PTTP meeting 2016

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

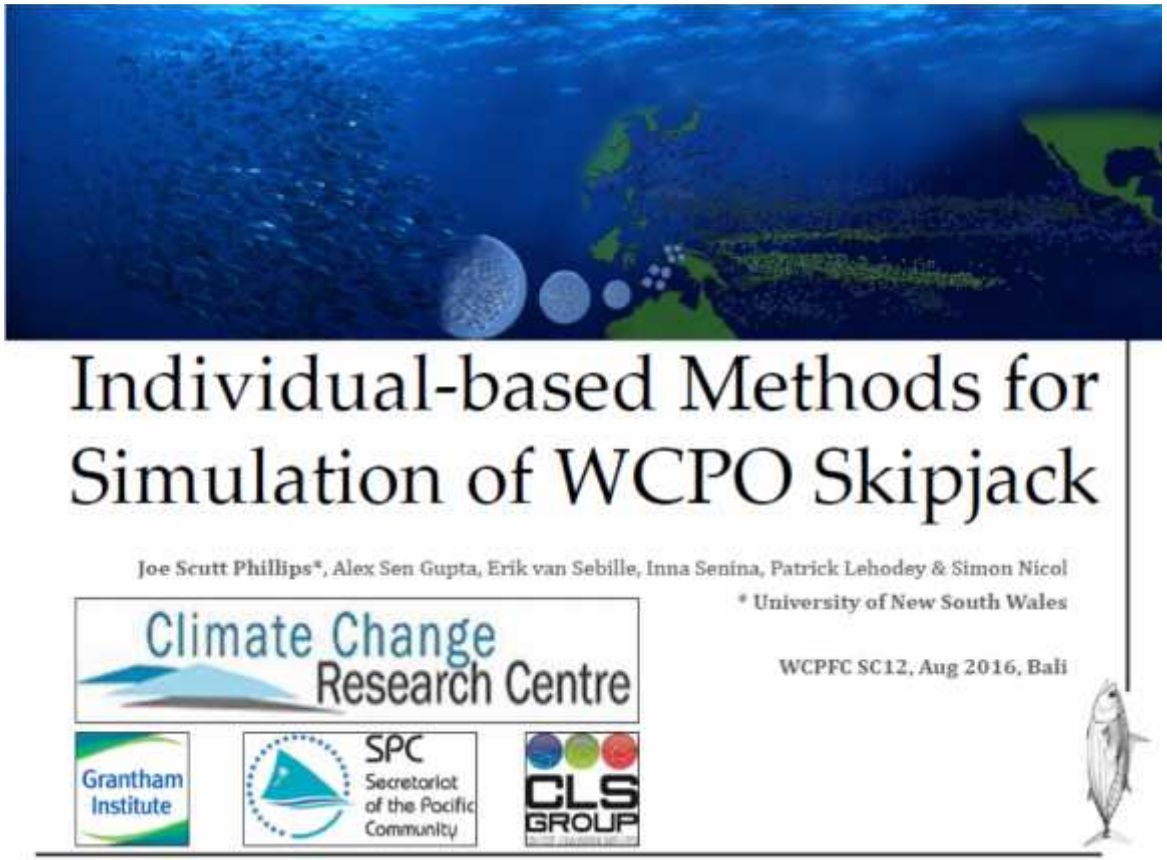
Oceanic Fisheries Programme
Pacific Community

PTTP 2016 meeting

- Met in margins of SC12
- Key findings
  - Recent cruises – CP10, 11, 2016 PNG trial
  - CP12 currently underway – further west. Targets:
    - 2000 CT and 75 AT around TAOs and at dFADs
    - Sonic tagging around 3 FADs equipped with satellite linked acoustic receiver
    - Tag silky sharks with satellite tags to collect info on behaviour and determine entanglement rates with dFADs
  - thanks to EU, ISSF, PNG, Republic of Korea, WCPFC

Further research

- Abascal et al. (described in SPC presentation)
- Scutt Phillips et al. (PTTP3)

