Training..... By Bertrand Fontaine (AIR³ designer)

XCTrack

Menu

- Introduction
- Main actions
  - On screen-touchscreen – through buttons
- Main menu:
  - Navigation – Tracklogs – Customize – Preferences – IGC replay – Livetracking – Quit
- Advanced XCTrack training

Introduction

- ~~Opensource~~
- Xcontest = platform <-> XCTrack = App
- 2 versions:
  - Standard → Free
  - Pro: Check features details https://www.fly-air3.com/en/software/xctrack-pro-air3/
    - Perpetual licence (AIR³)
    - Monthly licence: user based
- 2 development channels
  - Standard
  - Beta (requires registration): still very stable

Introduction

- XCTrack for AIR³ = XCTrack for anyone, except :
  - Perpetual Pro licence
  - Special optimized configuration with 5 profiles
  - Specific feature for AIR³: Fanet and Flarm support
  - AIR³ XCT addon: additional features through events trigger

- Full online manual – Videos tutos – Short videos – FAQ: https://www.fly-air3.com/en/support/

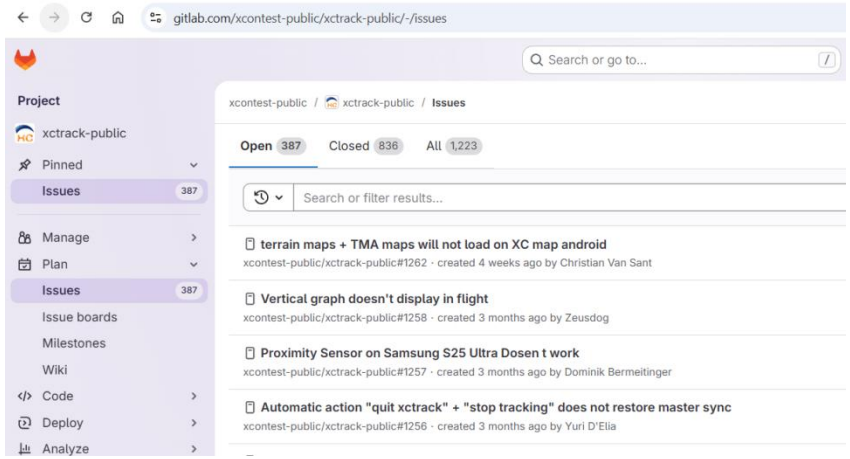
→ GOOGLE SEARCH!! Example: « XCTrack altitude statistics »

Introduction

- Want a new feature?

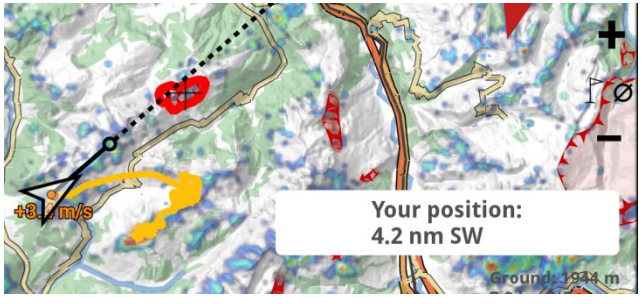
→ https://gitlab.com/xcontest-public/xctrack-public/-/issues

  - Check if already requested
  - Upvote for your favorite features!



Main actions (on screen)

- Swipe Down → Menu
- Turn left/right → Change page
- Short click - Long click (widget configuration)
- Swipe Up → Toggle map mode
  - Move the map →↓↑←
  - Zoom in (click on upper half – Zoom in button)
  - Zoom out (click on lower half - Zoom out button)
  - Long click on the map (contextual menu)
  - Get your position to a given target
    (widget configuration required)



Main actions (physical buttons)

NB: with a any phone, it is possible to add a BT remote control

- « + » Short click → Zoom in
- « - » Short click → Zoom out
- « + » Long click → Force Brightness +
- « - » Long click → Force Brightness -
- « Return » Short click → Toggle map mode
- « Return » Long click → Menu
- « F1 » Short click → Turn page left
- « F2 » Short click → Turn page right
- « F1 » Long click → Previous Waypoint
- « F2 » Long click → Next Waypoint

Main Menu

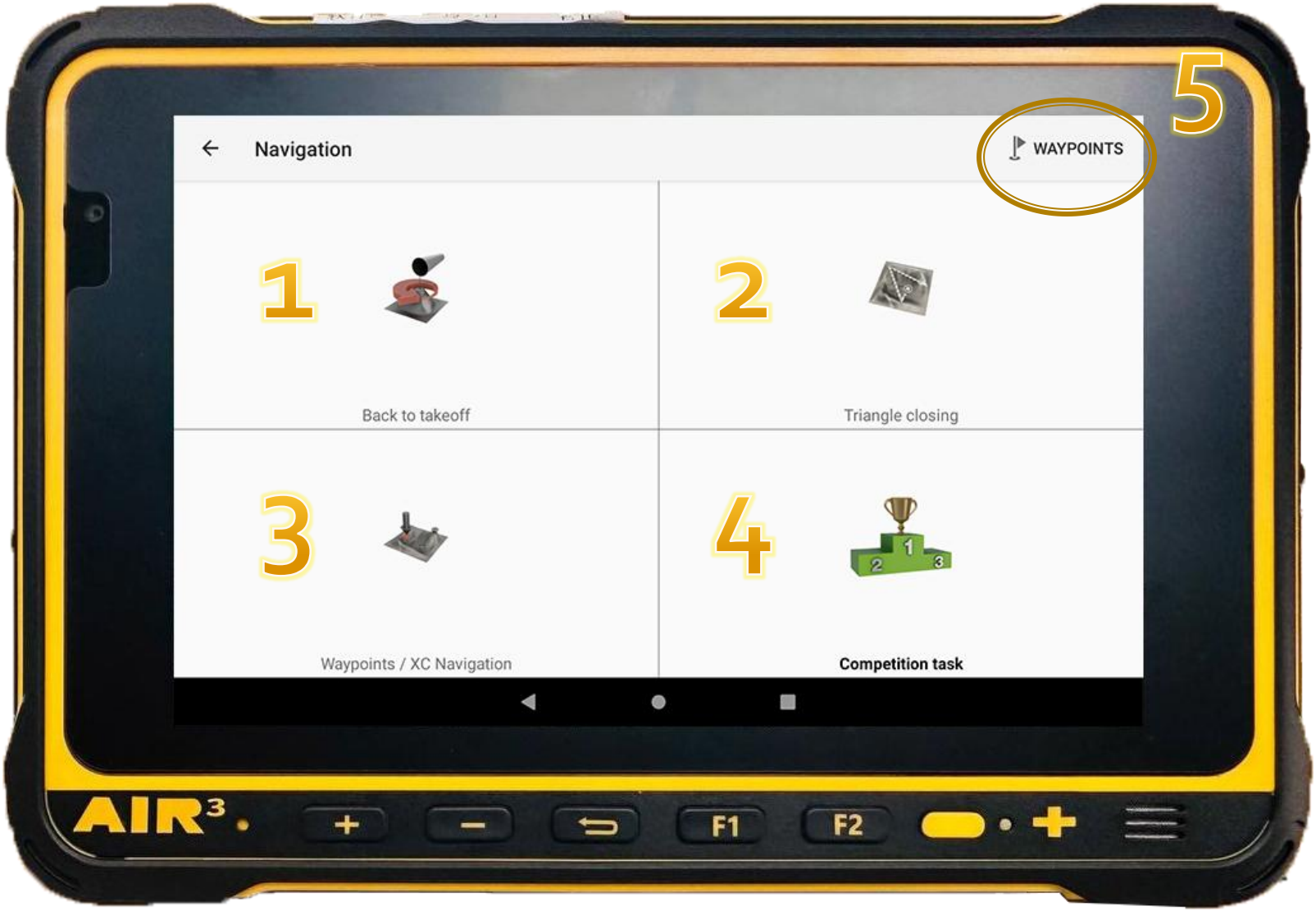
- Navigation
- Tracklog
- Customize - Widgets
- Preferences
- IGC replay*
- Livetracking*
- Quit

Tips

- Livetracking only if Livetracking activated
- IGC replay only if replaying an IGC

Navigation

Navigation


Navigation
WAYPOINTS
5
1
Back to takeoff
2
Triangle closing
3
Waypoints / XC Navigation
4
Competition task
AIR3
F1
F2

Navigation

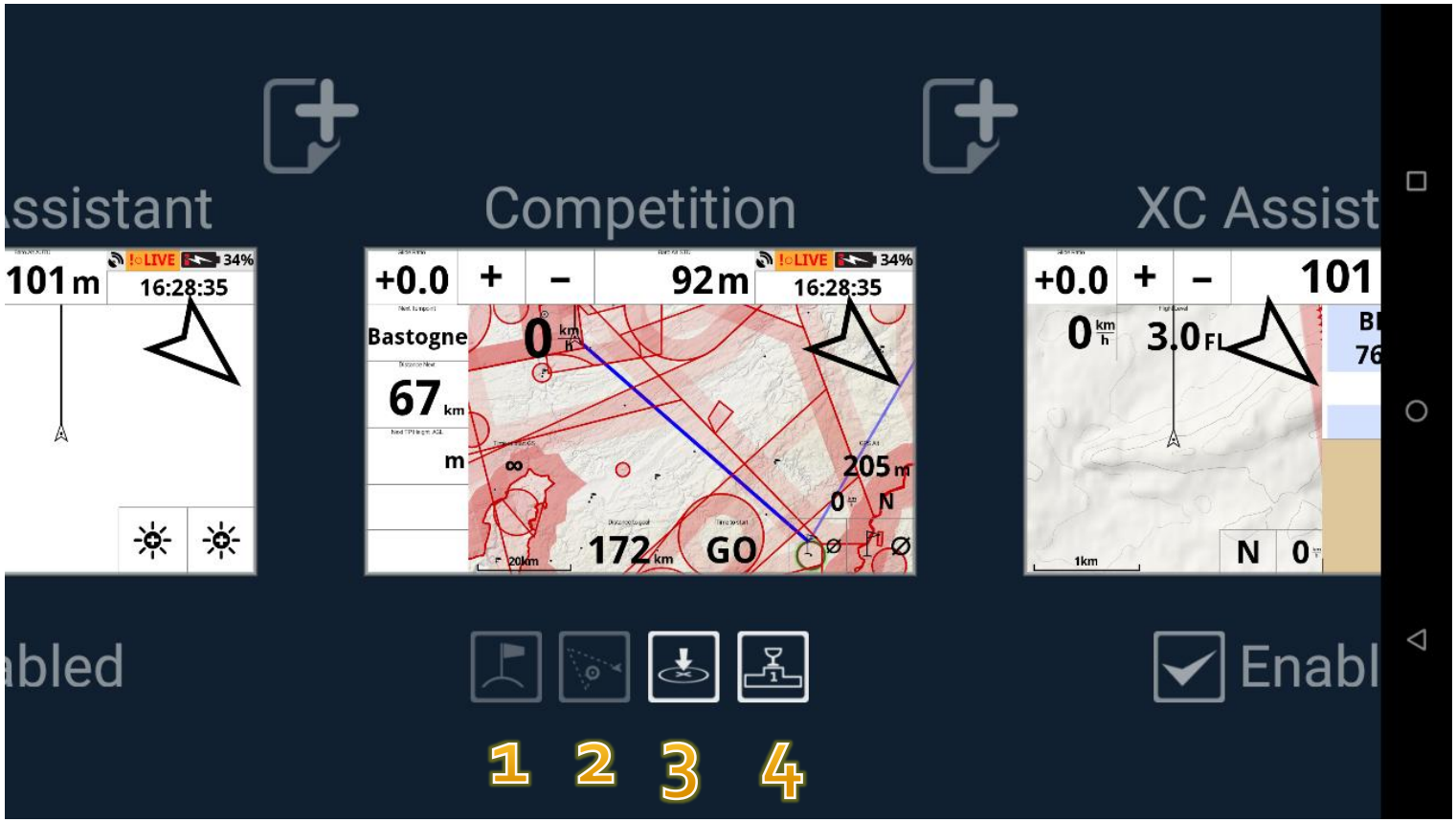
1. Back to takeoff
   → indicates the direction of the takeoff

2. Triangle closing
   → direction of the best triangle depending on your position and the flown distance

3. Waypoints/ XC navigation
   → simple way to navigate through different waypoints with manual switch between turnpoints

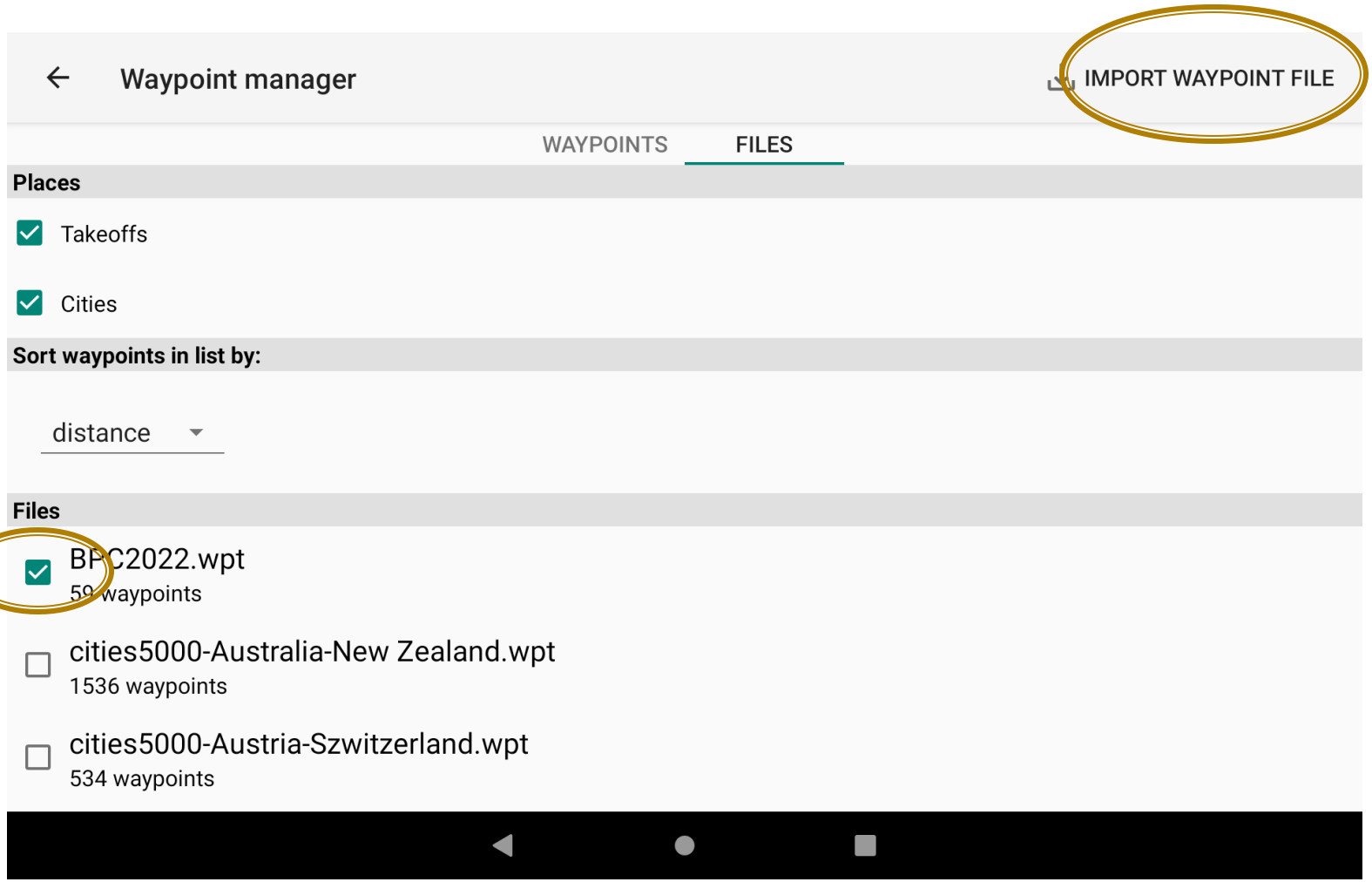
4. Competition task
   → navigate through different waypoints with automatic switch to next turnpoints once cylinder reached

Navigation → page layout



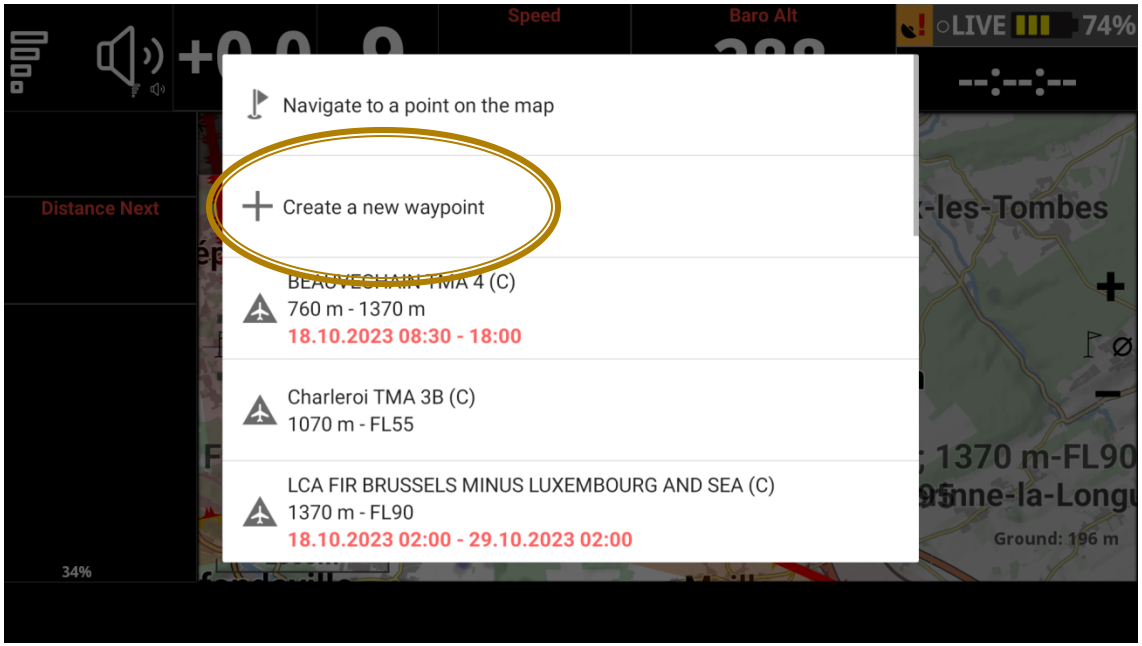
Waypoints

5


Waypoint manager
IMPORT WAYPOINT FILE
WAYPOINTS
FILES
Places
Takeoffs
Cities
Sort waypoints in list by:
distance
Files
BPC2022.wpt
59 waypoints
cities5000-Australia-New Zealand.wpt
1536 waypoints
cities5000-Austria-Szwitzerland.wpt
534 waypoints

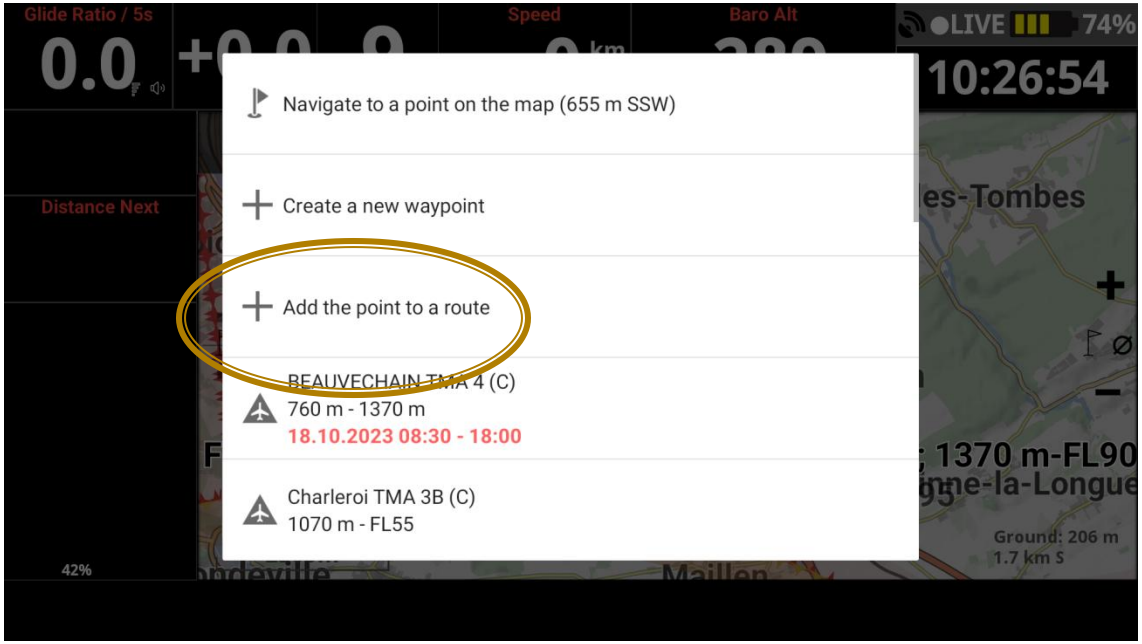
More details - How to (XCTrack)?

