Primary productivity anomalies, 2015

Title

Primary productivity anomalies, 2015

Creator

Environmental Reporting, Ministry for the Environment and Statistics New Zealand

Date

2016-10-27

Description

The average concentration of chlorophyll-a (chl-a) in phytoplankton for 2015. Concentrations of chl-a in phytoplankton are used to assess primary productivity in our oceans. Phytoplankton are primary producers of biomass (mass of living organisms) and form the main basis of marine food chains. They use the chl-a pigment to capture the sun’s energy through the process of photosynthesis. Phytoplankton growth is affected by the availability of nutrients and light, which in turn are affected by the structure of the surface water column. The surface water column structure is affected by oceanographic and climate processes; large-scale changes to climate and oceanographic conditions can lead to changes in phytoplankton growth and chl-a concentrations.

Source

Source: NIWA Method: Data are based on measurements from the SeaWiFS and MODIS-Aqua satellite ocean colour sensors. Anomalies are where chlorophyll-a concentrations deviated from the long-term (1997–2014) mean (Pinkerton, 2016). Primary productivity anomalies are inferred from observed changes in near-surface concentrations of chlorophyll-a (chl-a) for five selected regions over time: the New Zealand exclusive economic zone (EEZ) as a whole, the Chatham Rise, northern subtropical waters, subantarctic waters, and the Tasman Sea.

Coverage

-57.5121843068 157.021328158 -23.9957073089 -167.024629596

Identifier

https://data.mfe.govt.nz/layer/53460-primary-productivity-anomalies-2015/

Language

eng

Subject

New Zealand

Subject

MARINE

Subject

MARINE-Biology

Subject

FAUNA-Vertebrates

Subject

ECOLOGY-Habitat

Subject

BOUNDARIES

Subject

environment