Validating an assessment

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Validating an assessment

Key features to investigate are:

- AIC
- OSA-residuals
- Retrospective plots

AIC

The AIC-value provides information about how well the data fit to the model. Definition:

$$AIC = 2k - 2\ln(L)$$

where k is the number of parameters and L is the likelihood.

- Smaller values indicate better fit

OSA-residuals

If the model is correcly spessified, the OSA-residuals should be IID standard Gaussian distributed.
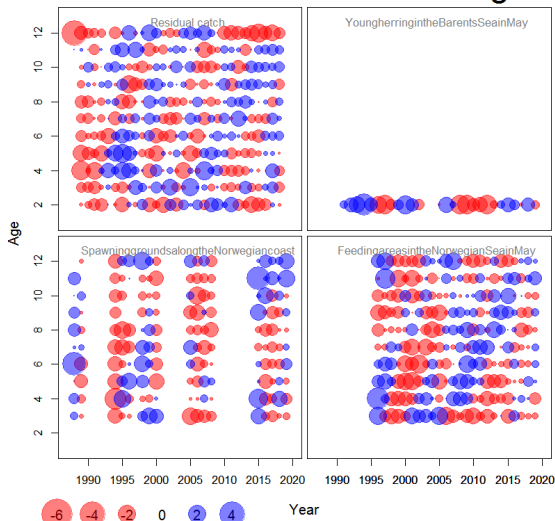
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OSA-residuals

If the model is correcly spessified, the OSA-residuals should be IID standard Gaussian distributed.

The OSA residual for observation i is defined as

$$Z_i = \Phi^{-1}(U_i), \quad \text{where} \quad U_i = P^M(Y_i \leq y_i | Y^{i-1} = y^{i-1}).$$
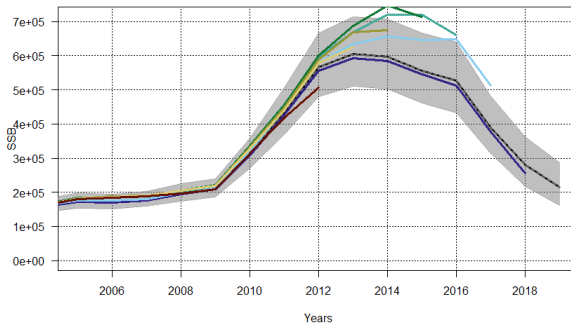
Example of an alarming OSA-residual plot

OSA residuals current settings

Retrospective plots

Remove sequentially one year with observations.

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Remove sequentially one year with observations.