- Create a waypoint on the map (Toggle map mode)



More details - How to (XCTrack)?

- Create a route/task
  - From waypoints
  - Add waypoints from the map to route (toggle map mode)
  - From Friendly Air Tool! (https://mids.be/fat/fat.php), Flyxc.app

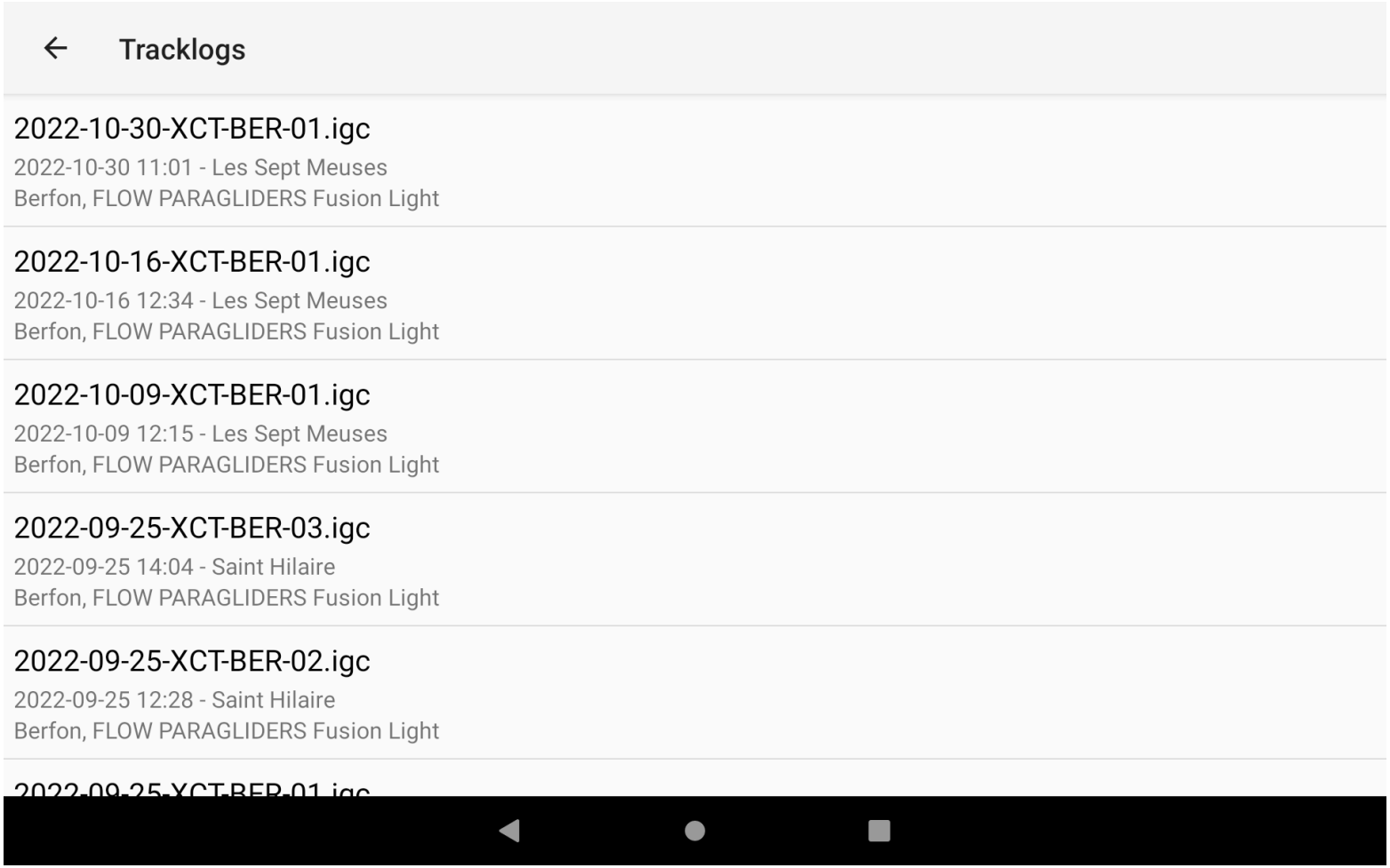


More details - How to (XCTrack)?

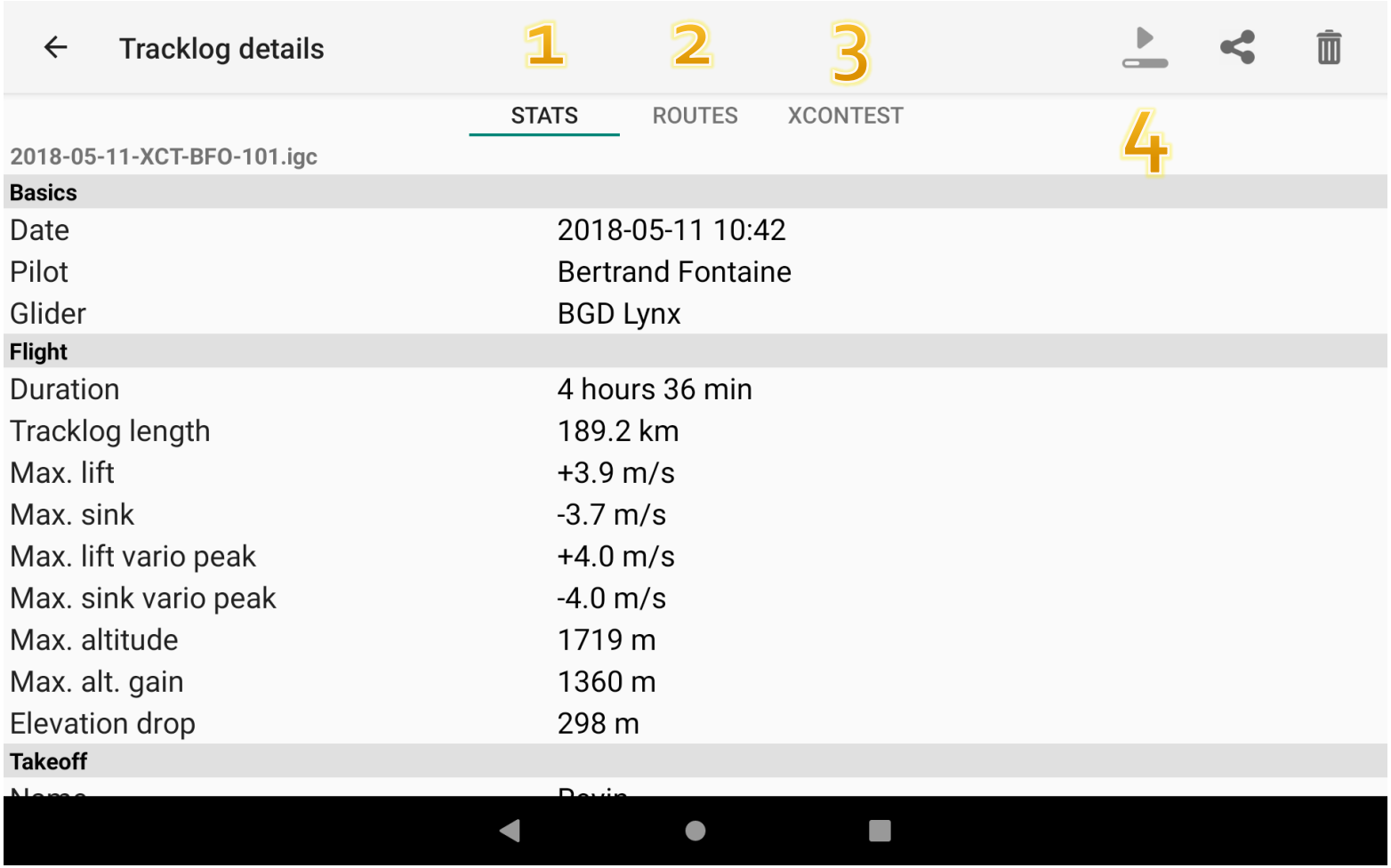
- Task/route sharing
  - QR code
  - Cloud code sharing

Tracklogs

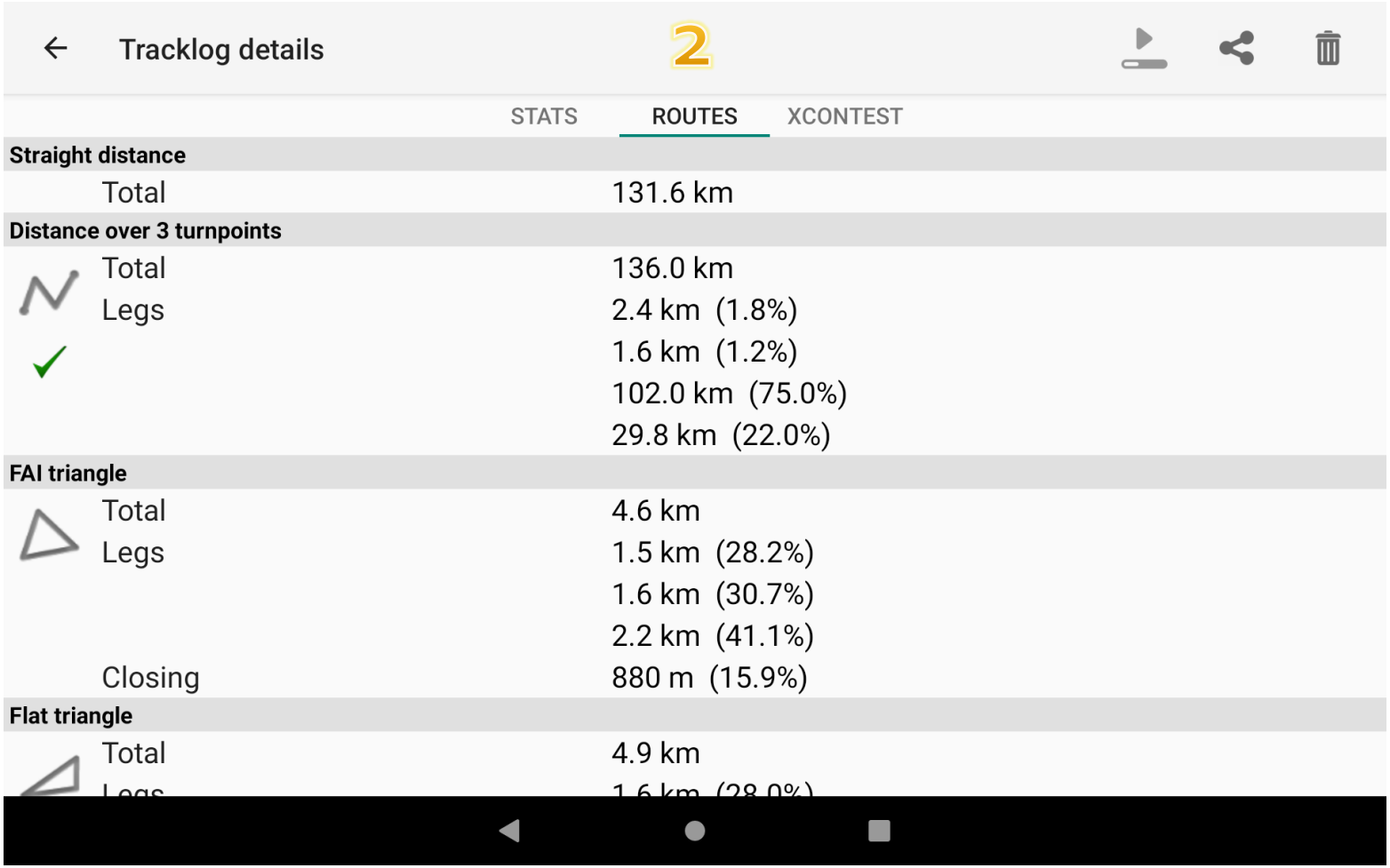
Tracklogs


Tracklogs
2022-10-30-XCT-BER-01.igc
2022-10-30 11:01 - Les Sept Meuses
Berfon, FLOW PARAGLIDERS Fusion Light
2022-10-16-XCT-BER-01.igc
2022-10-16 12:34 - Les Sept Meuses
Berfon, FLOW PARAGLIDERS Fusion Light
2022-10-09-XCT-BER-01.igc
2022-10-09 12:15 - Les Sept Meuses
Berfon, FLOW PARAGLIDERS Fusion Light
2022-09-25-XCT-BER-03.igc
2022-09-25 14:04 - Saint Hilaire
Berfon, FLOW PARAGLIDERS Fusion Light
2022-09-25-XCT-BER-02.igc
2022-09-25 12:28 - Saint Hilaire
Berfon, FLOW PARAGLIDERS Fusion Light

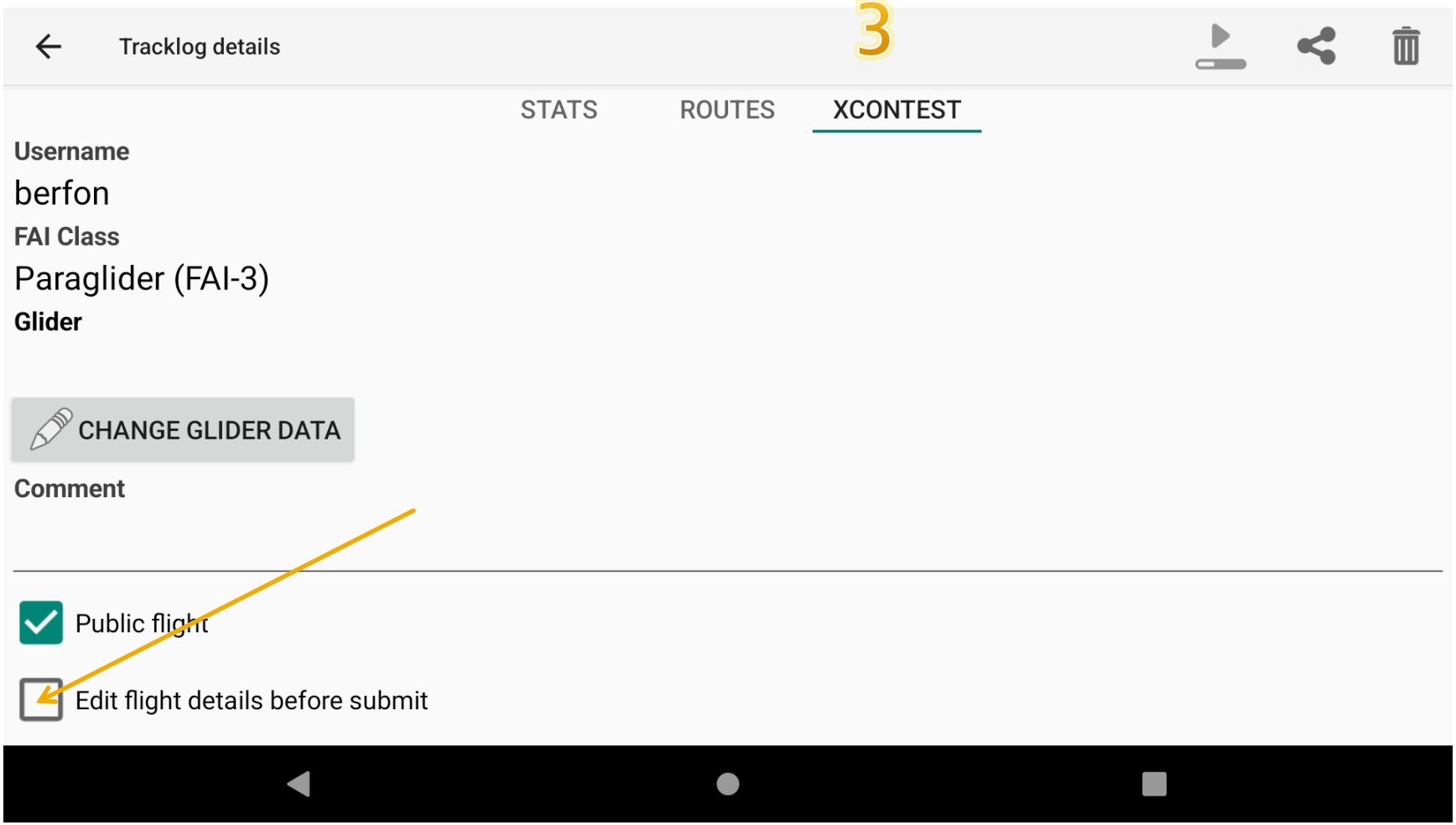
Track-Stats


Tracklog details
1
2
3
STATS
ROUTES
XCONTEST
4
2018-05-11-XCT-BFO-101.igc
Basics
Date
2018-05-11 10:42
Pilot
Bertrand Fontaine
Glider
BGD Lynx
Flight
Duration
4 hours 36 min
Tracklog length
189.2 km
Max. lift
+3.9 m/s
Max. sink
-3.7 m/s
Max. lift vario peak
+4.0 m/s
Max. sink vario peak
-4.0 m/s
Max. altitude
1719 m
Max. alt. gain
1360 m
Elevation drop
298 m
Takeoff

