

Octocoral population response and recovery to reef disturbances

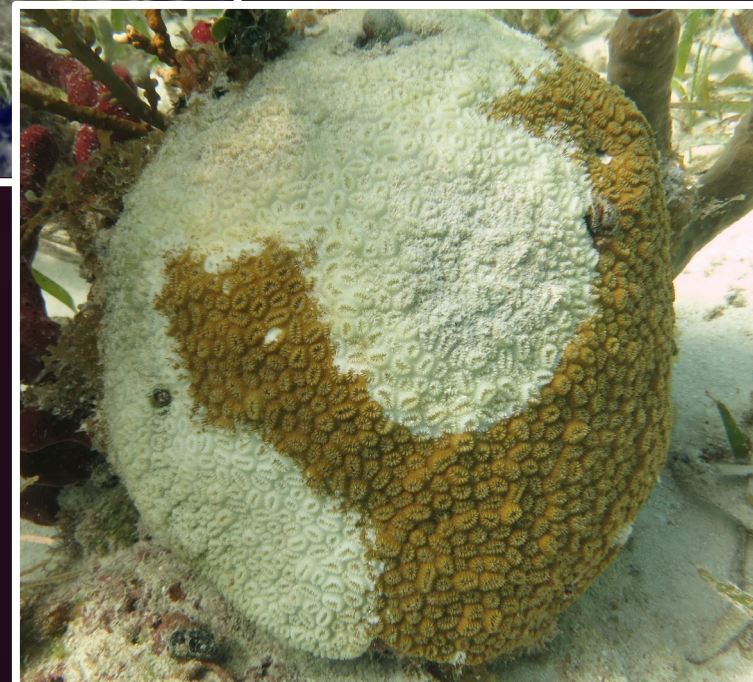
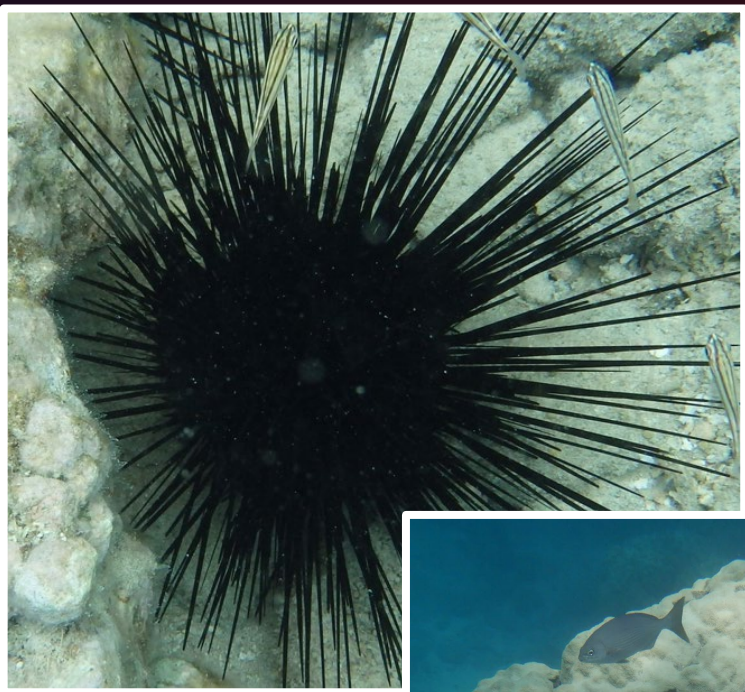


Lindsay K. Huebner¹, Colin P. Shea¹, Katherine E. Cummings², Michael A. Colella¹, Jennifer Stein², Alicia Vollmer¹, Tanya Ramseyer², Nathan Berkebile², Rob Ruzicka¹

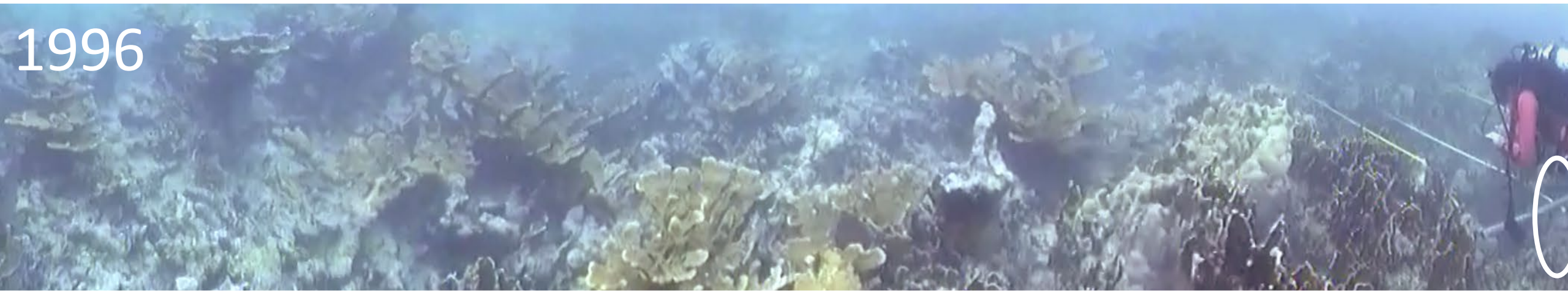
¹Florida Fish & Wildlife Research Institute, St. Petersburg, FL, USA

²South Florida Regional Laboratory, Florida Fish & Wildlife Research Institute, Marathon, FL, USA

