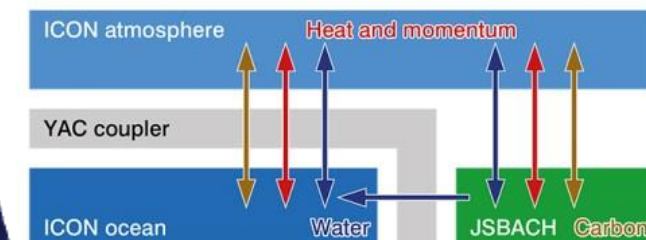


Simulationen mit ICON-A und höher aufgelösten Teilgebieten (CMIP6-DICAD TP 3: ICON Klimaprojektionen der Atmosphäre mit einer feineren Gitterweite über Europa)

Vera Maurer



ICON - ESM



Aktueller Stand

- Korrekturen in jsbach → jetzt auch nesting mit jsbach_pfts möglich (momentan nur in gitlab.dkrz.de/icon/icon-les/tree/icon-les-dev)
- update auf neueste ICON-A-Version mit GPU-Implementierung (nesting aber nicht auf GPUs getestet)
- buildbot-Experiment aktiviert
- Vergleichsexperimente mit ICON-NWP (AMIP-style mit nesting)
- Vergleichsexperimente R2B5 (80 km) / R2B6 (40 km) global
- Abschließende Auswertungen für AMIP-Simulation (1979-2014) global R2B5 mit einem Teilgebiet R2B6 (R2B5N6) geplant

Differenz R2B5N6 mit feedback zu R2B5, Vergleich NWP

angepasstes dt_cld im Teilgebiet

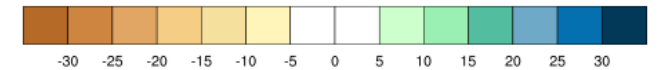
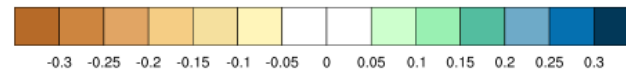
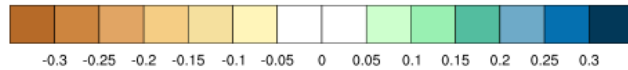
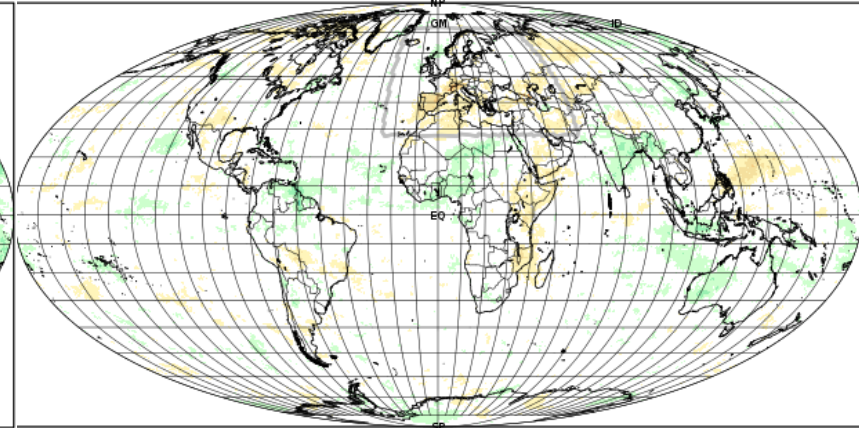
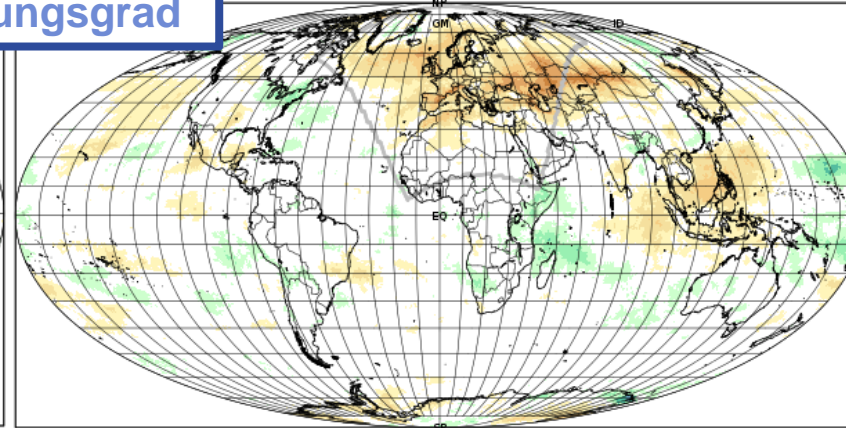
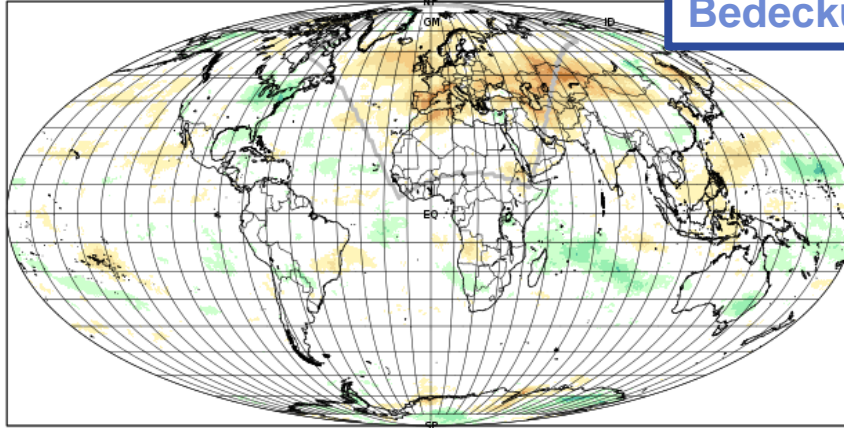
alte Version

