

OMP-18 development: selecting an interim Harvest Control Rule for directed sardine

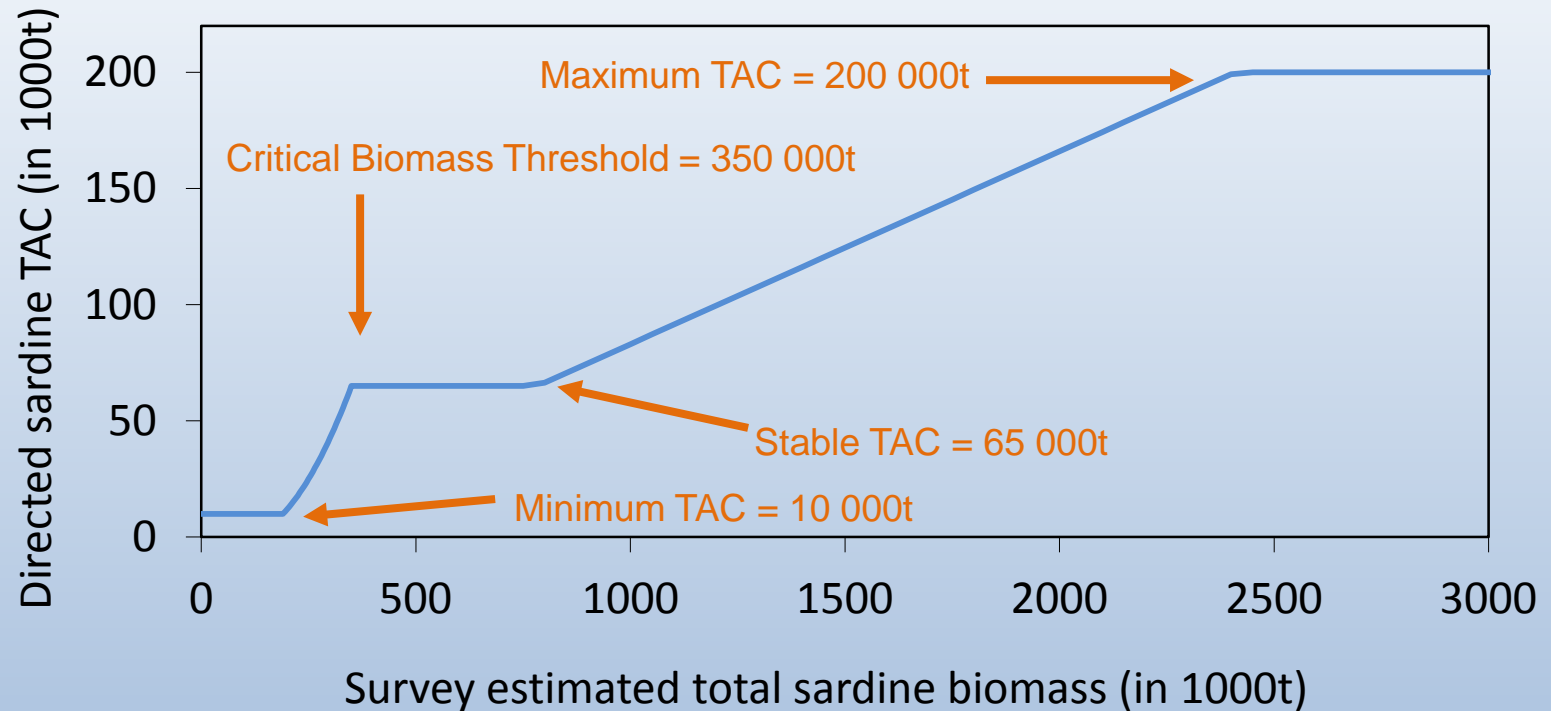
SWG-PEL Meeting
4th July 2018

Carryn de Moor

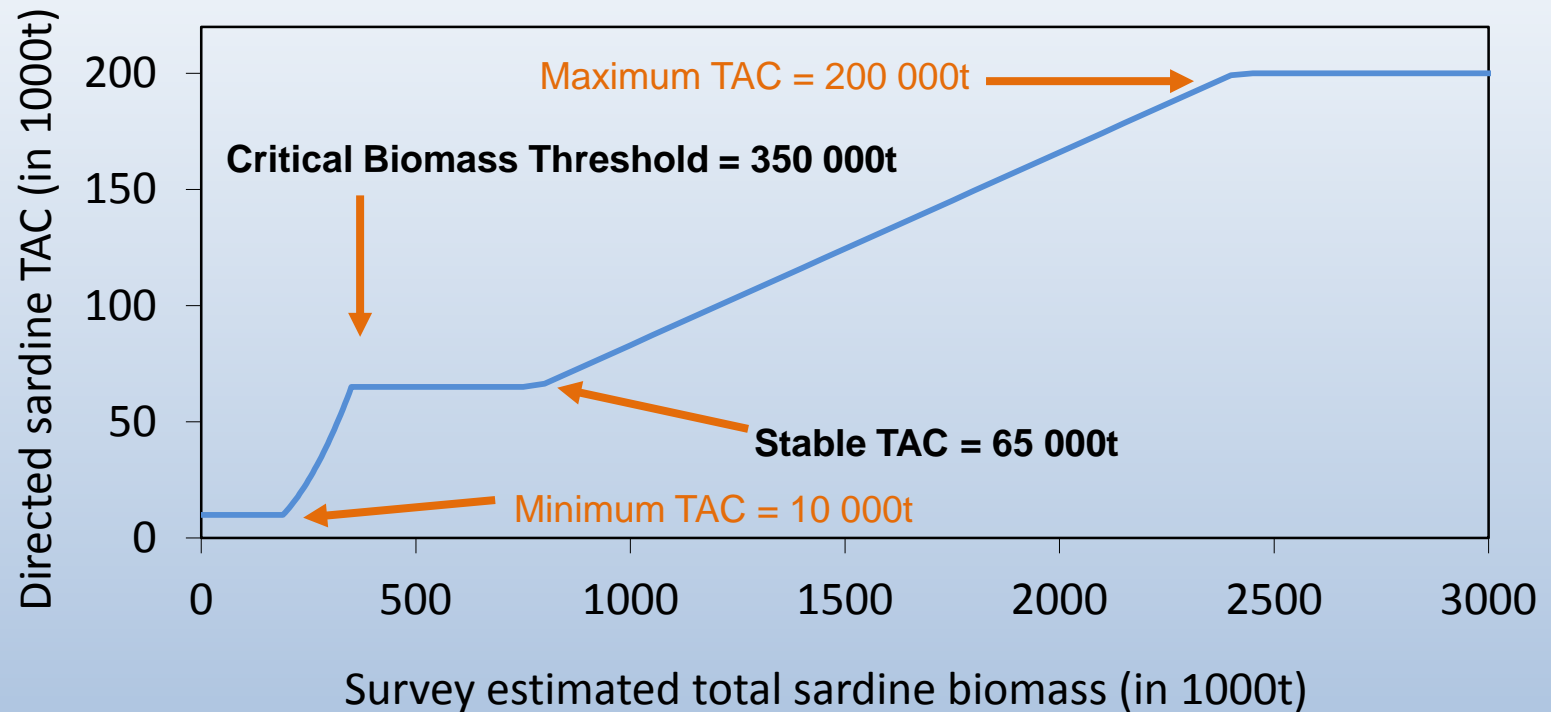


Marine Resource Assessment and Management Group (MARAM)
