



DATA

Historical data consists of
Instrumental data - century-long measurements of surface temperature and precipitation, records of daily data
Paleoclimate and proxy data - derived from natural sources such as tree rings, ice cores, corals, and ocean and lake sediments

Monitoring
 Uses data from recent past and the present

Sub-seasonal to Seasonal
 Flash flood guidance
 Severe weather forecasting
 Tropical cyclone forecasting

Interannual
 Climate Change Indices

PRODUCTS

Past climate
 Climate trends, Extreme climate indices, Sector-specific climate indices, Reanalyses, Return periods of extremes, Climate Normals, World Weather Records

Weather
 Initial conditions

Climate variability
 Boundary conditions (sea surface, snow cover, land), Climate monitoring and watch

Multi-decadal

Projections
 Operational projections on climate change timescales

TOOLKIT - facilitates operations and used typically by forecasters

TAILORED PRODUCTS FOR DECISION SUPPORT – products can either be tailored in space and time or according to the decision relevance

DECISION SUPPORT APPLICATIONS – climate services apply past climatological records, contemporary monitoring and expected future conditions to socio-economic sectors

In agriculture, to inform crop choice, planting to optimize yield and minimizing crop failure risk
 Disaster risk identification based on extreme event return periods and trends

Emergency response, Disaster Risk Reduction

Contingency plans, humanitarian response, government and private infrastructure investment

Informs mitigation policy and adaptation choices
 Impacts on water resources, heat stress, crops, infrastructure

Figure 1.1: CSIS data and products for climate services