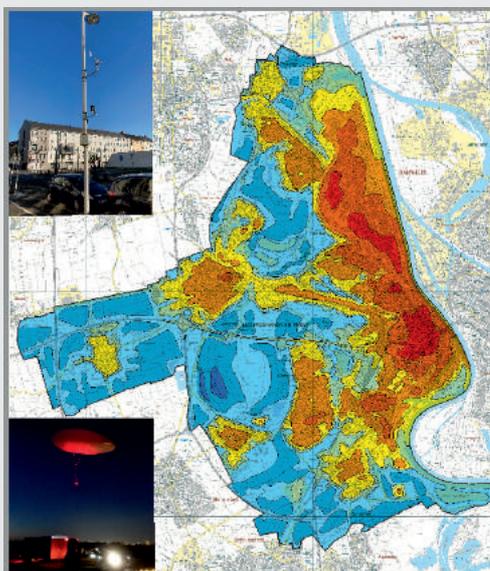


ÖKOPLANA

KLIMAÖKOLOGIE
LUFTHYGIENE
UMWELTPLANUNG

ERFASSUNG METEOROLOGISCHER DATEN IN LUDWIGSHAFEN AM RHEIN



Auftraggeber



Stadtverwaltung Ludwigshafen am Rhein
Rathausplatz 20
67059 Ludwigshafen a. Rhein

Bearbeitet von:

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Mannheim, Juli 2022

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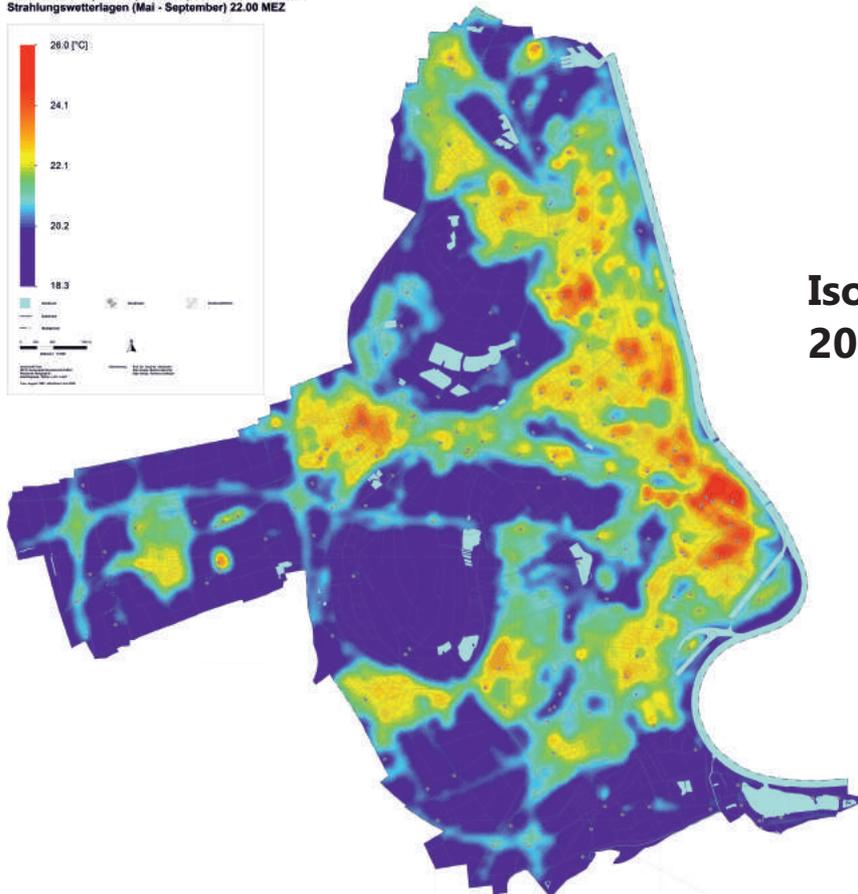
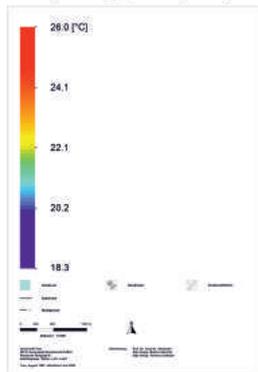
Aufgabenstellung:

- 1) Erarbeitung einer gesamtstädtischen Isothermenkarte für die Stadt Ludwigshafen am Rhein - Aktualisierung der Isothermenkarte aus dem Jahr 2000
- 2) Auswertung von Daten bestehender Klimamessstationen in Ludwigshafen am Rhein
- 3) Erfassung des vertikalen Windfeldes an ausgewählten Messstandorten in Ludwigshafen am Rhein

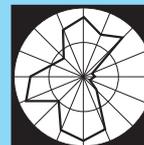
Ziel der Untersuchungen:

Bereitstellung vertiefender Erkenntnisse zum Stadtklima von Ludwigshafen am Rhein, um die Folgen potenzieller Stadtentwicklungsmaßnahmen bewerten zu können.

Ludwigshafen am Rhein
Mittlere Lufttemperatur (2m ü. Gr.) bei windschwachen
Strahlungswetterlagen (Mai - September) 22.00 MEZ



**Isothermenkarte
2000**



Standorte von Klimamessstationen in Ludwigshafen am Rhein

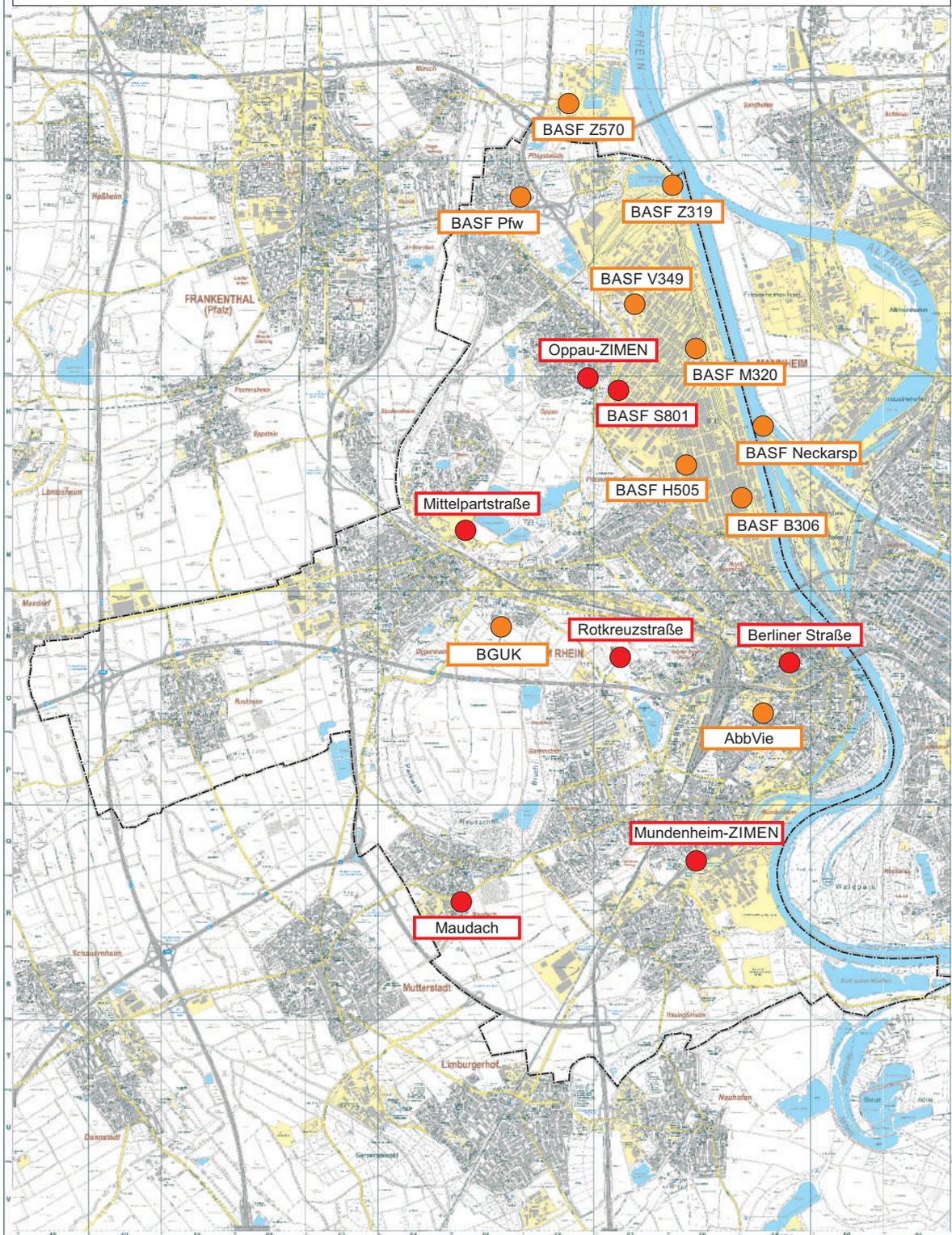
Maudacher Straße

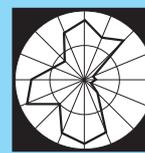
Messprogramm:
Windrichtung, Windgeschwindigkeit
Lufttemperatur, Luftfeuchte

