

Timestamp: 44862.4486656366

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Program Office/Division:

Position Title: Research oceanographer

Title of use case: Global forecasts of marine heatwaves

Authors or Creators: Jacox, M., Alexander, M., Amaya, D., Becker, B., Bograd, S., Brodie, S., Hazen, E., Pozo Buil, M., Tommasi, D., Hsu, C.-W., Smith, C.

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Contributors:

Affiliation of Contributors:

Description: Researchers used climate forecast systems to develop global marine heatwave (MHW) forecasts, which have significant skill in many regions. They also created a MHW website that provides current ocean maps, experimental forecasts, and interactive tools.

Keywords: Marine heatwave, prediction, forecast

Start date of use case: 44652

End date of this use case:

Is this use case ongoing? : Yes

Use case URL : <https://www.nature.com/articles/s41586-022-04573-9> <https://psl.noaa.gov/marine-heatwaves>

Data source URL: <https://psl.noaa.gov/marine-heatwaves>

Image:

Ocean Region: Atlantic Ocean

Sea:

Large Marine Ecosystem Area:

Country:

Other Geography: global ocean

Format Type: Journal Article, website

Data Type:

Primary Use: Research, Weather/Climate, Environmental Management, Commercial Fishing, Aquaculture, Recreation

User Type: Government Professional, Academic

Data Type: Physical

Ocean Observing System (OOS) Variable: Sea surface temperature, Subsurface temperature

Information Type: In situ data, Remote sense data, Model output

Other Format Data:

Published Date: 44671

Publisher Name: Springer Nature

Publisher City: London

Publisher State :

Publisher Country: England

Publisher/Distributor URL: <https://www.springernature.com/>

Publication URL: <https://www.nature.com/articles/s41586-022-04573-9>

DOI: <https://doi.org/10.1038/s41586-022-04573-9>

Industries which benefit: Commercial Fishing, Aquaculture, Recreational Fishing, Marine Research and Education, Coastal and ocean tourism and recreation

Benefits to ecosystems: Ecosystem Health, Biodiversity, Endangered Species

Ecosystem Services: Ecosystem Services: Provisioning, Ecosystem support of goods and services,
Fisheries (commercial or recreational, Aquaculture

Ecosystem Regulation and Maintenance Services:

Cultural Ecosystem Services:

Are benefits documented?: No

Are the benefits documented by:

Are the benefits quantified?: No

Are the quantified benefits reported as monetary values?:

Other Benefits: