

Abalone Industry Reinvestment Fund (AIRF)

Modelling the fine-scale dispersal of *Centrostephanus Rodgersii* larvae

Lead Agency: Institute for Marine and Antarctic Studies

Funding: \$25,000

Start Date: 1 September 2019

End Date: 23 December 2023

Status: CURRENT

Aims and Objectives:

- Construct a robust model (based on previous work of Sean Tracey) of larval dispersal for *Centrostephanus rogersii* around the east coast of Tasmania using existing oceanographic data (piecing together high and low resolution)
- Calculate the most likely sources for large recruitment events to the east coast of Tasmania
- Predict whether the Tasmanian population may be self-recruiting or what oceanic changes may lead to self-recruitment
- Set model up to be capable of addressing management decisions, such as which Tasmanian reefs would be most likely to produce larvae that survive the winter, which reefs pose the greatest risk of further range extension
- The model could be flexible to allow input data for abalone or rock lobster larvae