Simulation test using Operating Model based on Life History

Biomass Dynamic

L Kell

24 July, 2018

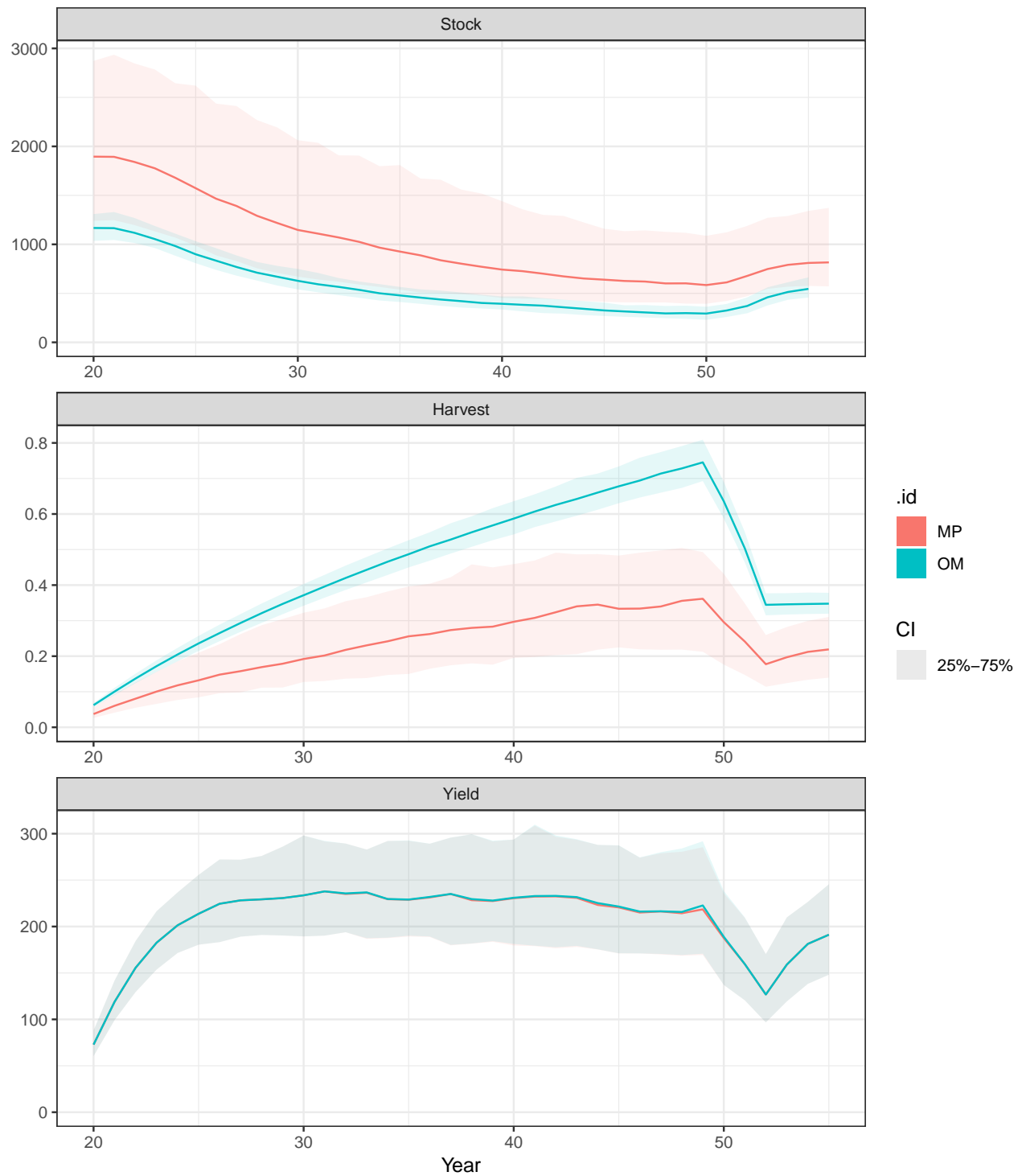# Simulation