BASF Z570

Messprogramm:
Windrichtung, Windgeschwindigkeit

Kartenhintergrund:
Amtlicher Stadtplan der Stadt
Ludwigshafen am Rhein





**Klimamessstationen
(Temporärer Betrieb Juni - September 2021)**

Station - Oppau - ZIMEN



Station - Rotkreuzstraße



Station - Innenstadt: Beliner Straße

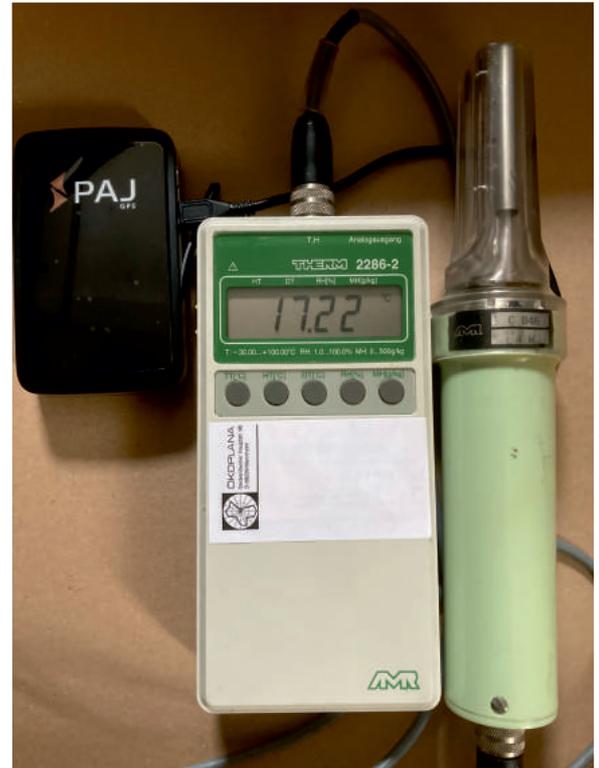


Station - Maudacherstraße

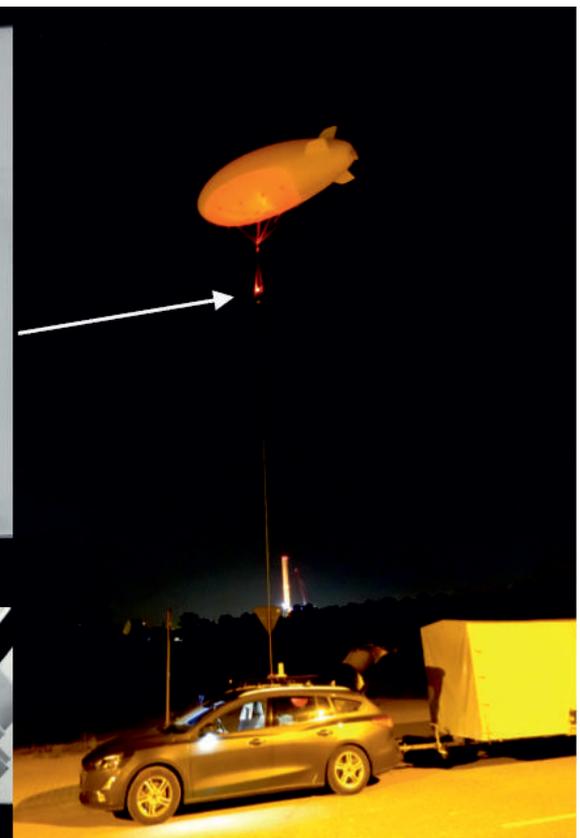


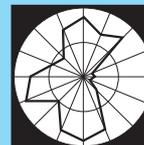
Ausstattung der vier Messfahrzeuge

Ventilierte Psychrometer, Messhöhe 2 m ü.G.
und GPS-Tracker



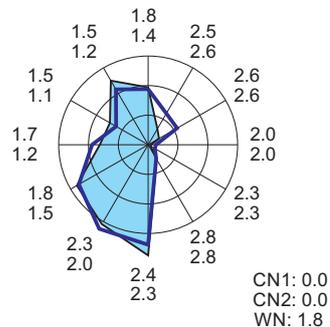
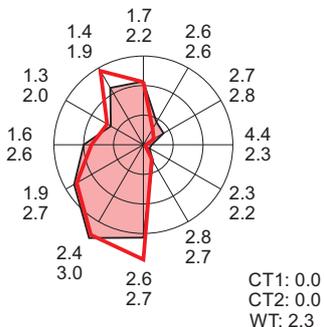
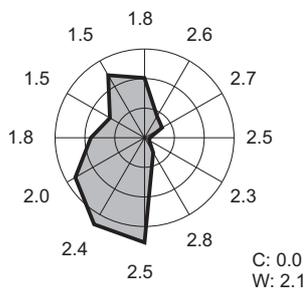
Vertikalsondierungen
mittels Fesselballonsonde



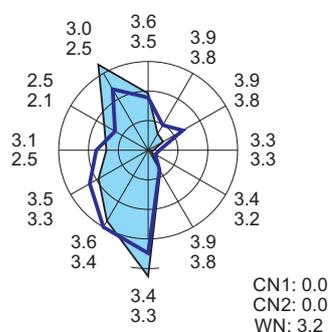
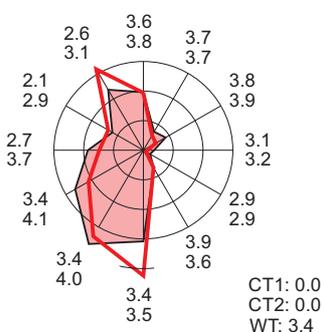
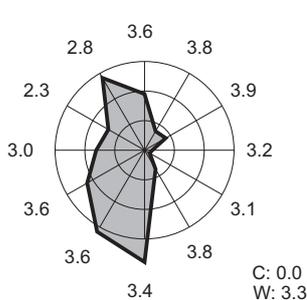


**Häufigkeitsverteilung der Windrichtung und mittlere Windgeschwindigkeit
Zeitraum: 2011 - 2020**

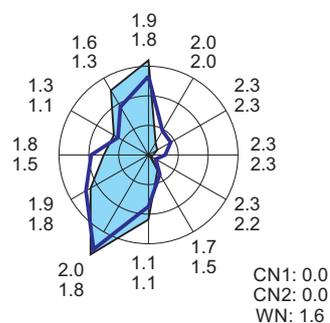
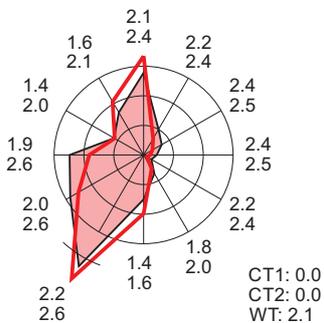
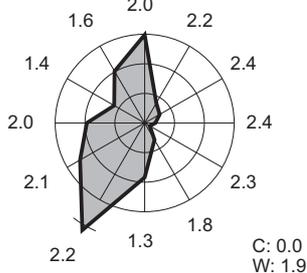
Standort: BASF S801 10m



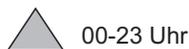
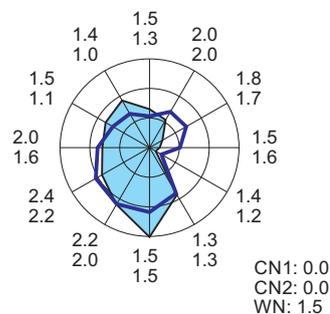
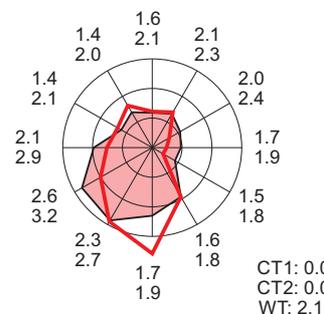
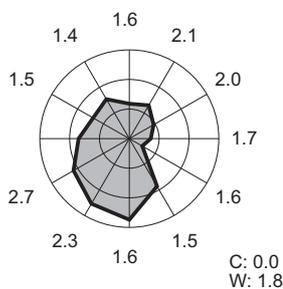
Standort: BASF S801 30m



Standort: ZIMEN Oppau



Standort: ZIMEN Mundenheim



C: Windstillen
W: mittlere Windgeschwindigkeit



06-12 Uhr



13-19 Uhr

CT: Windstillen
WT: mittlere Windgeschwindigkeit

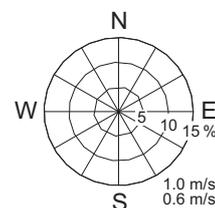


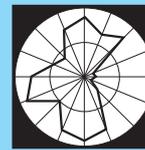
20-23 Uhr



00-05 Uhr

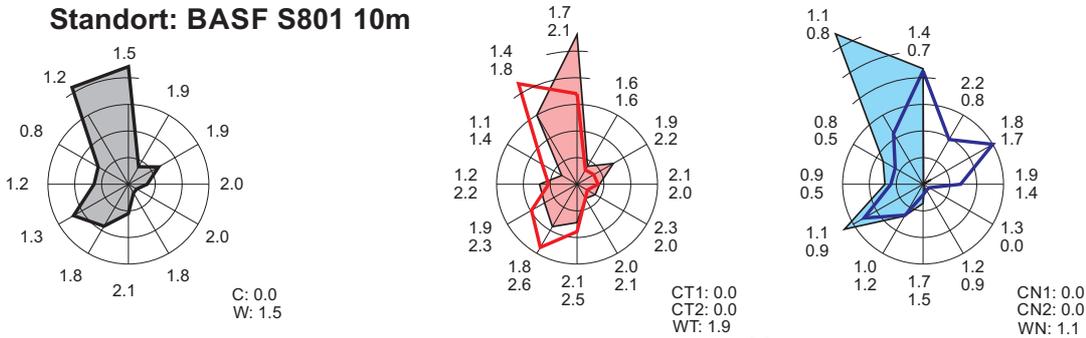
CN: Windstillen
WN: mittlere Windgeschwindigkeit



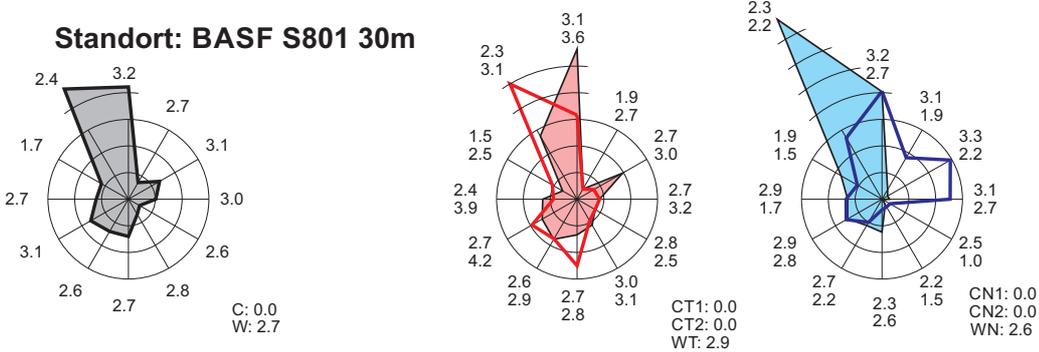


**Häufigkeitsverteilung der Windrichtung und mittlere Windgeschwindigkeit
Zeitraum: Juni - September 2021 (Strahlungswetterlagen)**

