# Recent research initiatives

2nd Meeting of the FAD management options intersessional working group
Pohnpei, FSM
28-30 September 2016

Oceanic Fisheries Programme
Pacific Community

# Presentation Outline

**Research areas**

- BET ‘hotspots’
- BET/oceanographic factors
- BET/YFT behaviour

Applied scientific analyses to inform management

# Table 1 - WCPFC-SC12-ST-WP-06

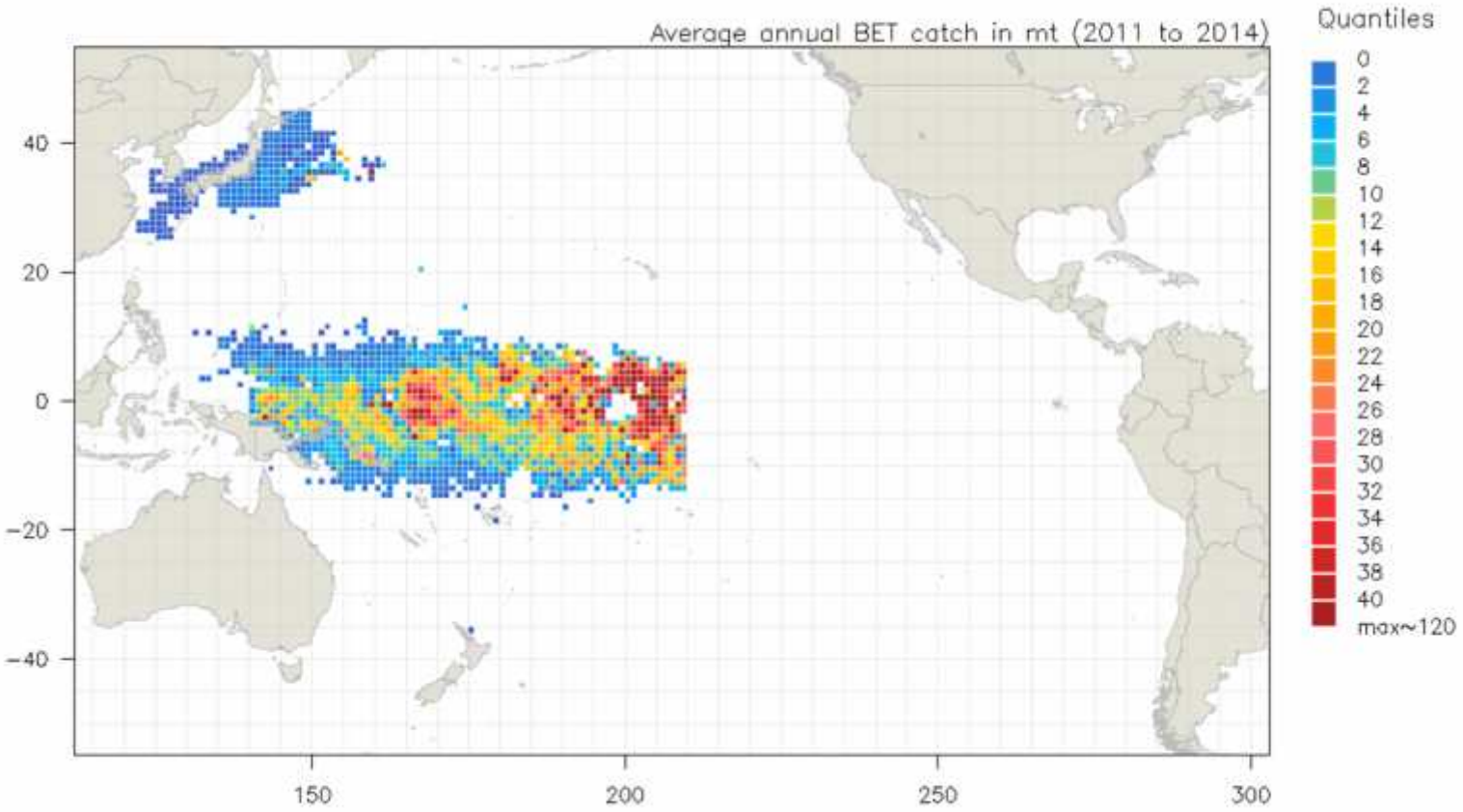
Pacific Community
Communauté du Pacifique