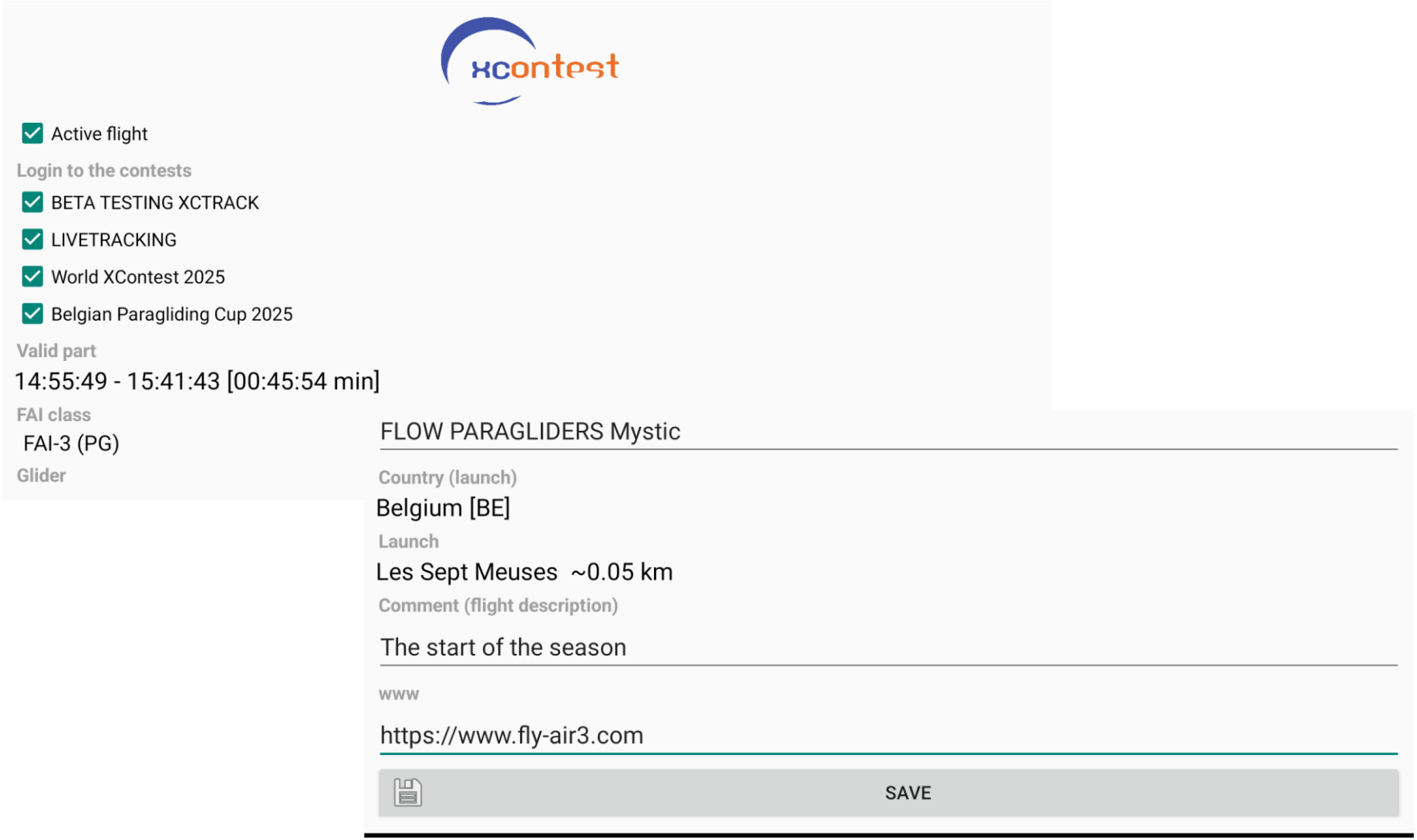
Track- Routes



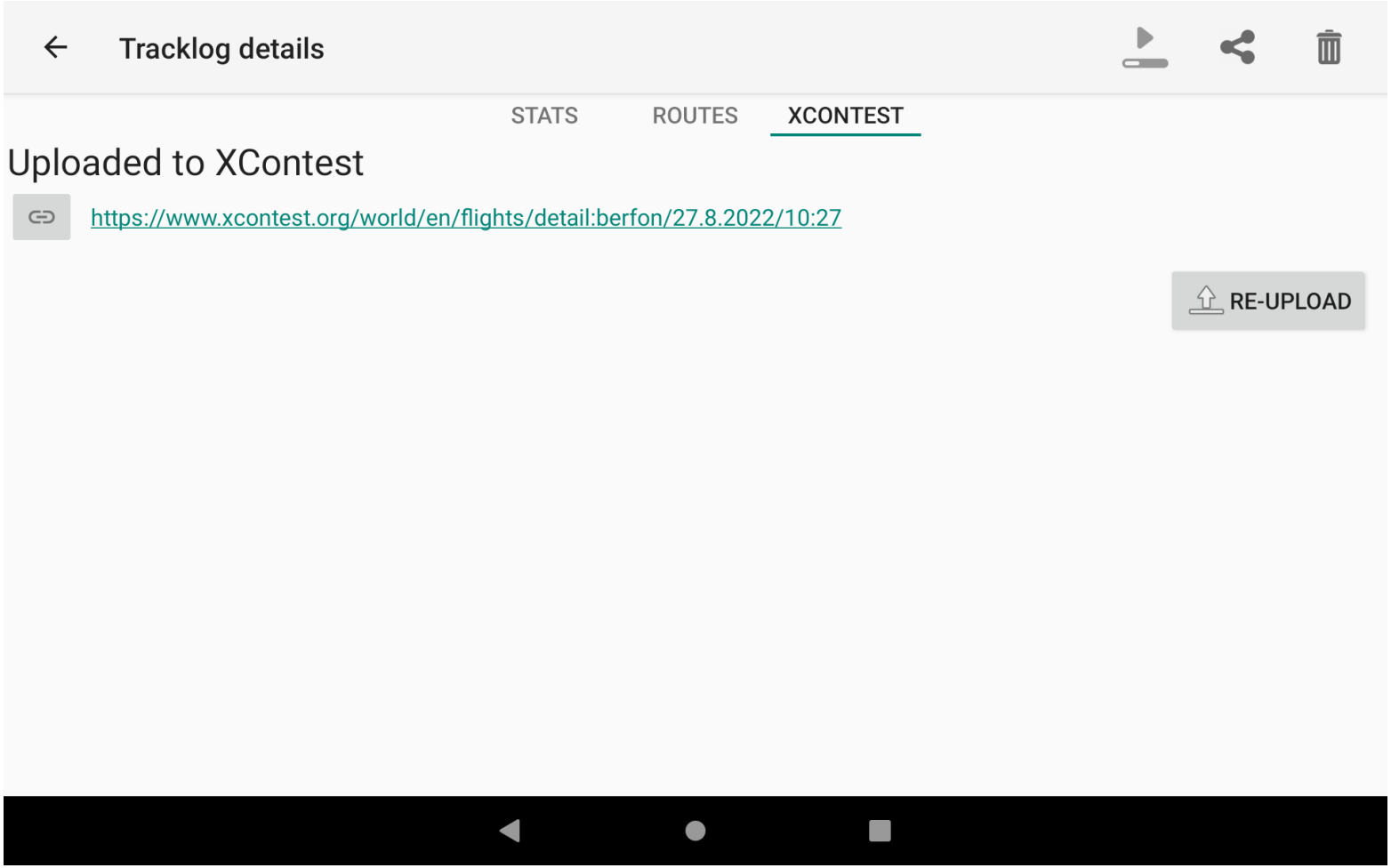
Track-Xcontest (manual upload)



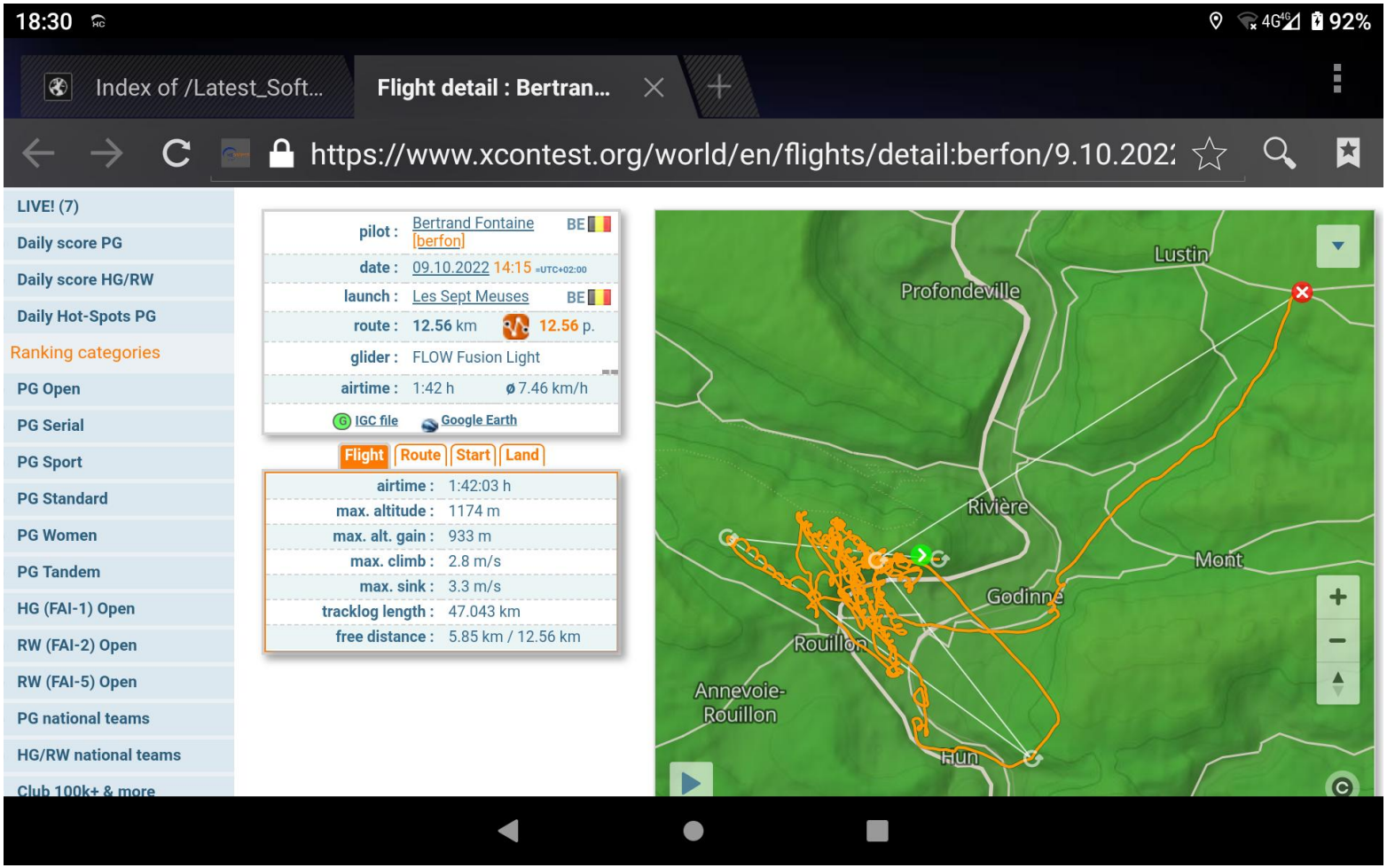
Track-Xcontest



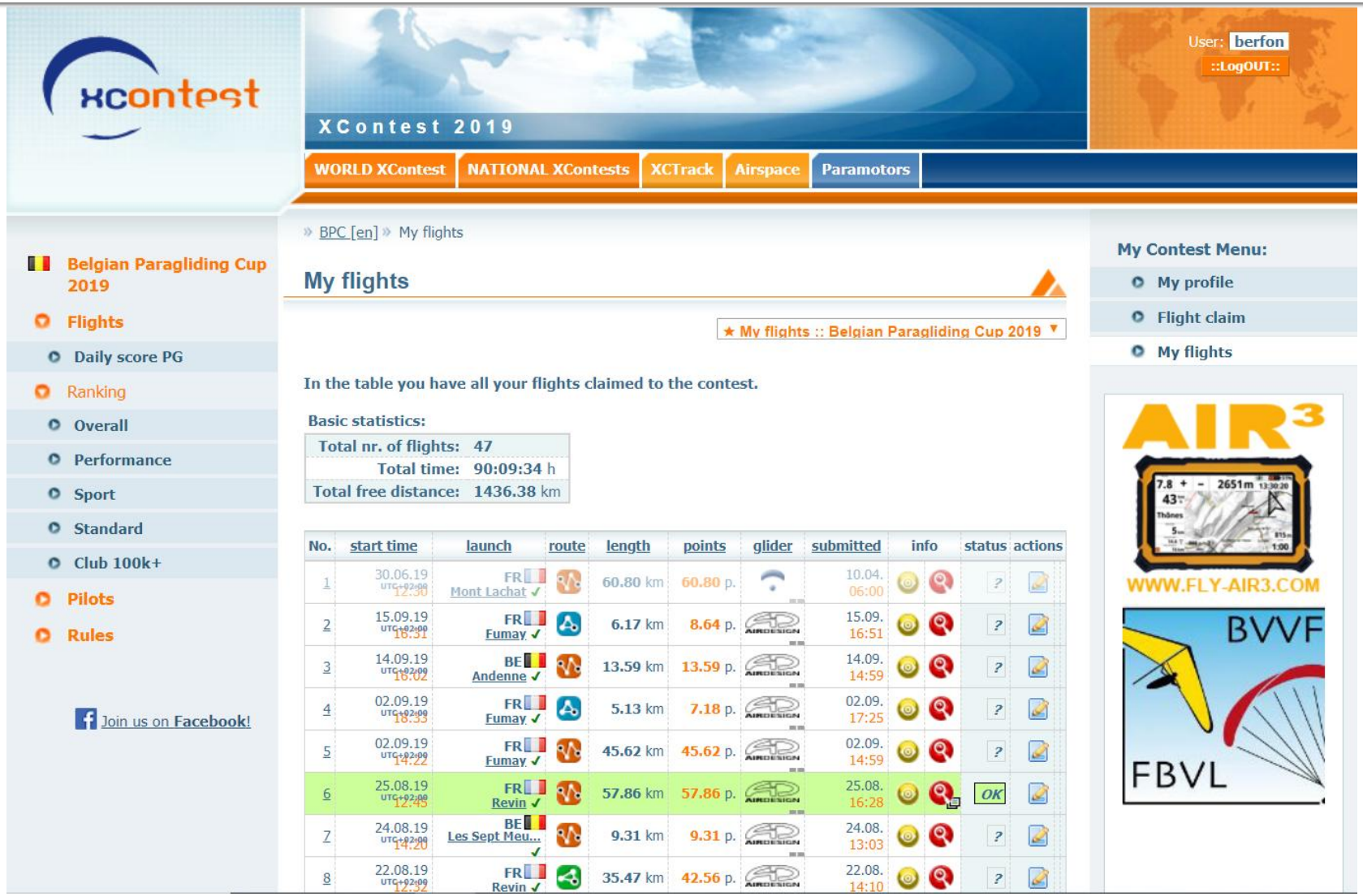
Track-Xcontest-done



Track-Xcontest-link



Track-Xcontest-logbook



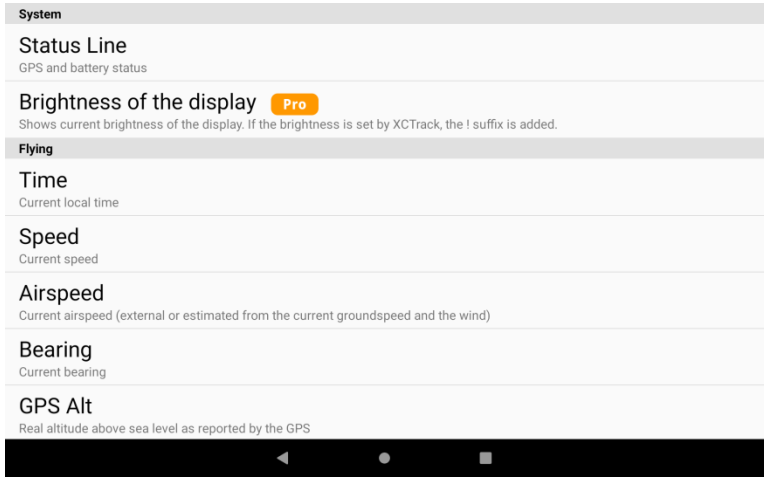
Customize

Customize

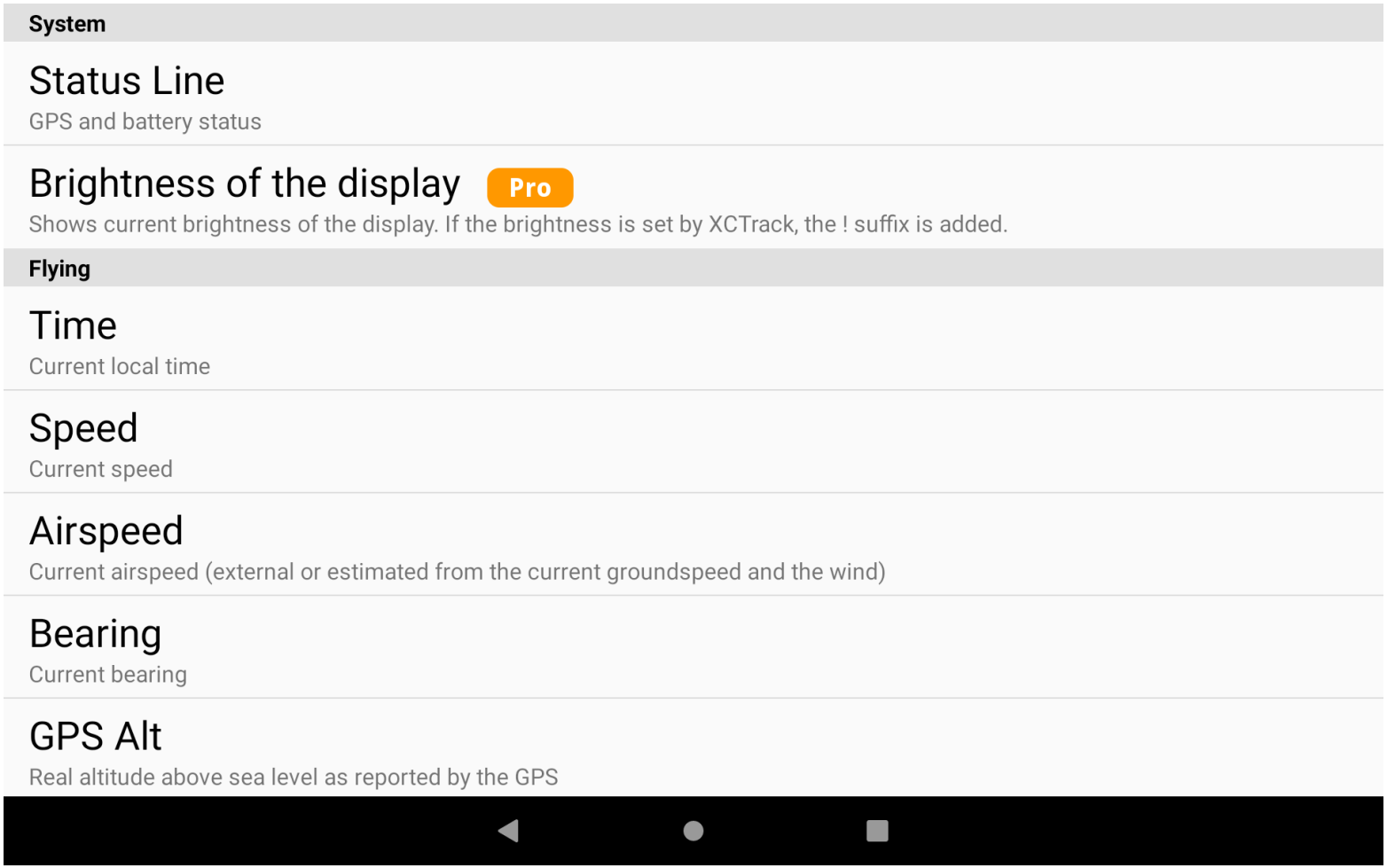
Add Widget
Configure Widget
Bring to Front
Send to Back
Delete Widget
Glide Ratio / 2s
0.0
+
−
0 km/h
Baro Alt
213 m
LIVE
64%
14:15:09
Start
Distance Next
506.0 km
Wind
AGL
AIR3
F1
F2

More details - How to (XCTrack)?

