

Wellenflug im Schwarzwald



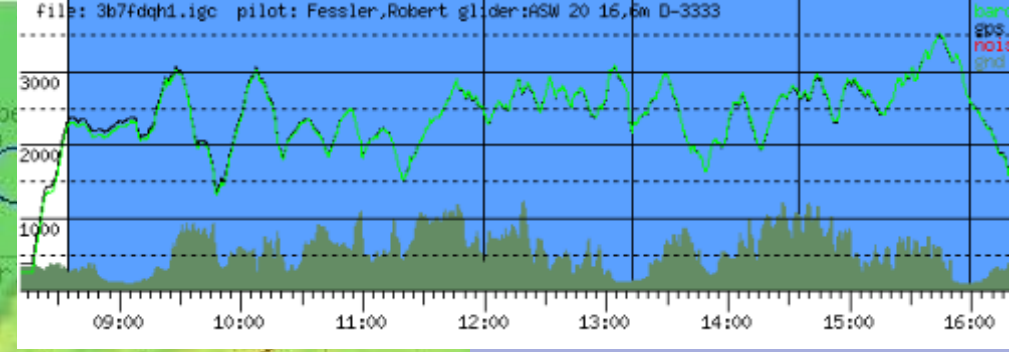
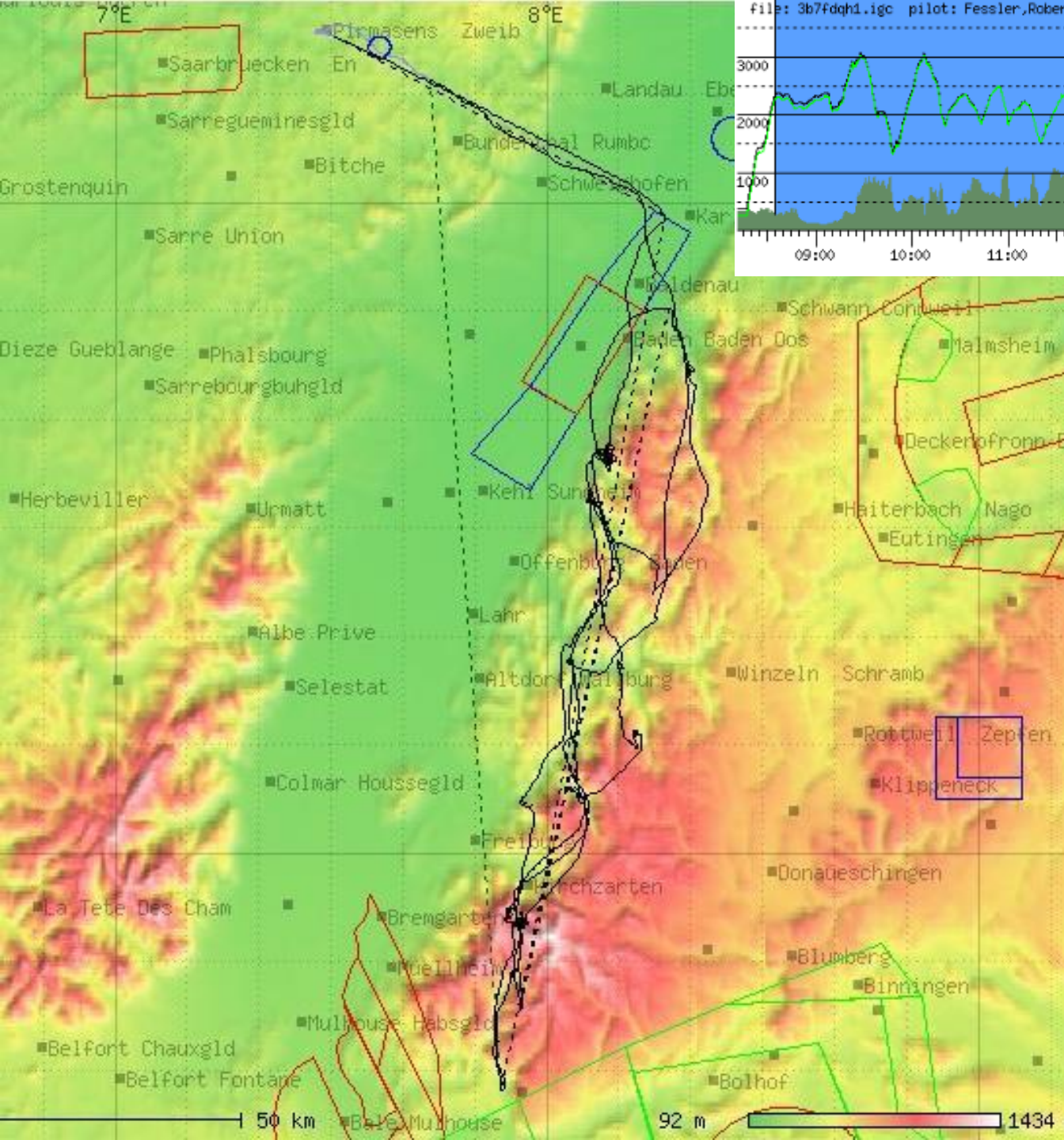
Vortrag von Robert Feßler zum Deutschen Segelfliegertag am 06.11.2004 in Mainz

Möglichkeiten

- Streckensegelflug im Winter vor der „Haustür“
- Strecken bis 700 km oder mehr machbar
- Im Wellenfenster FL 140
- Flüge von Sunrise bis Sunset
- Unbeschreibliches Flugerlebnis

7. November. 2003





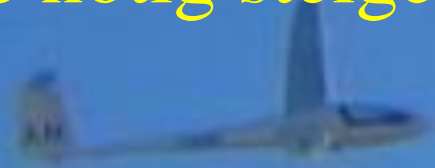
Robert Fessler

7. 11. 2003

630 KM OLC

Flugtaktik wie immer ...

- Gleiten mittels schwacher Wellen strecken
- Nur so hoch wie nötig steigen
- Steigen nur in den bekannten Hauptwellen:
 - Schwarzwaldhochstrasse, Murgtal, Simonswäldertal, Kandel, Feldberg, Schönau (Wiesental)



Orographie und Wellensysteme des Schwarzwaldes



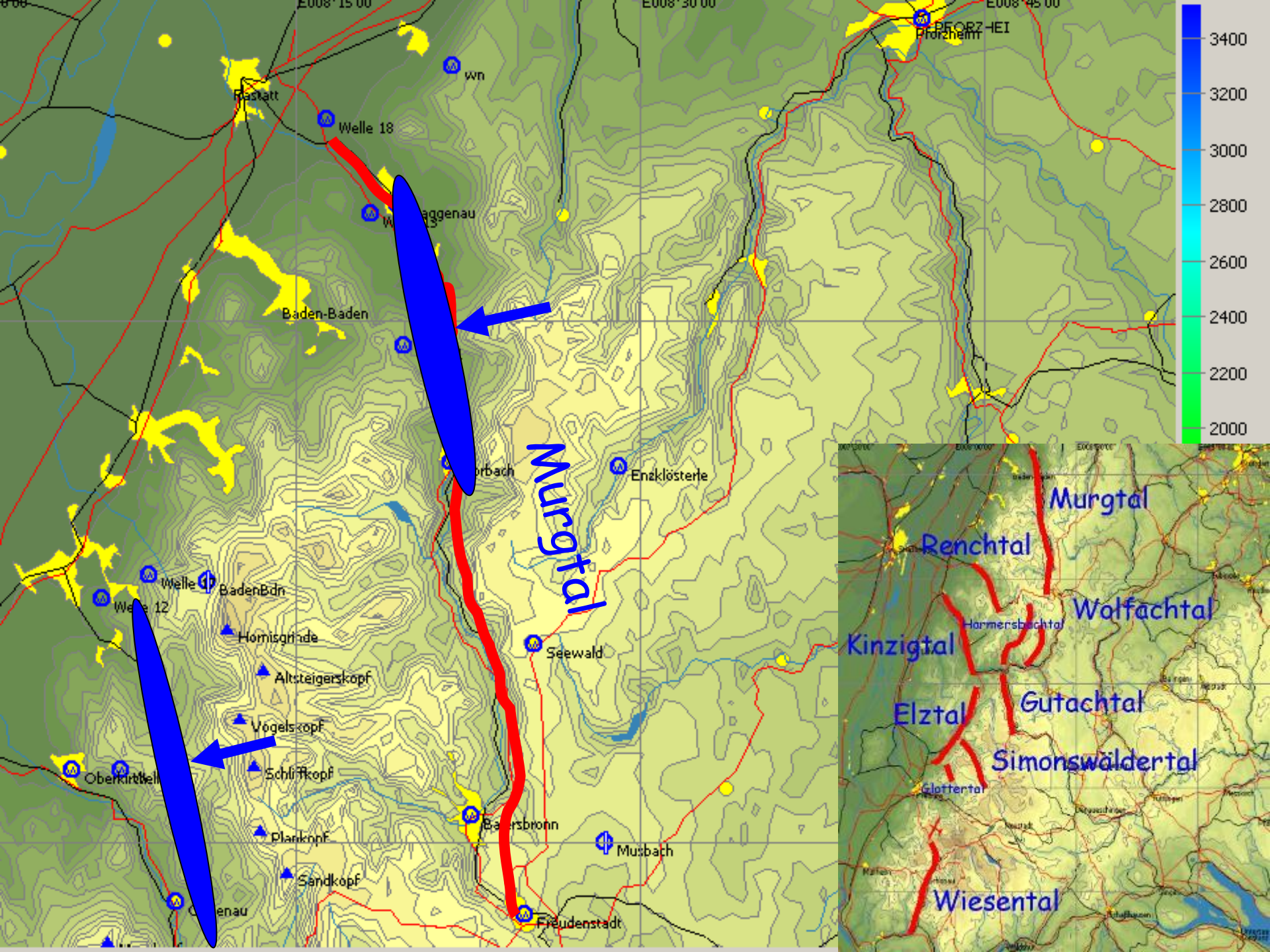
An aerial photograph taken from the perspective of a glider. In the center, a small white airplane is towing a glider. The glider is visible on the right side of the frame, with its wing and tail section in view. The sky is filled with a thick layer of white clouds, and the sun is setting on the horizon, creating a warm orange and yellow glow. The text is overlaid on the left side of the image.

Ausdehnung:

Karlsruhe (N) – Bad Säckingen (S) ca. 160 km

Ausrichtung $14^{\circ}/194^{\circ}$



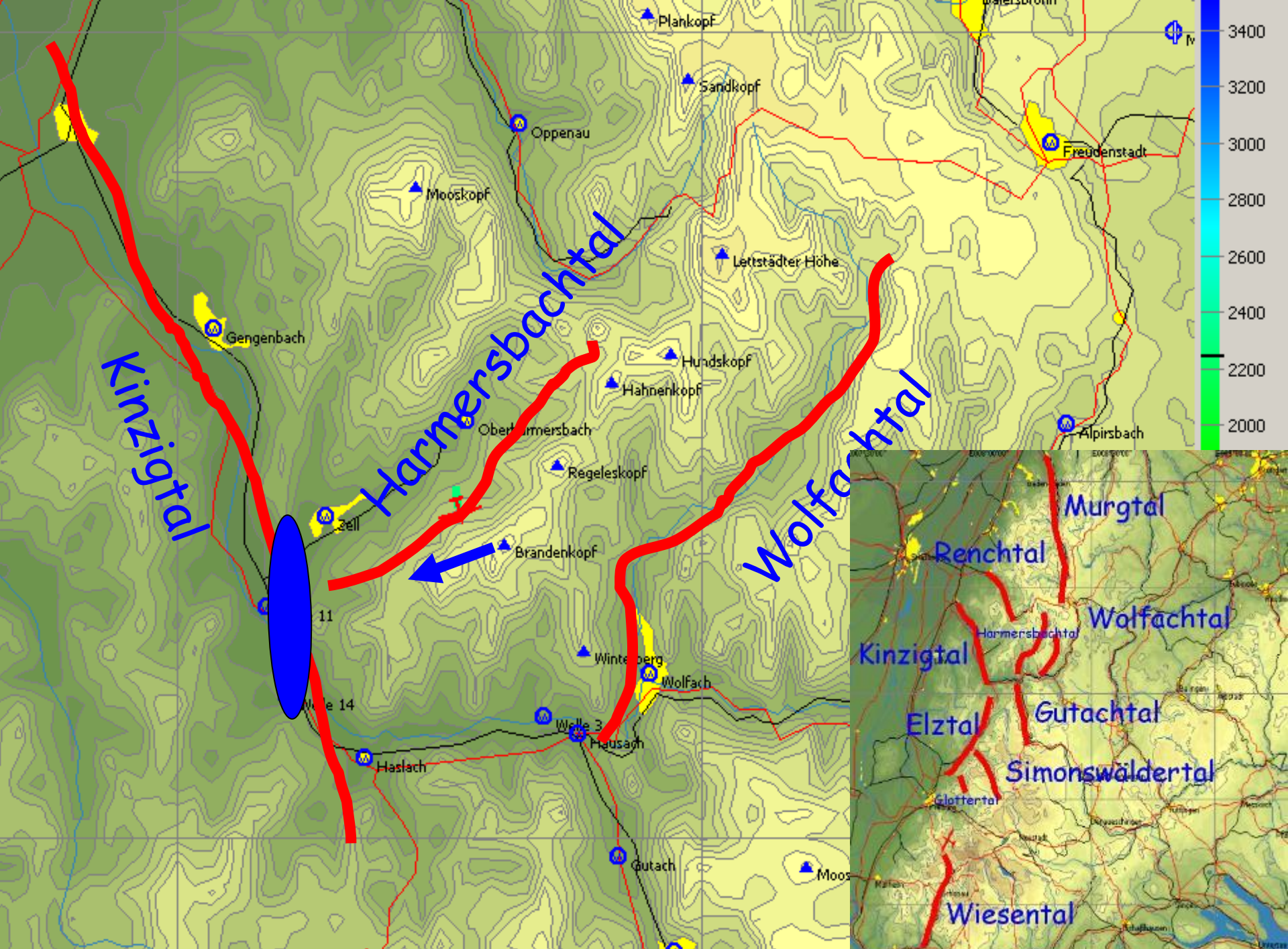


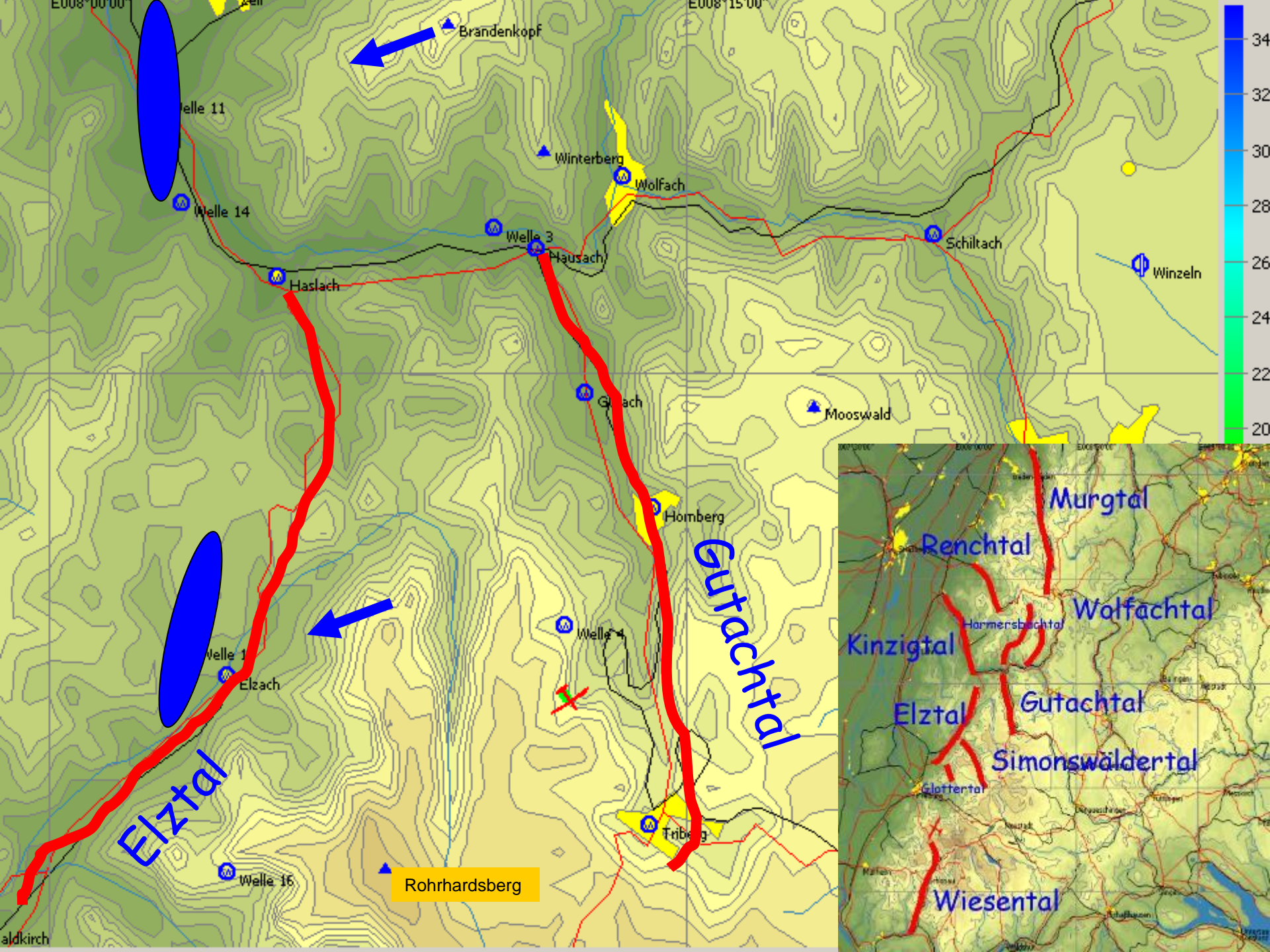


Wellenfluggebiet Murgtal

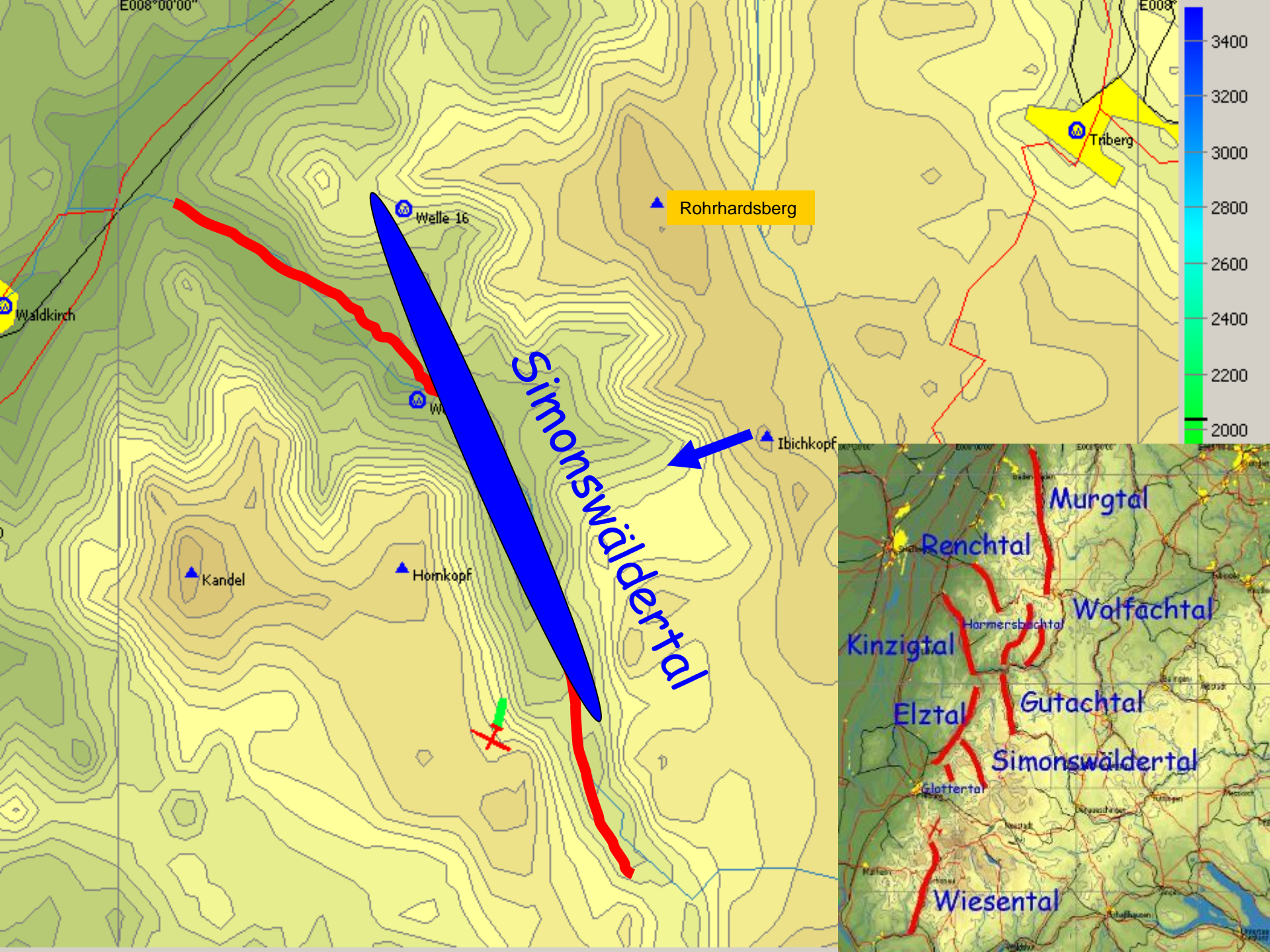


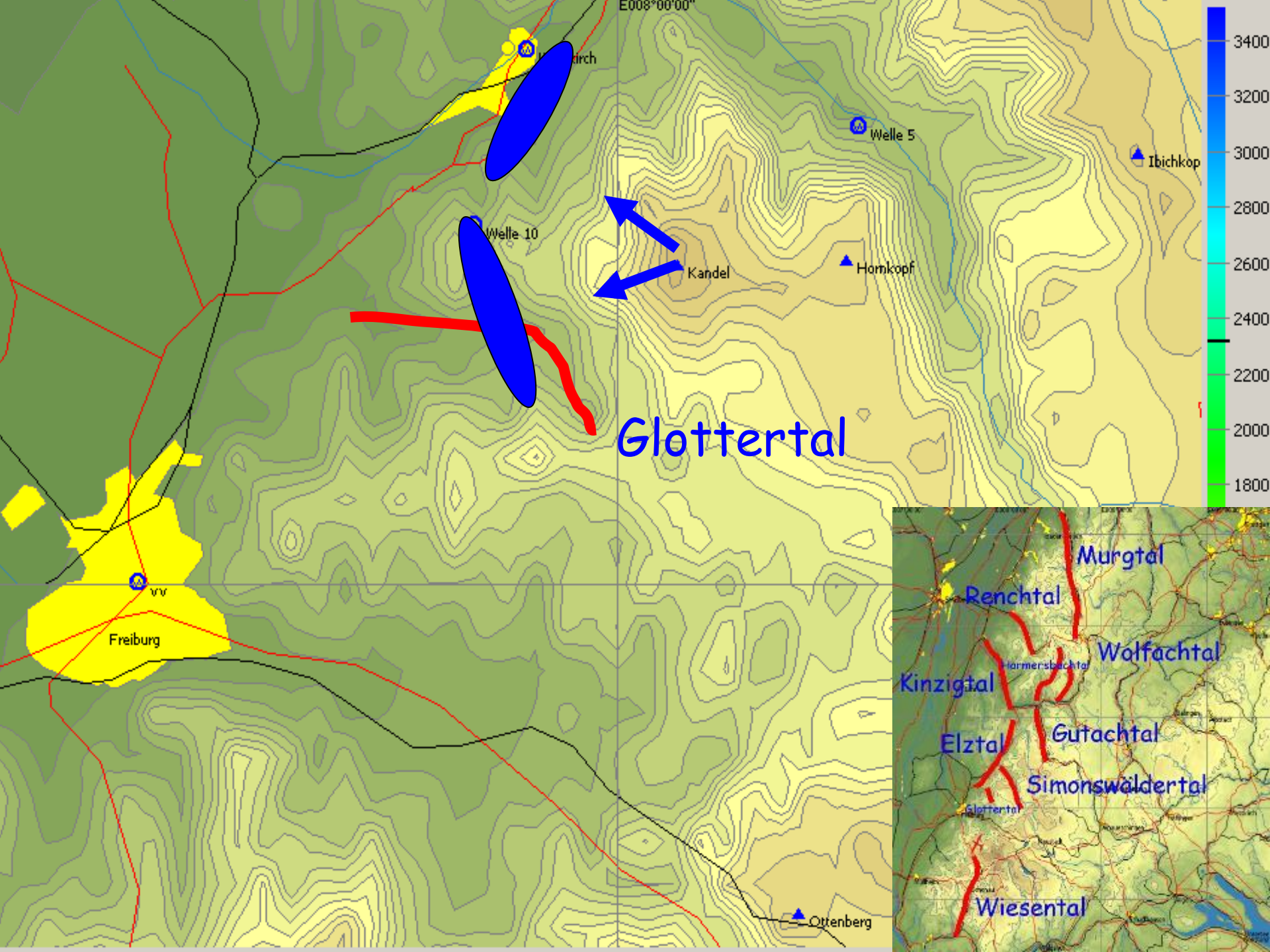
- FL 140 - 160
- Aktivierung spätestens 1 Stunde vor Aufnahme des Flugbetriebes
- Tel.: 07229 662583
- „Baden Turm“ 125.875
- Hörbereitschaft
- Abmeldung erforderlich
- Ausflug nur nach unten



