

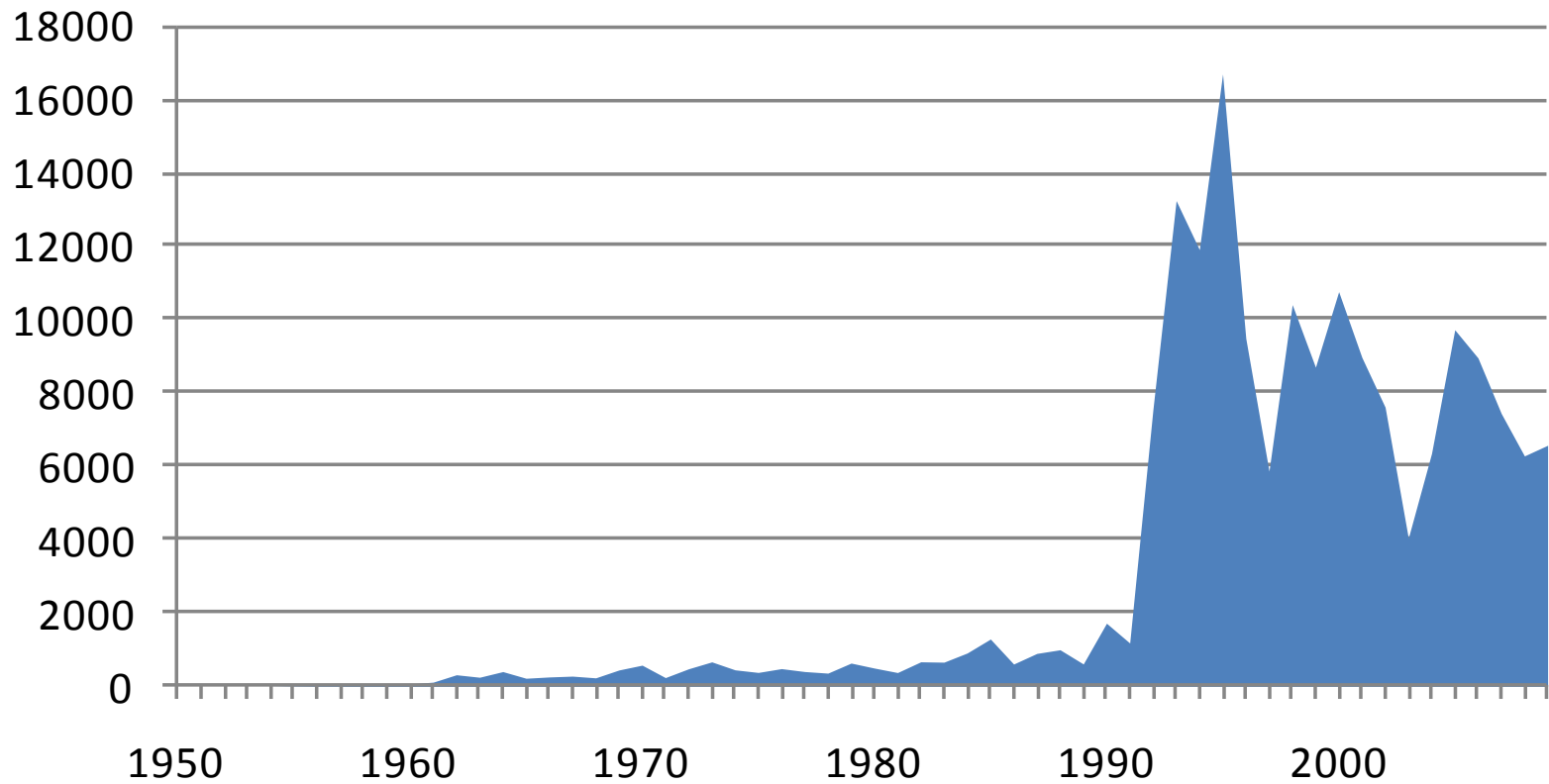
Results of ASPIC SW

Addendum 1

IOTC-2011-WPB09-18

(Nishida, Kitakado and Wang)

SWO catch in SW (t)



Fleet (4) (CPUE)

- LL (Taiwan like)
- LL (Japan like)
- LL (Spain)
- LL (Re Union)
- GILL (Nil)


IOTC (Miguel Herrera)

