

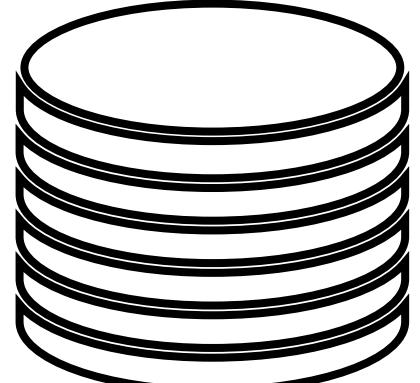
Unsupervised classification of the Antarctic marginal ice zone

Noah Day [1], Luke Bennetts [1], Siobhan O'Farrell [2], Alberto Alberello [3], and Fabien Montiel [4]

[1] University of Adelaide, Australia, [2] CSIRO Environment, Australia, [3] University of East Anglia, UK, [4] University of Otago, New Zealand

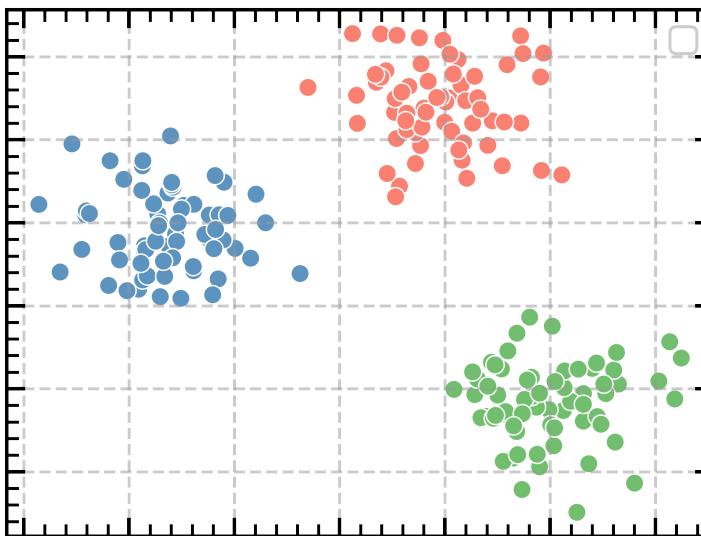
Unsupervised machine learning

CICE6 + wave module
(daily outputs 2010–2020)