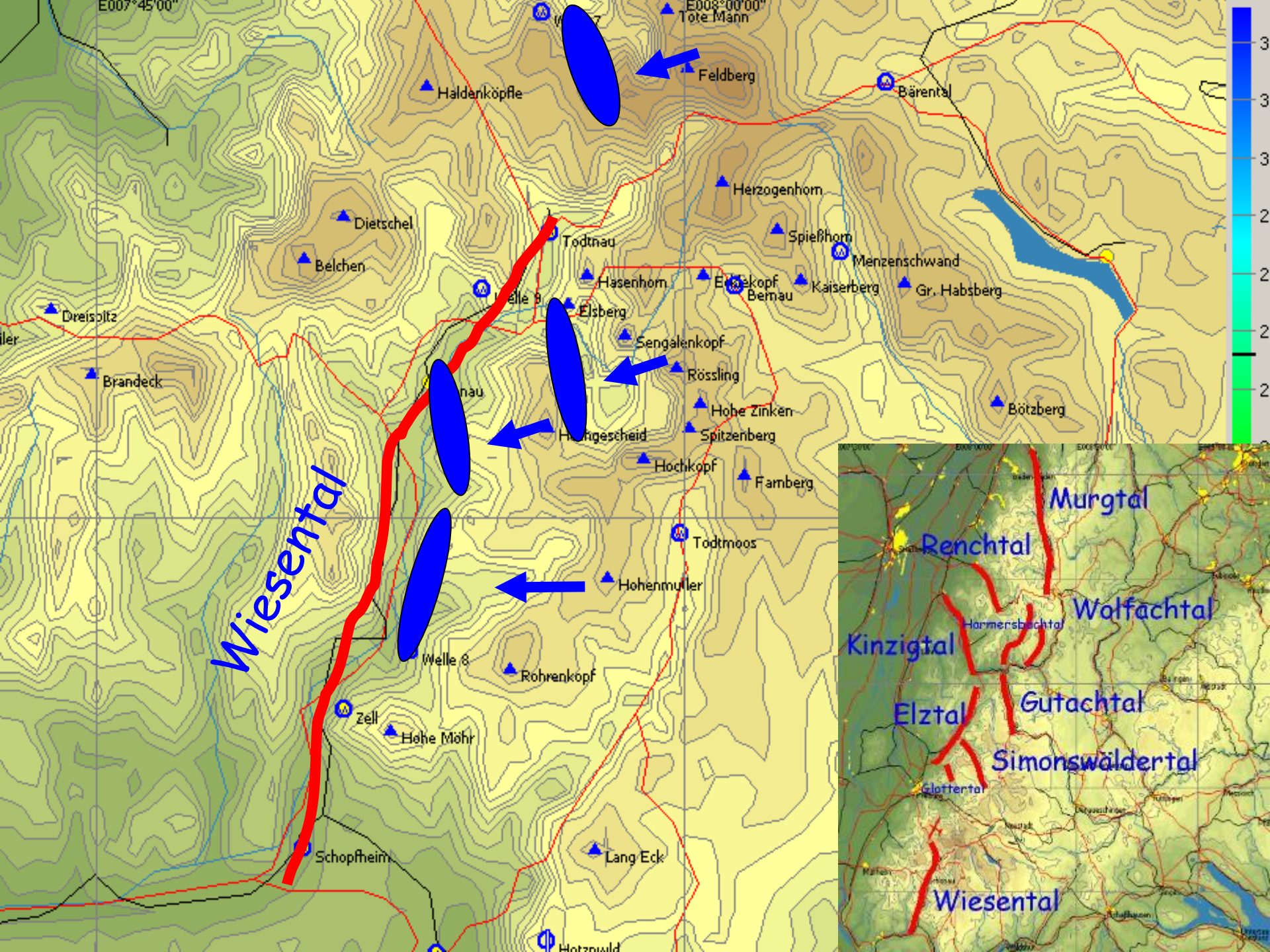


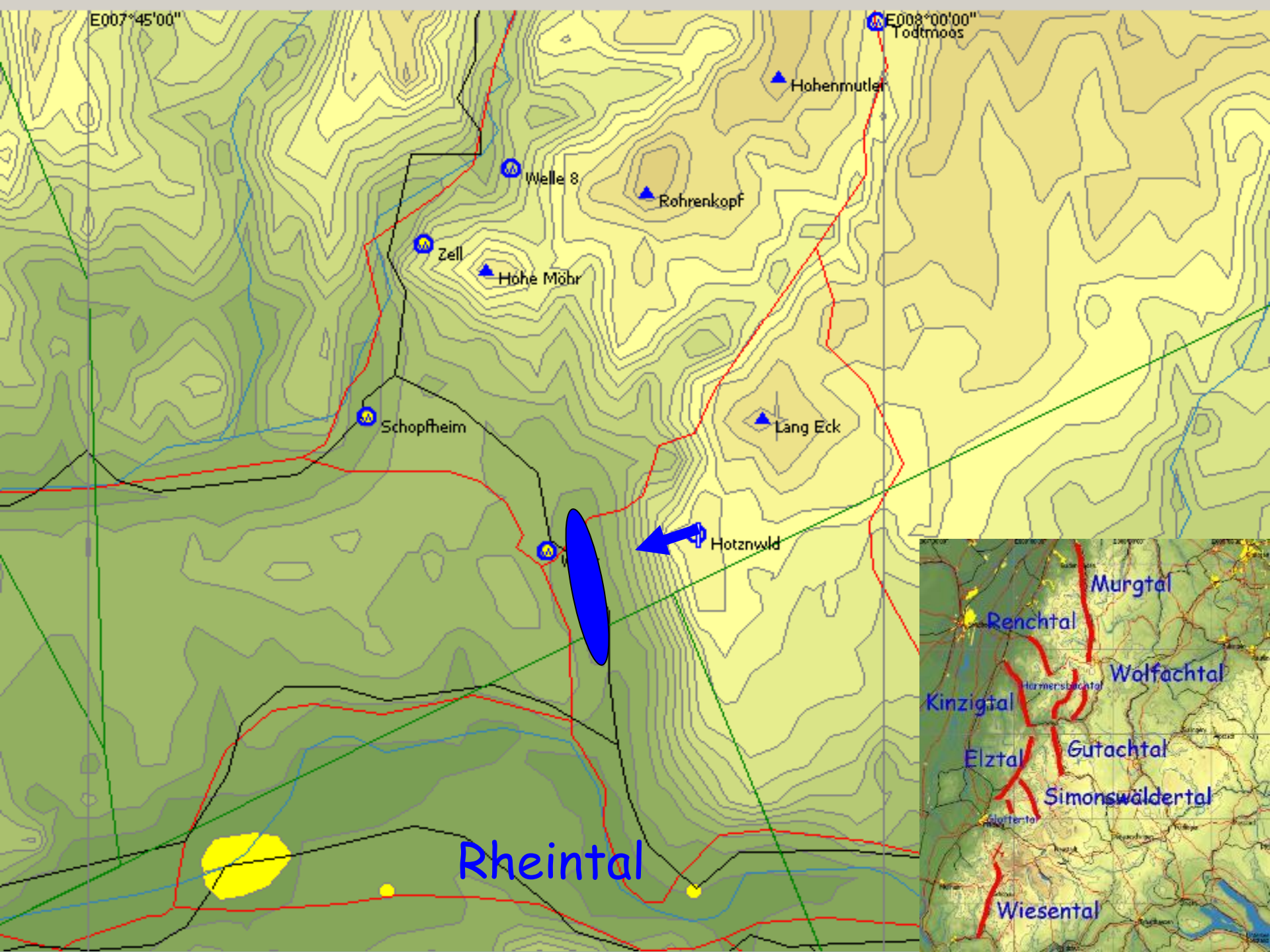






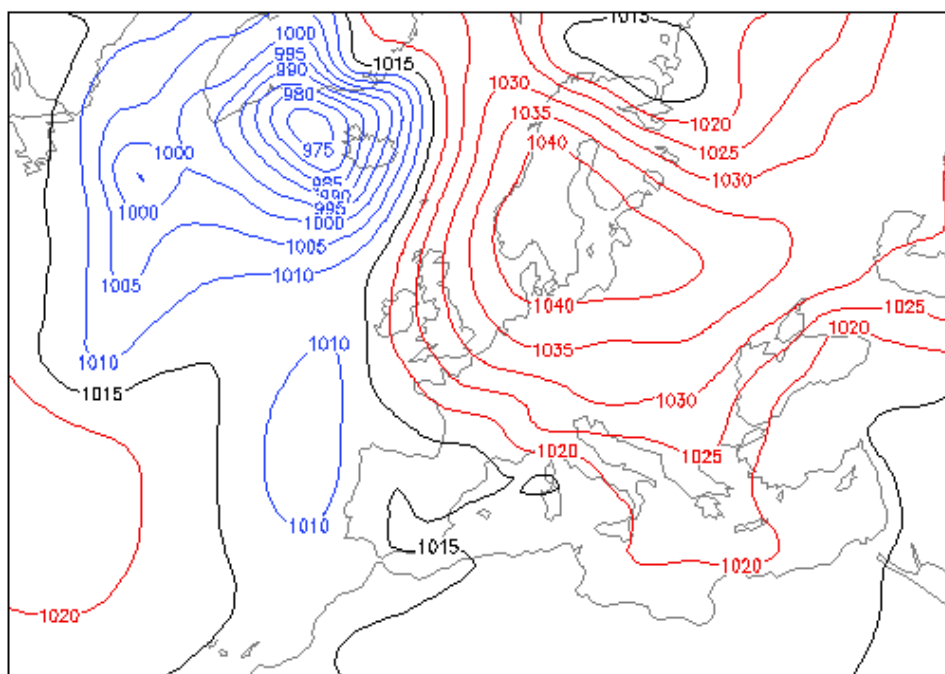




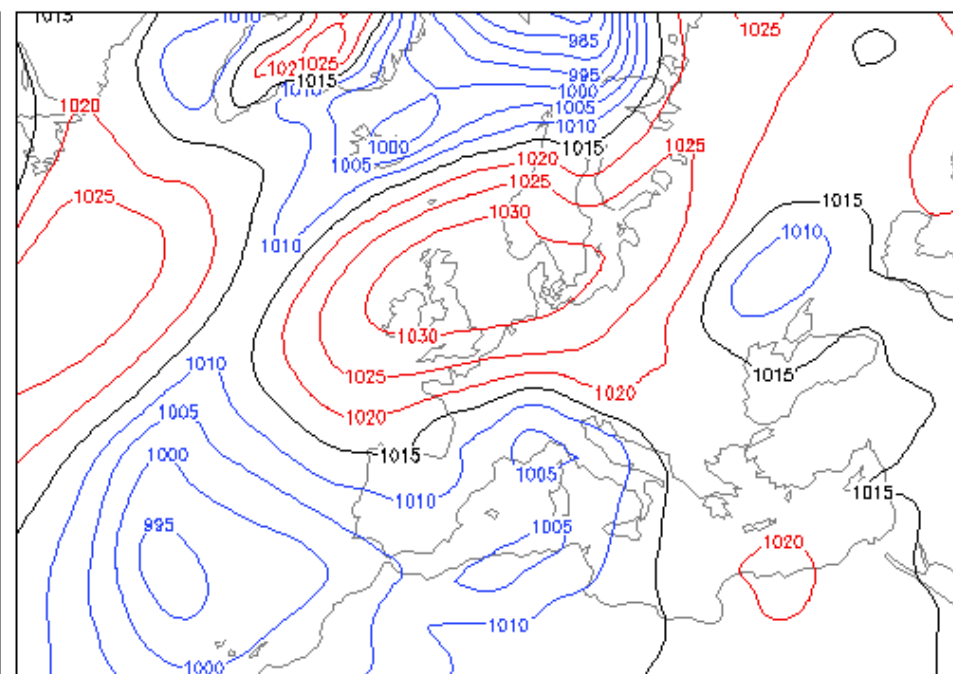


Wetterlagen

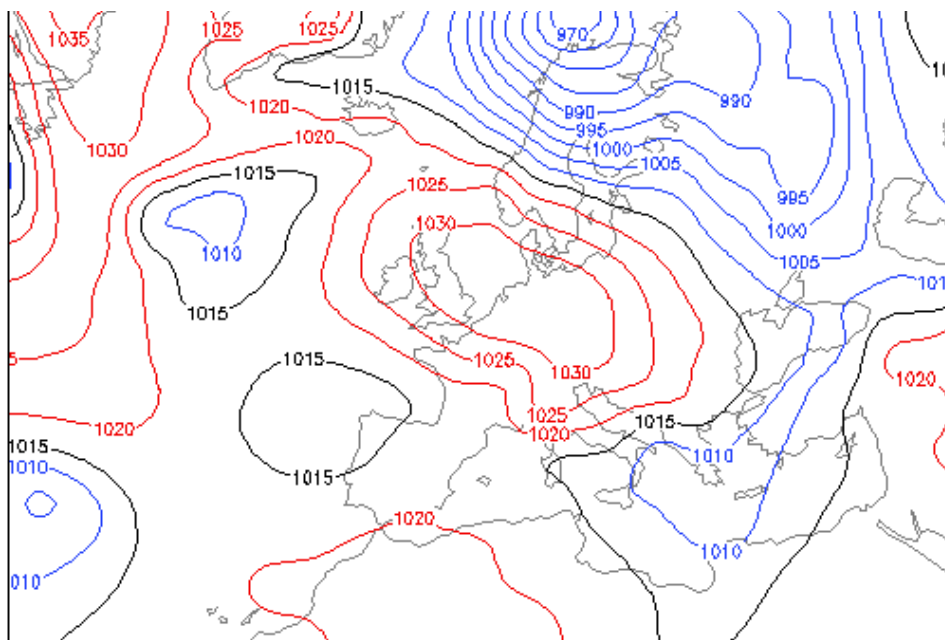
- Hoch im N (Nordsee, Baltikum)
- Tief über Norditalien
- Dazwischen Ostströmung (meist kalt)
- Fluggebiet unter Hochdruckeinfluss
- siehe: [pc_met](#), [www.wetterzentrale.de](#),
[www.wetteronline.de](#), Bolam21km



Bodendruck (NN) GFS (hPa) VT: Fr 07.11.03 12 GMT (Fr 00 + 12)
WetterOnline



Bodendruck (NN) GFS (hPa) VT: Do 19.02.04 12 GMT (Do 00 + 12)
WetterOnline



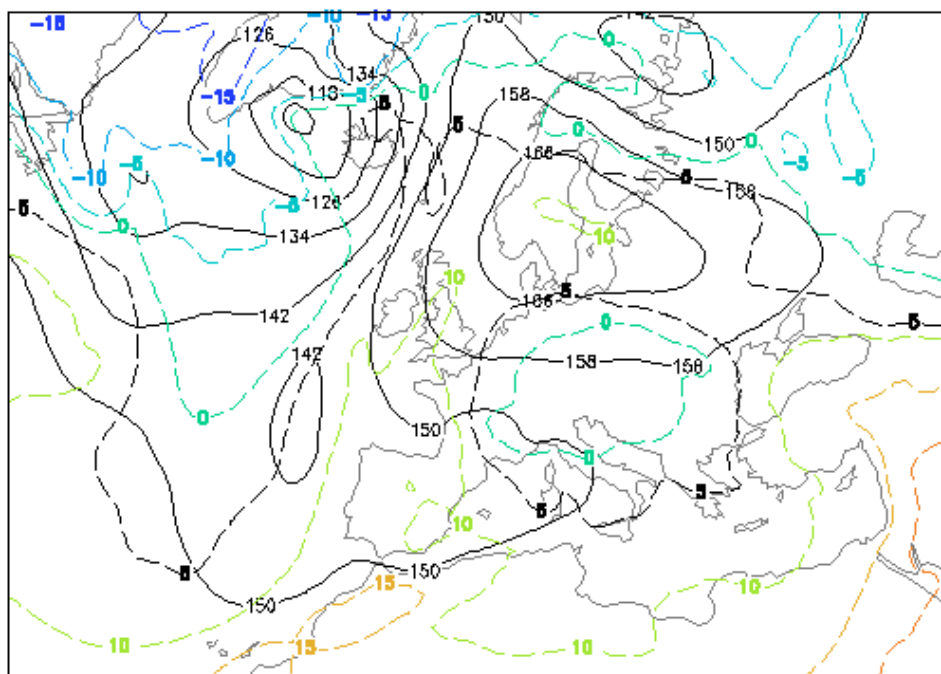
Bodendruck (NN) GFS (hPa) VT: So 07.12.03 12 GMT (So 00 + 12)
WetterOnline

Bodendruck:

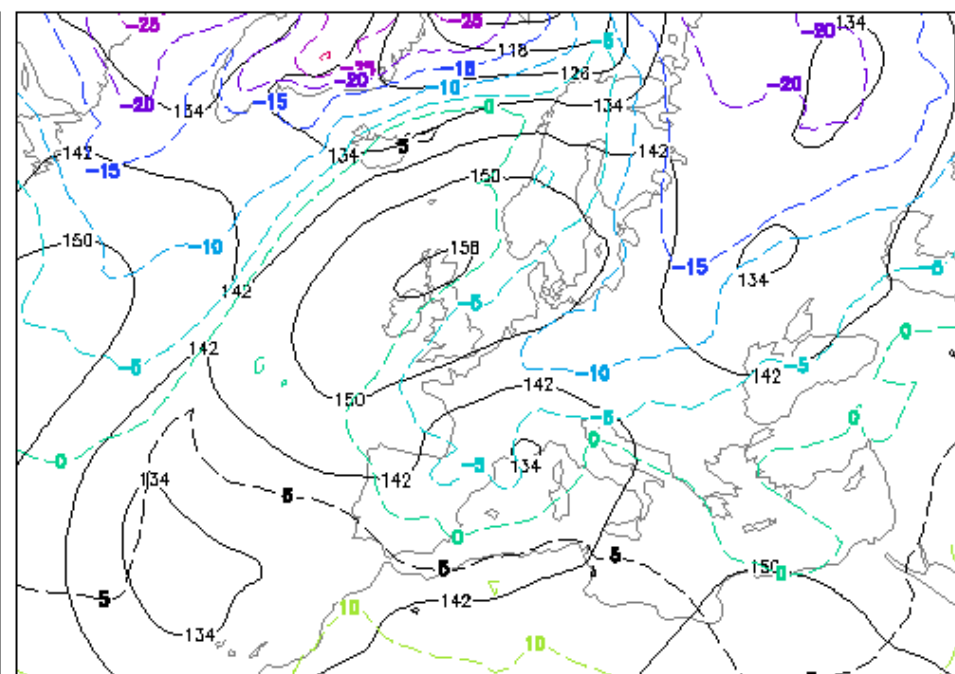
7.11.03

19.02.04

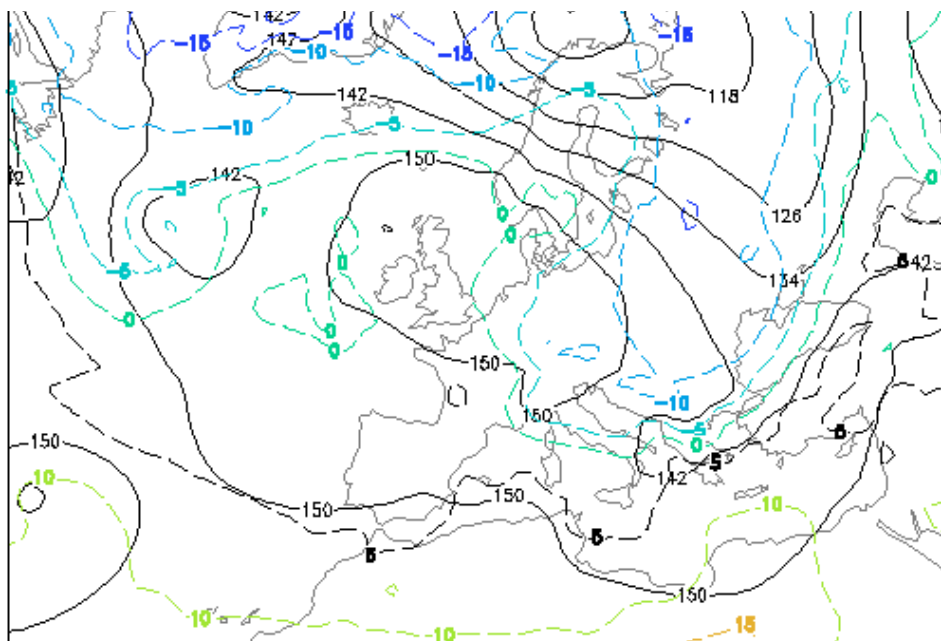
7.12.03



Höhe 850 hPa GFS (gpdm) VT: Fr 07.11.03 12 GMT (Fr 00 + 12)
 Temperatur 850 hPa GFS (Grad C) WetterOnline



Höhe 850 hPa GFS (gpdm) VT: So 19.02.04 12 GMT (So 00 + 12)
 Temperatur 850 hPa GFS (Grad C) WetterOnline



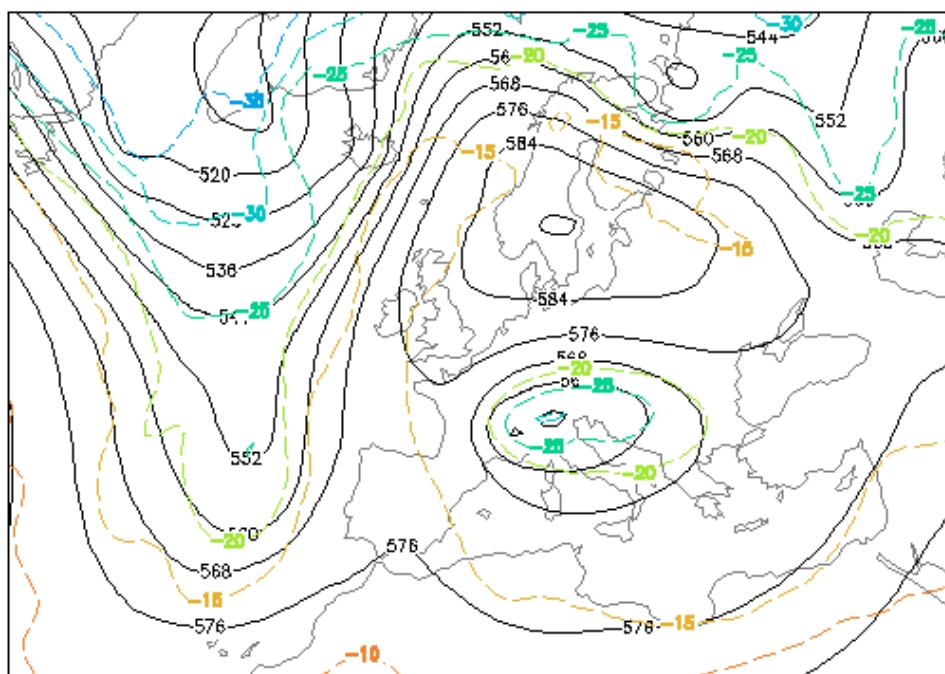
Höhe 850 hPa GFS (gpdm) VT: So 07.12.03 12 GMT (So 00 + 12)
 Temperatur 850 hPa GFS (Grad C) WetterOnline

850 hPa (ca. 1500 m):

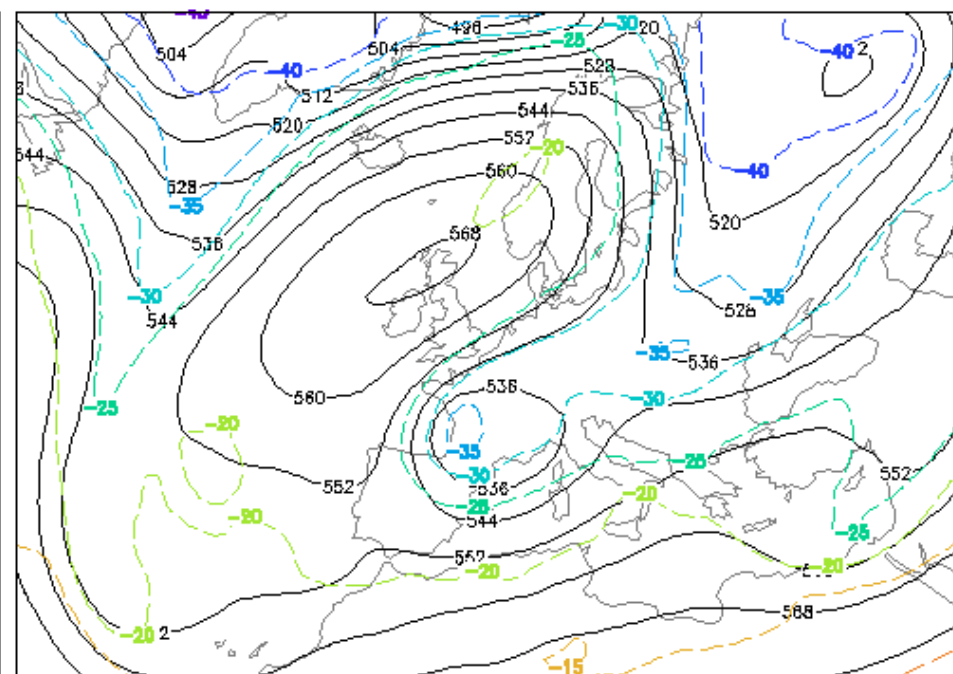
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19.02.04

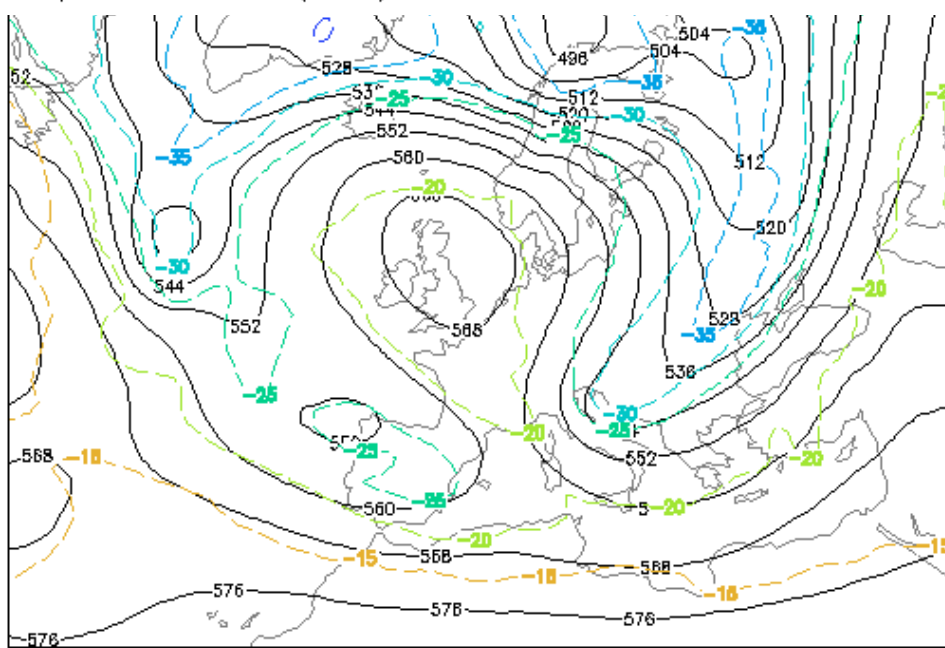
7.12.03



Höhe 500 hPa GFS (gPdm) VT: Fr 07.11.03 12 GMT (Fr 00 + 12)
 Temperatur 500 hPa GFS (Grad C) WetterOnline



Höhe 500 hPa GFS (gPdm) VT: Do 19.02.04 12 GMT (Do 00 + 12)
 Temperatur 500 hPa GFS (Grad C) WetterOnline

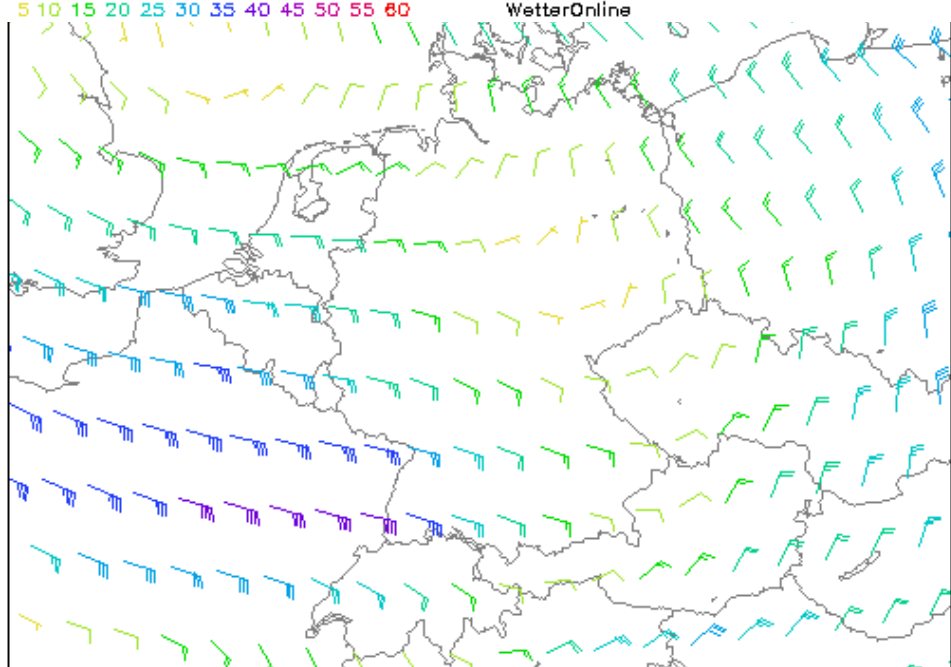
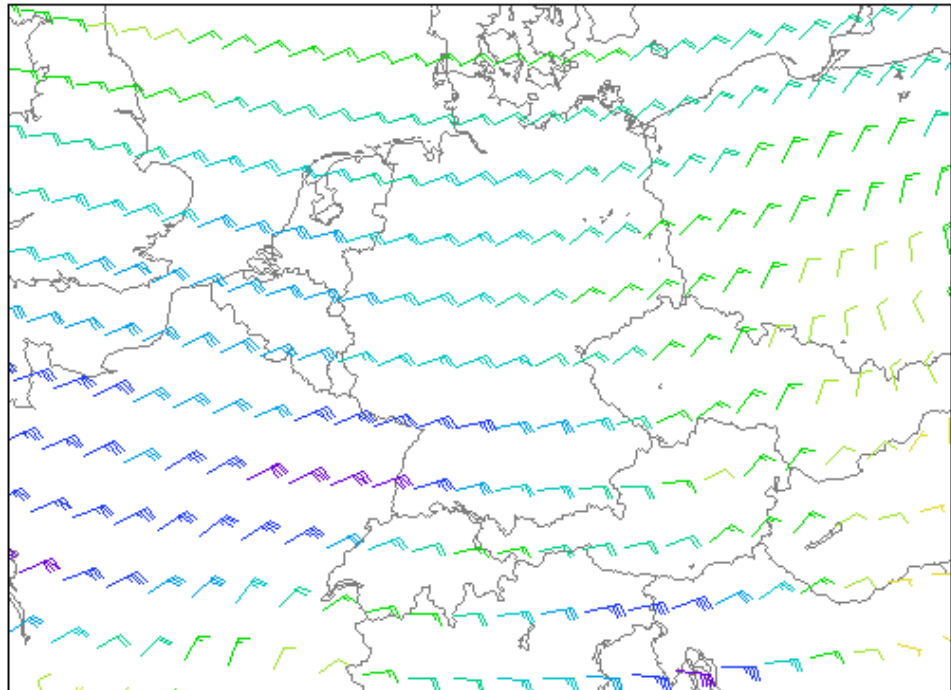
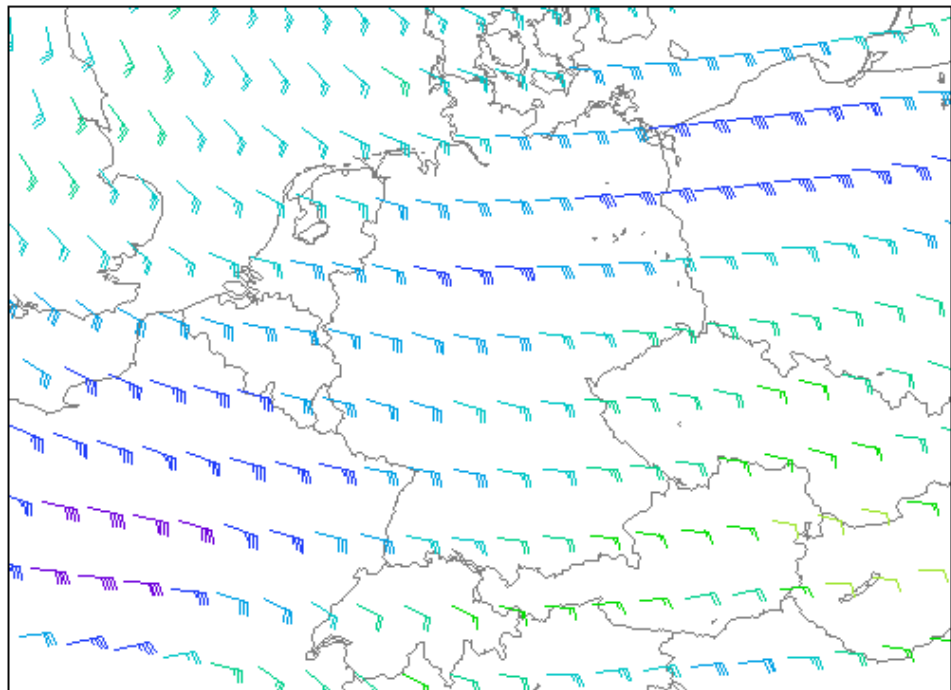