ICON-NWP

total cloud cover

Bedeckungsgrad

m2 m-2 total cloud cover



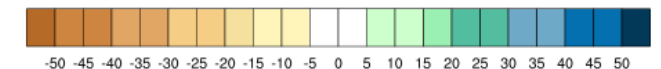
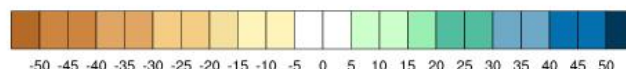
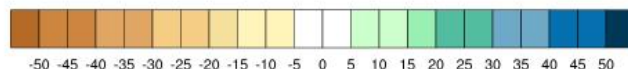
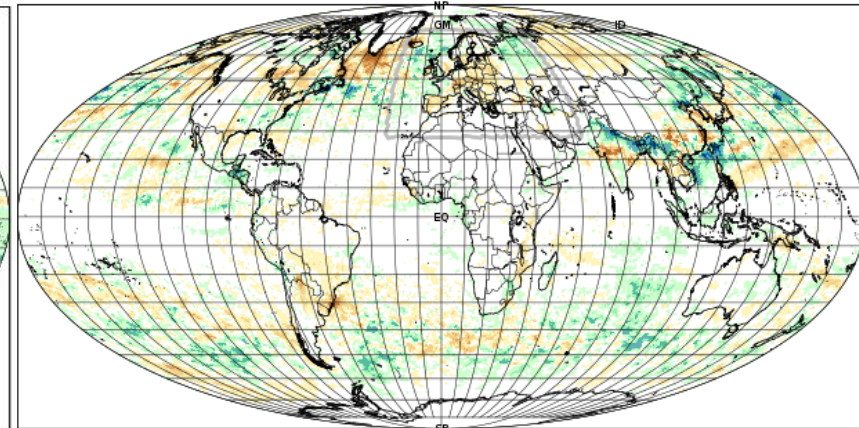
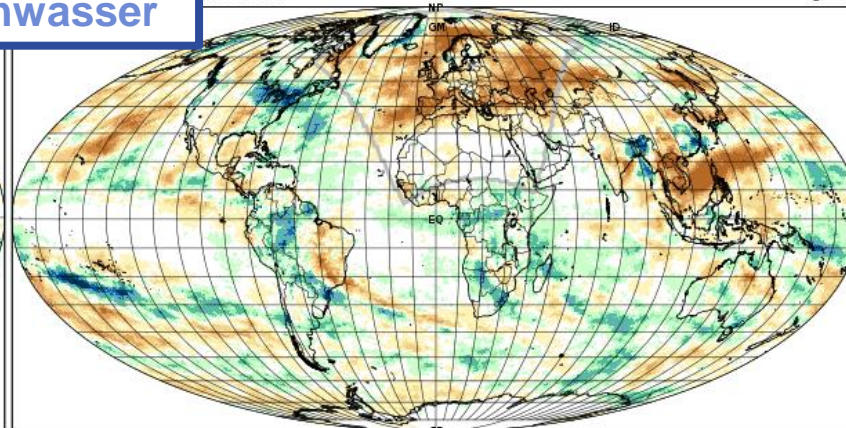
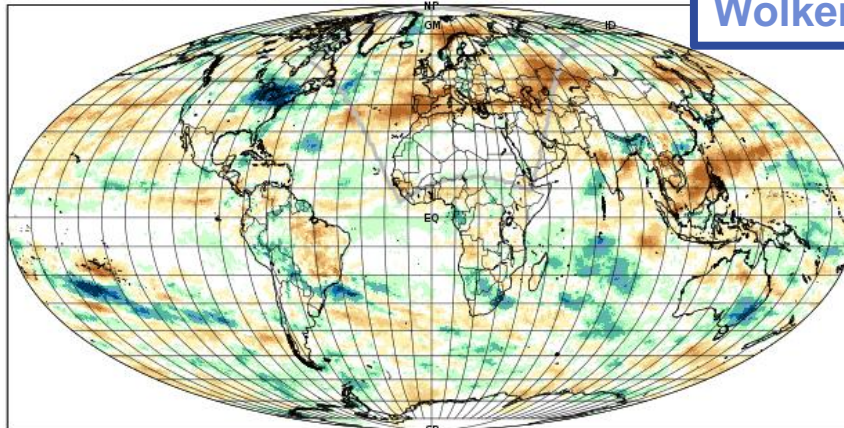
vertically integrated cloud water

