Parrot

USER GUIDE v1.0

Parrot®

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Using this Guide

This User Guide presents and describes the screens and functions of **ParrotFields**:

- planning and carrying out mapping flights with **Parrot Bluegrass**;
- Real-Time Mapping (NDVI maps);
- Aerial Scouting Missions and in-field annotations & survey of points of interest;
- generating prescriptions maps.

The Table of contents, on page 2, is active. Click a title to access the corresponding section.

This online user guide has no index: use [ctrl]-F (Windows) or [command]-F (Mac) to browse all occurrences of any keyword (*mapping*, *scouting*, *annotation*, *zonation*, and so on).

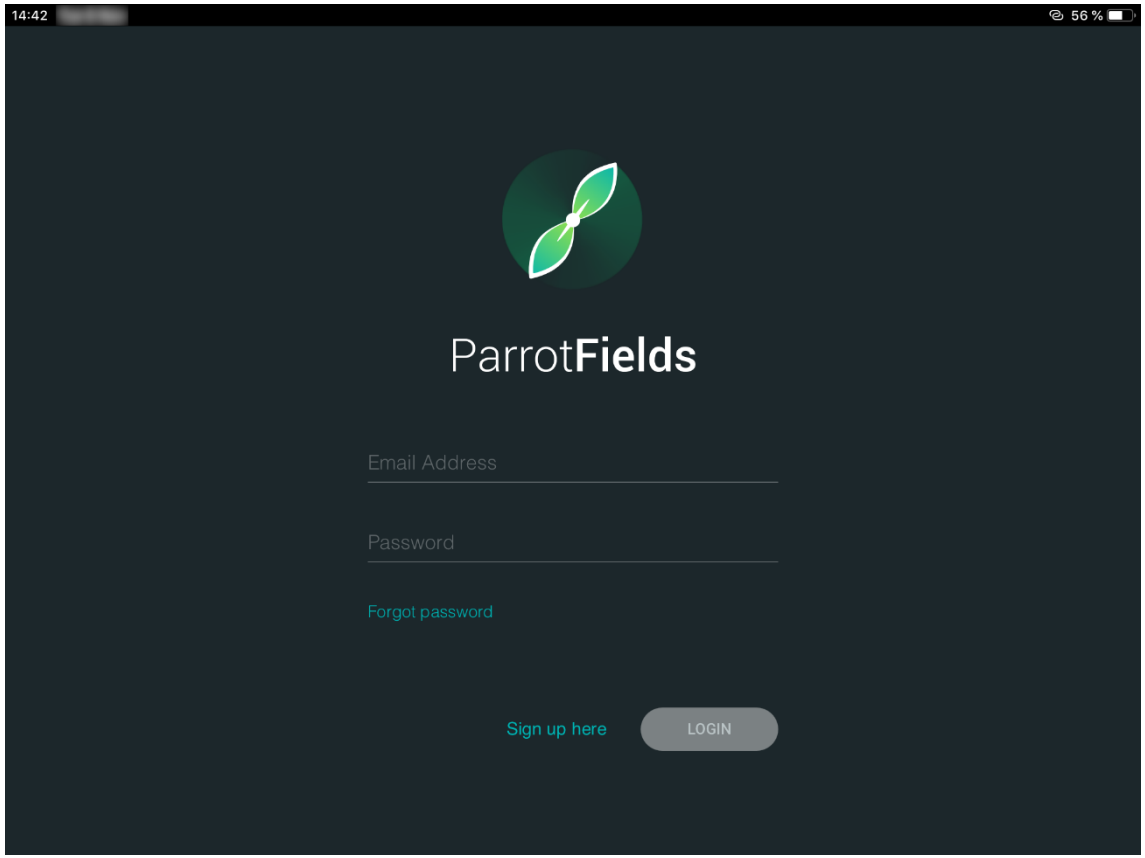
Prerequisites

ParrotFields has been specially designed for the **Parrot Bluegrass** quadcopter drone, as part of the **Parrot Bluegrass Fields** end-to-end solution for agriculture. Before using **ParrotFields**, make sure you have:

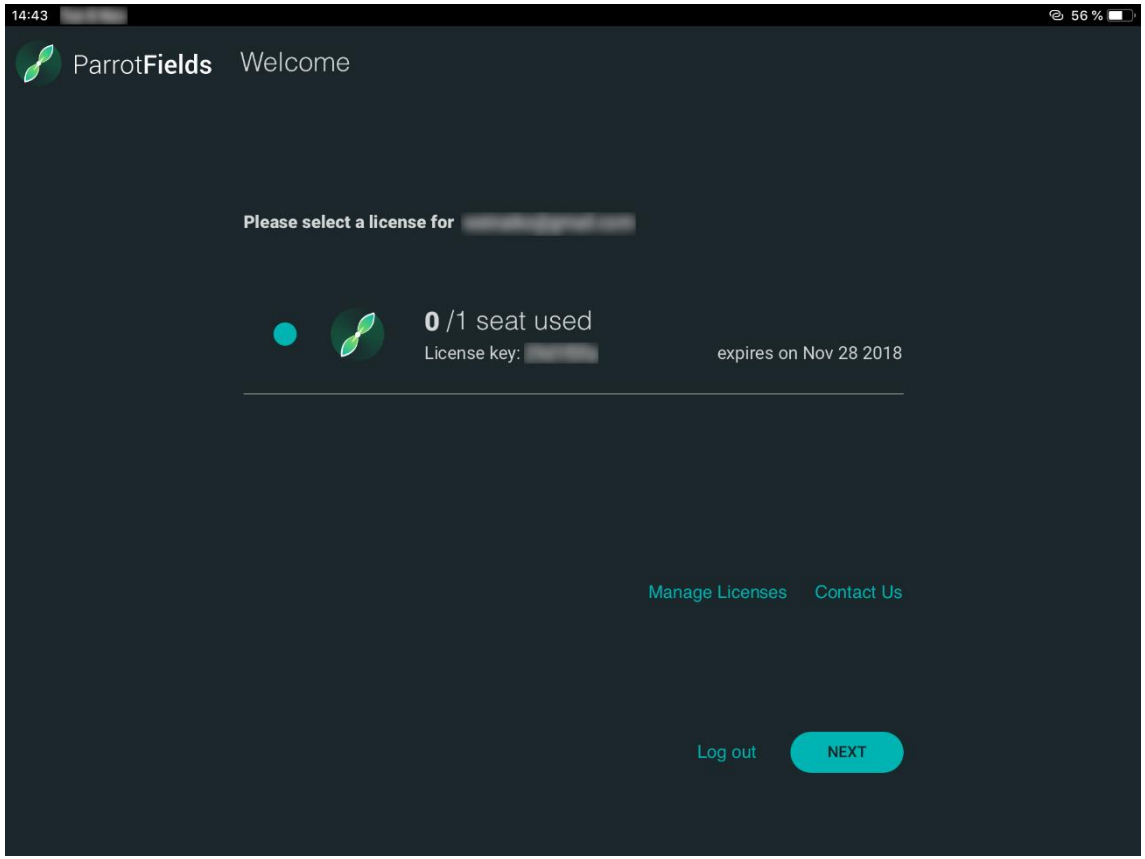
- created an account on **my.parrot-business.com**;
- downloaded the **ParrotFields** app and the **Pix4Dfields** desktop solution, using your **Parrot Bluegrass Fields**' flyer invitation key;
- installed the **ParrotFields** app on your smart device;
- updated your **Parrot Bluegrass** with its most recent firmware;
- updated your **Parrot Skycontroller 2** with its most recent firmware;
- updated your **Sequoia** with its most recent firmware.

Logging in

1. Use the email address you have used and the password you have chosen to create your **my.parrot-business.com** account to log in to **ParrotFields**.