Höhe 500 hPa GFS (gPdm) VT: So 07.12.03 12 GMT (So 00 + 12)
 Temperatur 500 hPa GFS (Grad C) WetterOnline

500 hPa (ca. 5500 m):

7.11.03 19.02.04

7.12.03



Wind ca. 1500 m:

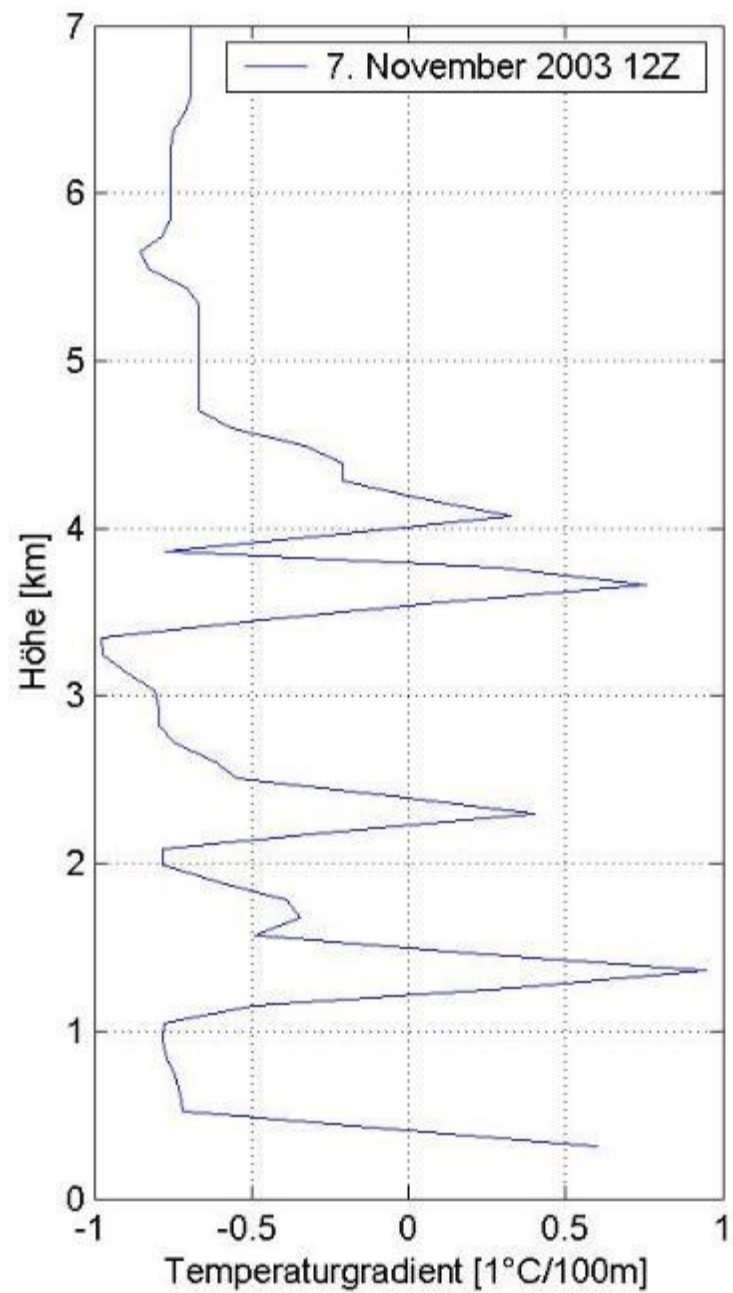
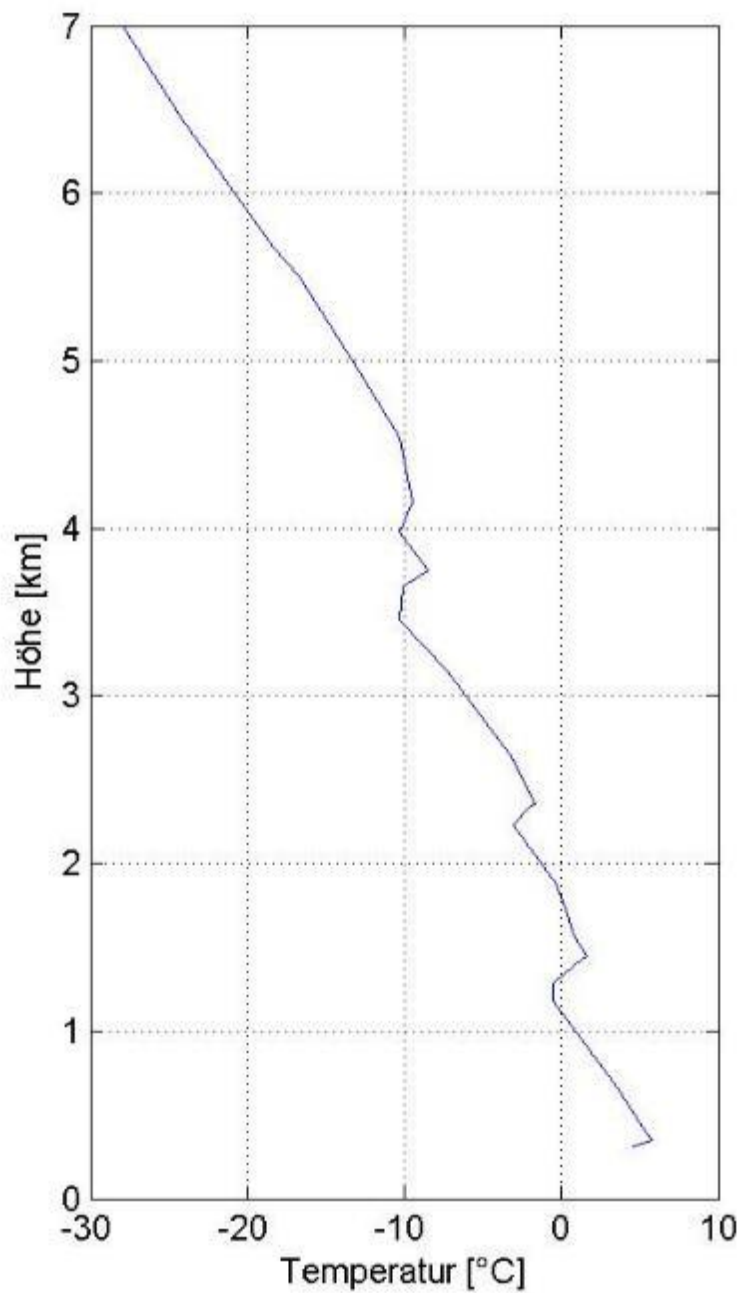
7.11.03