tests

Figure 1, Simulation test of biomass dyanmic assessment for brill.
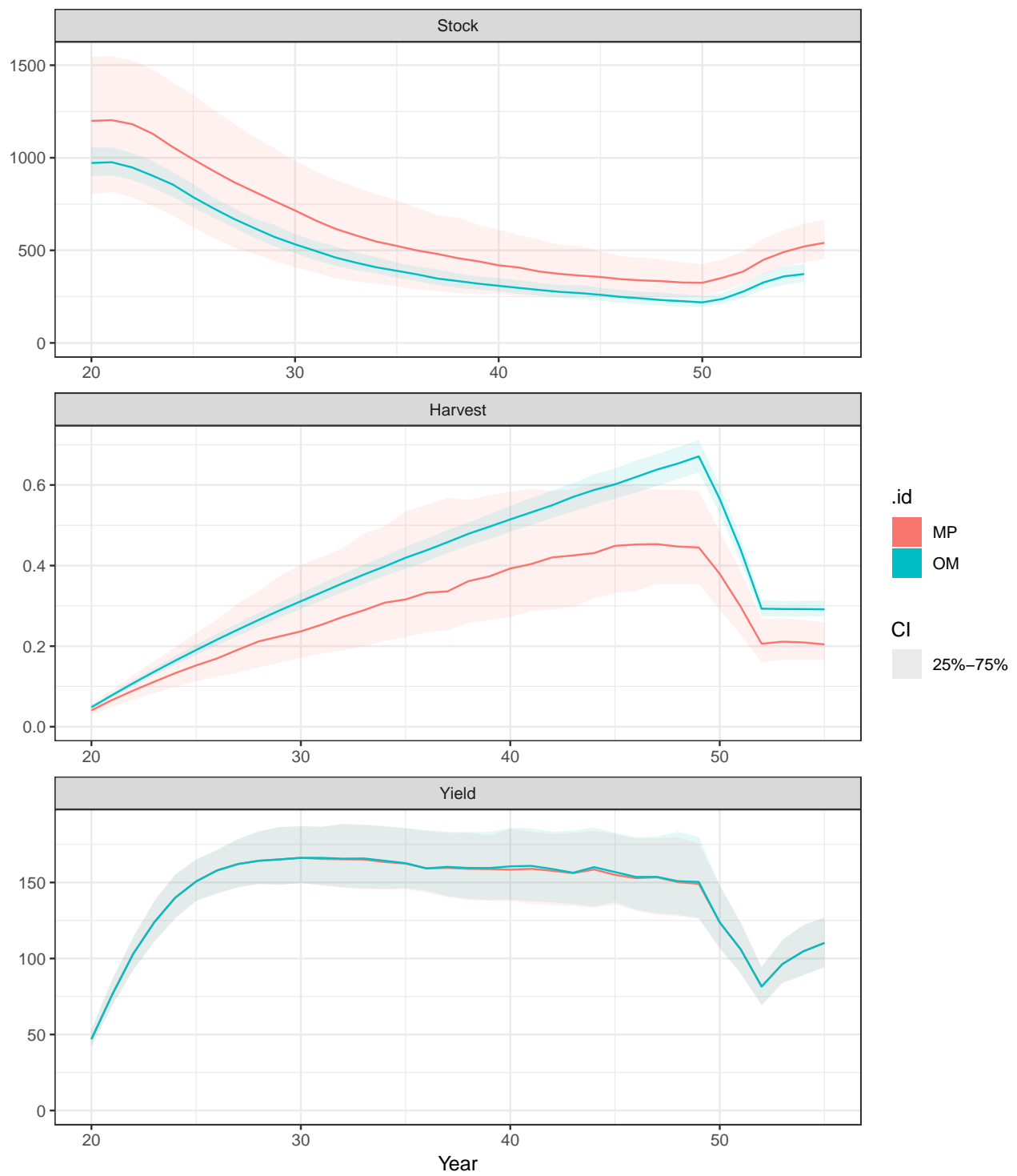
Turbot