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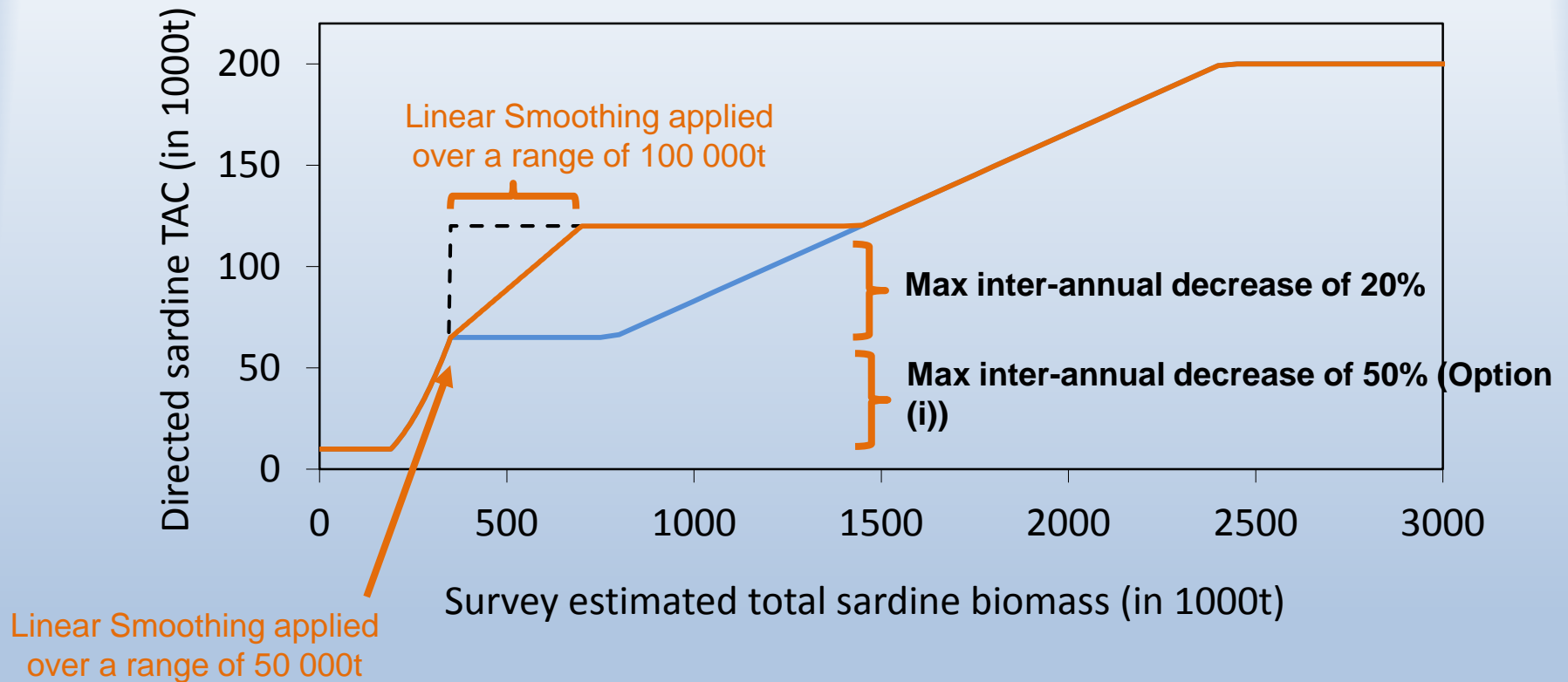
Reference Case Sardine HCR



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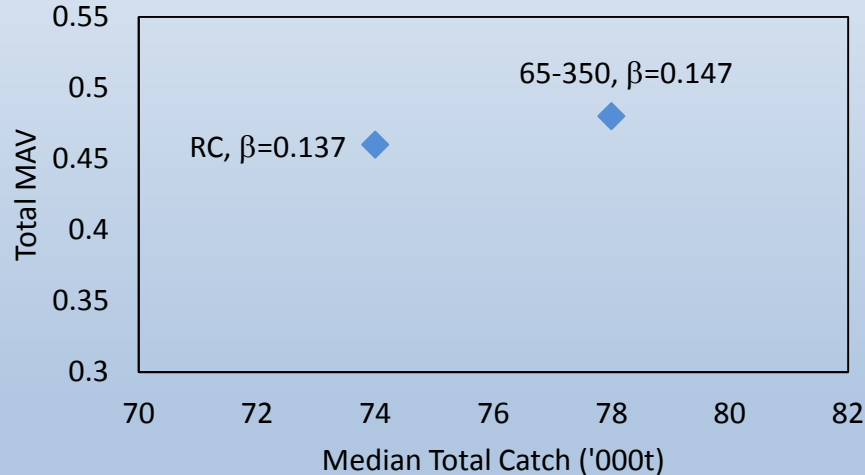
Reference Case Sardine HCR