| Research Area | Management Focus | Supported | Completion | Priority |
|---|---|---|---|---|
| 1. FAD Design | Mitigation of non-target species catch associated with FADs through FAD design | NO | ~24 months | MEDIUM |
| 2.Tuna Behaviour | Movement rates of target and non-target species associated with FADs in the western Pacific | YES* | ~36 months | MEDIUM |
| 3. Hotspot Analysis | Longitudinal and latitudinal differences in catch of non-target species to be characterized by way of hotspots. | YES* | ~18 months | HIGH |
| 4. Acoustic FADs | *Limit catches to only FADs with large biomass to reduce proportion of non-target species caught. | NO | ~36 months | LOW |
| 5. Fleet Behaviour | Characterisation of effort creep due to FAD use and fleet specific factors resulting in high catches of non-target species. | YES* | ~18 months | HIGH |

# BET hotspot analysis

- WCPFC-SC11-2015/MI-WP-07
- EU funding until end 2017 to further work
  - Factors related to BET PS catches (season, vessel, location, set type, etc.)
  - Characteristics of the ‘top’ BET catching vessels
  - Spatial management considerations

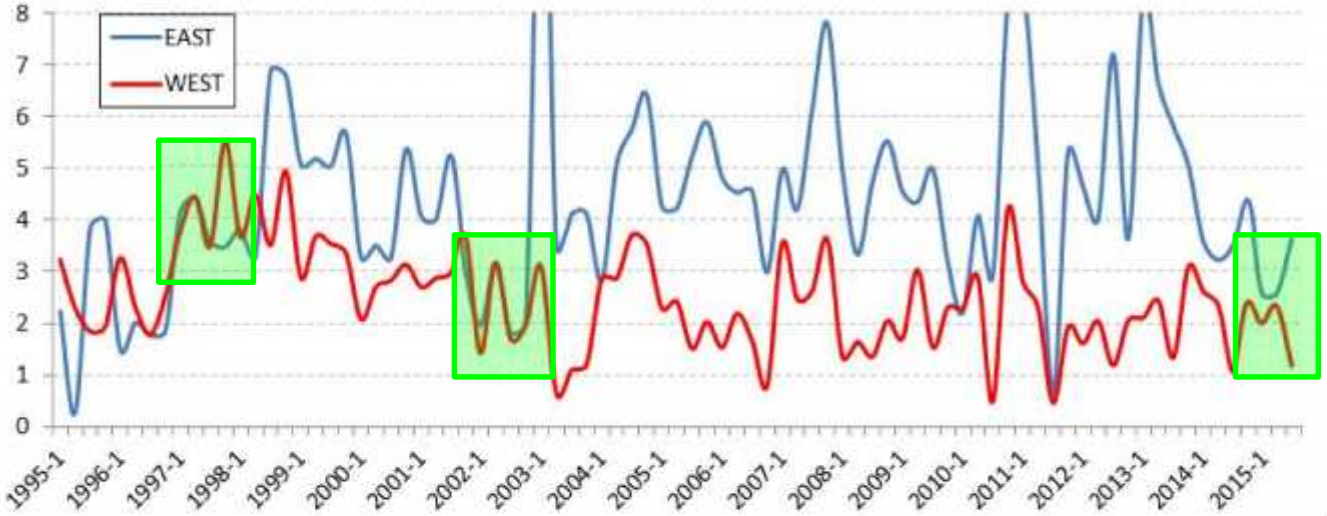
# Results so far…



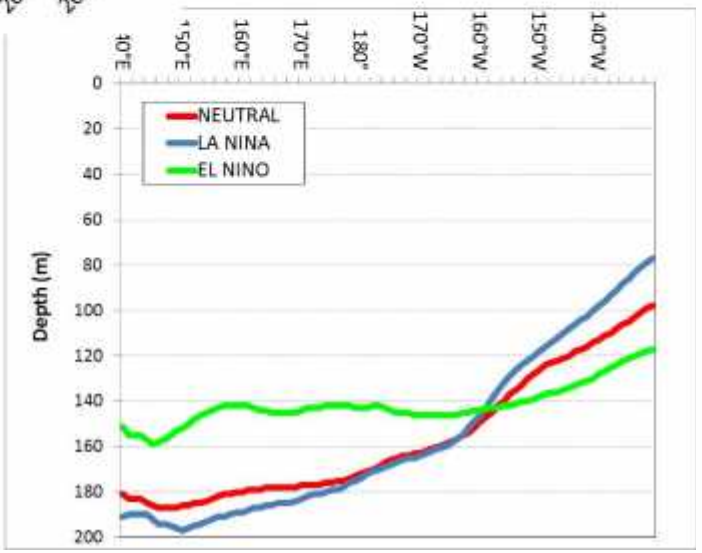
# Challenges

- Consistent vessel data
- Variability in CPUE
- Spatial separation of fleets
- Oceanographic influences (2015)

