

ADDENDUM TO:

Summary of impact of survey estimates on the hake TAC

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Robustness tests

Projections under a series of robustness tests (based on RS1, the Reference Case assessment, not the full Reference Set) relating to future surveys have been run for the current OMP. The robustness tests are:

- Rob31a: no future surveys
- Rob31b: only West Coast surveys would take place in the future
- Rob31c: only South Coast surveys would take place in the future
- Rob31d: both surveys would be missing every three years
- Rob31e: the CVs of all future surveys are increased by a multiplicative factor of $\sqrt{2}$
- Rob31f: no future surveys plus an undetected increase in catchability related to CPUE

Results are shown in Table 1 and Fig. 1.

Table 1: Projections results (either median or lower 2.5%ile: "low") under RS1 and a series of robustness tests for the current OMP.

			RS1	Rob31a	Rob31b	Rob31c	Rob31d	Rob31e	Rob31f
median	BS	avC: 2011-2020	133.4	145.0	142.3	137.8	133.5	133.5	149.4
low	para	$B_{low}^{sp}/B_{2010}^{sp}$	0.85	0.74	0.80	0.83	0.83	0.85	0.65
low	cap	$B_{low}^{sp}/B_{2010}^{sp}$	1.01	0.99	1.01	1.01	1.00	1.00	0.94
median	para	B_{2020}^{sp}/B_{MSY}	1.14	0.89	0.96	1.04	1.13	1.14	0.82
median	cap	B_{2020}^{sp}/B_{MSY}	2.47	2.33	2.37	2.42	2.47	2.47	2.28
median	BS	AAV	3.3	3.9	3.7	3.5	3.5	3.4	4.0
low	BS	lowest TAC (2011-2030)	103.1	108.8	108.3	108.3	97.4	102.8	117.9
	BS	Prob decl >20% (2011-2013)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	BS	Prob decl >20% (2012-2014)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
median	BS	Pdecl>20% (2011-2028)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
high	BS	Pdecl>20% (2011-2028)	0.0	0.0	0.0	0.0	0.0	0.0	0.0

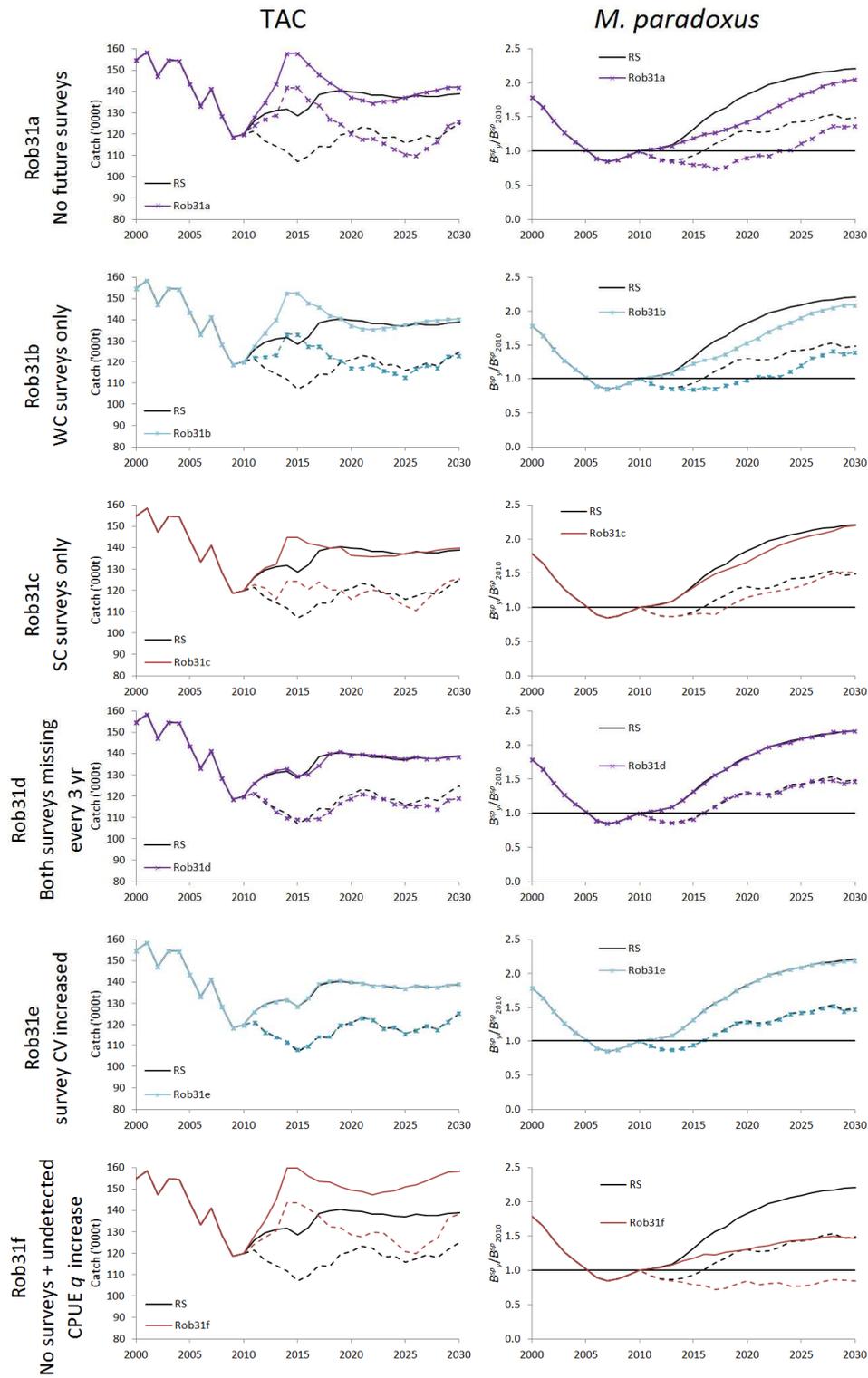


Fig. 1: Median (full lines) and lower 2.5%iles (dashed lines) TAC and spawning biomass (in terms of 2010 level) for *M. paradoxus* under RS1 and a series of robustness tests for the current OMP.