

# Parrot®



USER GUIDE v1.0

## TABLE OF CONTENTS

TABLE OF CONTENTS .....	2
USING THIS GUIDE.....	4
PREREQUISITES .....	4
LOGGING IN .....	5
HOMEPAGE .....	7
CREATING A NEW PROJECT .....	8
<b>New Project</b> .....	9
<b>Plan Flight</b> .....	9
CAPTURE PATH SCREEN.....	10
MISSION SUMMARY SCREEN .....	12
PRE-FLIGHT CHECKLIST .....	13

REAL-TIME MAPPING (RTM).....	14
COMPARISON SCREEN .....	16
<b>Split view</b> .....	16
<b>Double view</b> .....	17
ZONATION AND PRESCRIPTION SCREEN.....	18
ANNOTATION SCREEN .....	20
AERIAL SCOUTING .....	21
GROUND SCOUTING .....	22

## 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).

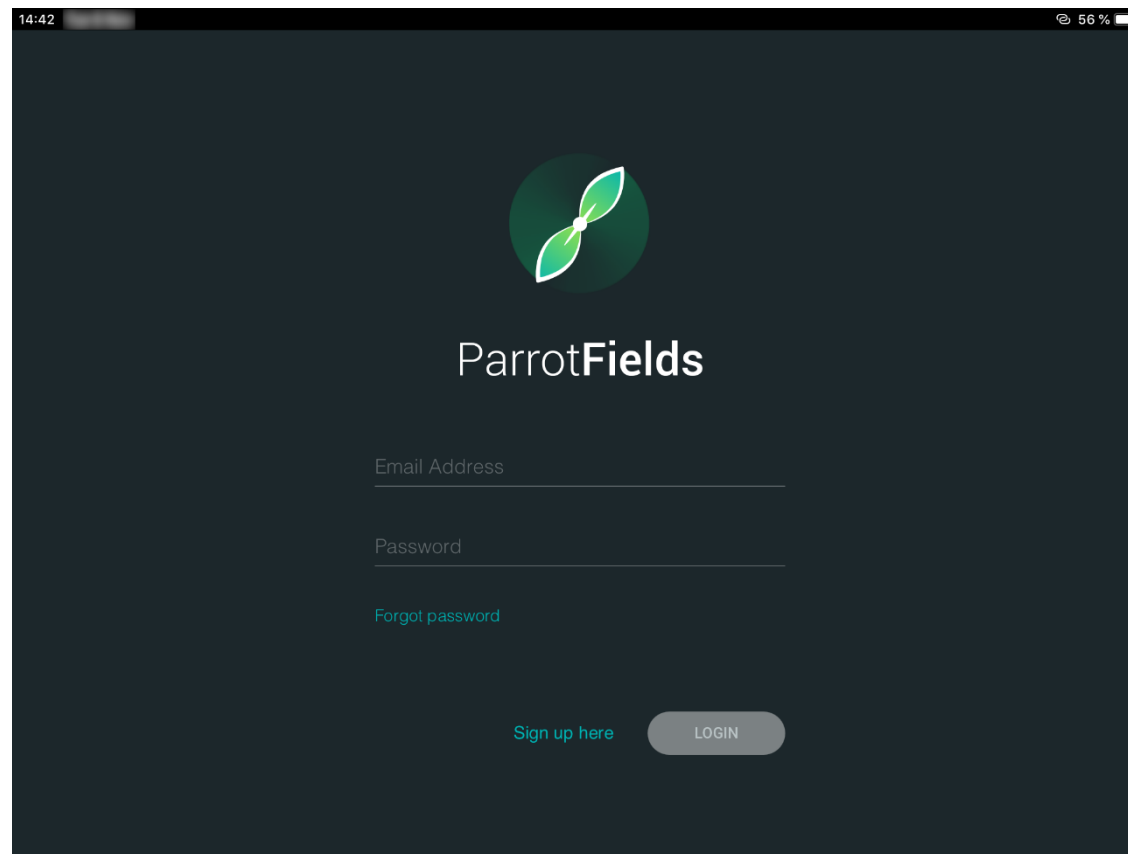
## PREREQUISITES

**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:

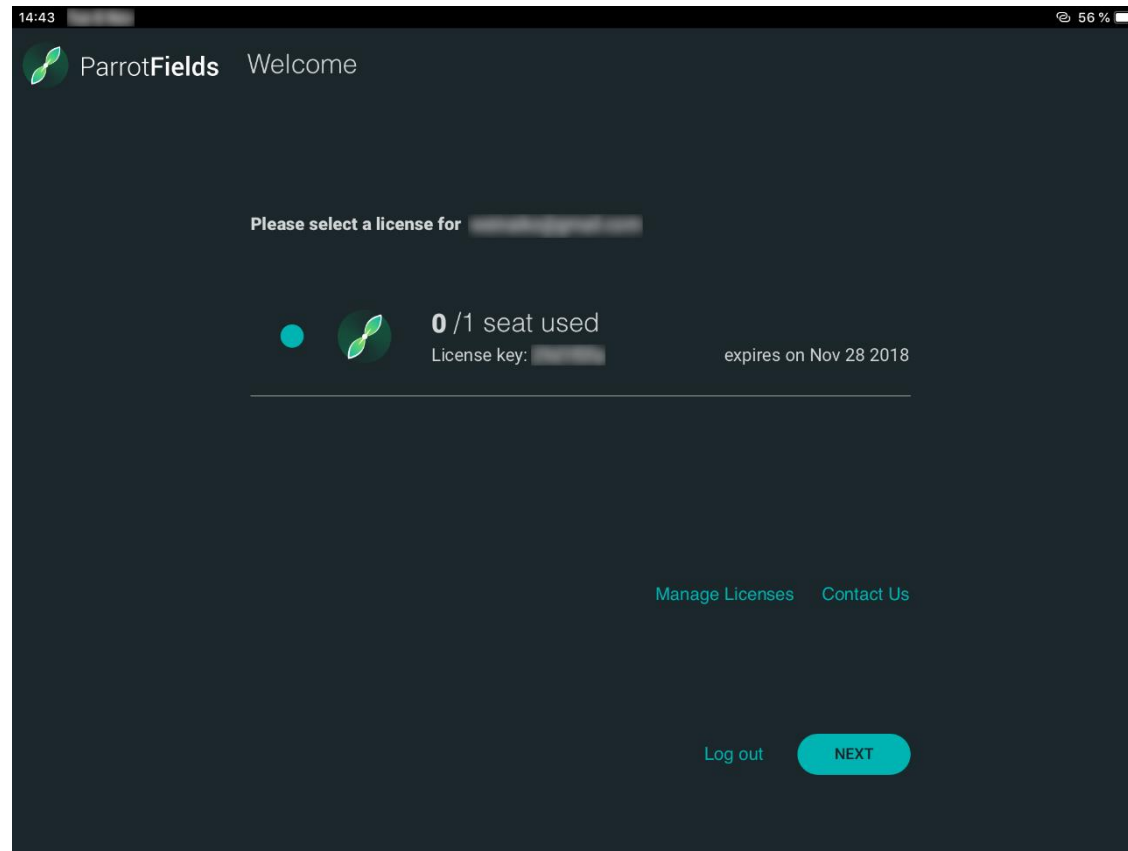
- created an account on **my.parrot-business.com**;
- downloaded the **ParrotFields** app and the **Pix4Dfields** desktop solution, using your **Parrot Bluegrass Fields**' flyer invitation key;
- installed the **ParrotFields** app on your smart device;
- updated your **Parrot Bluegrass** with its most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