RESULTS of 14 RUNS

Run	Area used in GLM	Period	CPUE used (figures represent R2)				MSY 1000 t	TB ratio	F ratio	MSE	Comments
			Japan	Spain	Taiwan	Reunion					
1	Lat + Long	1950 - 2010	0.71				9.96	1.62	0.43	0.1385	Low fit
2			0.75	-0.63			8.14	0.84	1.00	0.060	Problem of Negative corr.
3			0.75		-0.08		8.02	0.87	0.98	0.0071	TWN CPUE poor fit
4			0.75			0.92	8.53	1.00	0.81	0.0054	3RD BEST
5			0.75		-0.09	0.88	8.04	0.88	0.97	0.0063	Poor fit
6			0.74	-0.03	0.02		7.87	0.82	1.05	0.0062	Spain & Taiwan CPUE
7			J	S	T	R					
8	1980 - 2010		0.84				8.64	0.96	0.85	0.0047	2ND BSET
9			0.84	-0.71			8.28	0.79	1.05	0.0047	Problem of Negative corr.
10			0.83		-0.13		8.12	0.84	1.01	0.0062	TWN CPUE poor fit
11			0.82			0.92	8.58	0.97	0.84	0.0042	BEST FIT
12			0.85		-0.09	0.88	8.28	0.82	1.02	0.0057	Spain & Taiwan CPUE not well fit
13			0.81	-0.06	0.03		7.92	0.79	1.09	0.0056	
14			J	S	T	R					

