

T U R N I N G I N F O R M A T I O N I N T O P R O F I T S .



INTER-REGIONAL SMART AGRICULTURE FORUM

Khartoum, Republic of Sudan



35 years - Pessl Instruments: Experienced, Global, Successful!

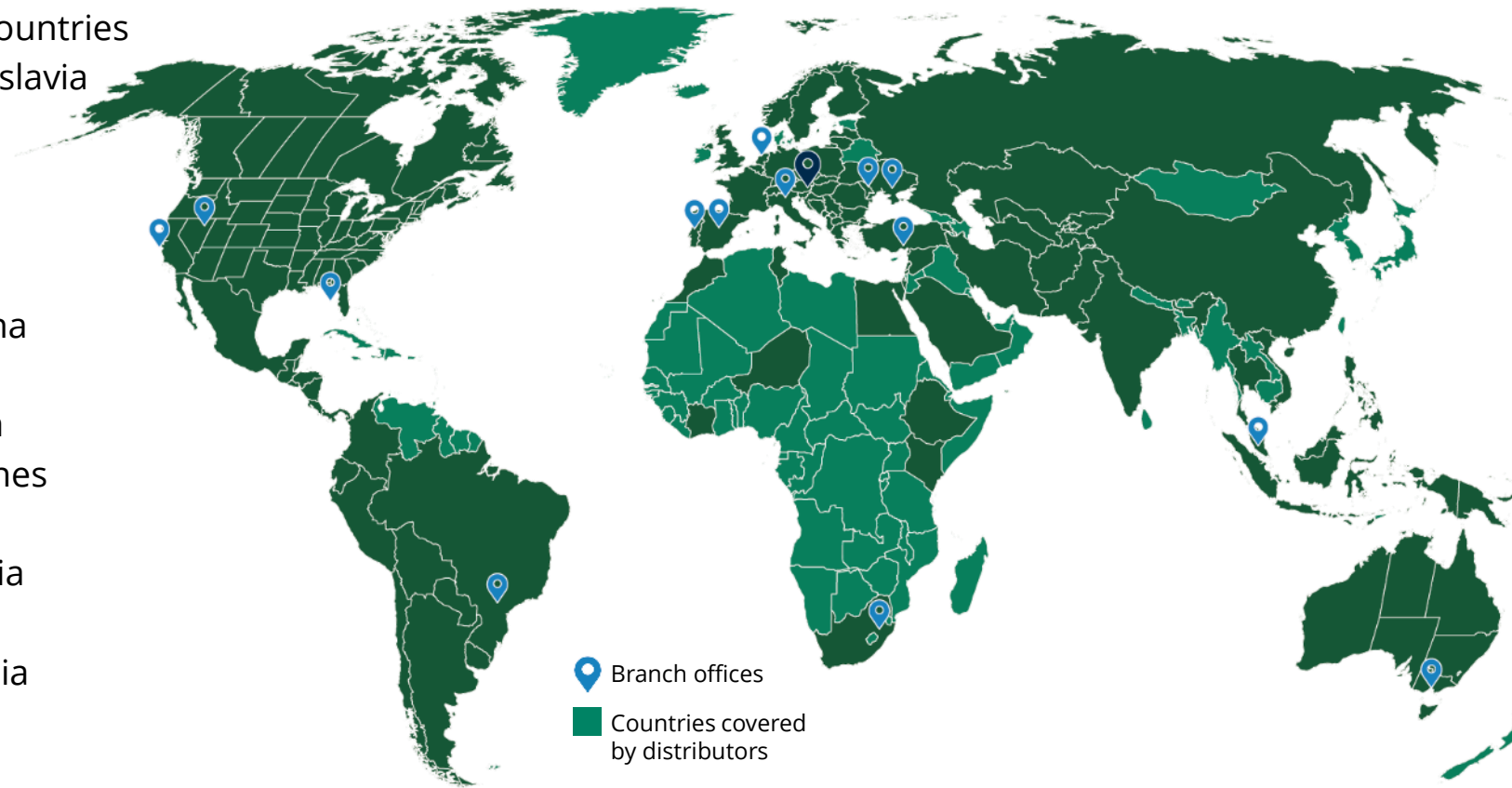
REPRESENTATIONS DEALERS & AFTER-SALES SERVICE POINTS:

- All EU Countries
- Ex-Yugoslavia
- Egypt
- Iran
- India
- Israel
- Argentina
- Iran
- Vietnam
- Philippines
- Peru
- Colombia
- Bolivia
- Indonesia
- Niger
- Kenia
- Russia

HEADQUARTERS: Weiz, Austria

AFFILIATES & DISTRIBUTORS

- METOS® ANZ
- METOS® BRASIL
- METOS® FRANCE
- METOS® IBERIA
- METOS® ITALY
- METOS® LATAM
- METOS® MOLDOVA
- METOS® MX
- METOS® POLSKA
- METOS® SOUTH AFRICA
- METOS® SOUTH-EAST ASIA
- METOS® TURKEY
- METOS® UKRAINE
- METOS® USA
- AQUAGRI (Portugal)
- AGRI PRECISION (Morocco)



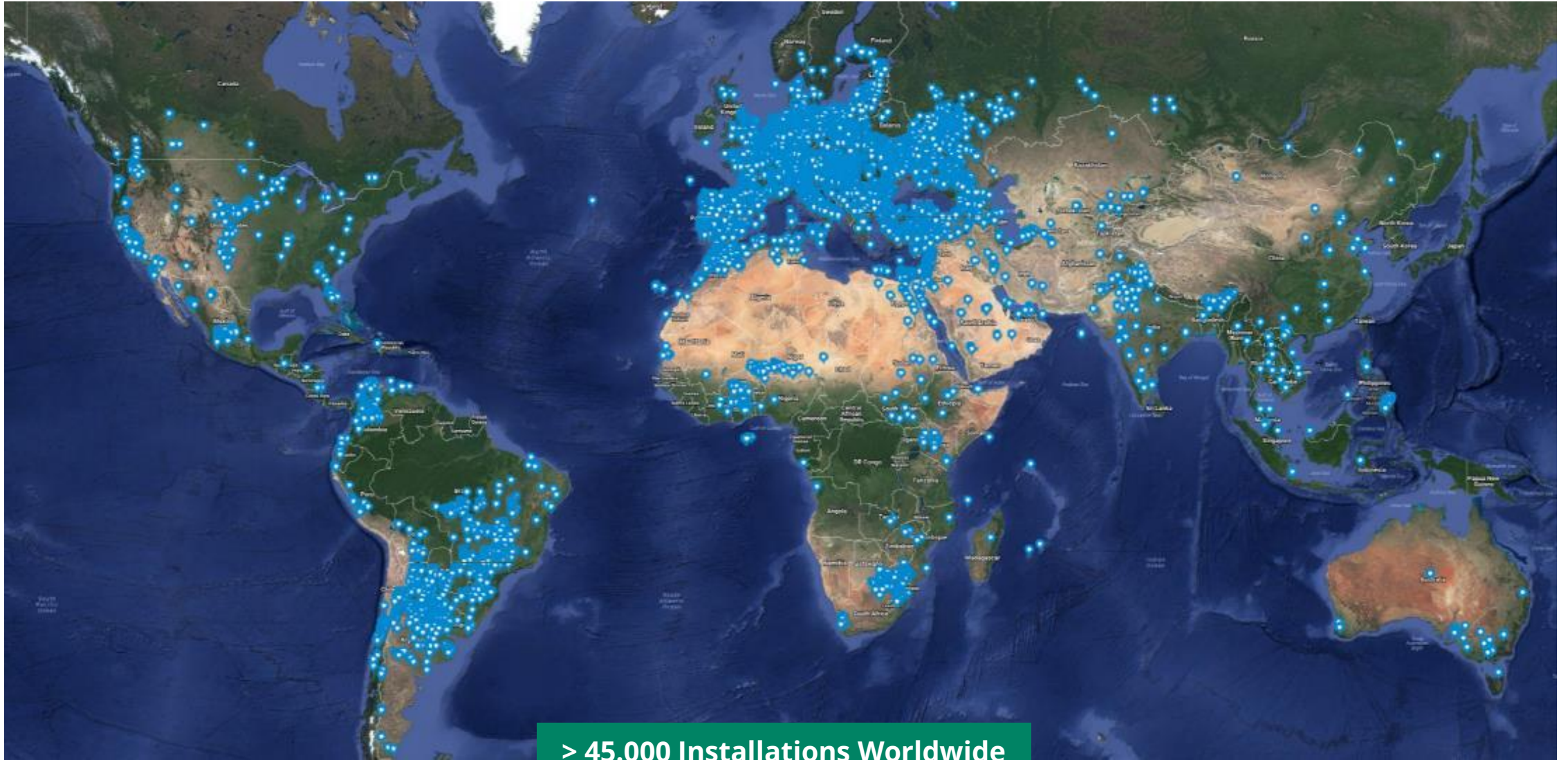
> **45.000 stations**
up & running

> **250.000 sensors**
connected

> **85 countries**
installed

> **180 people**
employed

Worldwide Installations



> 45,000 Installations Worldwide

Pessl Instruments Over Time



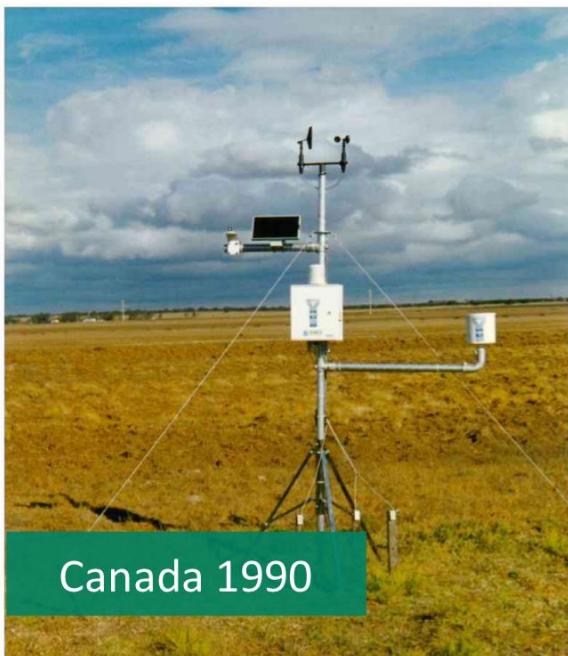
1988



USA 1995



New Factory 1995



Canada 1990

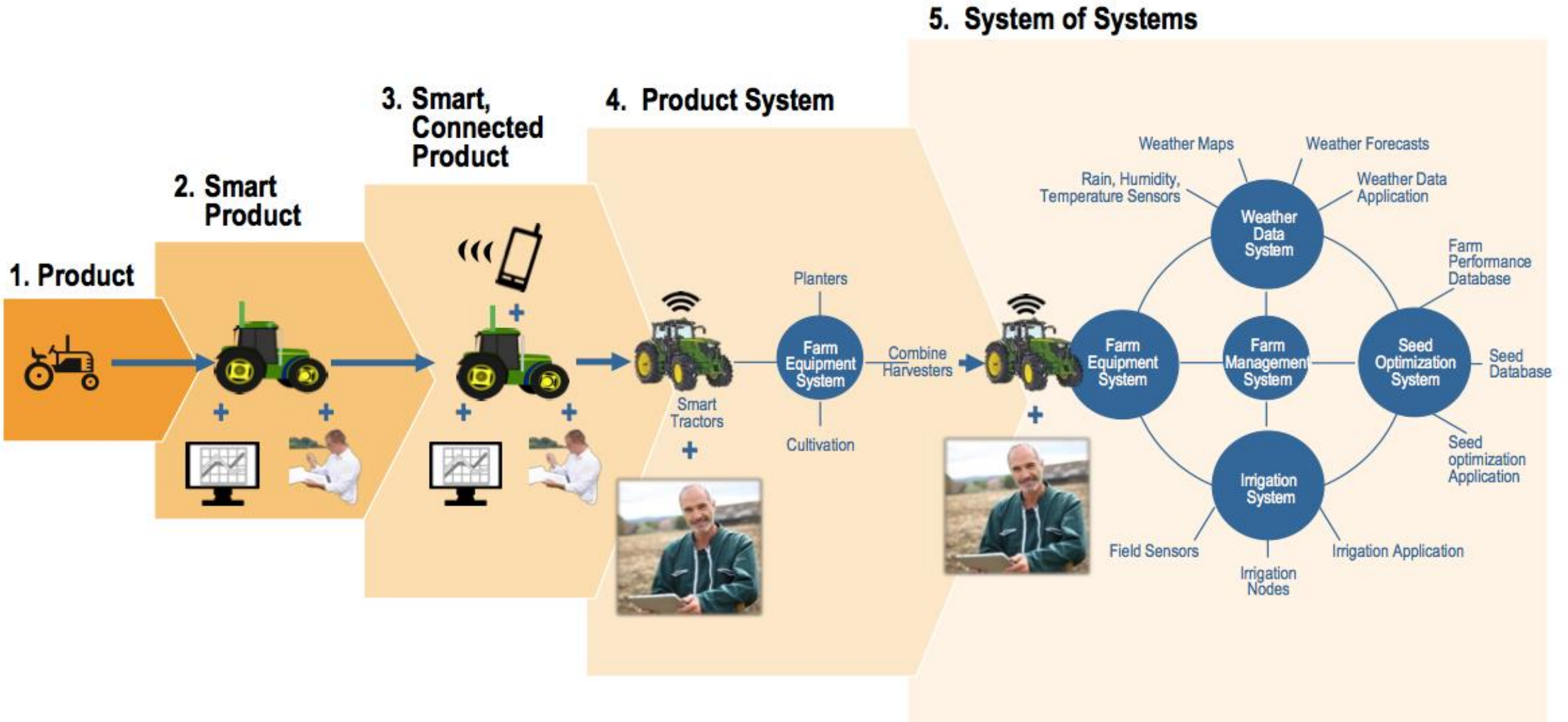


Germany 2005



Company Expansion 2015

From the Product to Interconnection with IOT



Value proposition: real insights for farmers

Proper
Time of
planting



Optimal
Water
Balance
Planning

Timely
Fertilizer
Application



The best
Harvest
Time

Sustainable Agriculture

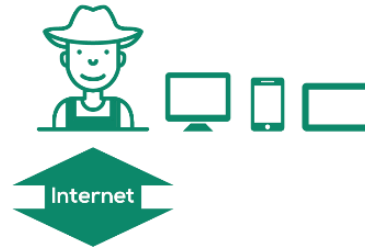
- ✓ Optimal Resources
- ✓ High Yield
- ✓ Premium Quality
- ✓ Food Safety
- ✓ Environment Friendly

Optimal Crop
Health
Management
Schedule



Perfect
Storage
Monitoring

What is required? Connectivity in the fields!



FieldClimate

IoT APPLICATION ENABLEMENT



CONNECTIVITY

WIRED

(interface needed: WiFi, LoRa, Bluetooth, ...)