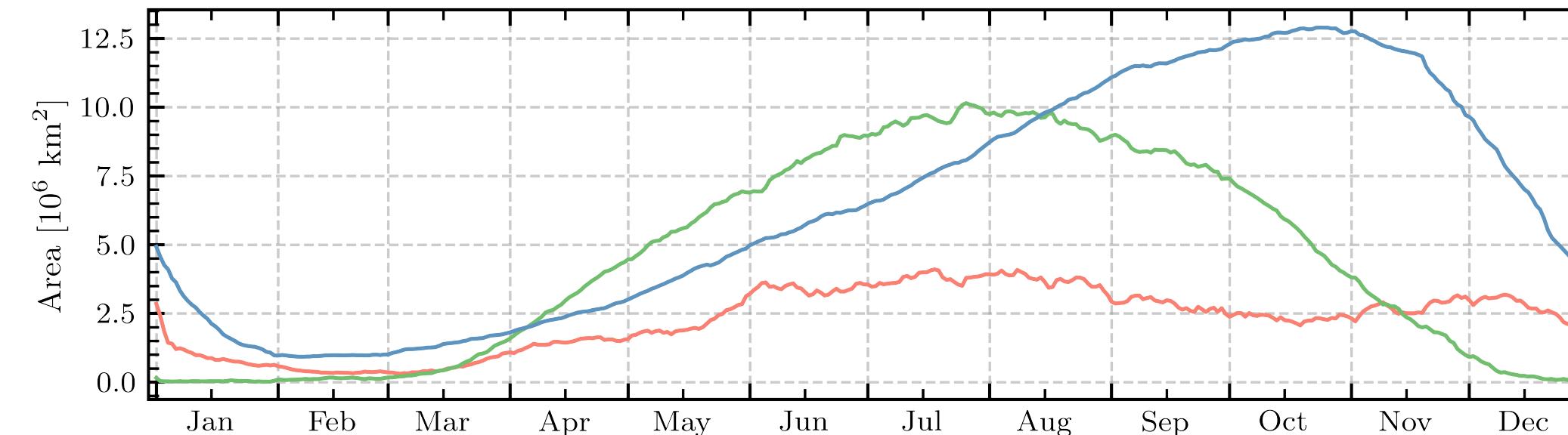
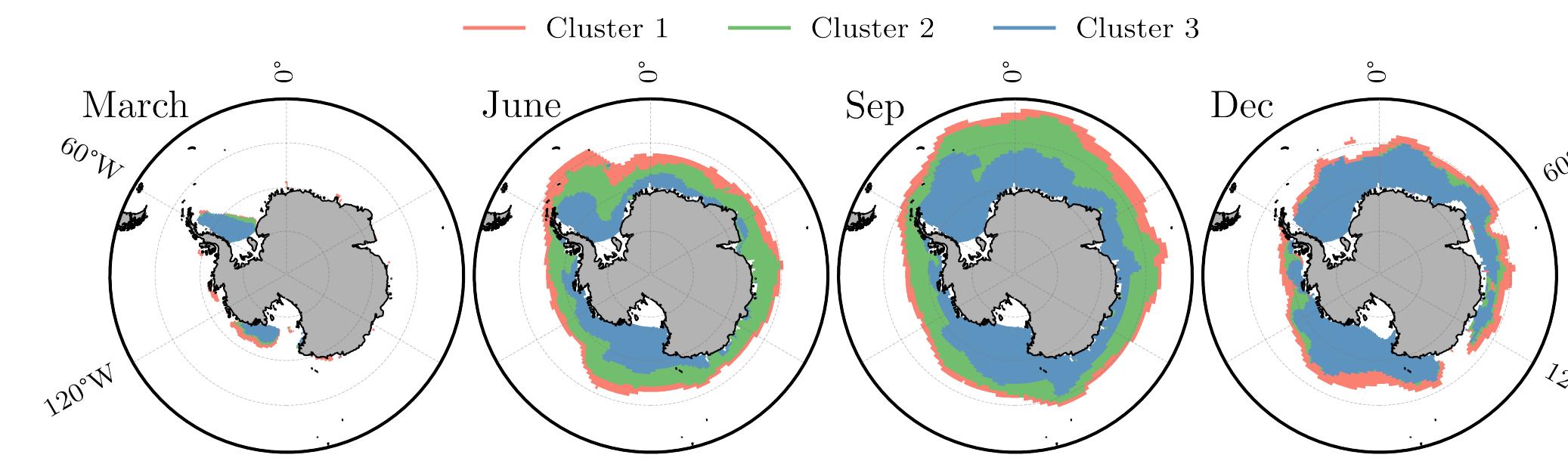
k -means

