Klima, Ostsee, Sturmfluten

Diplom-Meteorologe Sebastian Wache




Was ist Wetter?

⟶ der augenblickliche Zustand, was jetzt gerade passiert

Was ist Klima?

⟶ ein mittlerer Zustand, Mittel über 30 Jahre

Temperatur

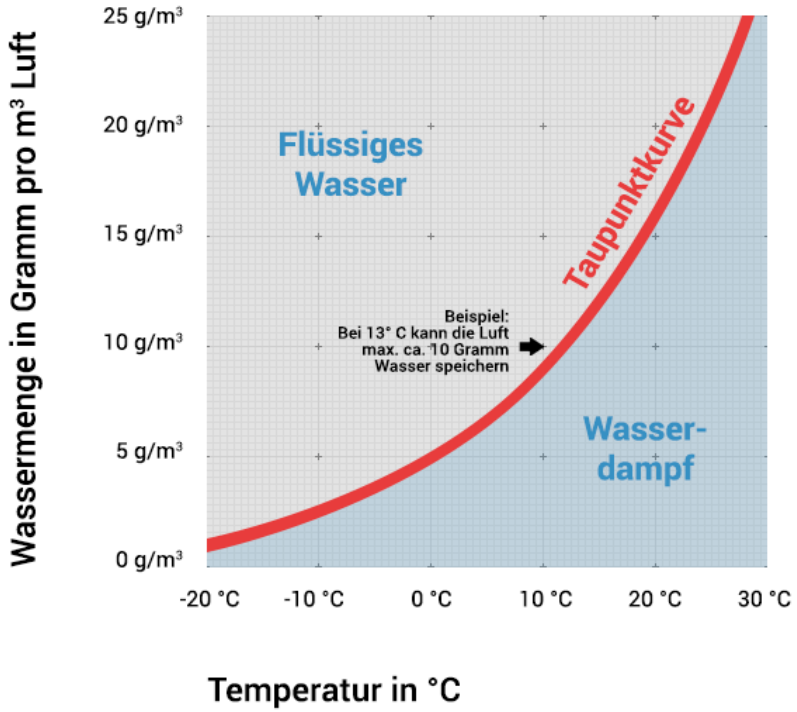
Hohe Temperatur = warm = geringe Dichte =
leichte Luft

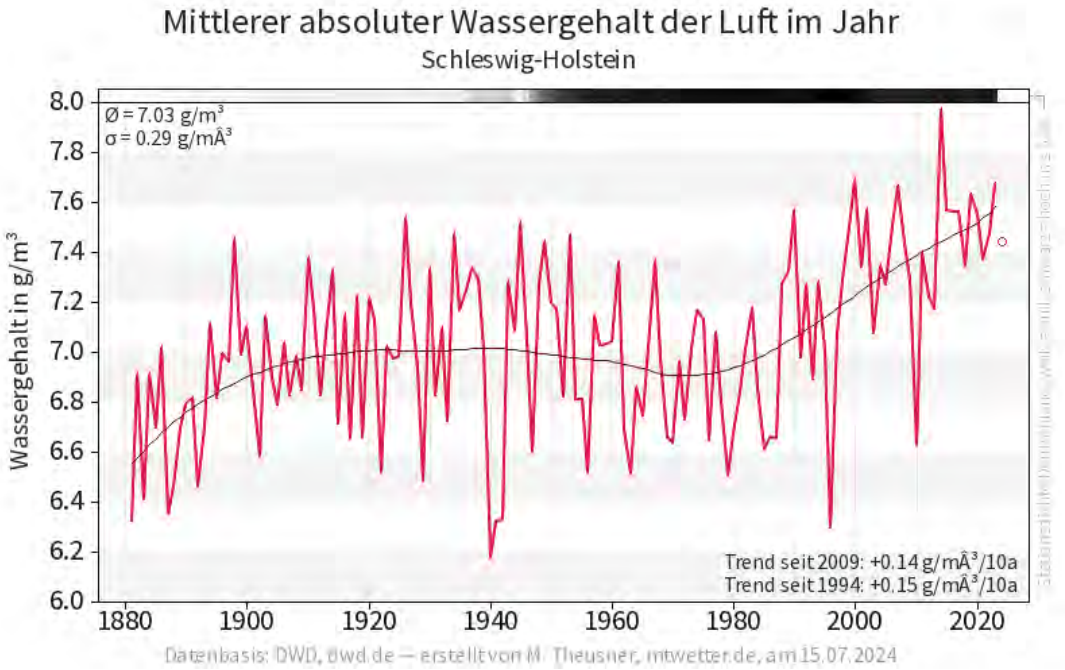
Niedrige Temperatur = kalt = große Dichte =
schwere Luft

Warme Luft steigt auf !

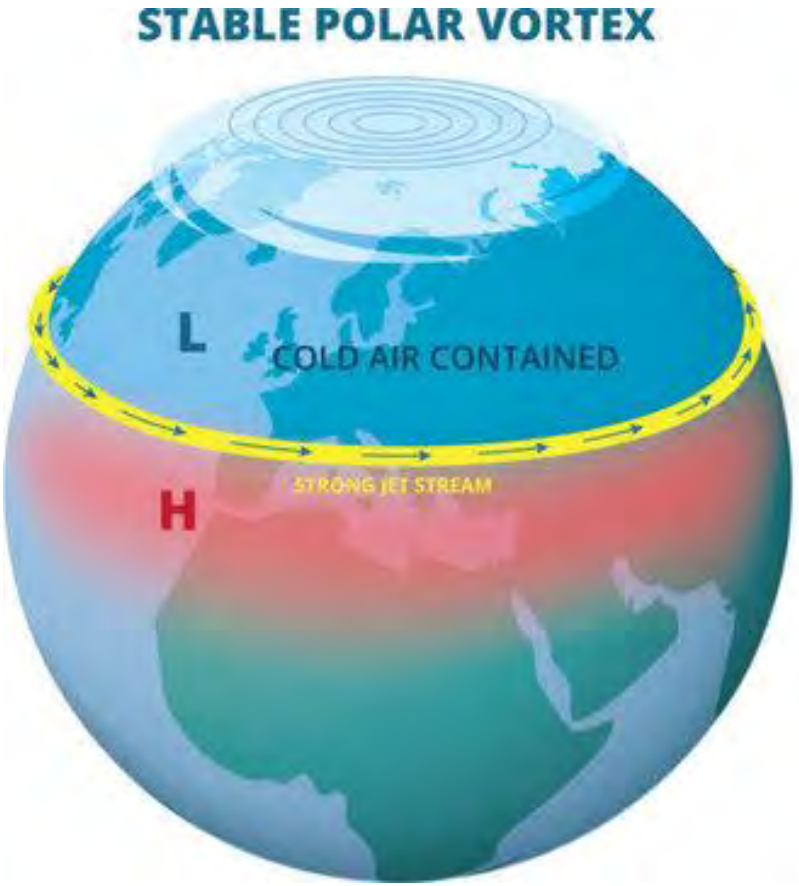
Kalte Luft sinkt ab !