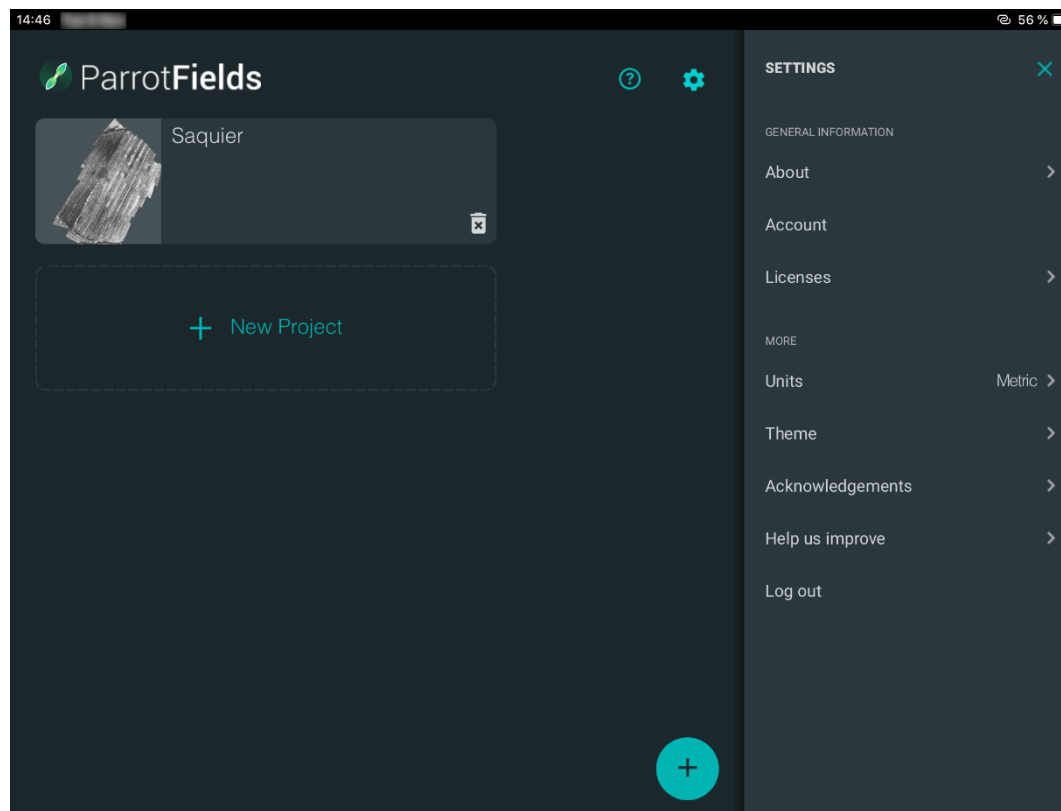


## HOMEPAGE

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).

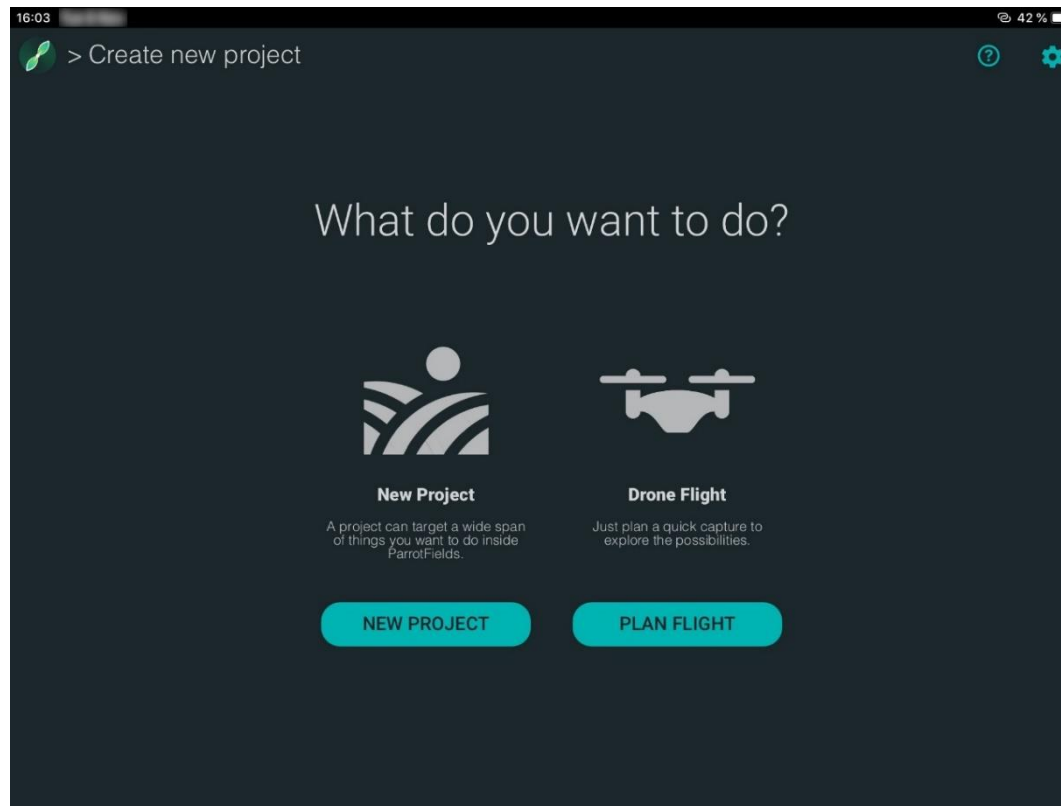
Tap "New Project" to start.