Repeated Disturbances

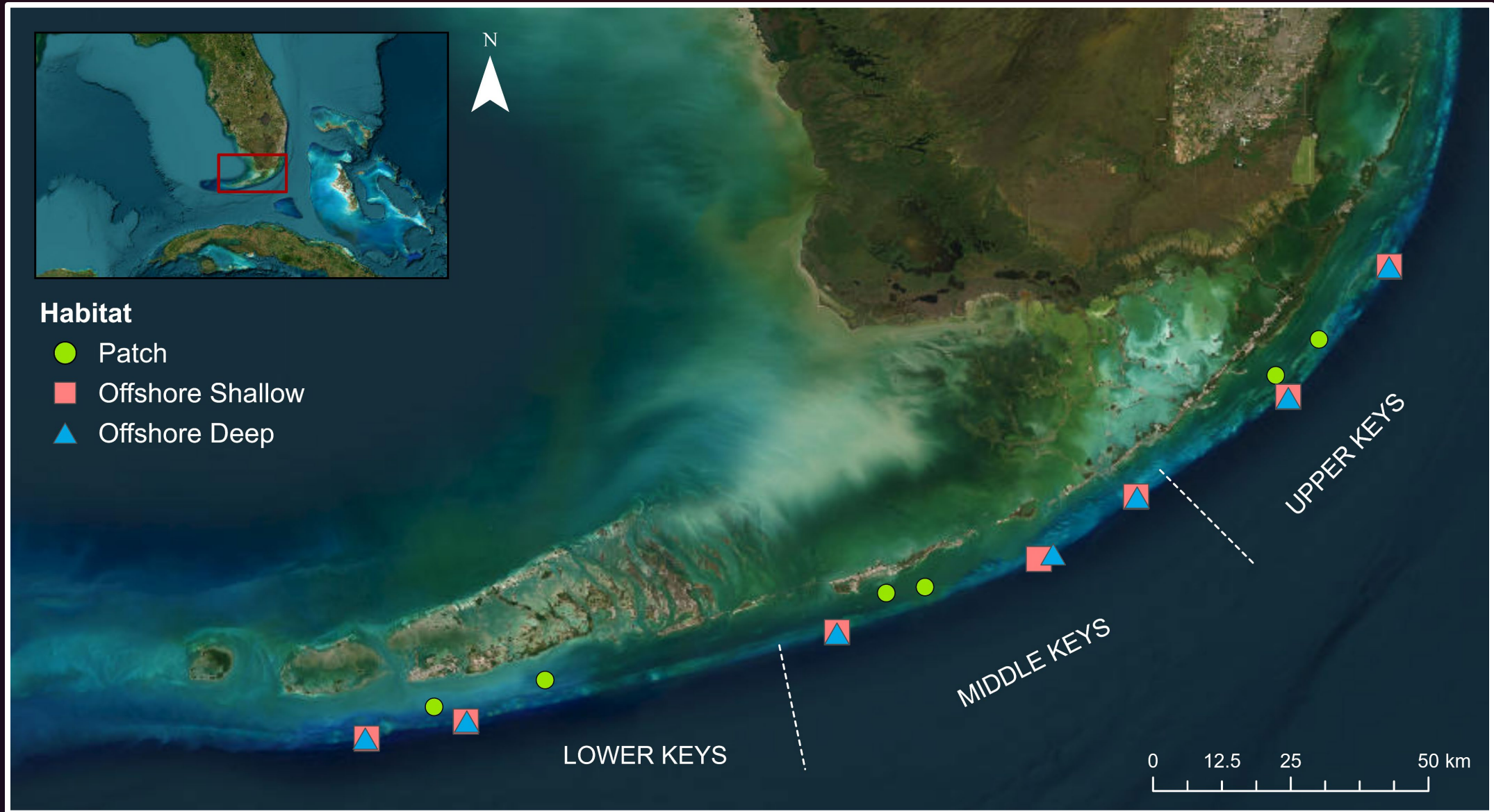


Reef Community Change

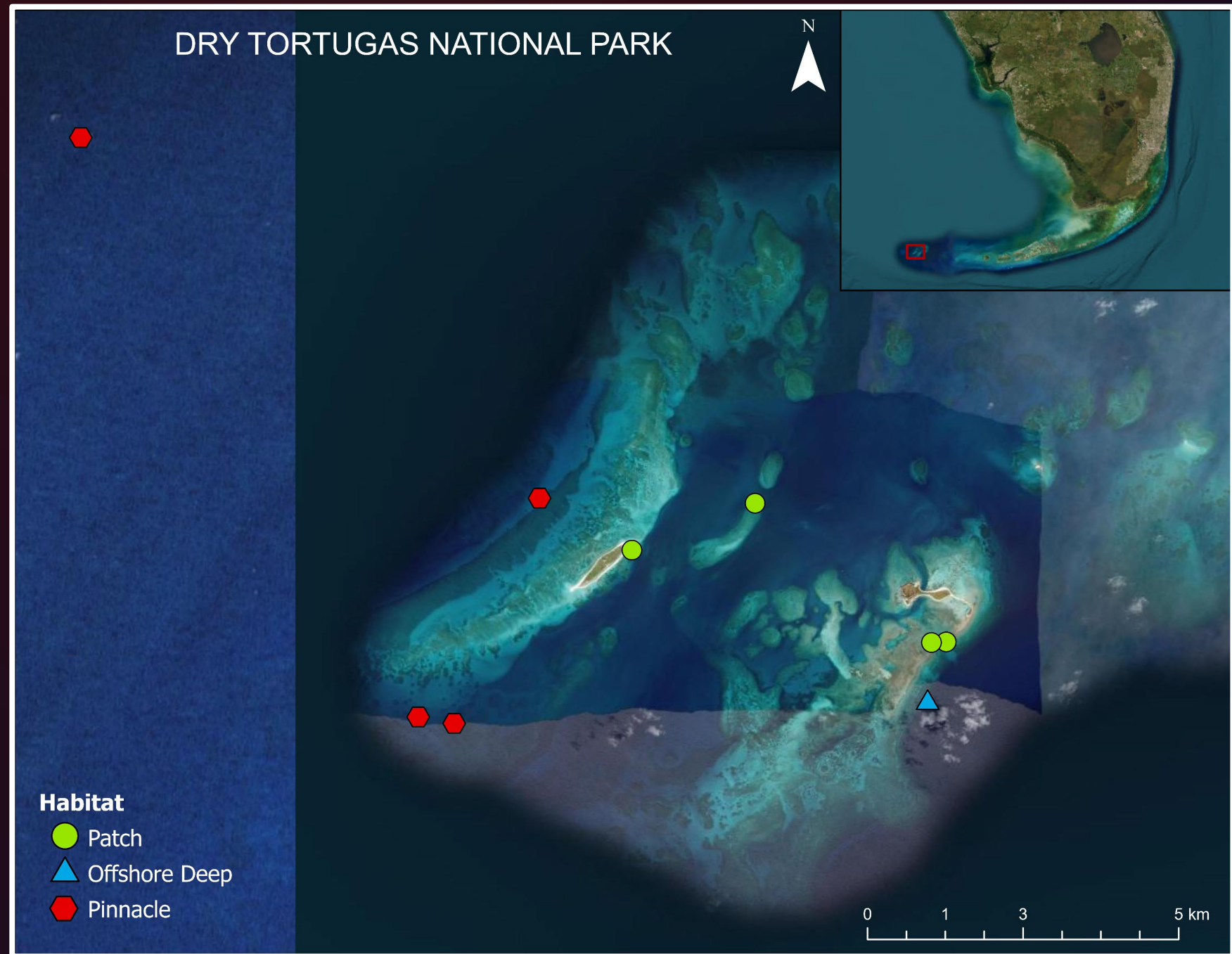


Western Sambo Reef CREMP Stations

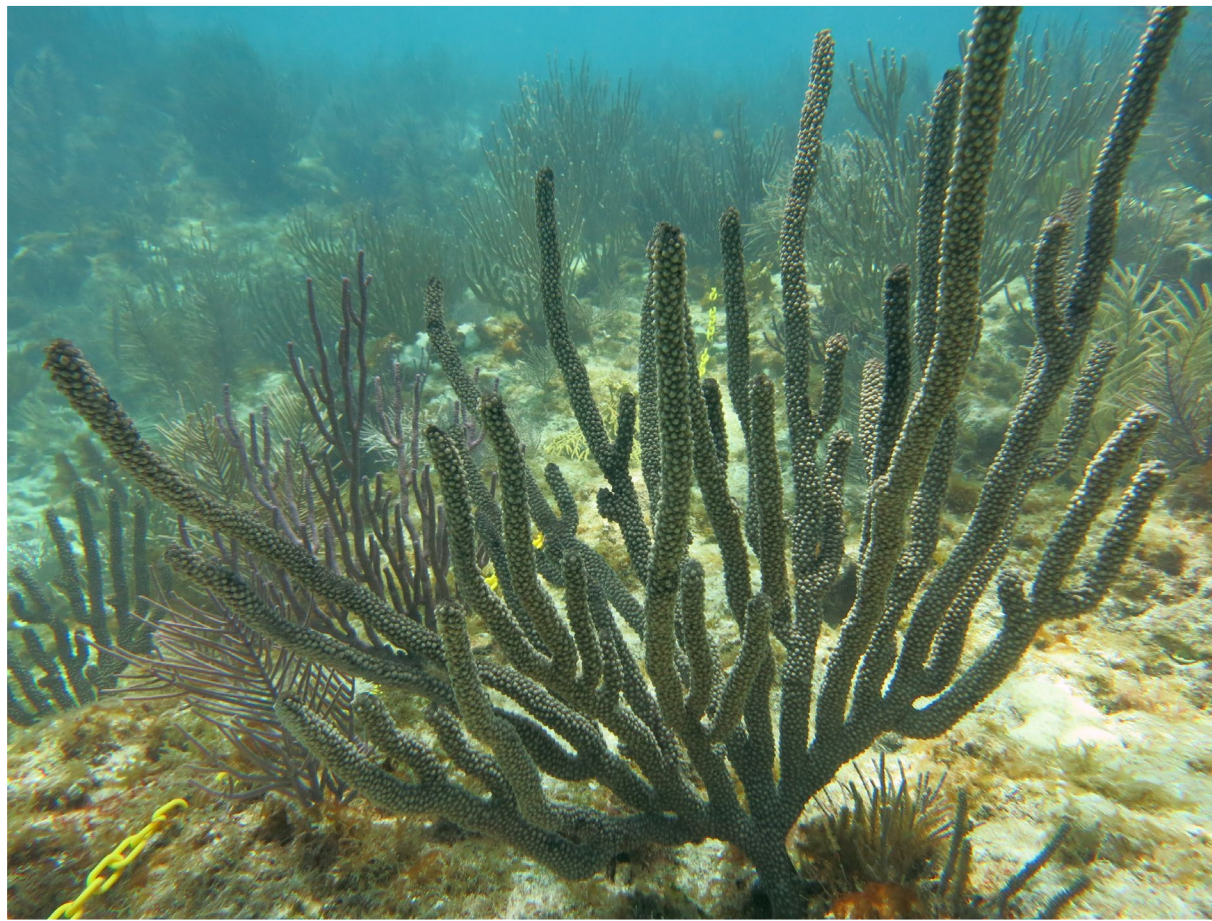
CREMP Octocoral Survey Sites - Keys