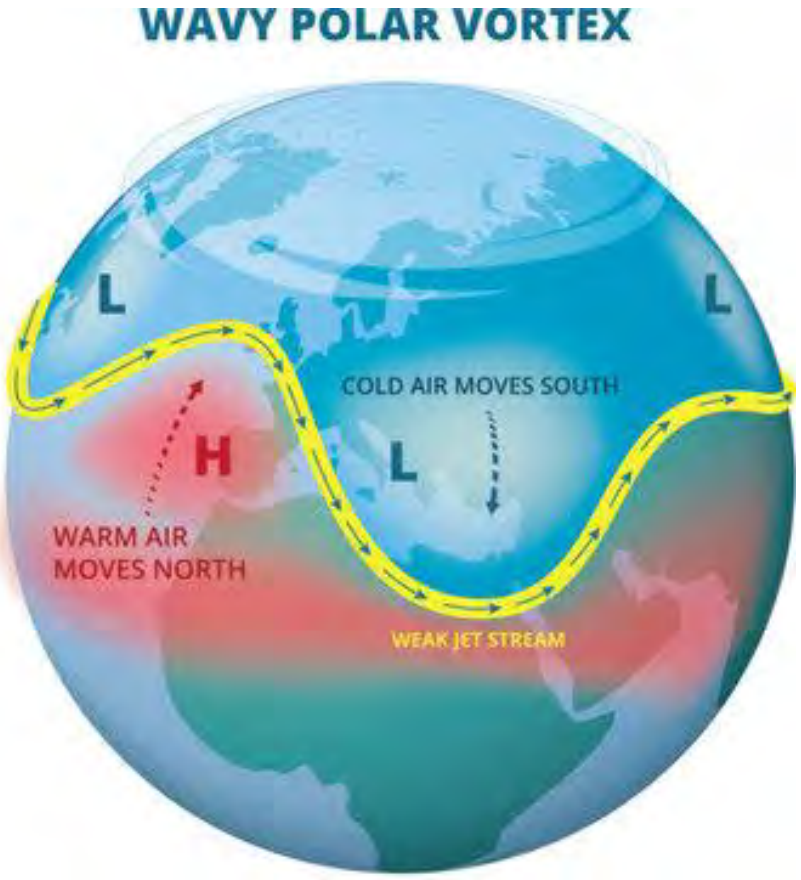
Feuchte in der Atmosphäre → Energie





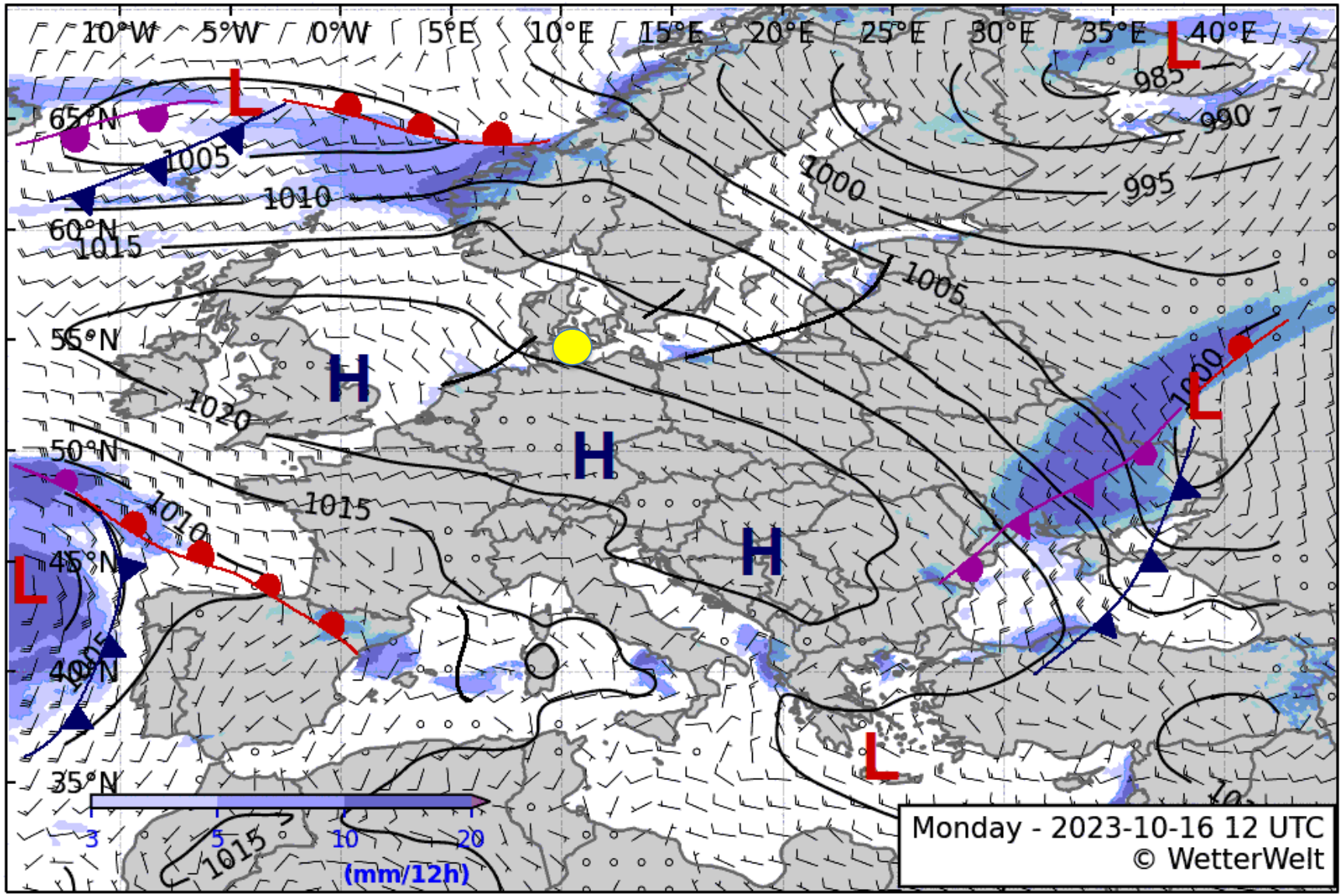
Allgemein Zirkulation
Unser Wetter





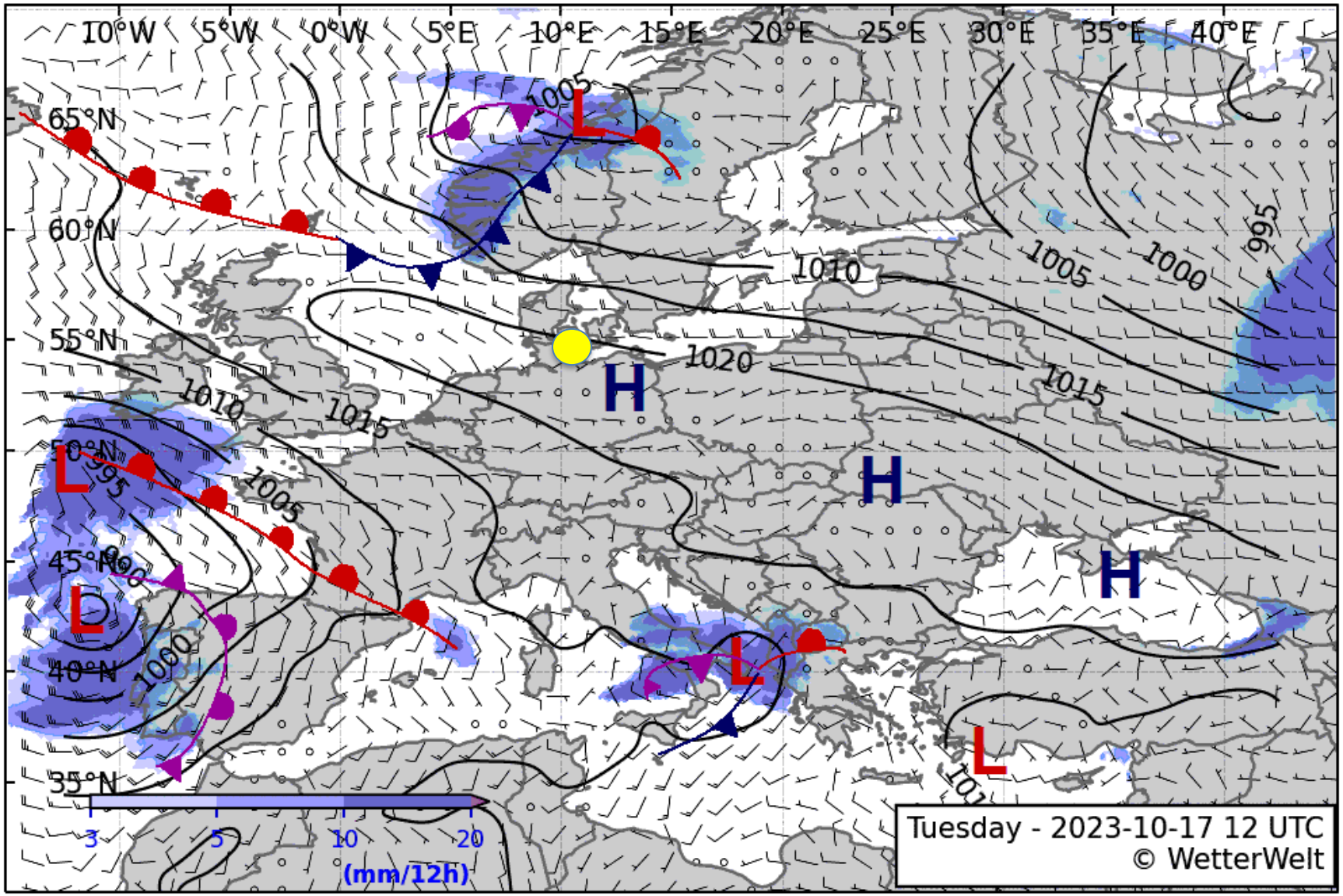
Ostsee-Sturmflut