## 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.

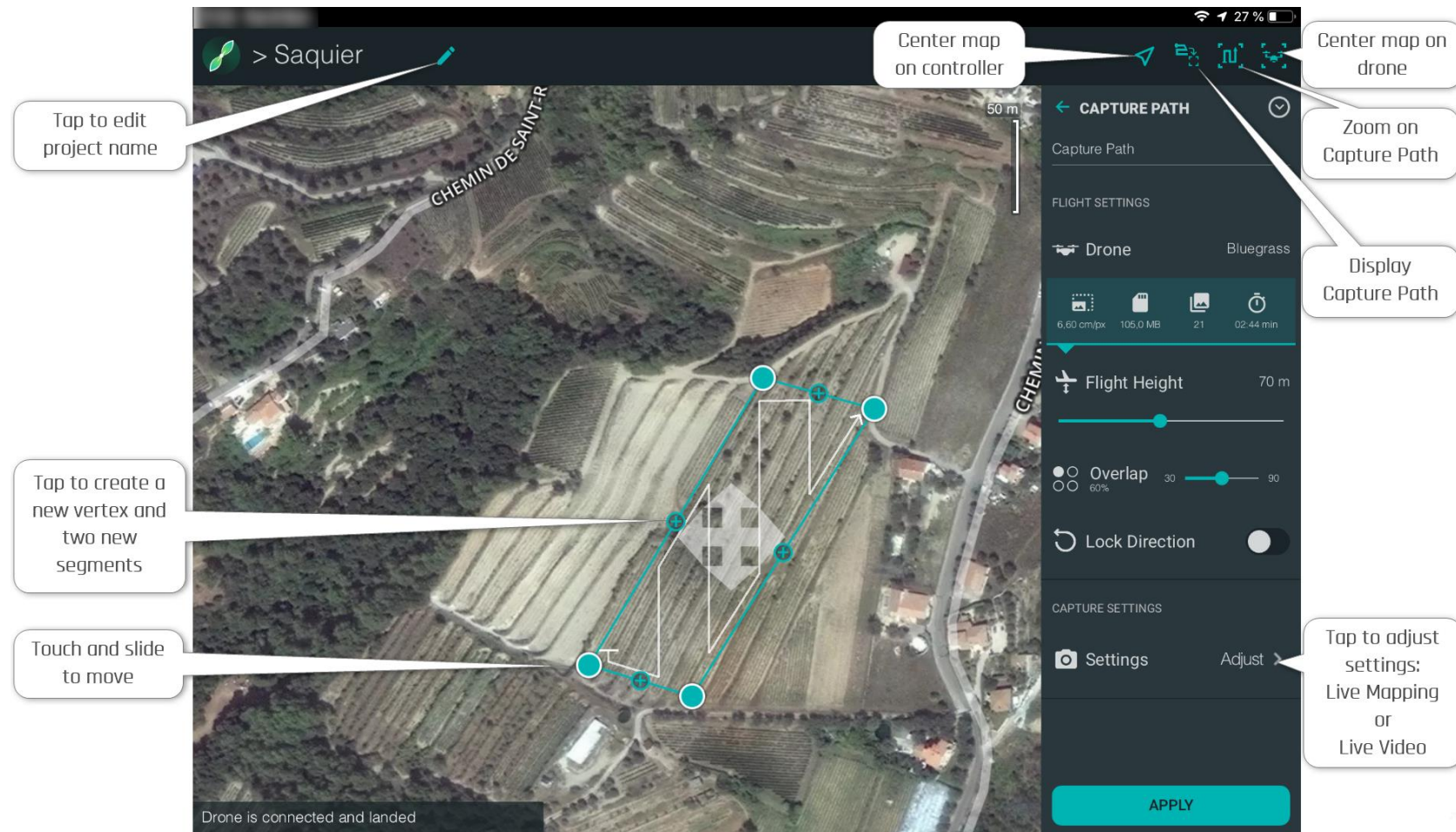
## Plan Flight

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.



The screenshot shows the ParrotFields app interface. The main map displays a field with a planned flight path (a series of connected points and lines) and a 50m scale bar. The path is labeled 'CHEMIN DE SAINT-R'. The top bar shows '> Saquier' and a close icon. The right sidebar contains the 'CAPTURE PATH' settings, including 'Flight Settings' (Drone, Bluegrass, 3,30 cm/px, 740,0 MB, 148, 07:57 min) and 'Capture Settings' (Settings, Adjust >). A large 'APPLY' button is at the bottom right. A status bar at the bottom left says 'Drone is connected and landed'.

Tap to close project and return to Homepage

Tap to edit name of Capture Path

Resolution, memory use, number of pictures and flight time vary, based on your Flight Height and Overlap settings.