CREMP Octocoral Survey Sites – Dry Tortugas

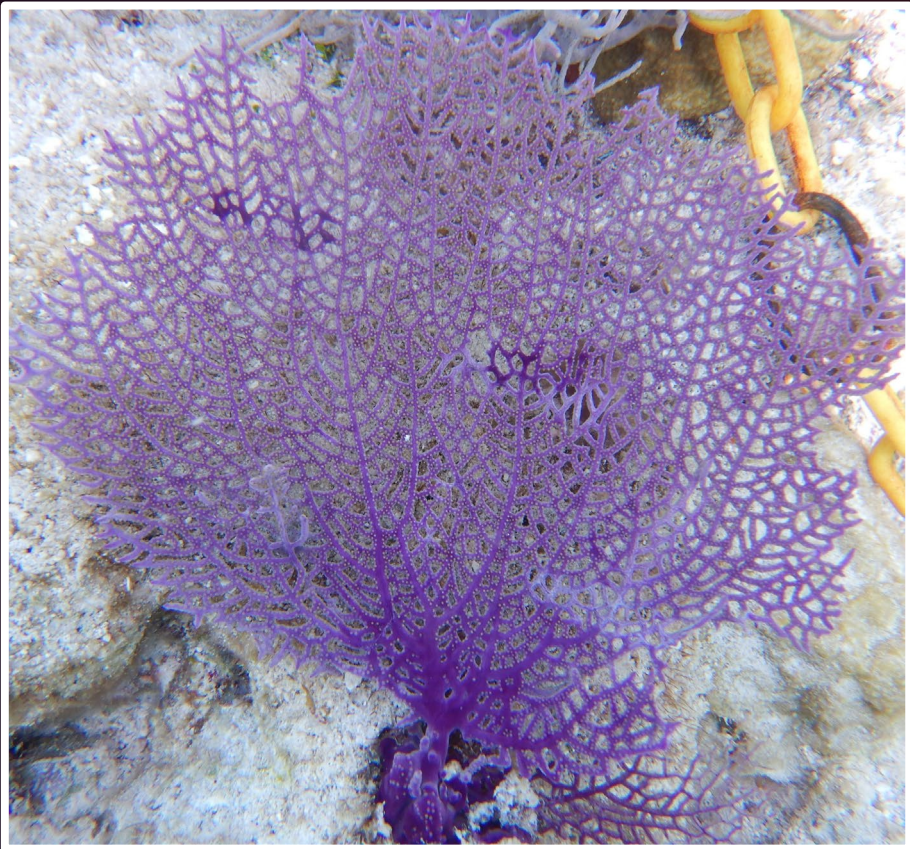


Octocoral Survey – Arborescent Tally



Octocoral Survey – Target Species

Gorgonia ventalina



*Antillogorgia
americana*