Ablauf



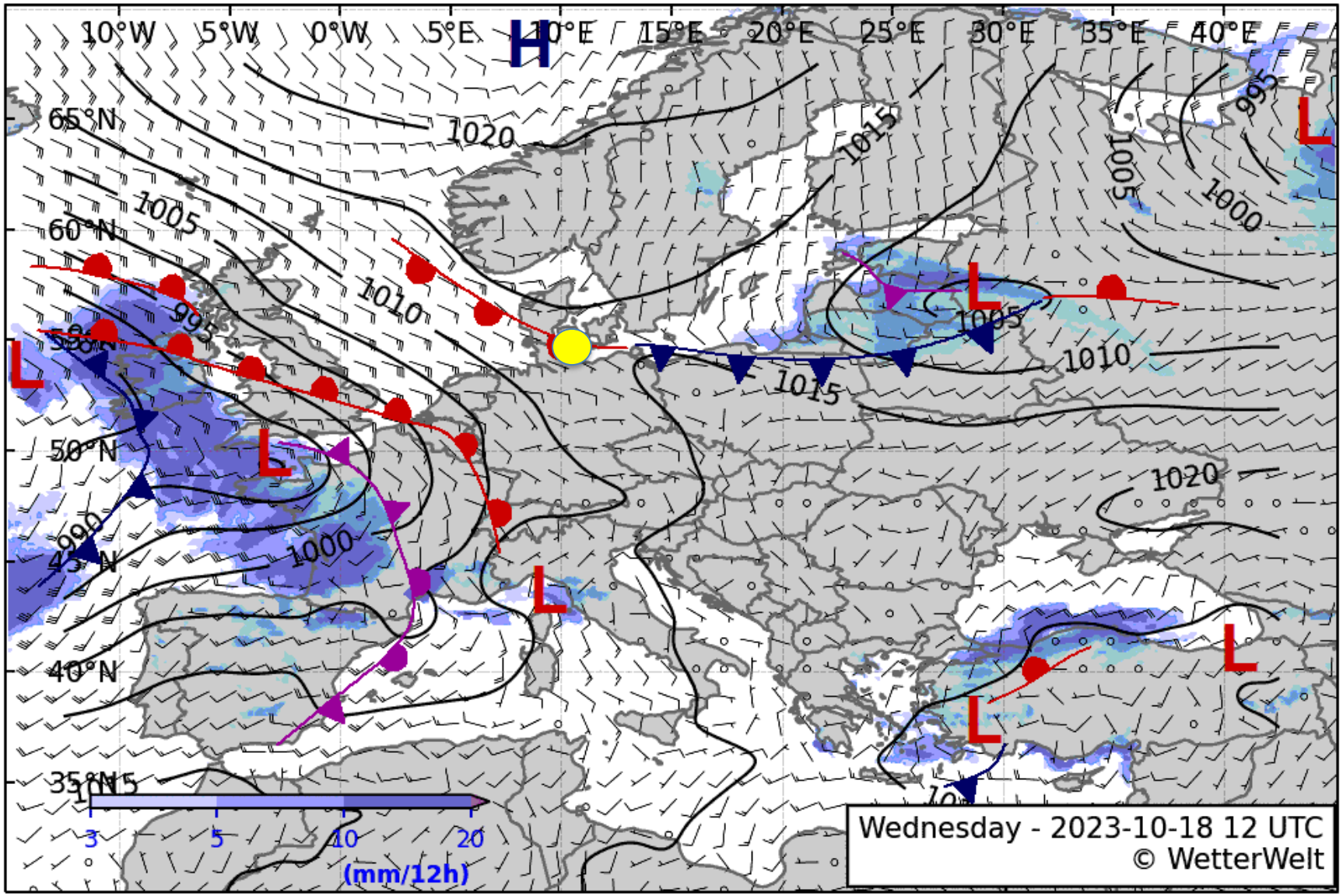
Ostsee-Sturmflut

Ablauf



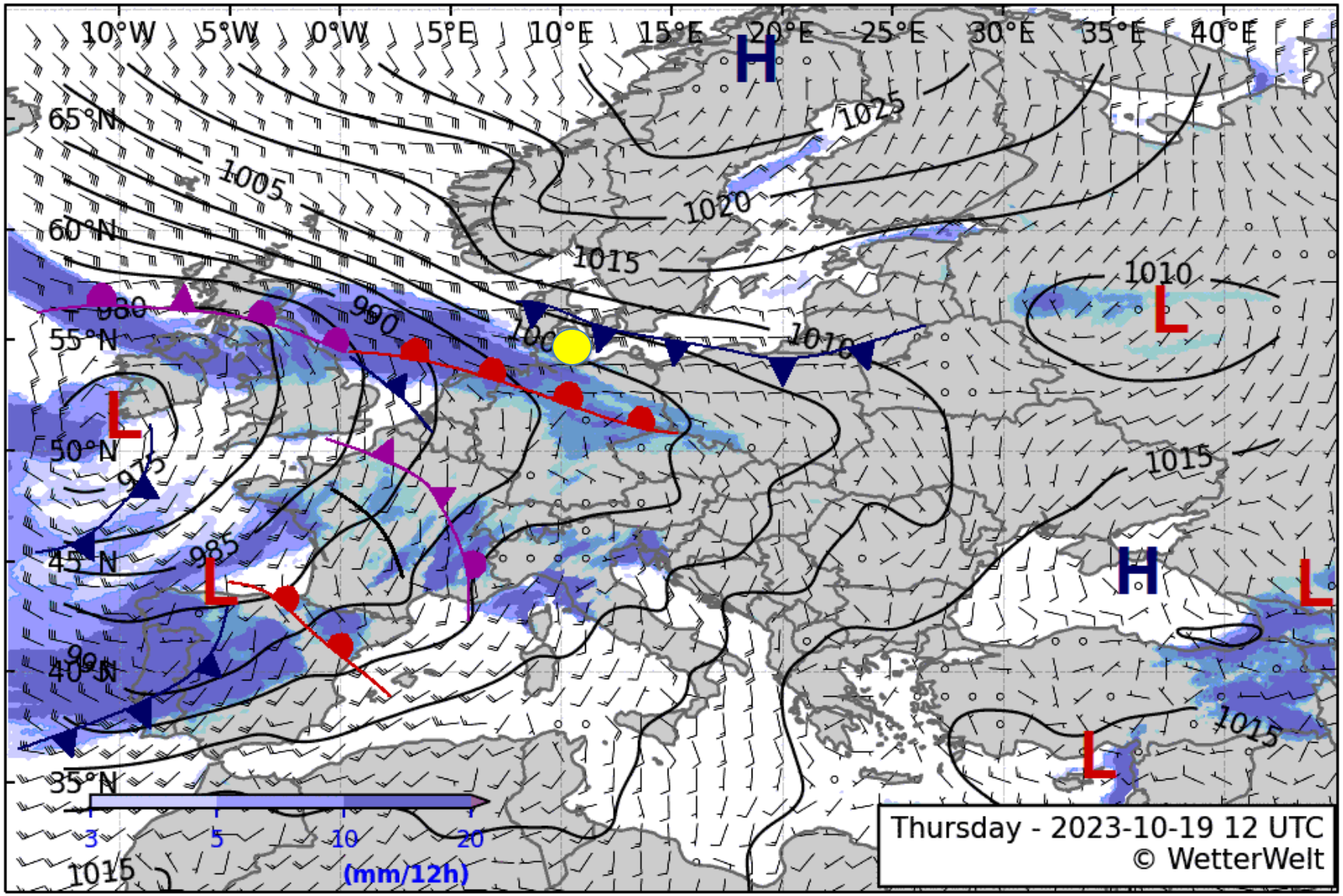
Ostsee-Sturmflut

Ablauf



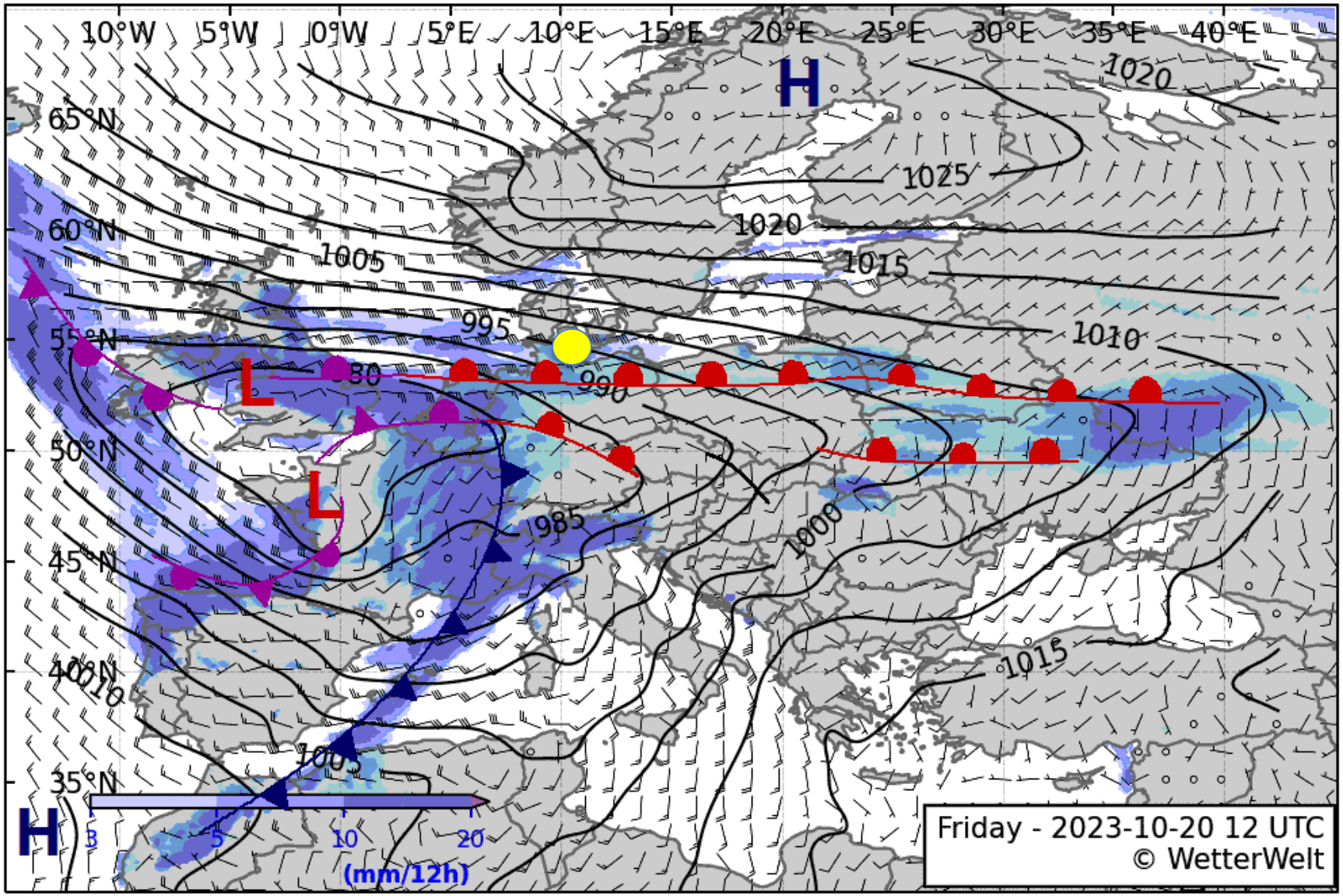
Ostsee-Sturmflut