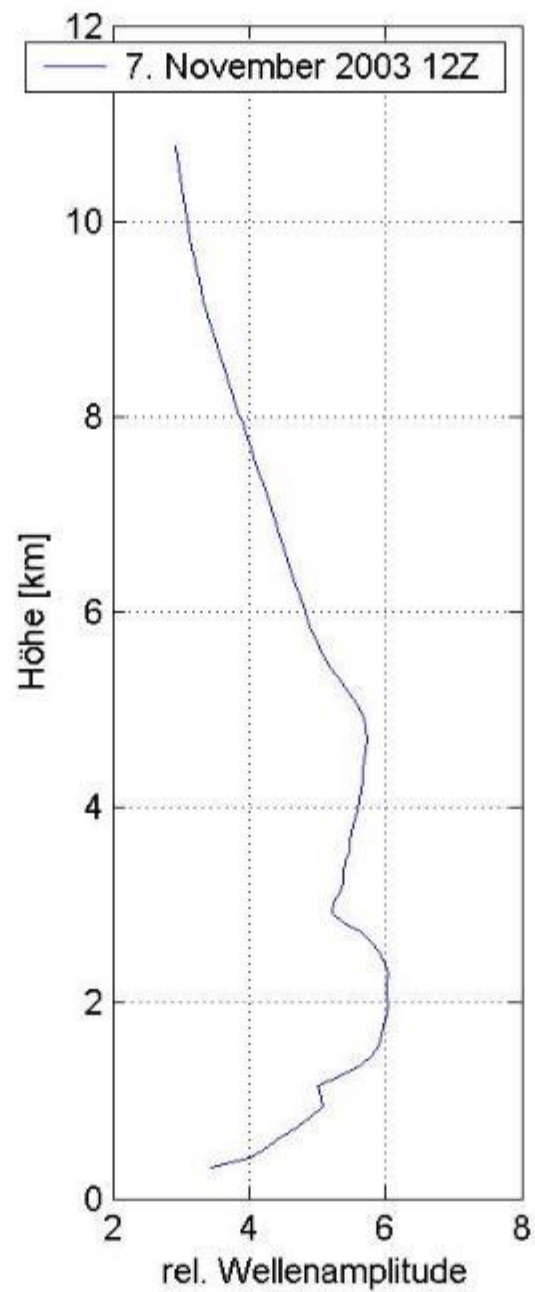
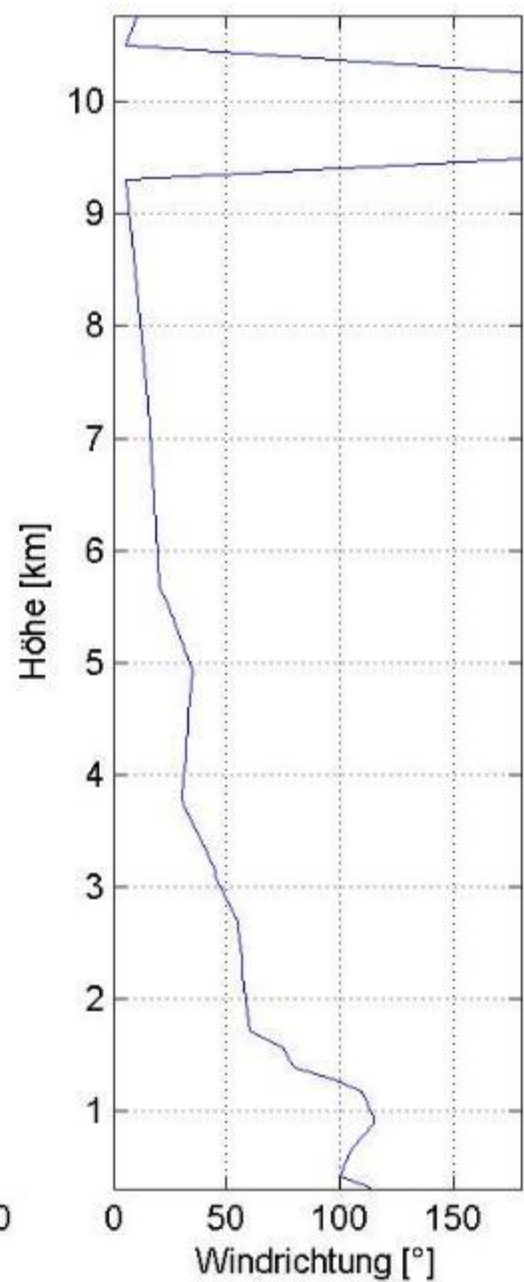
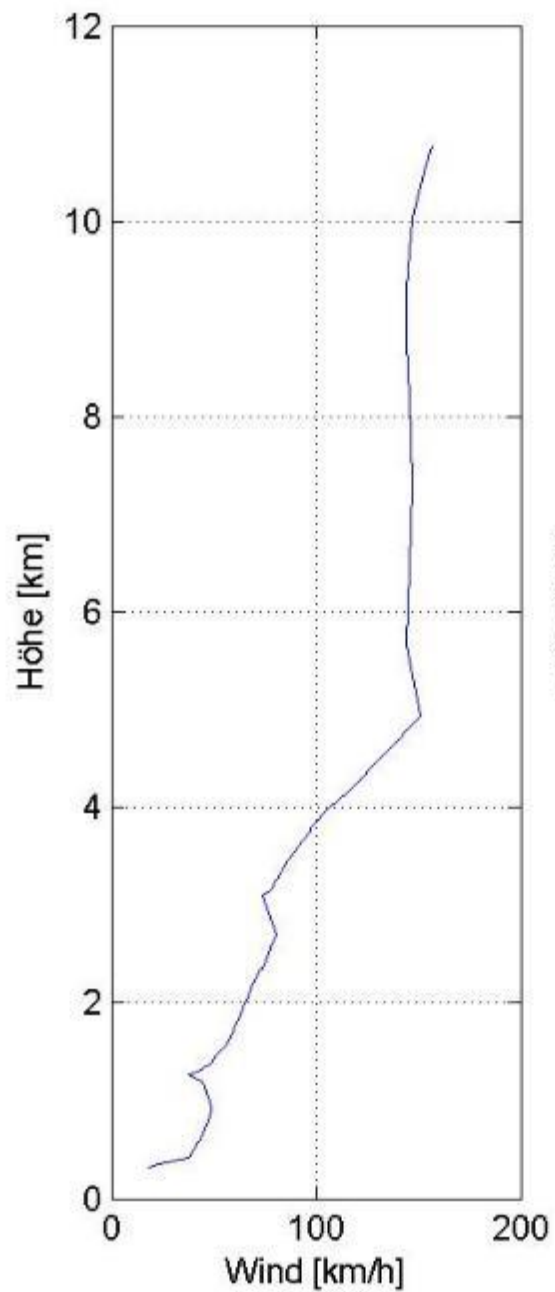
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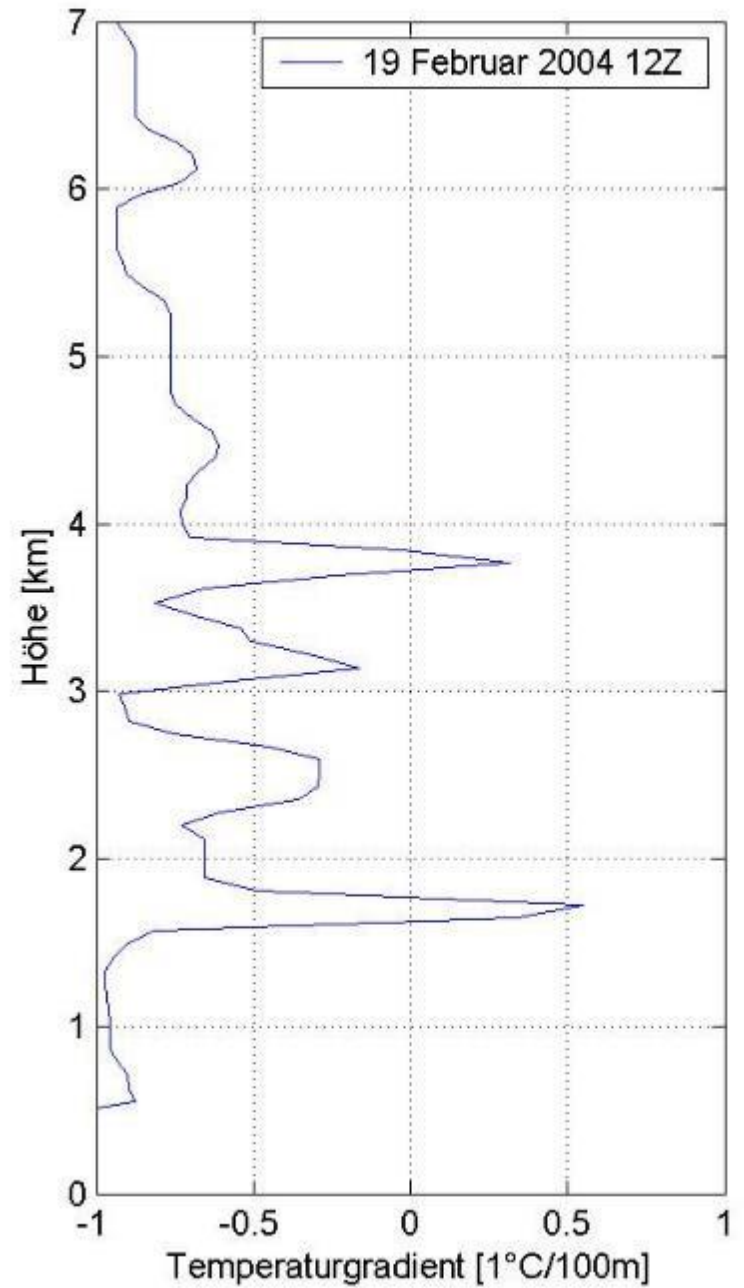
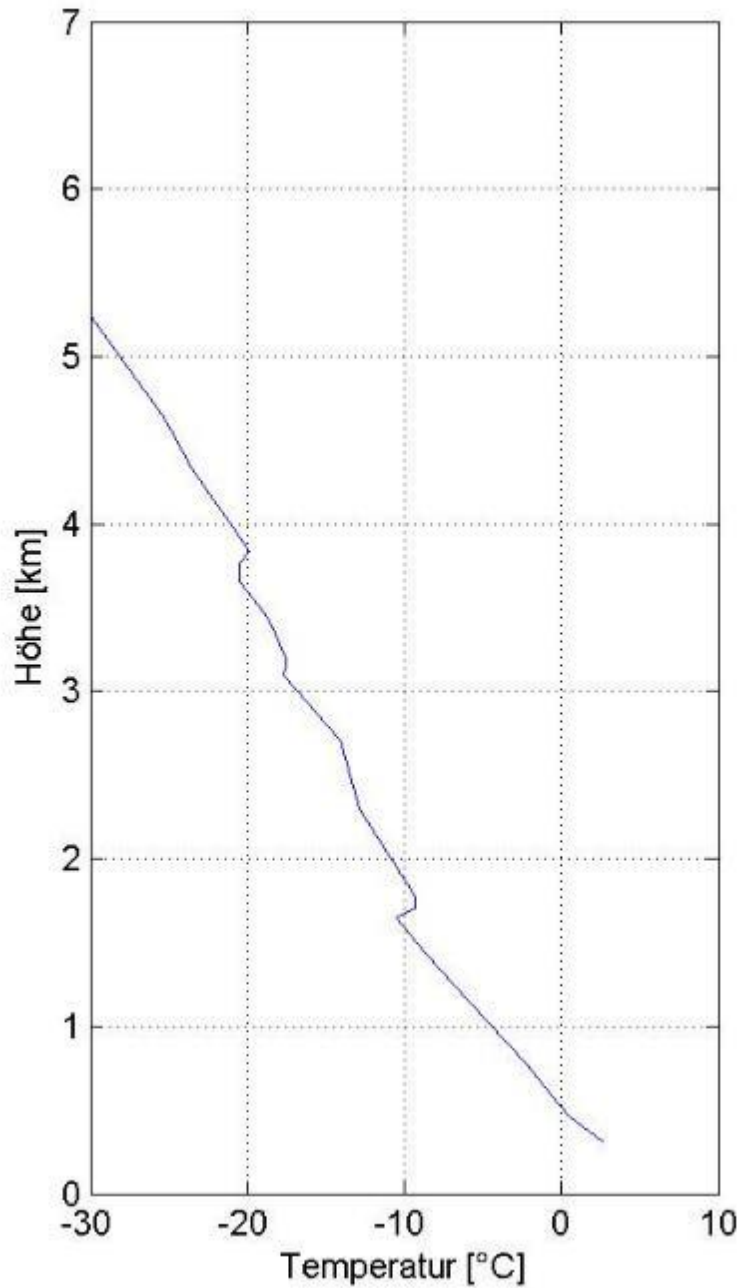
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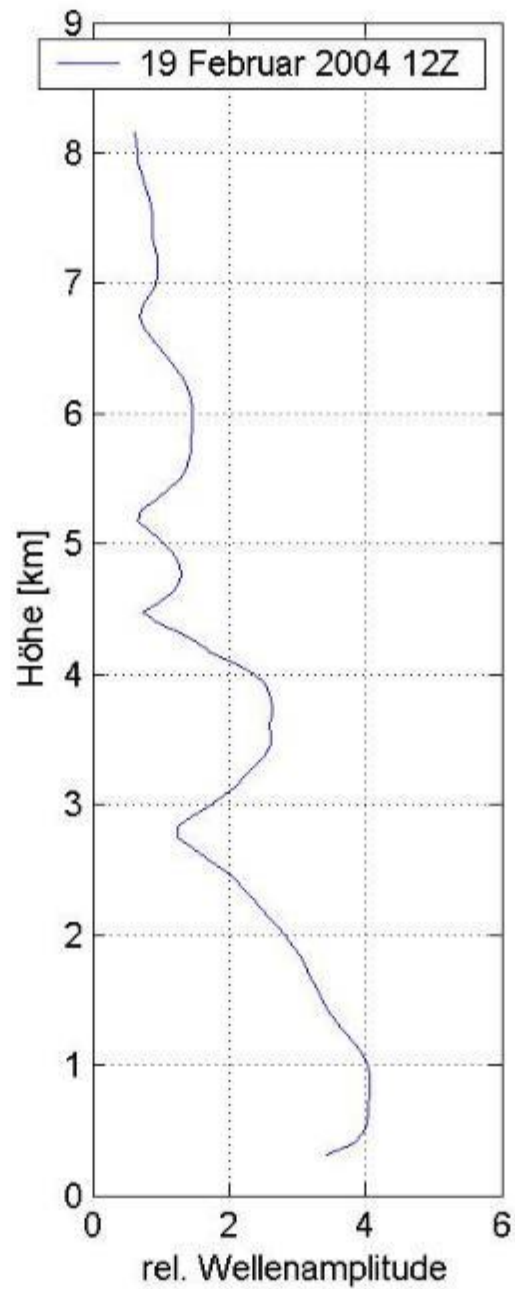
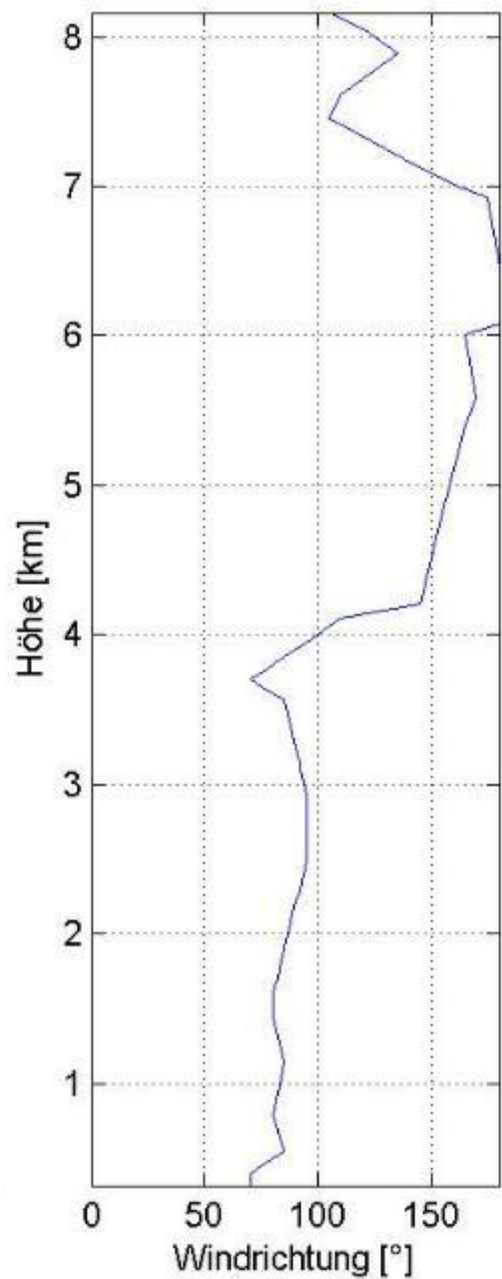
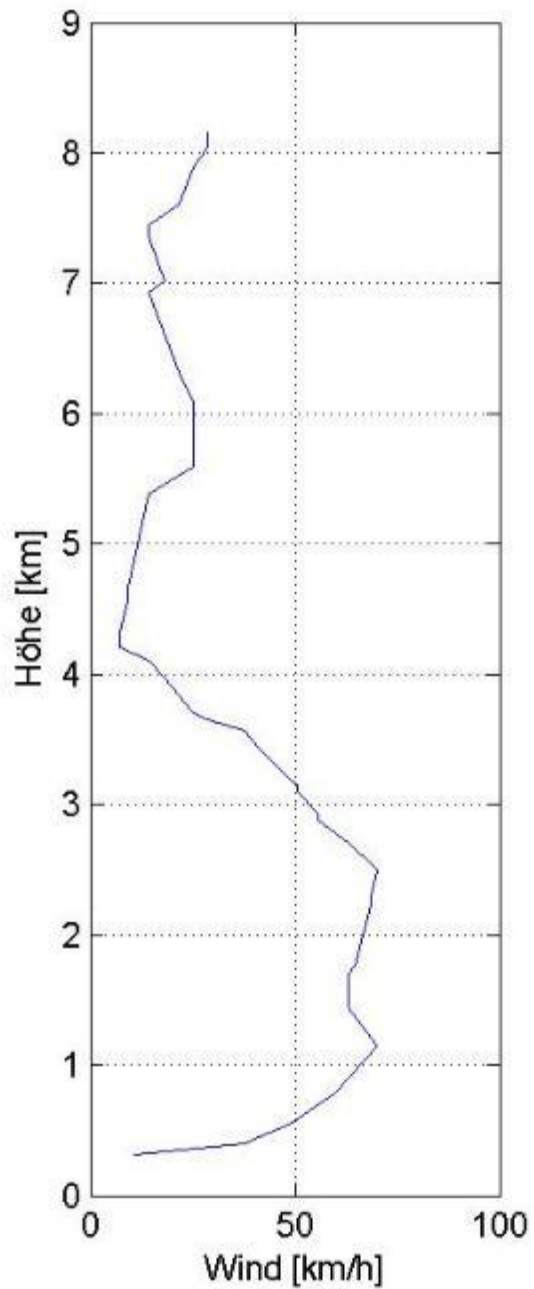
Voraussetzungen für Wellenbildung

