



Aculeo Lagoon

TimeSeries drought map from 2010 to 2018

Santiago Metropolitan Region

Chile

Legend of Water

2010	2013	2016
2011	2014	2017
2012	2015	2018

Additional Information

Original Data

R script

Created Data

EAGLE Mac

What do the maps show?

The maps show different facets of surface water dynamics in the Aculeo Lagoon, Paine, Chile. Together the maps show where and when open water was present on the Earth's surface between March 2010 and October 2018. The maps display water surfaces that are visible from space for the Aculeo Lagoon.

What is Surface Water?

Surface Water Seasonality describes the intra-annual distribution of surface water. It discriminates between 'permanent' and 'seasonal' water surfaces for any given year. A permanent water surface is underwater throughout the entire year, whilst a seasonal water surface is underwater for less than 12 months of the year. In some places, we don't have observations for all 12 months of the year. In such cases, water is considered to be seasonal if the number of months during which water is present is less than the number of months for which valid observations were acquired (i.e. water has been detected in some but not all months during which observations were possible).

On the Aculeo lagoon...

The Aculeo Lagoon is a lagoon located in the metropolitan region of Chile, which is currently dry and as we can see from the permanent water graph, this decline began in 2010 almost continuously. On the other hand, when analyzing the graph of Seasonal water, an annual increase in it can be found, being a paradoxical phenomenon and which needs further study to understand if the decrease in water was due to the effect of climate change, natural or anthropogenic.

TimeSeries of Water Body in Aculeo Lagoon, Chile

Autor: Diego Alarcón

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Map produced April 21, 2020

Data Source: EC JRC/Google

IDE Chile

Softwares : RStudio & QGIS

Cartographic Information

Local Projection: WGS 84 UTM Zone 19S
Geographic Projection Lat/Lon (DMS), Datum: WGS 84
Printed in A0

0 750 1500 m

Scale: 1:7000

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