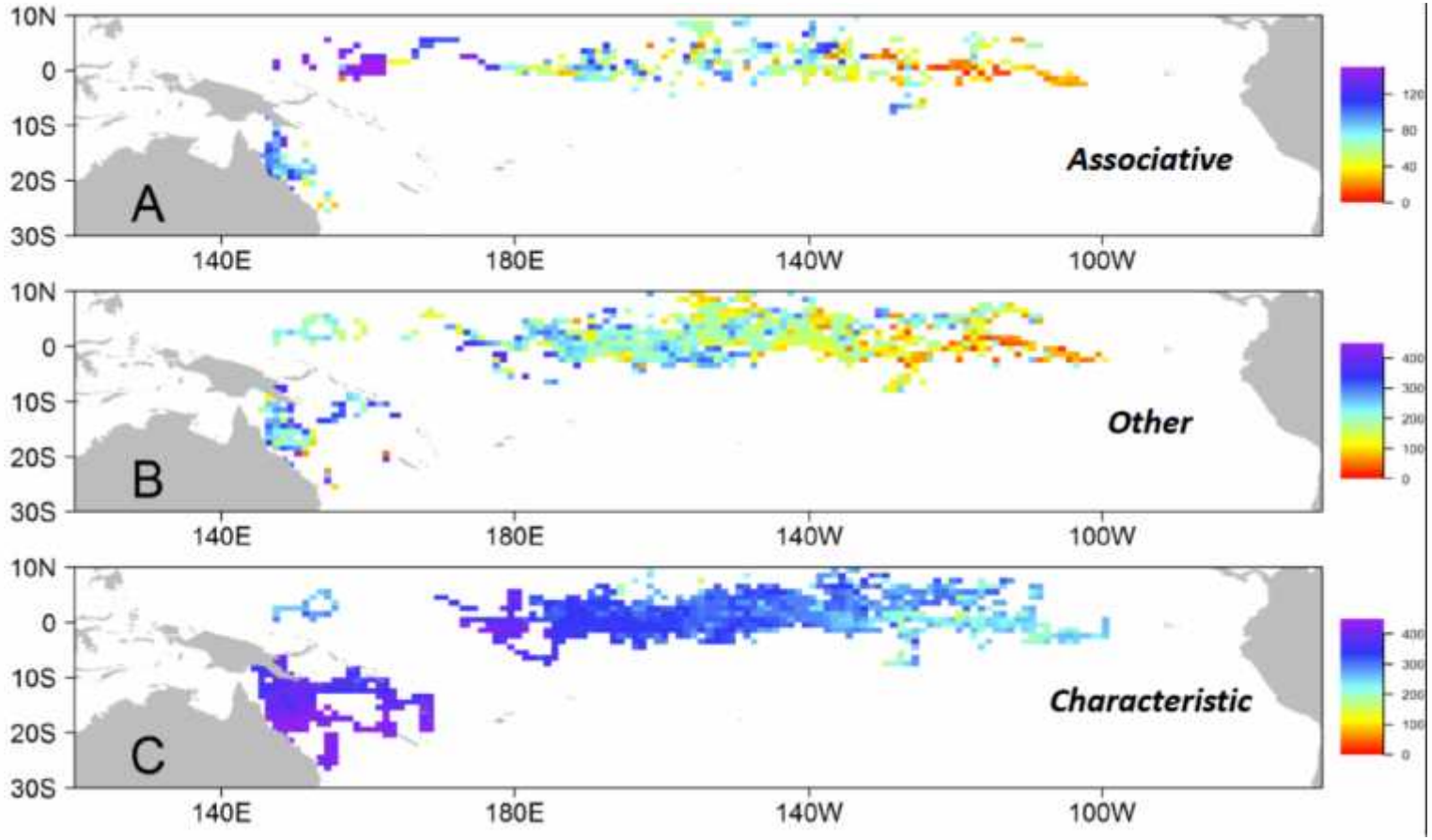
# BET Oceanographic factors




- Impacts on vertical distribution??
- Implications for spatial management?
- Aim to present to SC13



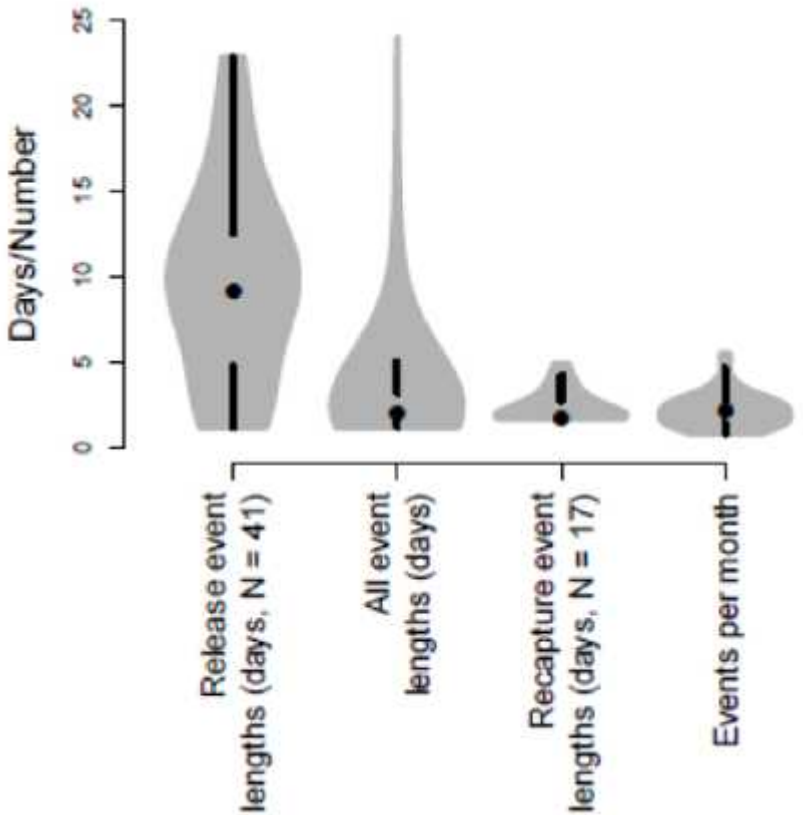
# PTTP 2 2016 – Abascal et al.




- http://www.wcpfc.int/node/27642
- PS and LL catchability

Daytime depths

# Further analysis of archival tags




- Scutt Phillips et al. (submitted)
- Assigned status through modelling
- Examine ‘surface association’ in results
- Time spent at surface greater post tagging, v short just prior to capture

# Summary

- Ongoing work on FADs
  - any drivers of catches that might lead to higher catches? [management options]
  - Oceanographic effects on catchability? [assessment?]
  - Behaviour around FADs? [both]
- Important for future assessments – CPUE series
- Important for ‘effort creep’ considerations