AQP-Clima quick start guide

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AQP-Clima is a tool that provides access to historical weather data (1988 to 2017) of the Arequipa Department, Peru. In this tool, you can view, compare and download annual, monthly and daily weather data from any location within the department. The data offered by this tool can be used:
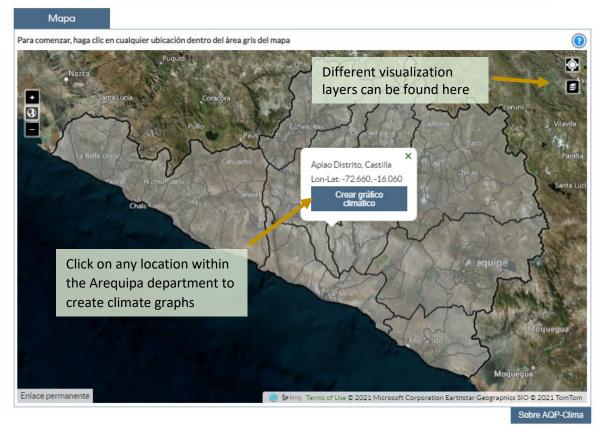
- To understand the climatic variation across the region and climate trends over time;
- In studies to understand the effect of climate in:
    o Hydrology and water resources;
    o Crop management and food production;
    o Animal production;
    o Economic decision-making, and much more!

Getting started: The Map Tab

Climate data is available for any location within the Arequipa Department at 1 km resolution. The map tab allows you to select your location of interest.

Data visualization options and tool features

The climate data can be visualized in five different formats, available on different tabs across the top: Yearly Data, Daily Data, Monthly Data, Monthly Averages, and Monthly Comparison.

For more information

The data sets used in AQP-Climate were created using data from meteorological stations of the National Service of Meteorology and Hydrology of Peru (SENAMHI) and the Global Summary of the Day (GSOD) of the National Oceanic and Atmospheric Administration (NOAA). The topographic data, used as covariates, were obtained from the World Advanced Satellite Observation (ALOS) World 3D DEM. The meteorological data went through extensive pre-processing for the removal of implausible values, filling of data gaps, and testing for homogeneity. Details can be found in the users' manual, available at the same web-address.

To obtain more information about this tool and the climate data sets, you can access the following resources:

- User's manual for AQP-Clima
- Tutorial video for AQP-Clima
- Publications of typical weather data and annual, monthly, and daily data maps
- Information sheet of meteorological data available in Arequipa

All of these resources, our decision support tools, and other information about the SWM team can be found on our website at https://purdue.ag/nexus_tools.

CONTACT

For more information about the developers, this, and other tools developed by the Arequipa Nexus Sustainable Water Management team, contact us at nexus-swm@purdue.edu.