Slide to adjust Flight Height

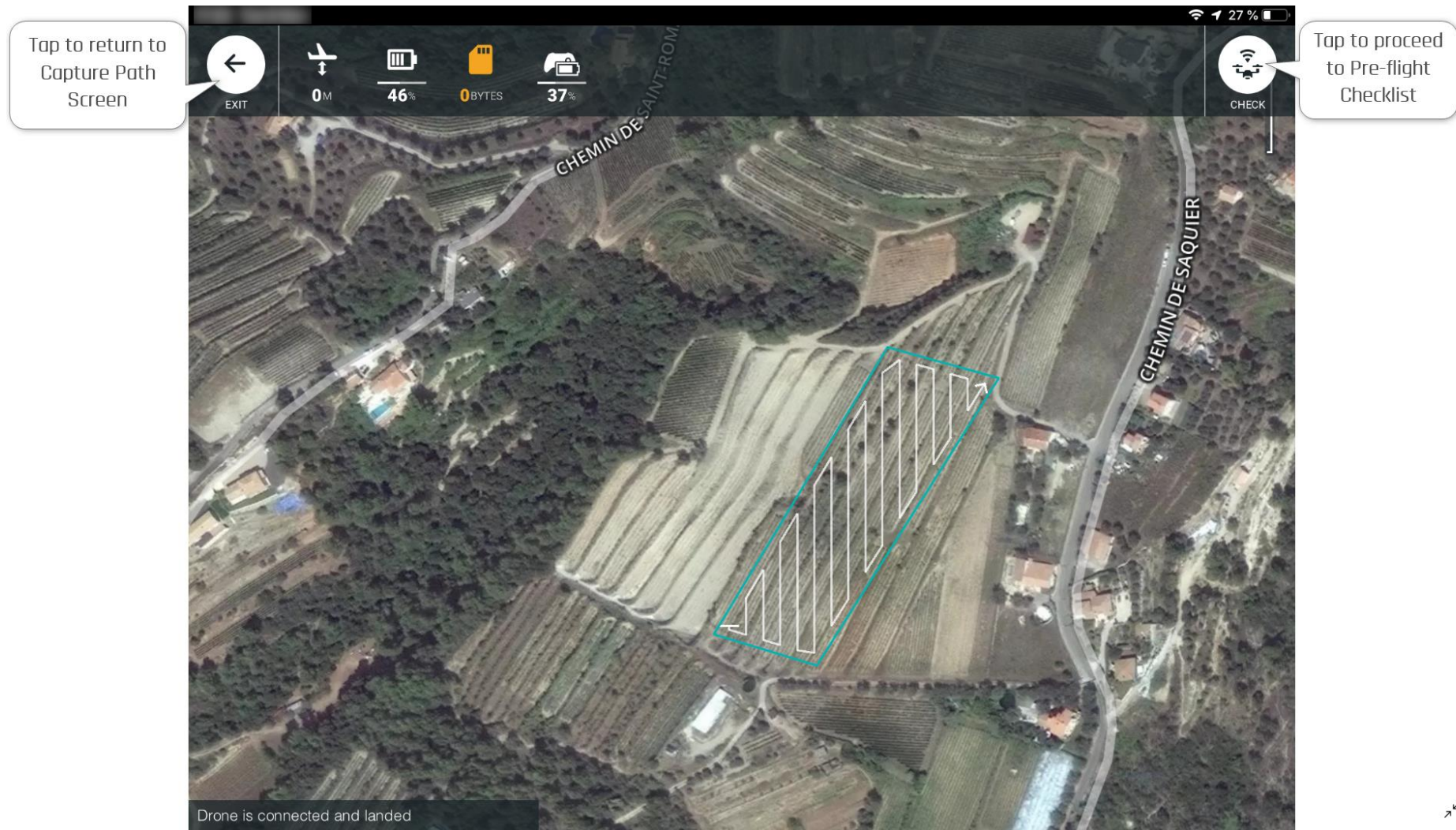
Slide to adjust Overlap

Tap to lock drone's Direction

Tap to proceed to mission summary



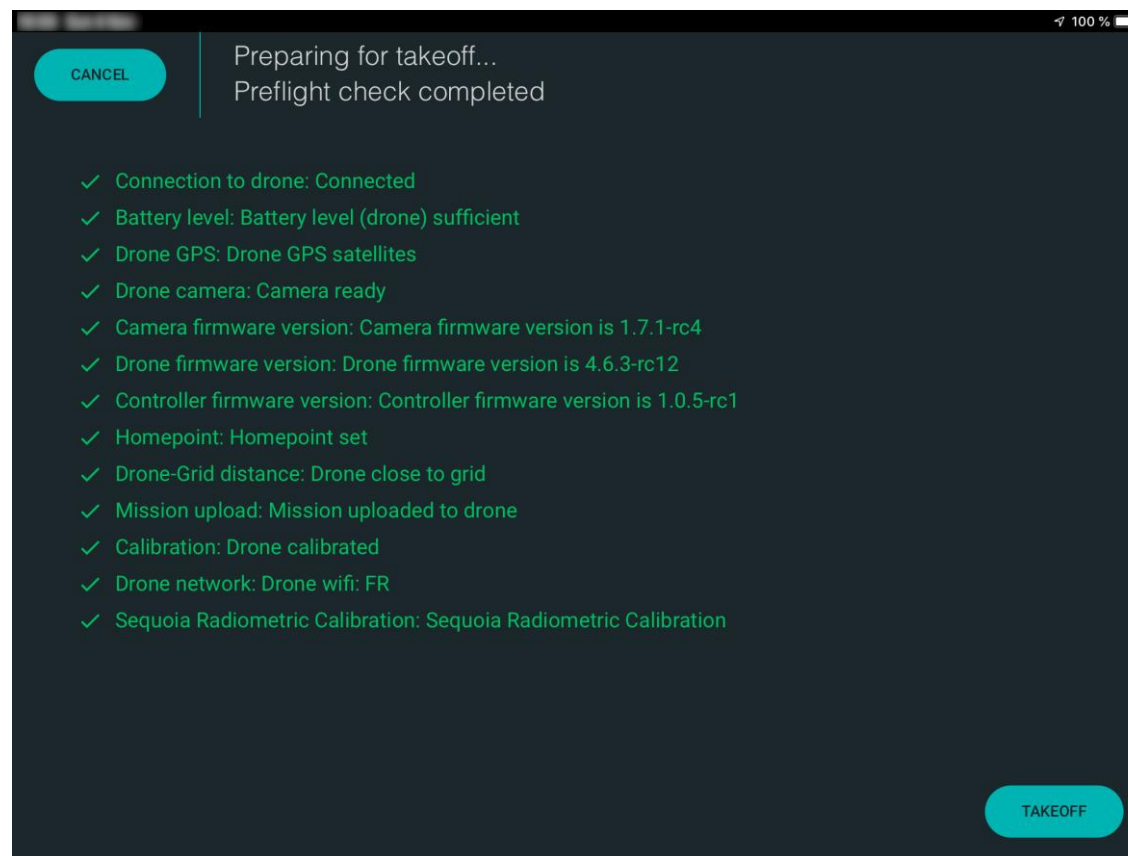
## MISSION SUMMARY SCREEN



## PRE-FLIGHT CHECKLIST

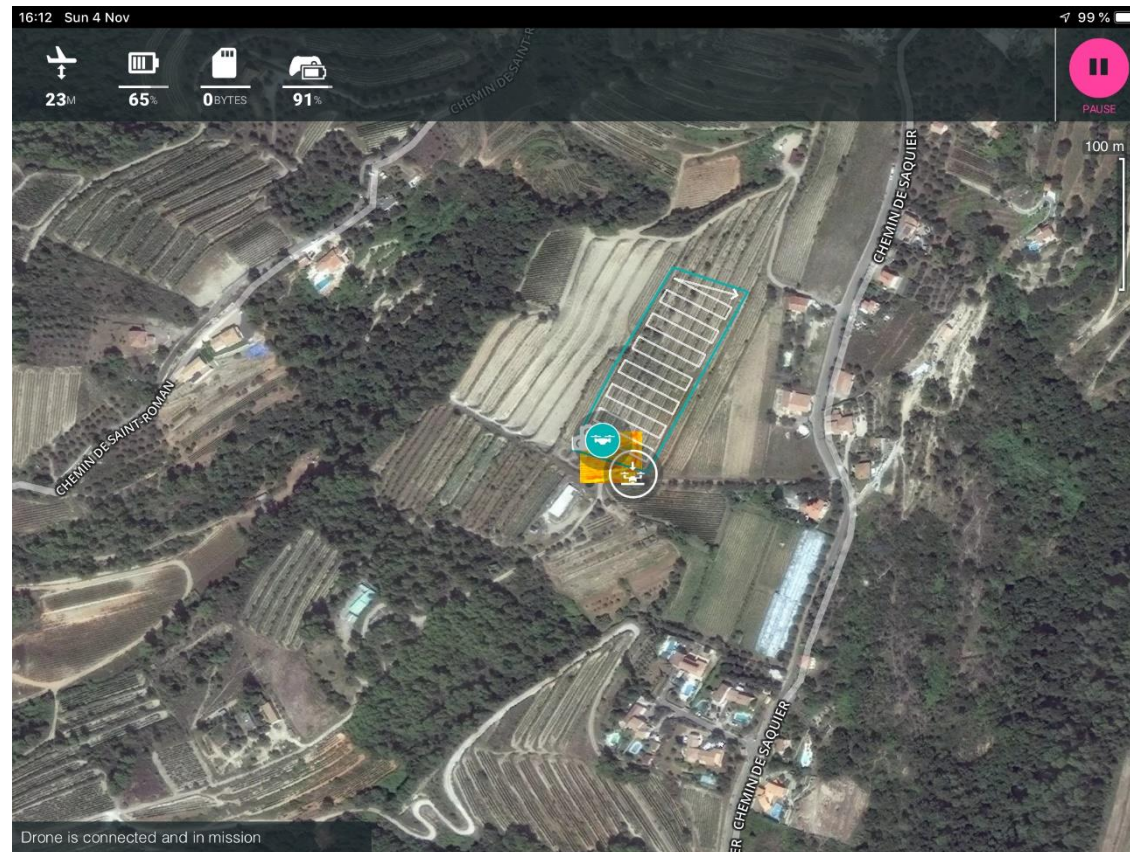