Optical Wire
Copper
Ethernet
Cable

WIRELESS Long Range

(Licensed/Public)

GSM, 2G, 3G
LTE
LTE Cat 0/Cat 1
5G
Satellite



WIRELESS Short Range

(Unlicensed/Public)

WiFi
Bluetooth
Radio

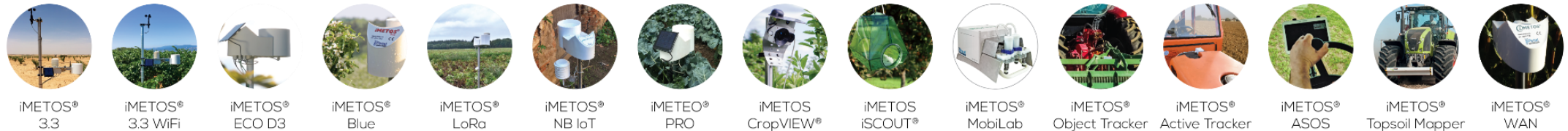


WIRELESS LPWAN

LoRa (Unlicensed Private/
Hybrid/Public)
SigFox (Unlicensed Private)
NB IoT (Licensed/Public)



MONITORING & LOGGING



iMETOS®
3.3

iMETOS®
3.3 WiFi

iMETOS®
ECO D3

iMETOS®
Blue

iMETOS®
LoRa

iMETOS®
NB IoT

iMETEO®
PRO

iMETOS
CropVIEW®

iMETOS
iSCOUT®

iMETOS®
MobiLab

iMETOS®
Object Tracker

iMETOS®
Active Tracker

iMETOS®
ASOS

iMETOS®
Topsoil Mapper

iMETOS®
WAN

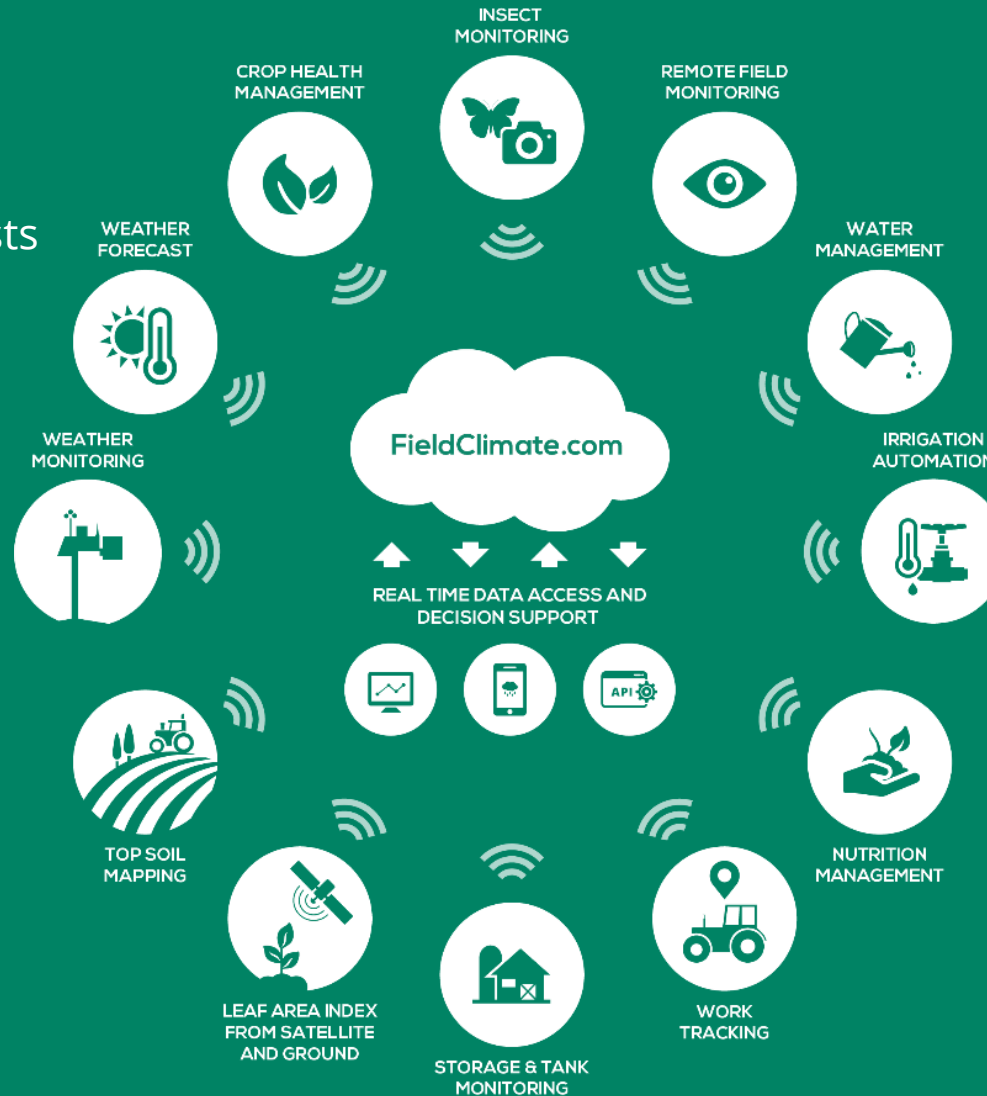
Holistic Solutions for Smart Agriculture

