Backgrounder

What is the Climate Reference Station (CRS)?
The Saskatchewan Research Council's Climate Reference Station (CRS) in Saskatoon is considered a principal climatological station because it supplies hourly readings. It is recognized as a high quality station because it has collected data for more than 30 years at its current location and continues to monitor a large variety of elements.

The CRS takes readings of temperature, precipitation, humidity, wind and atmospheric pressure. Supplemental observations include rainfall rate, soil temperature, bright sunshine and solar radiation.

The CRS data allows SRC to:

- Provide climate data to governments, universities, insurance agencies, lawyers, agricultural sectors, chemical companies, schools, building science, construction firms, media, transportation studies, accident studies, wildlife studies, tourism groups and interested individuals.
- Evaluate long-term climate trends. It is an early warning system for extreme weather events, such as droughts and floods.
- Determine how climate events, such as rainfall causing flooding, affect society.
- Collaborate in research programs, such as SRC's Boreal Ecosystem Atmosphere Study (BOREAS) and collaborative research with the University of Saskatchewan (U of S) Western College of Veterinary Medicine and College of Agriculture.

CRS History
The U of S Physics Department established a climatology station in 1916. SRC took over this weather observation program in 1963 at the newly established Climatological Reference Station. SRC took manual measurements until the CRS was converted to an automated data collection system in 1992.

CRS Records

Since it opened in 1963, the CRS has recorded some Saskatoon weather extremes, including:

- Highest temperature: 41.0°C on June 5, 1988
- Lowest temperature: -43.9°C on January 22, 1966 and January 29, 1969
- Most precipitation: 99.4 mm on June 24, 1983
- Earliest last spring frost: May 1, 1977
- Latest last spring frost: June 14, 1969

For more information on SRC's Climate Reference Station and its services, contact:
Virginia Wittrock
SRC Research Scientist
(306) 933-8122
wittrock@src.sk.ca