

b) Advise on whether or not an exceptional circumstance is occurring.

According to the indicator based on surveys, exceptional circumstances are presently occurring, with one survey observation below the 5th percentile of the simulated distributions. Due to the unavailability of STACFIS catch estimates in 2011, 2012, and 2013, Scientific Council is unable to determine whether recent catches also constitute an exceptional circumstance nor does it allow evaluation for some of the secondary indicators.

Although the application of the HCR results in an increase in TAC, the fact that one of the 2013 surveys is below the simulated distributions constitutes an exceptional circumstance and is a conservation concern.

The “primary indicators” used to determine if exceptional circumstances are occurring are catch and surveys. The observed values are compared to the simulated distributions from both SCAA-based operating models and XSA-based operating models. If the observed values are outside of the 90% confidence interval (i.e. outside 5th-95th percentiles) from the simulations presented to WGMSE during September 2010, then Scientific Council shall advise FC that exceptional circumstances are occurring.

STACFIS catch estimates for 2011, 2012 and 2013 are not available. Therefore, Scientific Council cannot compare observed catches to the simulated distributions, and is unable to determine if exceptional circumstances are occurring in respect to this indicator. Scientific Council notes the management strategy for Greenland halibut assumed that the simulated catches would exactly equal the TACs generated from the HCR. The 90% confidence intervals for the simulated 2013 catches range from 15004 to 18234 t in the XSA based OMs and in SCAA based OMs, from 15507 to 15507 t. (The latter is constant as all SCAA simulations indicated a TAC that was 5% lower than the previous year, the maximum change permitted in the HCR.) The STATLANT 21 catches for 2013 were 14855 t, against a TAC of 15441 t.

For the three surveys that comprise the input data to the HCR, the 2013 observed values were compared with composite distributions of simulated surveys for both SCAA-based and XSA-based operating models. Out of the six comparisons possible (three surveys; two sets of operating models), there was one case (Canadian Spring 3LNO for the XSA operating models), for which the observed survey index was below the 5th percentile. The lower 5th percentile from the projections was 1.07 kg/haul and the observed value was 0.73 kg/haul (Fig. 2).

When exceptional circumstances are occurring there are five secondary indicators which should be considered. These are:

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| 1 Data Gaps. | There have been no data gaps in the survey series used in the HCR. |
| 2 Biological Parameters: | No new information is available. |
| 3. Recruitment: | Unable to update in relation to the 90% confidence intervals of the MSE as catches from 2011 – 2013 could not be estimated. |
| 4. Fishing Mortality: | Unable to update in relation to the 90% confidence intervals of the MSE as catches from 2011 – 2013 could not be estimated. |
| 5. Exploitable Biomass: | Unable to update in relation to the 90% confidence intervals of the MSE as catches from 2011 – 2013 could not be estimated. |

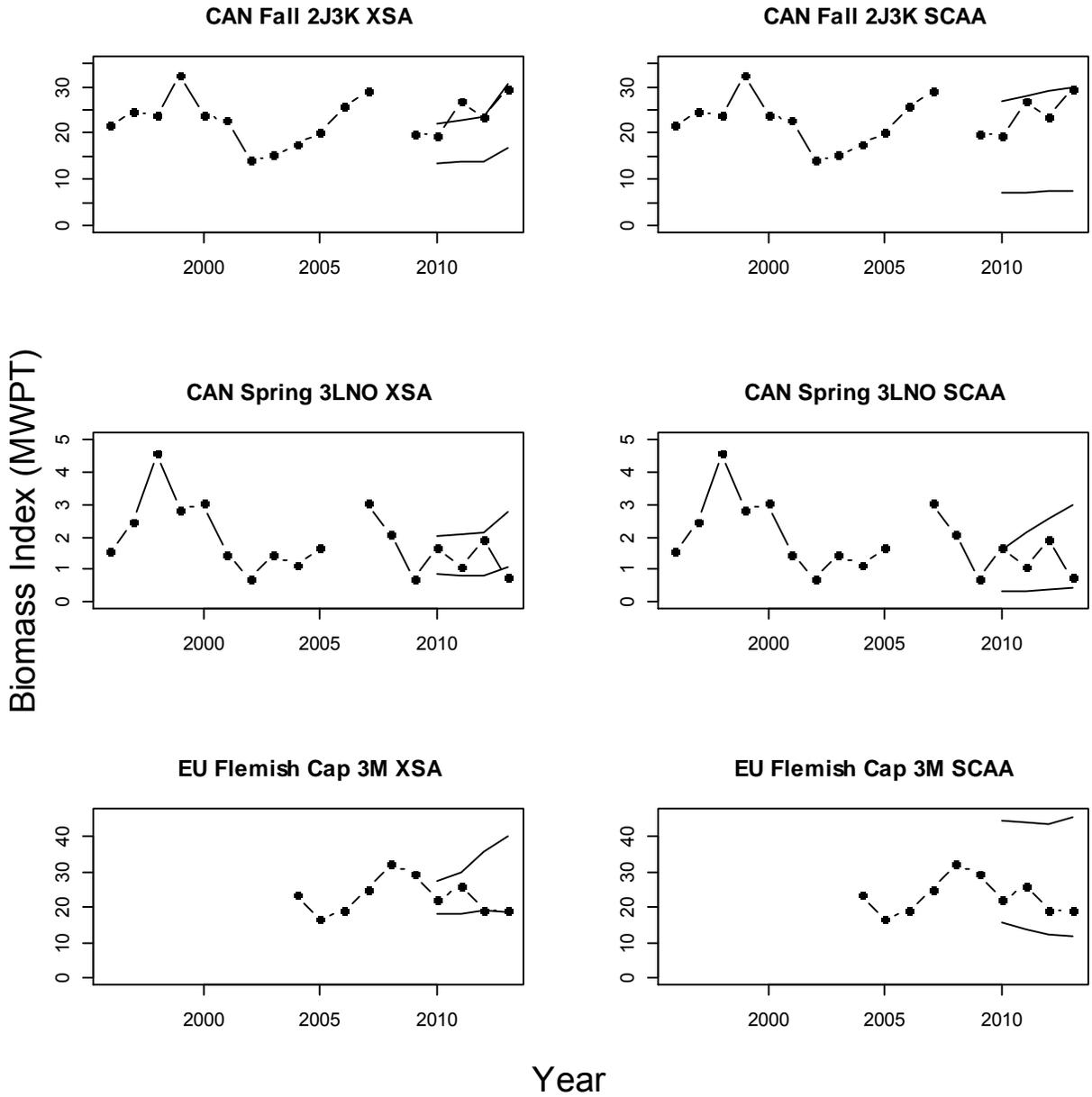


Fig. 2. Observed surveys (lines with dots) and upper and lower 90% confidence intervals of surveys simulated (solid lines) in the MSE for Greenland Halibut in Subarea 2 + Divisions 3KLMNO. The panels on the left give the simulated surveys from the XSA operating models