Ablauf



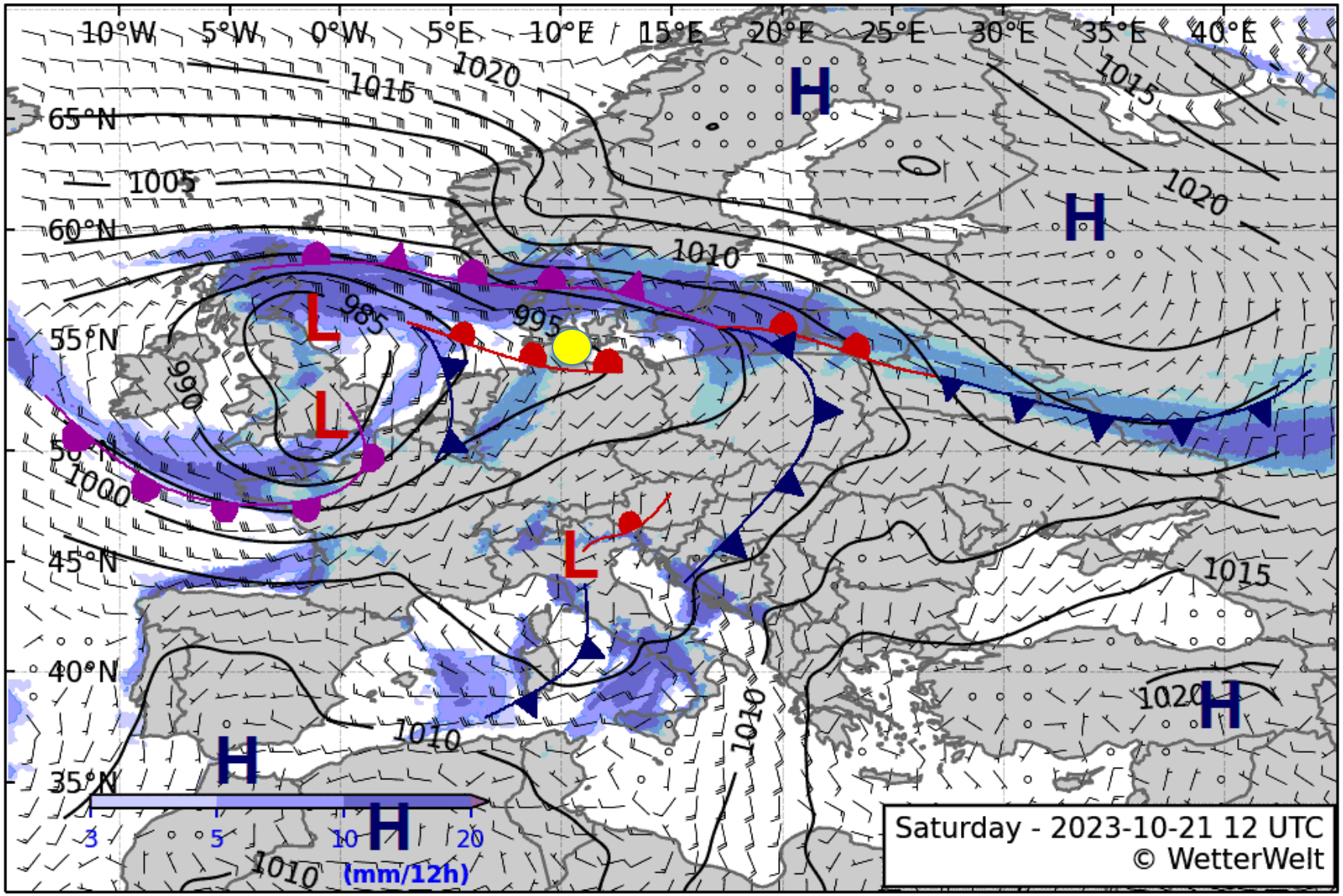
Ostsee-Sturmflut

Ablauf



Ostsee-Sturmflut

Ablauf



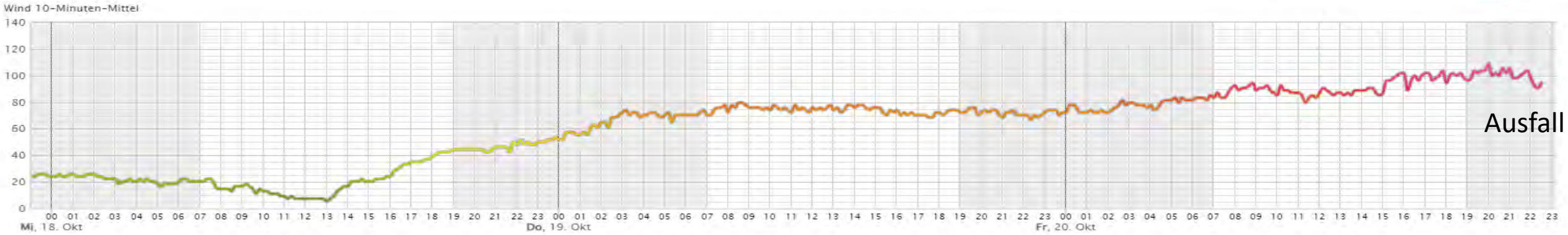
Leuchtturm Kiel (Om)

94km/h

Gemeldet um 22:30 Uhr

Mittlerer Wind (!)