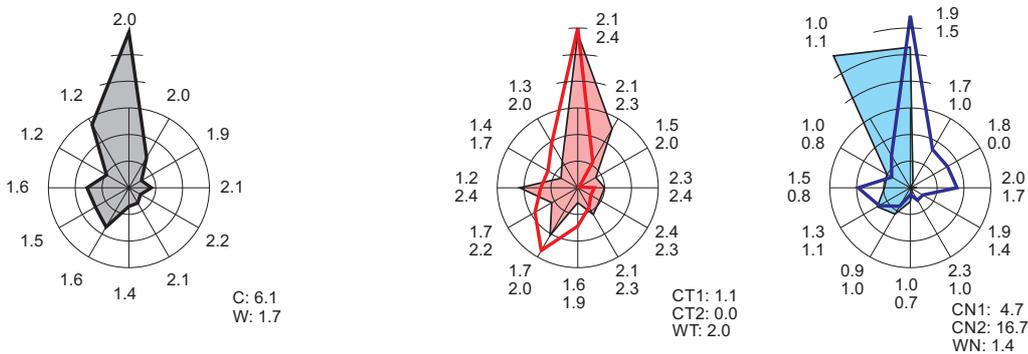
Standort: BASF S801 10m



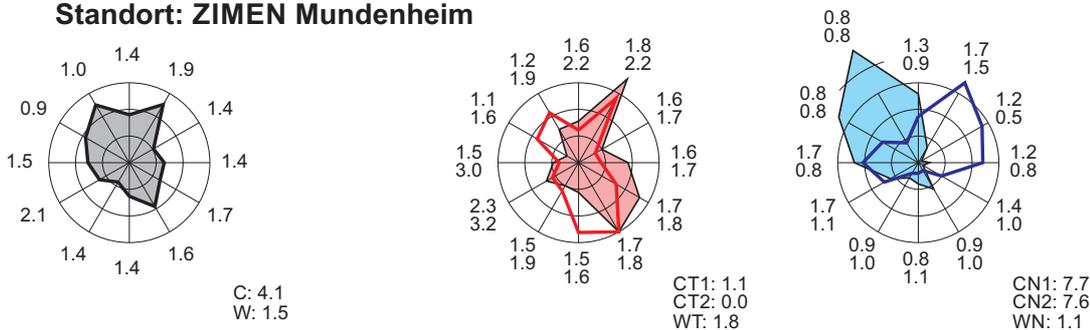
Standort: BASF S801 30m



Standort: ZIMEN Oppau



Standort: ZIMEN Mundenheim



00-23 Uhr



06-12 Uhr



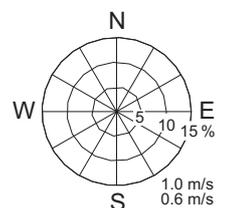
13-19 Uhr



20-23 Uhr



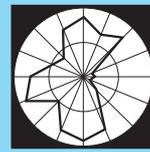
00-05 Uhr



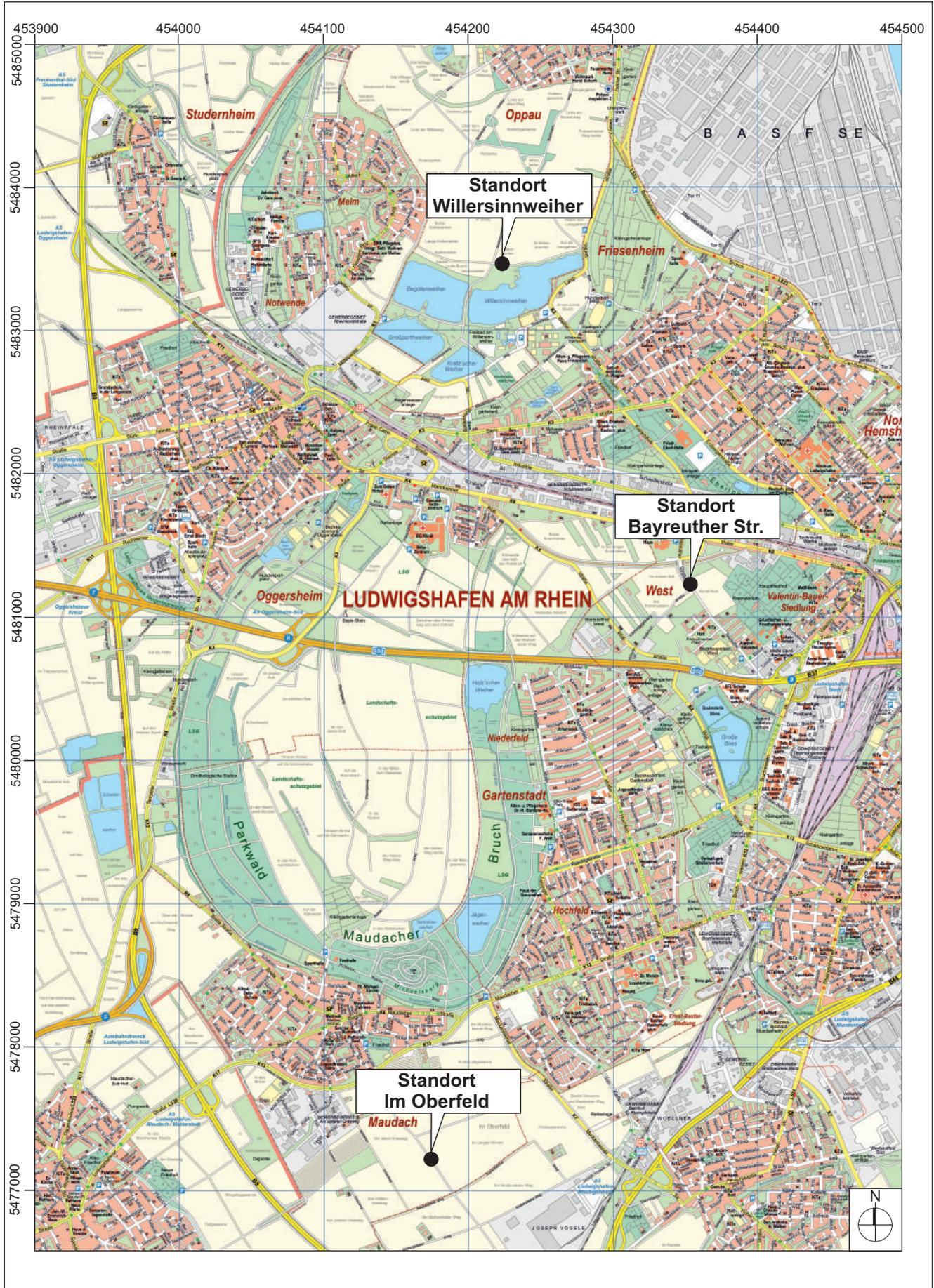
C: Windstillen
W: mittlere Windgeschwindigkeit

CT: Windstillen
WT: mittlere Windgeschwindigkeit

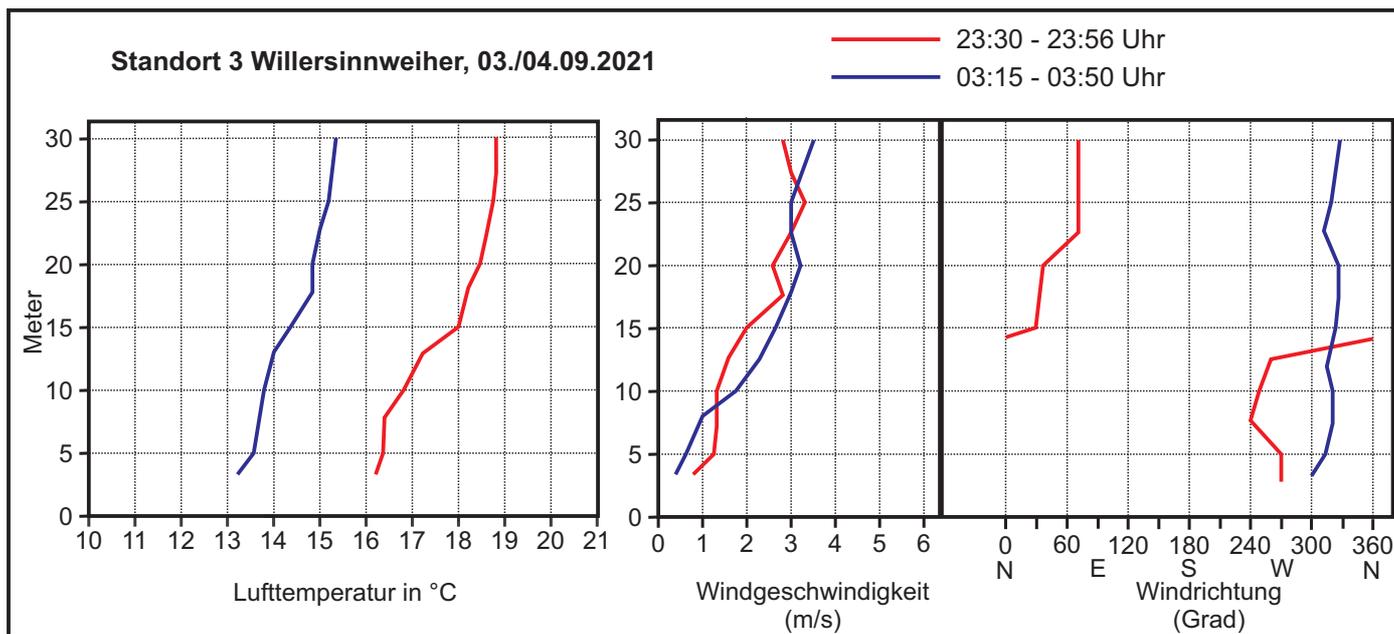
CN: Windstillen
WN: mittlere Windgeschwindigkeit

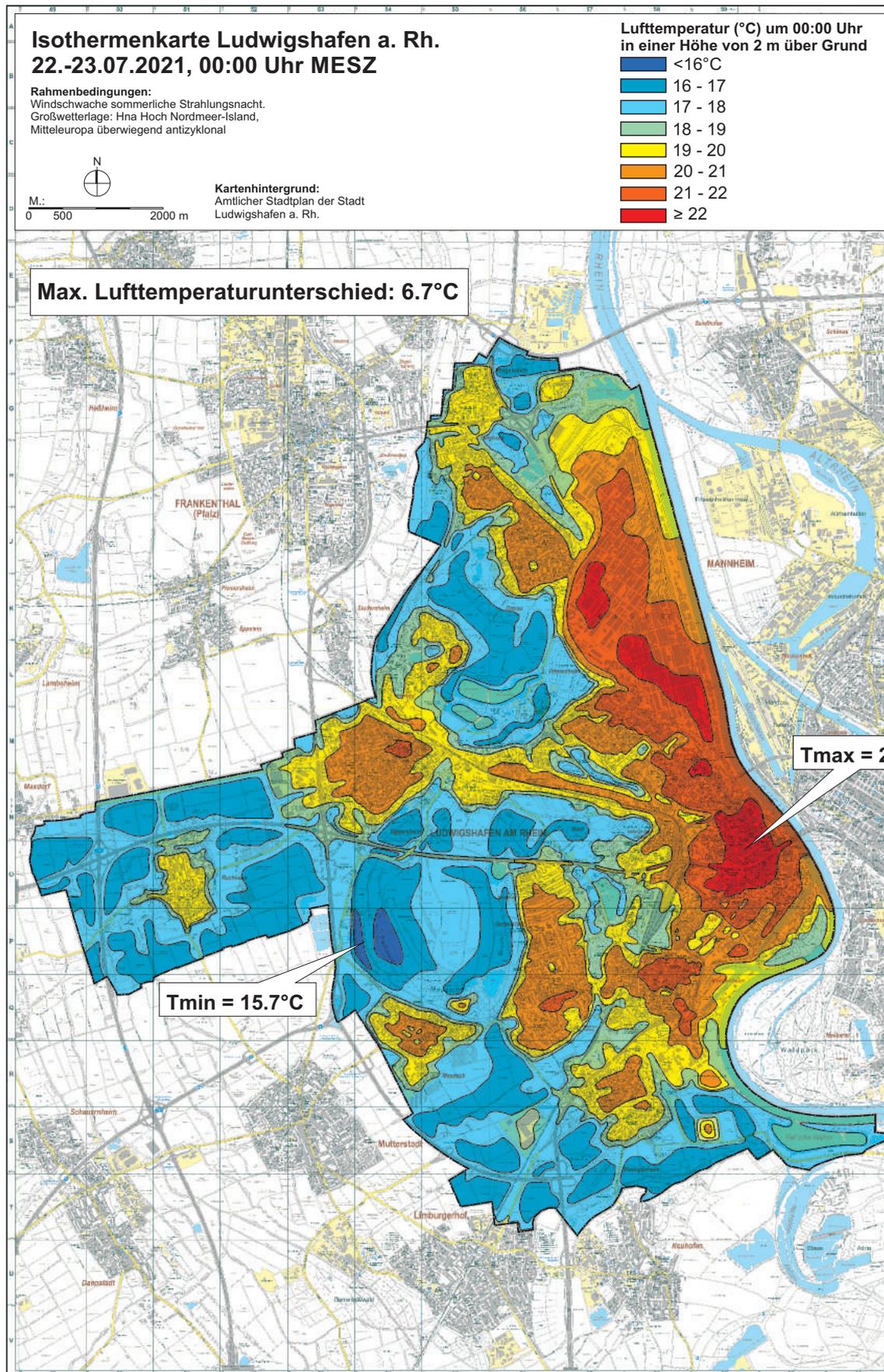


Standorte von Fesselballonaufstiegen



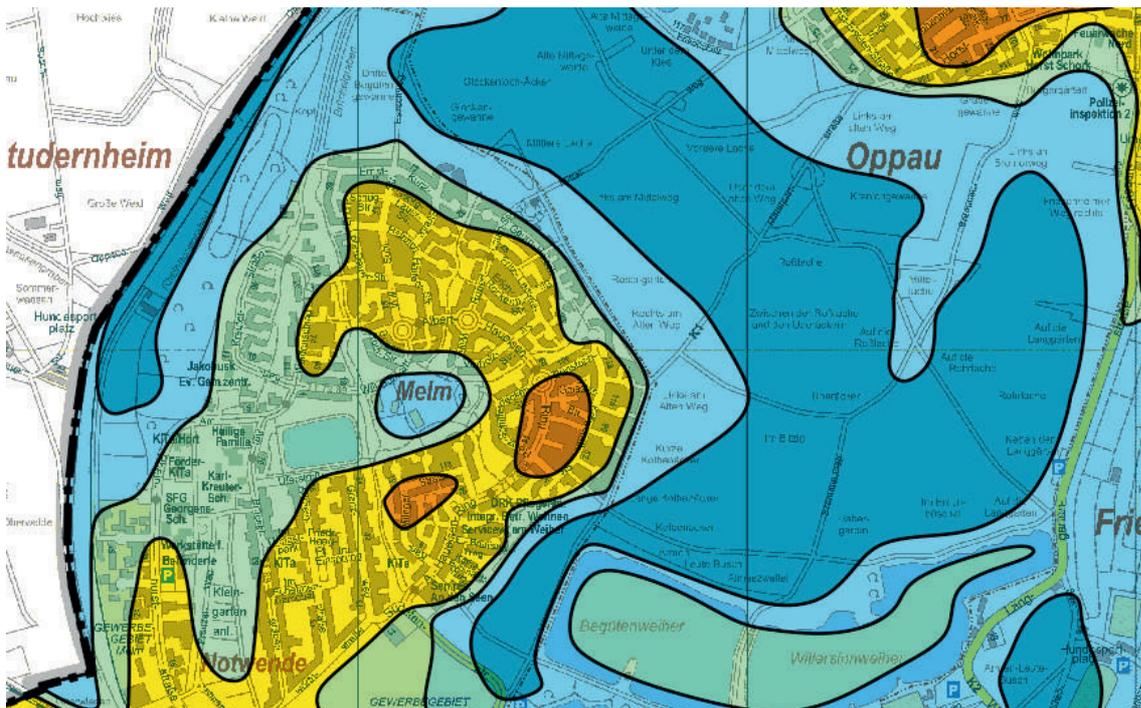
Standorte von Fesselballonaufstiegen







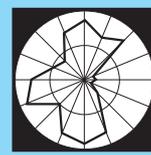
Wohngebiet Melm



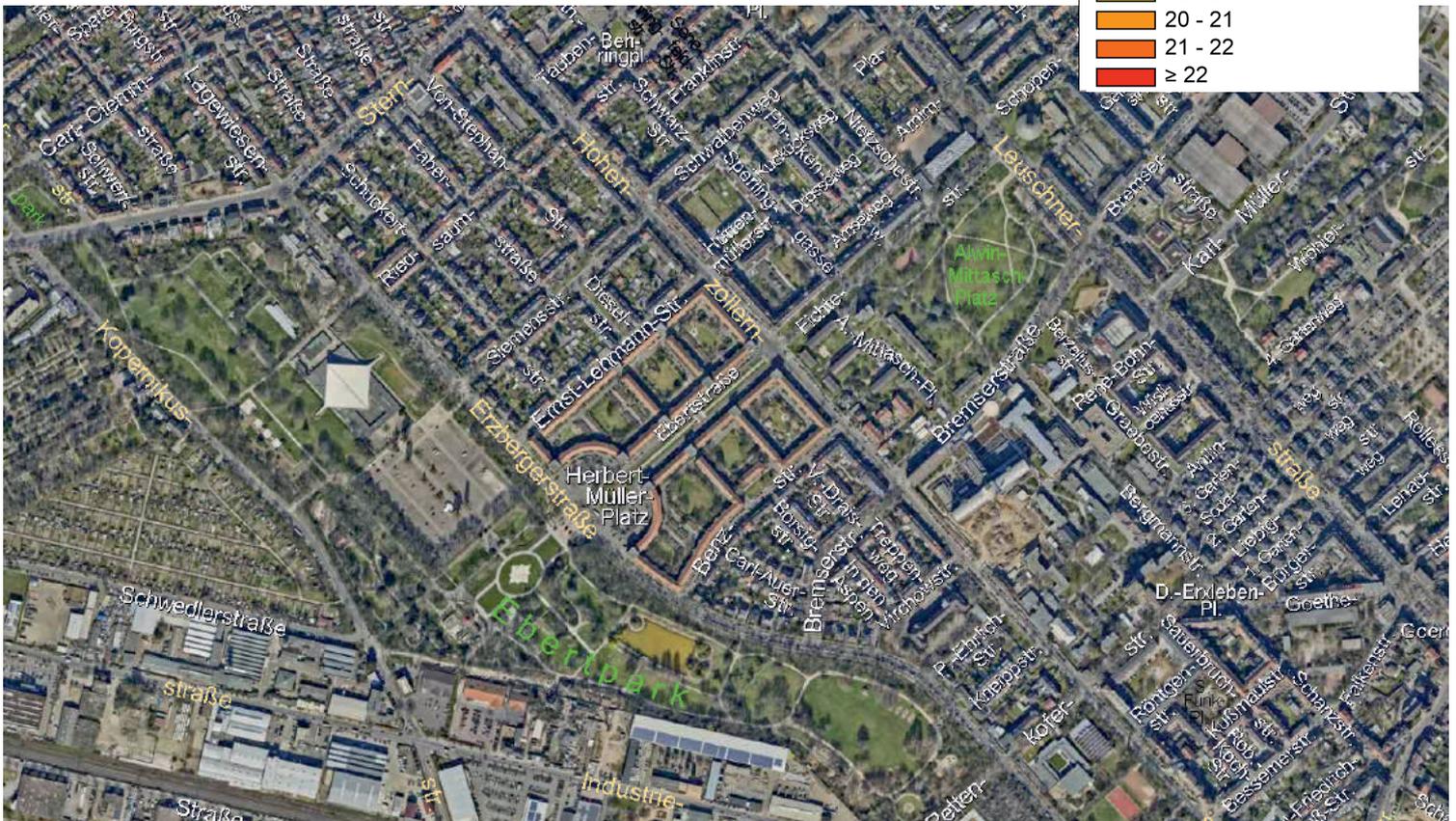