2. Select the license which has been granted to you and tap “NEXT” to confirm and proceed to **ParrotFields** homepage.

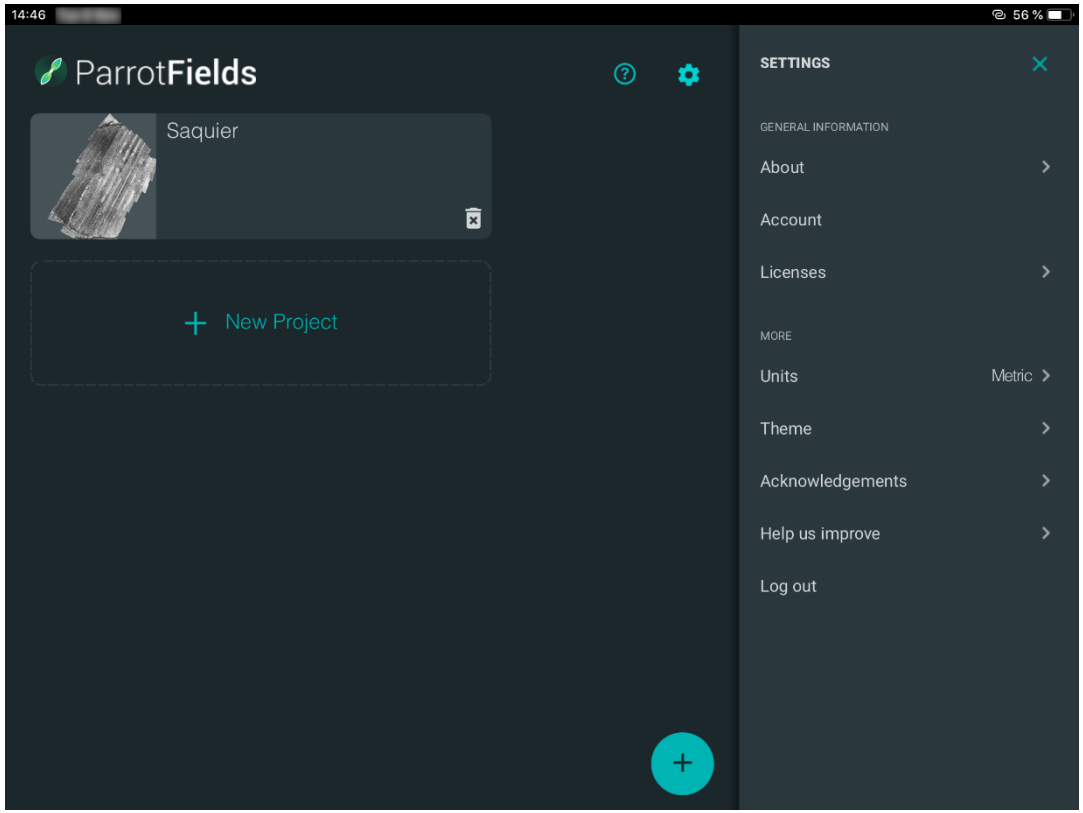


HOMEPAGE

The ParrotFields homepage shows your on-going projects, allows you to create a new project and access the app settings.

The following screen capture shows the settings homepage view, which you can access with a tap on the geared wheel. From there, you can notably access information about the app (About, Acknowledgements), change the app's units from metric to imperial (Units) and select a lighter theme (Theme).

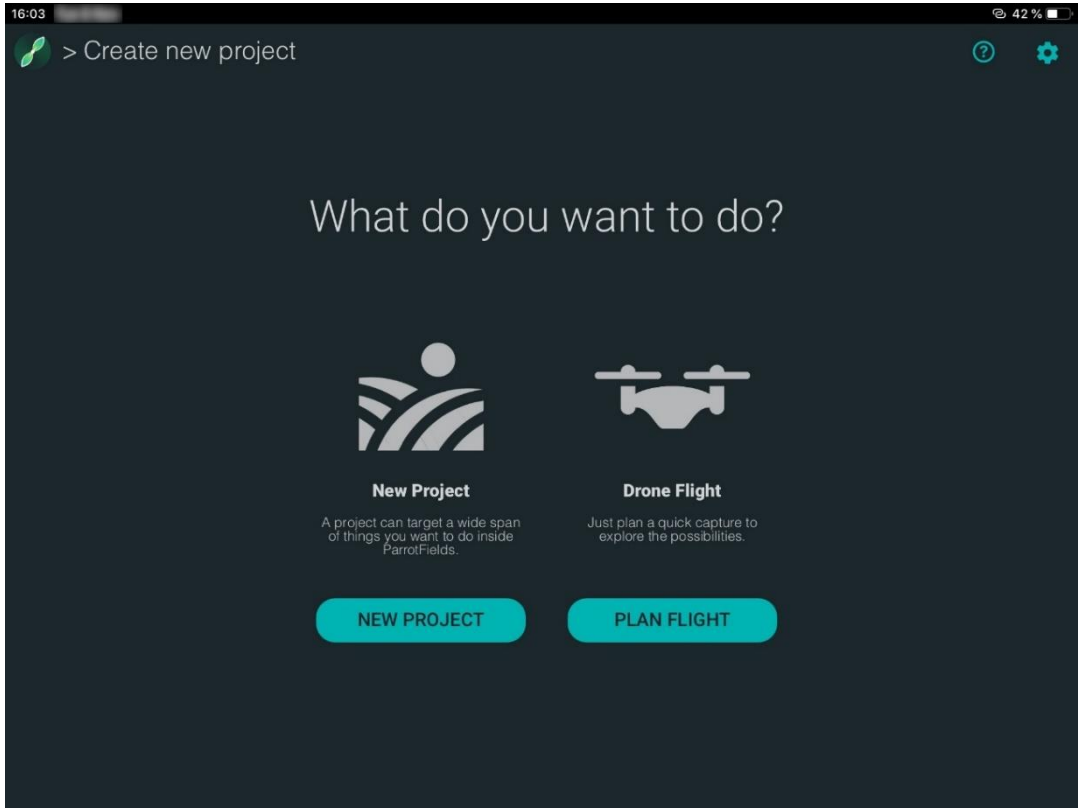
Tap "New Project" to start.



CREATING A NEW PROJECT

From the following screen, select “New Project” to create a full mapping, scouting and analysis project.

Select “Plan flight” to prepare a single mapping drone flight.



Note: creating a mission upfront means ParrotFields saves the background maps for offline use.

New Project

If you have selected “New Project”, **ParrotFields** leads you to an “Unnamed Project 1” page. Tap the pen icon next to the project name to edit it.

For every new project, the first step is planning a flight, by setting a capture path.

Tap the drone icon, on the extreme right of the top bar, to access the “Flight Planning” screen.

From the “Flight Planning” page, tap “New Capture Path” to access the “Capture Path” screen.