letzte 6 12 24 48 72 Stunden



Ausfall

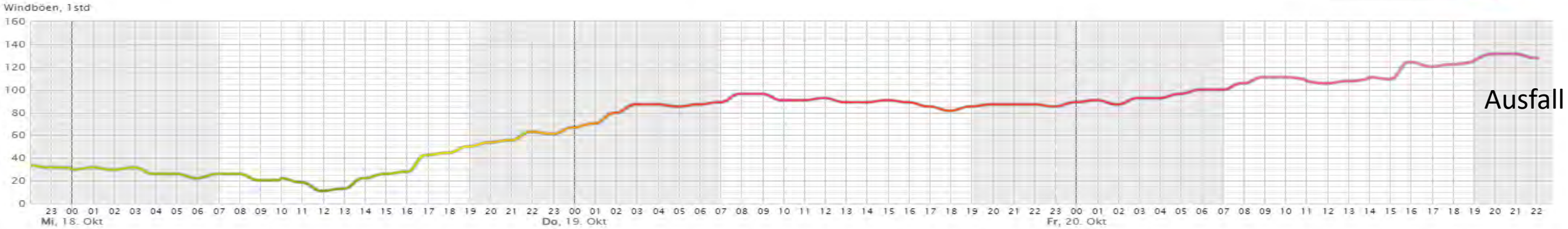
Wind 10-Minuten-Mittel

Kiel/Leuchtturm (Om)