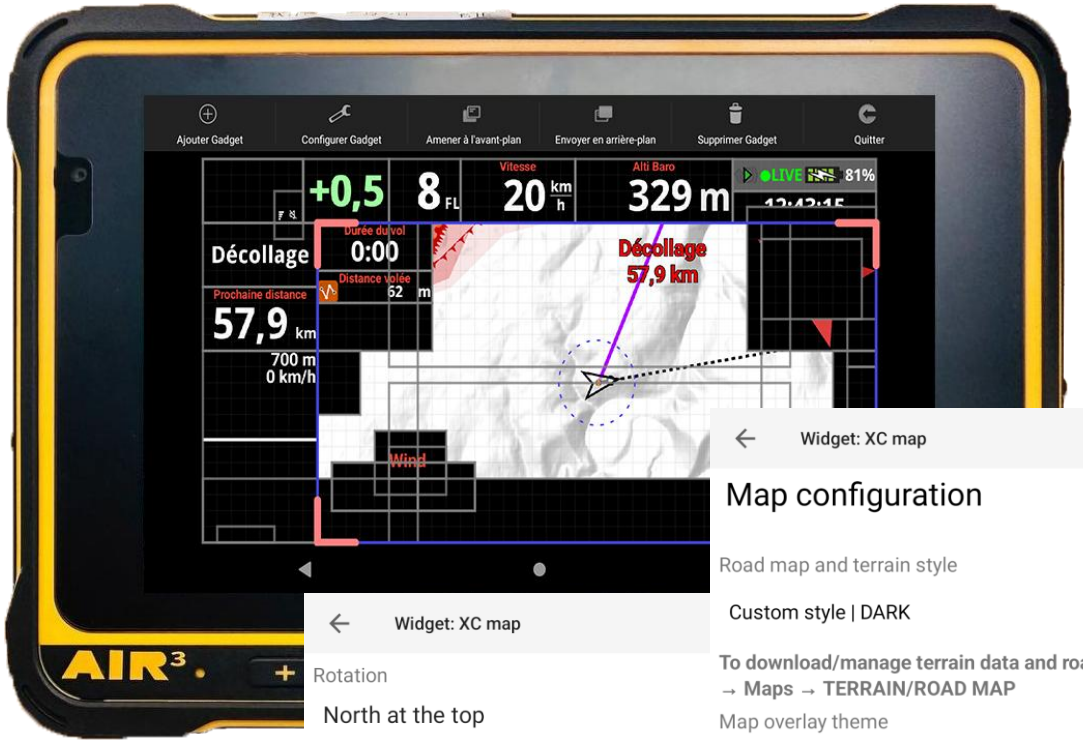
- Customize the layout
  - Add /Delete/Resize/Move/Configure widgets
  - Portrait ≠ Landscape, each page = own layout

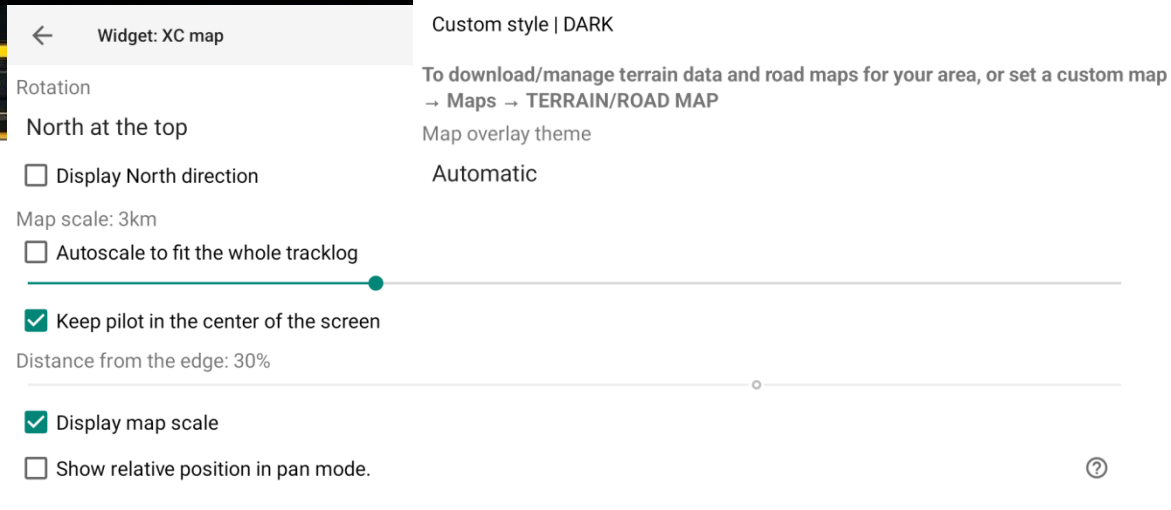


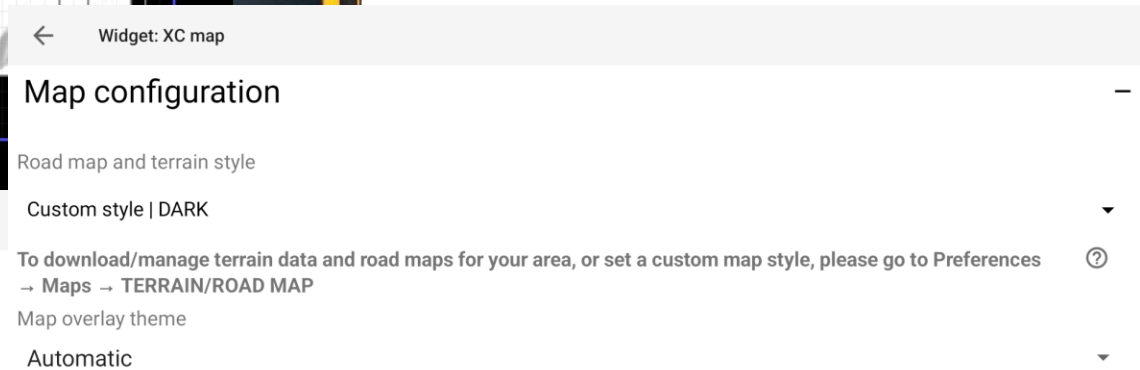
Widgets


System
Status Line
GPS and battery status
Brightness of the display
Pro
Shows current brightness of the display. If the brightness is set by XCTrack, the ! suffix is added.
Flying
Time
Current local time
Speed
Current speed
Airspeed
Current airspeed (external or estimated from the current groundspeed and the wind)
Bearing
Current bearing
GPS Alt
Real altitude above sea level as reported by the GPS

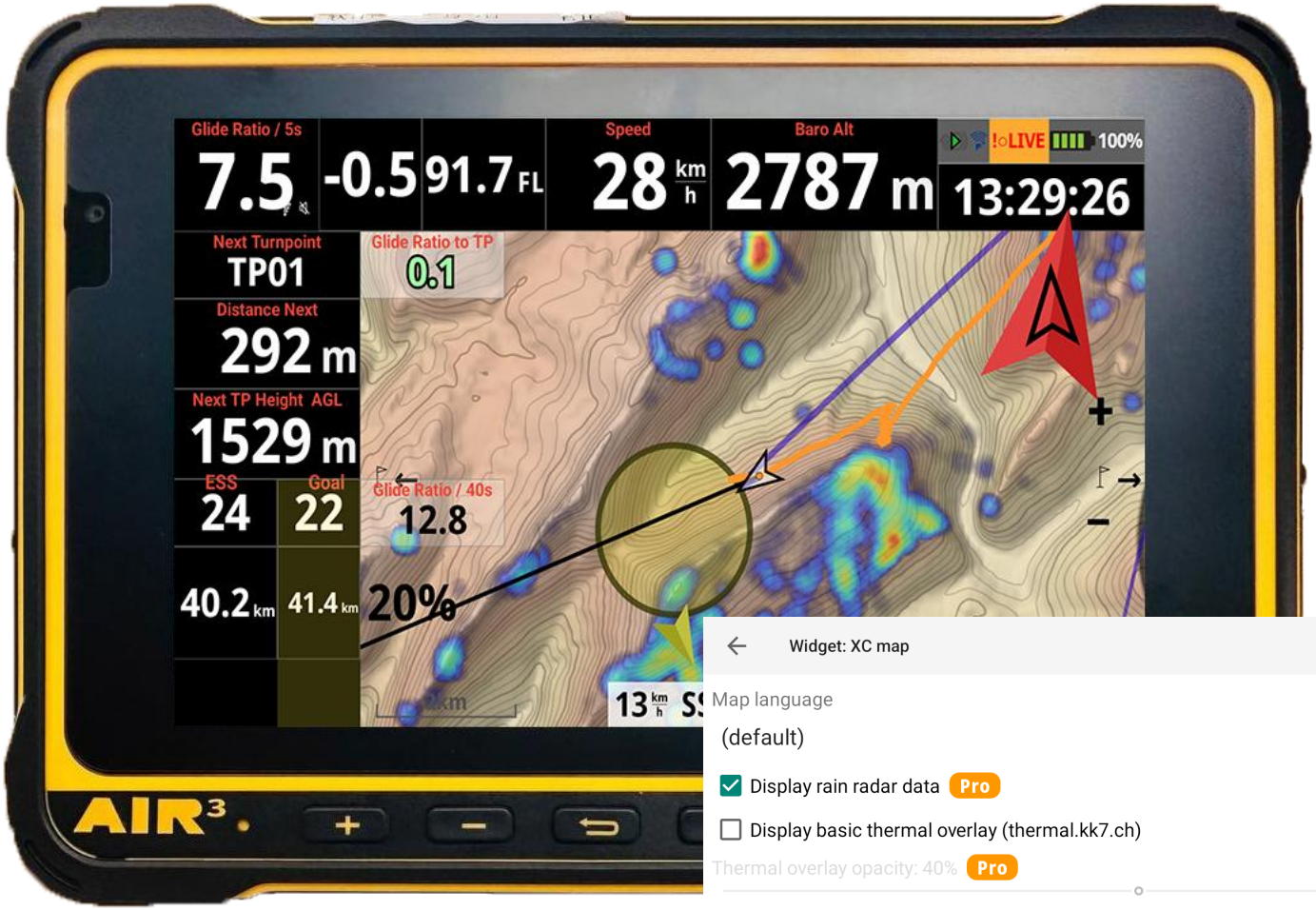
Widget configuration

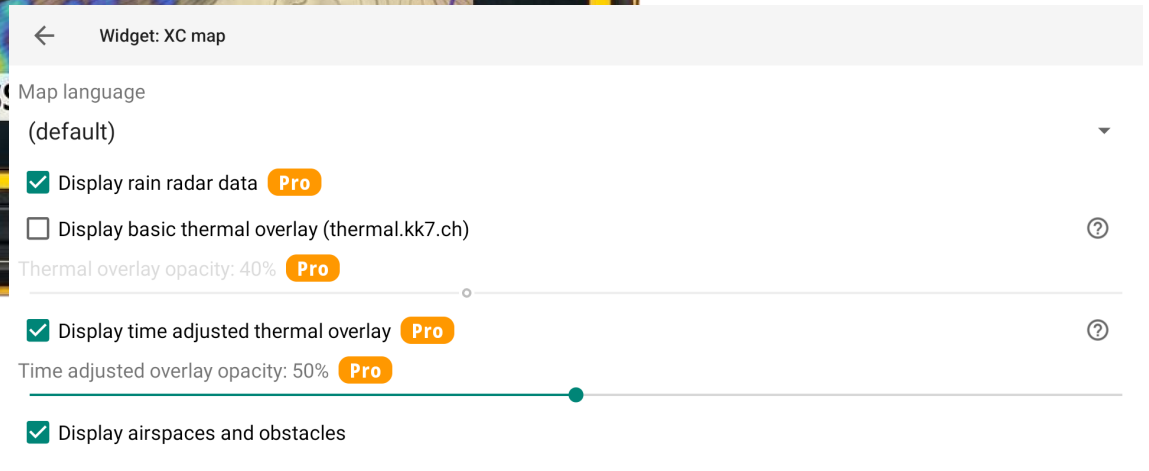






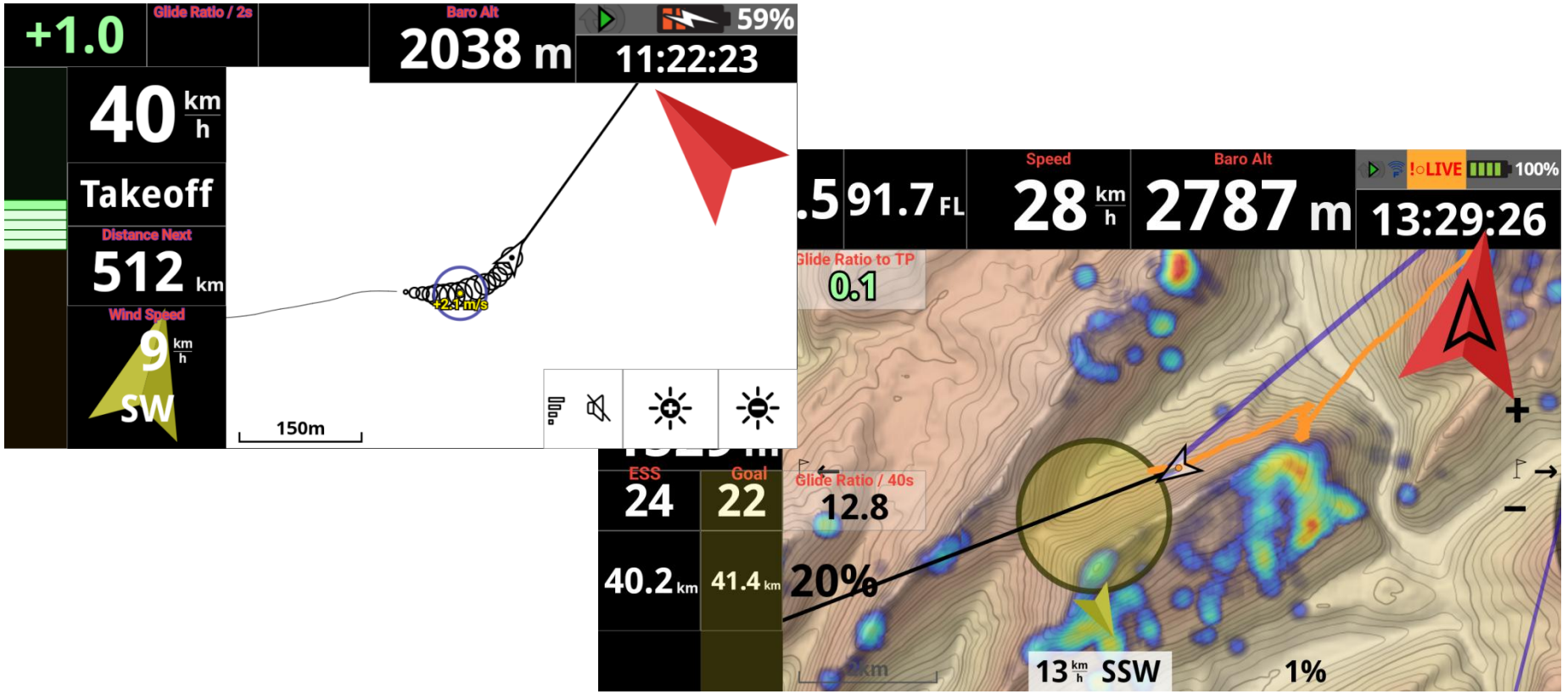
Widget tip: thermal map





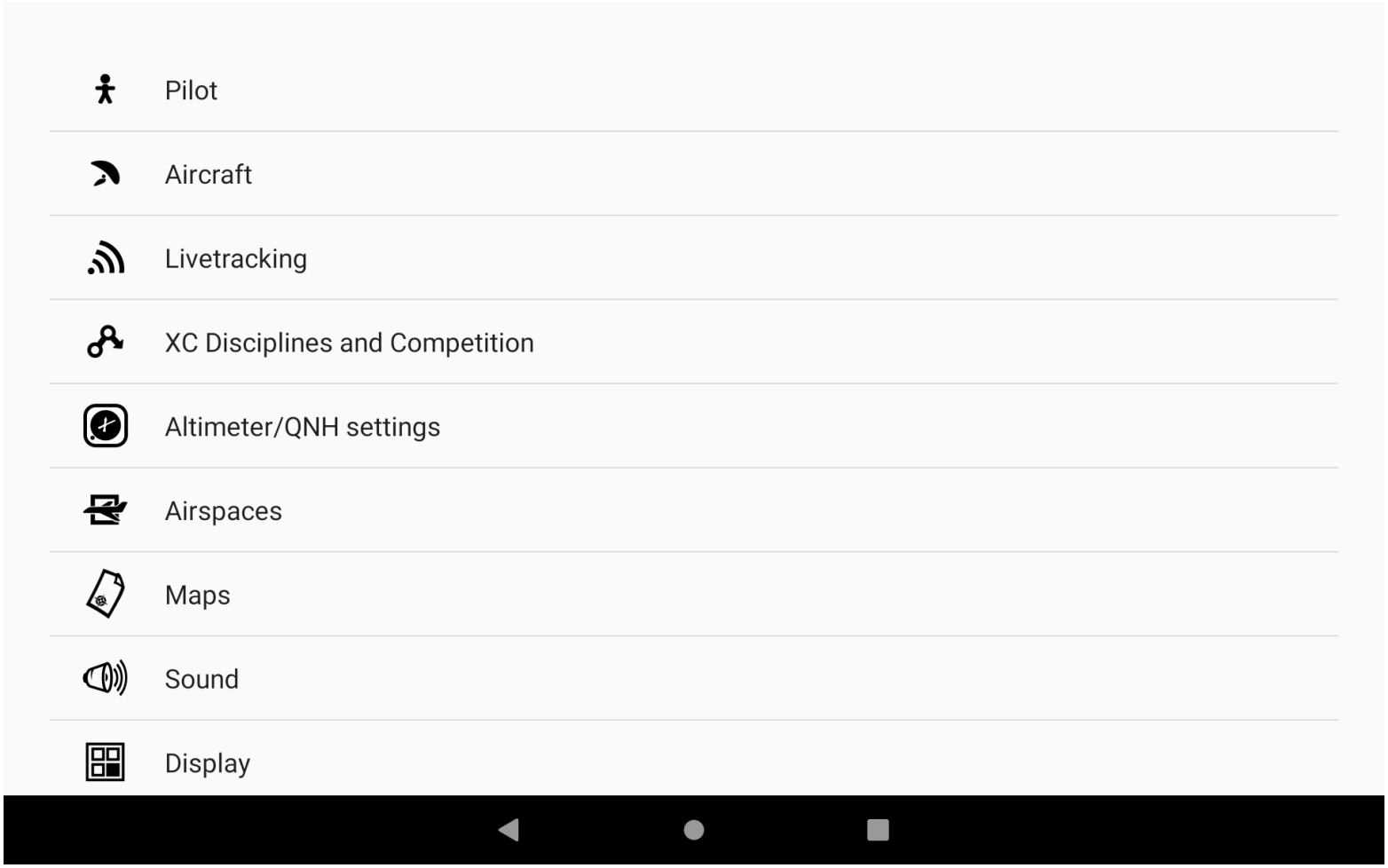
More details - How to (XCTrack)?