All Checklist items are green, **Parrot Bluegrass** is ready to take off. Tap "TAKEOFF" to proceed.

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



## REAL-TIME MAPPING (RTM)

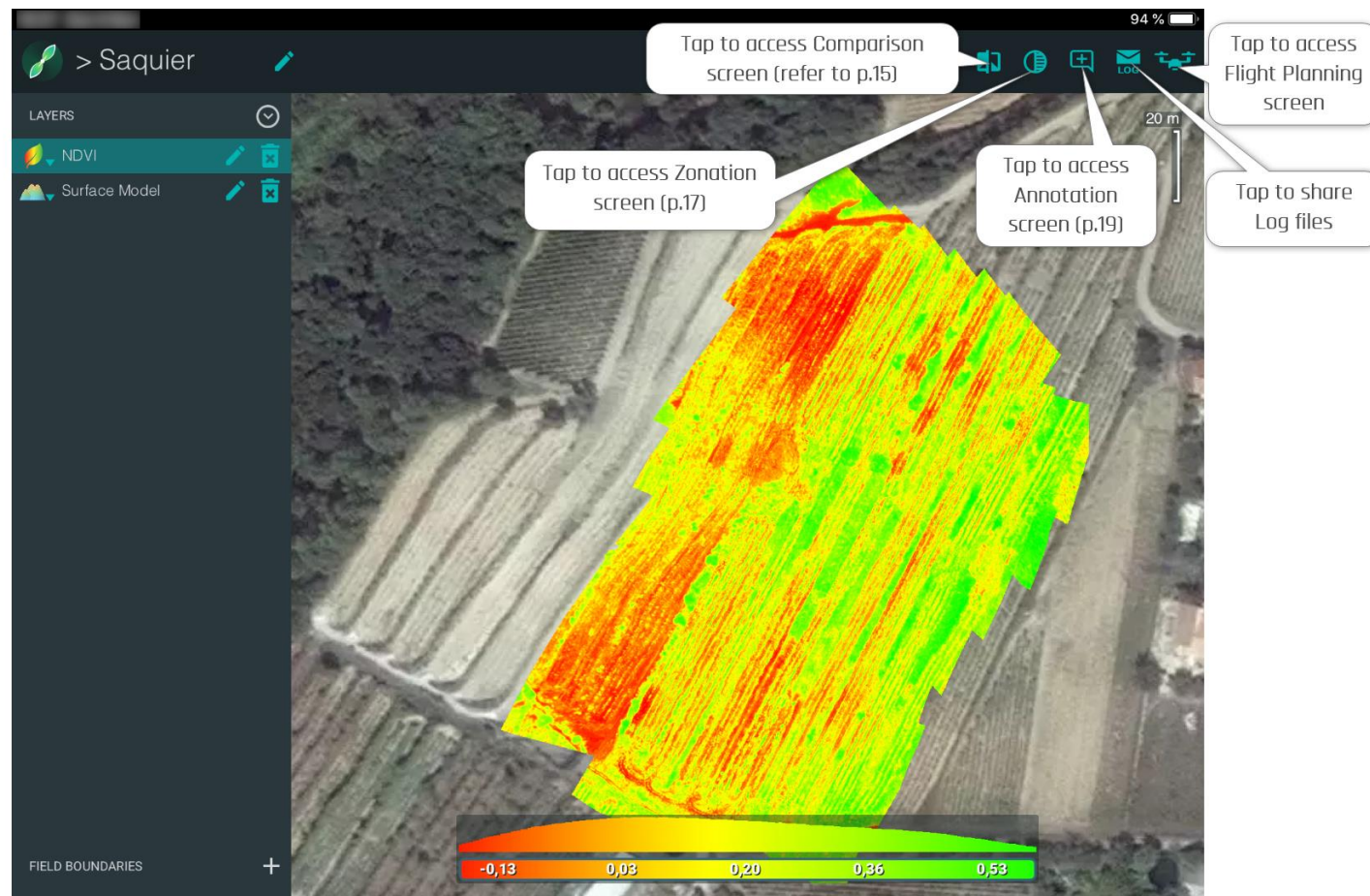
On the following screen capture, **Parrot Bluegrass** is flying its mission as planned and **ParrotFields** is generating NDVI data in real time.