128km/h

Gemeldet um 22:00 Uhr

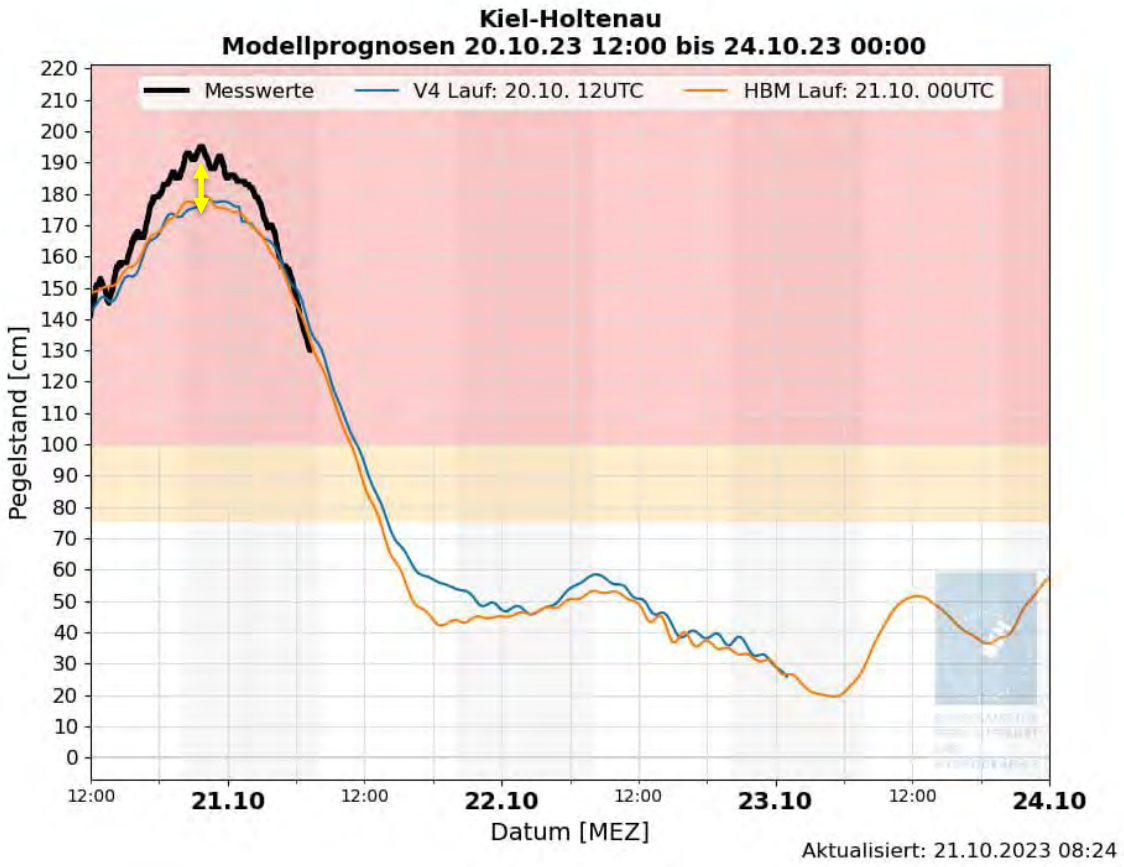
letzte 6 12 24 48 72 Stunden

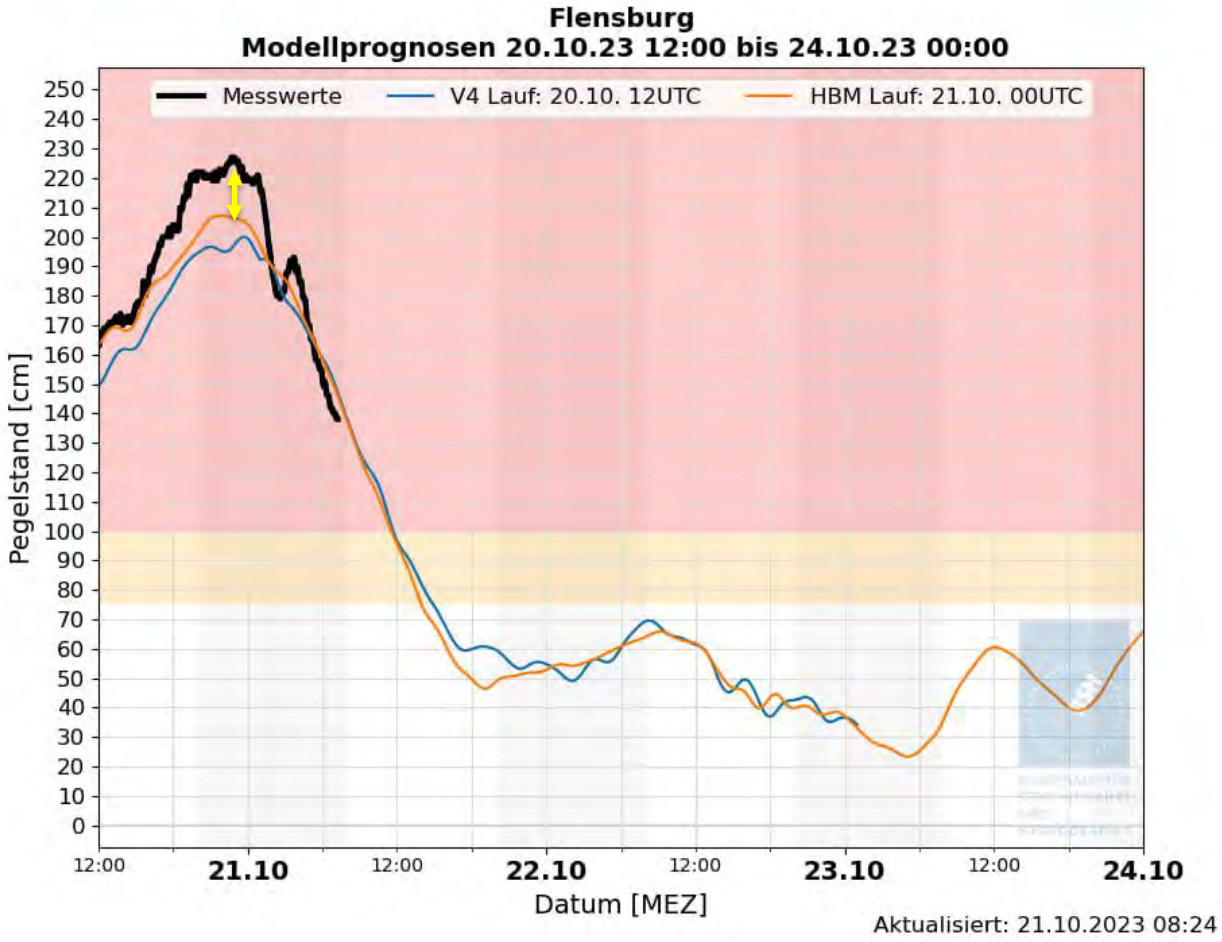


Ausfall

Windböen, 1std

Ostsee-Sturmflut
Pegel



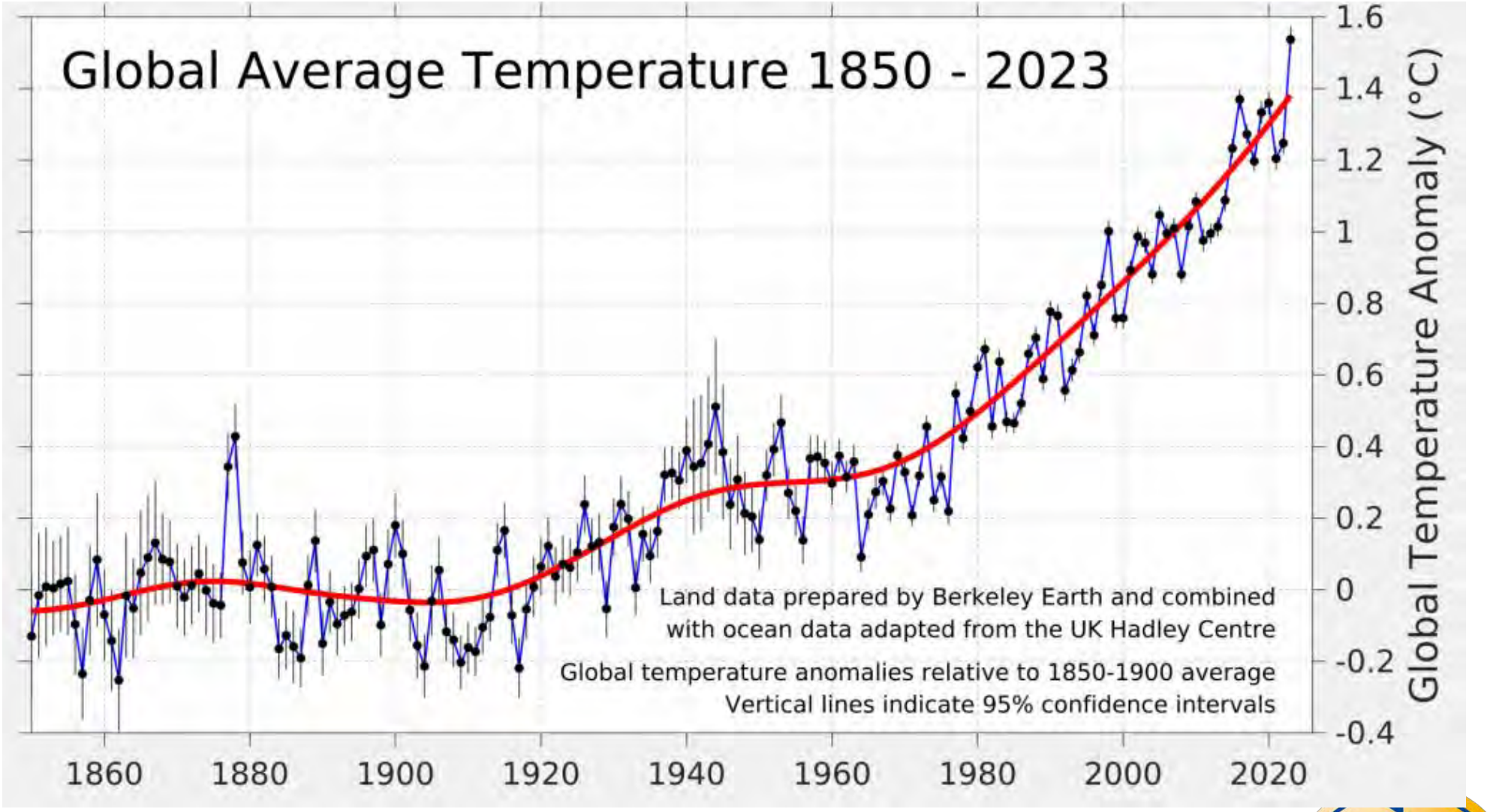


Flensburg

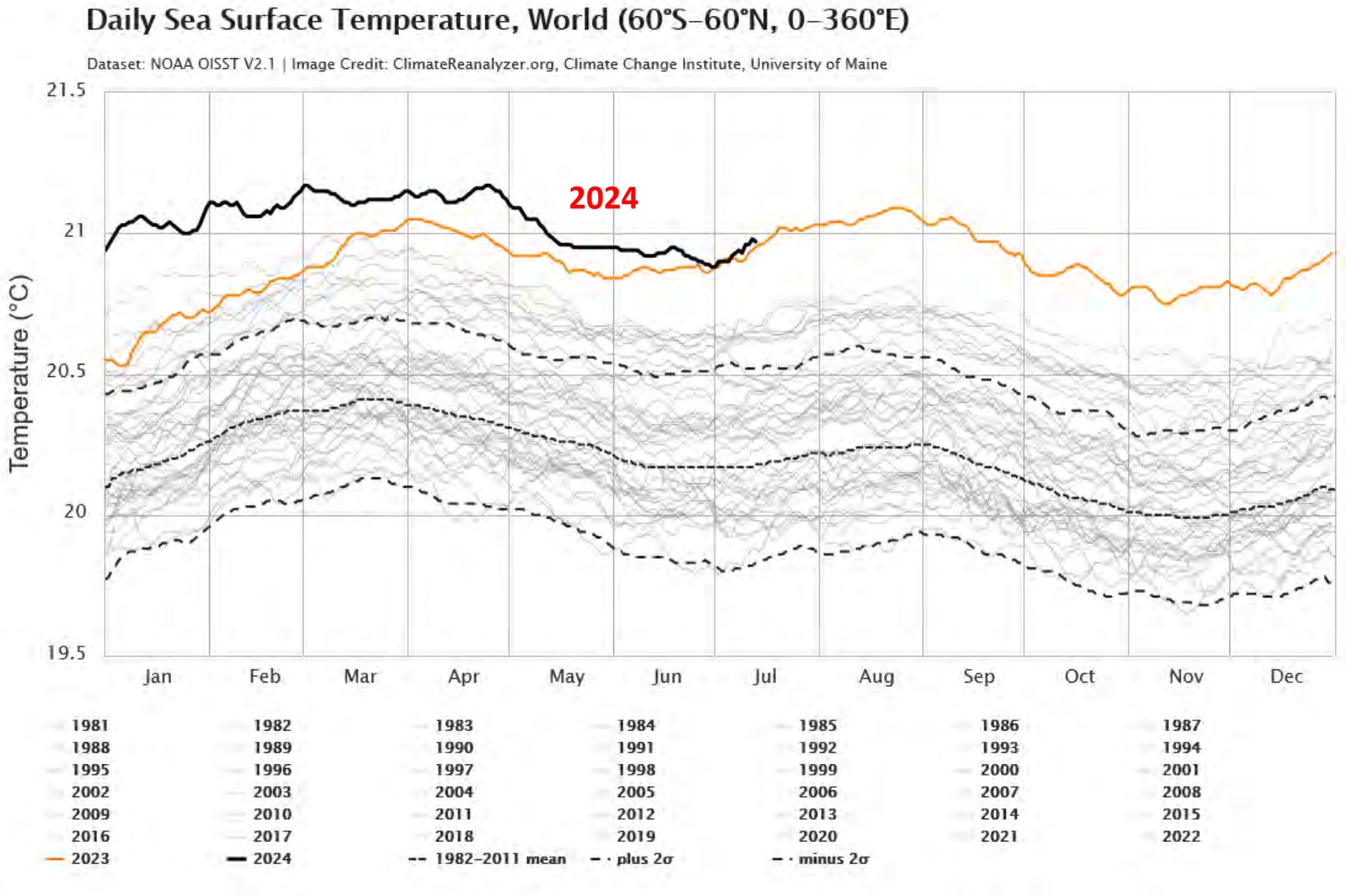
Schilksee

Schilksee

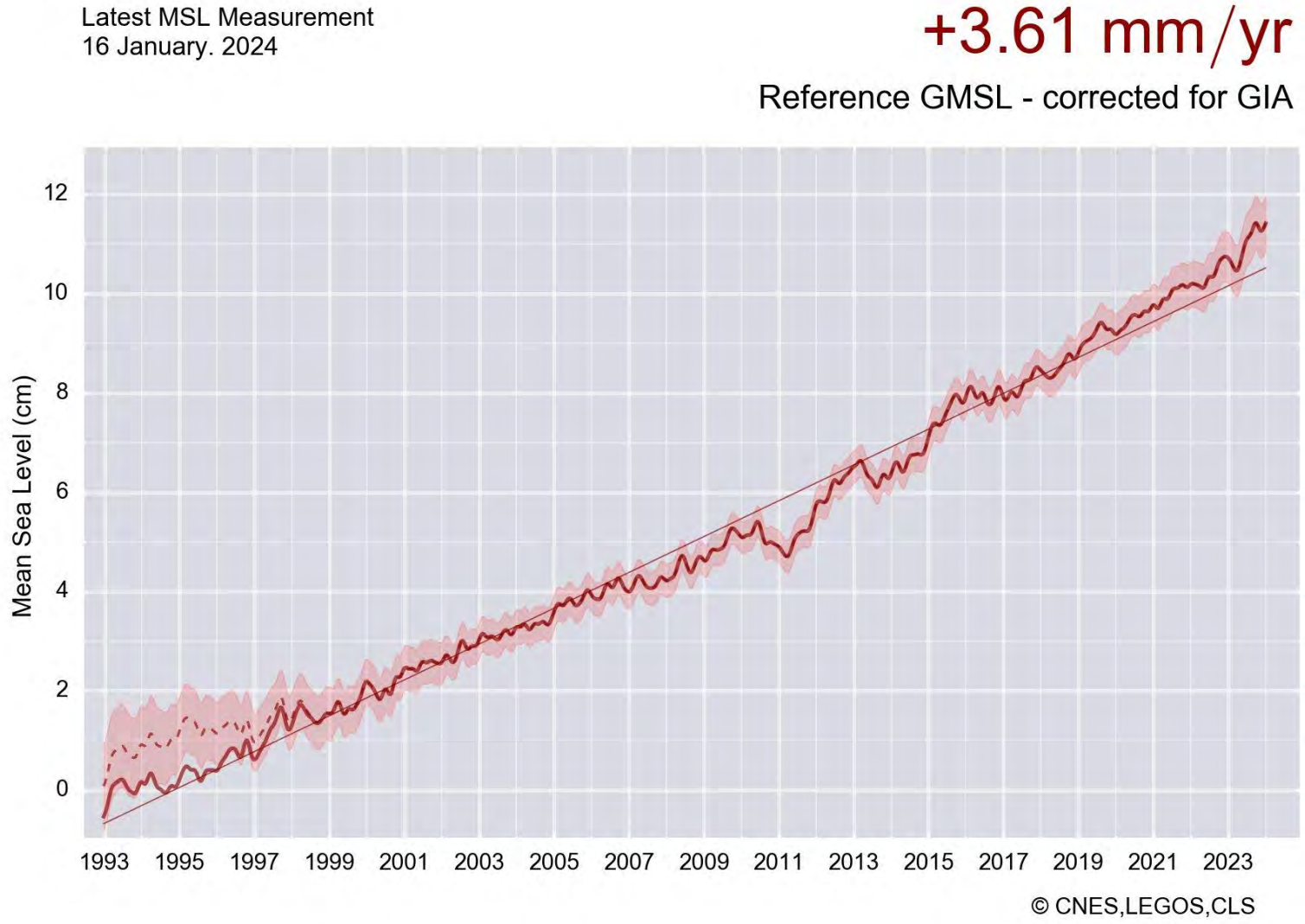
Zukunftsaussichten weltweiter Temperaturanstieg



Wassertemperaturen