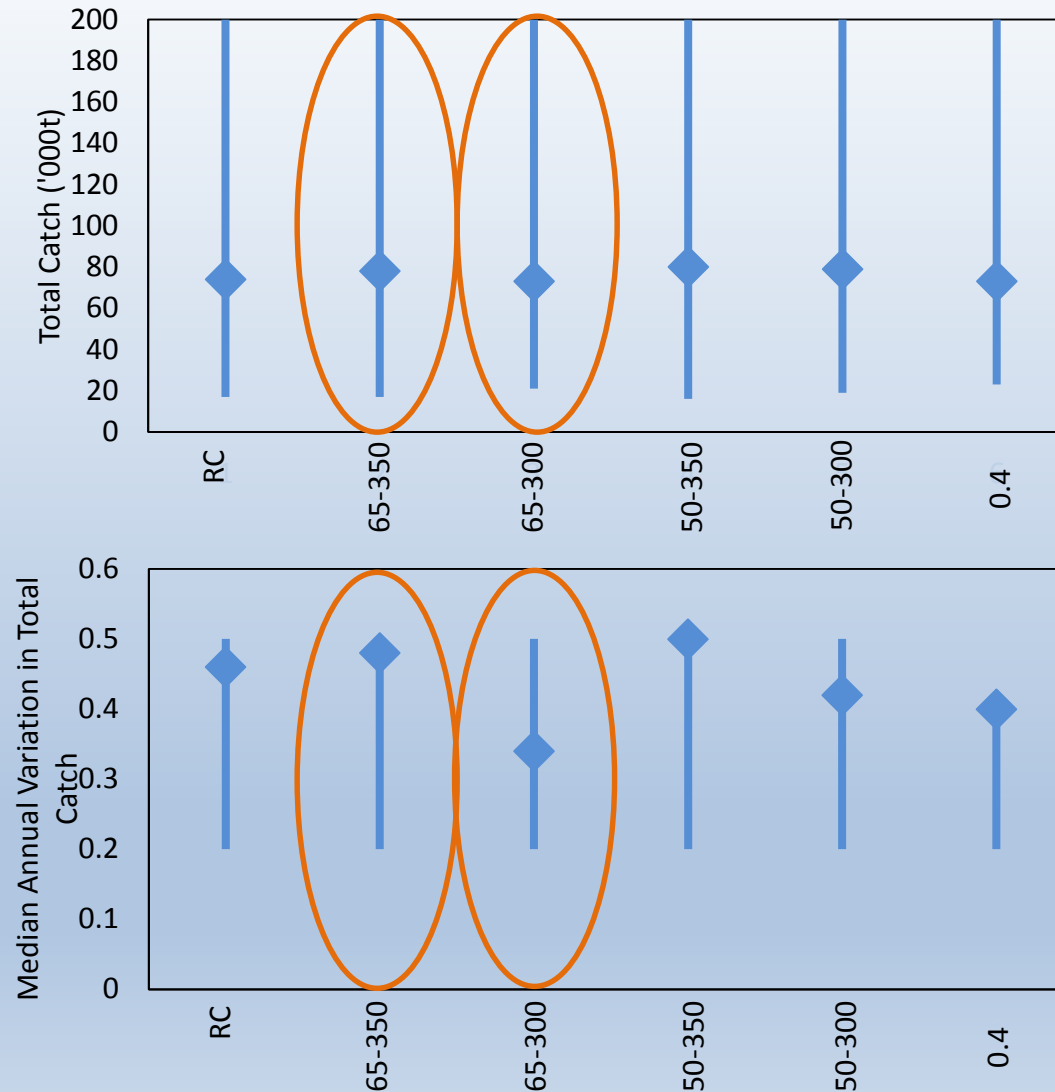
If $TAC_{y-1} = 150\ 000t$, 20% constraint on inter-annual decrease applies:
 $0.8 \times 150\ 000t = 120\ 000t$

Linear Smoothing above B_{crit}

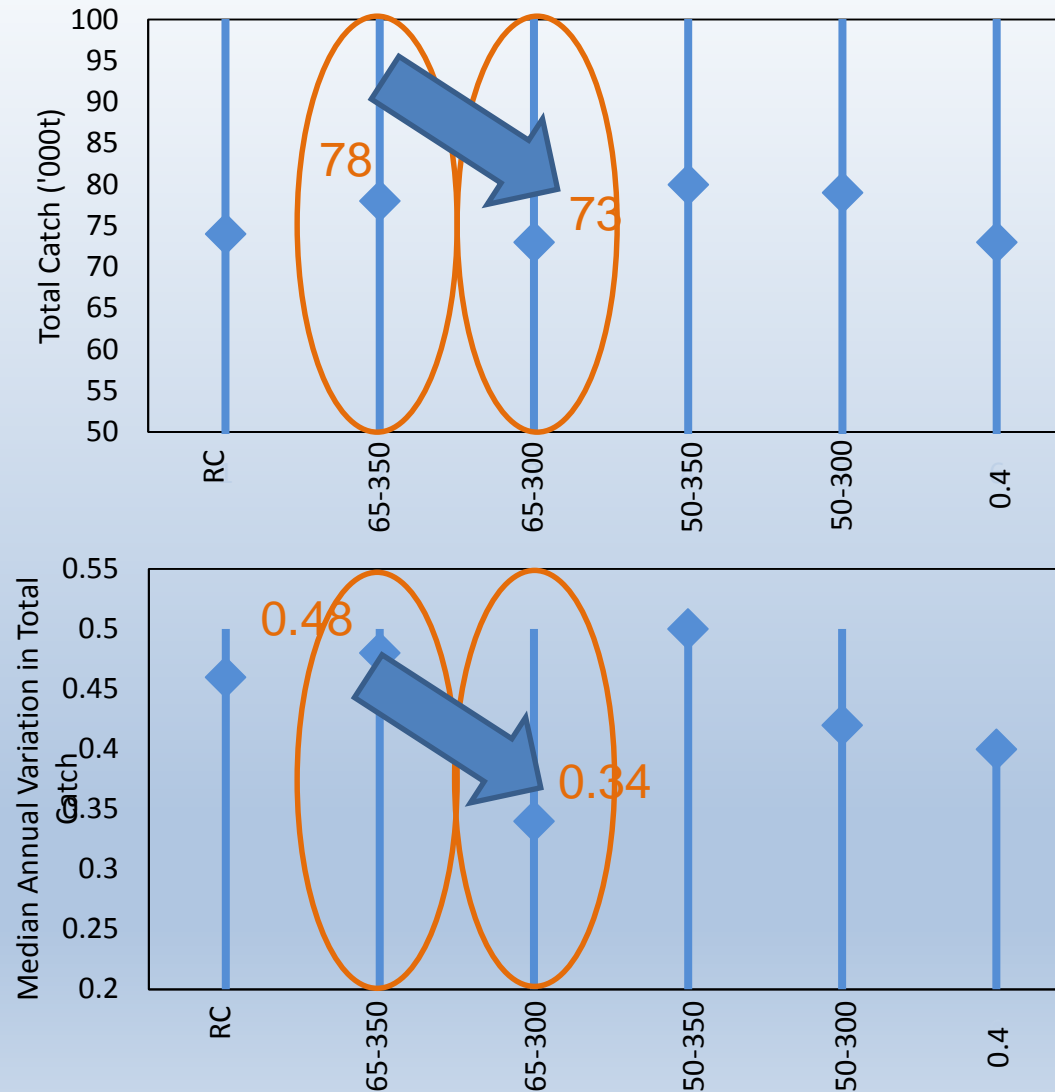
- Reference Case: tuned for “leftward shift” to give $\beta = 0.137$ and $risk_S = 0.20$ (**rounded!**)
- All alternatives tuned for $risk_S < 0.20$