Pest Instruments Decision Support Software Solutions

- In field Monitoring (Weather)
- Site Specific Weather Forecasts
- Disease Forecast Modelling
- Crop Monitor
- Insect Monitor
- Soil Moisture Monitor
- Soil Analyses
- Fertility Monitor
- Storage / Tank Monitoring
- GPS Work Tracking on machines

Active Alert/Automation

- Accident Warning System
- Theft
- Frost warning systems
- Automation in Irrigation



FieldClimate Mobile App



FieldClimate



iMETOS®

Weather data

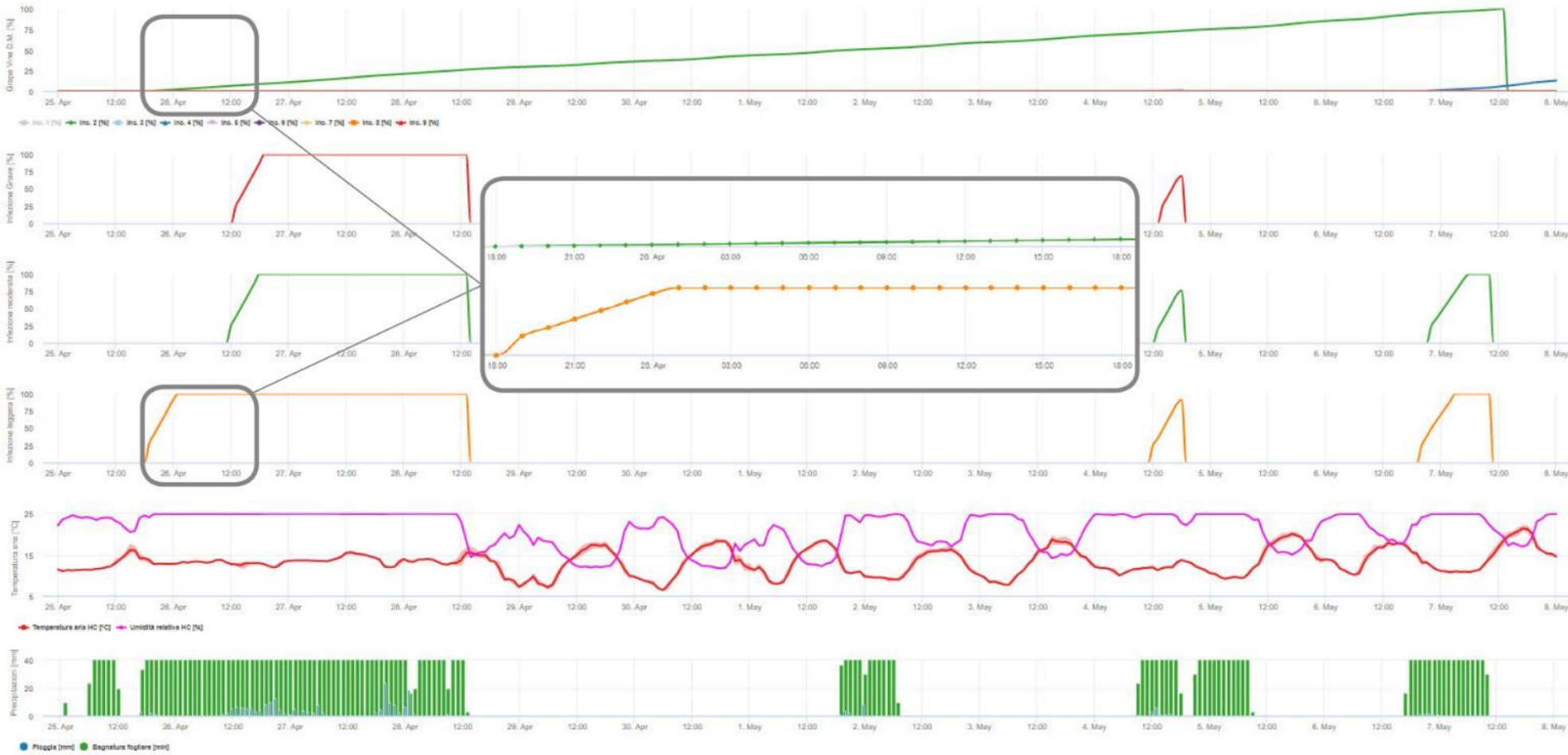
Soil Moisture

iMETOS® 3.3 is a durable and flexible data logger for all climatic conditions, powered by rechargeable batteries and a solar panel. The data logger has a built-in UMTS/ CDMA modem for direct communication with the FieldClimate platform, and can handle up to 600 sensors through the intelligent sensor bus system. The system is extremely reliable due to a non-volatile internal memory and can store more than 8 MB of logged data (cca. 2 years).