Figure 2, Simulation test of biomass dyanmic assessment for turbot.
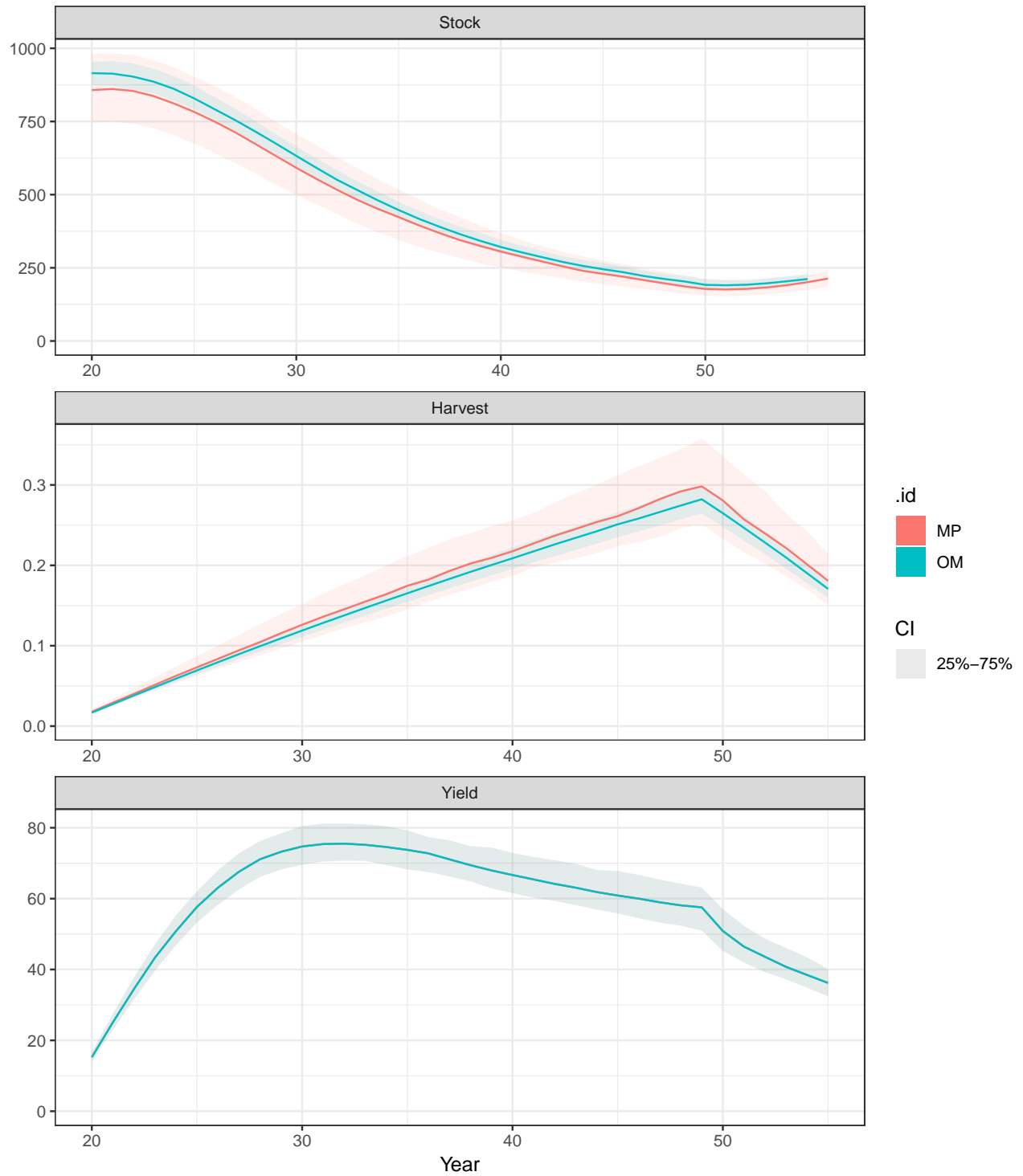
Ray

