Visualization and Overlap of Fishery-Independent and Fishery-Dependent Data for Assessment of the Oregon Shelf Flatfish Fishery

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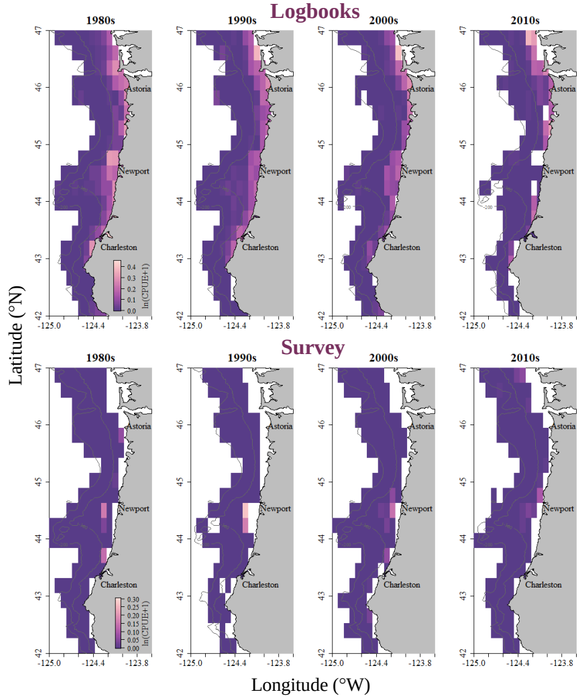
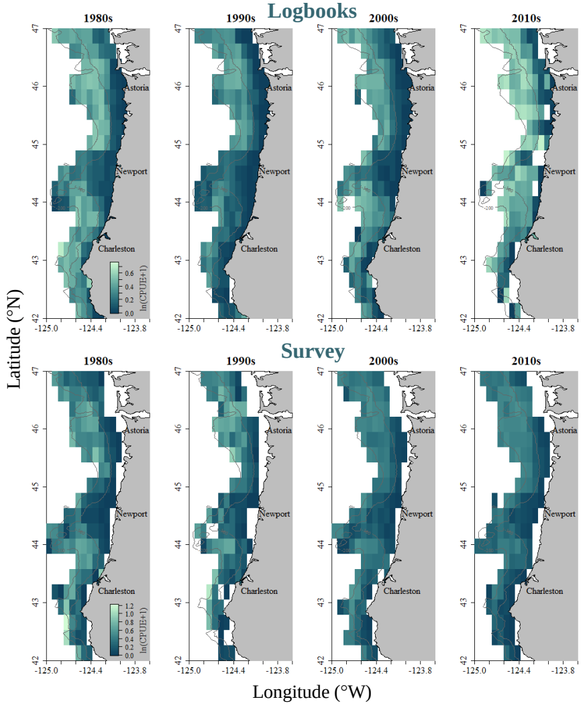
Research question

In what ways can fishery-independent and -dependent data be complementary for research on Oregon's flatfish fishery?

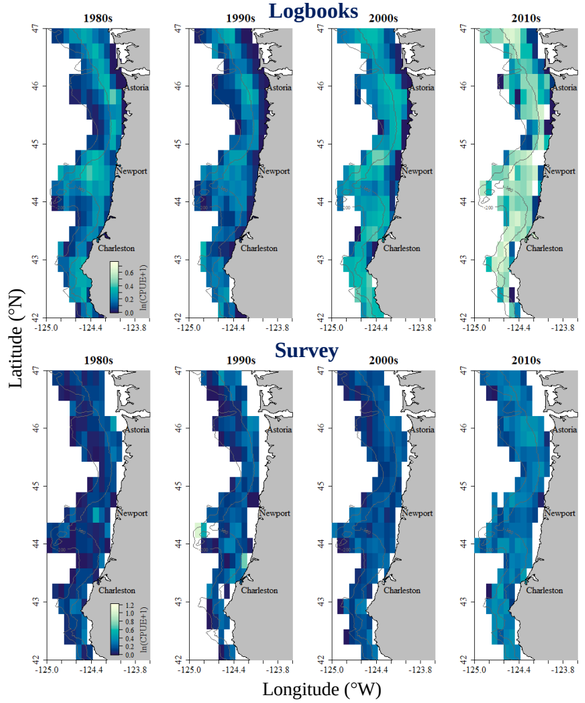
Starry Flounder



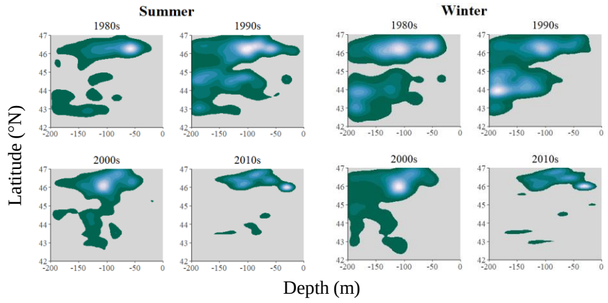
Dover Sole



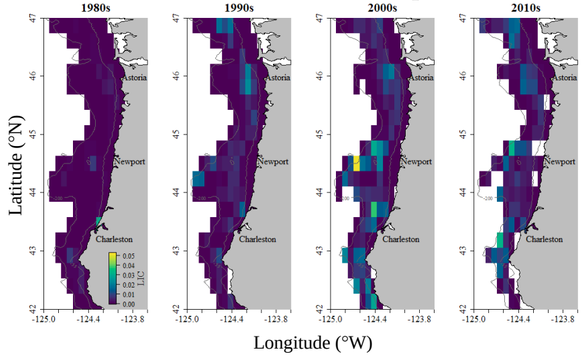
Petrale Sole



Dover Sole Seasonality



Petrale Sole Overlap



Data

Fishery-independent (1980 – 2018)

- NMFS West Coast Groundfish Bottom Trawl Survey

Fishery-dependent (1981 – 2017)

- Oregon trawl logbooks
- Fish tickets

Methods

Spatiotemporal catch visualization

- Gridded maps of CPUE by decade
- Plotted catches (presence) by depth and latitude

Overlap

- Gridded maps of local index of collocation (Carroll et al. 2019)

Conclusions & Recommendations

1. Visualization of logbooks and NMFS survey data leads to similar results for frequently encountered species.
2. Inshore species would likely benefit from use of fishery-dependent data for spatiotemporal analyses.
3. The 1980s and 1990s may be the best time period for collective use of both datasets.

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