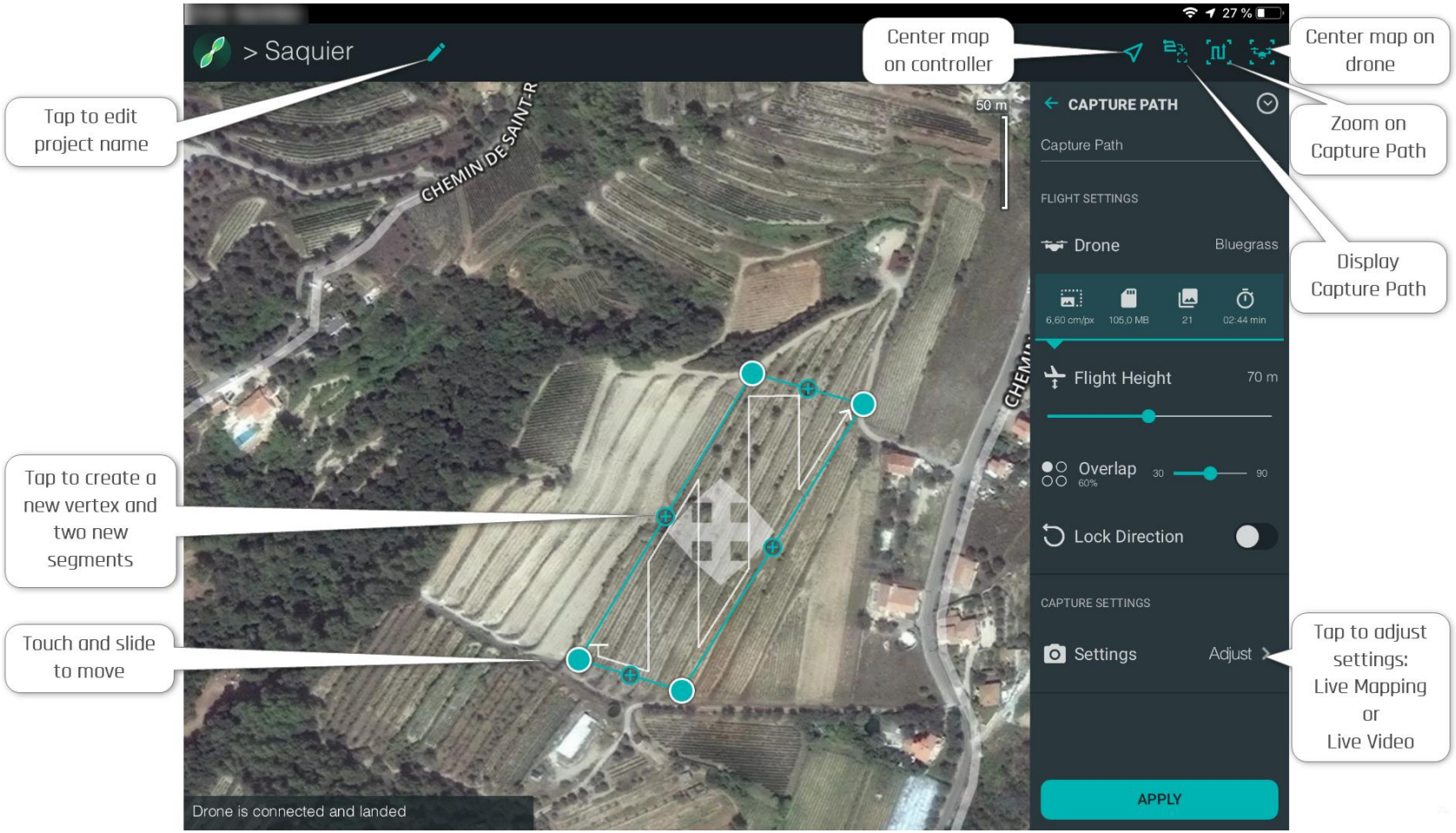
Plan Flight

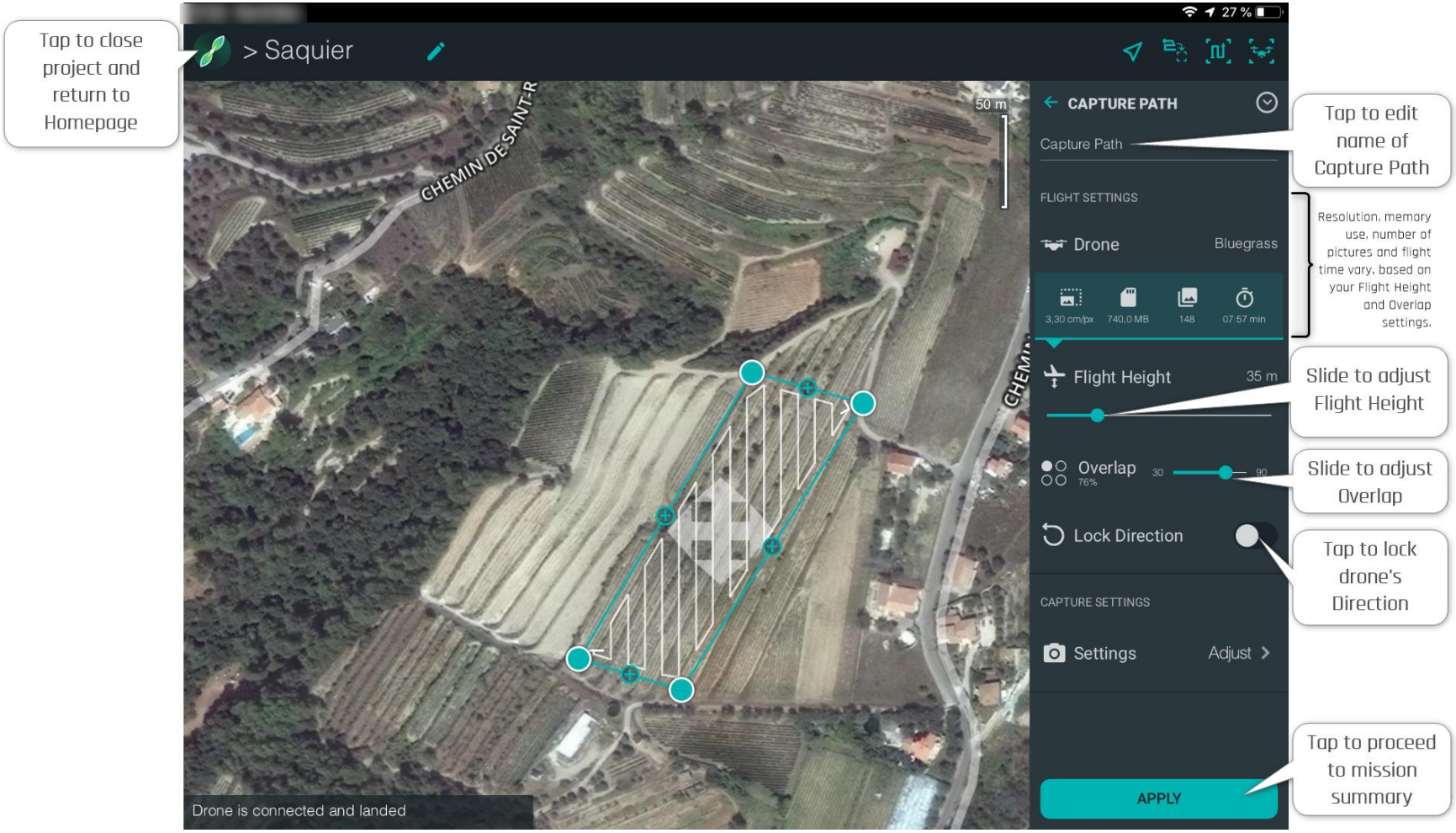
If you have selected “Plan Flight”, **ParrotFields** leads you directly to the “Flight Planning” screen.

Tap “New Capture Path” to access the “Capture Path” screen.