Figure 3, Simulation test of biomass dyanmic assessment for ray.
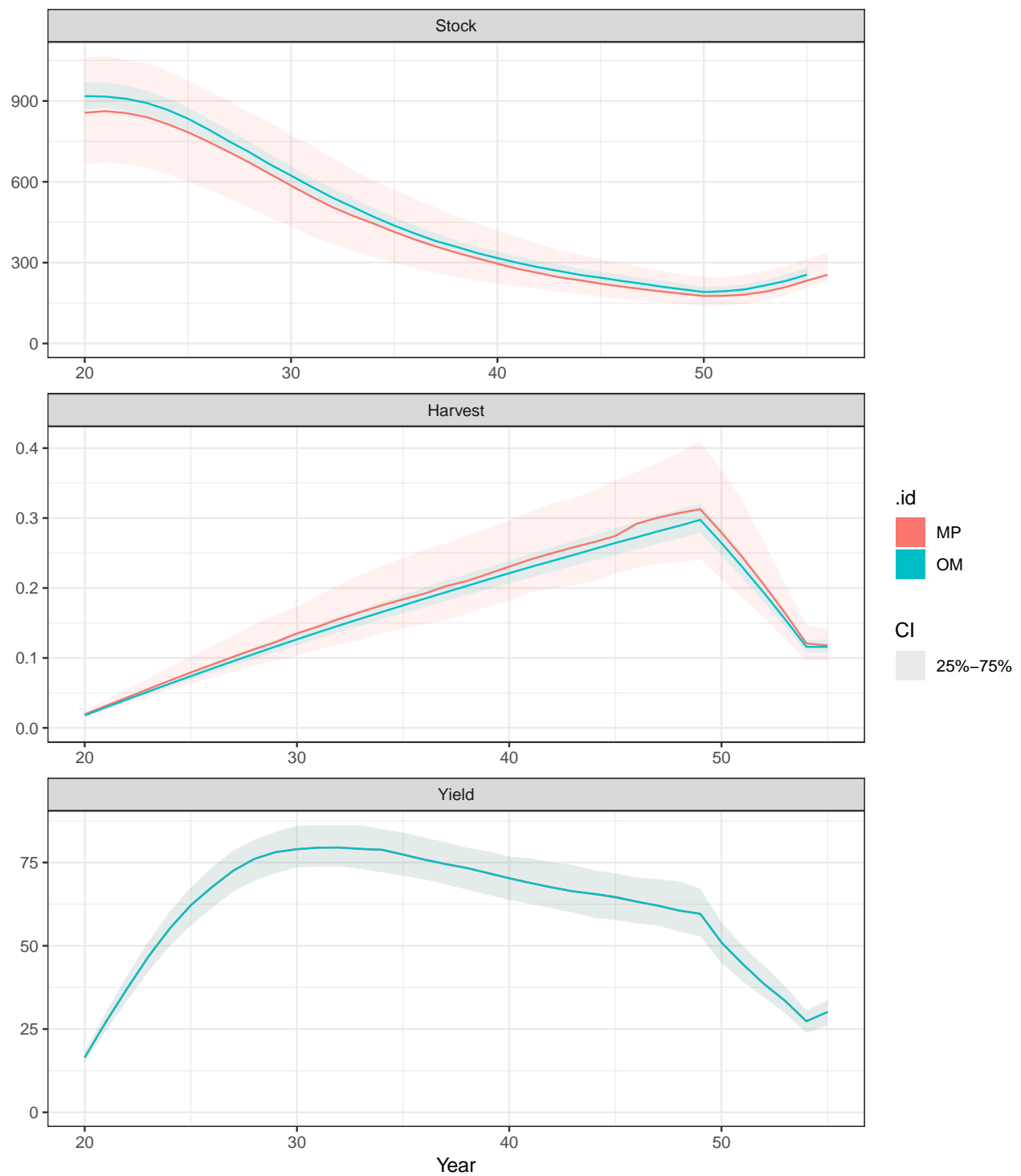
Pollack