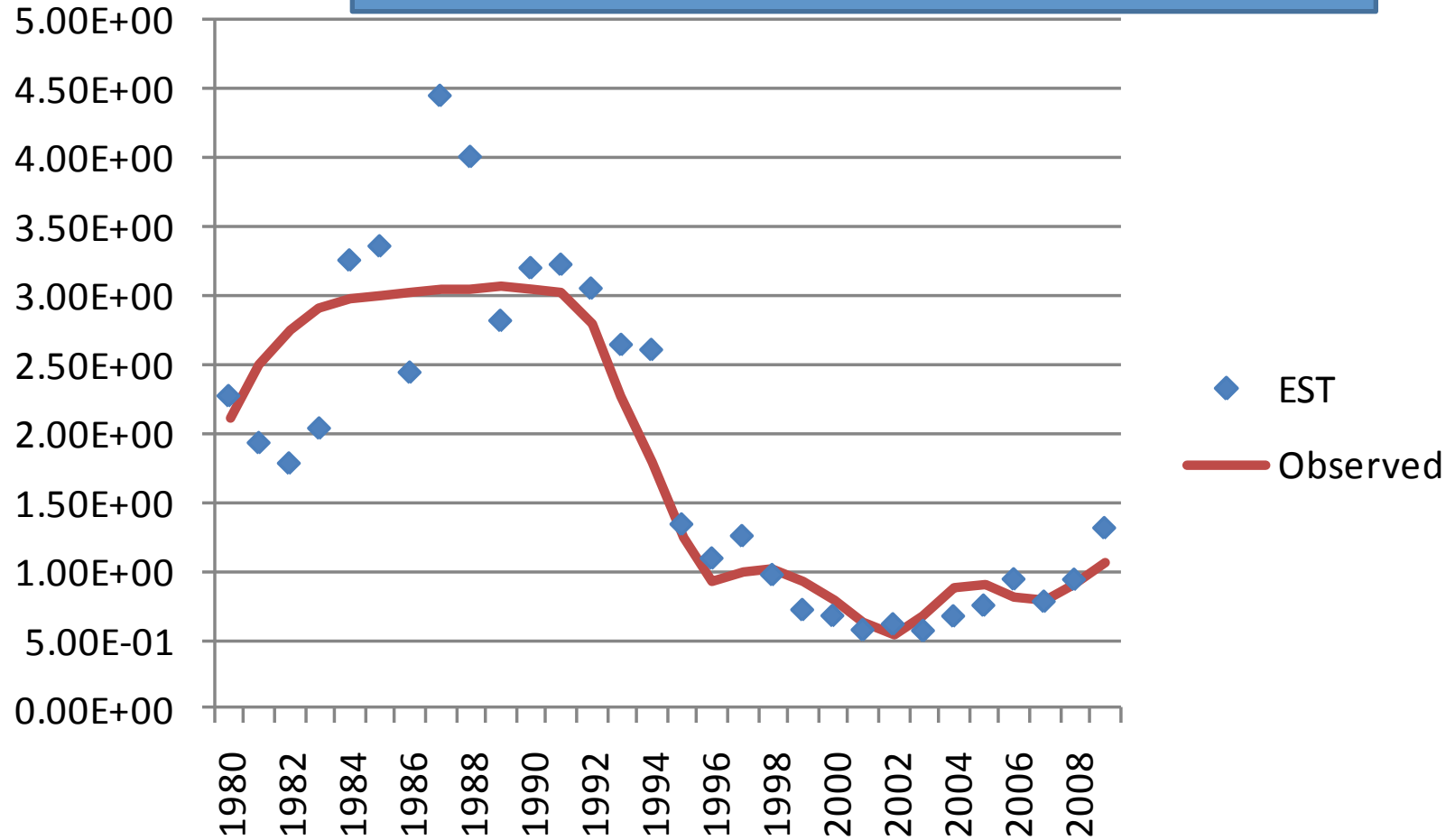
Model (results) selection

- Elimination of models (results) with problems

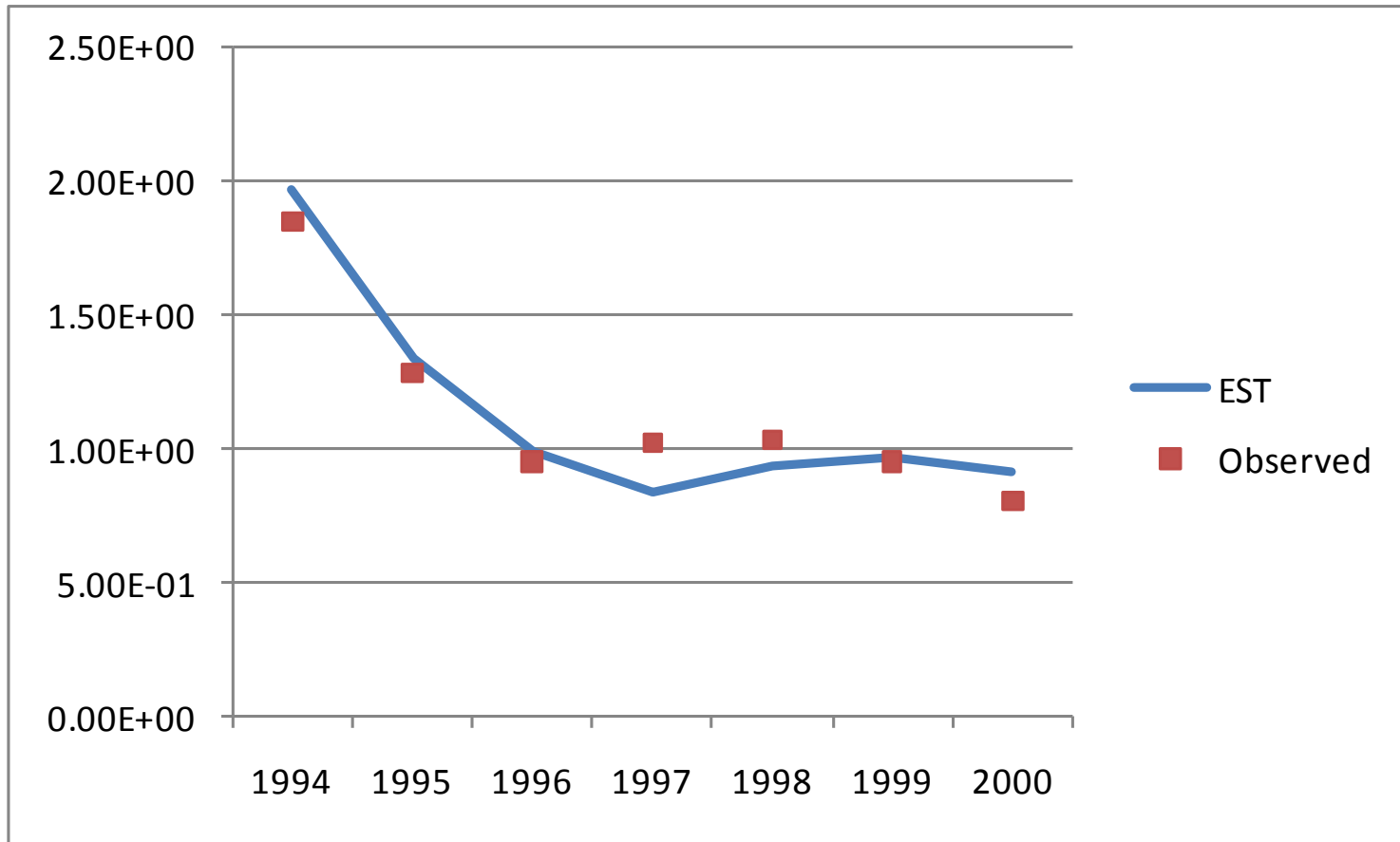
- Average of best methods
- Bayesian average method
- Weighting methods of best models
- Best fit 