Wolkenwasser

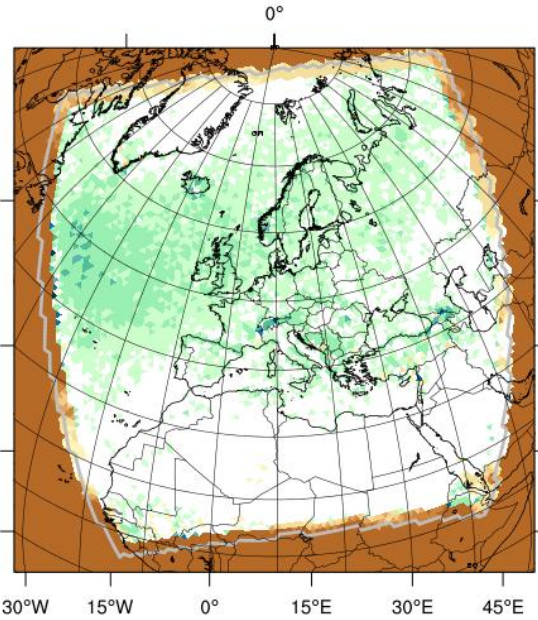
cloud water

g m-2 total_column_integrated_cloud_water

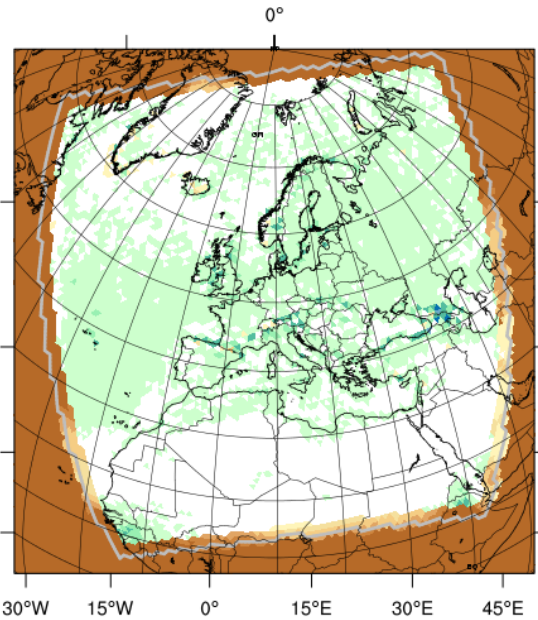
g m-2



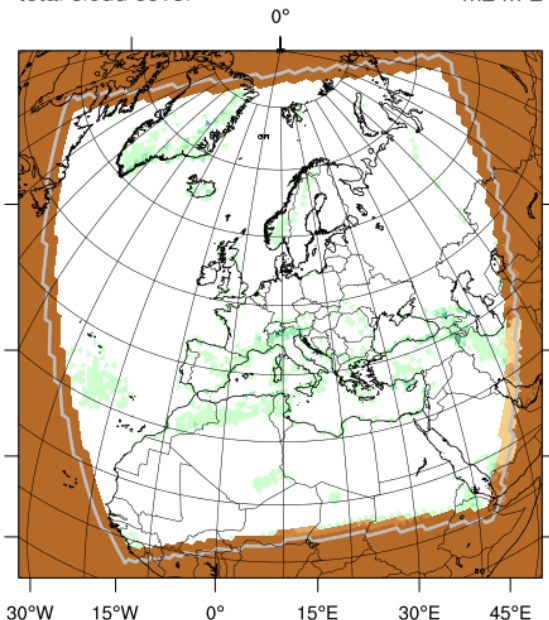
precipitation flux mm/day



vertically integrated cloud water g m⁻²



total cloud cover m² m⁻²