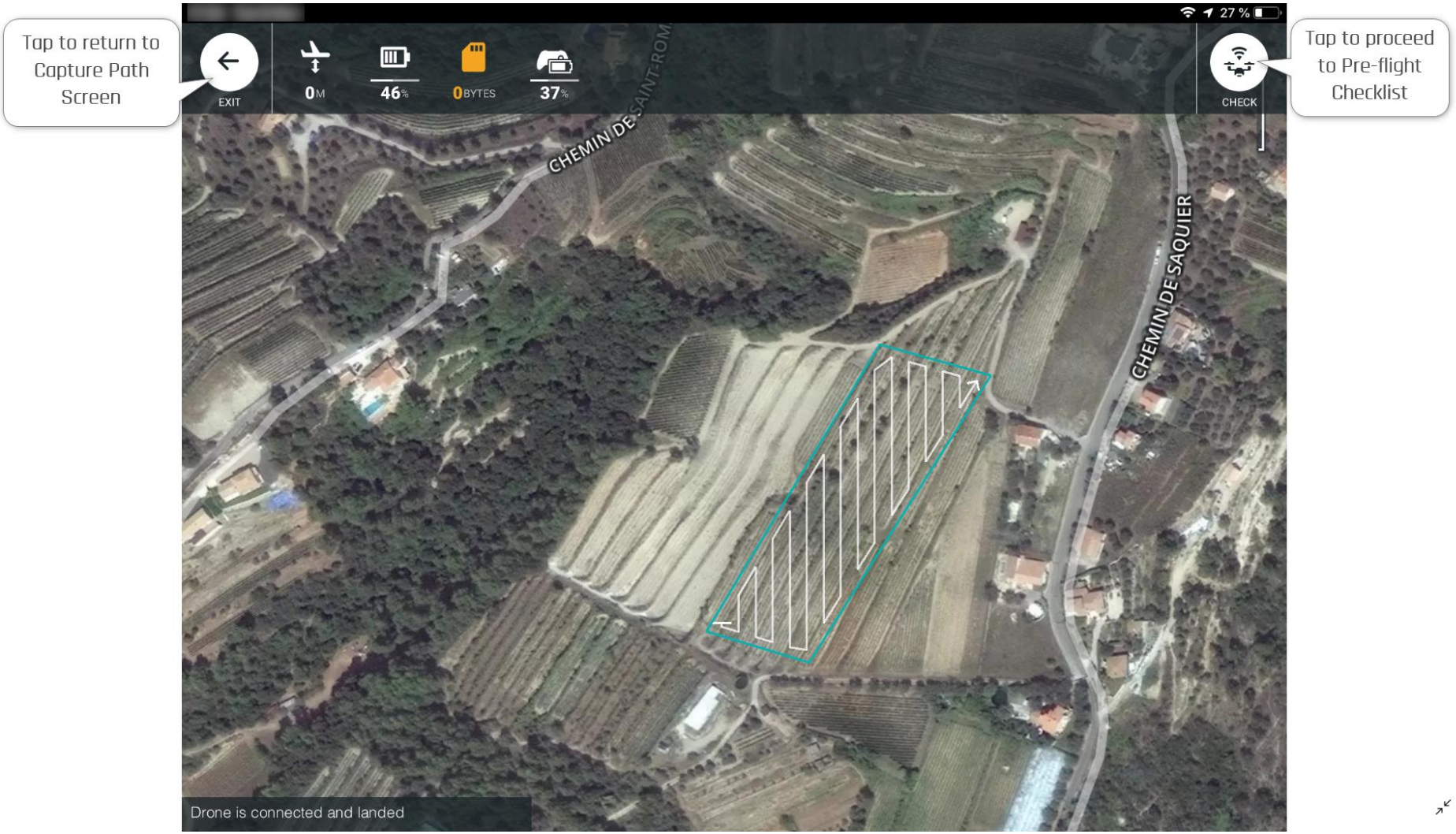
Capture Path screen

Refer to the following screen captures for information on the interface.




Tap to close project and return to Homepage
> Saquier
27 %
CHEMIN DE SAINT-R
50 m
CAPTURE PATH
Capture Path
Tap to edit name of Capture Path
FLIGHT SETTINGS
Drone
Bluegrass
3,30 cm/px
740,0 MB
148
07:57 min
Resolution, memory use, number of pictures and flight time vary, based on your Flight Height and Overlap settings.
Flight Height
35 m
Slide to adjust Flight Height
Overlap
76%
30
90
Slide to adjust Overlap
Lock Direction
Tap to lock drone's Direction
CAPTURE SETTINGS
Settings
Adjust
APPLY
Tap to proceed to mission summary
Drone is connected and landed