-

Japan

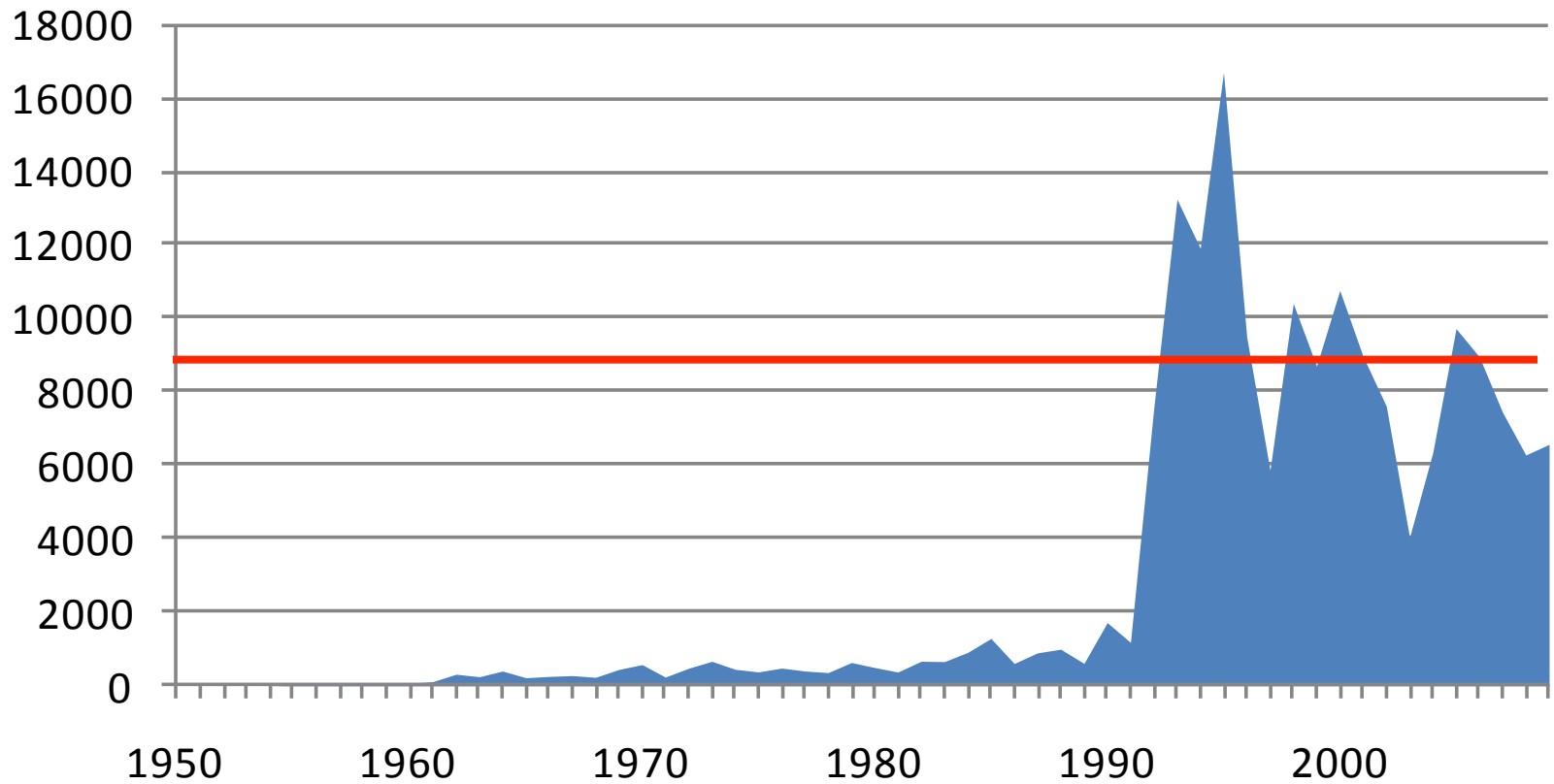


La Reunion