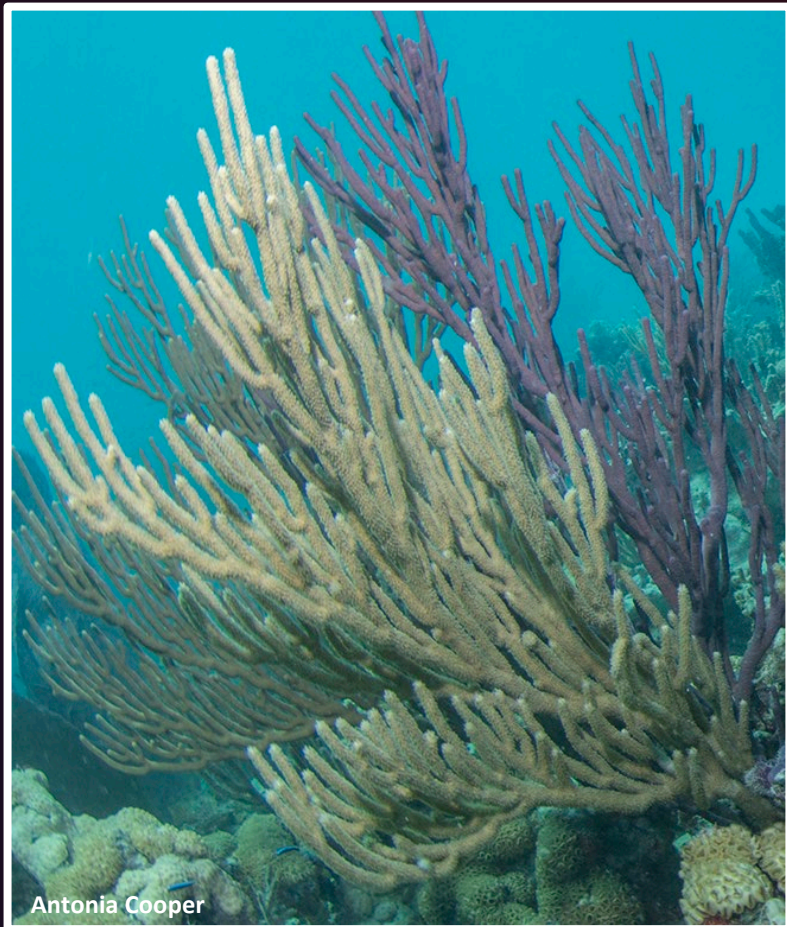


*Antillogorgia
bipinnata*

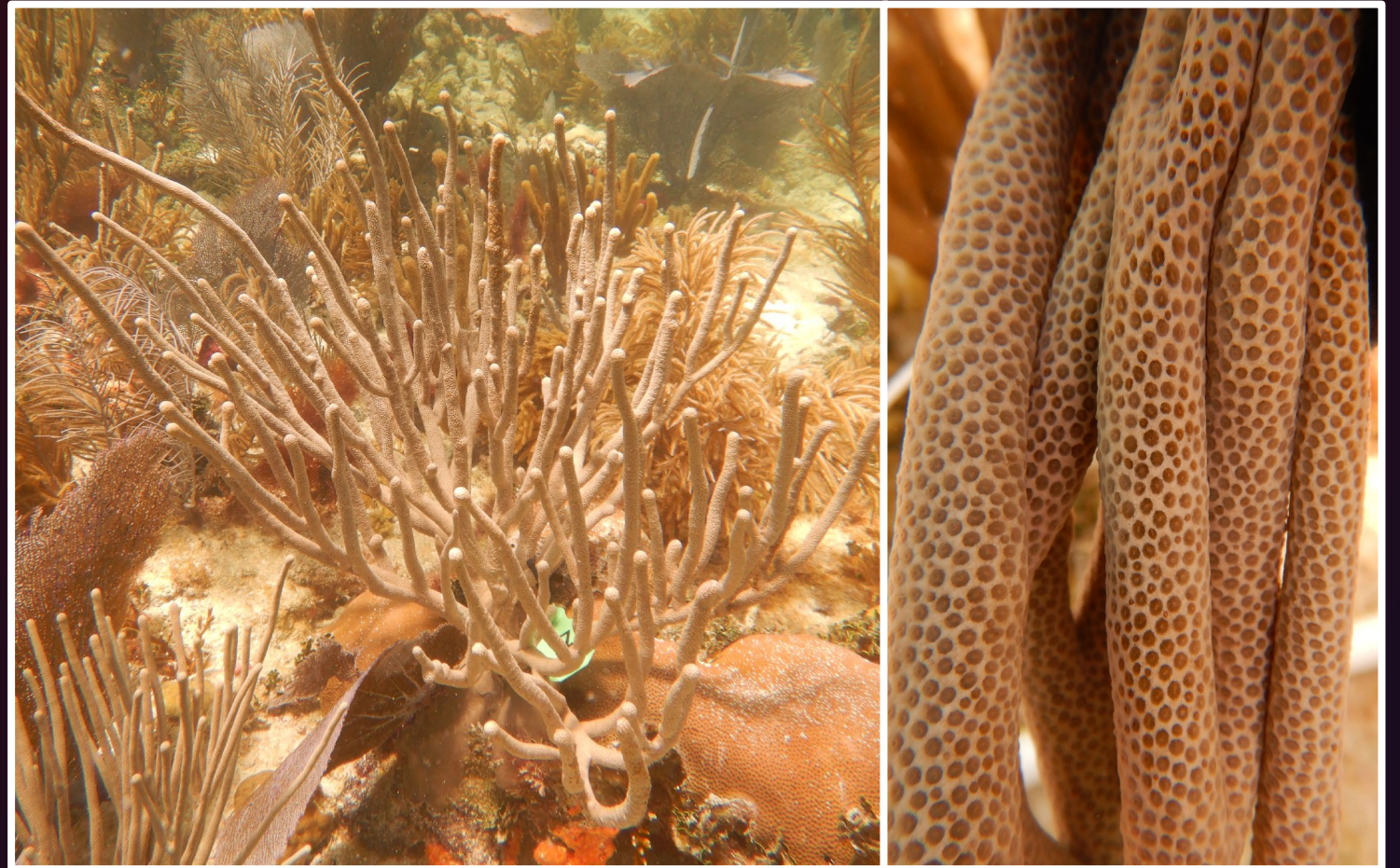


Octocoral Survey – Target Species

Eunicea flexuosa



Pseudoplexaura porosa

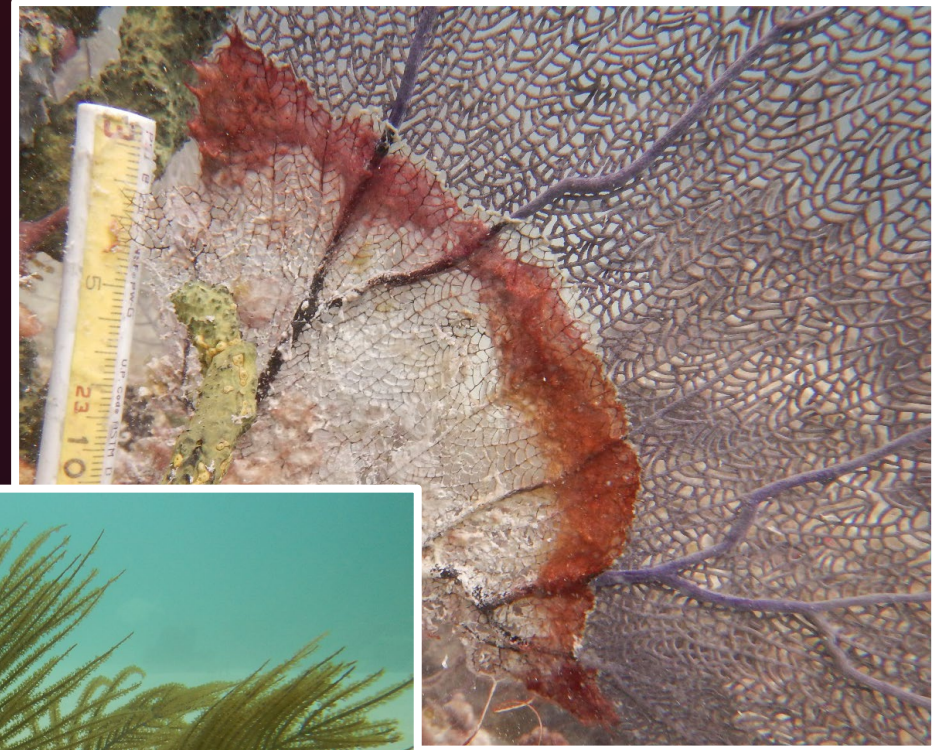