weltweiter Pegelanstieg pro Jahr



Gründe für Meeresspiegelanstieg

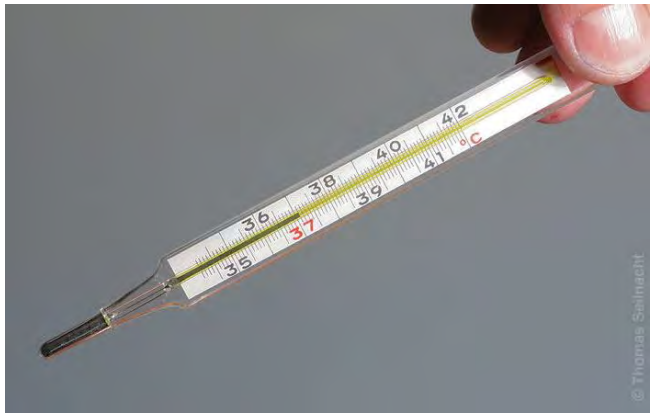
Schmelze der Eisschilde + Gletscher

Thermische Expansion

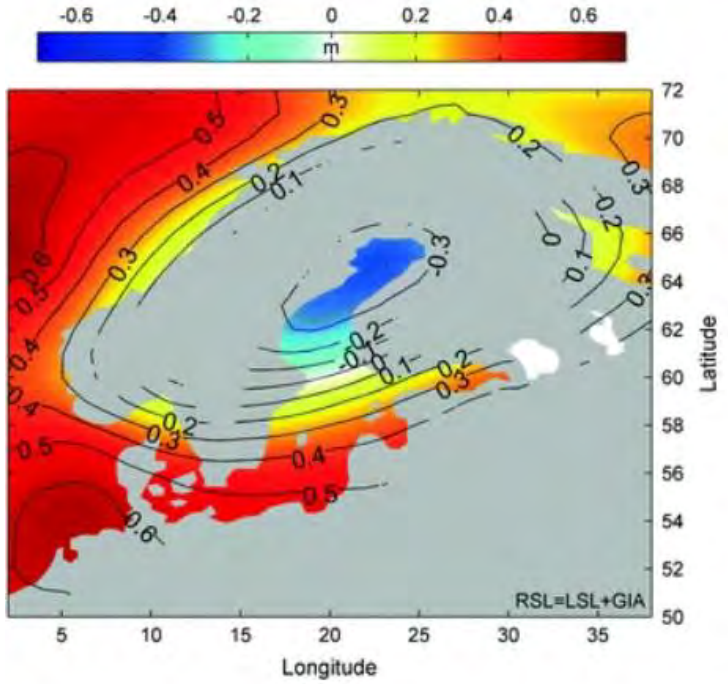
Speziell Ostsee: Anhebung der Erdkruste

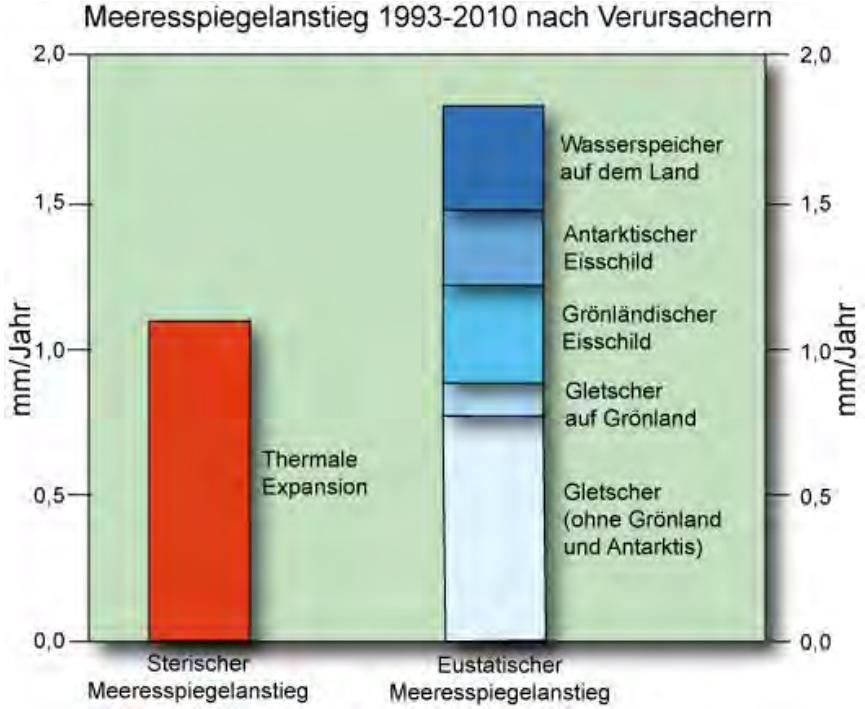
Bottnischer Meerbusen:
Hebung + 10 mm/Jahr,
hier sinkt Meeresspiegel
-8,2 mm/Jahr

Ostseeküste SH:
Anstieg um 60 cm bis 2100



Vergleich Ende 20. vs. 21 Jhd.