- Thermal assistant Vs. Thermal map



Preferences

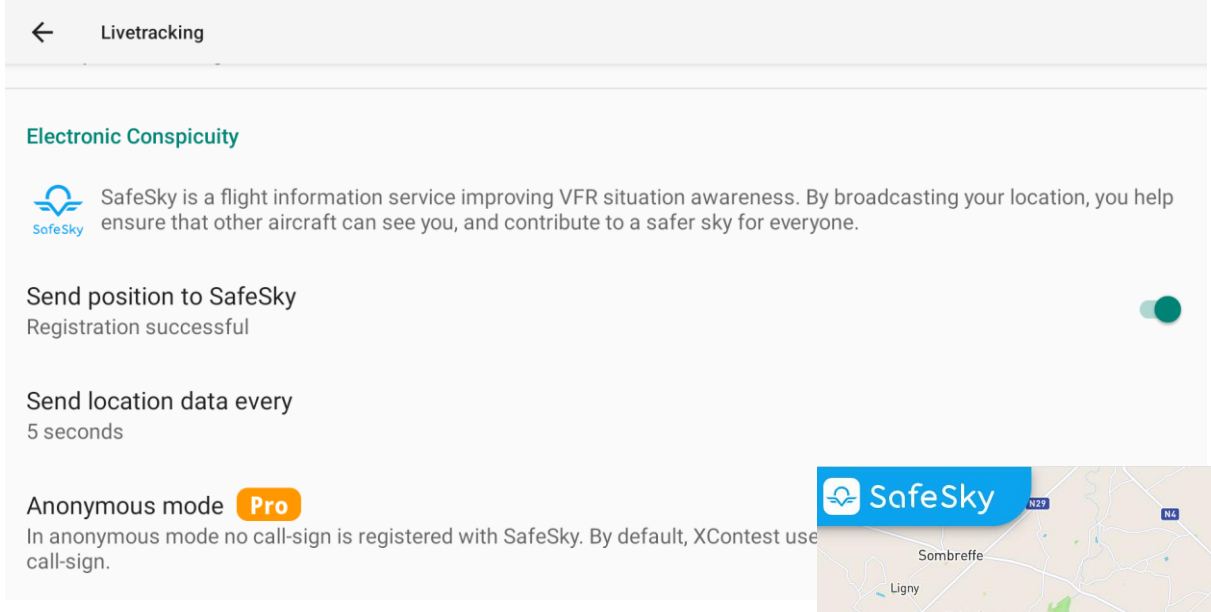
Preferences (settings)

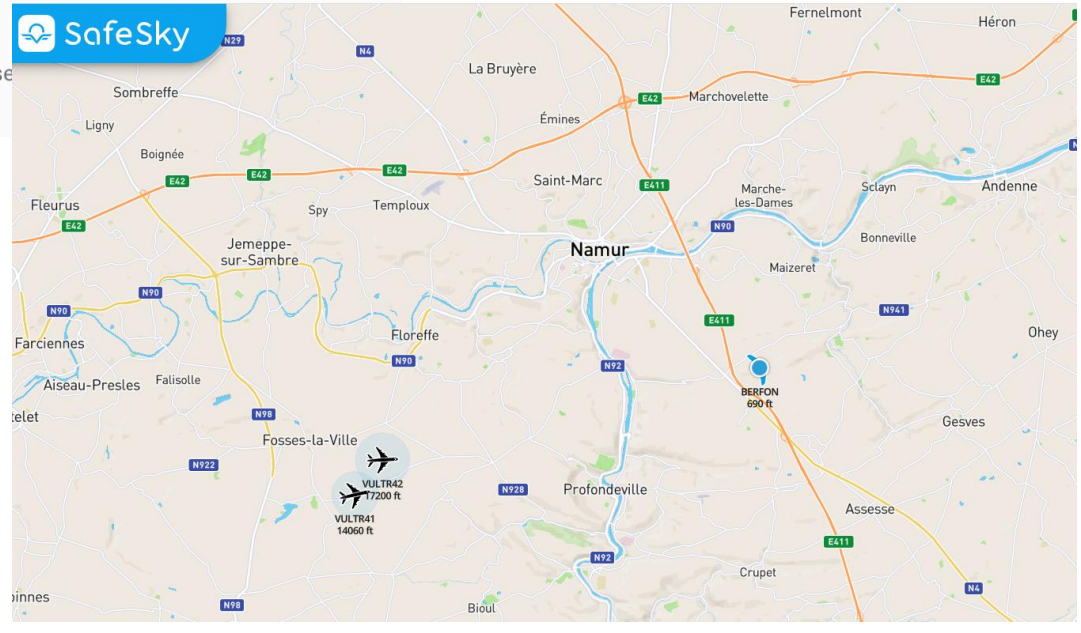


Preferences: quick overview

- Pilot: Login and Pswd of Xcontest account
  - « logged in to Xcontest »!
- Aircraft
- Livetracking (internet required)
  - Xcontest Livetracking
  - Electronic Conspicuity (Safesky)

Electronic Conspicuity





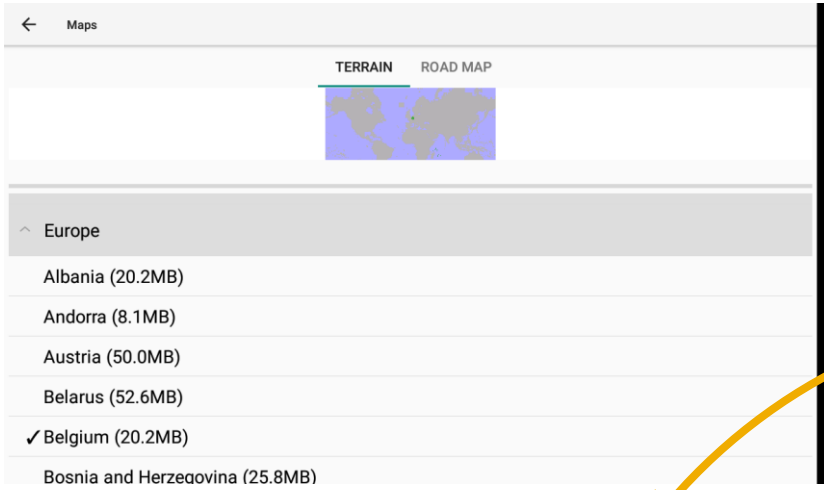
More details - Livetracking

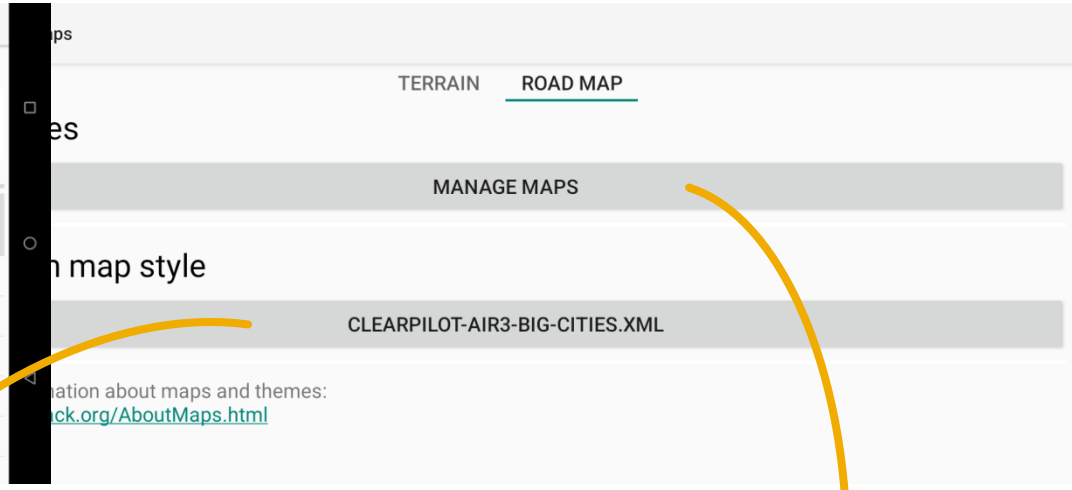
- Xcontest Livetracking – Fanet – Flarm- Electronic Conspicuity (Safesky)
  - Xcontest: largest paragliding platform internet-based
  - Fanet: Livetracking. No internet needed.
  - Flarm: Flight alarm! Collision avoidance. No internet
  - Safesky: Internet-based. Aggregation of all livetracking platforms for others to see you

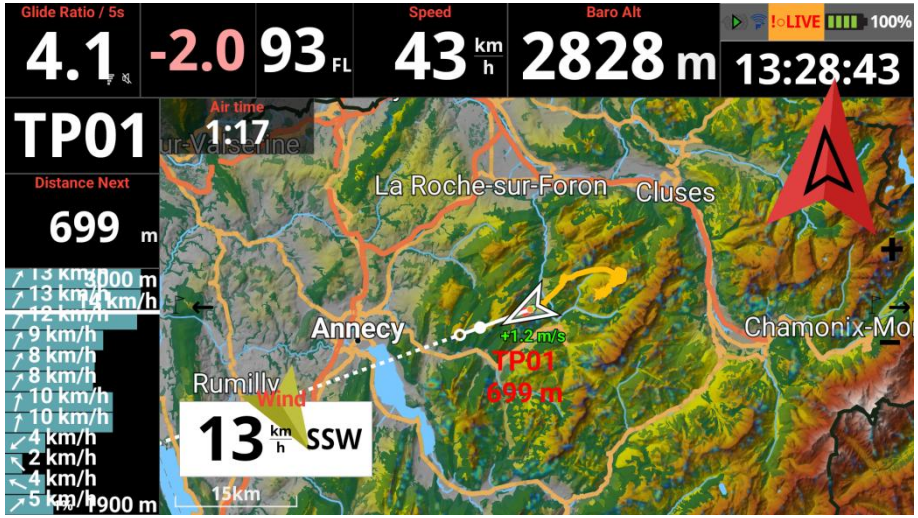
Preferences: quick overview

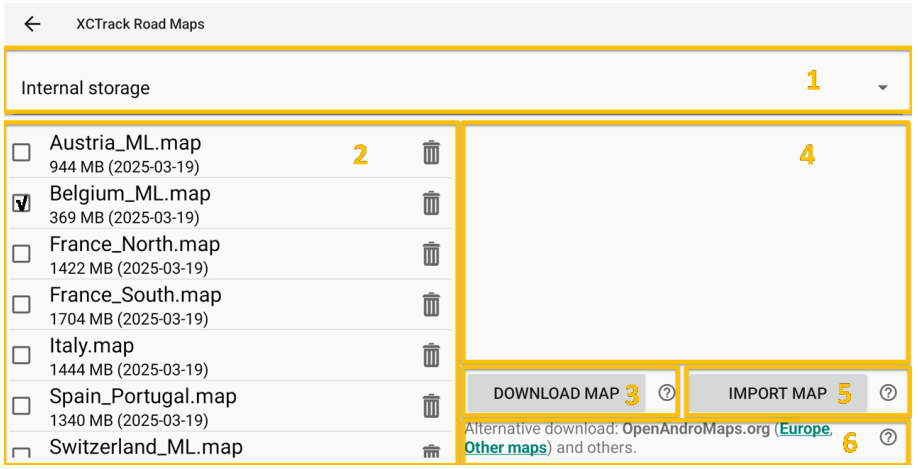
- Altimeter/QNH settings
  - Get QNH automatically! Internet required.
- Airspace & Obstacles
  - Click + refresh….. Automatic upon restart. Internet required
- Maps
  - Terrain= Ground altitude
  - Roadmaps : Maps Manager
  - Map style (exemple: bigger cities)

Preferences: Terrain – Maps - Style







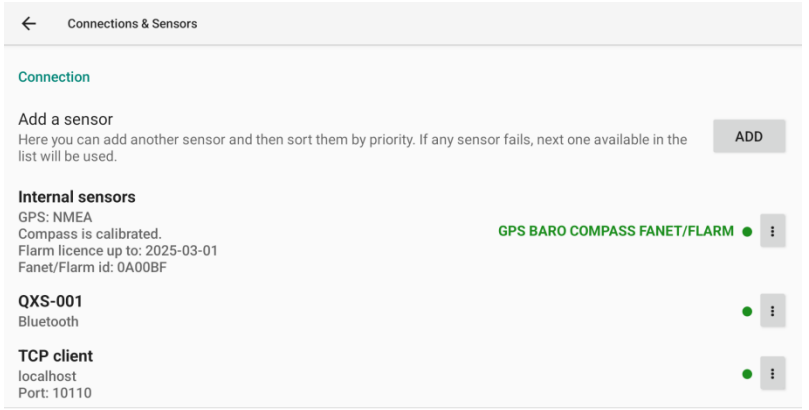


Preferences: quick overview

- Sound
  - Acoustic vario!
- Display
  - Main theme (each widget can be customized)
  - Full screen Off = android buttons available
  - Widgets titles
- ActiveLook glasses/Maverick glasses
  - Define the layout here!
- Pages layout: manage pages.
  - Depending on navigation choice – new/delete/copy page

Preferences: quick overview

- Key bindings
  - Select action – press the key
- Automatic actions
  - Landing and takeoff detection
  - Start/end thermal – etc.
- Connections & Sensors
  - Internal sensors (GPS, Baro, Flarm/Fanet (AIR³)
  - External sensors for XC Guide TCP or BT sensors

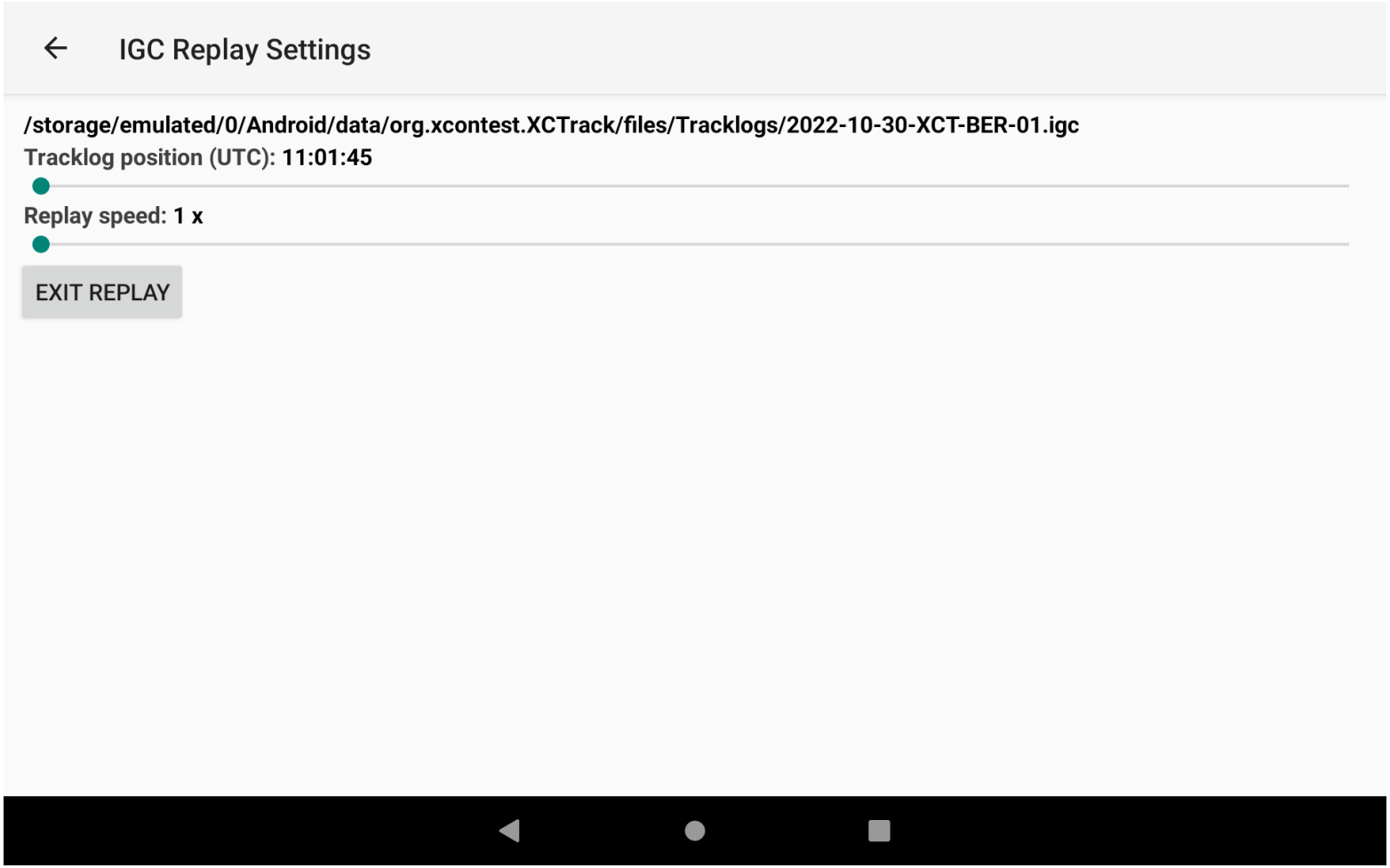


Preferences: quick overview

- Export & import config
  - Choose Pages ONLY!
- Android integration
  - Keep screen ON/OFF
  - Disable HW acceleration?

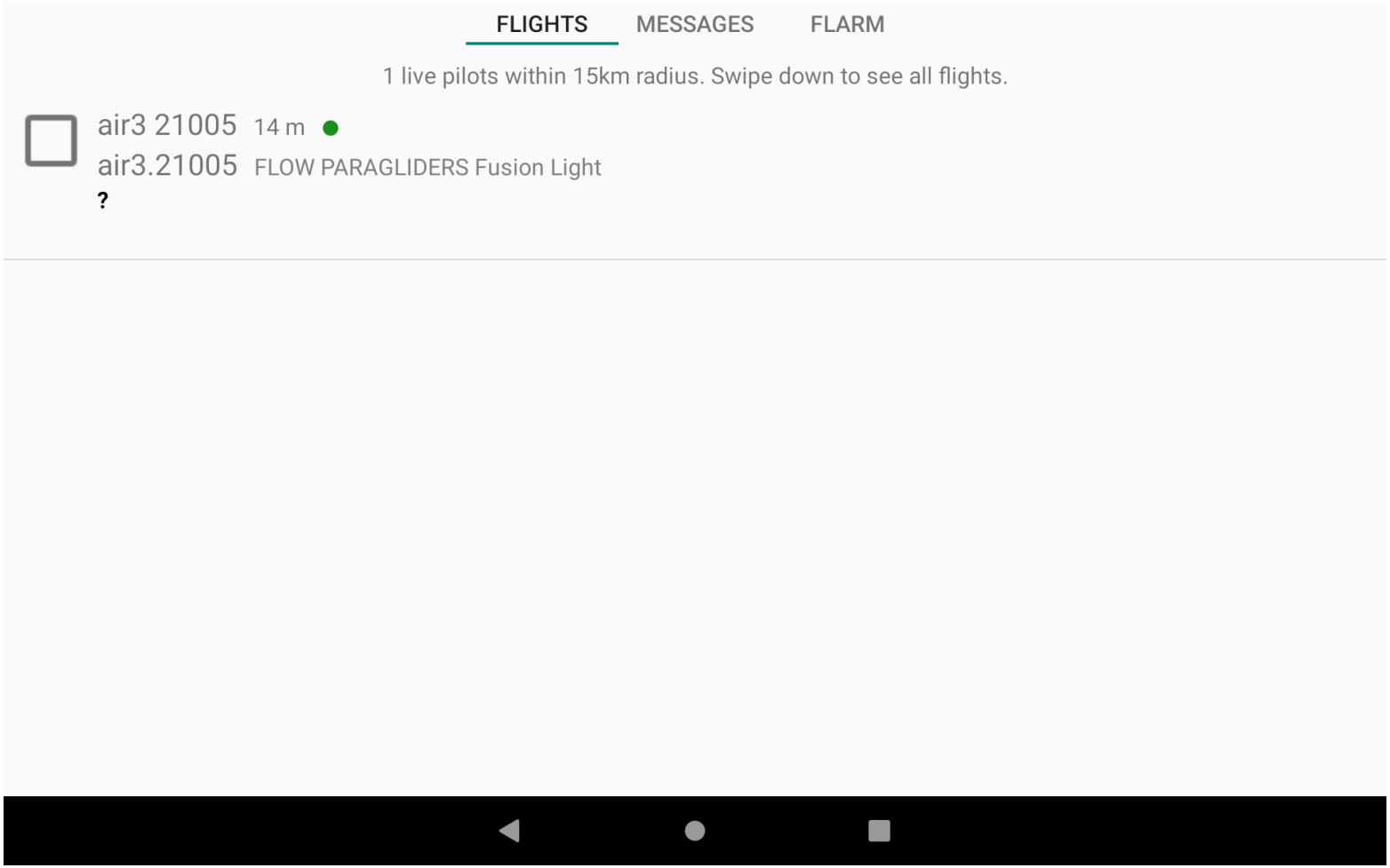
IGC Replay

IGC replay


IGC Replay Settings
/storage/emulated/0/Android/data/org.xcontest.XCTrack/files/Tracklogs/2022-10-30-XCT-BER-01.igc
Tracklog position (UTC): 11:01:45
Replay speed: 1 x
EXIT REPLAY