Clustered data

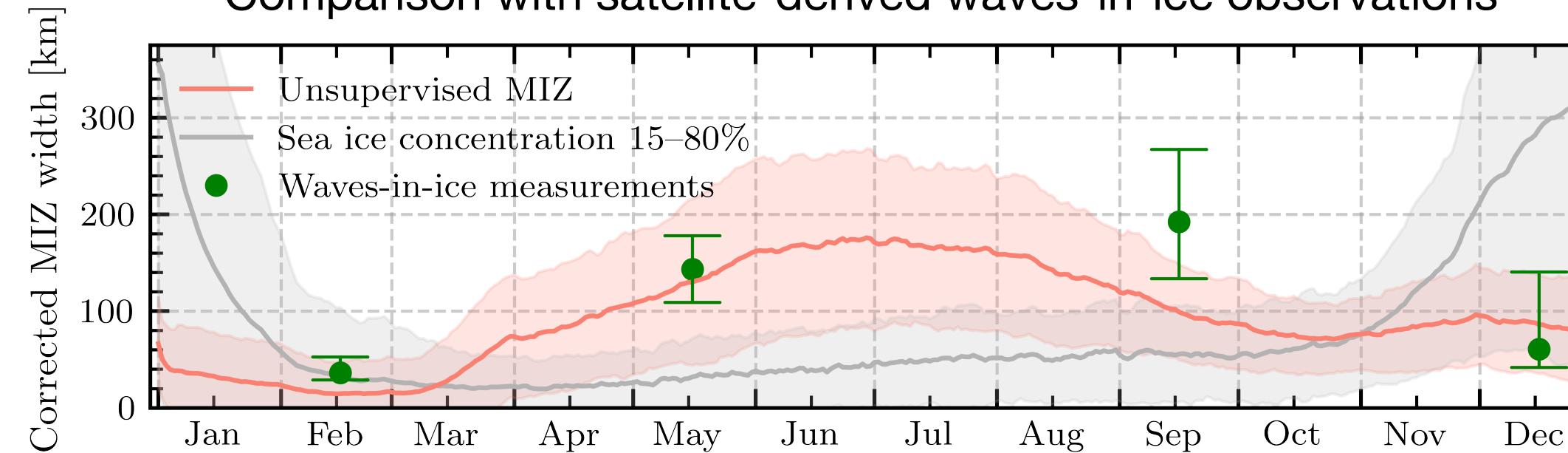


Area and width of the MIZ

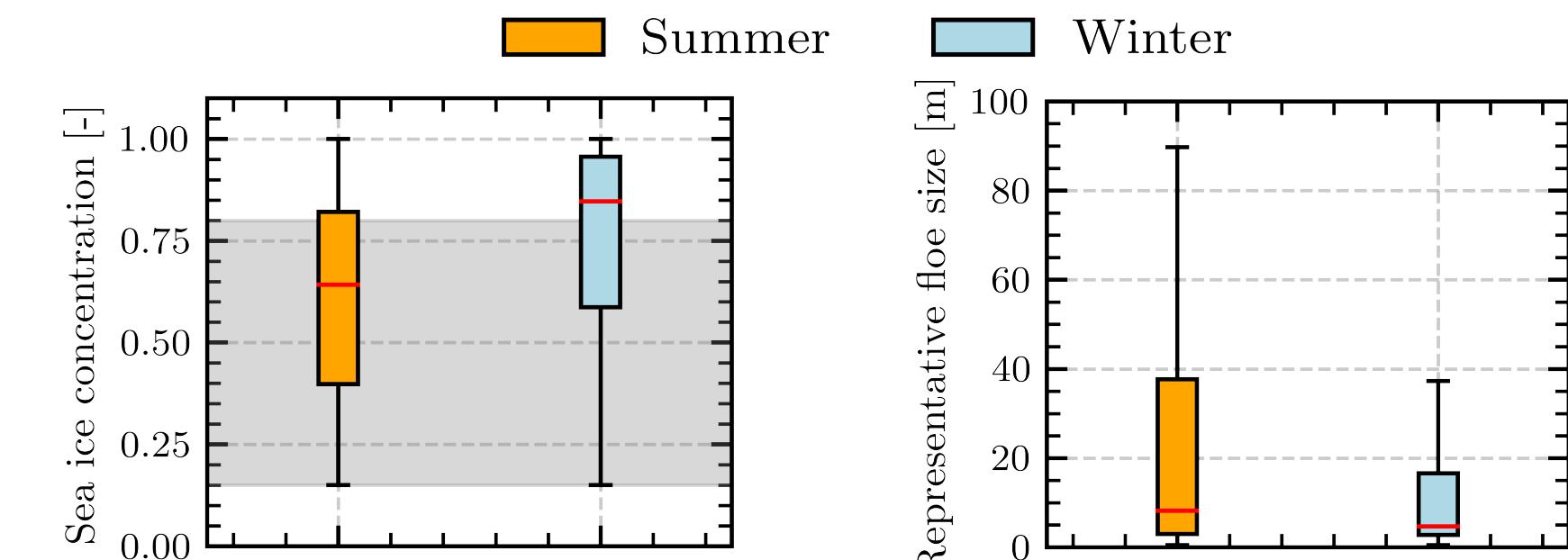
Seasonal evolution of ice clusters



Comparison with satellite-derived waves-in-ice observations



Seasonal MIZ characteristics and dynamics



MIZ vs interior pack dynamics