Decision Support Systems (DSS)



iMETOS 3.3



Automatic Insect Monitoring



iMETOS iSCOUT

Potential pests found: 19
New detections: 3

● moth (19) ● fly (0) ● beetle (0) ● true bug (0)





Crop Growth and Yield with AI



iMETOS CropVIEW





Early Warning on Risk Management





Soil Analytics – Everywhere and Any Time

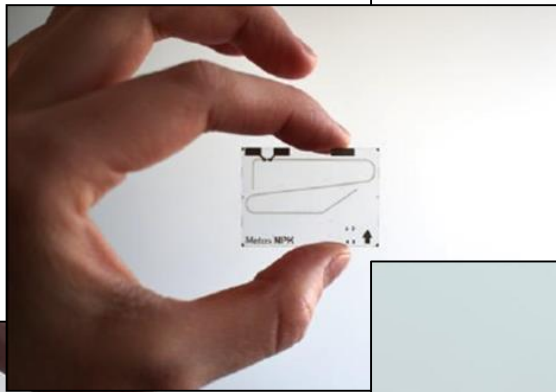


iMETOS MobiLAB

Mobile Soil Lab

All Items included to run Soil Lab:

- Portable Case
- iMETOS MobiLab Device
- Power and USB Cables
- USB HUB with Shaker and Scale
- Microfluidic Chip
- Run Buffer
- Syringe with Needle
- PC Software



iMETOS MobiLAB

**Nitrate
Potash
Clorite**

TURNING INFORMATION INTO PROFITS.



Electromagnetic Soil Monitoring Non invasive Topsoil Mapping



Asset Tracking and Preventative Maintenance



iMETOS Active Tracker



iMETOS Object Tracker



Irrigation Management and Automation

FieldClimate[®] by Pessl Instruments