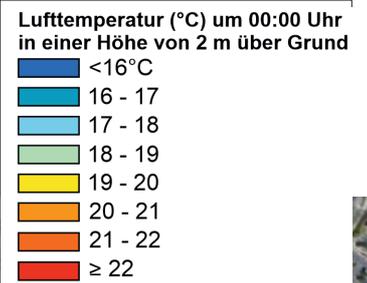
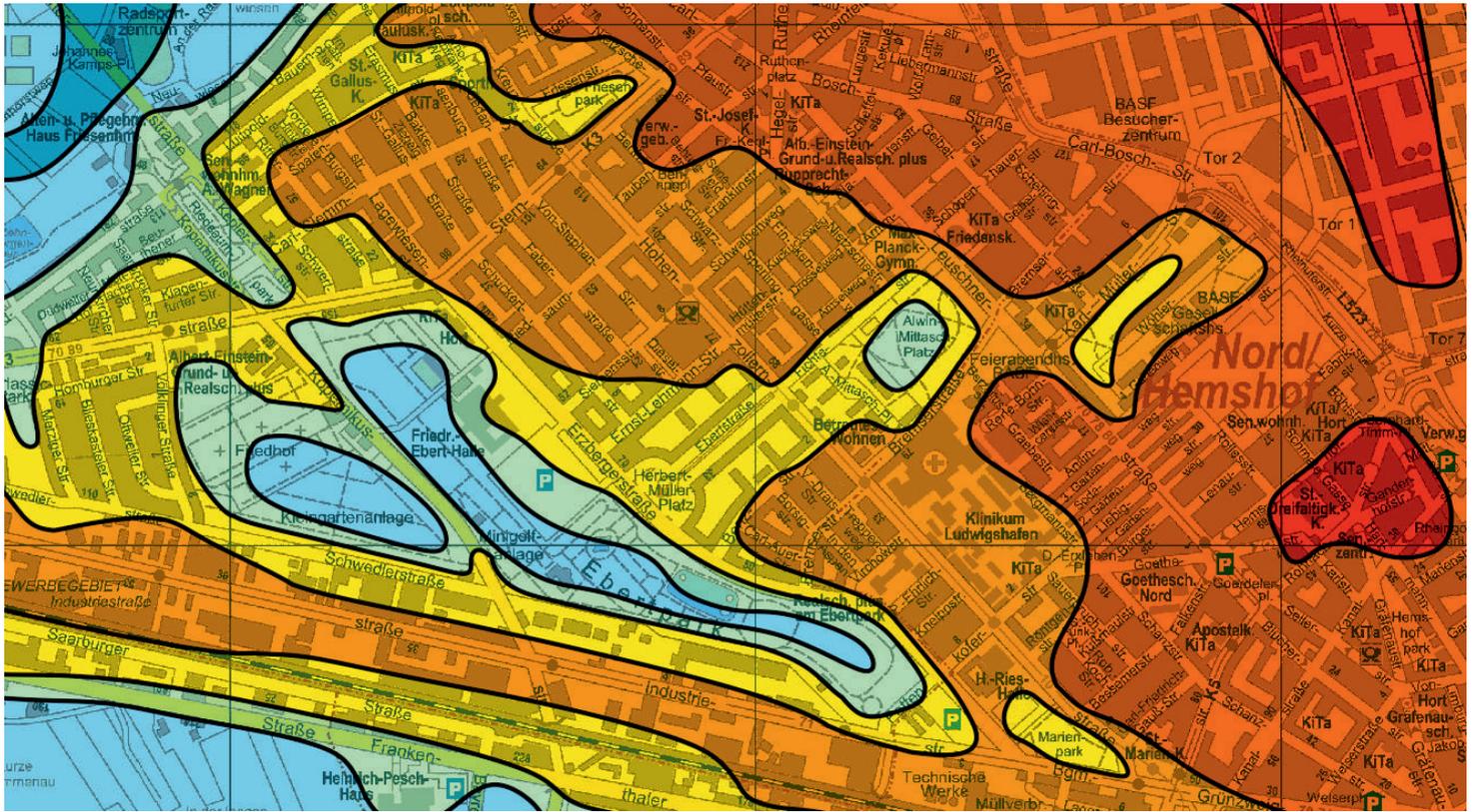
Lufttemperatur (°C) um 00:00 Uhr
in einer Höhe von 2 m über Grund

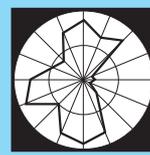
- <16°C
- 16 - 17
- 17 - 18
- 18 - 19
- 19 - 20
- 20 - 21
- 21 - 22
- ≥ 22