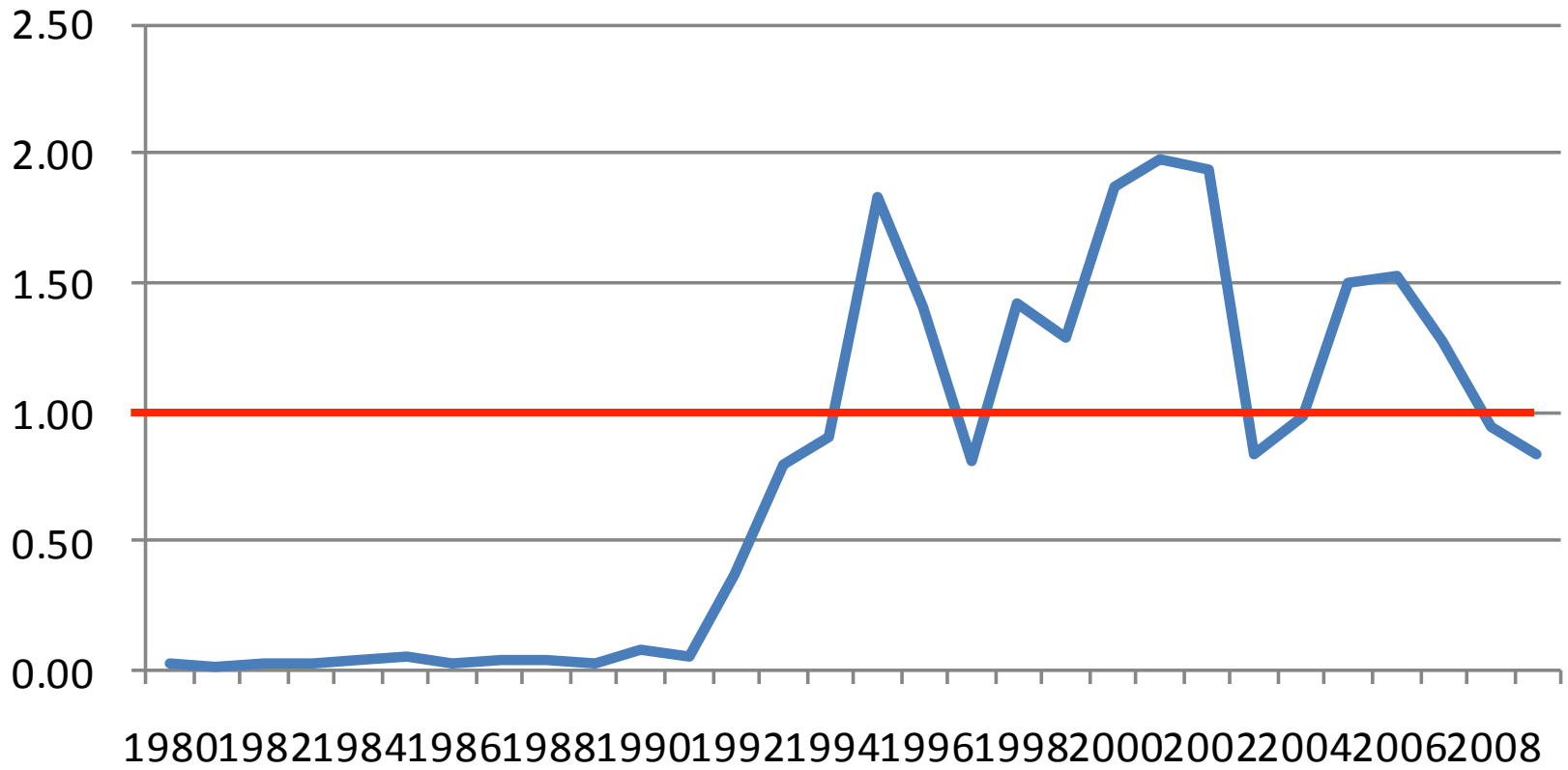
MSY=8600 t

SWO catch in SW (t)



