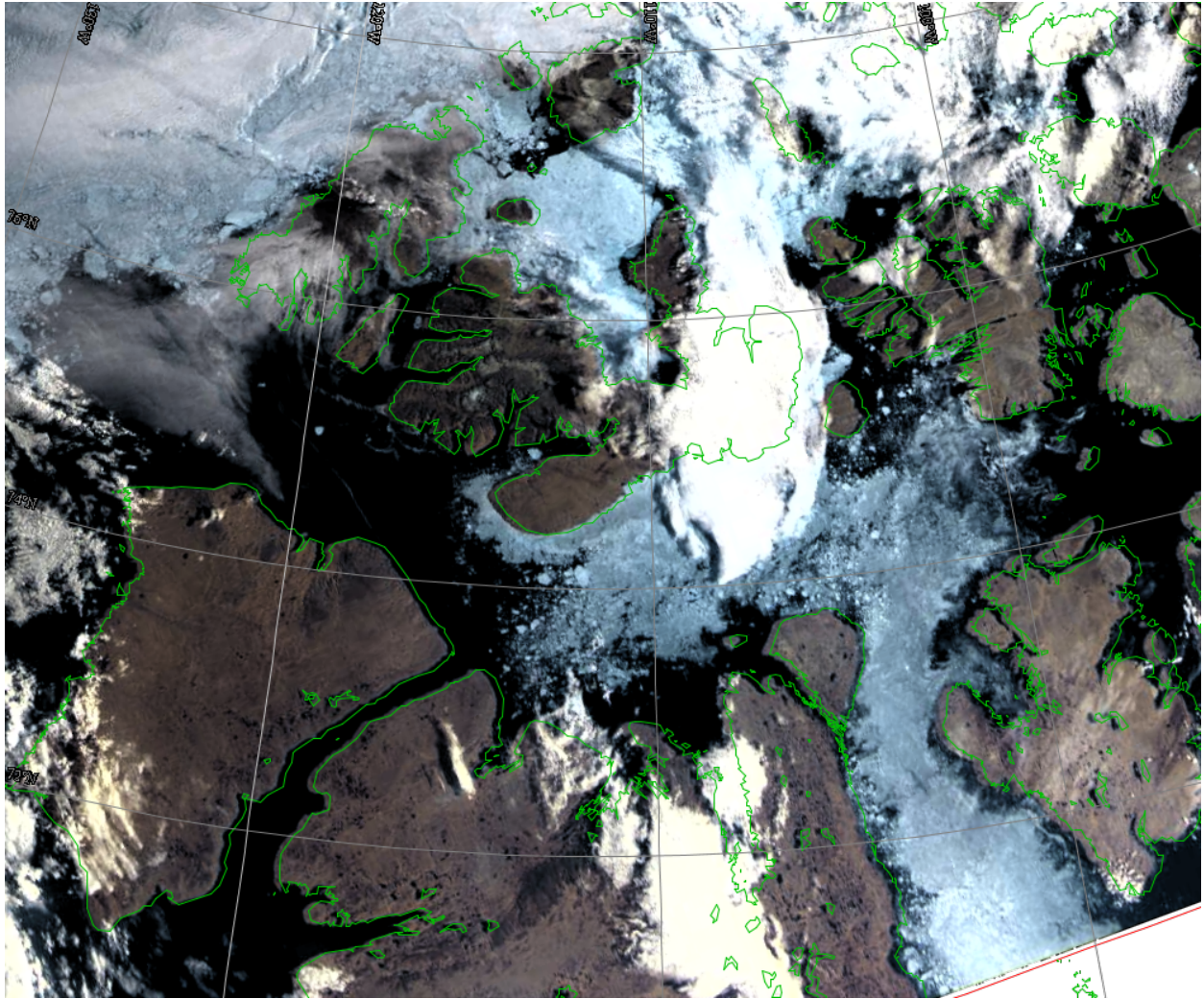


Figure 3. MODIS image over the Western Parry Channel route of the Northwest Passage on August 8, 2011 13:36:08 GMT.