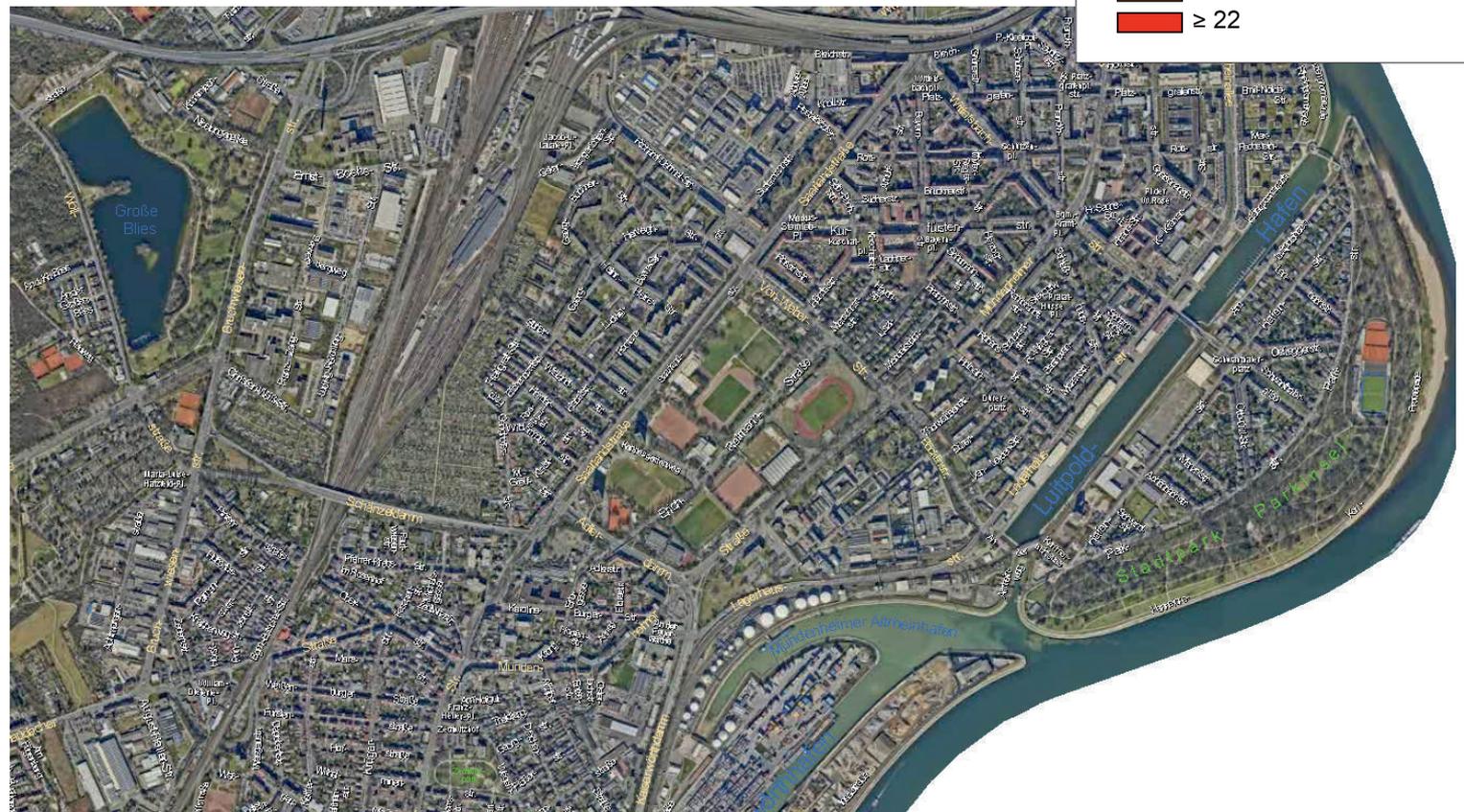
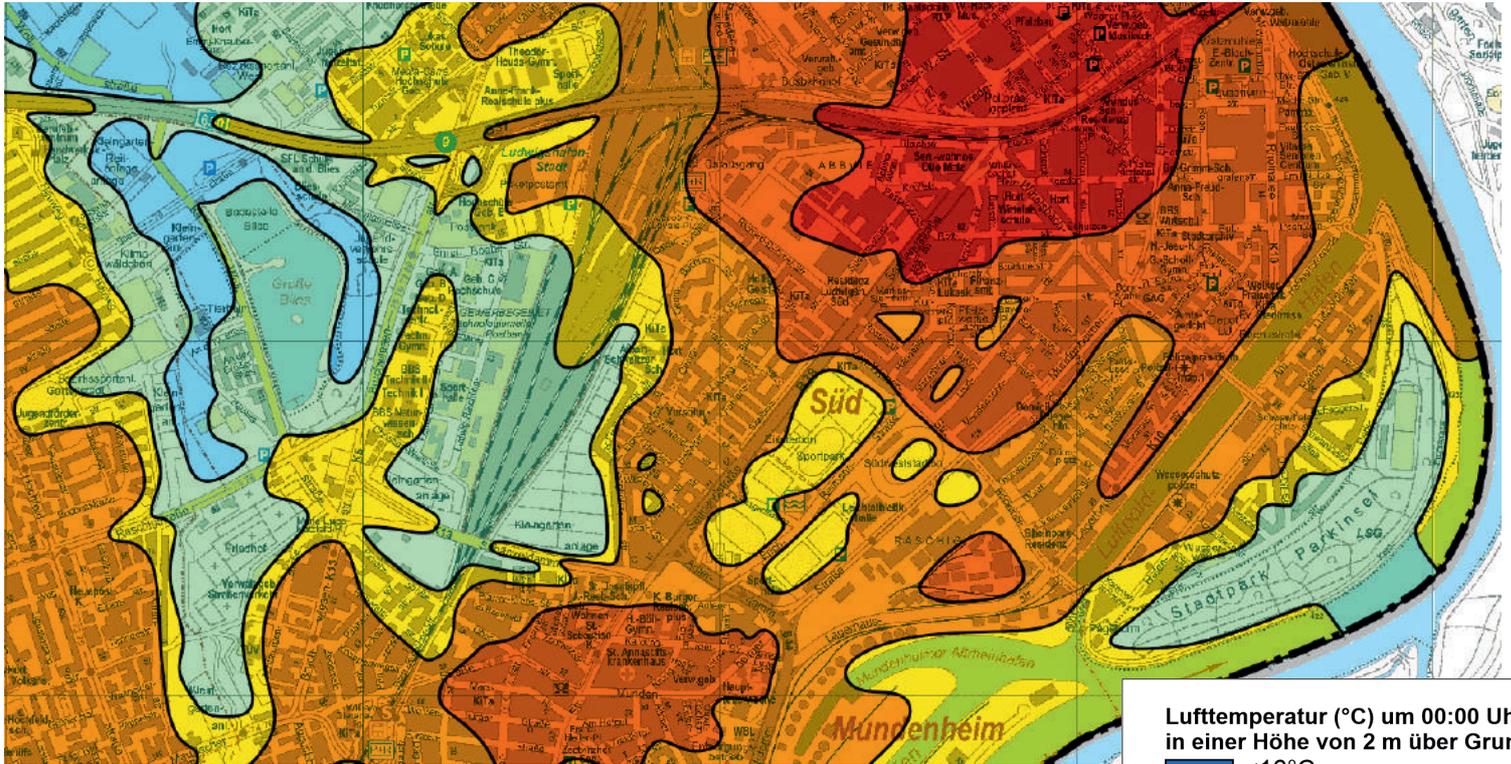


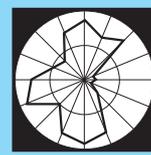
Ebertpark



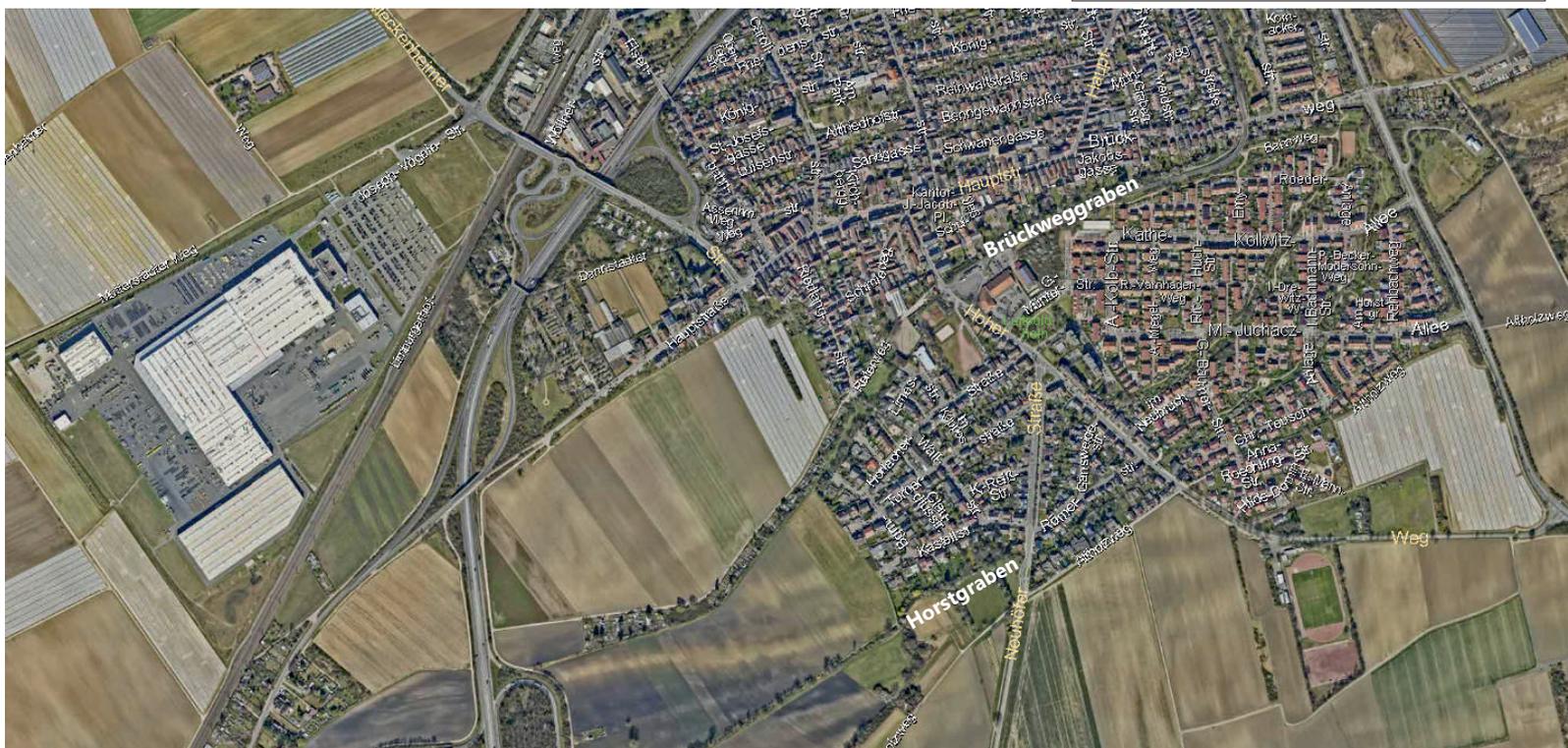
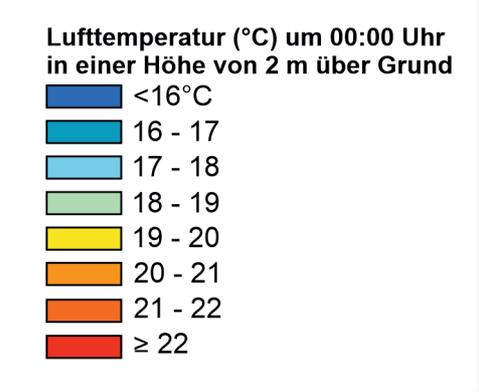
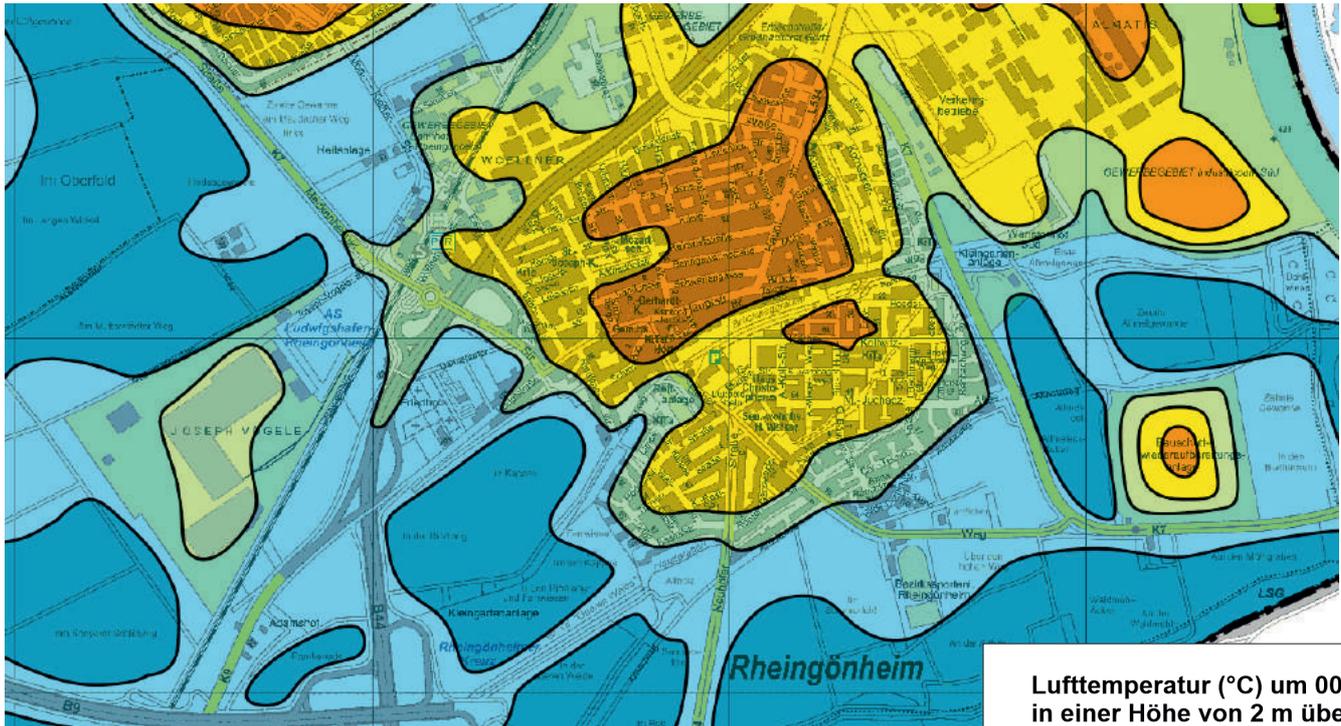


