The versatility of the fire weather stations allow them to serve more than one purpose. Our equipment has been used for fire research during prescribed burns, and monitored conditions near fire lines. A suitably sited fire weather station could also be used for avalanche forecasting in the winter or serve as a year-round hydrological monitoring station with the addition of a water-depth sensor.

Custom Fire Weather Stations

Custom weather stations are configured from a wide selection of sensors and data transfer peripherals, providing flexibility in matching an application’s exact requirements. Tell us what you need and we’ll help you configure a system that meets your exact needs.

Dataloggers

Campbell Scientific measurement systems are based around programmable dataloggers that measure the sensors, then process, store, and transmit the data. We offer a family of rugged, reliable dataloggers, but the CR1000X is usually suitable for fire weather applications. Our low-power dataloggers have programmable execution intervals, wide operating temperature ranges, on-board instructions, and ample input channels for commonly used sensors. Our dataloggers interface directly to most sensors, eliminating external signal conditioning.

Data are typically displayed and stored in the units of your choice. Measurement processing and data storage are programmable, but measurements are typically processed and stored at hourly and daily intervals (e.g., maxima, minima, averages). True averages can be calculated and stored by our dataloggers. Conditional outputs can also be processed and stored.

Fire Weather Sensors

Sensors that measure wind speed, wind direction, air temperature, relative humidity, solar radiation, and fuel temperature and moisture are often used in our systems. Campbell Scientific equipment can interface to many sensors with different output types. Our dataloggers can also measure large numbers of sensors.

Telemetry

Data can be transmitted over a variety of communication options, including satellite, telephone, cell phone, and radio. In the United States, GOESSatellite telemetered data can be collected via NIFC and stored to WIMS or collected directly from NESDIS using Remsoft’s WeatherPro and NESDIS module. NFDRS indices are calculated using WIMS or WeatherPro.

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4 Geostationary Operational Environmental Satellite
4 National Interagency Fire Center
4 National Information Management System (database)
4 National Environmental Satellite, Data, and Information Service
4 National Fire Danger Rating System
**Instrument Mount**

Permanent fire weather stations typically use 20 foot instrumentation towers. Also available are 10 and 30 foot instrumentation towers and 10, 15, and 20 foot tripods.