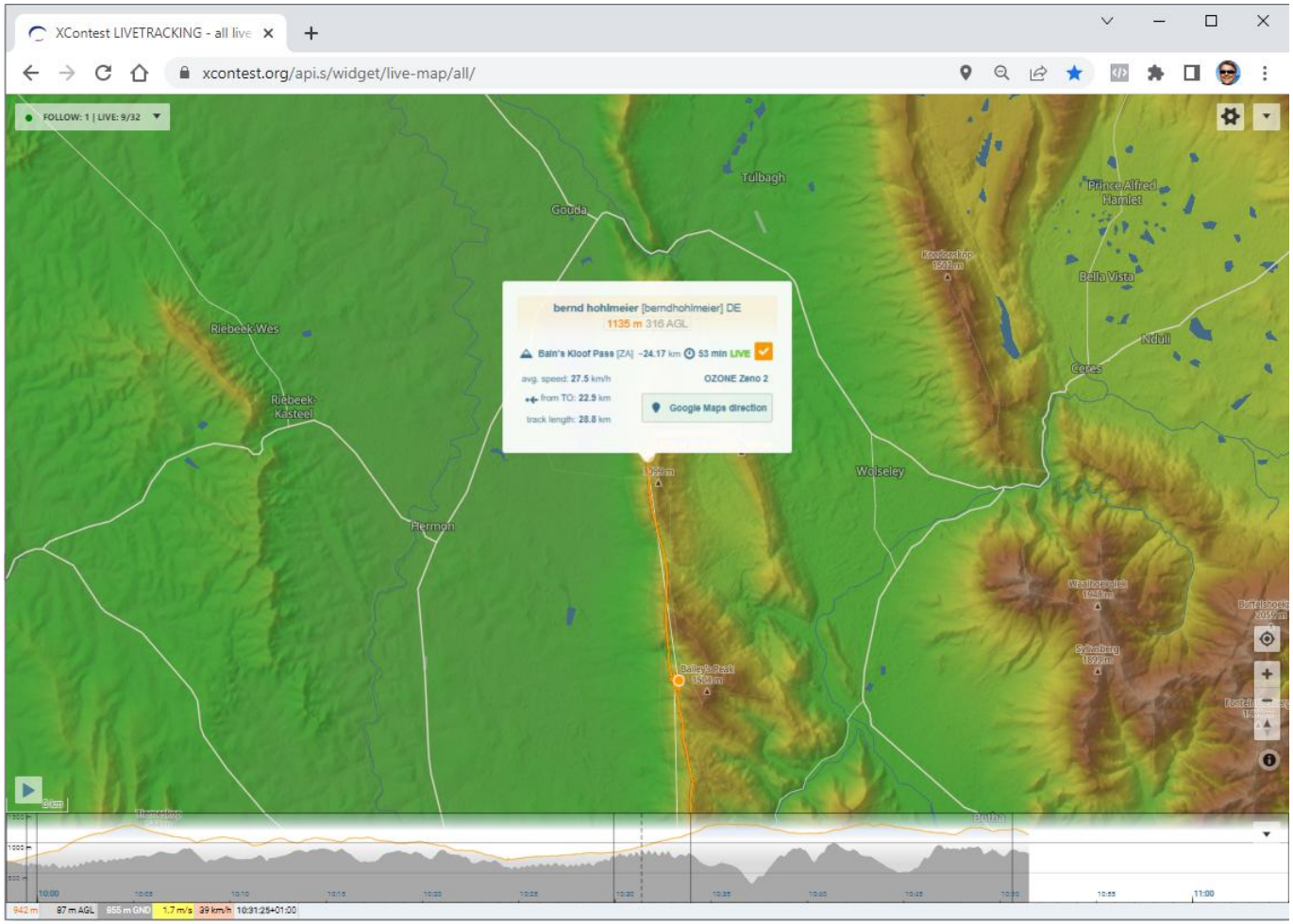
Livetracking

Livetracking

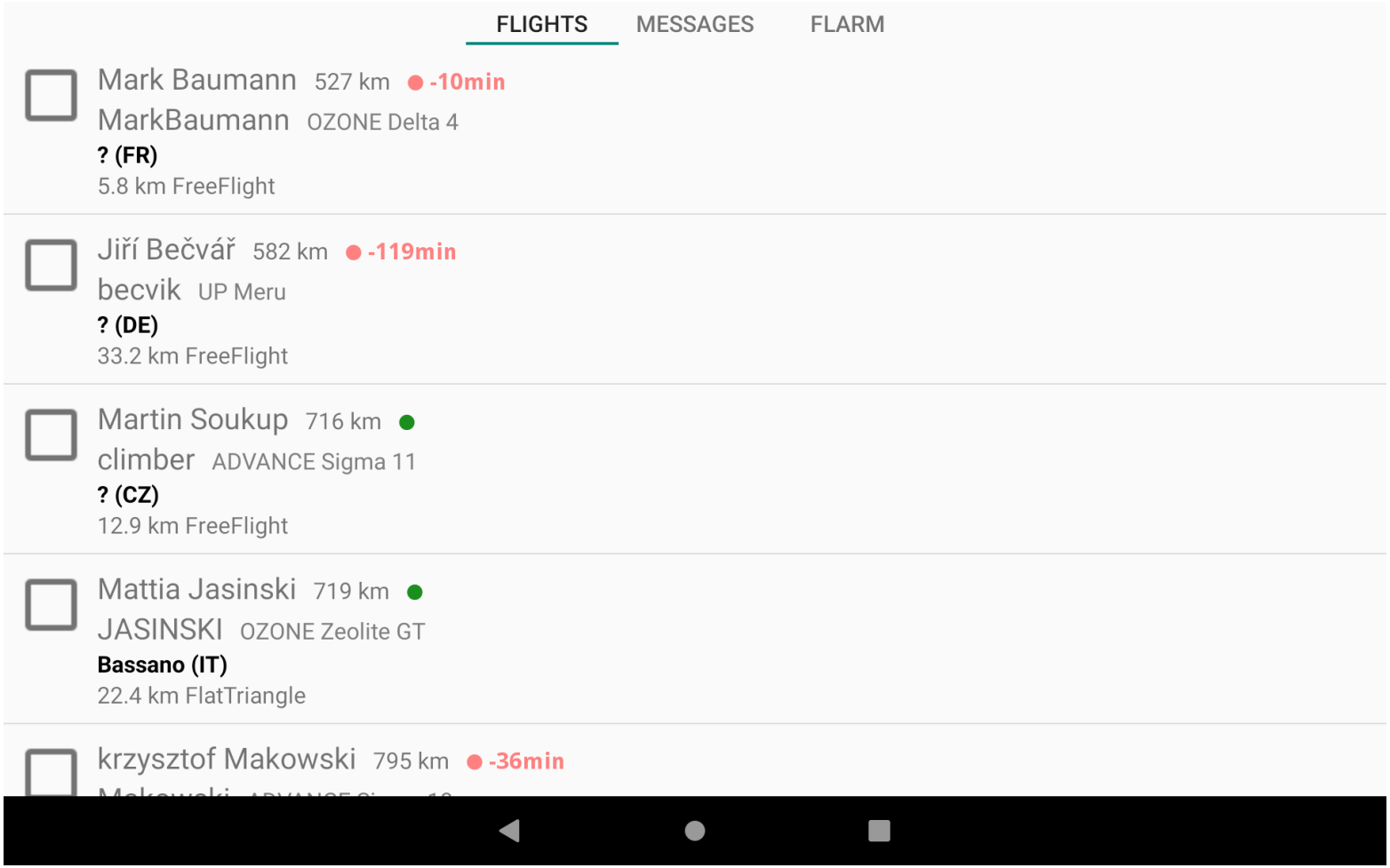


Livetracking - XCTrack

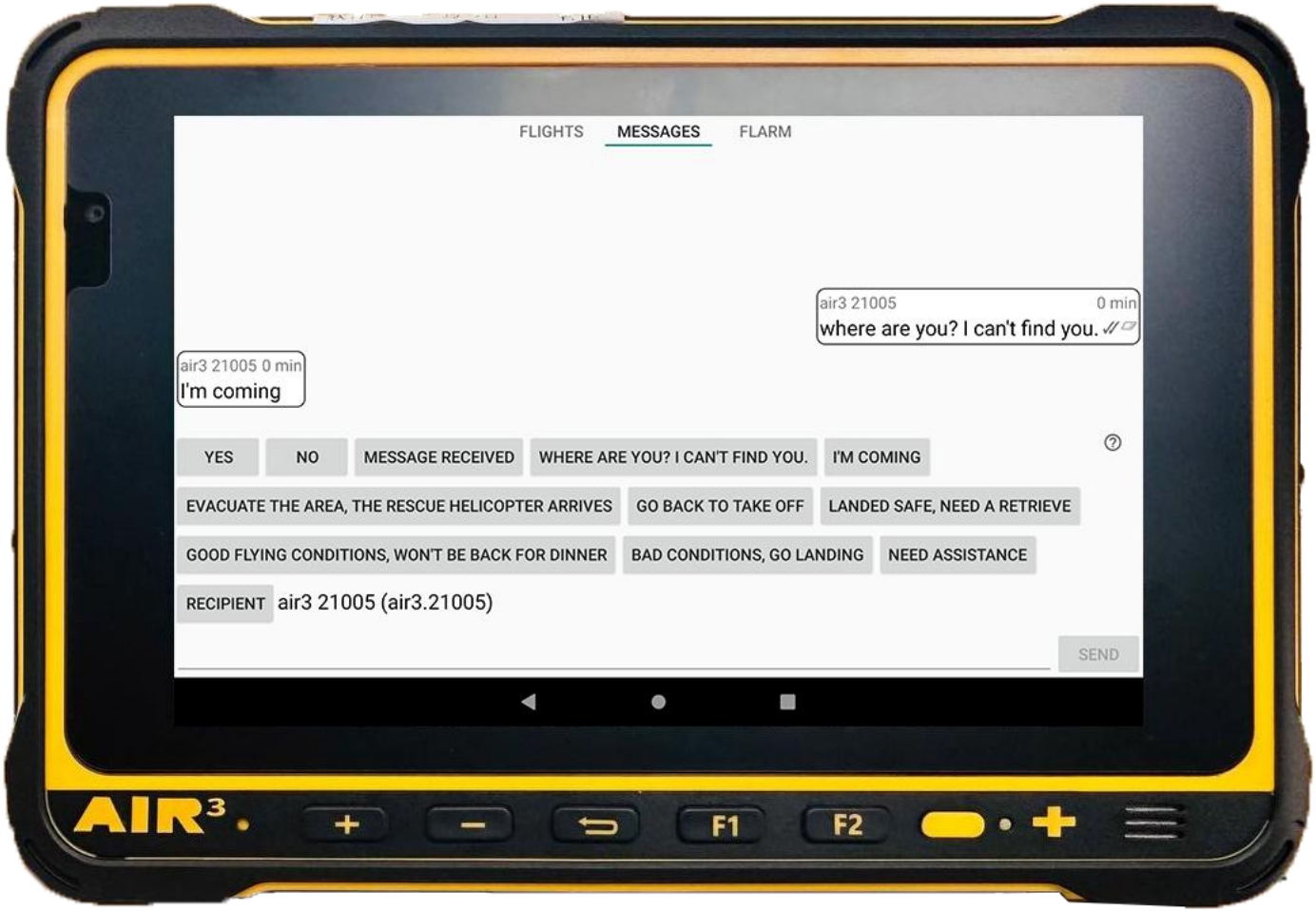
Livetracking - Xcontest



Livetracking - refreshed



Livetracking - Messages



Livetracking - Message

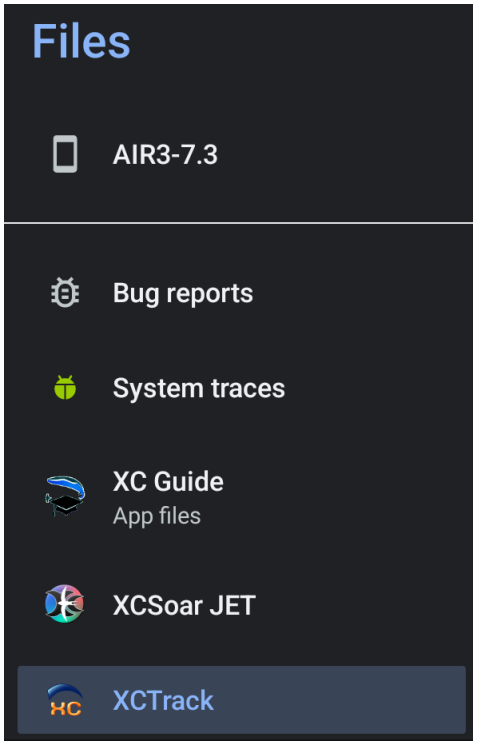
Quit

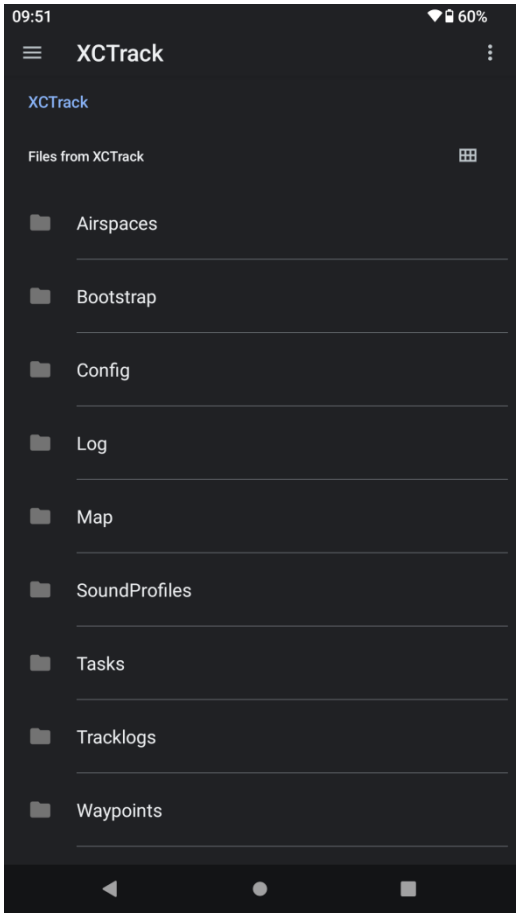
Quit

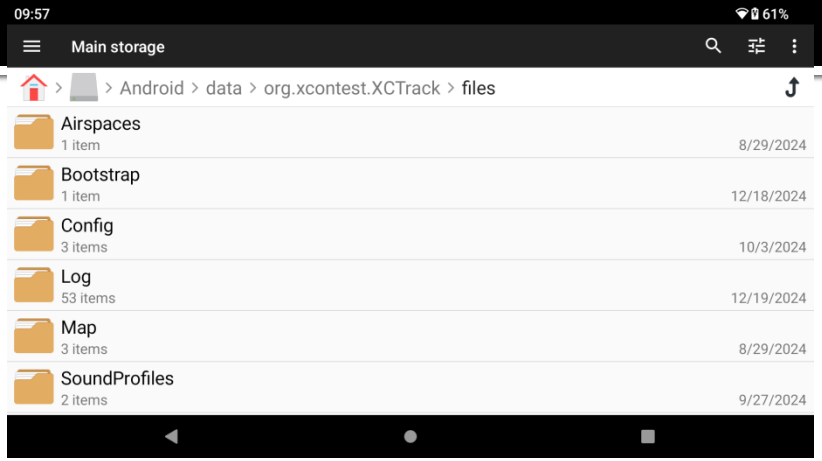
- Without exiting via the menu (Android buttons Δ O ☐), XCTrack will not close!

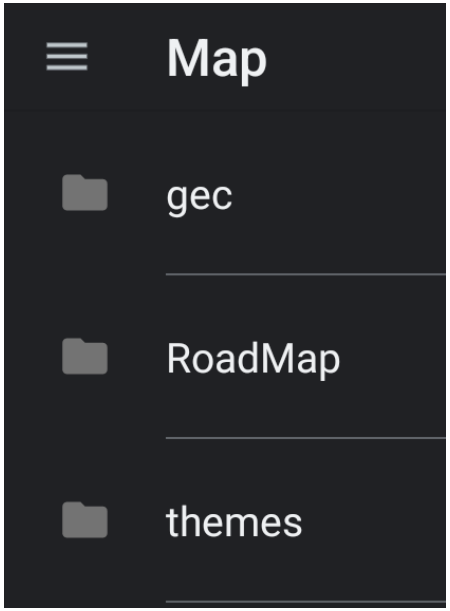
Advanced XCTrack training

XCTrack subfolders

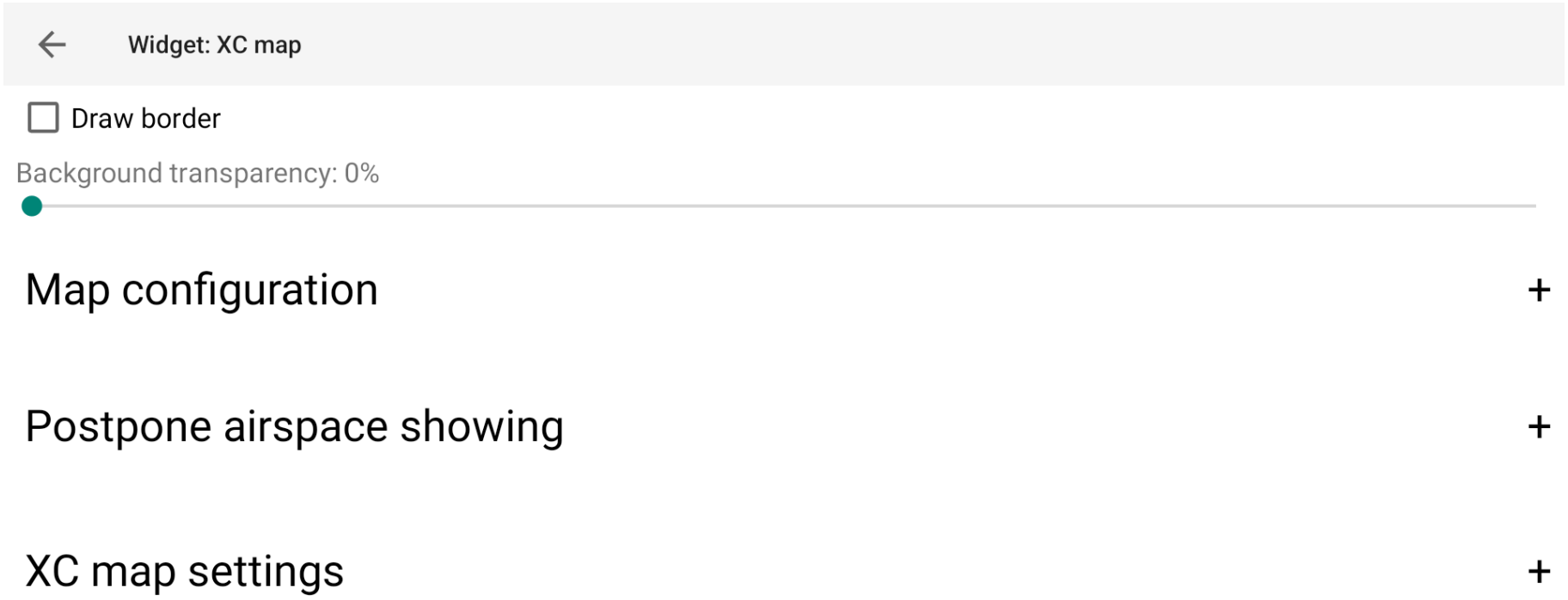








Review Maps widgets details



Review Maps widgets details

Map configuration

Road map and terrain style

Custom style | DARK

To download/manage terrain data and road maps for your area, or set a custom r
→ Maps → TERRAIN/ROAD MAP

Map overlay theme

Automatic

Map configuration

Featured styles with relief Pro

Extra styles with relief Pro

Classic styles (hillshading)

