Al thermals around EDFZ by D-SVEN, glider pilot since 2016

Please read the instructions below to have a maximum of fun with this feature!

The following steps are required to install and make use of this scenario:

- 1. Install the custom scenery as well as the thermal-scenario as described in the repo's README.md
- 2. Start FlightGear at EDFZ (Mainz Finthen) in a glider of your choice (ASK-21 to be recommended)
- 3. Go to the menu bar (F10) \rightarrow Al \rightarrow Al Scenarios
- 4. Activate the scenario "Thermals around EDFZ"



Thermal activation

Pro tip: In FG's "mini-map", every "Thermal cloud" is visible as Al-Traffic!

Thermaling:

- 1. After the thermals have been activated, black thermal clouds appear in the sky around the airfield
- 2. Now launch your glider with a launching method of your choice (winch/aerotow)
- 3. After launch, retract the gear (if possible) and head to the nearest thermal cloud (might be behind you!)



Every "Thermal cloud" in my scenario looks like this

Catching the thermal:

- 1. Once you are below the cloud the variometer in your instrument panel starts moving. The air around you is rising!
- 2. Decrease your speed (~80km/h with ASK-21) and start circling left or right
- 3. In the circle, keep a high bank angle of 30-50° and keep your speed low

The variometer is the most important instrument during thermaling





1. Pull the speed back 2. Keep the circles tight 3. Climb faster!

"Centering" the thermal:

You can easily keep and increase your climb with a few corrections while circling.

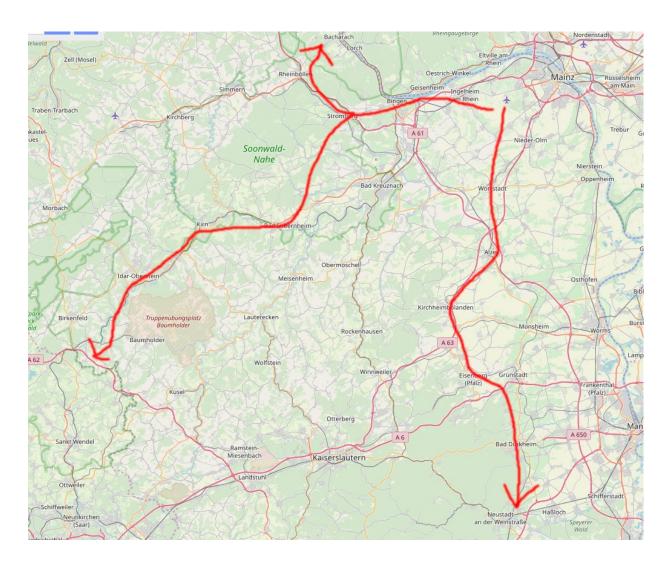
- 1. When the thermal gets better throughout the turn, straighten up the glider and turn in again shortly afterwards
- 2. If the climb decreases, circle even tighter until the climb increases again, then straighten up
- 3. You may lose the entire thermal. You may find it again by flying into the wind for a moment

The higher you are, the better the climb!

Stick with the direction in which you started circling (e.g. right). You may lose the climb when changing directions!

Cross-country gliding from/to EDFZ:

The thermal scenario generates cloud streets in various directions.



Flights to EDRH Hoppsteadten-Weiersbach or EDRL Lachen-Speyerdorf are easily possilbe

You may also use FlightGear's generic thermals on occasion: Environment → Weather → Deatiled Weather → Advanced Settings Enable "Generate Thermals"

These lifts are usually quite weak and unreliable.

CREDITS: Thanks to Thomas Polzer (D-ABBA) for the inspiration!