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



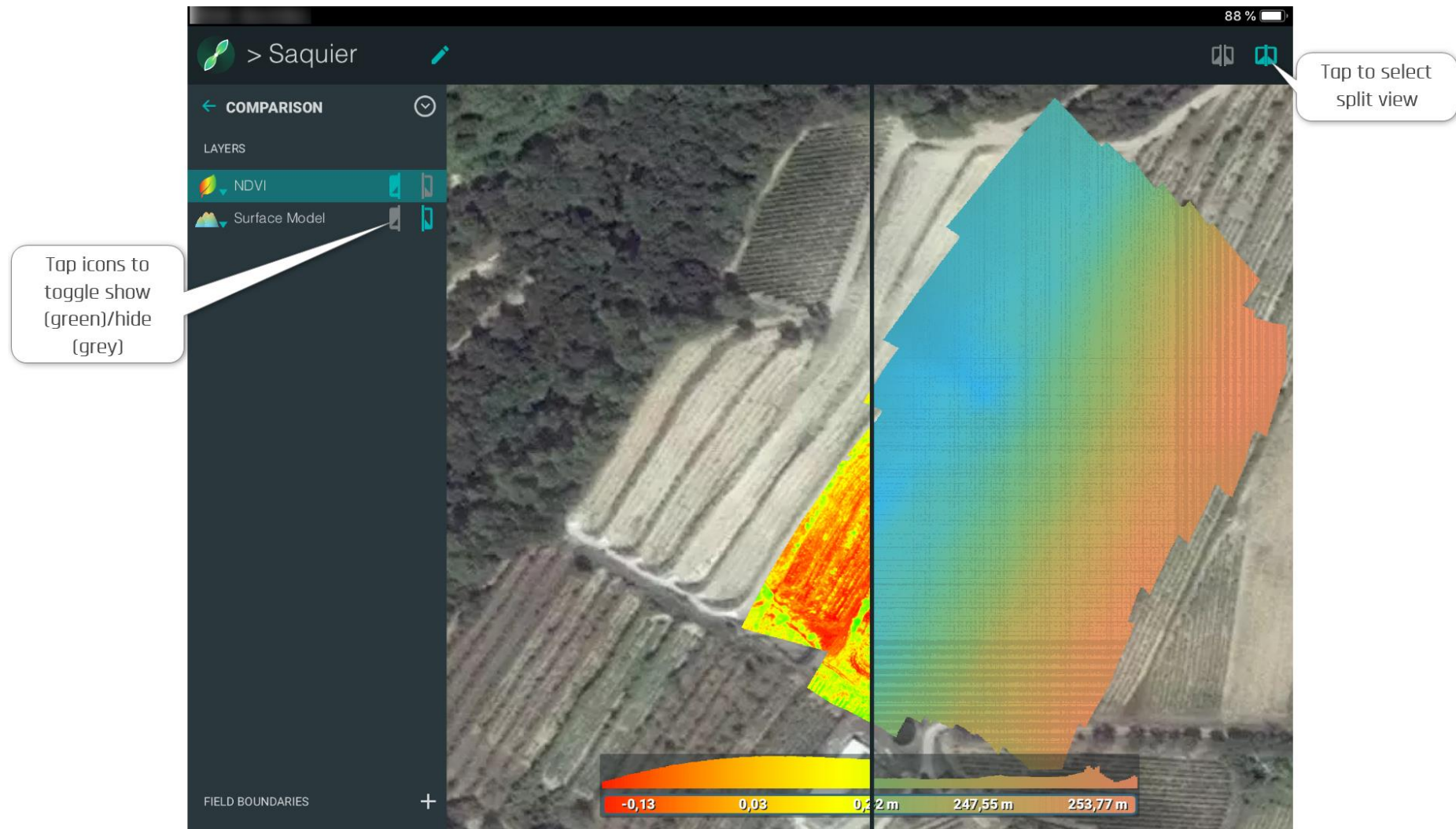
Flight and mapping are complete. Refer to the screen capture for information about additional functions.