Relief only

Empty map

Widget: XC map

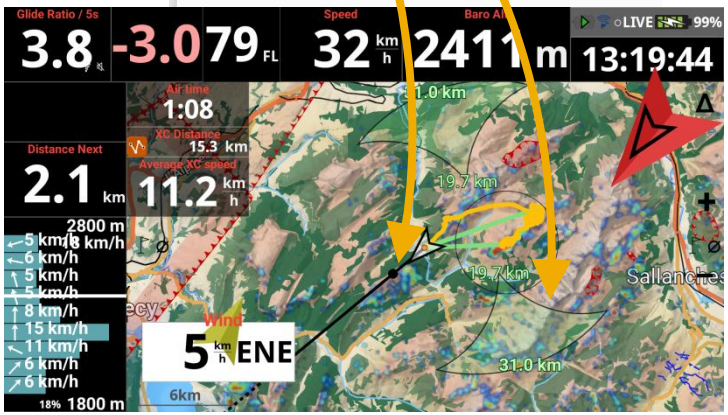
Map overlay theme

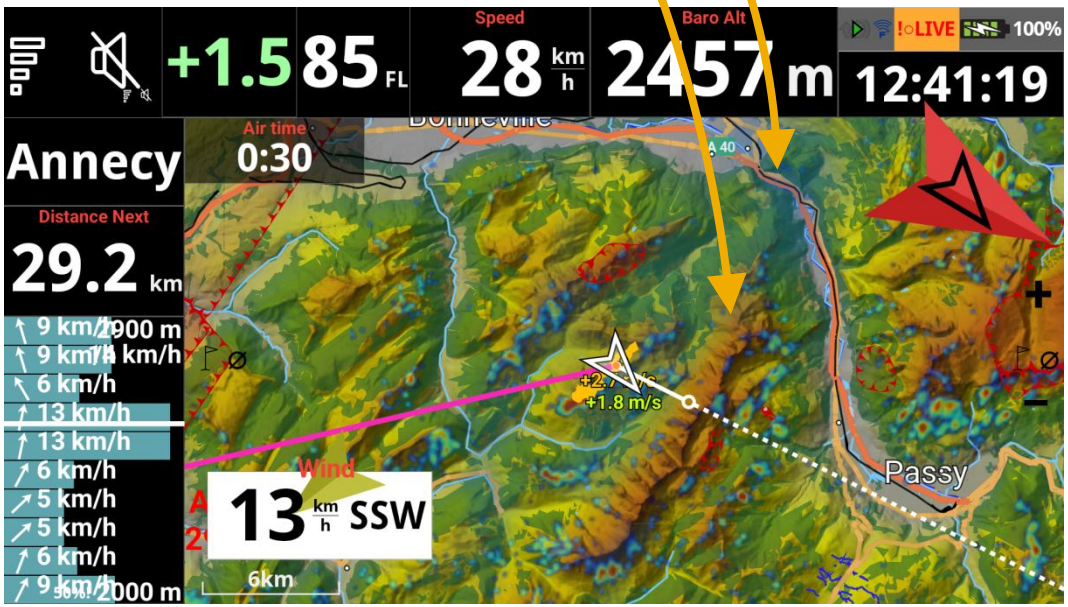
Automatic

Black

Black High Contrast

White





Review Maps widgets details

Widget: XC map

Rotation

North at the top

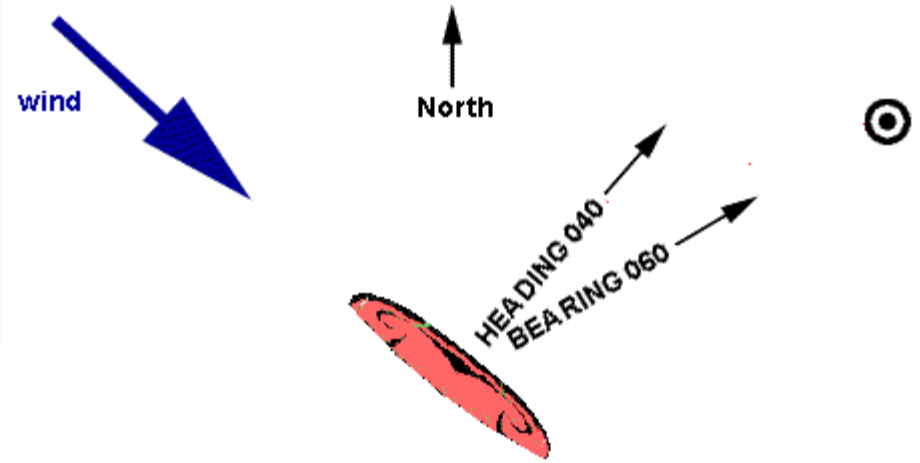
Navigation target at top

Bearing at top

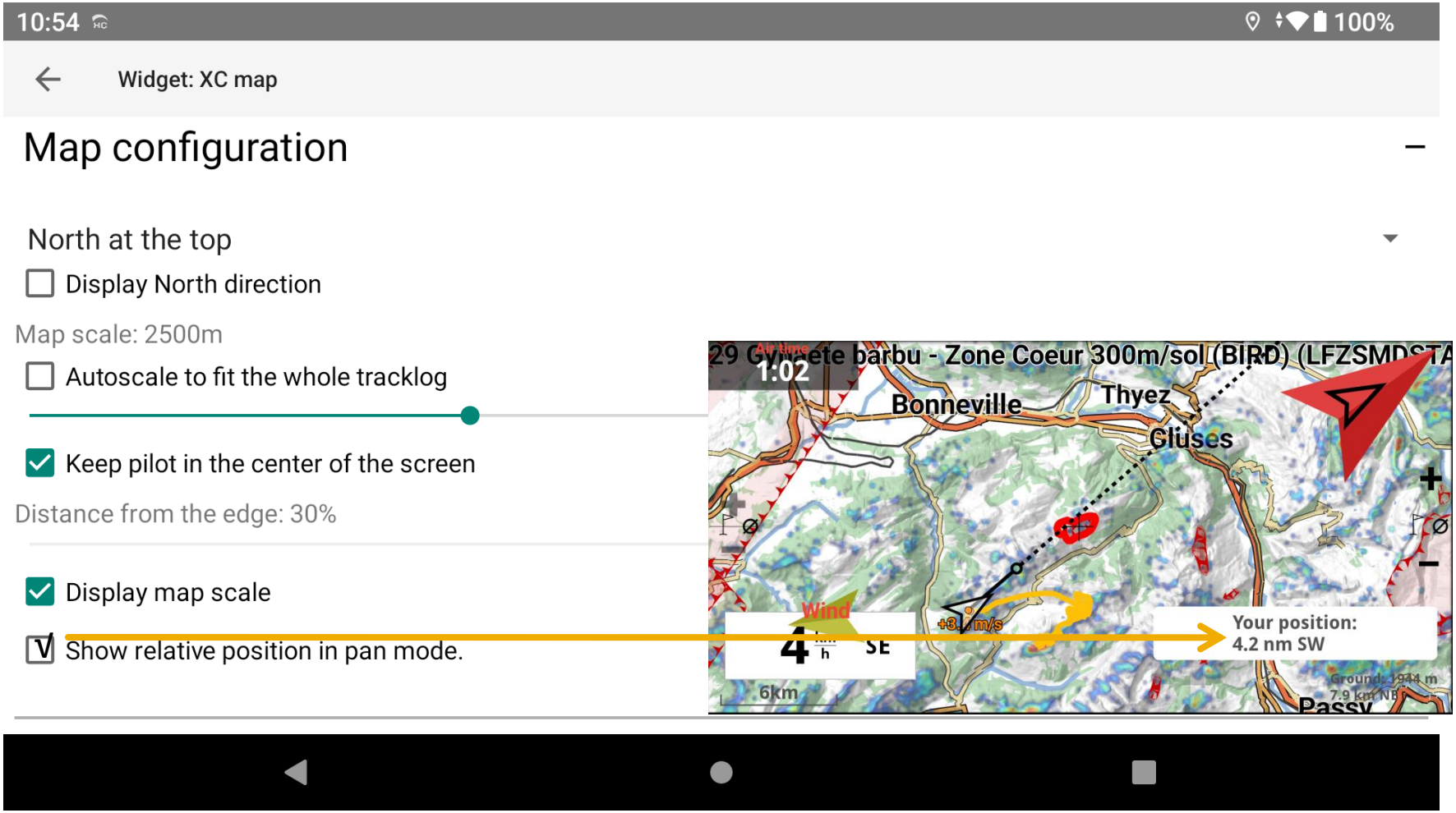
Heading at top

Down wind direction at top

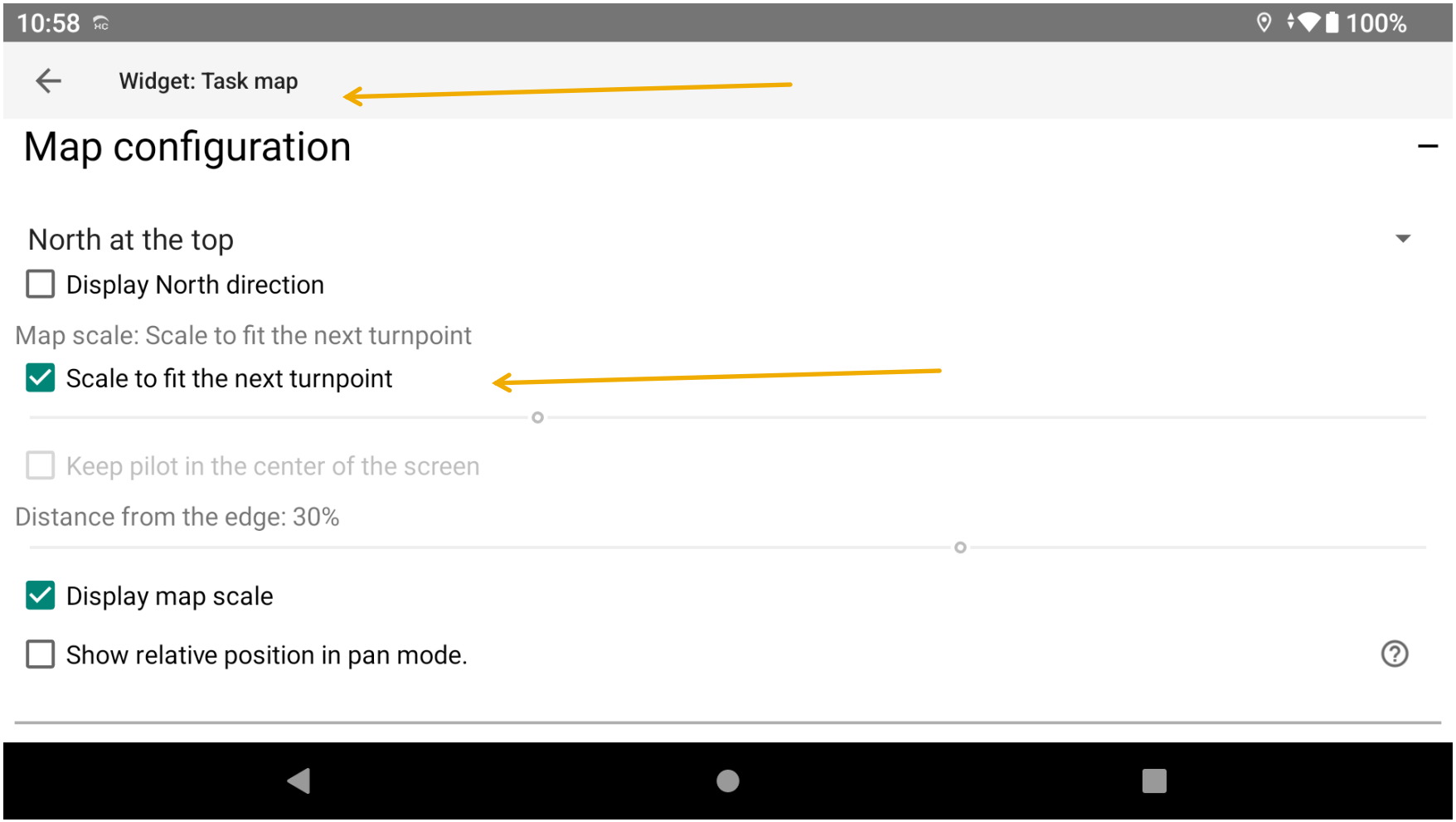
Travel direction at top



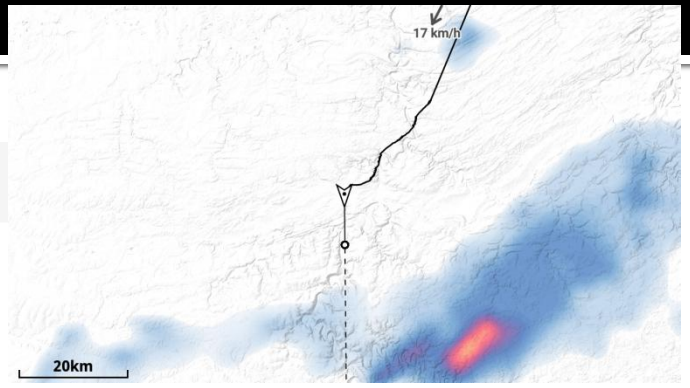
Review Maps widgets details



Review Maps widgets details



Review Maps widgets details



Widget: XC map

Map language

(default)

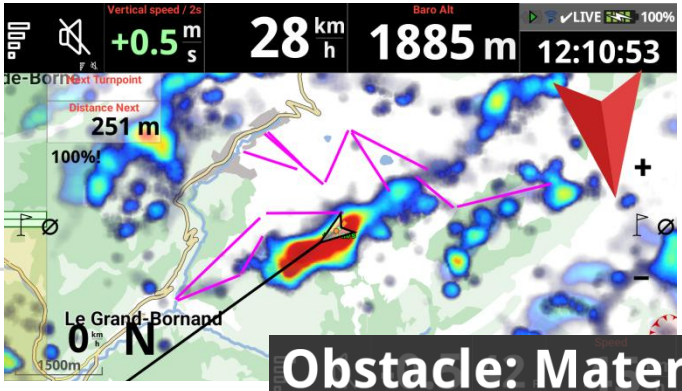
- [x] Display rain radar data **Pro**
- [ ] Display basic thermal overlay (thermal.kk7.ch)

Thermal overlay opacity: 40% **Pro**

- [x] Display time adjusted thermal overlay **Pro**

Time adjusted overlay opacity: 50% **Pro**

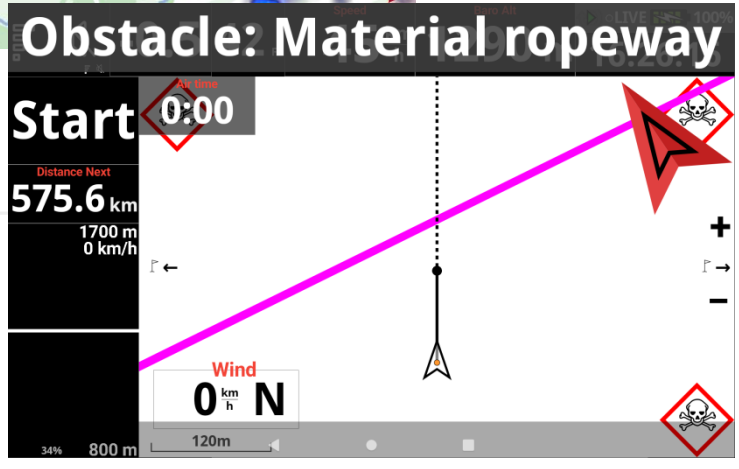
- [x] Display airspaces and obstacles



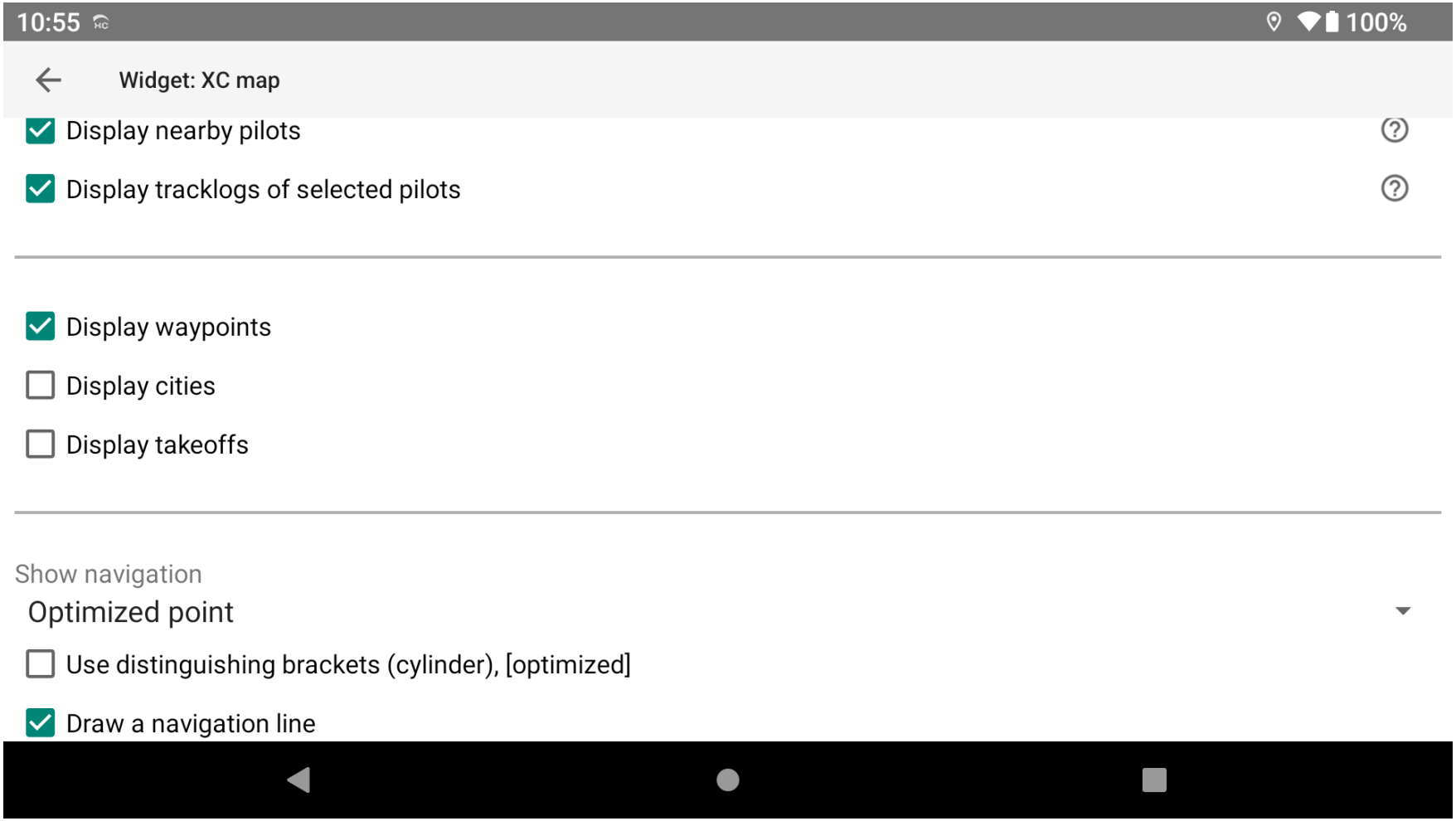
- [x] Show alert screen when approaching obstacle