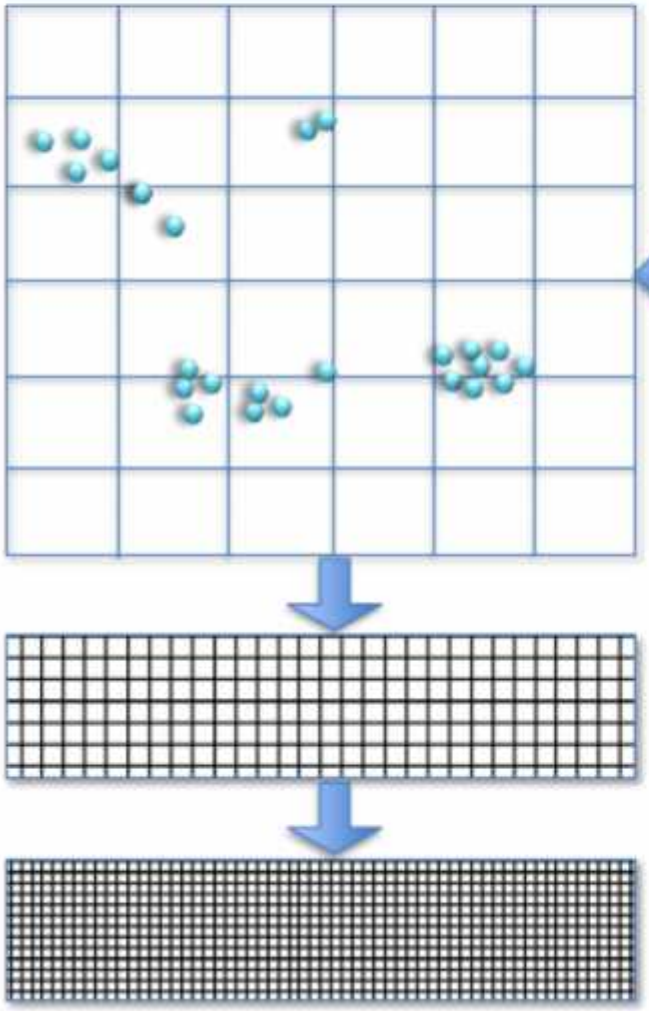


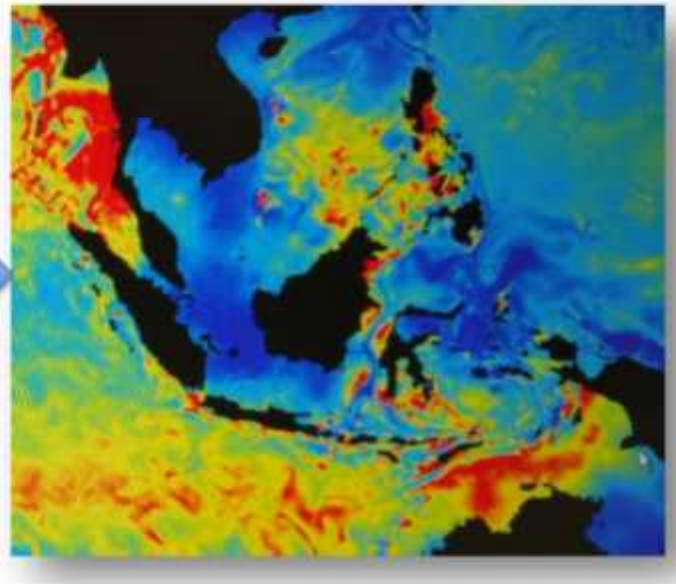
Individual-based Model of Tuna Movement and Distribution

Aims:

- Build a individual-based model of skipjack tuna distribution in the WCPO
- Use to quantify sensitivity of tuna distribution to:
  - Variable resolution ocean forcing fields
  - Alternative behaviours and foraging strategies
  - Effect of small and meso-scale interactions (tuna-prey, tuna-tuna, tuna-FAD etc.)
- Examine connectivity and movement estimates used in MULTIFAN-CL and SEAPODYM
- Not an ecosystem dynamics model!
- An "assumption analyser"

Individual-based "SIMPODYM"





- Compare particle densities with SEAPODYM biomass
- Examine differences across grid resolutions
- Use a baseline to begin deviating using alternative assumptions

Further work for the individual model

- Movement simulation tool for pelagic species
- Use in analysis and design of tagging experiments
- Parameterise from conventional tag data
- Horizontal and vertical movement from electronic tags
- Incorporate feedbacks between environment and individuals (particularly FADs)