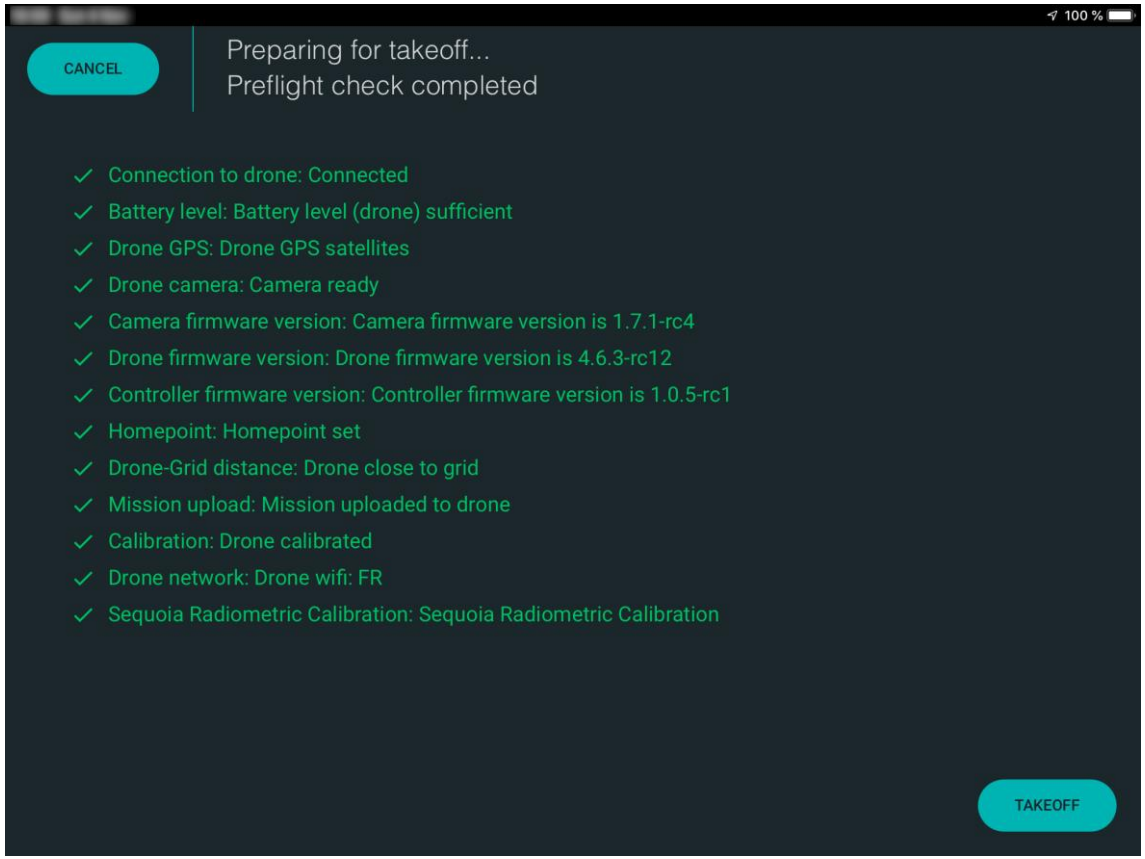
Mission summary screen



Pre-flight Checklist

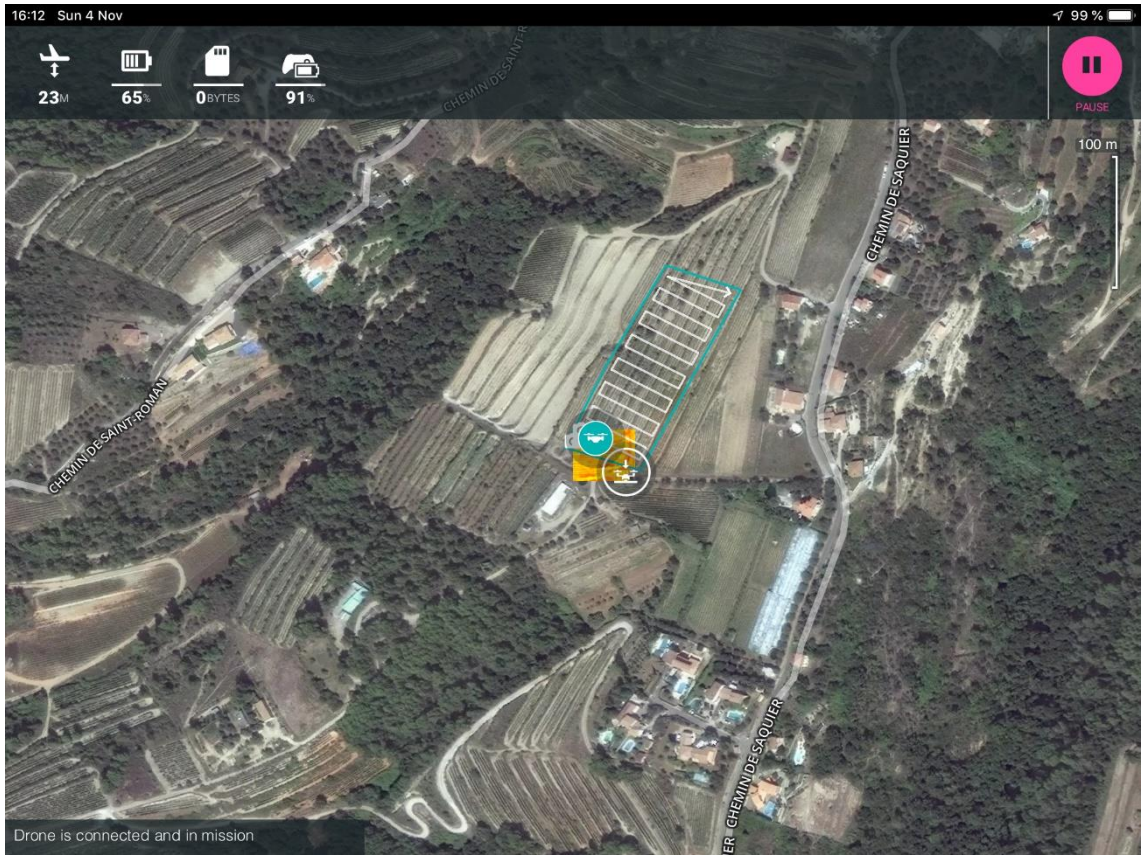
All Checklist items are green, **Parrot Bluegrass** is ready to take off. Tap "TAKEOFF" to proceed.

Tap "START" on the next screen to launch mapping mission.



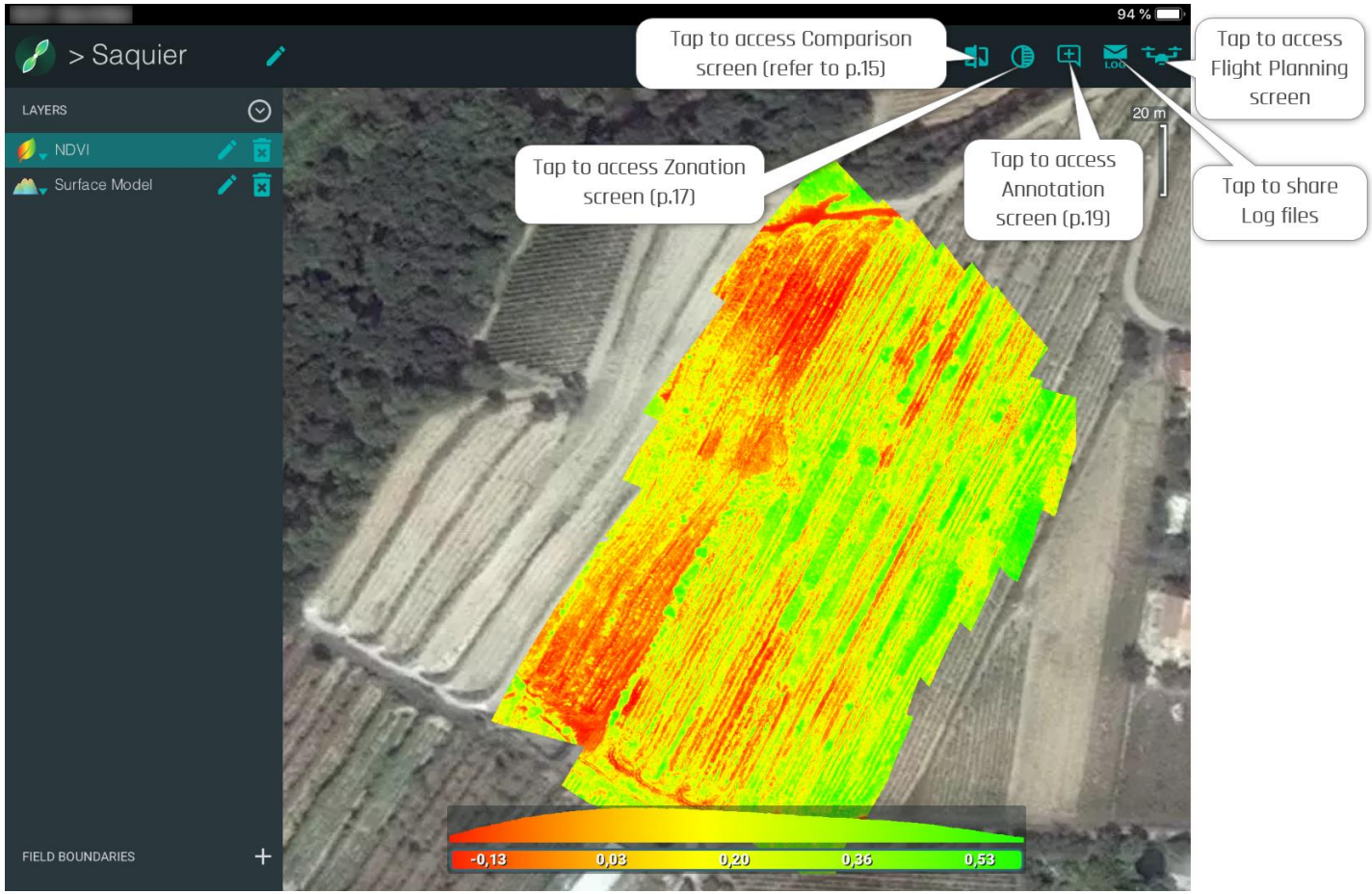
Real-Time Mapping (RTM)

On the following screen capture, **Parrot Bluegrass** is flying its mission as planned and **ParrotFields** is generating NDVI data in real time.



To take manual control back at any time during the mission, activate any Parrot Skycontroller 2 command.

