Region) of the Payerne airport, but in order to simplify authorization it will avoid its ATZ (Aerodrome Traffic Zone).
For the e-TOD exercise, the area of Bellechasse airfield shall be used.

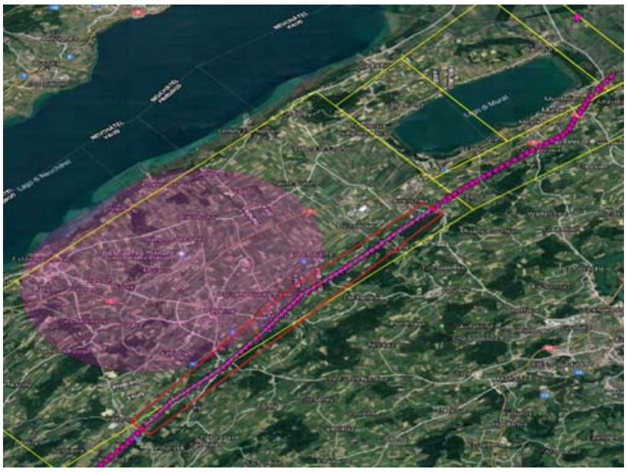

Figure 4. Demo flight area

4. CONCLUSIONS

Skypener demonstrates technology readiness for BVLOS missions in the framework of level-2 of U-Space. Main contributions to enabling technologies for such purpose are:

- implementation of a secure and dependable command-and-control communications links between RPAS and Ground Station, and from the latter to public infrastructure (UTM);
- integration of state-of-the-art UTM technology in the system architecture, demonstrating readiness for interaction with wide-area air traffic control, and providing smooth service request and provision chain.

These results were obtained under reasonable cost constraints, so that future long-range civil RPAS operations will compete strongly with manned-aircraft-based operations. Main reasons are the reduction in costs and simplified logistics, as well as enhanced quality and detail of data, thanks to the possibility of flying low, closer to survey targets. New applications for aerial survey and direct intervention (e.g. in maintenance, delivery, etc.), will be made possible in areas where large aircraft cannot fly.

The main challenge remaining is linked to safety guarantee and regulatory risk. Regulation authorities need to require very demanding proof of safety. This involves technological development such as demonstrated in Skyopener, but also extensive testing and certification. Another challenge is the regulating activity. Although expected to lead to an EU directive hopefully soon, this is necessarily a long-term process that does not allow for predicting immediate permission and management of large-scale commercial operation.

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