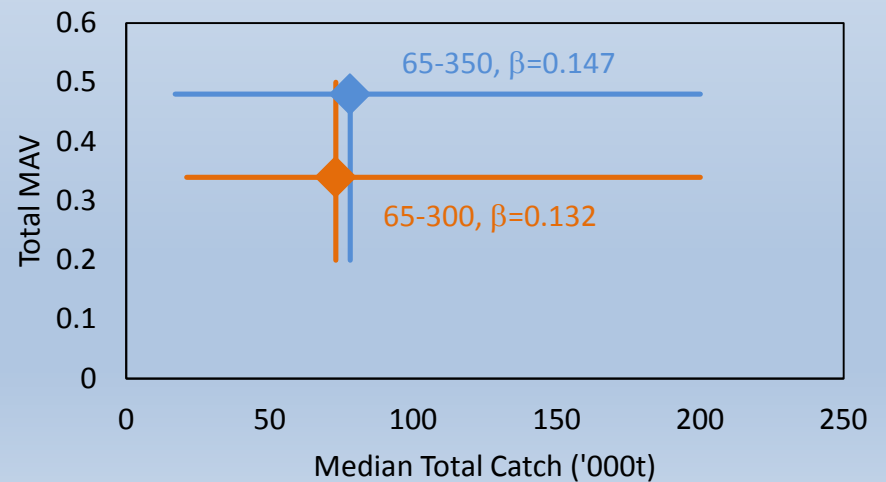
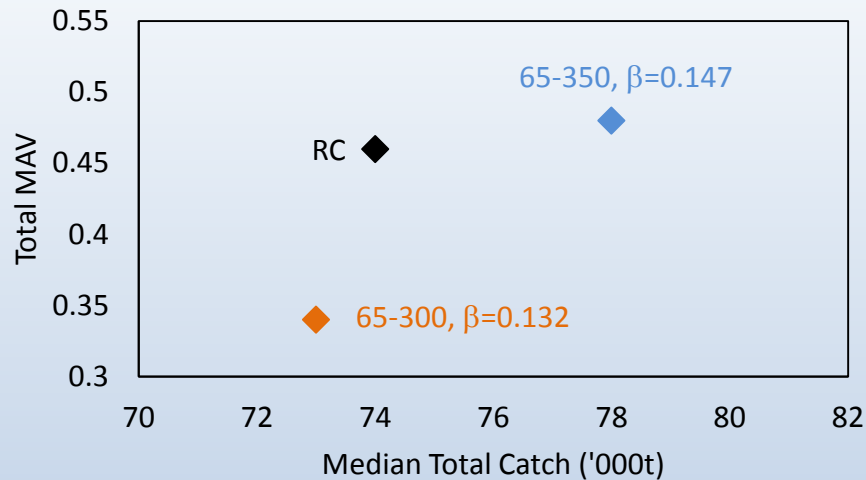
Critical Biomass Threshold



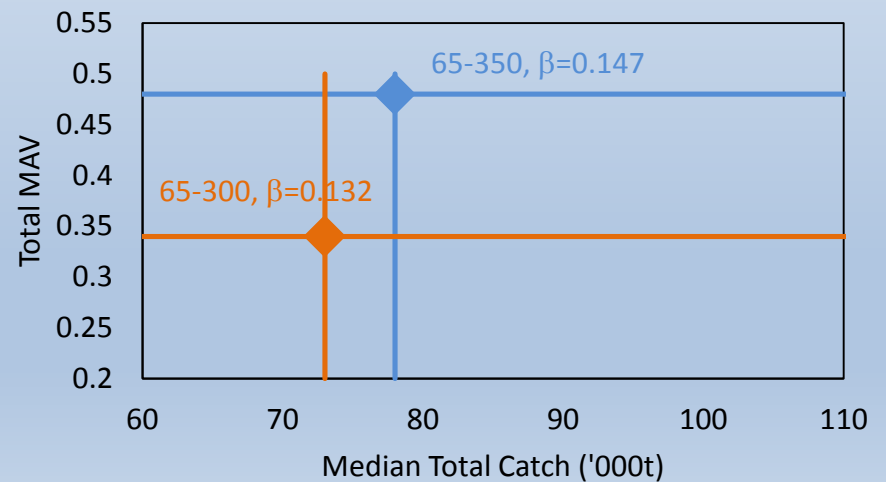
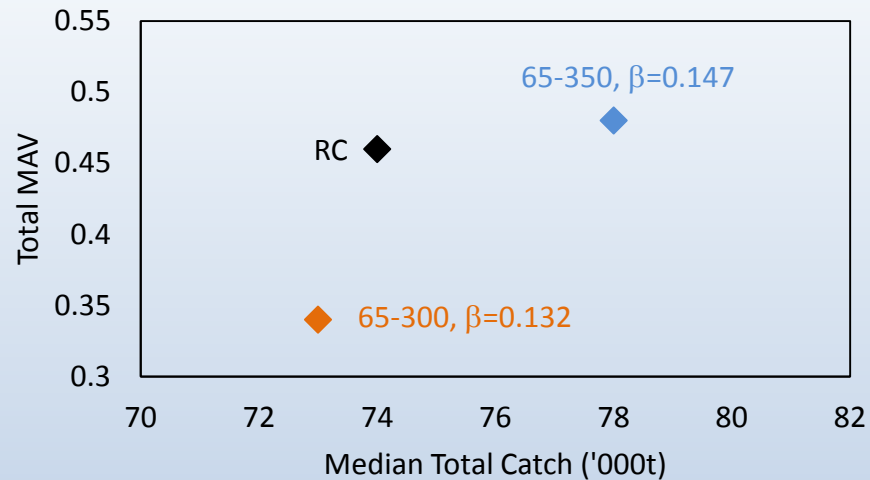
Critical Biomass Threshold