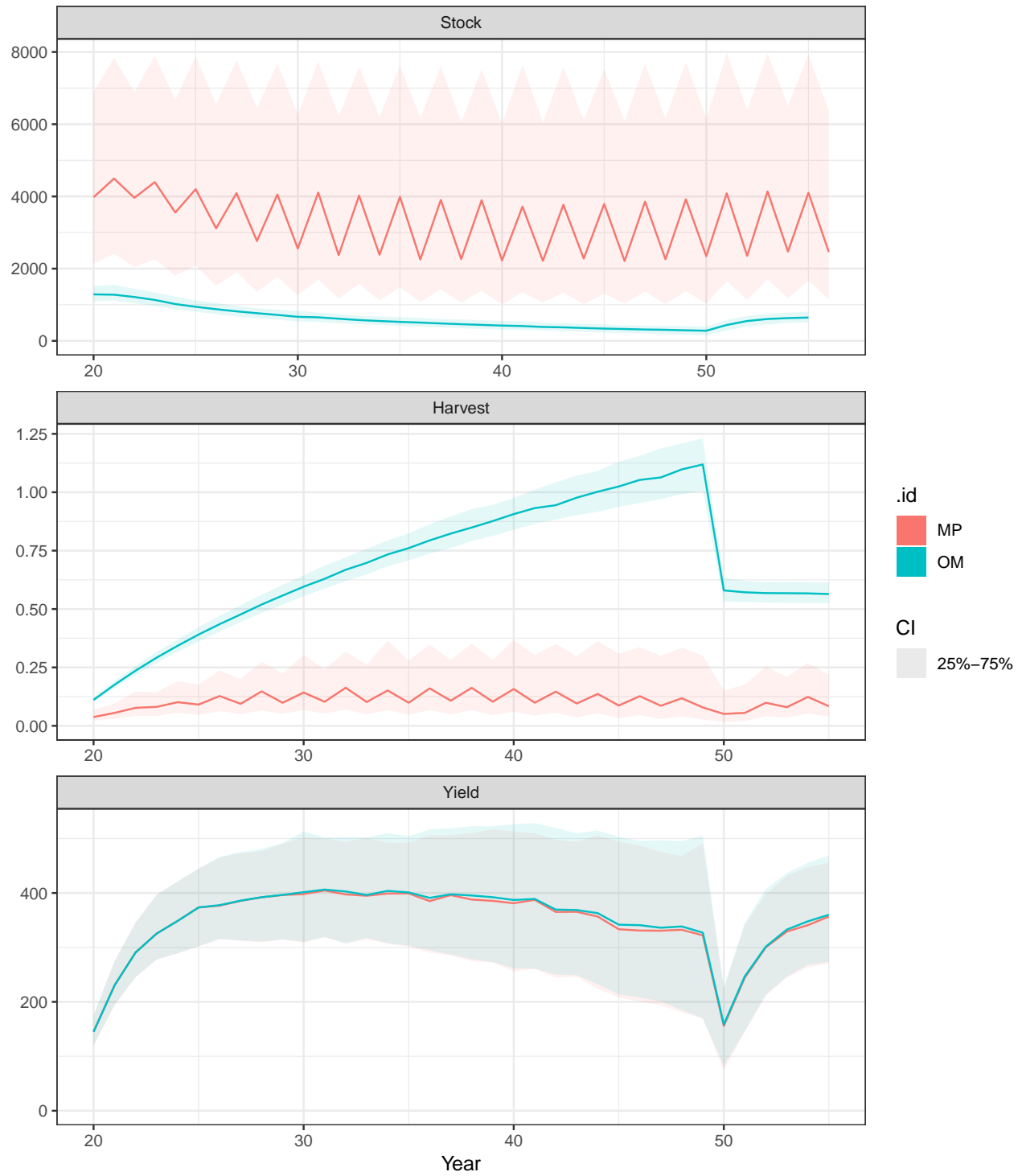**Figure 4,** Simulation test of biomass dyanmic assessment for pollack.