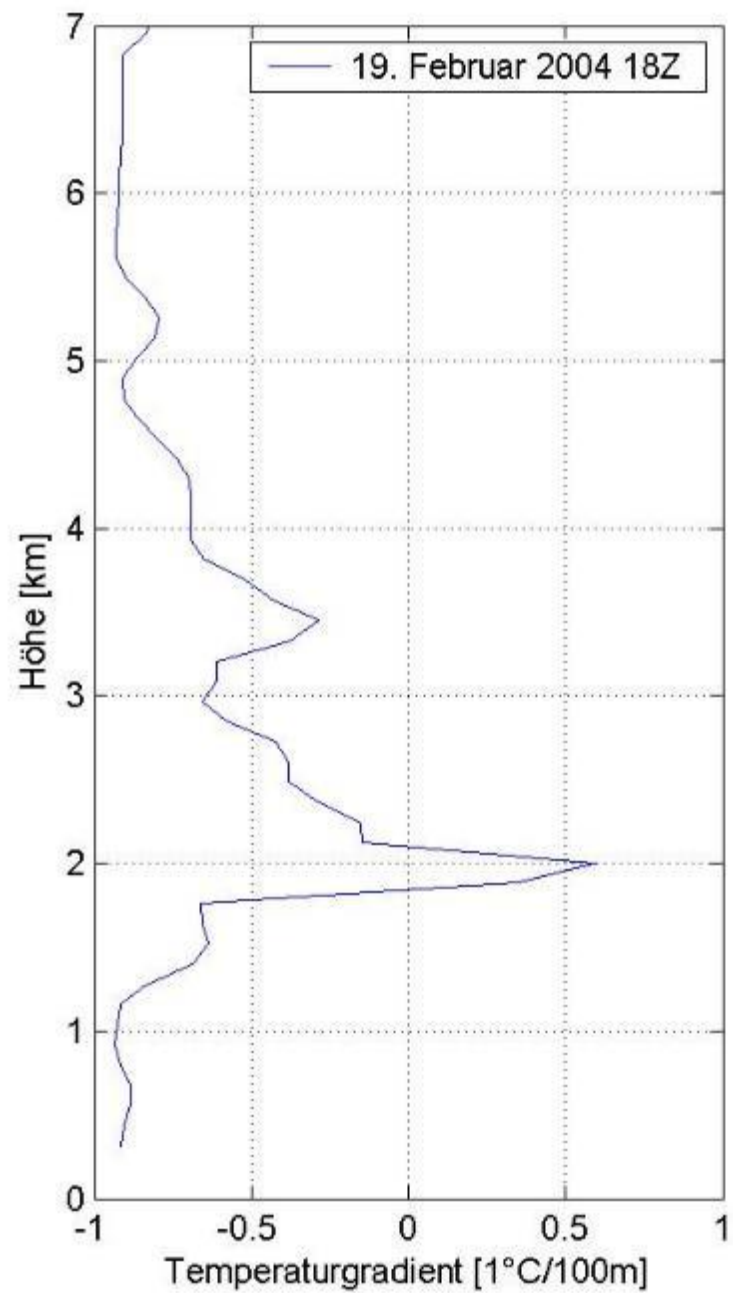
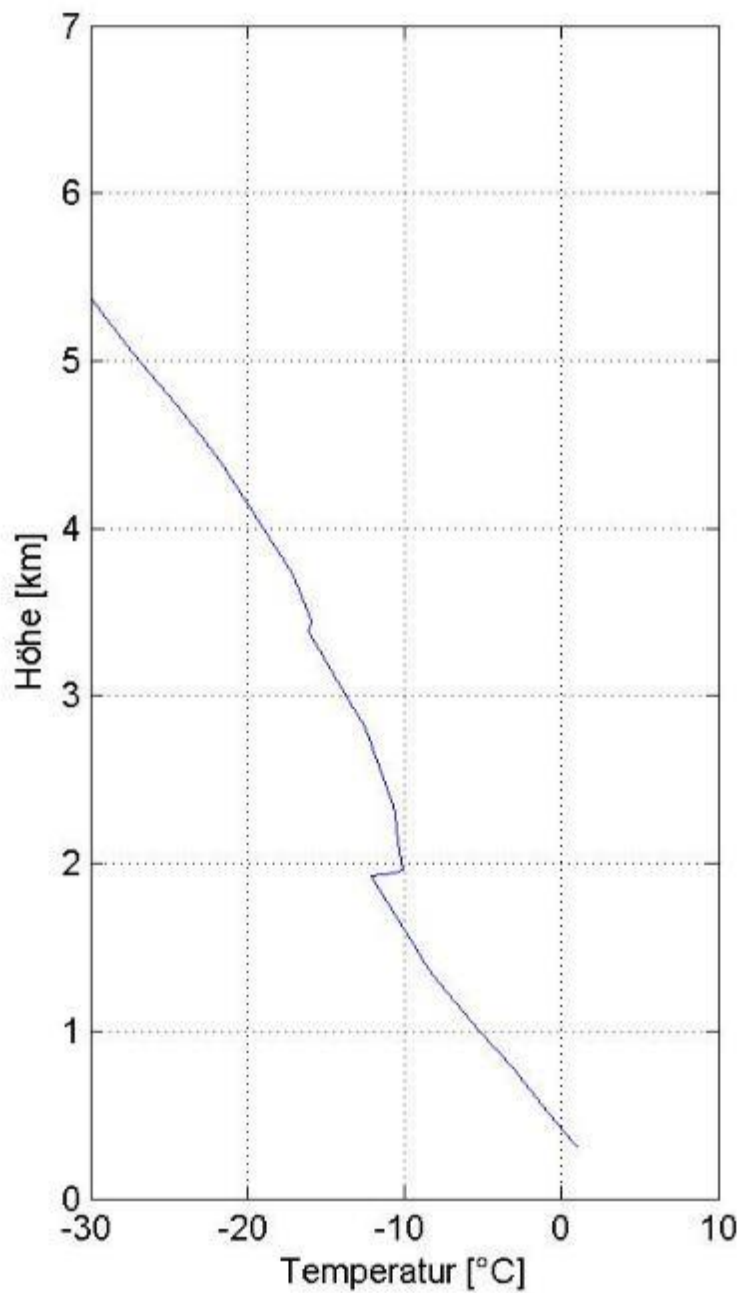
- Stabile Schichtung direkt oberhalb der Bergkämme, sonst weniger stabil
 - Hochdruckeinfluss (Absinkinversion)
 - Flach einströmende Kaltluftschicht
 - Keine massive konvektive Bewölkung (Schauer)
- Wind: mindestens 40 km/h transversal zu den Kämmen, darüber leicht zunehmend
 - Windrichtung in stabiler Schicht bestimmt Wellenbildung (Ausrichtung)
 - Windrichtung kann oberhalb stark abweichen ($< 60^\circ$)
- Häufige Probleme
 - O Wind: Nur unterhalb Inversion ausgeprägt
 - W Wind: Stabile Schicht fehlt (Tiefdruckbeeinflusst), Höhenwind zu stark

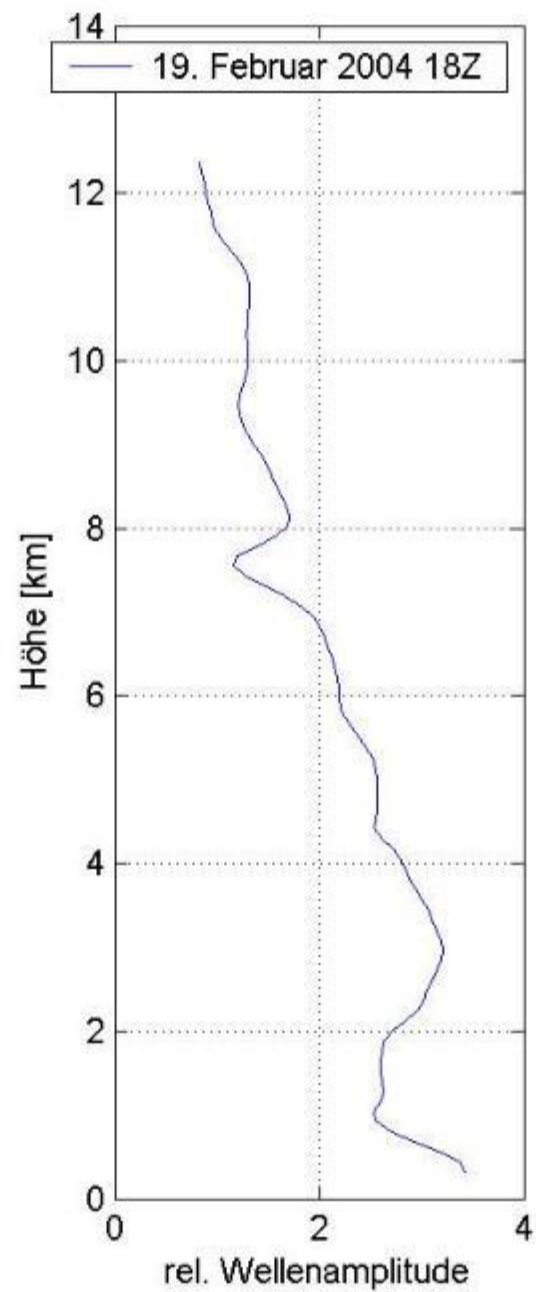
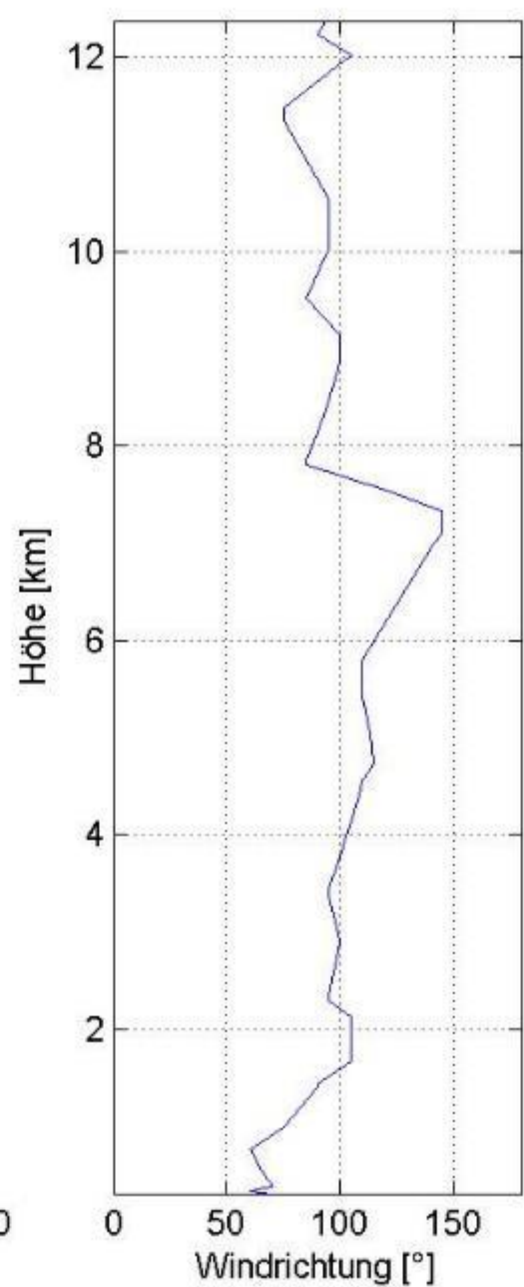
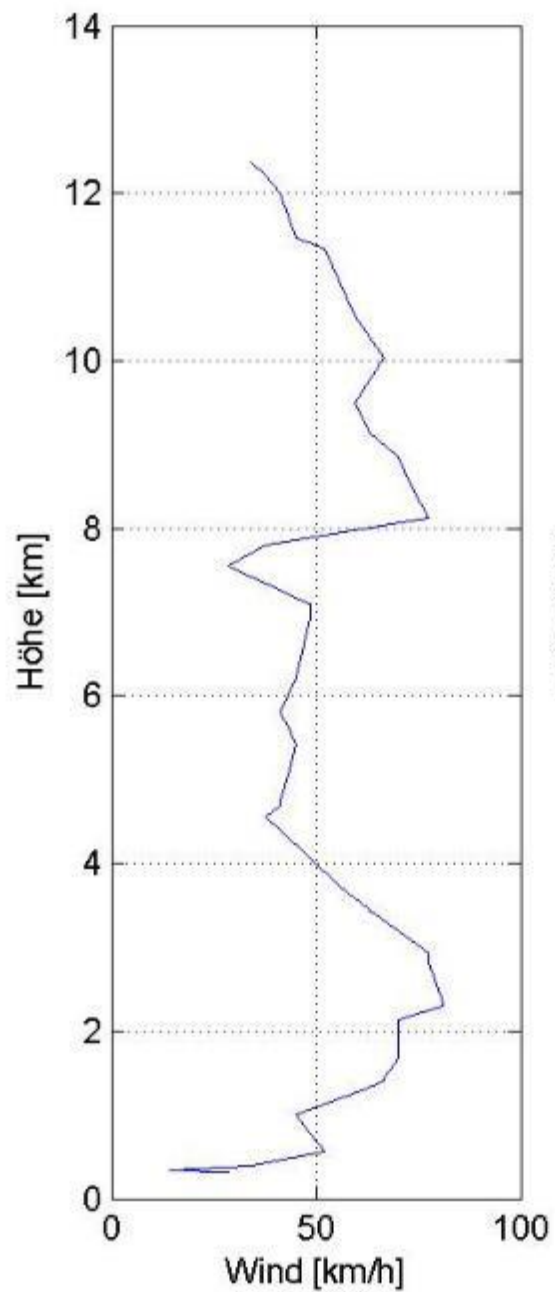


