JRC Dataset

EMIS - Favourable spawning habitat of adult Atlantic bluefin tuna (ABFT) Monthly 2003-2014 (frequency of occurence, %)

Description:

The favourable spawning habitat of the Atlantic bluefin tuna is daily identified linking their ecological traits with environmental variables from satellite remote sensing and physical ocean models. The spawning habitat (Atlantic bluefin tuna only) is essentially detected through the seasonal heating of surface waters. Adult bluefin tunas migrate thousands of kilometres to spawn in warmer and less productive waters (Mediterranean Sea and Gulf of Mexico) compared to their main feeding ground (North Atlantic Ocean). The physical variables used are sea surface temperature, monthly increase of sea surface temperature, sea surface current and sea surface height anomaly. More information: https://fishreg.jrc.ec.europa.eu/fish-habitat, Peer-reviewed publication: http://www.sciencedirect.com/science/article/pii/S0079661116000070

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Keywords:

Atlantic bluefin tuna, Environmental monitoring facilities, GIS digital format, Marine protected area, Ocean model, Oceanographic geographical features, Protected sites, Spawning Habitat, climate change, environmental data, marine environment, marine monitoring, ocean color, satellite observations

Related resources:

Data access

EMIS - Download access (EMIS_BFT500_SH)

Direct NetCDF download

http://emis.jrc.ec.europa.eu/emis/indices/

Publications

Habitat suitability of the Atlantic bluefin tuna by size class: an ecological niche approach

Druon J, Fromentin J, Hanke A, Arrizabalaga H, Damalas D, Ticina V, Quilez-Badia G, Ramirez K, Arregui I, Tserpes G, Reglero P, Deflorio M, Oray I, Karakulak S, Megalofonou P, Ceyhan T, Grubisic L, Mackenzie B, Lamkin J, Afonso P, Addis P. Habitat suitability of the Atlantic bluefin tuna by size class: an ecological niche approach. PROGRESS IN OCEANOGRAPHY 142; 2016. p. 30-46. JRC96598

DOI:10.1016/j.pocean.2016.01.002

Additional information:

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Landing page: http://emis.jrc.ec.europa.eu/

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Language: English

Data theme(s): Environment

EuroVoc domain(s): 36 SCIENCE; 52 ENVIRONMENT

EuroVoc concept(s): environmental monitoring; ocean; oceanography; protected area

Identifier: http://data.europa.eu/89h/cc2f75c9-7784-4ca1-a5d5-9d10970d3dc2

Geographic information:

Lineage: General information: Model performance is assessed against the distance of presence data to closest habitat. For bluefin tuna, 75% of observations are closer than 13.9 km of favourable spawning habitat (n = 582).

Geographic bounding box: 70.0° N, 42.0° E, 10.0° S, -30.0° W

Coordinate Reference System: ETRS89