Sprat

Figure 5, Simulation test of biomass dyanmic assessment for sprat.
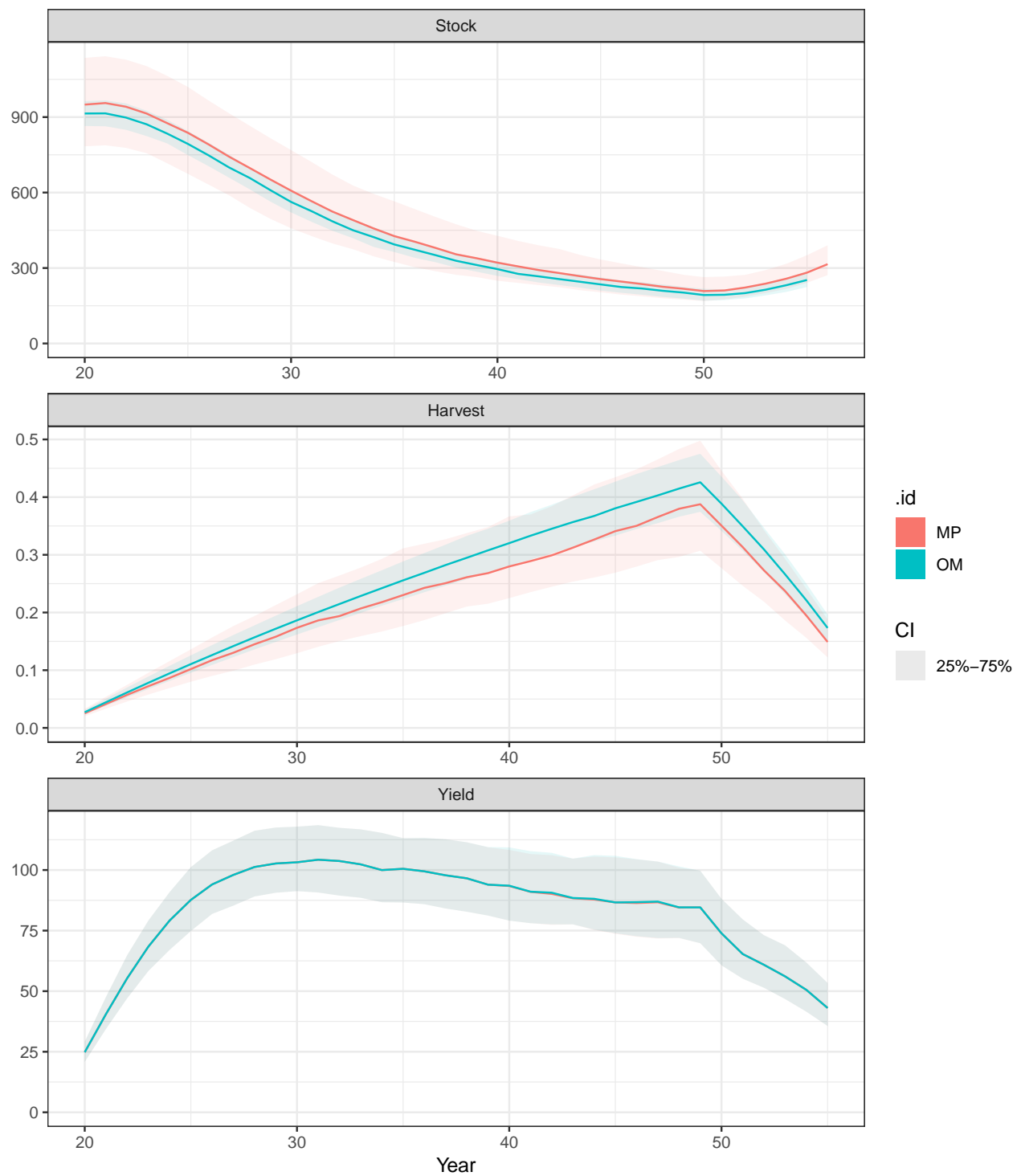
Lobster

Figure 6, Simulation test of biomass dyanmic assessment for lobster.
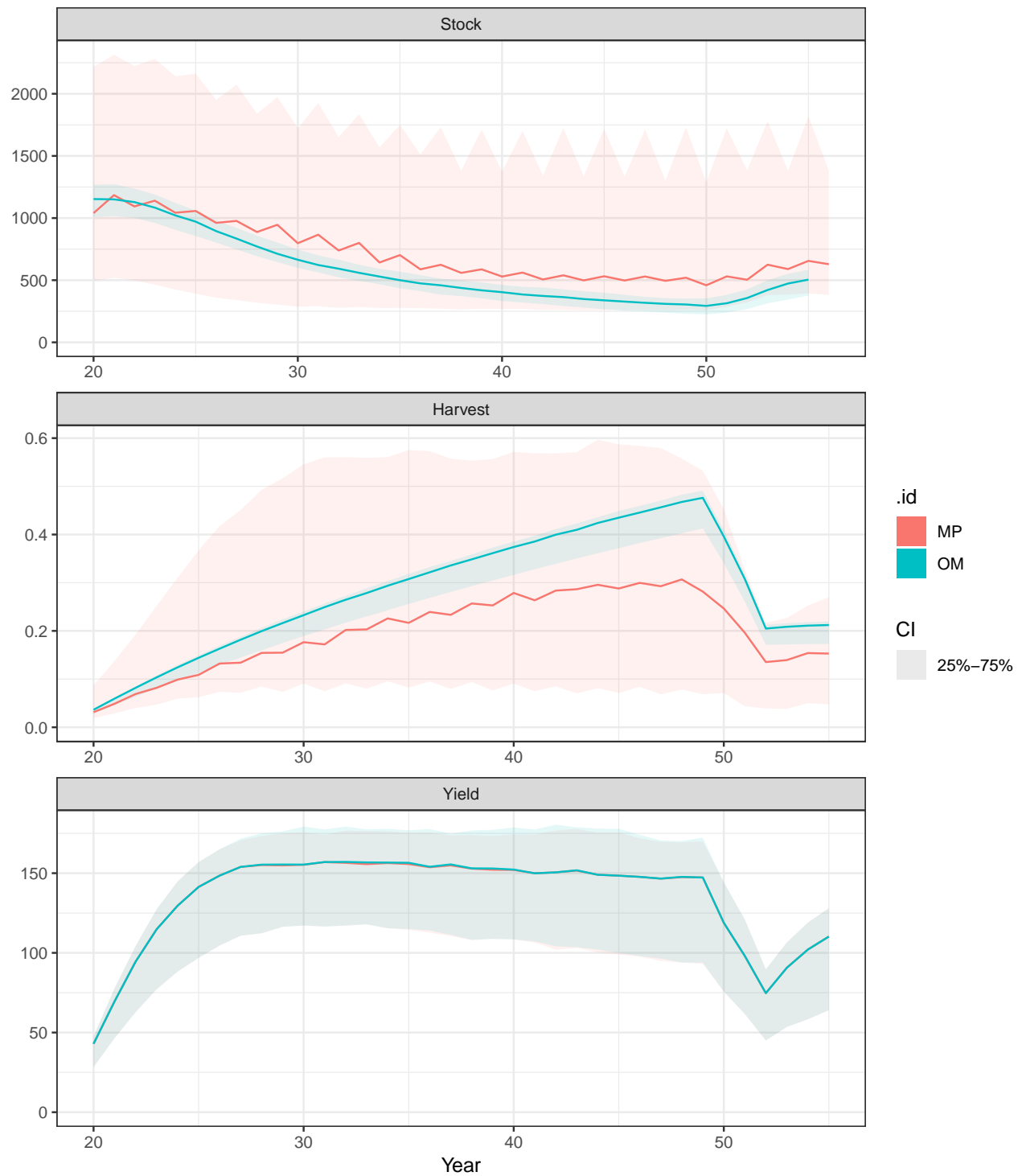
Razor

Figure 7, Simulation test of biomass dyanmic assessment for razor.
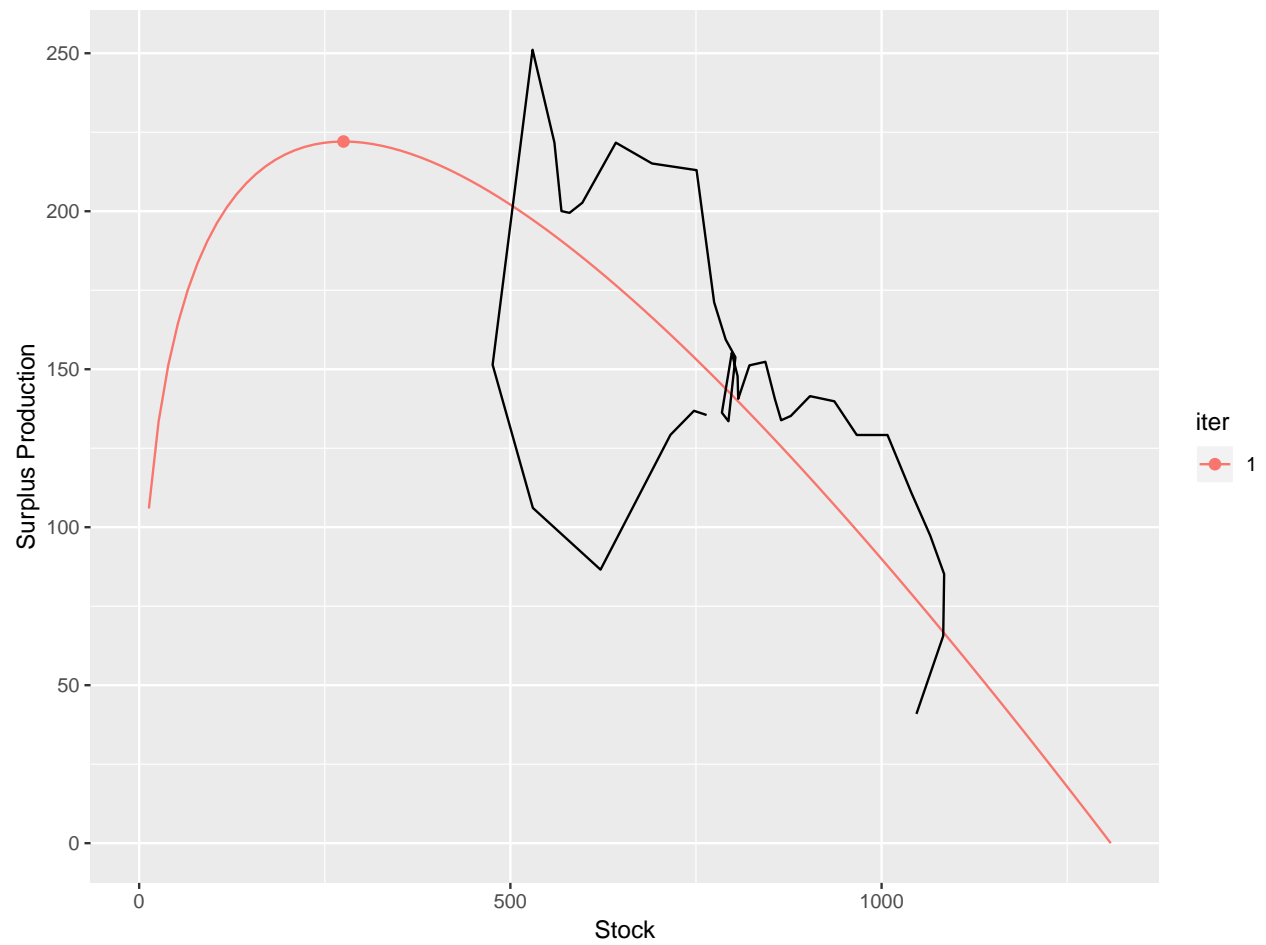
Figure 8, Biomass dynamic production function.