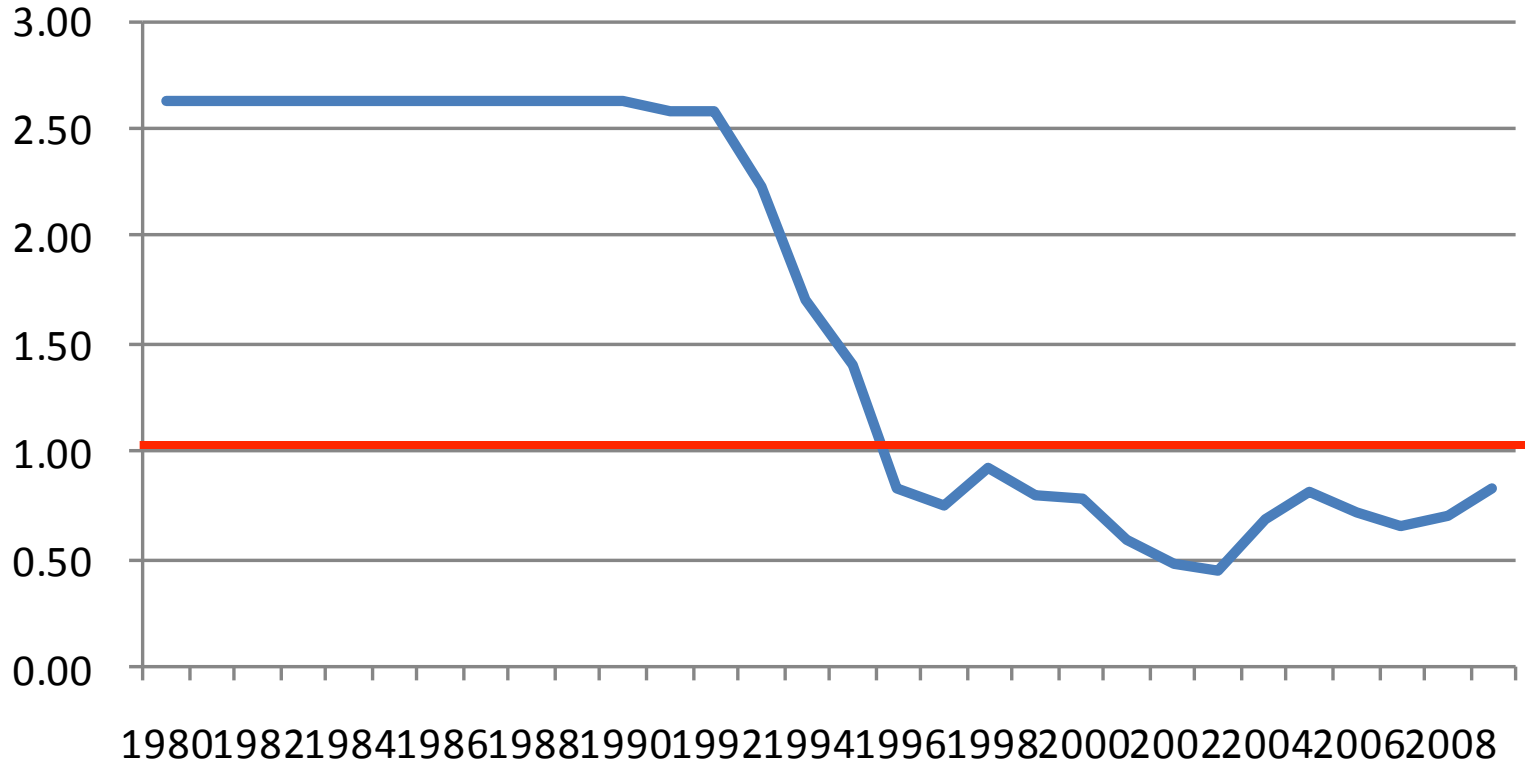
RUN 11

Fratio

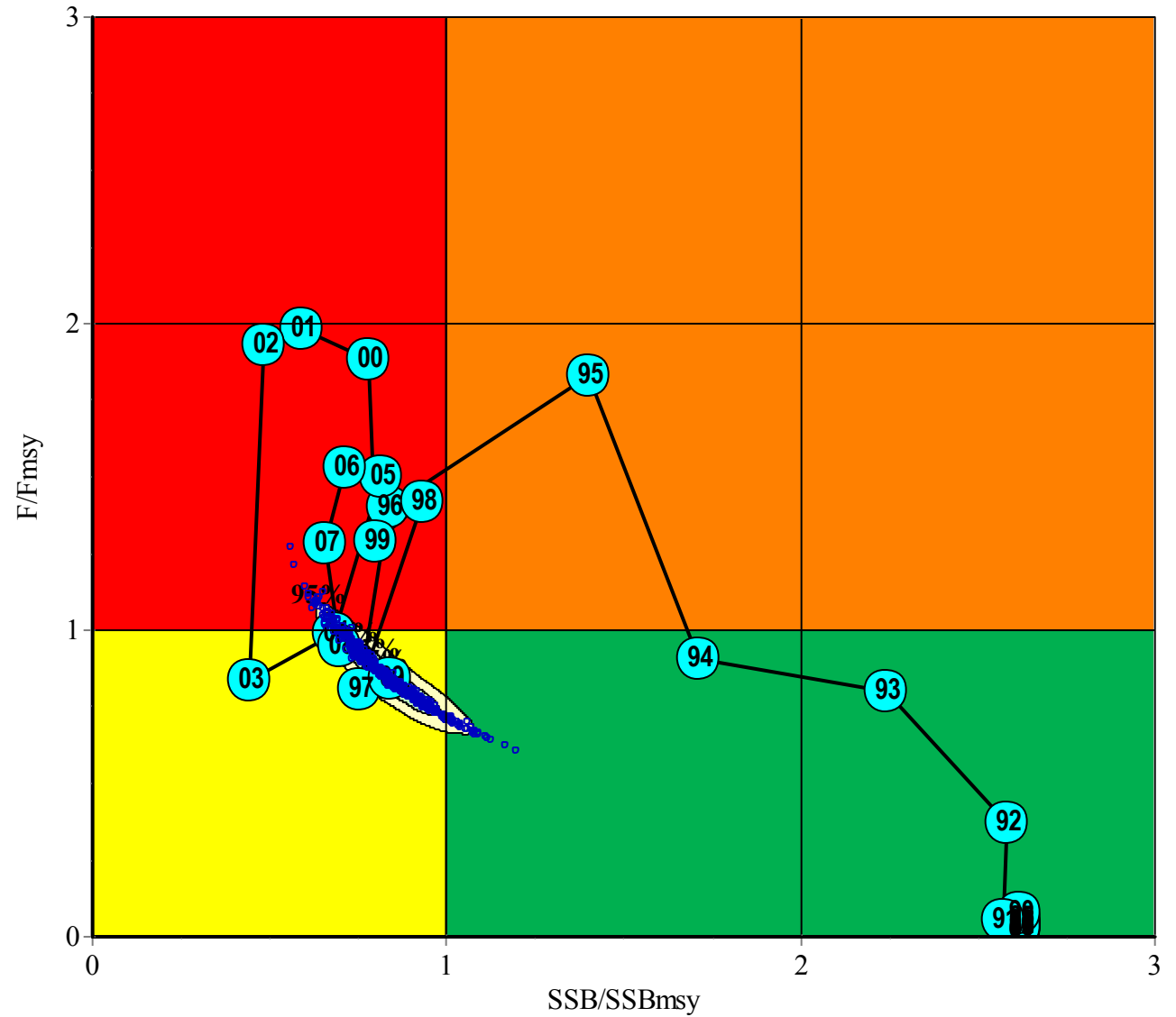


