## September 2012 Regional Outlook Adrienne Tivy

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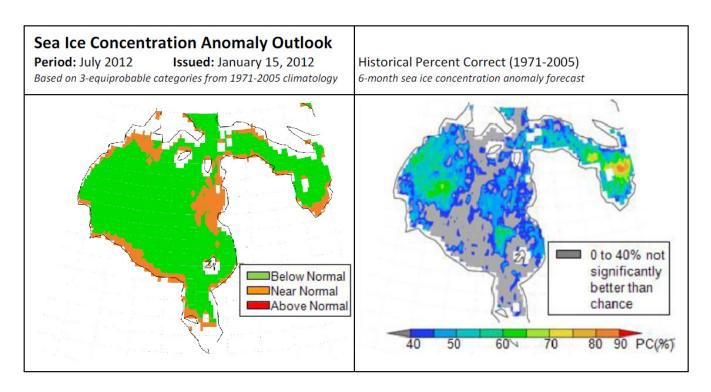
June Report based on May Data

## SHIPPING ROUTE: Arctic Bridge & Hudson Bay

<u>Sea Ice Parameter</u>: July ice concentration anomalies

Methods/Techniques: Canonical correlation analysis with three predictors: 1. North Atlantic Fall SST, 2. Northern hemisphere Fall z500 and 3. Regional (Hudson Bay) Fall SAT. For more information please see: *Tivy*, A., S. E.L. Howell, B. Alt, J. Yackel and T. Carrieres (2011). Origins and levels of seasonal forecast skill for sea ice in Hudson Bay using Canonical Correlation Analysis. Journal of Climate. doi:10.1175/2010JCLI3527.1

<u>Estimate of Forecast Skill:</u> The hind-cast skill of the model is used as an estimate of forecast skill. It is evaluated as the number of times the model correctly categorized ice concentration anomalies at each grid point as above normal, near normal or above normal.



**Figure 1.** Sea ice concentration anomaly outlook for July 2012 in Hudson Bay

## **REGION: Beaufort Sea**

Sea Ice Parameter: September ice concentration anomalies

Methods/Techniques: Canonical correlation analysis with one predictor: Fall (Oct-Nov-Dec) Surface Air Temperature over the Beaufort Sea (60-90N, 150-250W). The methodology follows: *Tivy, A., S. E.L. Howell, B. Alt, J. Yackel and T. Carrieres* (2011). *Origins and levels of seasonal forecast skill for sea ice in Hudson Bay using Canonical Correlation Analysis. Journal of Climate. doi:10.1175/2010JCLI3527.1* 

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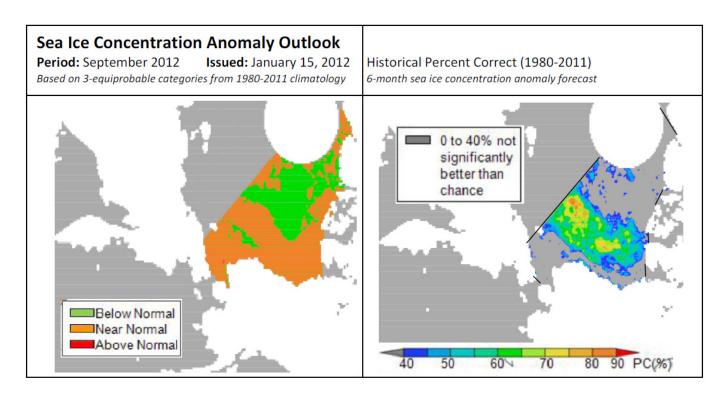


Figure 2. Sea ice concentration anomaly outlook for September 2012 in the Beaufort/Chukchi Seas