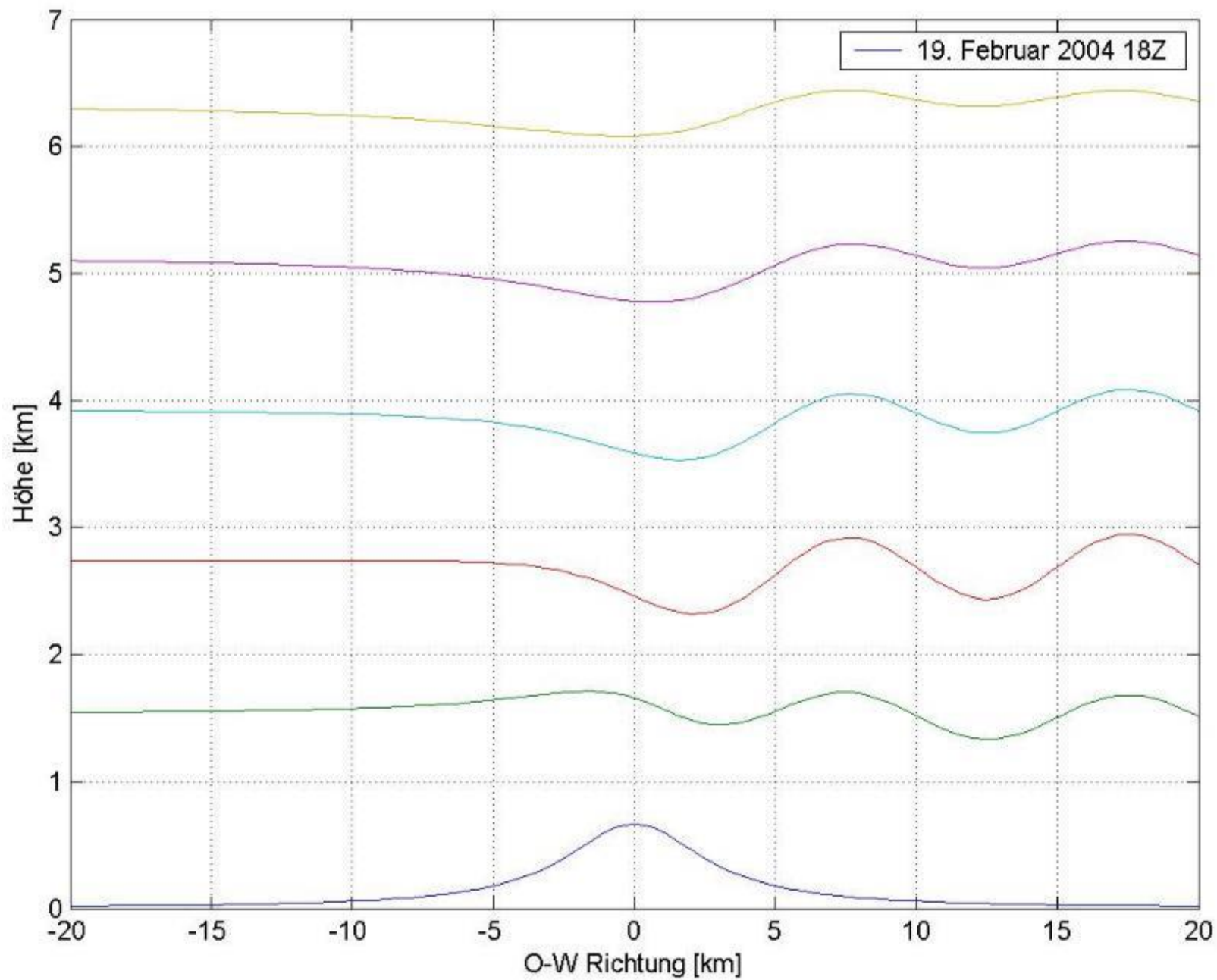












Ausblick

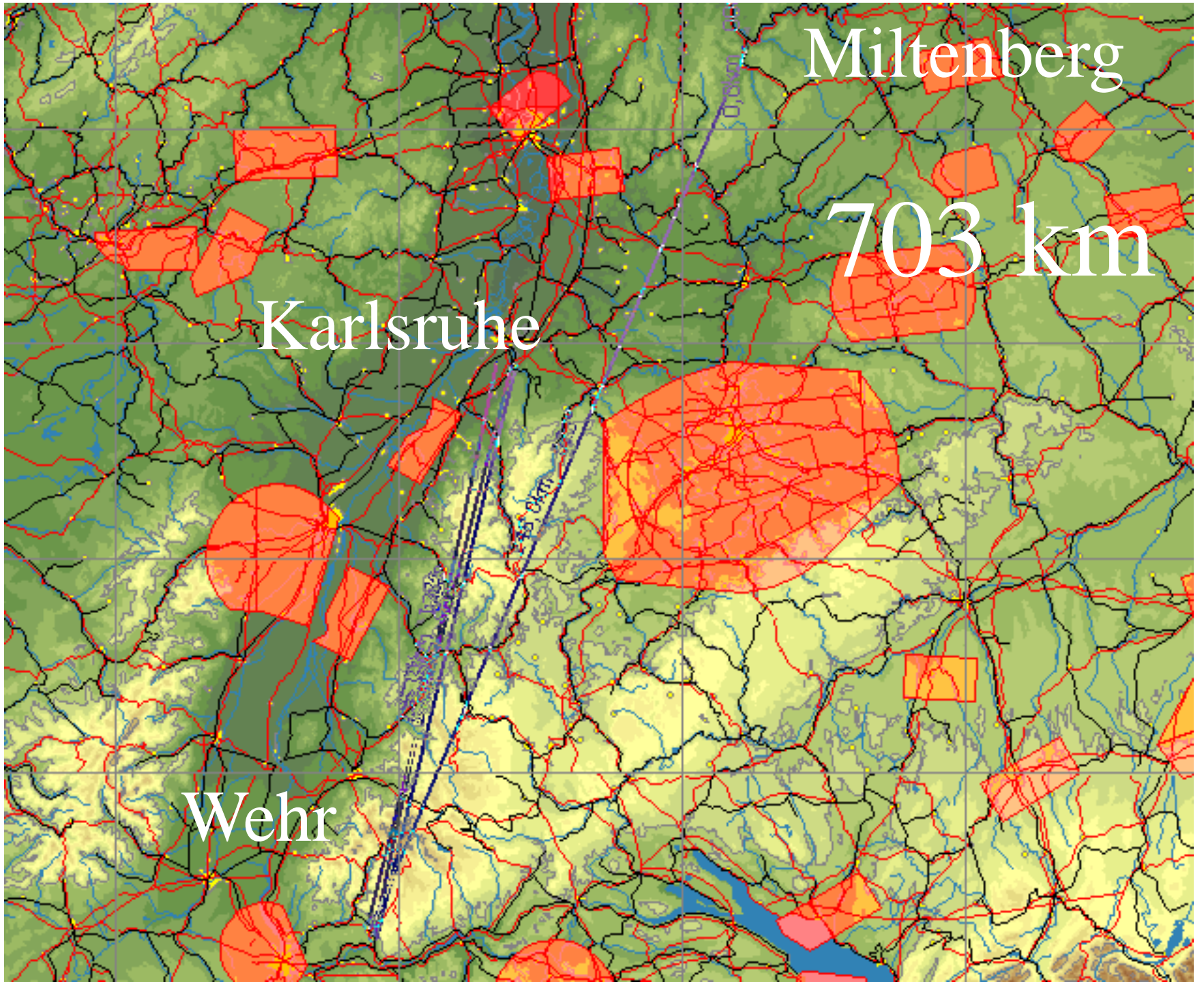
- Jojo mit verlängertem 4. Schenkel
- Flug in die Alpen
- ähnliche Flüge im Thüringer Wald, Fichtelgebirge und Bayerischem Wald

Miltenberg

703 km

Karlsruhe

Wehr

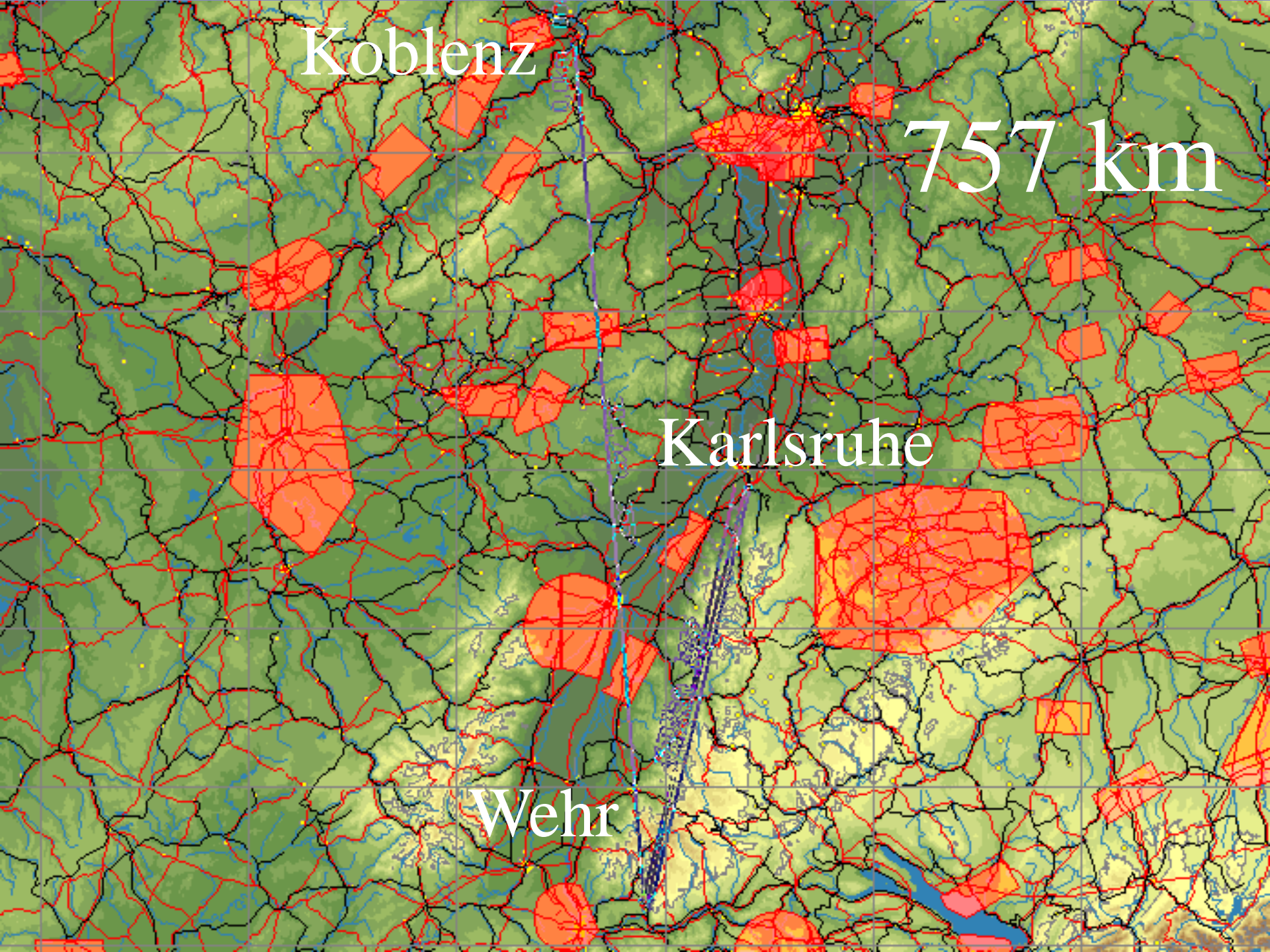


Koblenz

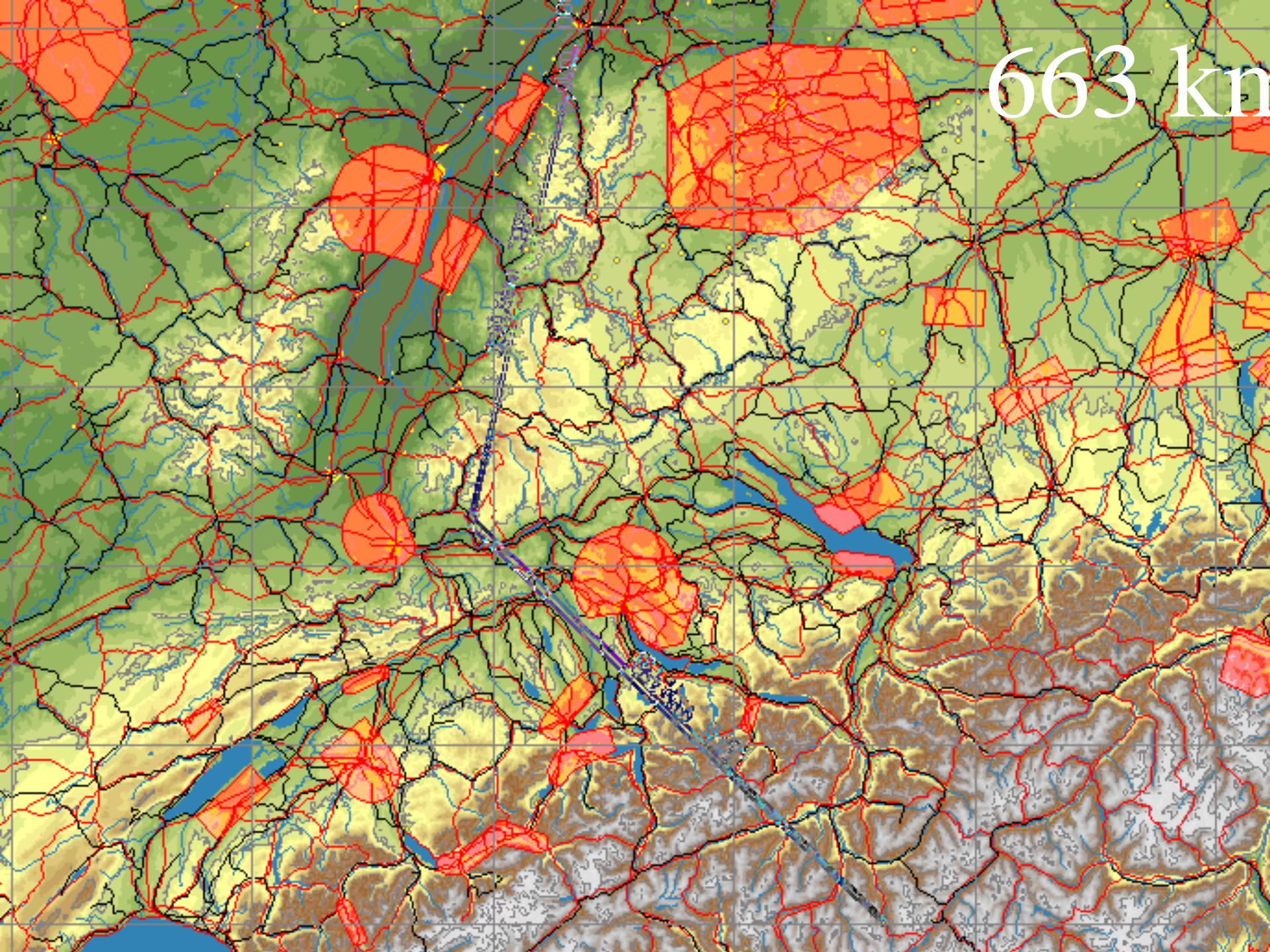
757 km

Karlsruhe

Wehr



663 km



7. Dezember 2003

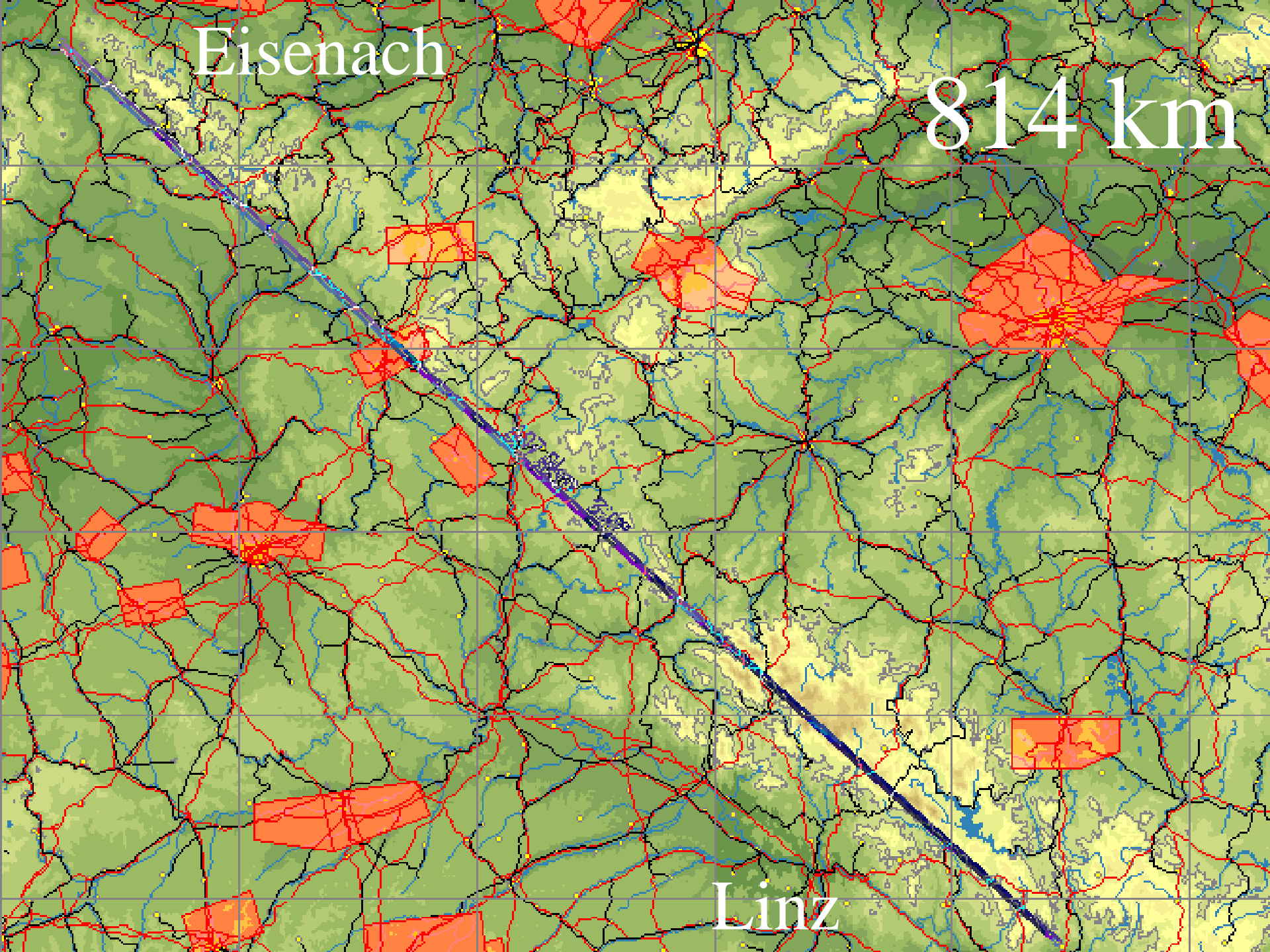




Eisenach

814 km

Linz



ENDE

