

## **SEARCH Regional Sea Ice Outlook 2012 August Report**

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

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#### Clearing of the Northwest Passage:

Sea ice area plummeted in the Western Parry Channel region of the Northwest Passage the last of week July (Figure 1). As a result, the region was almost clear of sea ice by the end of July that was well ahead of the previous years (Figure 2). Interestingly, mean July temperature anomalies were greater in 2011 compared to 2012 for most Canadian Arctic regions (Figure 3). Also of interest was that some ice was still presented in the Eastern Parry Channel which not a common occurrence since break up typically occurs east to west. The ice in the Eastern Parry Channel is seasonal and the region will eventually clear. Given the current ice light conditions at the end of July, it is almost certain that the Western Parry Channel route through the Northwest Passage will open. However, opening may only be temporary because open water in this region provides a pathway for multi-year ice (MYI) to be flushed southward from the Queen Elizabeth Islands.

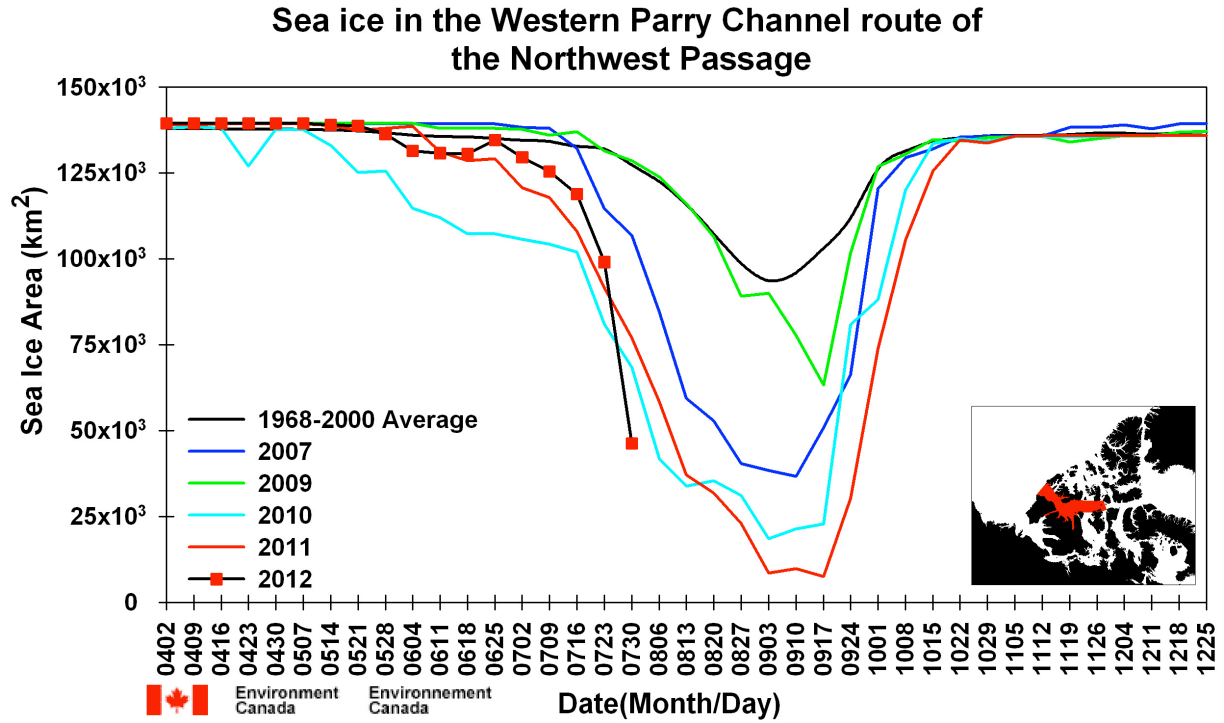


Figure 1. Time series of sea ice area for selected years within the Western Parry Channel. Data is from the Canadian Ice Service.

