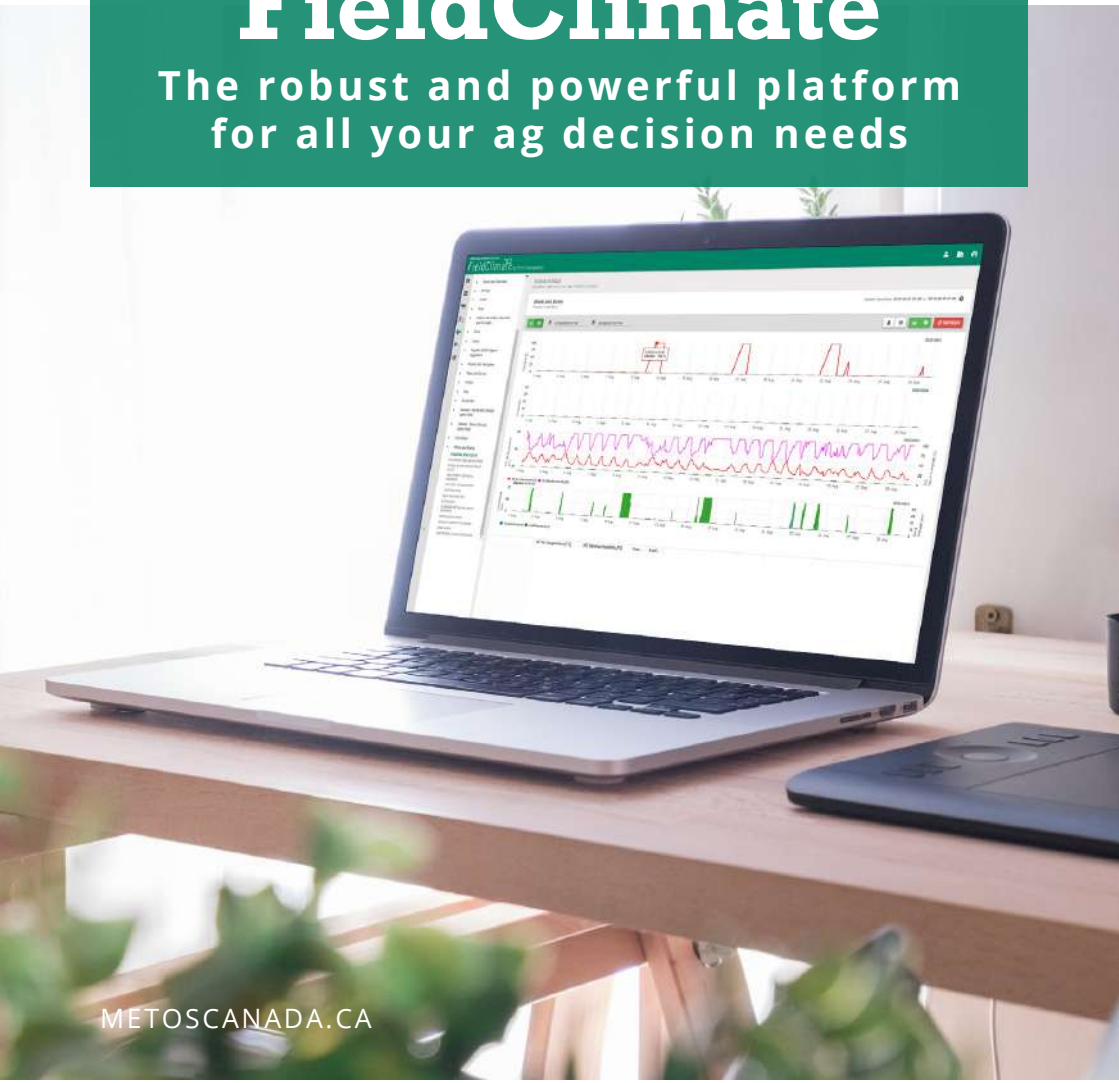
CONNECTED FIELDS. BETTER FARMING.

FieldClimate

The robust and powerful platform for all your ag decision needs



METOSCANADA.CA

METOS® CANADA

Metos Knows

Nested Approach to IoT Agriculture

In order for the nested approach to work , you need multiple devices to monitor multiple issues in your field and around your farm; having just one weather station cannot provide enough data to respond to everything your crops need.

Agro-Meteorological Data Management in the Cloud, to Your Desktop and Smart Phone

FieldClimate was introduced in 2005 as the first ever web platform for collecting and displaying agro-meteorological data for tens of thousands of weather stations and sensors installed all over the world.

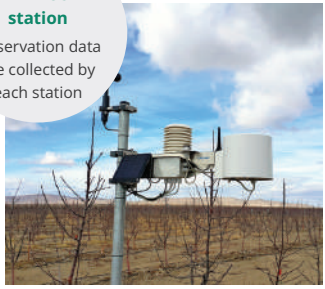
Use your field-level IoT device with advanced site-specific forecasts in FieldClimate to produce hourly updated actionable tools – e.g., when to spray for plant protection (image below).

How does it work?

