



# **Professional Climate Services**

## What Can Climate Science Do for You?

The Saskatchewan Research Council (SRC) Climatology section develops, tests and transfers climatic information, which can lead to environmental, economic and social benefits for Saskatchewan and the world. Climatology information promotes proactive risk management to offset the negative impacts of extreme climatic events, as well as taking advantage of the positive impacts. Climatology is the scientific study of climates, including the causes and long-term effects of variation in regional and global climates. Climatology also studies how the climate changes over time, how the changes affect human activity, how vulnerable society is to these changes and how society can adapt to these changes.

### **Climate Hazards**

SRC's Climatology section investigates climatic hazards which affect our society, economy and environment. Hazards include droughts, excessive moisture, extreme heat, extreme cold and their resulting influences on sectors such as agriculture, forest, health, water and communities. The impacts of climate hazards are often severe and costly, resulting in deaths, illness, lost economic production, infrastructure, other property damage, as well as water scarcity.

#### **Vulnerability, Impacts and Adaptation**

SRC's Climatology section provides climatic impact assessments for the resource and environment sectors. This process involves assessing climatic factors that affect socioeconomic and ecological systems. An example of vulnerability is the 2001 - 2002 cross-Canada drought, resulting in Canada's agriculture sector losing approximately \$3.6 billion.

#### **Monitoring Climate Variability**

Monitoring climate variability is accomplished by utilizing SRC's two Climate Reference Stations (CRS). The Saskatoon site has been in operation since 1963 and provides Saskatchewan with the most comprehensive climate variability data. Information from this site is requested by industry, government, researchers and private citizens. Climate monitoring at Saskatoon's CRS showed that within a ten-year time span, Saskatoon went from the driest year (2001) to the wettest year (2010) over a 47-year recording period.



For organizations and individuals interested in becoming supporters of SRC's Climate Reference Stations or subscribing to its monthly summary reports, visit www.src.sk.ca/weather or:

# CONTACT

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