

WCPO skipjack MP estimation method: planned approach

MI-WP-02

Scientific Committee Meeting
Manila, Philippines
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SPC-OFP
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Reminder – estimation method

- Key part of the Management Procedure
 - Data collection
 - estimation method
 - HCR
- Provides a ‘fixed’ approach to estimating stock status to feed into the HCR
- WCPO skipjack EM:
 - fixed implementation of MULTIFAN-CL (~2019 diagnostic case model)
- 2023 Monitoring strategy report flagged an issue
 - Reduced pole and line effort in tropical regions

Issue – tropical P&L input data

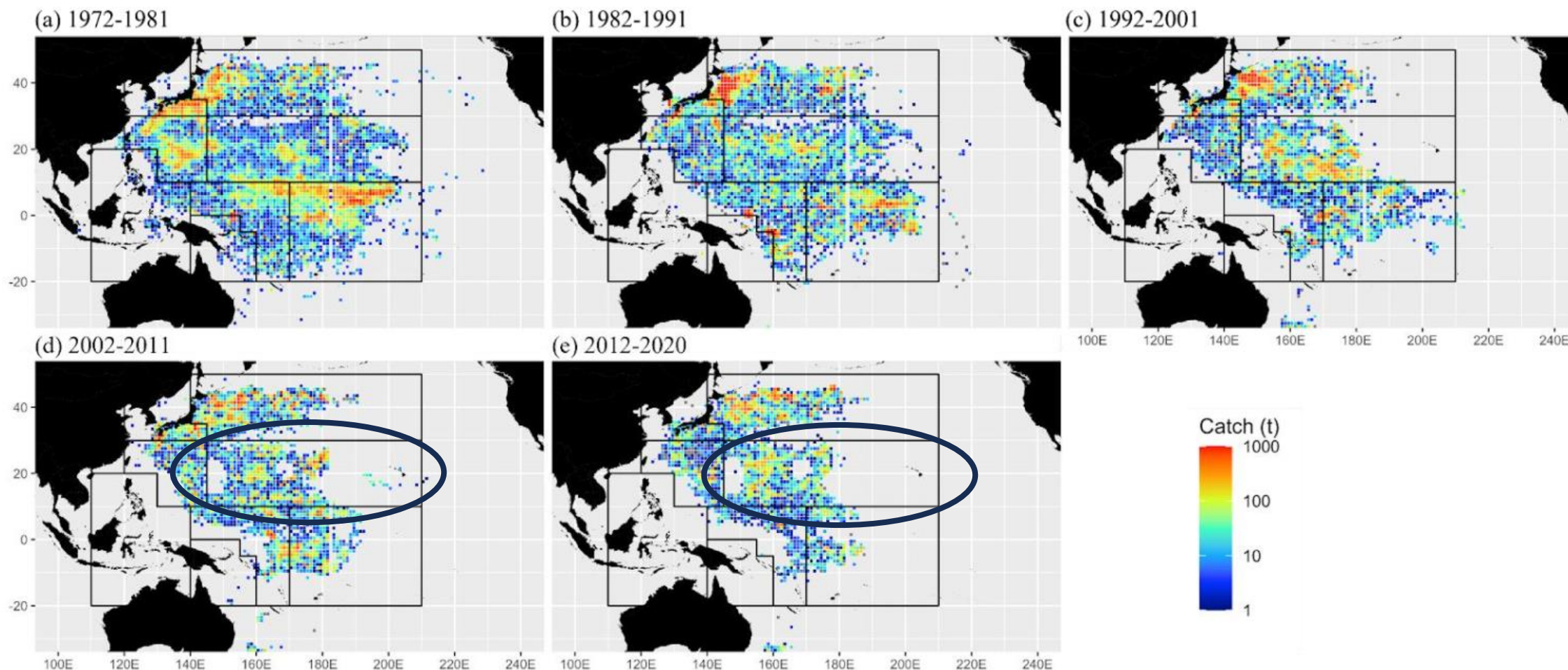


Figure 3: Decadal shifts in spatial distribution of Japanese pole-and-line (JPPL) fishery skipjack catch (metric tons) from 1972 to 2020.

Solutions

- 2022 assessment shifted to PS-based tropical index
 - Unassociated set data only
- In conjunction: catch-conditioned model
 - Much faster
- Examine alternative platforms
 - In past have struggled due to tagging data
 - Updates may have improved performance
- Evaluate tag-based models
 - Key data for SKJ
 - Note recent experience that multiple data sources may be better

General notes

- Better to ensure OMs and EM are 'different'
 - Avoids overly positive performance
- Updates to historical data
 - Routine updates of data and re-estimation of time series in CPUE series
 - Not as tested in the MSE
 - Need to detail differences more clearly, and investigate for potential exceptional circumstances

Work plan

- Investigation of alternative modelling approaches
 - Focussed specifically on the estimation method
- Re-test management procedure
 - Data collection, estimation method, HCR – MP package
 - Ideally no change to HCR
 - Data inputs to the estimation method may change depending on adopted approach.
- No change to Operating Models
 - OM grid remains as currently specified.
- No change to Management Objectives

Timeline

Year	Meeting	Proposed input	Notes
2024	SMD2	Discussion of relevant SC20 outcomes	
2025	SC21	Performance of alternative EMs presented to SC and advice provided	New SKJ assessment is scheduled for this meeting
	WCPFC22	Commission agreement of updated MP and update of CMM 2022-01 Annex 2.	
2026	SC22	Implementation of 2 nd running of the MP and provision of advice.	
	WCPFC23	Actions as per para 8 of CMM 2022-01	

Recommendations

- Consider and provide advice on the options provided for re-examining the WCPO skipjack MP estimation method; and
- Consider the proposed timeline for that re-examination.