RUN 11

Bratio

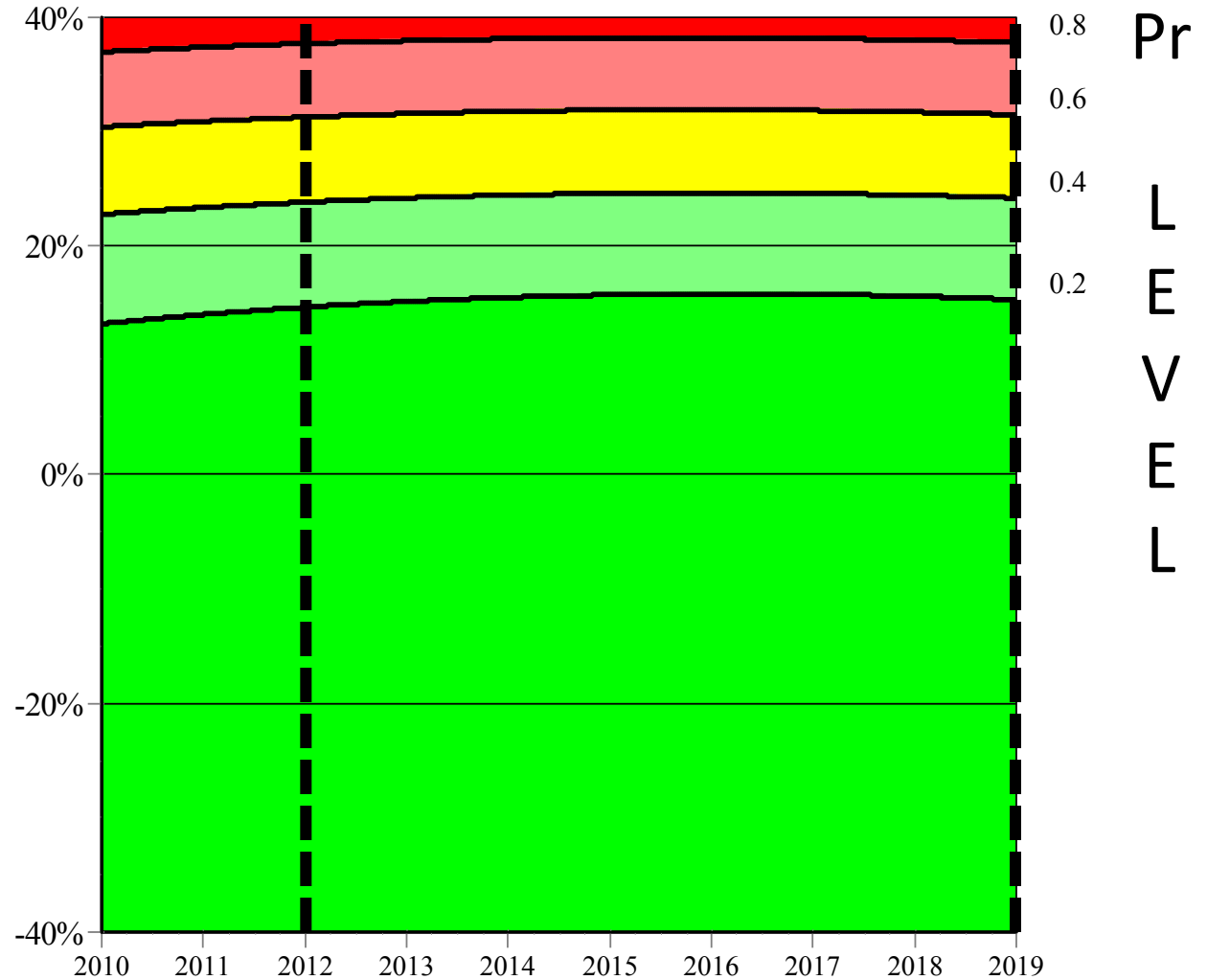


Stock
projectory
(Kobe plot 1)
(Run 11)