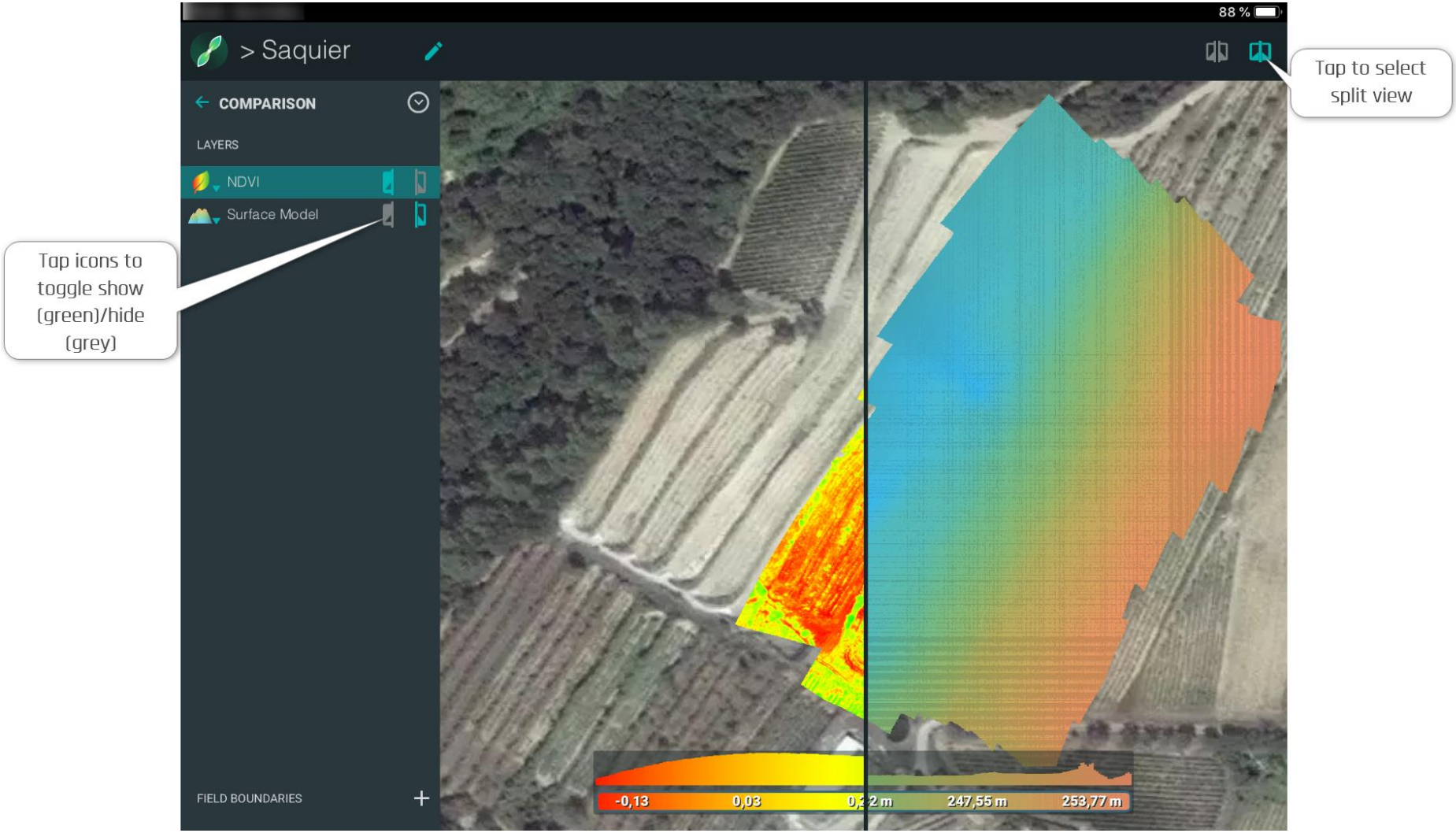
Flight and mapping are complete. Refer to the screen capture for information about additionnal functions.



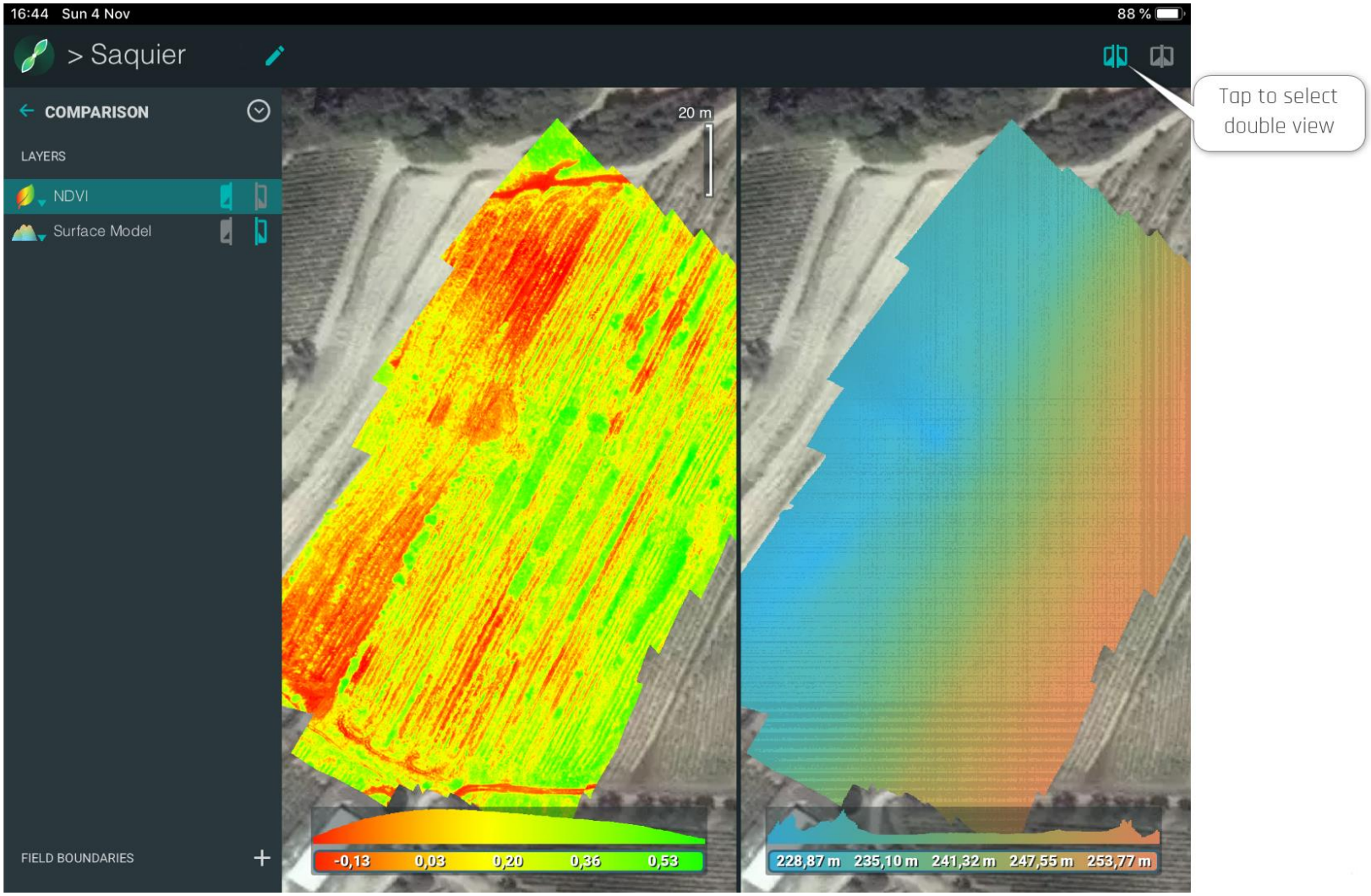
At the end of the Real-Time Mapping mission, you can further analyze the NDVI map and the surface model to identify problem areas.