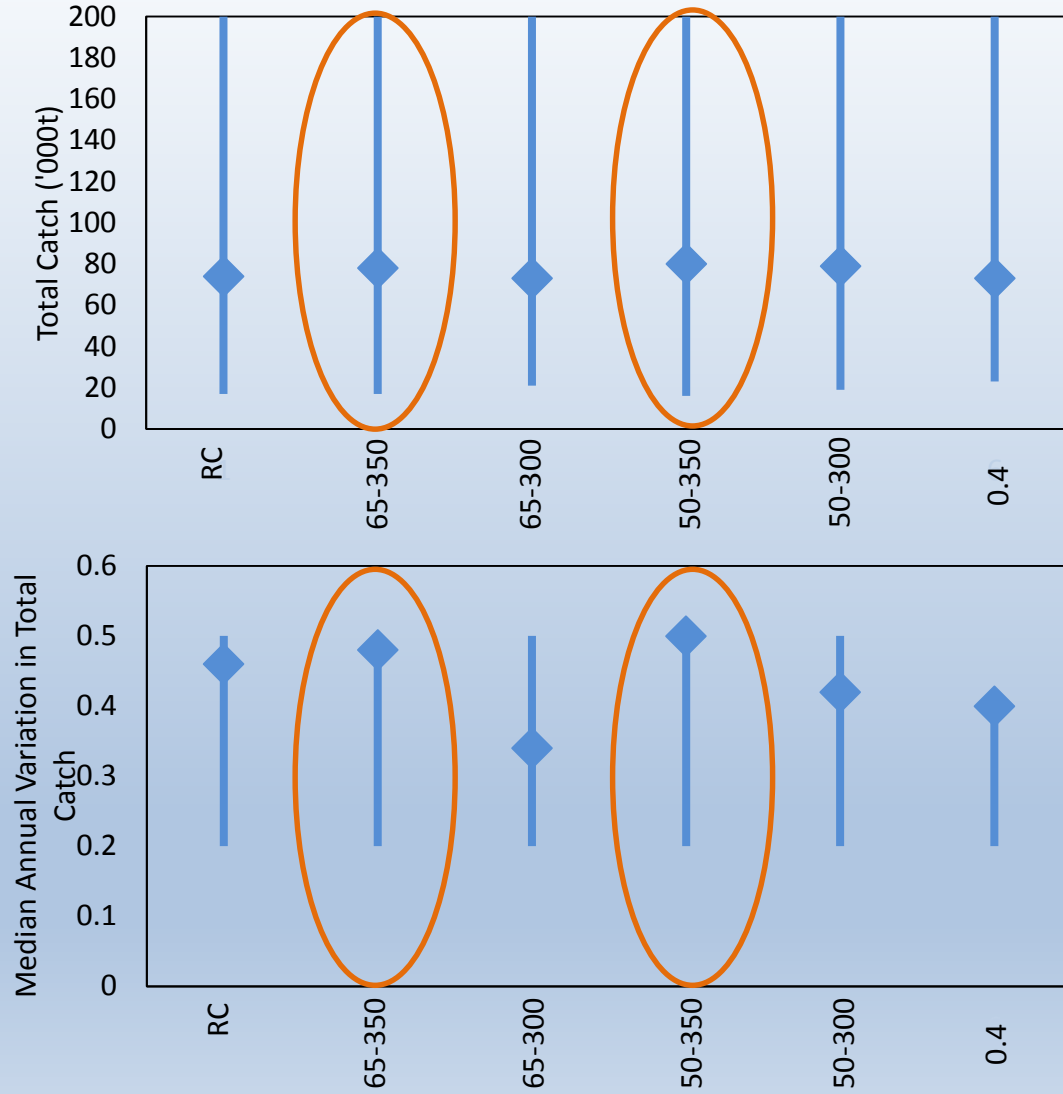
Critical Biomass Threshold



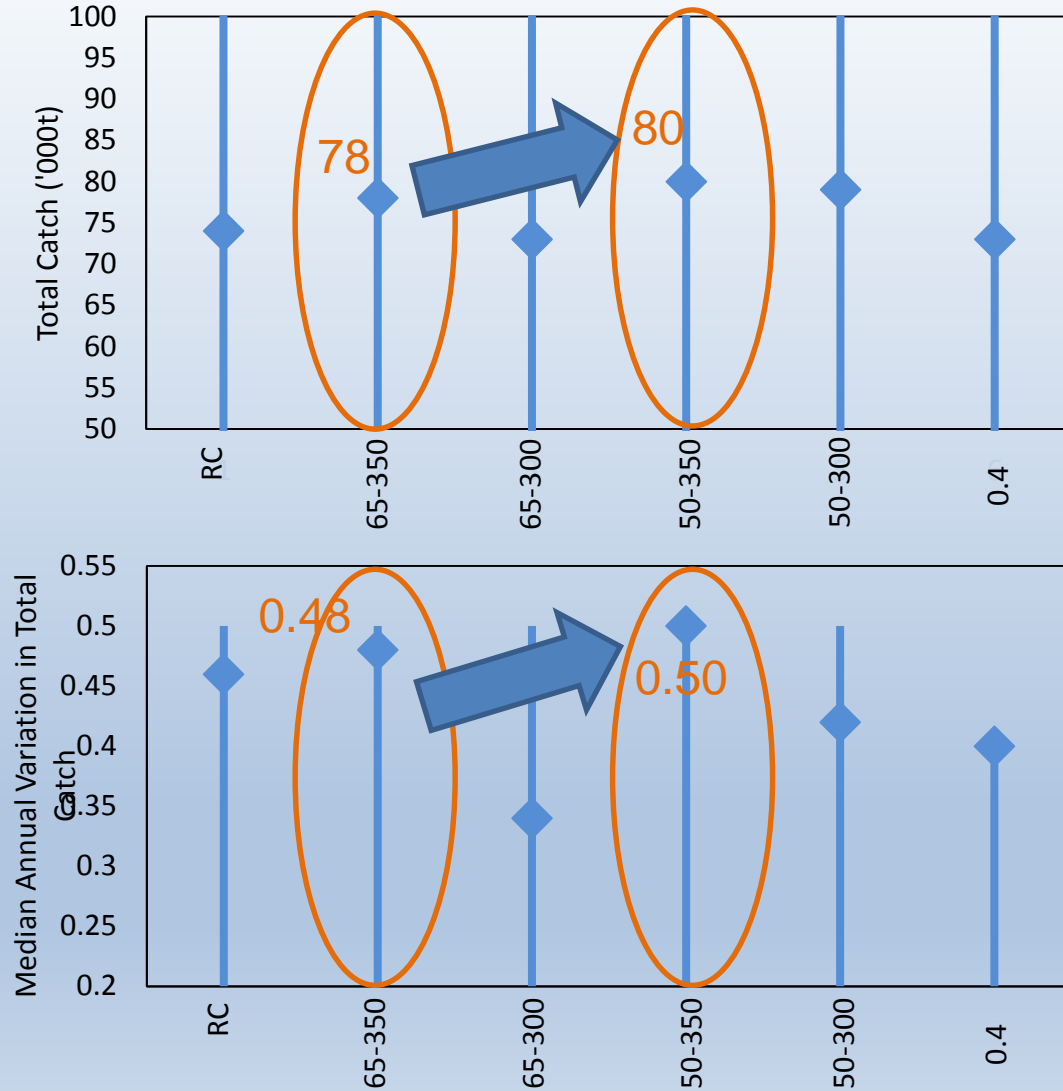
Critical Biomass Threshold



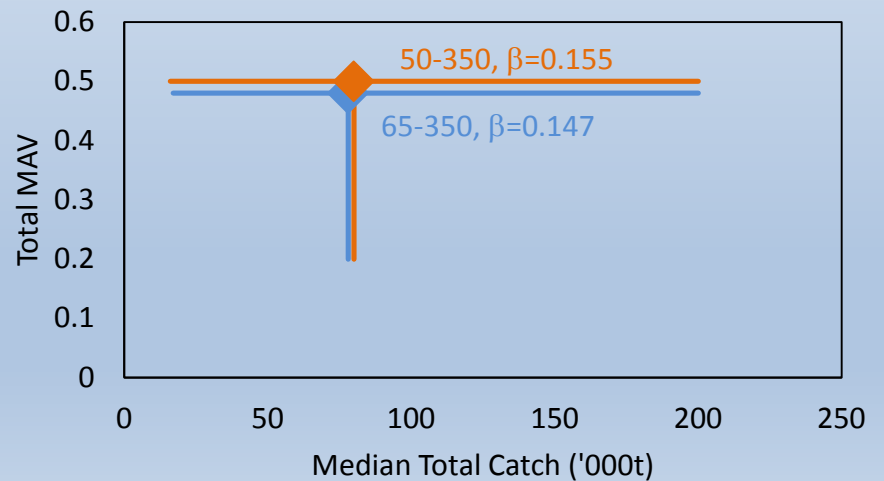