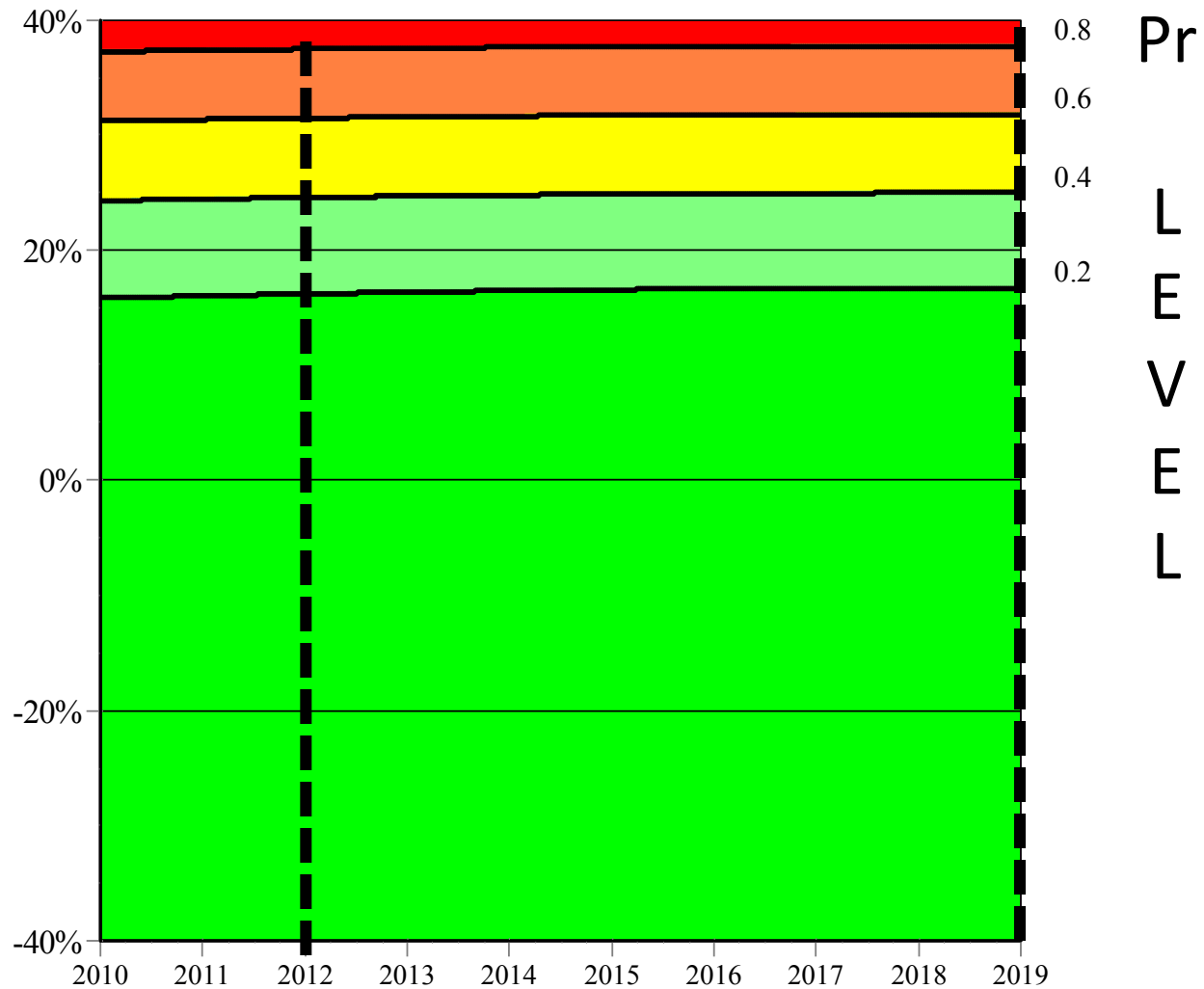
%	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
-40	0.004	0	0	0	0	0	0	0	0	0
-20	0.034	0	0	0	0	0	0	0	0	0
0	0.182	0.014	0.004	0	0	0	0	0	0	0
20	0.436	0.28	0.184	0.132	0.094	0.074	0.06	0.054	0.042	0.038
40	0.742	0.842	0.932	0.968	0.99	1	1	1	1	1

Probability
(TB <
TBmsy) by
5 different
catch
scenarios
current
catch level
(6,579t)
(0%)



%	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
-40	0	0	0	0	0	0	0	0	0	0
-20	0	0	0	0	0	0	0	0	0	0
0	0.006	0	0	0	0	0	0	0	0	0
20	0.246	0.16	0.094	0.06	0.052	0.04	0.03	0.028	0.024	0.024
40	0.862	0.946	0.978	1	1	1	1	1	1	1

Probability
($F_{msy} < F$)
by 5
different
catch
scenarios
current
catch level
(6,579t)
(0%)



MSY=8,580 t

TBratio= 0.97

Fratio= 0.84

Complete summary Table
(under construction)
will be provided later