Figure 9, Biomass dynamic

Figure 10, Biomass dynamic

Software Versions

- R version 3.4.1 (2017-06-30)
- FLCore: 2.6.9
- FLife: 3.2.0
- FLBRP: 2.5.3
- **Compiled**: Tue Jul 24 09:16:47 2018

Author information

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Acknowledgements

References

Session Info

```
R version 3.4.1 (2017-06-30)
Platform: x86_64-pc-linux-gnu (64-bit)
Running under: Ubuntu 16.04.2 LTS

Matrix products: default
BLAS: /usr/lib/libblas/libblas.so.3.6.0
LAPACK: /usr/lib/lapack/liblapack.so.3.6.0

locale:
 [1] LC_CTYPE=en_US.UTF-8       LC_NUMERIC=C
 [3] LC_TIME=en_GB.UTF-8        LC_COLLATE=en_US.UTF-8
 [5] LC_MONETARY=en_GB.UTF-8    LC_MESSAGES=en_US.UTF-8
 [7] LC_PAPER=en_GB.UTF-8       LC_NAME=C
 [9] LC_ADDRESS=C               LC_TELEPHONE=C
[11] LC_MEASUREMENT=en_GB.UTF-8 LC_IDENTIFICATION=C

attached base packages:
[1] stats     graphics  grDevices utils     datasets  methods   base

other attached packages:
[1] mpb_3.0.0      ggplotFL_2.6.4  FLCore_2.6.9    lattice_0.20-35
[5] dplyr_0.7.6    plyr_1.8.4      reshape_0.8.7   ggplot2_3.0.0
[9] knitr_1.20

loaded via a namespace (and not attached):
 [1] Rcpp_0.12.18    pillar_1.1.0    compiler_3.4.1  bindr_0.1.1
 [5] tools_3.4.1     digest_0.6.15   evaluate_0.10.1 tibble_1.4.2
```

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 [9] gtable_0.2.0       pkgconfig_2.0.1  rlang_0.2.1     Matrix_1.2-10
[13] yaml_2.1.18        bindrcpp_0.2.2   gridExtra_2.3   withr_2.1.2
[17] stringr_1.3.1      stats4_3.4.1     rprojroot_1.3-2 grid_3.4.1
[21] tidyselect_0.2.4 glue_1.2.0        R6_2.2.2        rmarkdown_1.9
[25] FLBRP_2.5.3        FLRP_1.0.1.9002  purrr_0.2.5     magrittr_1.5
[29] codetools_0.2-15 backports_1.1.2   scales_0.5.0    htmltools_0.3.6
[33] MASS_7.3-47        assertthat_0.2.0 FLife_3.2.0     colorspace_1.3-2
[37] labeling_0.3       stringi_1.2.3    lazyeval_0.2.1  munsell_0.5.0
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