MSE Demonstration

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SIMULATION STEPS by year

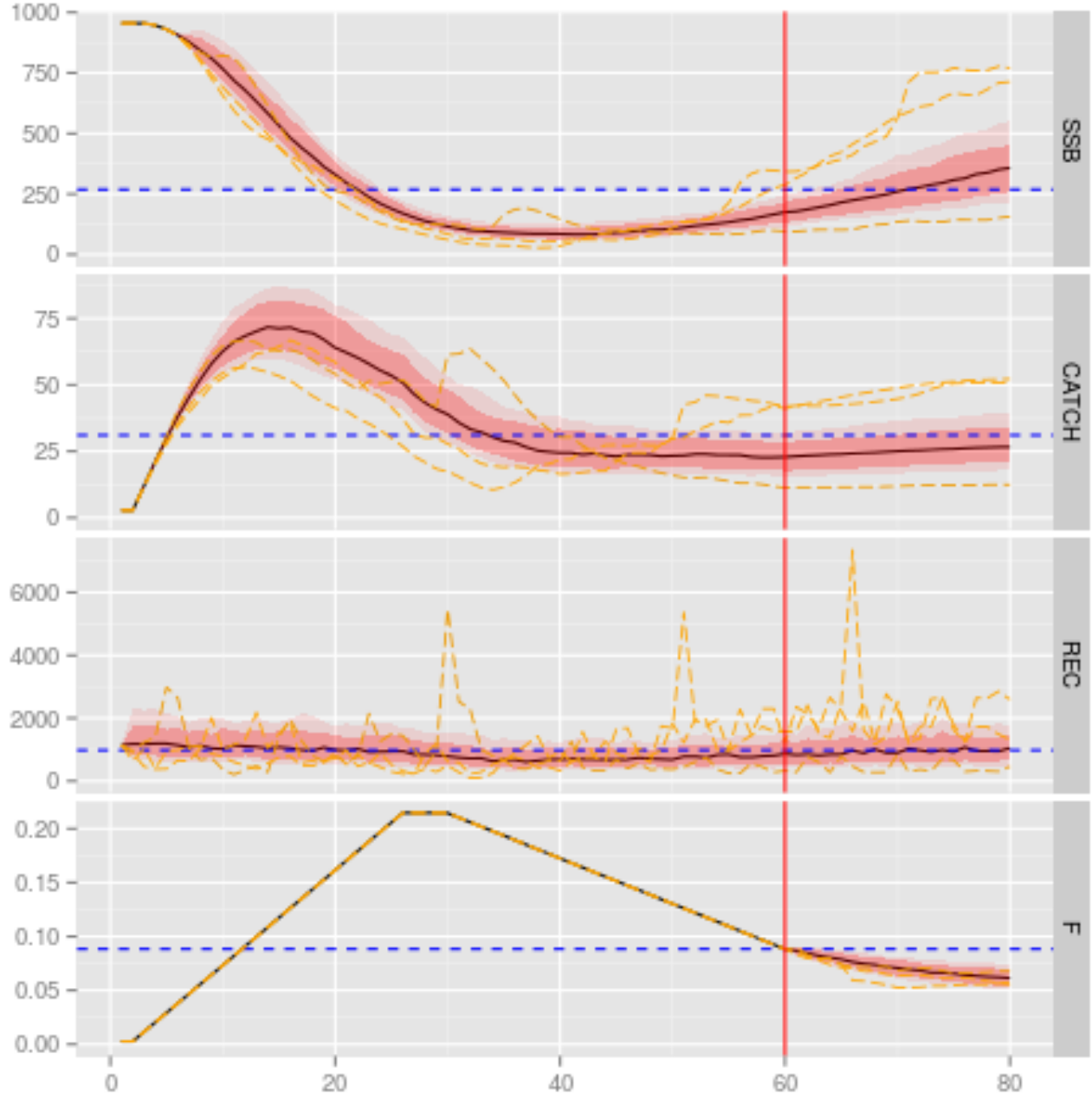
1. Get catch y-1
2. CPUE = SSB + E()
3. lm (cpue $\sim$ year) for last 5 years
4. C_y = C_y+1 * (1 + beta * slope)
5. Project stock w/ C_y + SR

Done for each iteration, HCR and OM option

SCENARIOS

- OMs: Simulated populations w/ tuna LH
  - ow: One-way trip, F up to 0.80*Fcrash
  - ed: Effort dynamics, F to drive stock to MSY
  - rc: Roller coaster, F up and then down
- Recruitment residuals: 10, 20 or 40 years
- Beta parameter in HCR: 0.1, 0.2, 0.4
- Noise in CPUE signal: 0, 10, 20 SD in Norm()

```
> 3*3*3*3 = 81
```


SSB
CATCH
REC
F
1000
750
500
250
0
75
50
25
6000
4000
2000
0.20
0.15
0.10
0.05
0.00
0
20
40
60
80

http://spark.rstudio.com/imosqueira/IOTCMSE/