Work Planning Tool = Current Conditions + Forecasted Plant Protection

iMETOS station

Observation data are collected by each station

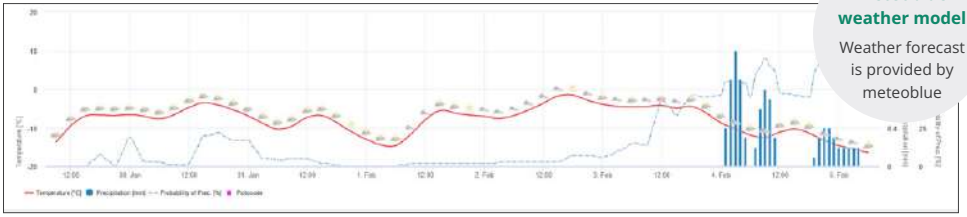


Current conditions measured with sensors

- Temperature
- Relative humidity
- Rainfall
- Wind speed and direction

meteoblue weather model

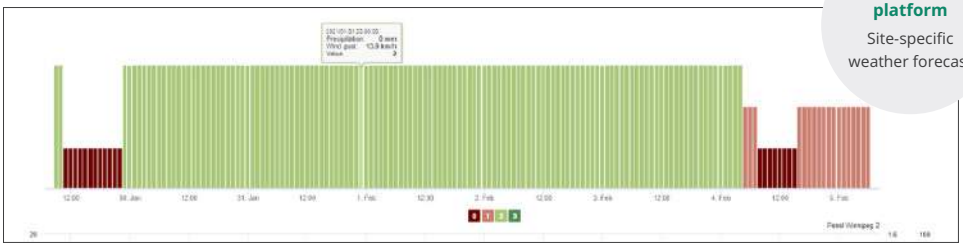
Weather forecast is provided by meteoblue



Forecasted conditions: Temperature, Relative humidity, Rainfall, Wind speed and direction

FieldClimate platform

Site-specific weather forecast



Work planning tool

Holistic Solutions for Decision Agriculture, Supported Through FieldClimate

The list of tools and actionable solutions continues to grow in FieldClimate with Nested Solutions for:

Actionable information based on sensor data

- Real time and historical data management
- Sensor level alerting – e.g., wind gust, precipitation levels, temperature thresholds and more
- Virtual Weather
- Localized Weather Monitoring and Forecasting

Soil Moisture Monitoring – variety of soil probes

The graph illustrates the ability to view your soil moisture data from top down, where the shallow sensors are shown at the top and the deeper ones at the bottom of the graph. This clearly illustrates how far the water is making it into the soil and where the active root zone is located based on stepping.

Crop Health Management and Decision Support Models

Disease models - apple

The graph shows the site specific Aphid risk increasing with warmer temperatures and high humidity.

Disease models - wheat and barley

The fusarium Head Blight complex favors warm temperatures between 20°C to 30°C and long humid periods. High risk periods occur when the infection curve reaches 100% and therefore favorable conditions will occur in the field shortly afterwards.

Disease models - corn

This graph illustrates fusarium head blight infection in the field and further on the risk of high contents of mycotoxin in seeds. A leaf wetness period of 2 days or more during the sensitive wheat stage is assumed to give a high risk of mycotoxins. Six completed infections would lead to a risk of 100%.

Satellite images

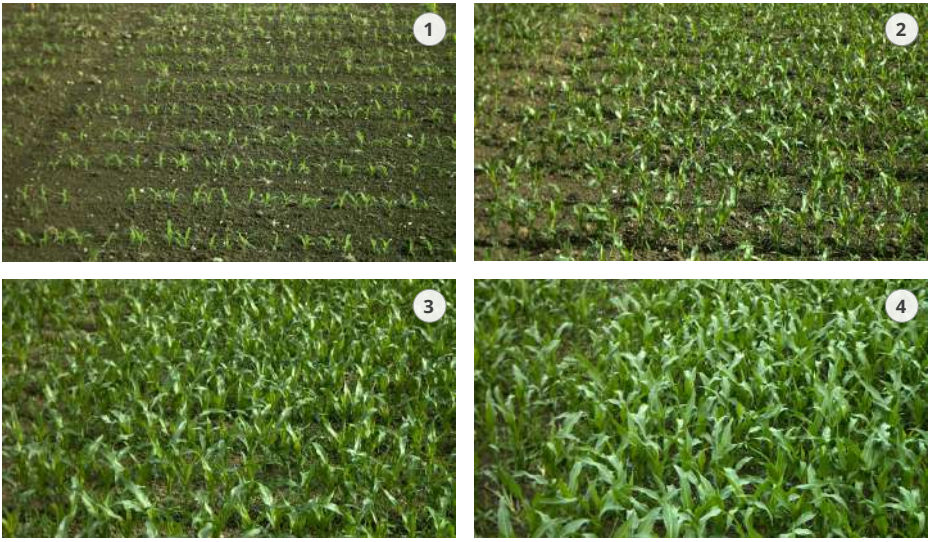
Remote sensing

Four satellite images from July 22 to August 1 show the decrease in Leaf Area Index and the tomato crop ripens and is harvested, in the lower left part of the image. Green colors show growth, while orange and red show poor growth or Leaf Area Index.