Comparison screen

Split view

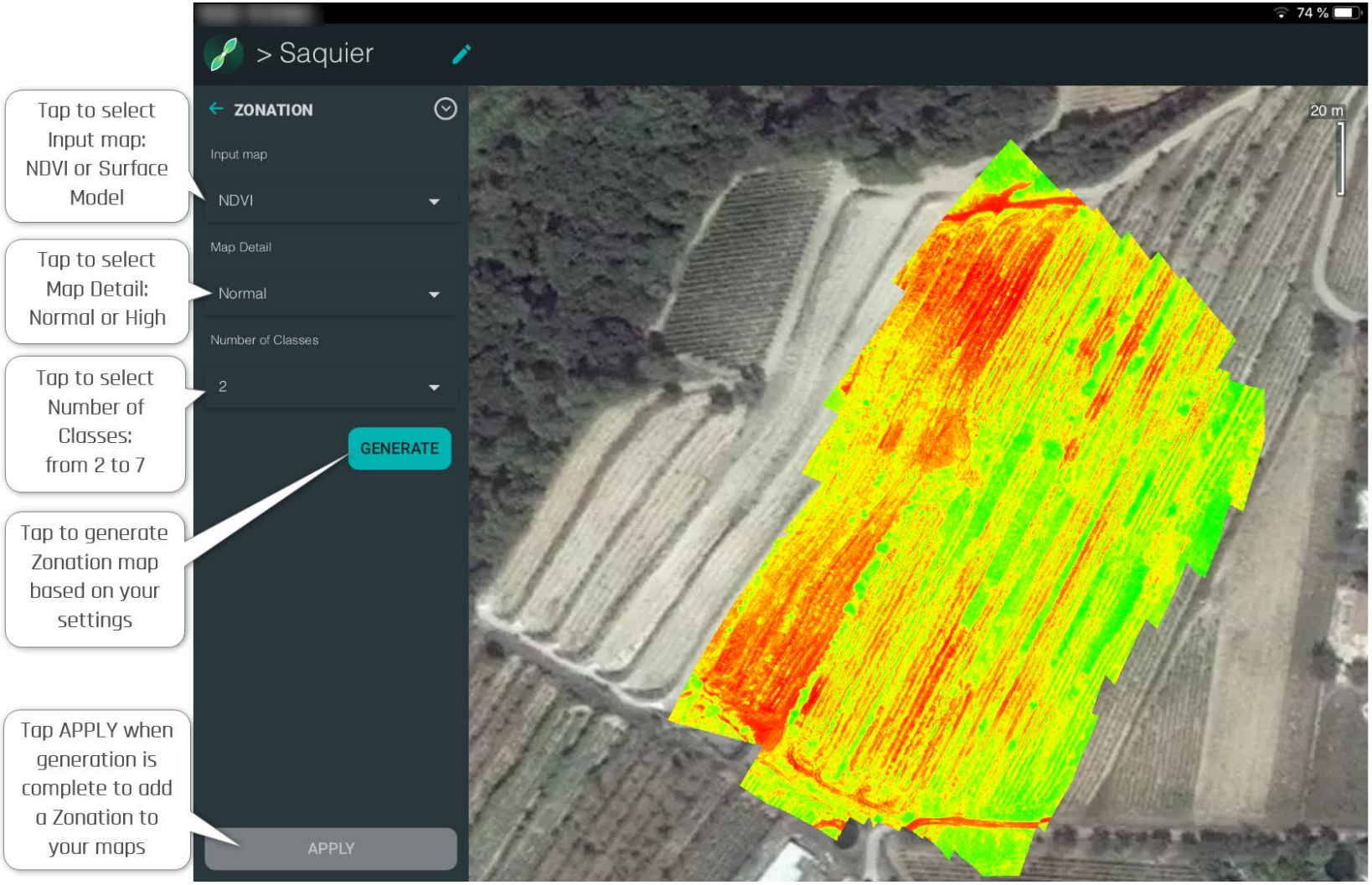


Double view


16:44 Sun 4 Nov
88 %
> Saquier
COMPARISON
LAYERS
NDVI
Surface Model
FIELD BOUNDARIES
20 m
-0,13 0,03 0,20 0,36 0,53
228,87 m 235,10 m 241,32 m 247,55 m 253,77 m
Tap to select double view