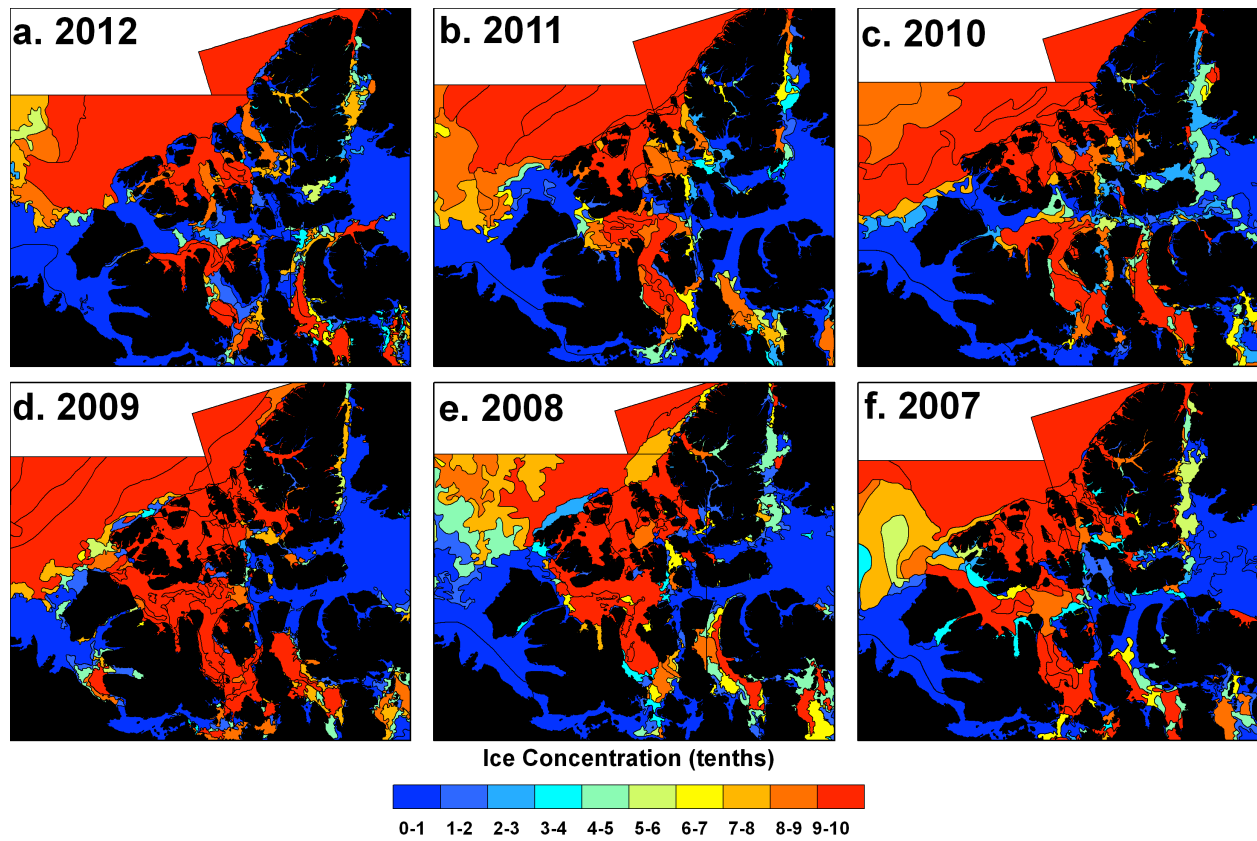


Figure 2. Total sea ice concentration in Canadian Arctic waters at the end of July for 2007-2012. Data is from the Canadian Ice Service.

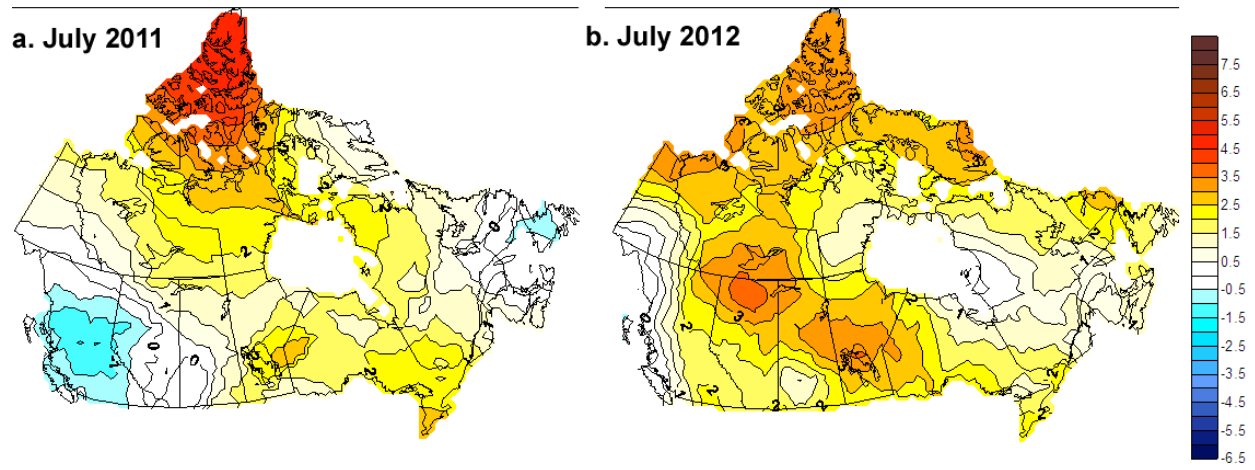


Figure 3. July 2011 (a) and July 2012 (b) surface temperature anomalies over Canada compared to the 1970-1999 average. Data is from Environment Canada.