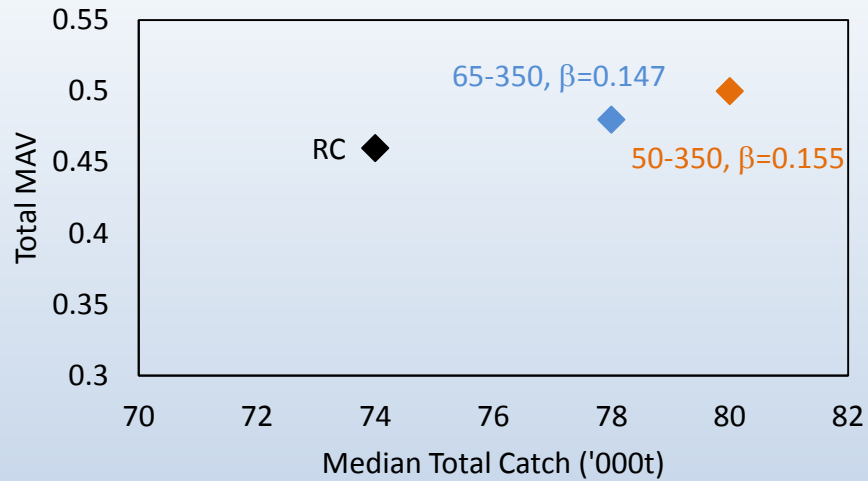
Stable TAC



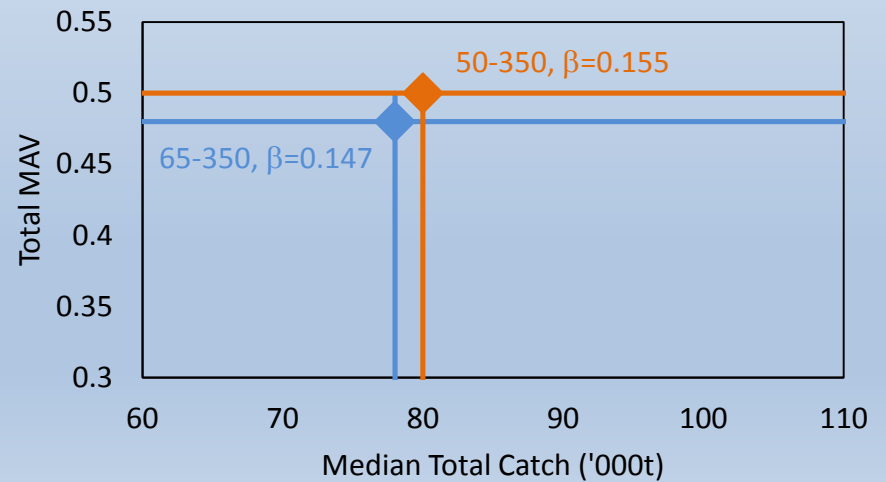
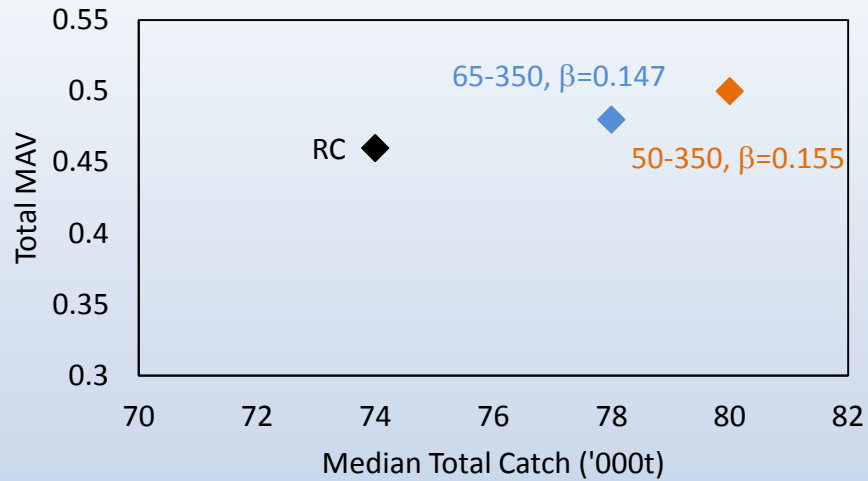
Stable TAC