SNAPSHOT TOMATOES SAT IMAGES

Remote Field and Insect Monitoring via Cameras

AI-Based solutions for insect scouting and crop growth monitoring



Following the uniform emergence and growth of maize daily.

With CropVIEW® you receive a time lapse of your crop growth. Check the time lapse of maize growth here:

https://youtu.be/V_ZXBSD_7XQ

iSCOUT® uses automatic recognition algorithm for recognizing pests.

iSCOUT® Color Trap

iSCOUT® Bug

Nutrition Management - Mobilab

When fertilizer is spread, it waits to be absorbed in the soil with rain events. Events with more than 20 mm of rain are good for fertilizer application if it is not too windy. Poor conditions occur when there is no rain after a fertilizer application.

You can test how much fertilizer should be applied to each zone by using the MobiLab.

Storage and tank monitoring

Knowledge of actual liquid levels is very important for supply and re-supply of various products – chemical, fuel, fertilizers.

Smart IoT values and irrigation automation through partnerships

Trackers for asset management- e.g., location of various machinery

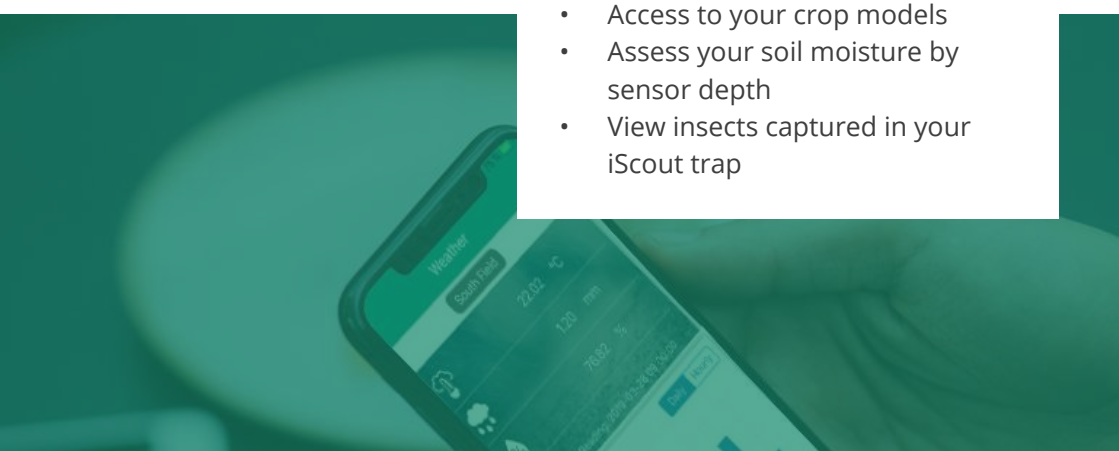
iMETOS Tracker used on a golf cart.

Mobile FieldClimate for Android and iOS Devices

With the desire to enrich the user experience and bring the field, and everything that is happening on it, even closer to METOS® Canada users an updated version of FieldClimate has been developed for mobile phone users. As of January 2020 it is available for both iOS and Android operating systems.

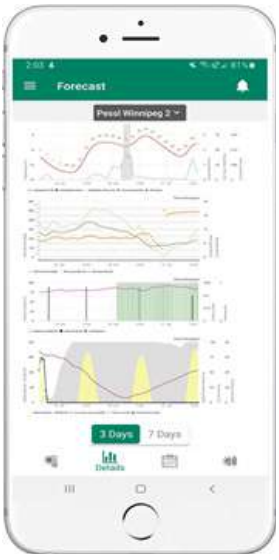
Highlighted Features:

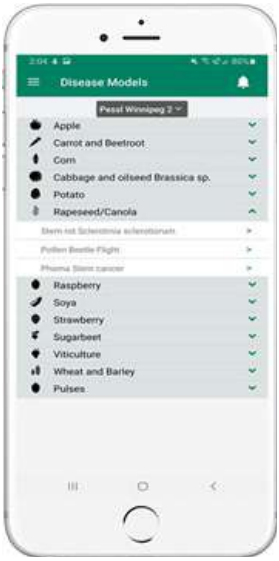
- Remote access to all in-field devices
- Display current conditions from any device sensor
- Map view of all devices for chosen variable
- Site specific forecasting – simple and detailed
- Access to your crop models
- Assess your soil moisture by sensor depth
- View insects captured in your iScout trap

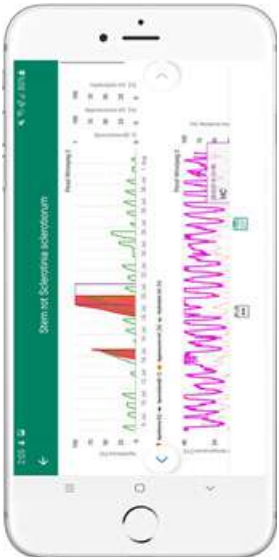


FieldClimate for iOS

Fantastic new features making field control easier than ever.







FieldClimate for Android

Seamless field management in the palm of your hand.

METOS® CANADA

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