TAC for the midwater fleet for 2017 based on the current OMP

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The current OMP (FISHERIES/2015/MAR/SW-G-DEM/03) is used in conjunction with the most recent CPUE series (FISHERIES/2016/SEP/SW-G-DEM/50) to provide a Horse Mackerel TAC recommendation for the midwater sector. (Note that this recommendation needs to be considered in conjunction with the question of whether Exceptional Circumstances apply.)

The Catch control rules are as follows:

\[
TAC_{y+1} = \Delta_y TAC_y
\]

\[
\Delta_y = \begin{cases} 
1 - X_{decr} & \text{for } I_y < I_{decr} \\
1 - X_{decr} + \frac{X_{incr} + X_{decr}}{I_{incr} - I_{decr}} (I_y - I_{decr}) & \text{for } I_{decr} \leq I_y < I_{incr} \\
1 + X_{incr} & \text{for } I_y \geq I_{incr}
\end{cases}
\]

\(I_y\) is related to a weighted average of the last three years of CPUE data which are 1.456 (2013), 0.390 (2014) and 0.181 (2015). Thus

\[
I_{2016} = \frac{1}{3} \sum_{2013}^{2015} CPUE_y = \frac{1}{7} \sum_{2009}^{2013} CPUE_y
\]

\[= \frac{0.6757}{0.996} = 0.704\]

Thus as \(I_{2016} < I_{decr}\) i.e. (0.704 < 0.84)

\[\Delta_y = 1 - X_{decr} = 1 - 0.15 = 0.85\]

Therefore the TAC recommendation from the OMP is:

\[TAC_{2016} = 0.85 \times TAC_y = 0.85 \times (38 658) = 32 859 \text{ tons}\]

Table 1: \(I_{inc}\) and \(I_{decr}\) values as calculated from the revised midwater MP (using the revised CPUE series in 2014):

| \(I_{decr}\) | 0.84 |
| \(I_{inc}\) | 1.01 |
| \(X_{inc}\) | 0.1 |
| \(X_{decr}\) | 0.15 |