Octocoral Disturbance Susceptibility



Heat stress tissue
sloughing

Hurricane sand
burial



Red band
disease

Octocoral Disturbance Response

Heatwave 2014-2015

Hurricane Irma 2017

Heatwave 2023/

Hurricane Ian 2022

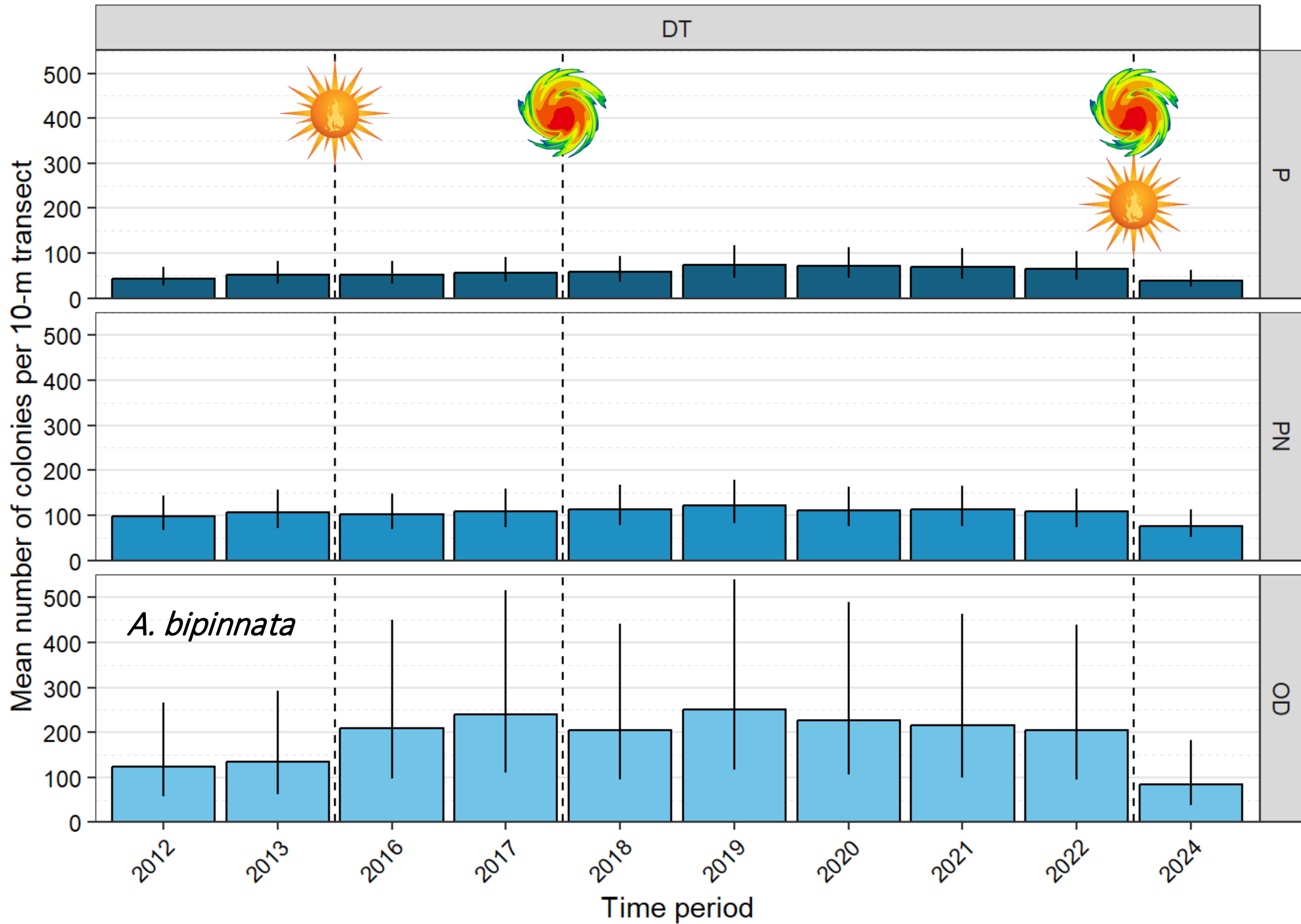
