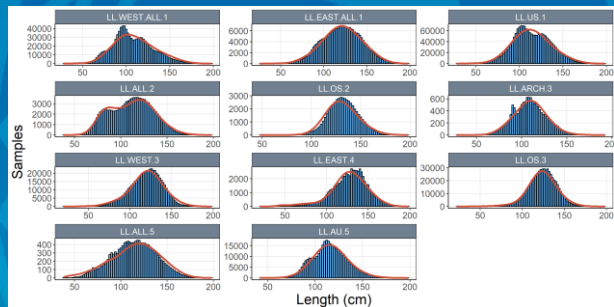




Review and Reconciliation of Size Data

Project 127/127a Phase 2 Progress Report | SC22-2026-ST-WP02

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Background

- Size composition data is an important data for stock assessments
- Many sources – over 80 size data source codes in SPC databases
- No consolidated documentation on data collection procedures, methods and quality – looks like a lot of data, but how much is suitable quality? **(phases1, 2)**
- Difficult to explore how data sources change in space and time– need dashboards for scientists. **(phase 2)**
- SciData submissions lack supporting information to track sampling method/quality changes **(draft proforma – phase 1, 2)**
- Size data coverage aspects are not monitored, data submission is a tick box, need for systems to track the amount/coverage of size data that is relevant to its use in stock assessment. **(phase 2)**
- Conversion factors still need improvement **(phases 1, 2)**

Reconciliation and documentation

- Follow-ups from phase 1: China, Korea, Chinese Taipei, Japan, Indonesia, Australia, USA-Hawai'i, New Zealand and Philippines
- Updated size data source descriptions appendix table 1 in ST-WP-02
- **SciData submission information proforma** – revised format, tested and discussed with those CCMs above provide most of the aggregated SciData size data submissions – **proforma needs review/comment/support to adopt or not by SC22**
- Info. Proforma To be added as a .csv version with the new standardised SciData submission templates



WCPFC SciData aggregate size data submission supporting

Information proforma: DRAFT version 5

This proforma relates only to the aggregated WCPFC SciData size data submissions. Data provided under the WCPFC ROP (i.e. Regional Observer Programme) or other special size data sampling programs (e.g., port sampling) that provide data to the SIP (SPC – Pacific Community) are not considered under this proforma. The purpose of the proforma is for CCMs to provide general information on how the size data provided in their annual WCPFC aggregated size data submissions have been collected and to flag any changes in the collection processes/methods.

Size data provider details	
CCM:	Reporting entity of data covered by this proforma:
Contact person:	
Position title:	Contact email:

Questions

Question 1: Can you provide information on the platform/location where the fish were measured or weighed? For example: port/landing point, on vessel at sea, fish market etc.

YES ☐ NO ☐ UNSURE ☐

If YES, can the sampling platform/location be selected from the options below (more than one option can be selected):

1. Port/landing point (catch is sampled direct from the vessel or as the vessel is being unloaded or directly after unloading at the port) ☐
2. Fish market/wharf ☐
3. Onboard fishing vessel at sea ☐
4. Processing plant ☐
5. Research/training vessel ☐

6. Other, please specify:

If NO, would this information be available on request? YES ☐ NO ☐

Notes:

Question 2: Can you provide information on who measured the fish in submitted size data?

YES ☐ NO ☐ UNSURE ☐

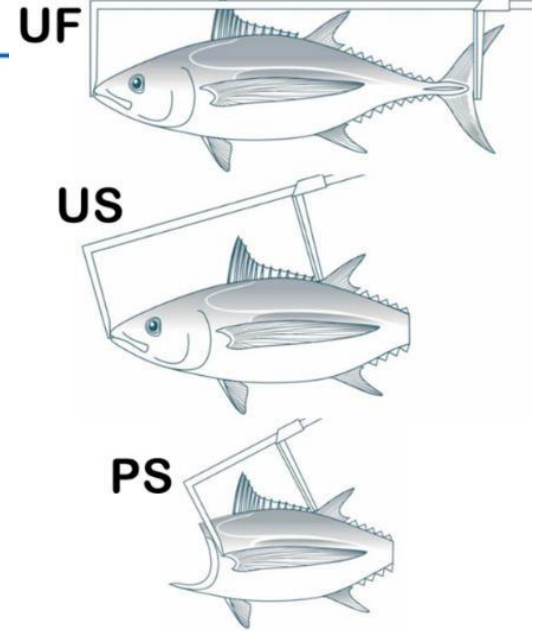
If YES, can the sampling person(s) be selected from the options below (more than one option can be selected):



Enhancing Conversion Factors

Transitioning toward more reliable measurement data:

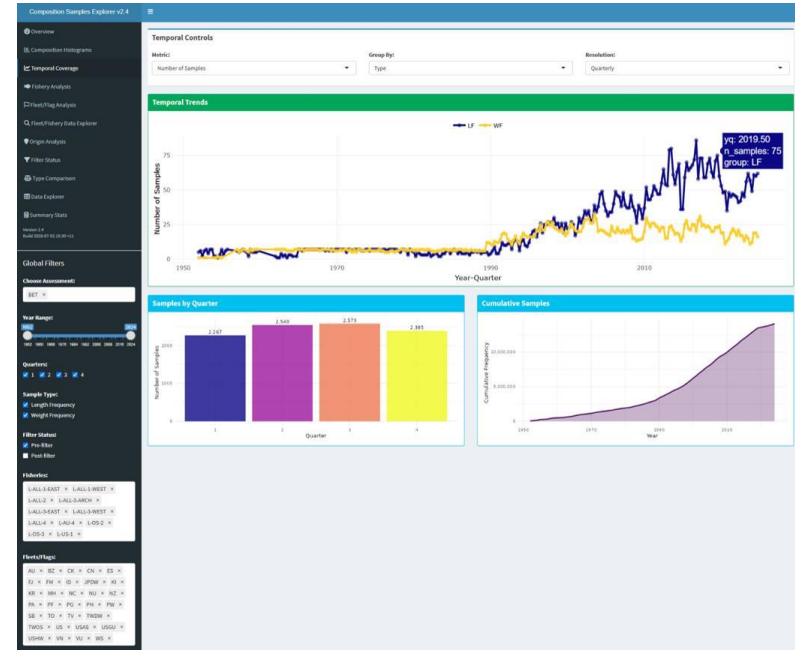
- A new 12-month sampling contract was implemented with the Socskargen program in the Philippines.
- Sampling strategically prioritizes partial length to fork length (UF) conversions (e.g., upper jaw to second dorsal fin) for tunas.
- Establishing these length-length conversion factors can reduce the reliance on highly variable weight-to-length conversions in stock assessments.
- Processed weight (gilled-gutted) to whole weight conversion tables have also been updated, new data for bigeye needs updating and more data coming from Socskargen



Size Data Exploration Dashboards

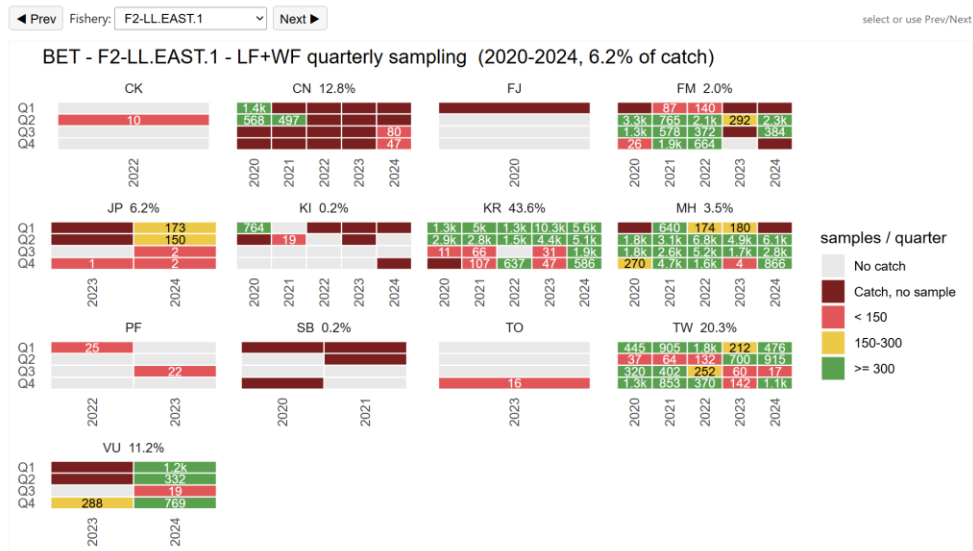
Equipping scientists with data review tools:

- An R Shiny dashboard (“Composition Samples Explorer”) was developed to help assessment scientists easily review available size data.
- The tool processes raw data from the LF_Master and WF_Master databases directly into defined model fishery structures.
- Users can filter and visualize temporal coverage and sample availability by flag, fleet, and origin ID.
- A subsequent “Composition Frequency Explorer” is planned to map spatial and temporal trends in the size compositions.



A large catch of salmon is shown hanging from a boat. The fish are arranged in a fan-like pattern, with their heads pointing downwards. The boat's hull is visible in the background, featuring the number '1050' in white on a red background. The scene is set outdoors on a wet, paved surface, likely a dock or harbor.

- Ad hoc data collection currently results in spatio-temporal patchiness, where some flags oversample while others severely undersample their catch.
- A prototype “traffic light” monitoring framework has been developed to track quarterly sampling coverage by flag against the percentage of catch taken.
- This visual system helps rapidly identify data gaps and provides a focus for where CCMs can direct additional sampling resources.
- Further work is proposed to establish objective, statistically based sampling targets for CCMs.



Key actions requested from the Scientific Committee

- **Consider and provide feedback** on recommending the adoption of the SciData size data submission information proforma for WCPFC23.
- **Provide feedback** on the development of flag- or fishery-specific size data sampling targets.
- **Provide feedback** on the implementation of a 5-year traffic light monitoring system to track sampling coverage against targets.
- **Note** the ongoing work to refine conversion factors and size data exploration dashboards for the remainder of Project 127/127a.

Acknowledgements

- WCPFC for funding support for project 127/127a
- CCMs who provided information, discussions and testing the proforma
- All the observers and port samplers for measuring and weighing fish over many years
- Data teams of CCMs for collation and data submission and openness to adopt to more standardised submission formats



Make sure the fish is not bent when you measure it!!