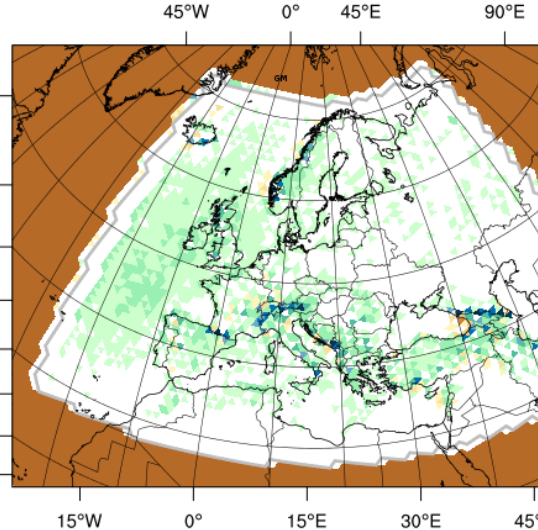


Der Wetterdienst
Klima aus einer Hand

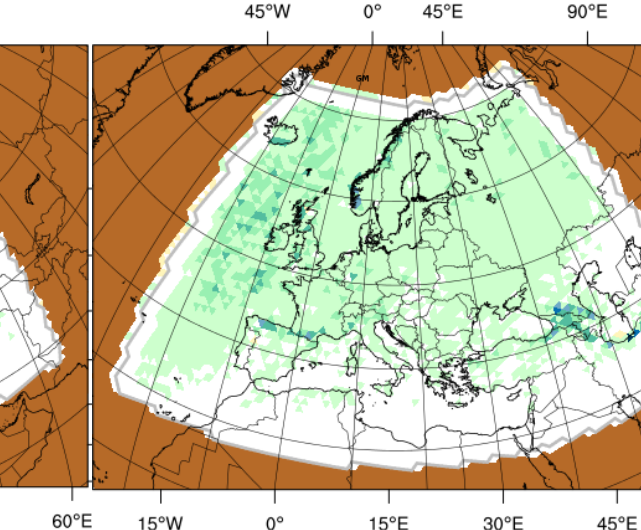


**D2-D1
ICON-A
R2B5N6 mit
feedback**

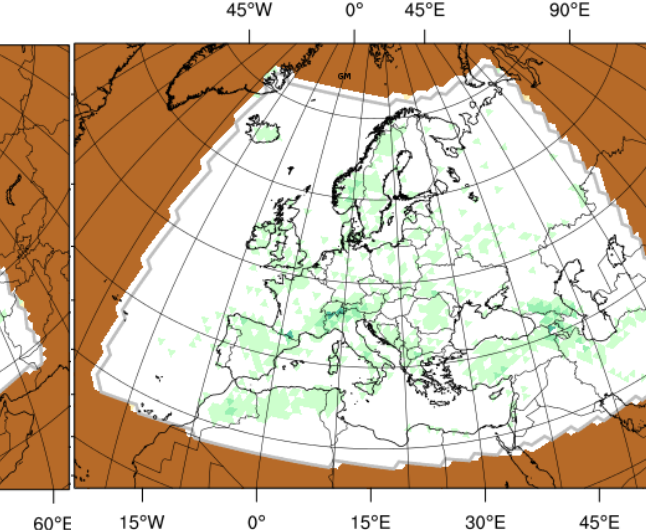
total precip



mm/day total column integrated cloud water (diagnostic)