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

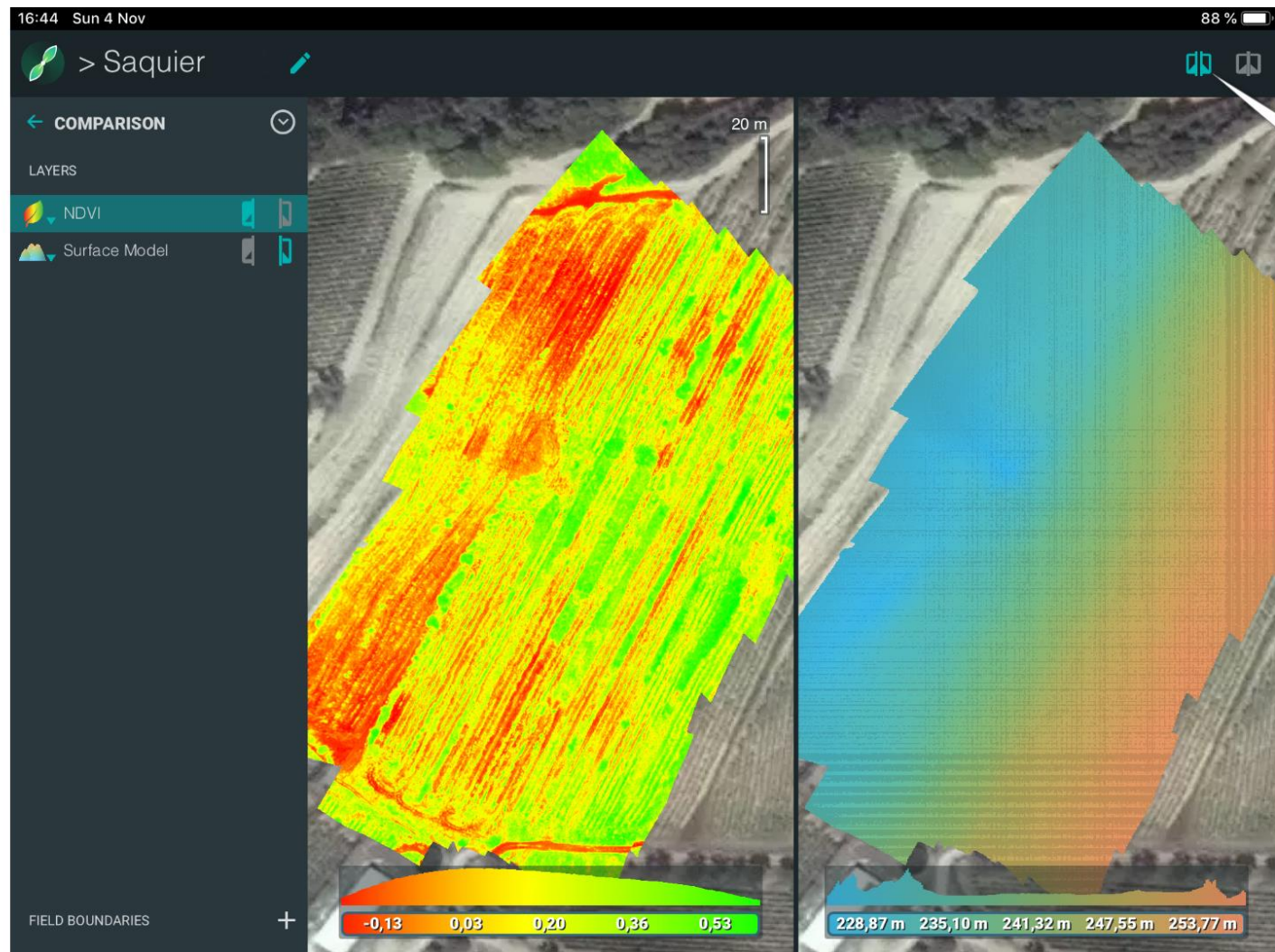
## COMPARISON SCREEN

### Split view



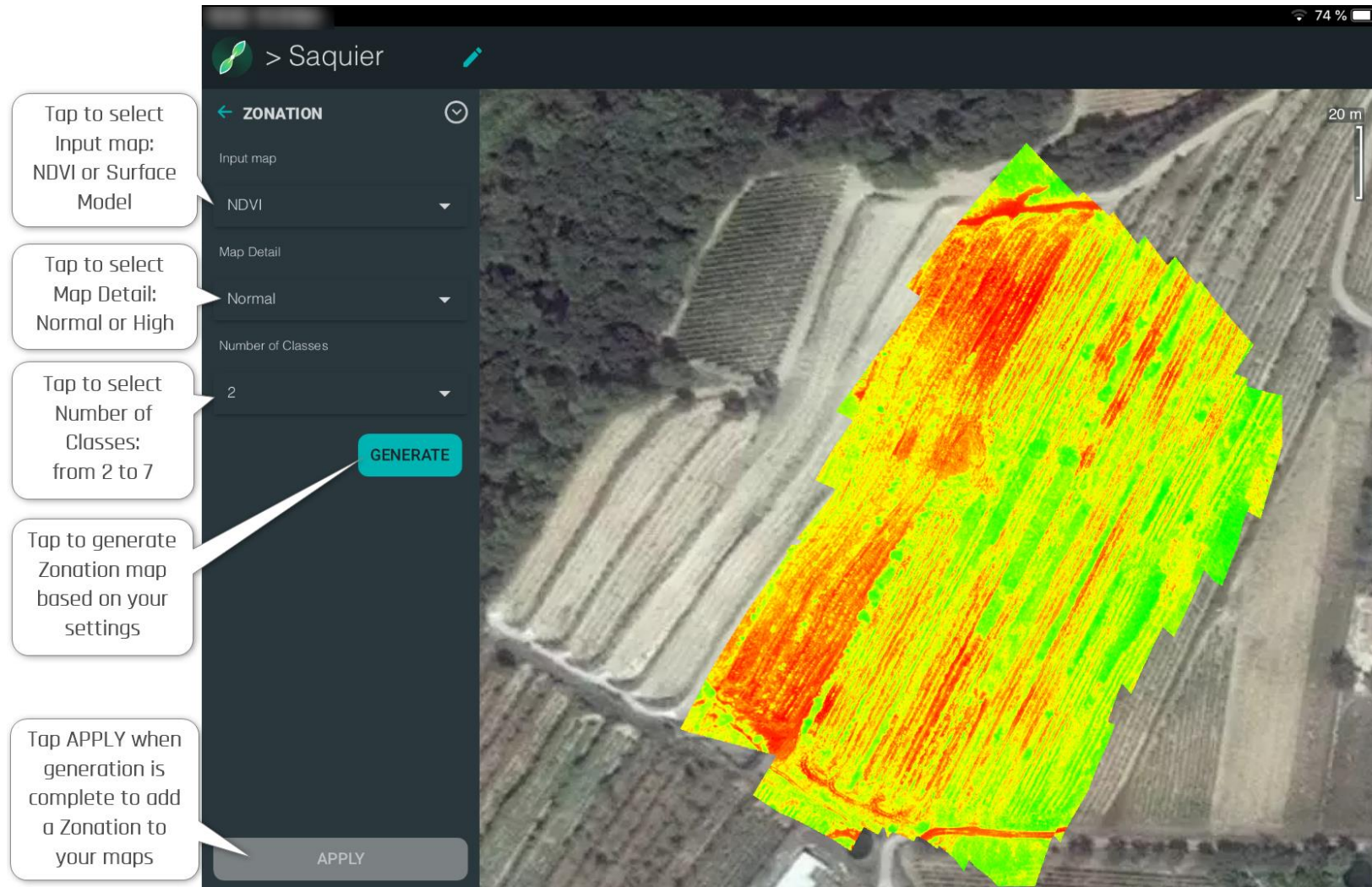


## Double view



## 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.



The screenshot shows the ParrotFields Prescription Screen. The top status bar displays the time (16:03), date (Fri 9 Nov), and battery level (74%). The main interface is divided into three sections: a left sidebar, a central map, and a right panel.

