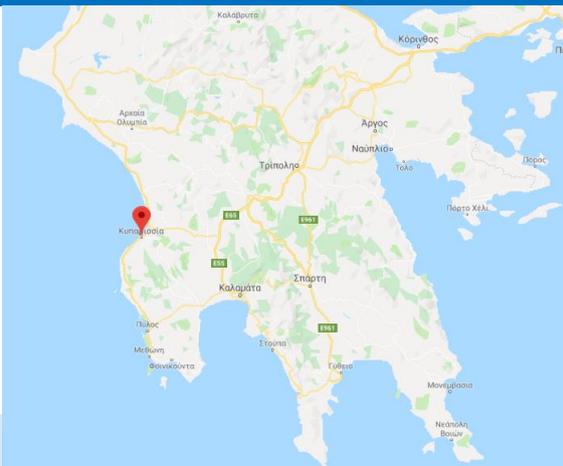


# Case Study

## AGROMETEOROLOGICAL RESEARCH STATIONS NETWORK IN SOUTH WEST GREECE (PELOPONNESE)



### Project ID:

Stations network with reference sensors, **at researching level**, with **data completeness and measurements accuracy** which fulfill the **WMO requirements**.

The stations are equipped with multiple solar radiation sensors which fulfill the discrete spectrums, **with agrometeorological interest** and provide complete data series for **energy calculations**. Simultaneously, **plants parameters** are logged with high accuracy via **IR sensors and soil parameters** too.

The stations are full expandable and portable, providing the advantage for use in any kind of researching and precision farming application.

### IN BRIEF:

**Project:** Telemetric Meteorological stations

**Place :** Peloponnese (South West Greece)

**When:** Completion on May 2019

### ADMINISTRATOR:

Agricultural University of Athens

### Important !

Probably the most complete Agrometeorological stations of the country

### Important !

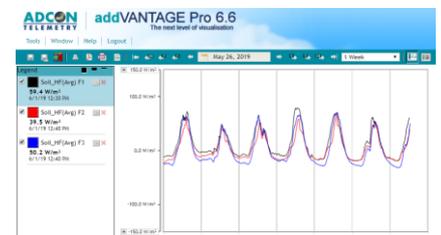
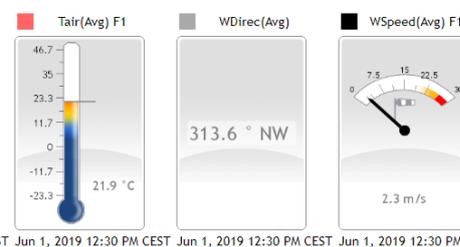
Equipped with reference sensors, for the climate, soil and plants

### Important !

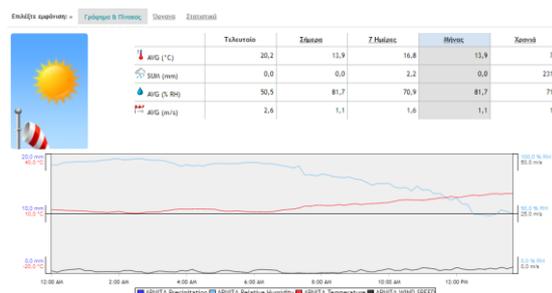
Automatic data processing



The stations are self-powered. The power supply is made via two complete independent photovoltaic systems. The first one supplies the telemetry system and the second one supplies the sensors. This technique was applied for the first time from SCIENTACT 15 years ago, providing excellent stability to systems with multiple sensors.



The data are transmitted automatically to the cloud every 10min. The software is automatically processing the raw data and calculates the secondary data.



The data apart from researching purposes, are available with supervisory and comprehensible way, to the growers of the region.

## PARAMETERS

1. Air Temperature (min. max, average)
2. Relative Air Humidity (min. max, average)
3. RS (pyranometer), incoming
4. RS (pyranometer), reflected
5. PAR
6. Wind Speed (max, average)
7. Wind Direction
8. Rain Height
9. Soil Temperature (in 6 depths)
10. Soil Moisture (in 6 depths)
11. Heat Flow
12. ETo
13. Sunshine Duration
14. Albedo
15. IR Leaf Temperature X 2
16. Average Leaf Temperature
17. Air – Leaf Variation Temperature
18. Hourly statistics
19. Installation Temperature
20. Batteries Voltage
21. Data delay
22. GSM Signal Power
23. Solar Panel operation
24. Daily statistics
25. Monthly statistics



Contact Info  
Thessaloniki:

16 Kanari str., 54644  
Thessaloniki, Makedonia - Hellas  
Tel. +30 2310 946.126  
Fax +30 2310 947.005  
scientact@scientact.com.gr  
www.scientact.com.gr

Contact Info  
Athens:

14 Etolias str., 15231  
Halandri, Athens – Hellas  
Tel. +30 210 67.28.585  
scientact@scientact.com.gr  
www.scientact.com.gr