g m⁻² total cloud cover %



**D2-D1
ICON-NWP
R2B5N6 mit
feedback**

precipitation flux

mm/day

vertically integrated cloud water

g m⁻²

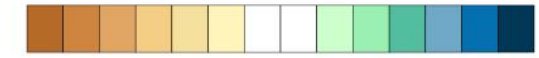
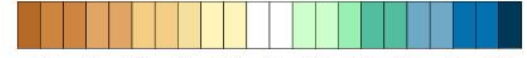
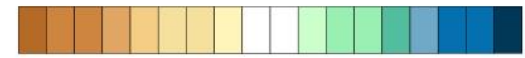
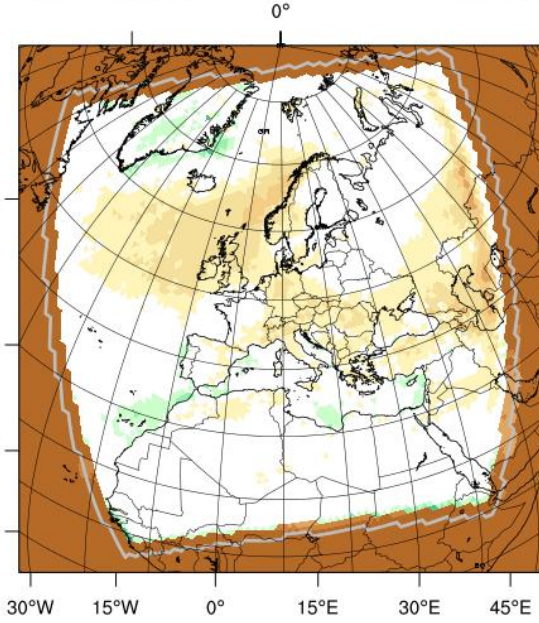
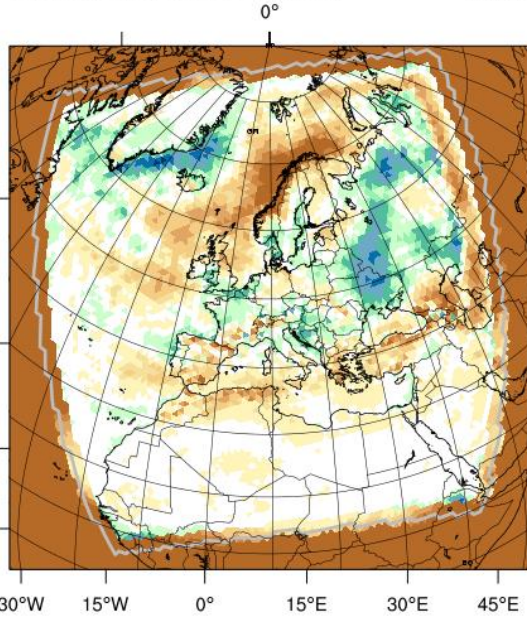
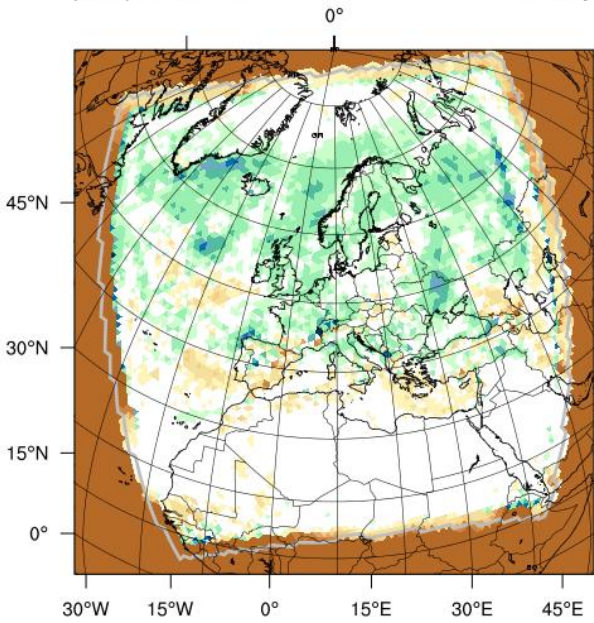
total cloud cover