**Left Sidebar (LAYERS):** Contains a list of layers. The 'Zonation' layer is selected and highlighted in teal. Below it are 'NDVI' and 'Surface Model' layers, each with edit and delete icons.

**Central Map:** Displays an aerial view of a field with various colored zones (red, orange, yellow, green) representing different prescription areas. A scale bar indicates 20 m. The text 'FIELD BOUNDARIES' is visible at the bottom left of the map area.

**Right Panel (PRESCRIPTION):** Contains a table with the following columns: Average Value, area [ha], rate [units/ha], and amount [units]. The table lists several zones with their respective values and areas. A 'Total' row at the bottom shows a total area of 2,0 ha and a total amount of 0,0 units. A 'SAVE' button is located at the bottom right of the panel.

Average Value	area [ha]	rate [units/ha]	amount [units]
-0,01	0,2	0,0	0,0
0,07	0,2	0,0	0,0
0,10	0,3	0,0	0,0
0,16	0,5	0,0	0,0
0,21	0,3	0,0	0,0
0,28	0,3	0,0	0,0
0,35	0,2	0,0	0,0
<b>Total</b>	<b>2,0</b>		<b>0,0</b>

Two callout boxes provide instructions:

- Top to set a rate for each average value (pointing to the 'rate' column).
- Tap SAVE when rates setting is complete (pointing to the 'SAVE' button).

## ANNOTATION SCREEN

Adding an annotation

1 Tap "+"

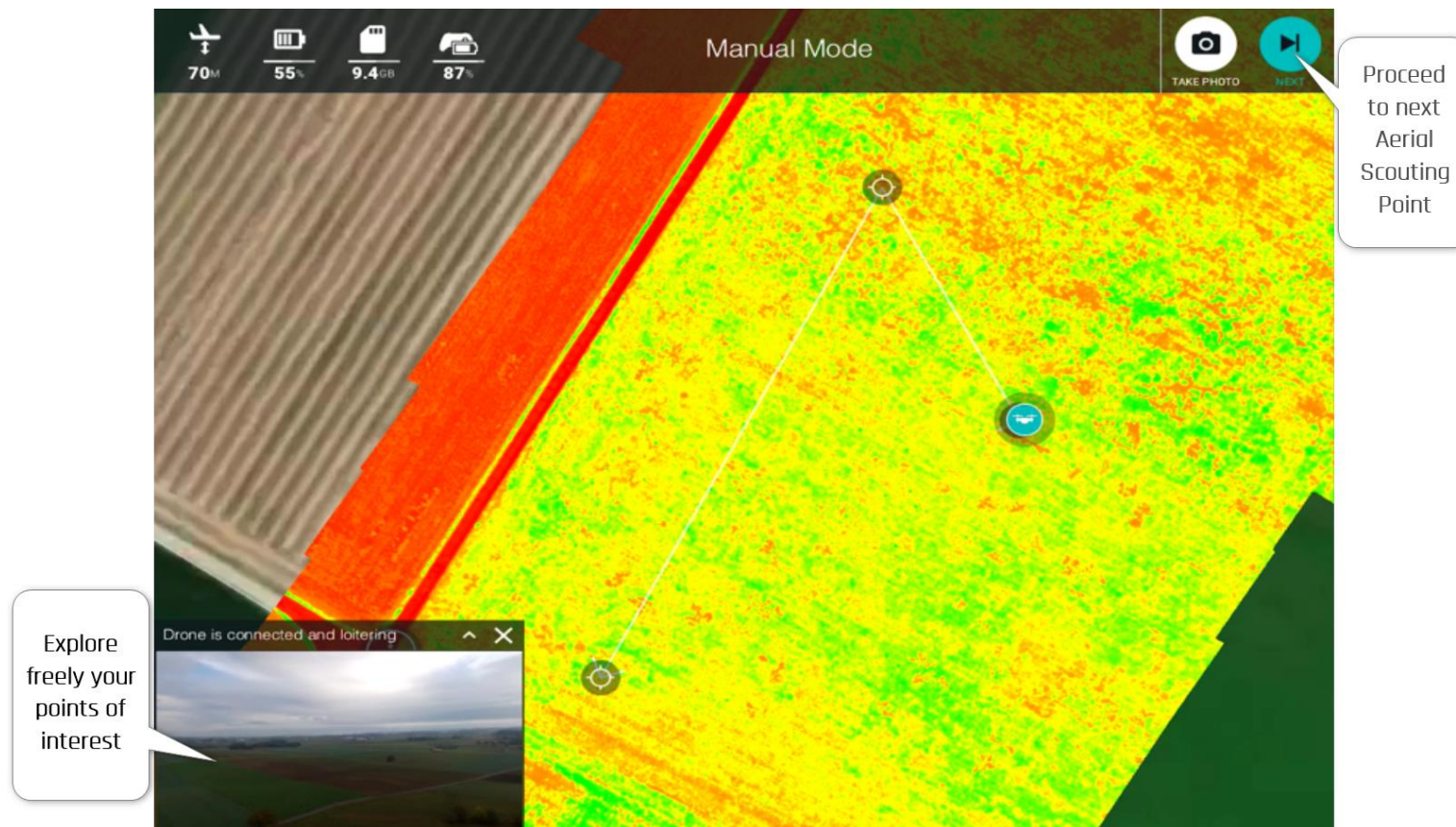
2 Tap the map location you want to annotate (then name and describe this location)

3 Activate selector to transform annotation into Scouting Point

## 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.