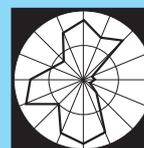
Große Blies - Mundenheim - Parkinsel



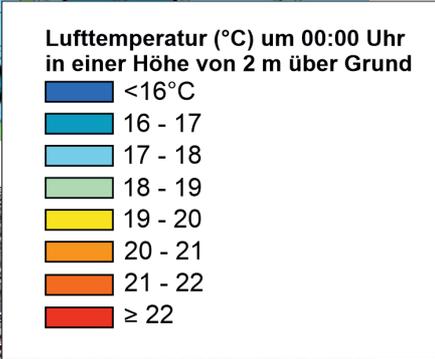
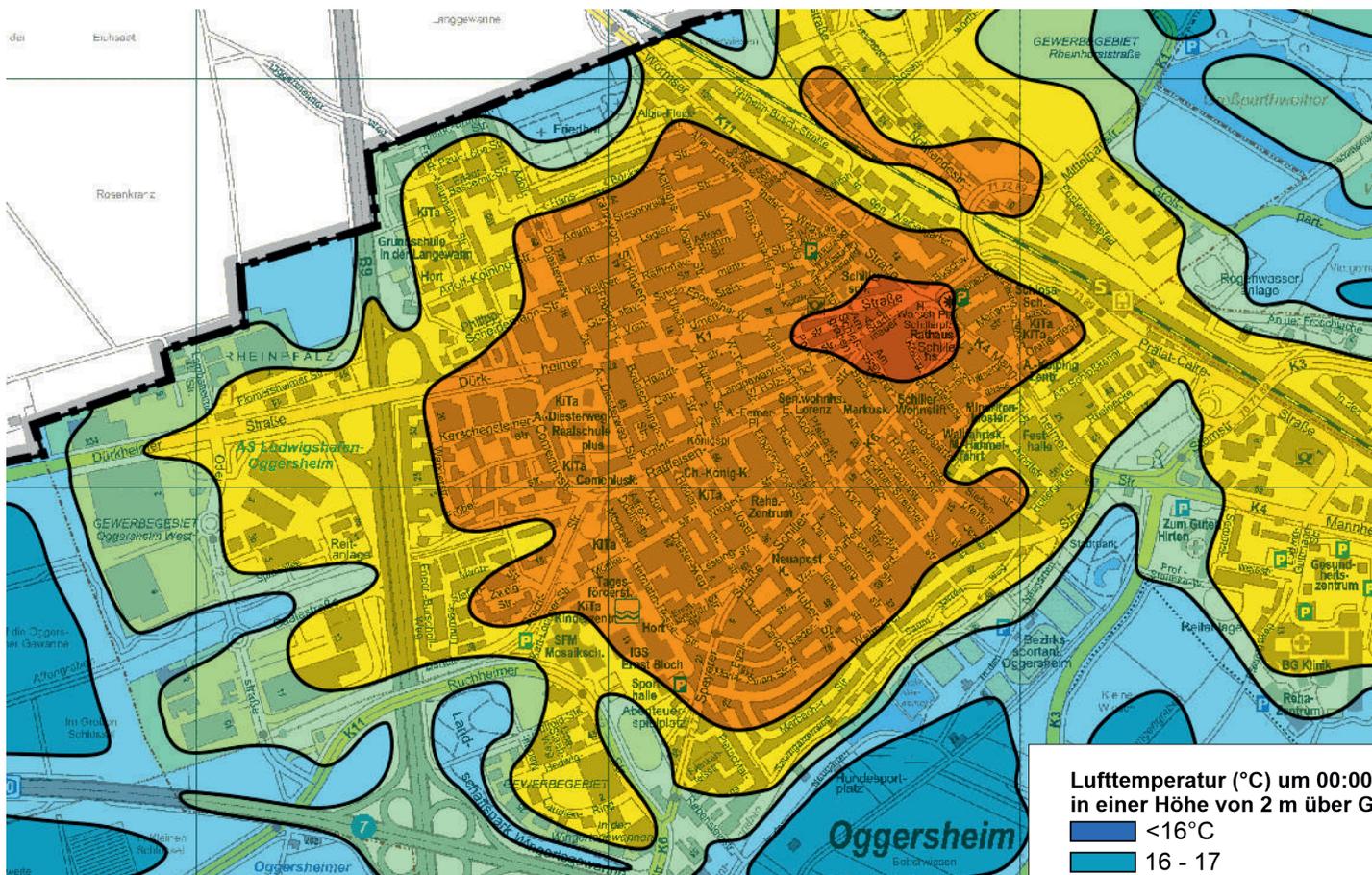


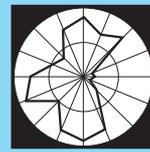
Rheingönheim (Wohngebiet Neubruch / Im Sommerfeld - Vögele-Areal)





Oggersheim - Gewerbegebiet Oggersheim-West





Vielen Dank für Ihre Aufmerksamkeit

Achim Burst
(Dipl.-Geogr. / Klimatologe)

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