Map scale: Automatic zoom in emergency obstacles mode

- [x] Automatic zoom in emergency obstacles mode



Review Maps widgets details



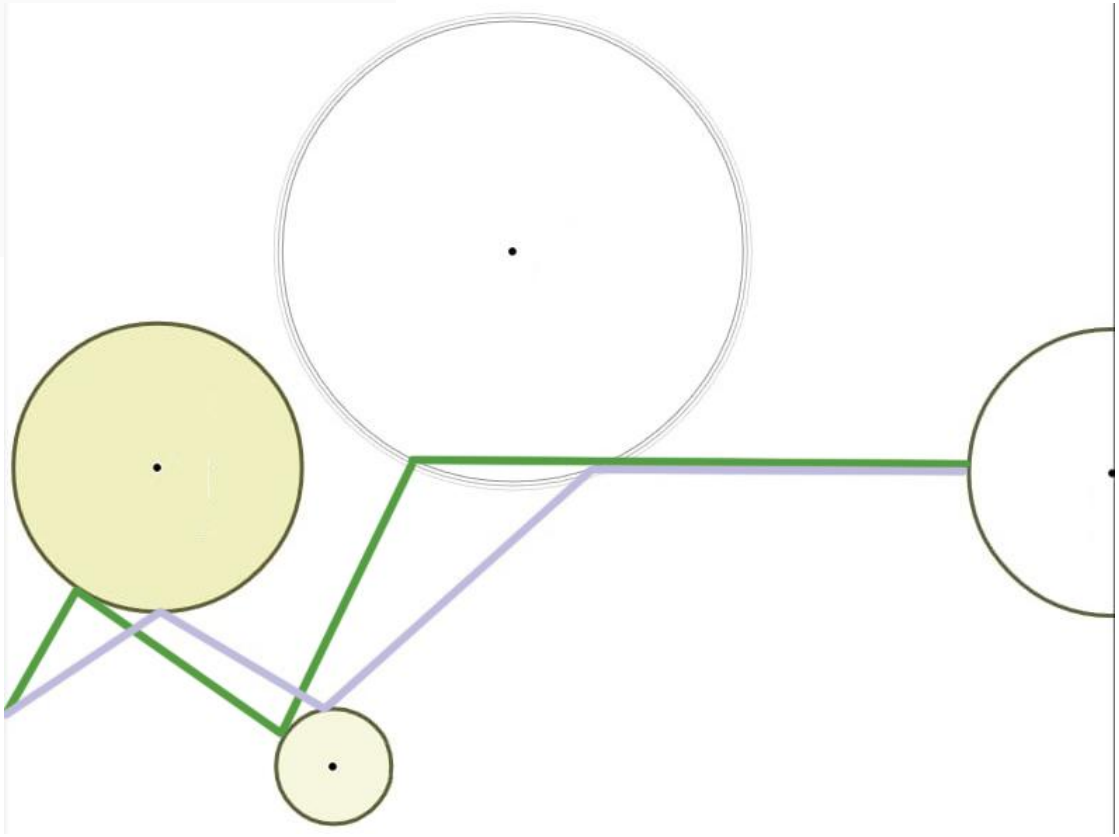
Review Maps widgets details

Point

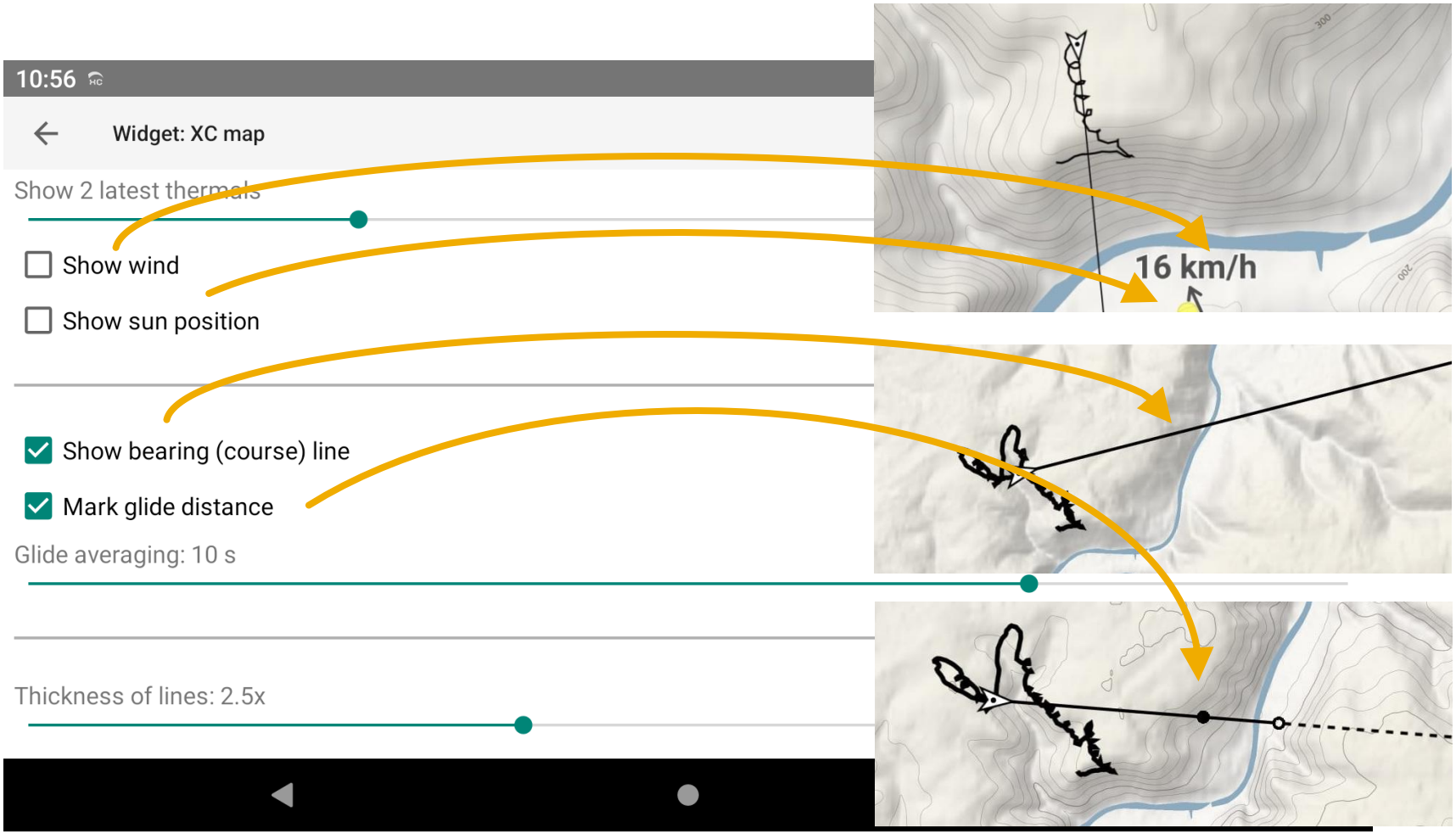
Optimized point

Cylinder (nearest point)

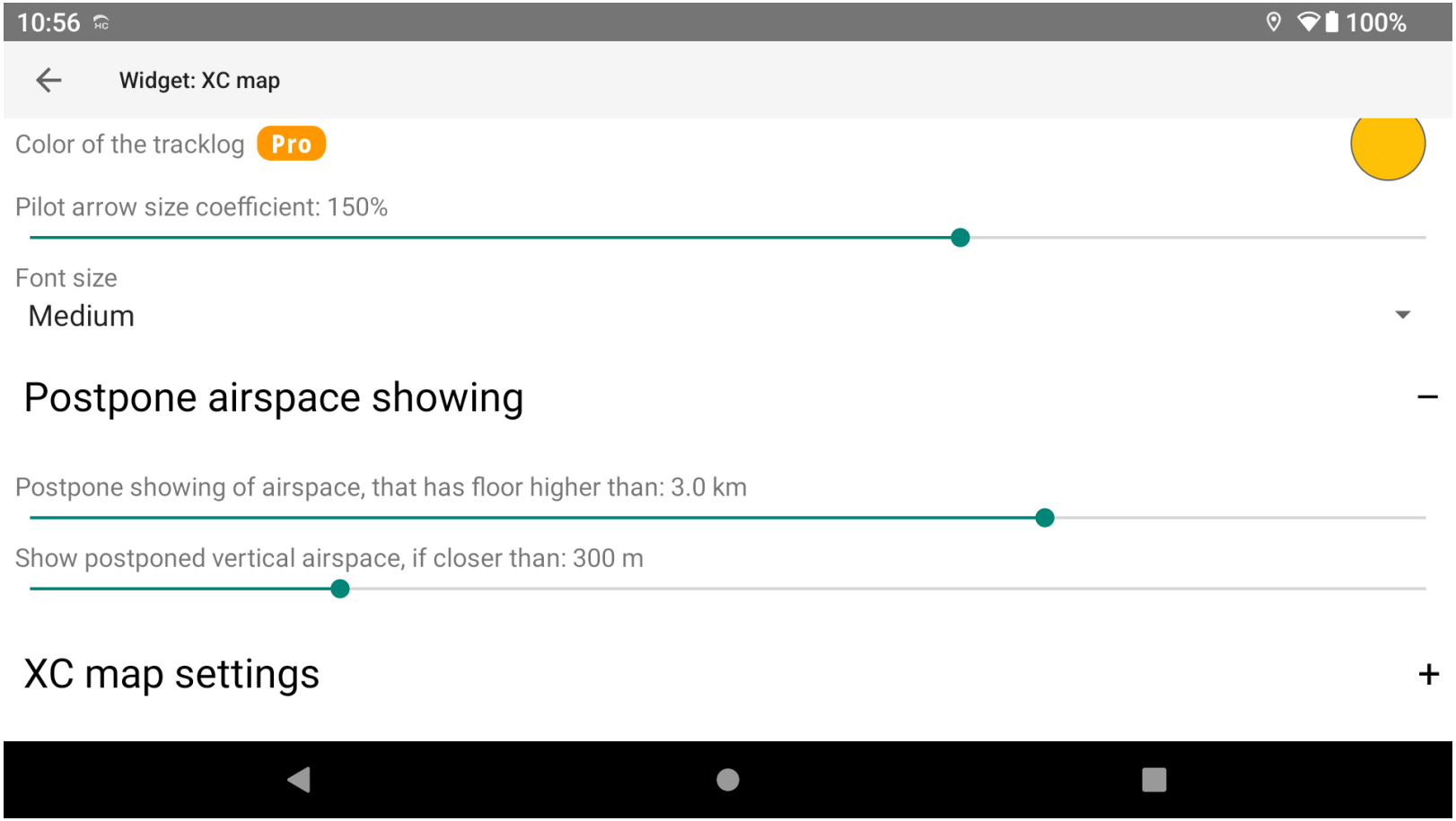
Do not use



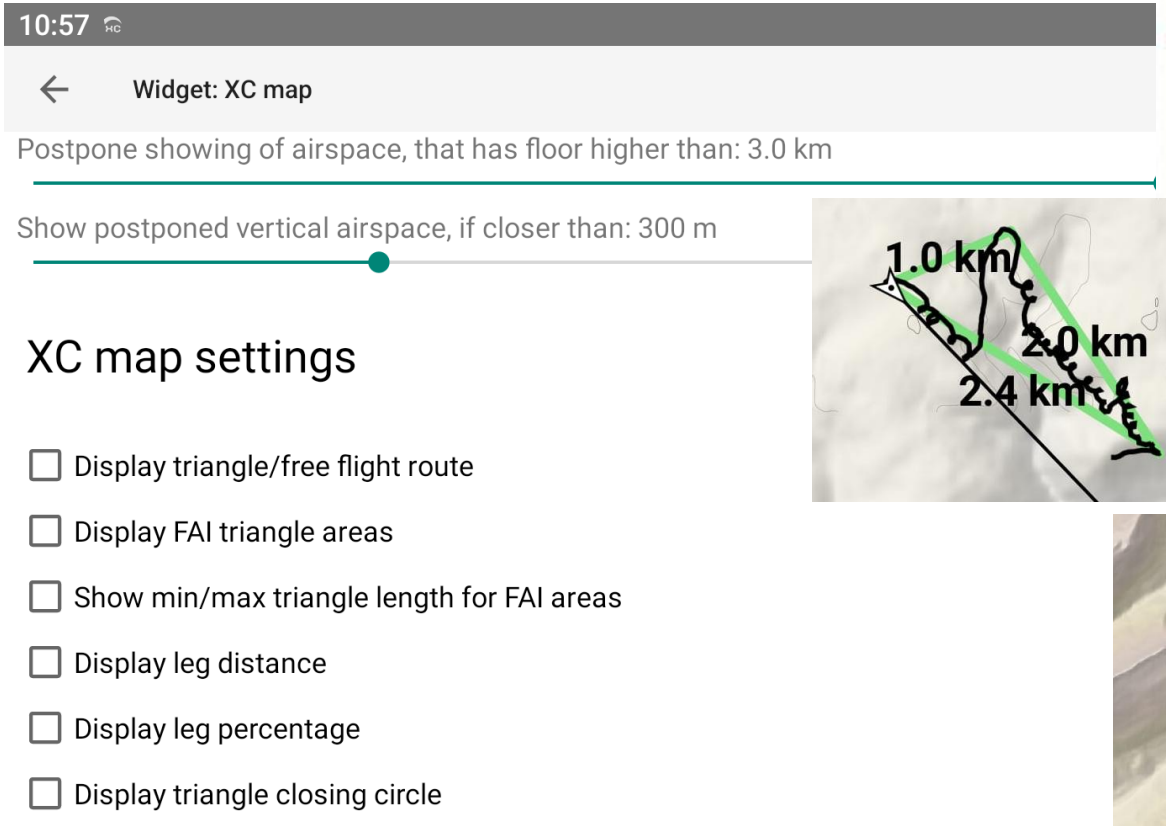
Review Maps widgets details

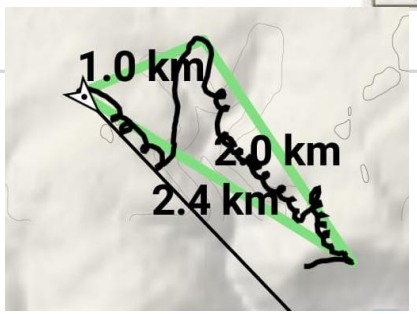


Review Maps widgets details

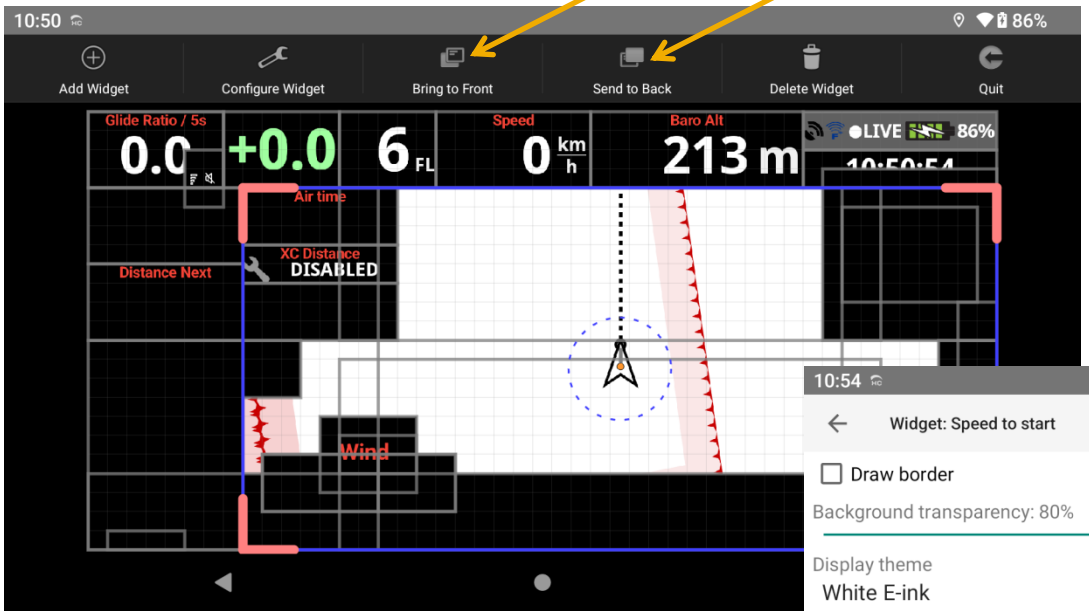


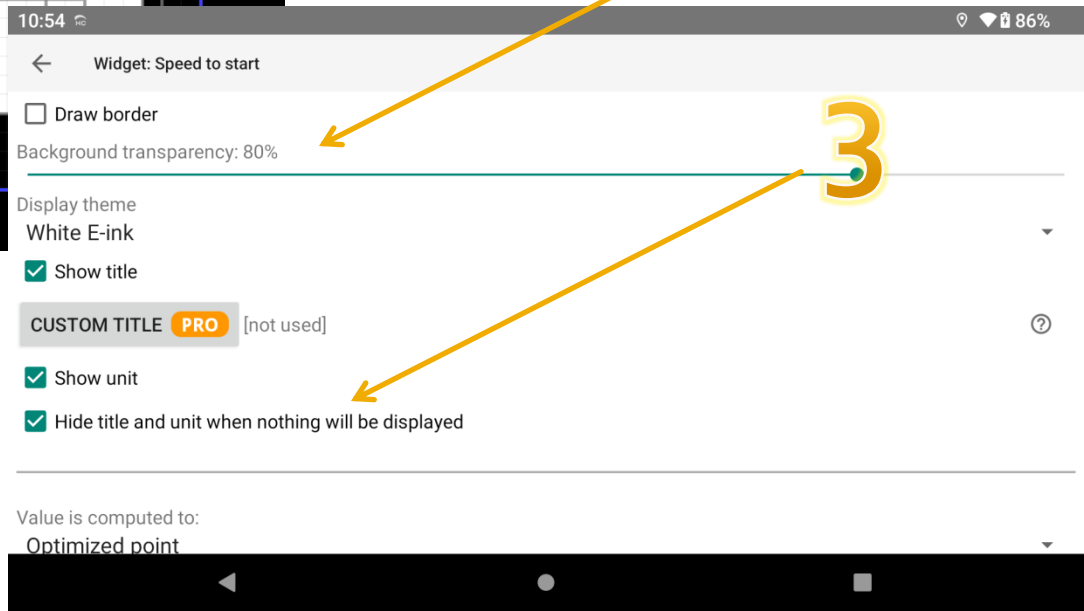
Review Maps widgets details





Customized Layout





1

2

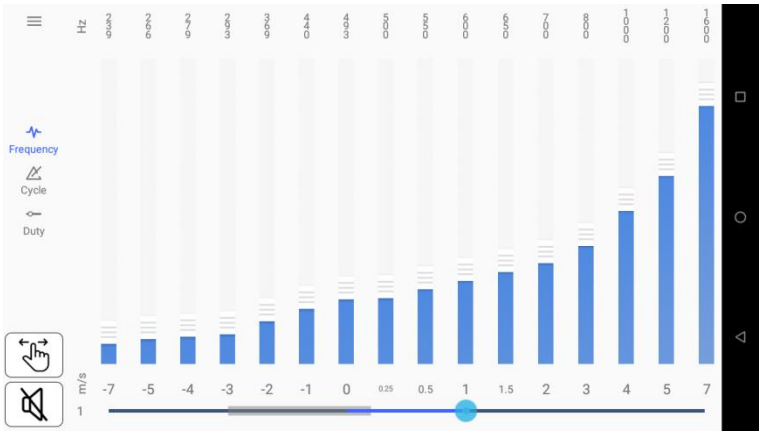
3

Competition widgets

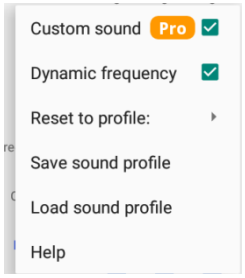
- Widgets before start
  - Time to start
  - Time at start
  - Speed to start
- Widgets during task
  - % of speed section
- Widgets before ESS/Goal (- 1000 m)
  - Distance, altitude over, Glide to ESS
  - Distance, altitude over, Glide to Goal

Sound customization

- Weak lift
- Lift audio threshold
- Custom sound
  - Frequency
  - Cycle
  - Duty



  - Dynamic frequency



The end….