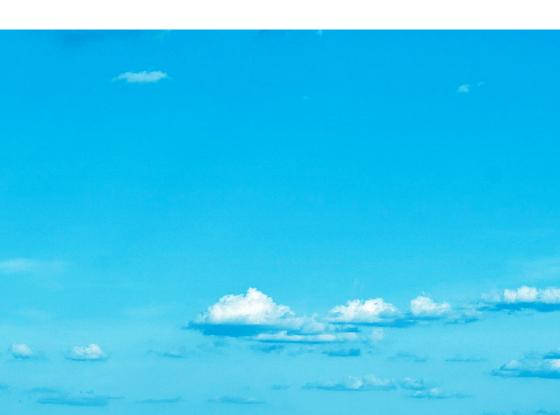# Climsoft

Climate Data Management System (CDMS)

What is Climsoft?

Climsoft is a free software suite for storing climatic data in a secure and flexible manner and for extracting useful information from the data. Climsoft is an opensource software, licensed under GPL3. It is widely used by the National Meteorological and Hydrological Services (NMHS) of developing countries.

The effective management of climate data, particularly that collected by NMHS is critical for understanding climate, and climate variability, on a national, regional and global level, and is essential for the effective provision of climate services, particularly for adaptation and mitigation against climate change.

Manual and digital data archives

Climsoft software main menu

Climsoft features and benefits

- Free, open source and has no associated (ongoing) license fee.

- No special and expensive software required, it just needs a computer with a Windows Operating System.

- Collects, safely stores and archives all climate data (historic as well as real time data).

- Allows an extensive management of metadata making a climate database richer and more accurate.

- Efficient quality control of data to make sure the data series is precise and relevant.

- Climsoft is scalable and can be used both at the HQ and outstations to make data entry more timely and effective.

- Delivers standard climatological reports and statistics, as well as customized products (graphs, charts, etc) especially elaborated to fulfil the needs of a specific end-user.

- Links to the R-INSTAT (www.r-instat.org/index.html) software to produce more advanced climate products for users (including wind rose, time series plots, trend analysis graphs).

- Includes features for data capture from Automatic Weather Stations (AWS) in real time, and paper archiving (helping to preserve and cross check records when inputting data).

- Encodes observations into weather messages according to the WMO new standard of Table Driven Code Forms (TDCF) and is capable of forwarding those encoded messages to the WMO network.

Road construction

> " Climsoft has really improved how we manage climate data enabling us to have quicker and more trusted access to data we use for regional Climate analysis.
>
> **Ismael Lutta Mulama**
> Climate Data Management Assistant, ICPAC
> East Africa

Why is climate data essential?

Climate data is at the heart of NMHS and an effective CDMS helps with the timely and quality provision of data and information to stakeholders.

Quality climate data is essential for many areas of society, for example:

Water resources management: A water manager can analyse climate forecasts for the coming seasons, together with historical rainfall over a catchment to determine if water restrictions should be implemented and enforced.

Food security and sustainable agriculture: A farmer can analyse climate forecasts for a predicted El Nino event that indicates that his property could be affected by drought. He reviews historical conditions over his farm to understand the risks of planting seeds and selling stock for the coming season.

Public health surveillance: Epidemiologists can analyse the relationship between disease outbreak and prevailing climatic conditions over a region in order to provide early warning of an increased risks of disease.

Disaster resilience: An emergency services analyst can investigate the relationship between vegetation curing, forecast and historical climatic conditions in order to plan bushfire risk mitigation actions for the coming season.

Energy and mineral resource management: A renewable energy analyst can review historical solar radiation data for a region in order to determine what type of solar system is best suited for their clients.

Sustainable urban development: A city planner can analyse the historical potential for rain and floods over the areas shortlisted for a proposed new housing development proposal to determine whether approval should be granted for the development.

Biodiversity and ecosystem sustainability: Land managers can analyse climate change projections, together with historical climatic conditions for specific species so that they can better mitigate against potential climate change impacts.

Infrastructure and transport management: A civil engineer can analyse the historical potential for rain and floods over the area short-listed for the new road and bridge project to determine the optimal locations.

How can you obtain Climsoft?

Climsoft is a free and open source Climate Data Management System (CDMS) software and can be obtained free of charge. Get your copy today by visiting: www.climsoft.org

Climsoft training and technical support

The Climsoft user community website provides users with the latest Climsoft software versions and updates. This platform also provides a well comprehensive documentation on Climsoft and a forum to share experiences and ask for assistance on specific features. For any technical support or help please contact the Climsoft Help Desk.
support@climsoft.org

Contribute to Climsoft

The Climsoft Project invites and welcomes users and interested developers to become Contributors. If you wish to become a Climsoft Contributor please complete and submit a Climsoft Contributor's Agreement form from the site: www.climsoft.org

Climsoft software features demo

Sorghum plantation

Climsoft has been developed by contributions from Zimbabwe Met Services, Kenya Met Department, ACMAD, DNM Guinea and others.