|  |  |  |  |
| --- | --- | --- | --- |
| Parameter categories | IBP 2017 | IBP 2018 | SUMMARY |
| min age | 1 | 1 |  |
| max age | 8 | 9 | 9+ group has the lowest absolute Mohns rho |
| Fishing mortality states | 1 2 3 4 5 6 7 7 | 1 2 3 4 5 6 7 8 8 | Allowing maximum freedom, binding the last two ages. |
| correlated random walks | 2 | 2 |  |
|  |  |  |  |
| Coupling catchability parameters |  |  | Same settings to 2017 based on lowest AIC |
| SNS | 1 1 2 3 3 3 0 0 | 1 1 2 3 3 3 0 0 |  |
| BTS | 4 4 5 5 6 6 6 0 | 4 4 5 5 6 6 6 0 |  |
| NL\_LPUE | 7 0 0 0 0 0 0 0 | 7 0 0 0 0 0 0 0 |  |
|  |  |  |  |
| Coupling of fishing mortality RW | 1 1 2 2 3 3 3 3 | 1 2 3 3 4 4 4 5 5 | Additional parameters in the model compared to 2017, choice is based on lowest AIC value |
| Coupling of log N RW | 1 2 2 2 2 2 2 2 | 1 2 2 2 2 2 2 2 2 |  |
|  |  |  |  |
| Coupling of observation variances |  |  |  |
| Catch | 1 1 2 2 2 3 3 3 | 1 2 3 3 4 4 5 5 5 | More parameters in the model compared to 2017. Result is based on lower AIC in combination with better Mohns rho |
| SNS | 4 4 5 5 5 5 0 0 | 6 6 7 8 8 8 0 0 0 | Choice is made on improved AIC |
| BTS | 6 6 6 7 8 8 8 0 | 9 9 9 10 11 11 11 0 0 | Choice is made on improved AIC and Mohns rho as well as amount of parameters. |
| NL\_LPUE | 9 0 0 0 0 0 0 0 | 12 0 0 0 0 0 0 0 0 |  |
|  |  |  |  |
| Stock–recruitment model | 0 (RW) | 0 (RW) |  |
|  |  |  |  |
| Coupling of survey correlation correction by age |  |  |  |
| Catch | 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 0 |  |
| SNS | 1 2 2 2 2 0 0 0 | 1 2 2 2 2 0 0 0 0 |  |
| BTS | 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 0 |  |
| NL\_LPUE | 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 0 |  |
|  |  |  |  |
| Biomass treat | 0 (SSB) | 2 (exploitable biomass) | Use the NL LPUE series as an indicator of exploitable biomass rather than as an indicator of SSB |