IMBeR West Pacific Symposium

CHANGING WEST PACIFIC OCEAN: SCIENCE AND SUSTAINABILITY

2021 Online

Connectivity of the West Pacific and Southern Ocean

the Importance of Oceanic Top Predators

Session 7: Connectivity of the West Pacific and Southern Ocean: the Importance of Oceanic Top Predators

About this session

Oceanic top predators are an important link between the West Pacific and Southern Oceans and function as indicators of ecosystem change across the region. The main determinants of predator movements are the distribution and abundance of their prey, which are not distributed homogeneously. Prey distribution is determined and influenced by oceanographic processes that influence biological productivity and/or increase the availability of prey, thus creating areas where foraging is more energetically efficient. The spatio-temporal scales on which these processes operate vary greatly, from vertical mixing at centimeters to meters over time scales of seconds-hours-days, to climate features such as El-Niño Southern Oscillation and Southern Annular Mode that occur over hundreds of thousands of kilometers at time scales of years to decades. Consequently the impact on trophic structure and predator responses also varies greatly; from localised and short-term changes in foraging efficiency and prey availability to long-term population trends. This session aims to further disentangle the relationship and relevant lagtimes between oceanographic processes in the West Pacific and Southern Oceans, and predator responses from foraging behaviour to large-scale demographic trends and future population viability under plausible climate scenarios. While focussed on this region, we also invite submissions from elsewhere which can provide valuable lessons that can be applied to understanding predator responses in the West Pacific and Southern Oceans. The session will feature both talks and posters, and the authors will have the opportunity to publish their works in a special volume of a renowned peer-reviewed international journal. We particularly encourage submissions from ECR and members from underrepresented groups in science.

This session represents a joint <u>ICED</u> (Integrating Climate and Ecosystem Dynamics in the Southern Ocean) <u>CLIOTOP</u> (CLimate Impacts on Oceanic TOp Predators) initiative.



Expected output

Accepted authors will be invited to submit a full paper for a special issue in Deep-Sea Research Part II: Topical Studies in Oceanography following the instructions that will be communicated later on. Other journals for the symposium volume may be also considered if needed.



Co-moderators

Jaimie Cleeland University of Tasmania / Australian Antarctic Division

Luis A. Huckstadt University of California Santa Cruz / University of North Carolina Wilmington

Please note, there is no charge for this online event. Submission Deadline 15 September 2021

Register and/or submit an abstract here

Symposium website | Abstract template | Poster | First announcement

Symposium Secretariat: 😜 IMBeR International Project Office – China | Contact us: imber@ecnu.edu.cn

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