GLMMs of density
changes

Subregions

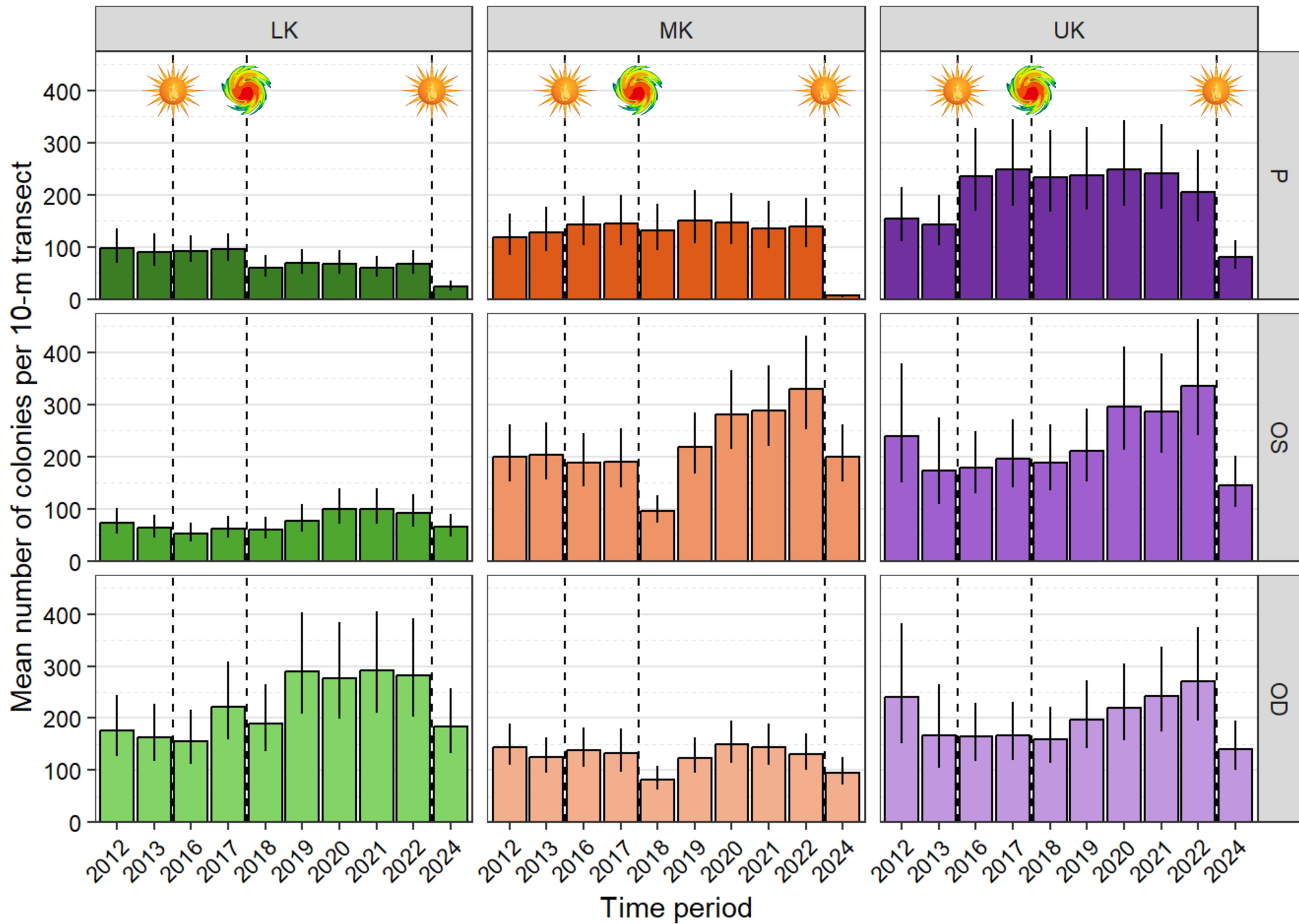
Habitats



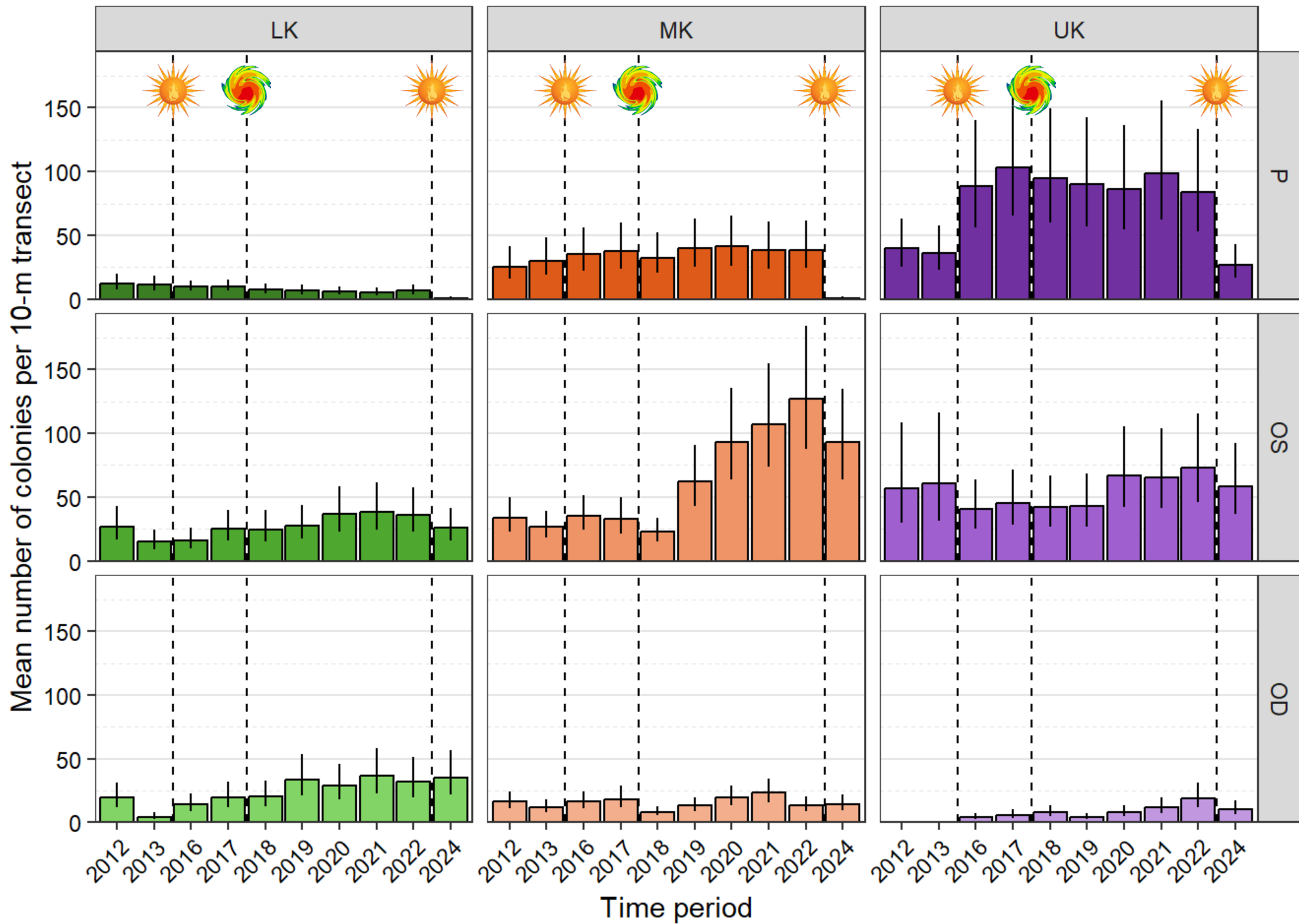
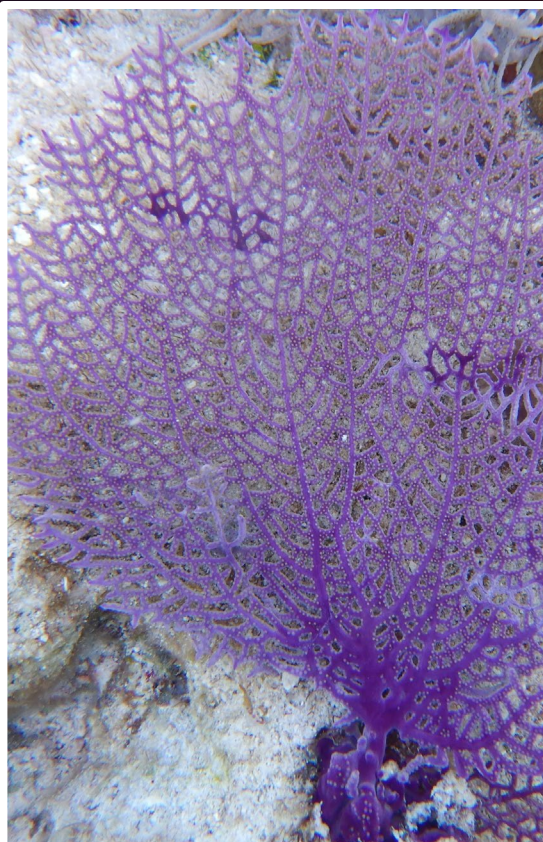
Total arborescent octocorals - Tortugas