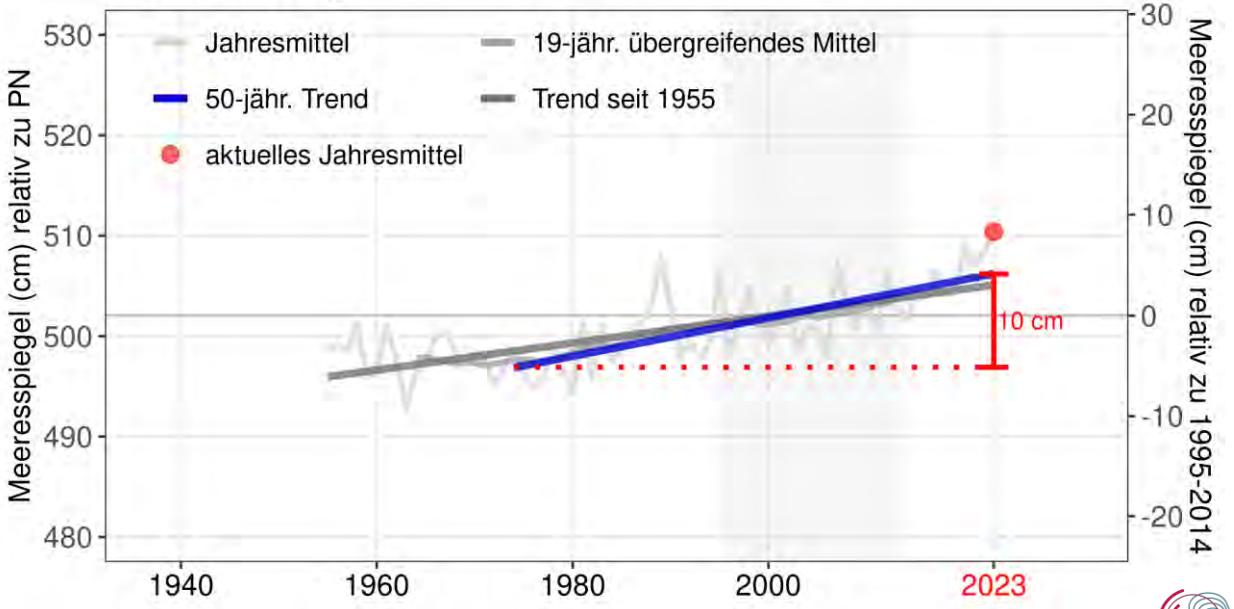




Projected Change—Sea Level

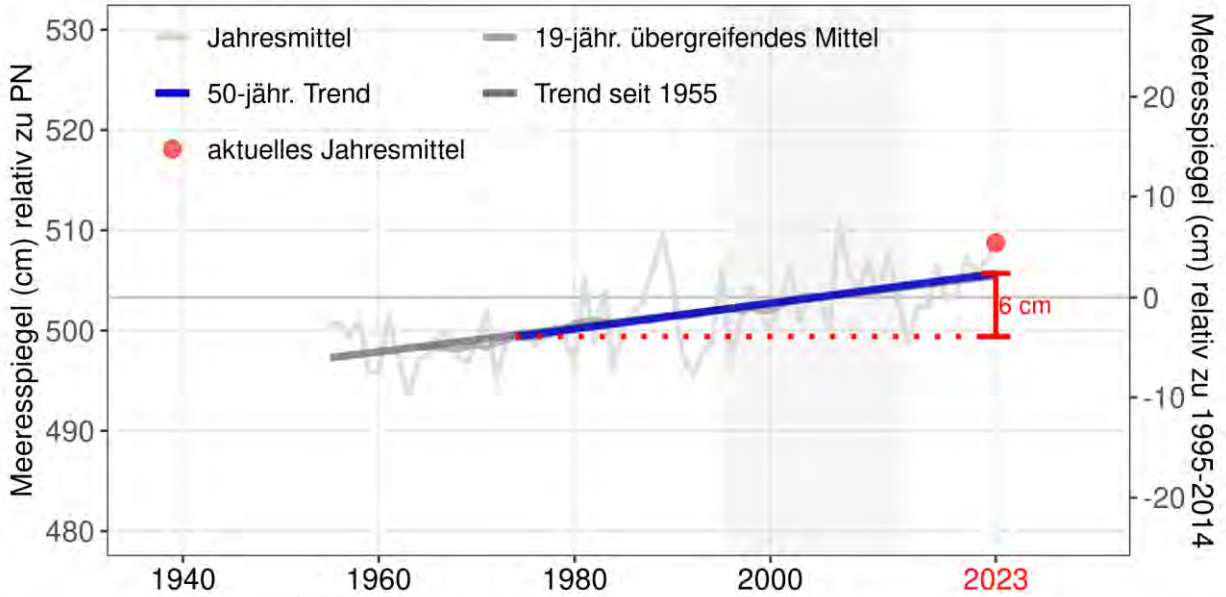
Meeresspiegelanstieg seit 1955

Pegel: Flensburg



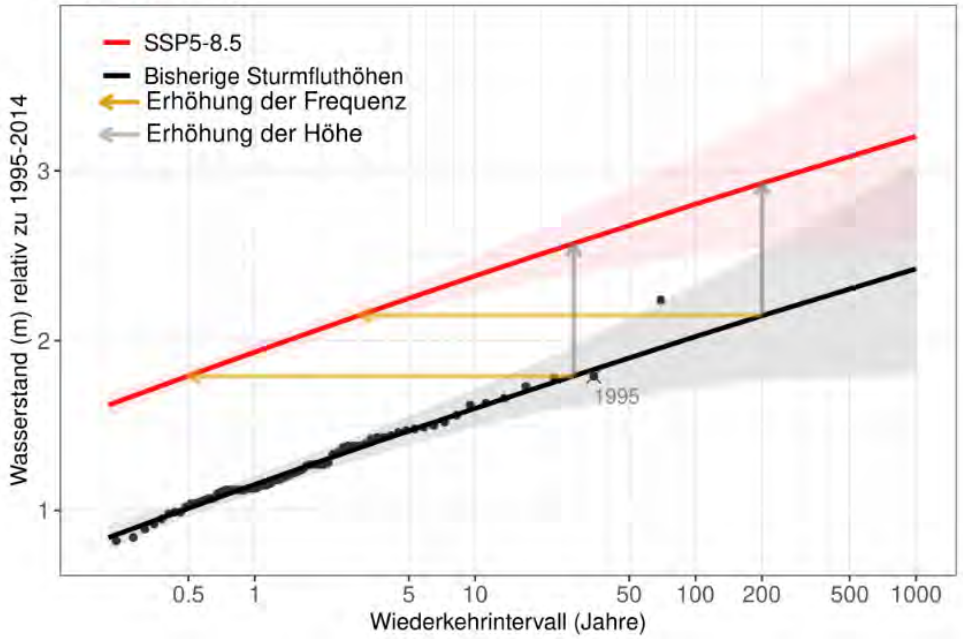
Meeresspiegelanstieg seit 1955

Pegel: Kiel-Holtenau



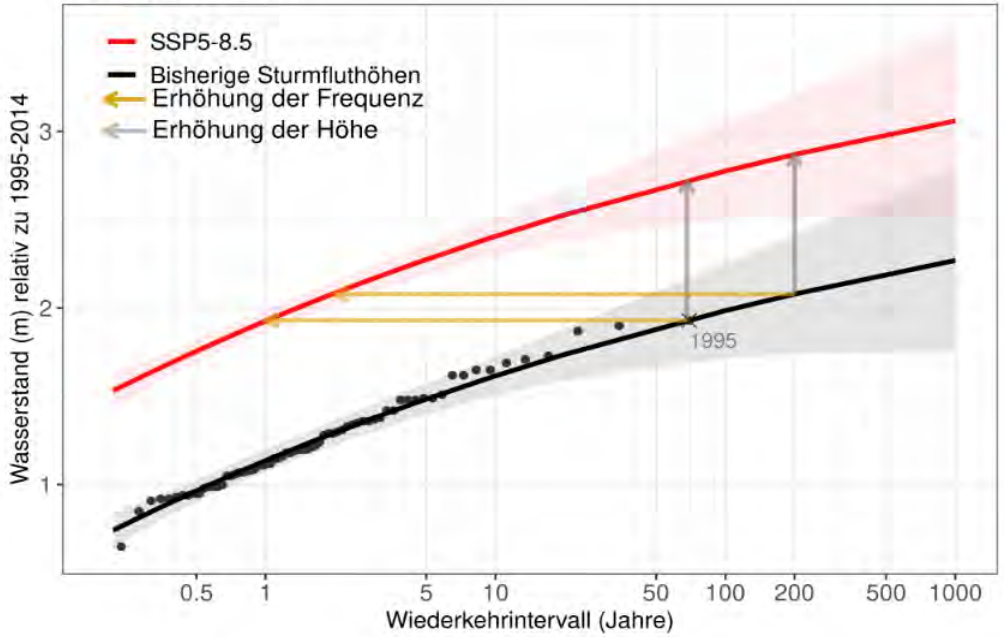
Sturmfluten

Pegel: Flensburg



Sturmfluten

Pegel: Kiel-Holtenau



Helmholtz-Zentrum hereon