

Curso de Verano

Modelamiento Climático Magallanes

Programa de Postgrados Universidad de Magallanes

Instituto Antártico Chileno

9 al 12 de enero 2017

Aula Tecnológica Biblioteca Central - Universidad de Magallanes

Requisitos: Idioma inglés. Conocimientos de programación Python y comandos de Linux.

Idealmente traer laptop con sistema operativo Linux con las siguientes aplicaciones instaladas: Pycharm y librerías Xarray, cartopy, scipy, numpy, pandas; Climate Data Operator (CDO); NCL (NCAR Command Language); NCO (NetCDF Operator) y Panoply.

Day 1 / 09 enero	Dr. Tobías Sauter, Friedrich Alexander Universität Erlangen-Nürnberg (FAU), Alemania
09:00 – 10:00	Introduction to atmospheric modelling
10:00-10:20	Coffee break
10:20 – 11:20	Governing equations for atmospheric motions
11:20-11:30	Coffee break
11:30 – 12:30	Parametrization of physical processes
12:30-14:00	Lunch break
14:00 – 17:00	Zero-dimensional energy balance model



Day 2/ 10 enero	Dr. Tobías Sauter, Friedrich Alexander Universität Erlangen-Nürnberg (FAU), Alemania
09:00 – 10:00	Data sets used in climate science
10:00-10:20	Coffee break
10:20 – 11:20	Exercise: how to read netCDF with Python
11:20-11:30	Coffee break
11:30 – 12:30	Exercise: introduction to Xarray
12:30-14:00	Lunch break
14:00 – 17:00	Exercise: climate analysis

Day 3/ 11 enero	Dr. Deniz Bozkurt, Centro de Ciencia del Clima y la Resiliencia (CR²), Universidad de Chile
09:00 – 10:00	High resolution regional climate model experiments for Chile
10:00-10:20	Coffee break
10:20 – 11:20	Evaluation and validation of regional climate model simulations: A focus on Magallanes Region
11:20-11:30	Coffee break
11:30 – 12:30	Description of regional climate model data
12:30-14:00	Lunch break
14:00 – 17:00	Exercise: processing of regional climate model data with CDO, NCO and NCL



Day 4/ 12 enero	Dr. Tobías Sauter, FAU / Dr. Deniz Bozkurt, CR²
09:00 – 10:00	Exercise: to be decided (tbd)
10:00-10:20	Coffee break
10:20 – 11:20	Exercise: tbd
11:20-11:30	Coffee break
11:30 – 12:30	Exercise: tbd
12:30	Closing