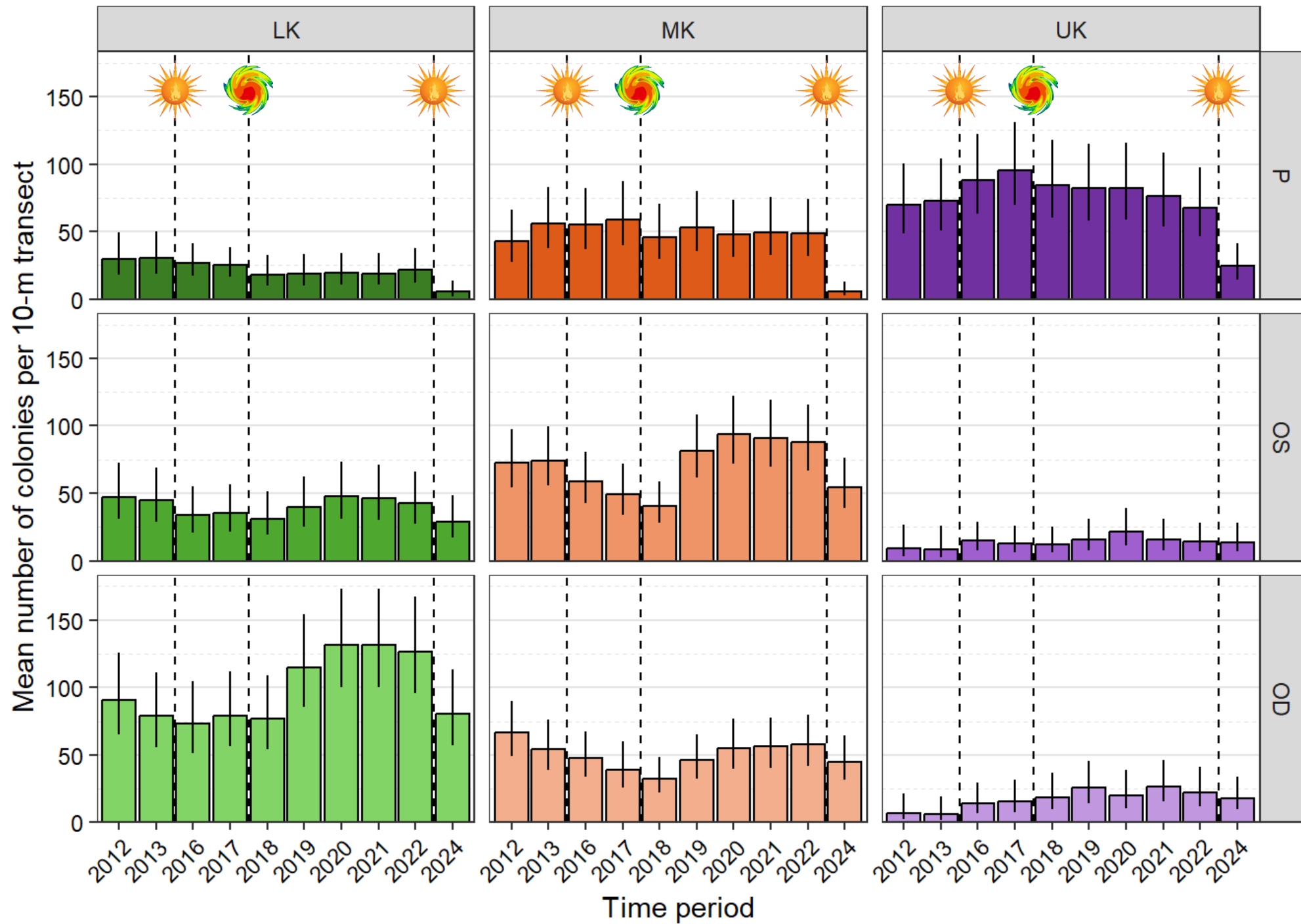
Total arborescent octocorals - Keys



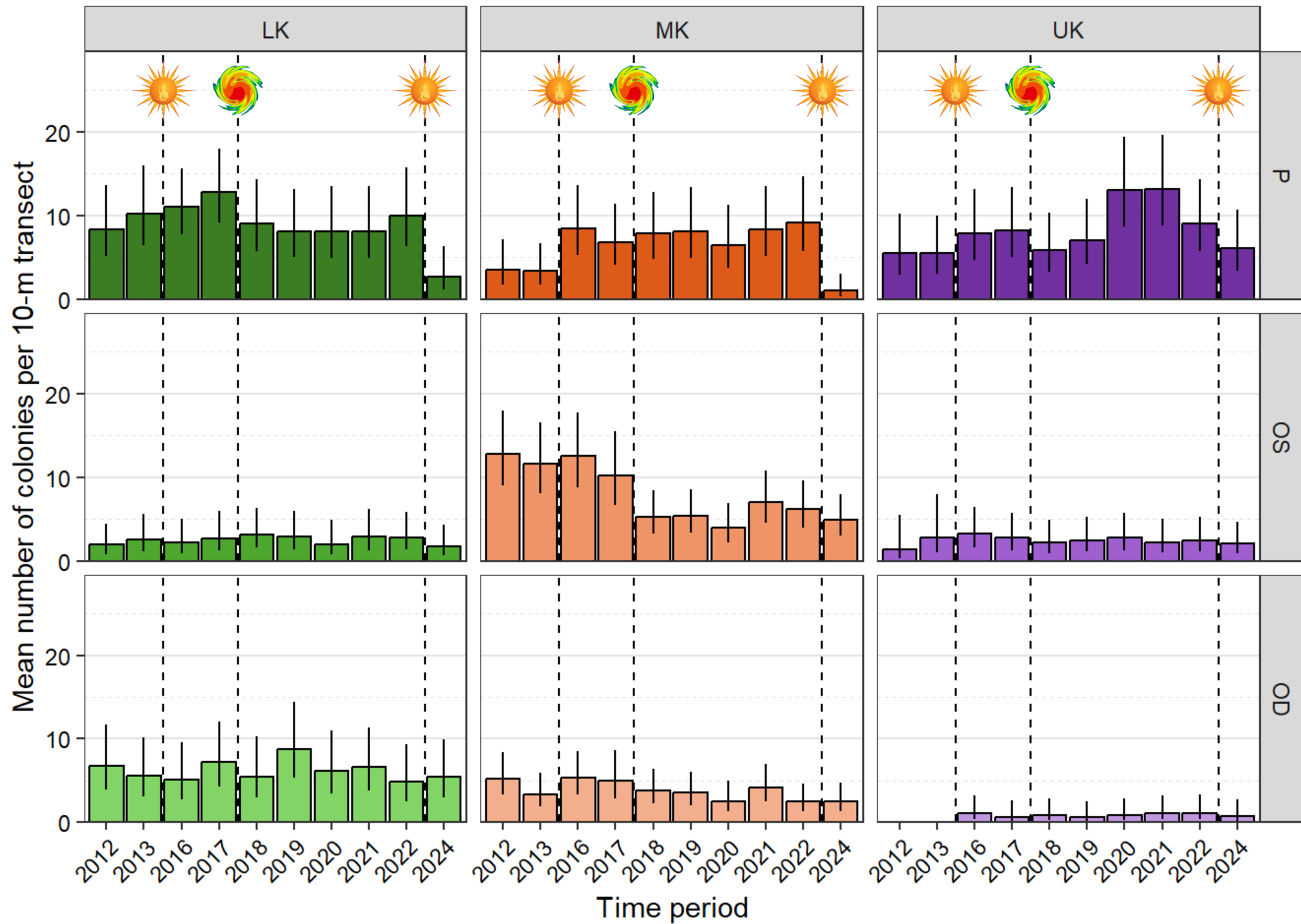
Gorgonia ventalina - Keys



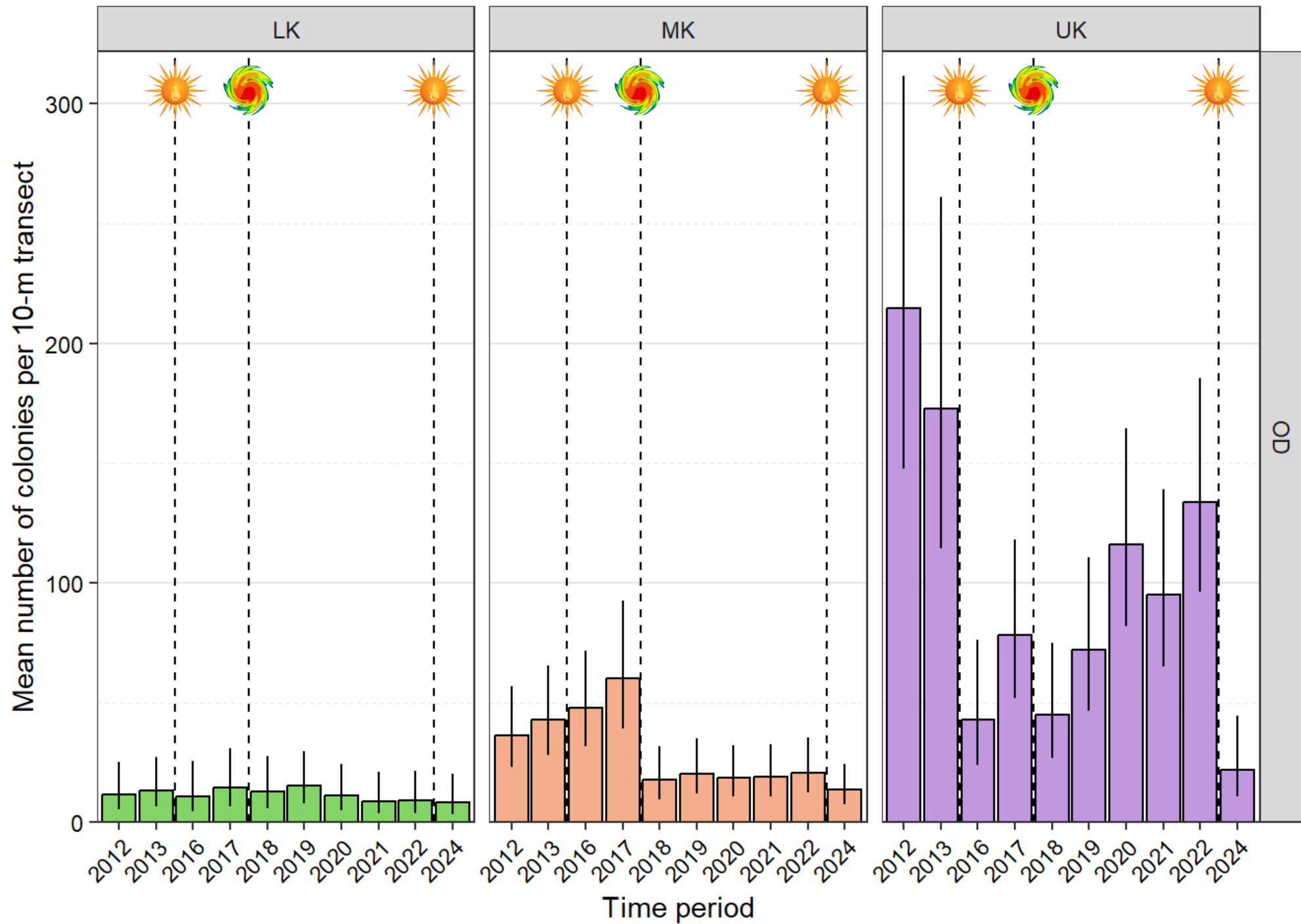
Antillogorgia americana - Keys



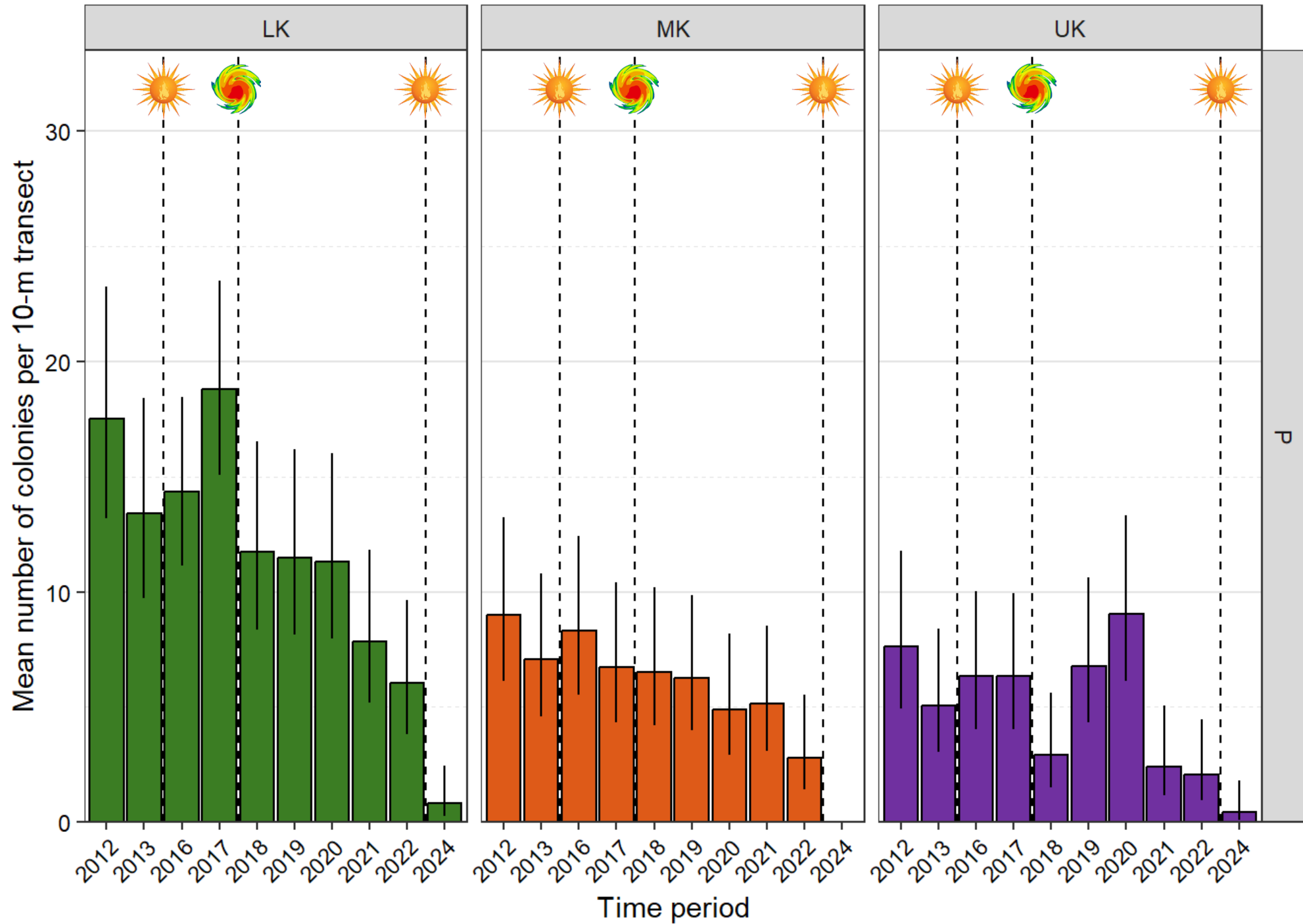
A vibrant underwater scene featuring a large, branching, yellowish-brown coral structure in the foreground, with a dense, dark purple or reddish-brown coral structure behind it. The background is a clear, bright blue water.



Antillogorgia bipinnata - Keys



Pseudo-plexaura porosa - Keys



Patch Reef Canopy Loss



Dustan Rocks CREMP station

Parting Thoughts

Abundant generalists
masking decline of
specialists

Community shifts

Frequent disturbances
test resilience of even
dominant octocorals





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