m² m⁻²



Wetterdienst
na aus einer Hand

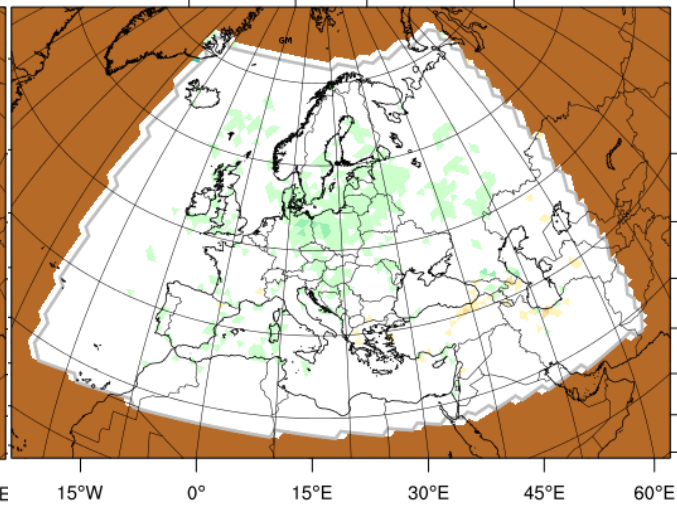
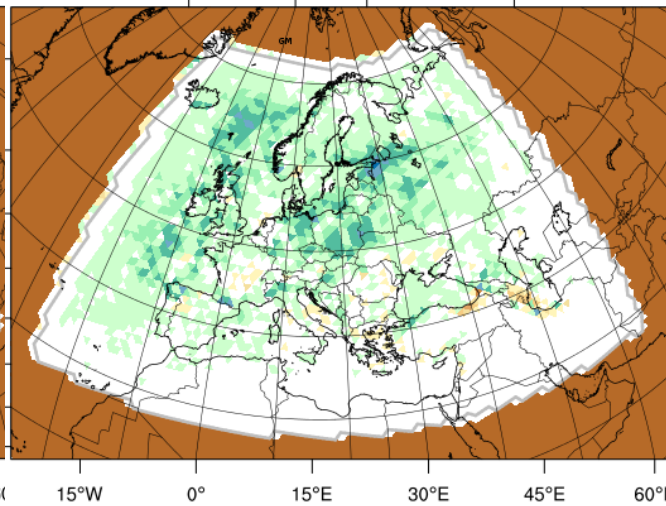
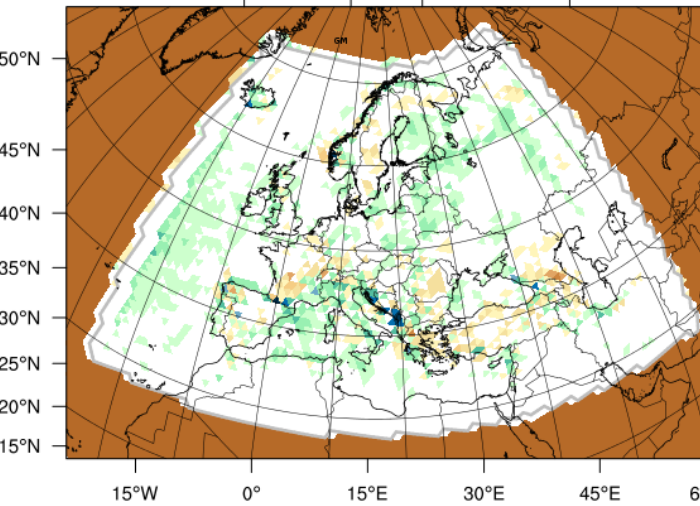
D2-D1
ICON-A
R2B5N6 ohne
feedback



total precip
45°W 0° 45°E 90°E

mm/d total column integrated cloud water (diagnostic)
45°W 0° 45°E 90°E

g m⁻² total cloud cover
45°W 0° 45°E 90°E %



-1.6 -1.4 -1.2 -1 -0.8 -0.6 -0.4 -0.2 0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6

-50 -40 -30 -20 -10 0 10 20 30 40 50

-30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30

D2-D1
ICON-NWP
R2B5N6 ohne
feedback