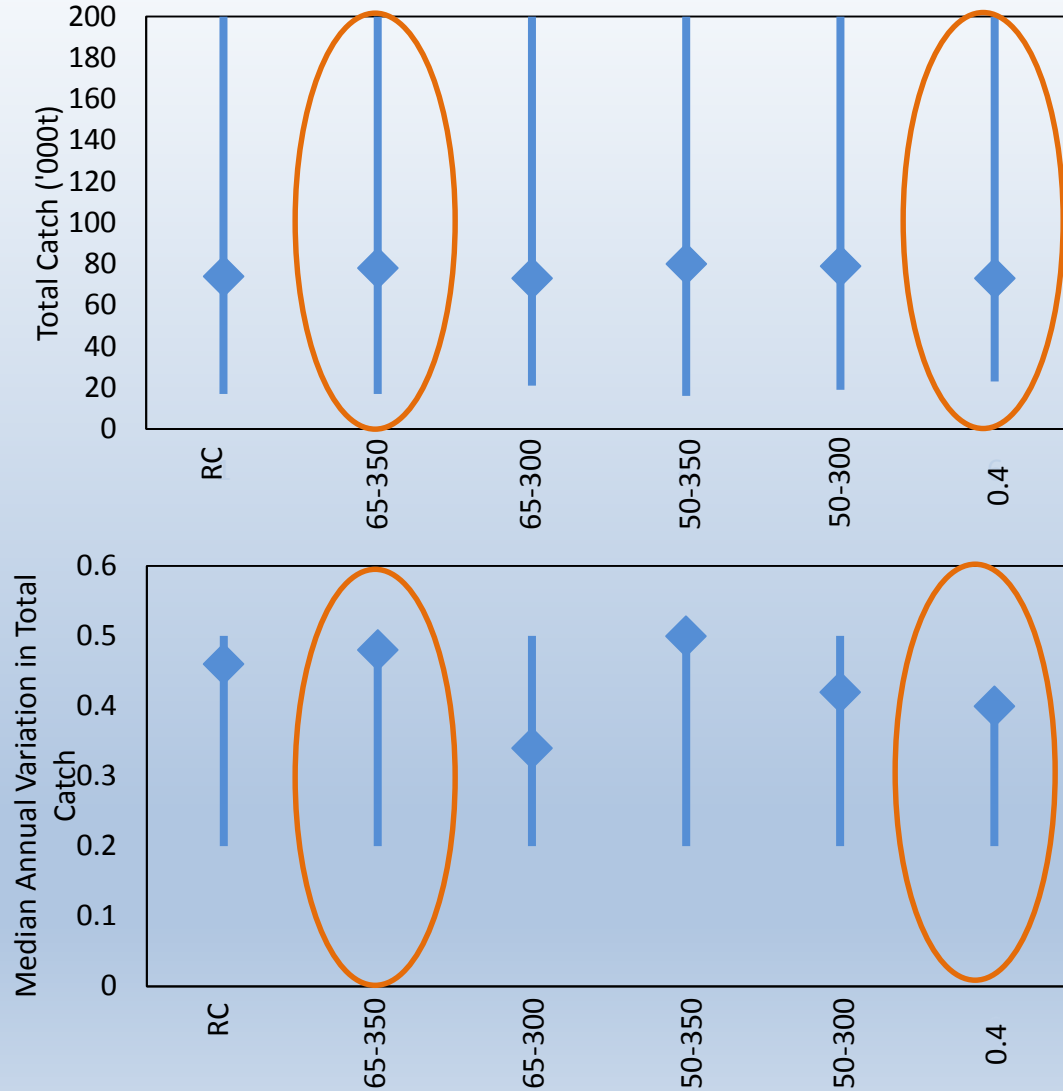
Stable TAC



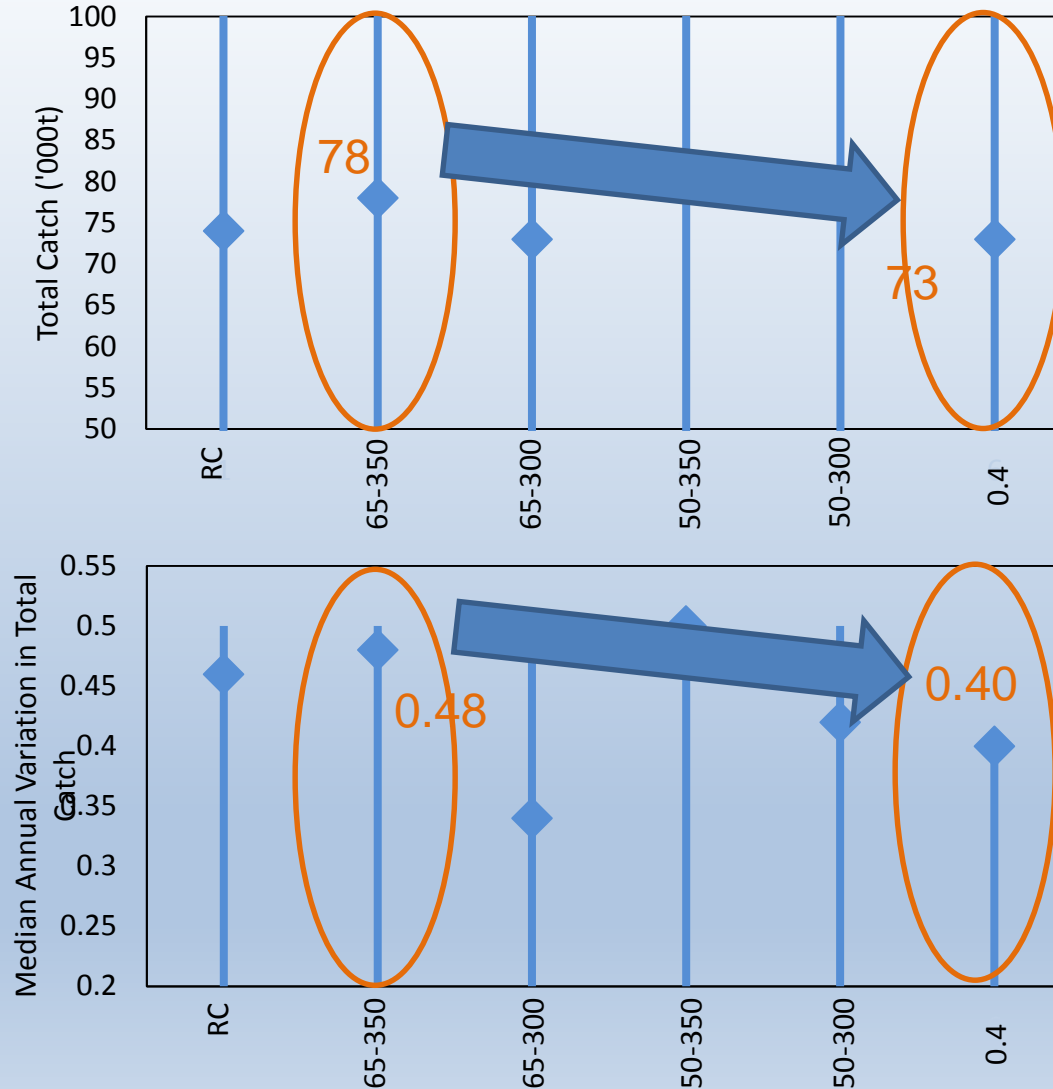
Stable TAC



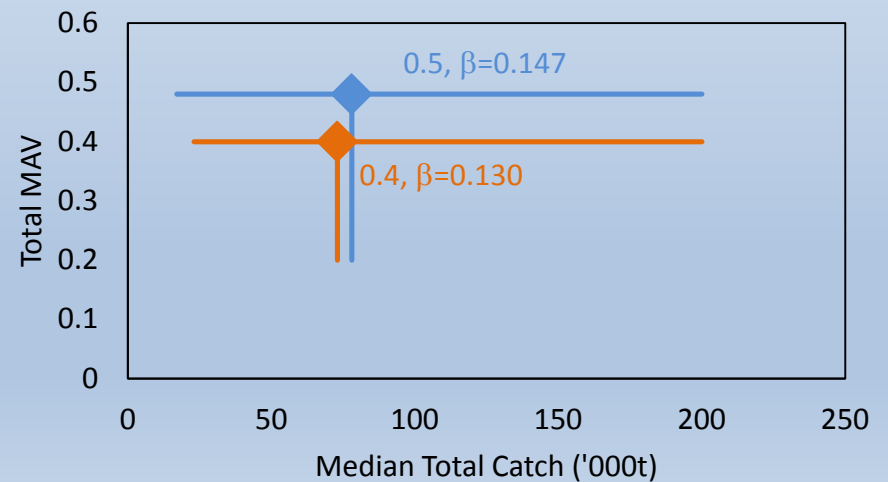
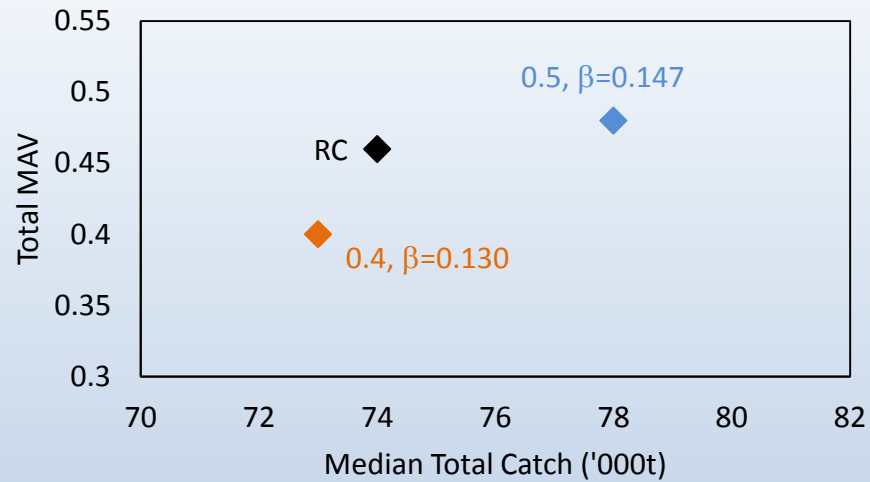
Proportion Constraint Below B_{crit}



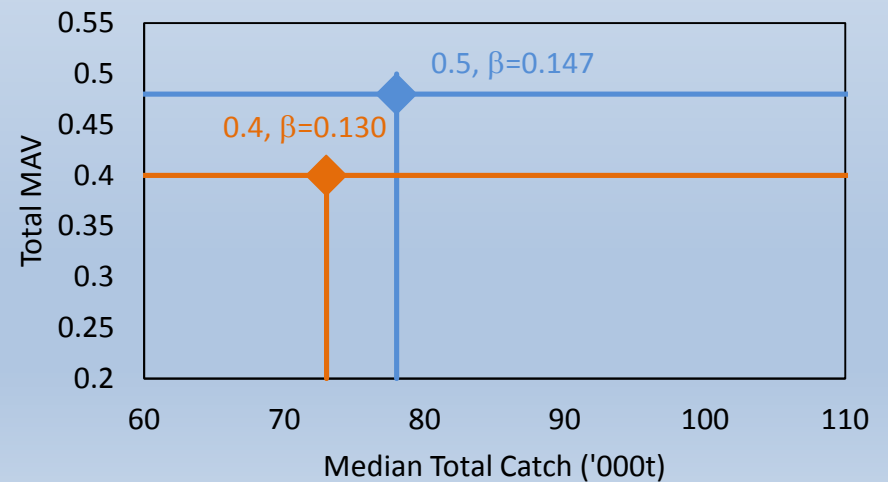
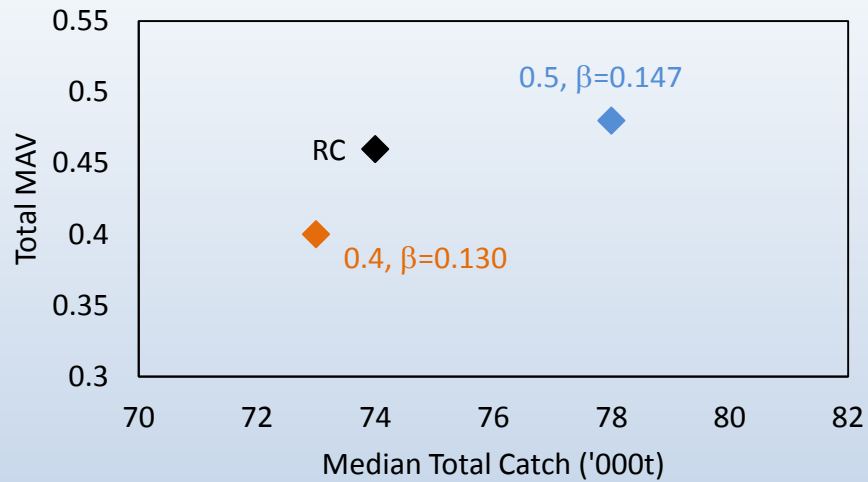
Proportion Constraint Below B_{crit}



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Proportion Constraint Below B_{crit}



Directed Sardine HCR Decisions!

- Critical Biomass threshold (**350** or 300 000t)
- Stable TAC (**65** or 50 000t)
- Constraint on inter-annual increases and decreases on TACs below B_{crit} (**0.5** or 0.4)
- Constraint on inter-annual decreases in TACs above B_{crit} (**0.2** or 0.5)