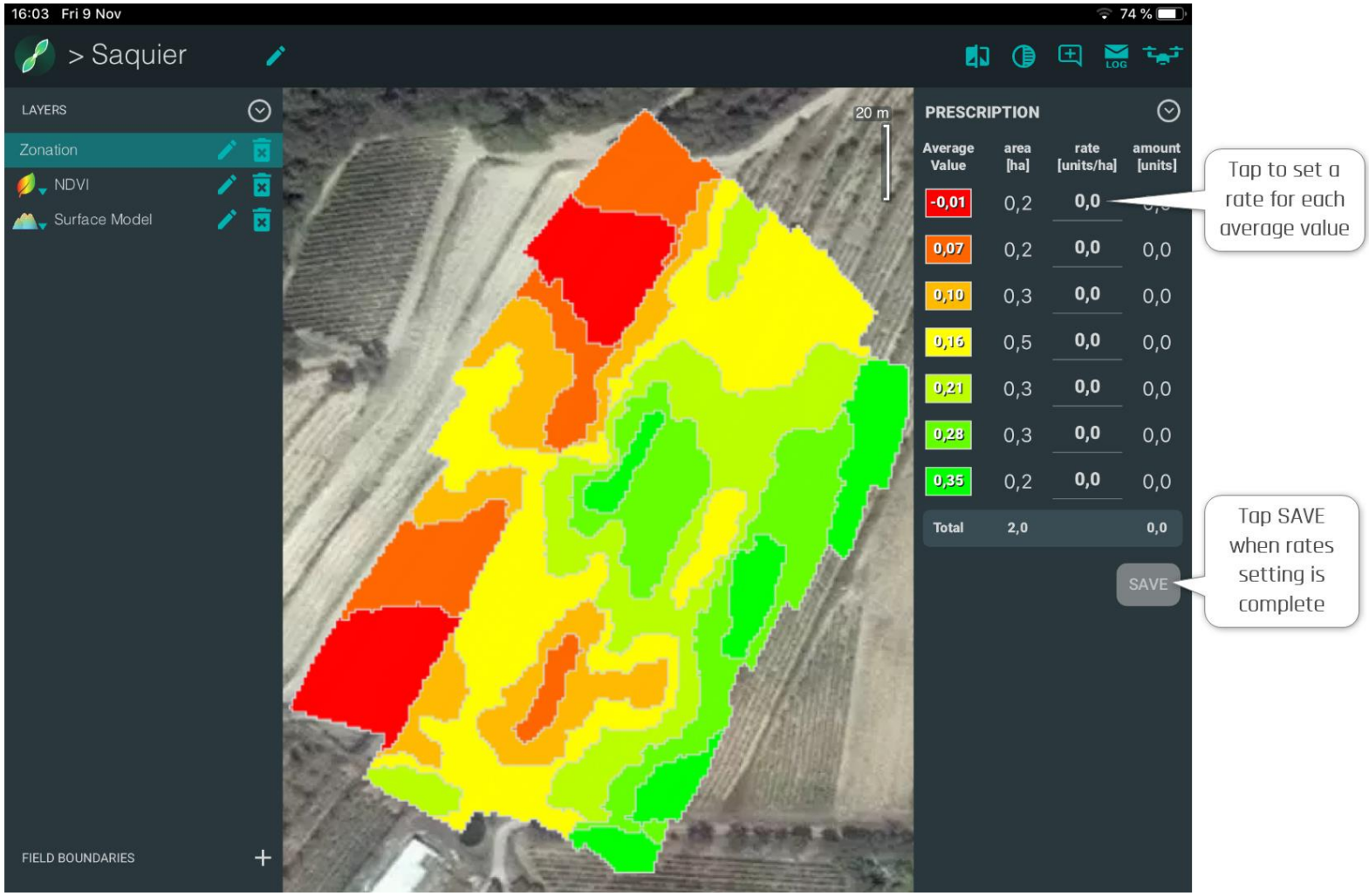
ZONATION AND PRESCRIPTION SCREENS

Zonation Screen



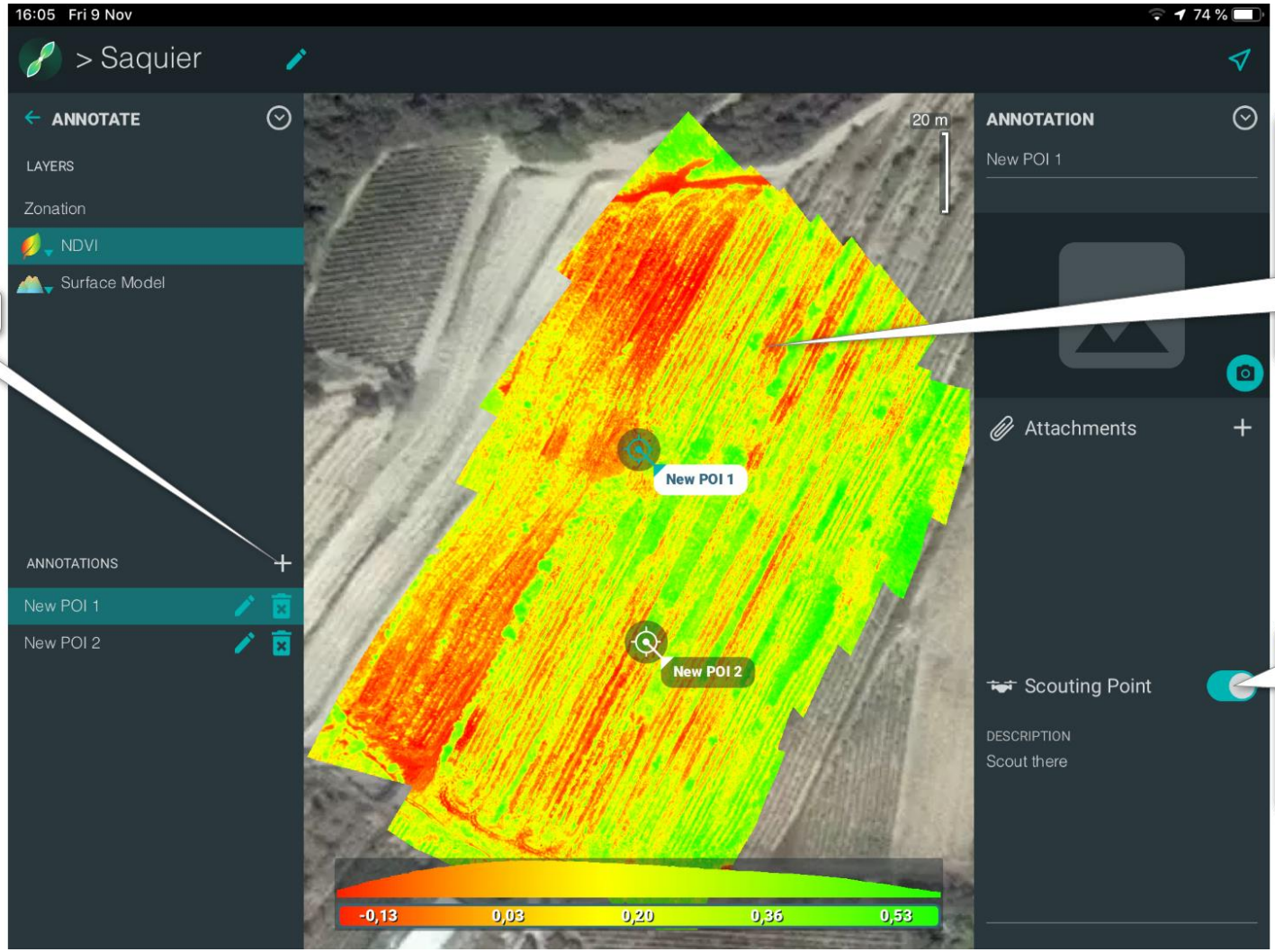
Prescription Screen

Zonation has been generated, applied and added to Layers. Refer to the following screen capture for additional information.



ANNOTATION SCREEN

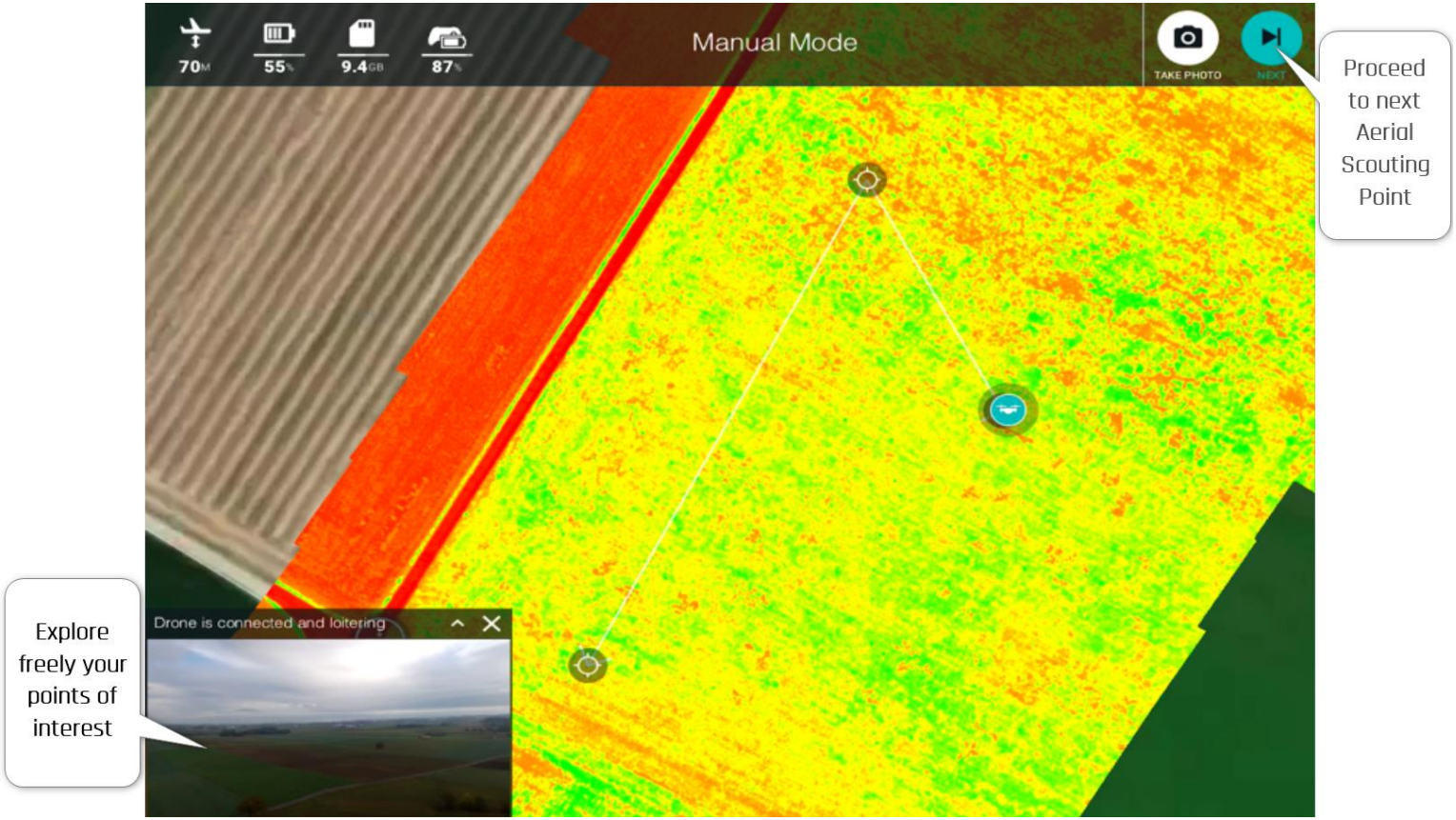
Adding an annotation



Aerial Scouting

When annotations have been turned into Aerial Scouting Points (ASP), access the "Flight Planning" screen again. To start an Aerial Scouting flight, tap "Aerial Scouting Path".

The drone flies automatically from one ASP to another and gives you manual control over each ASP: you can exploit the live camera feed to explore the area, to take pictures and to record videos.



Ground Scouting

After each Aerial Scouting mission, you can complement your aerial data with ground-truthing data, by adding GPS-tagged photos taken directly from the ground, with your device.