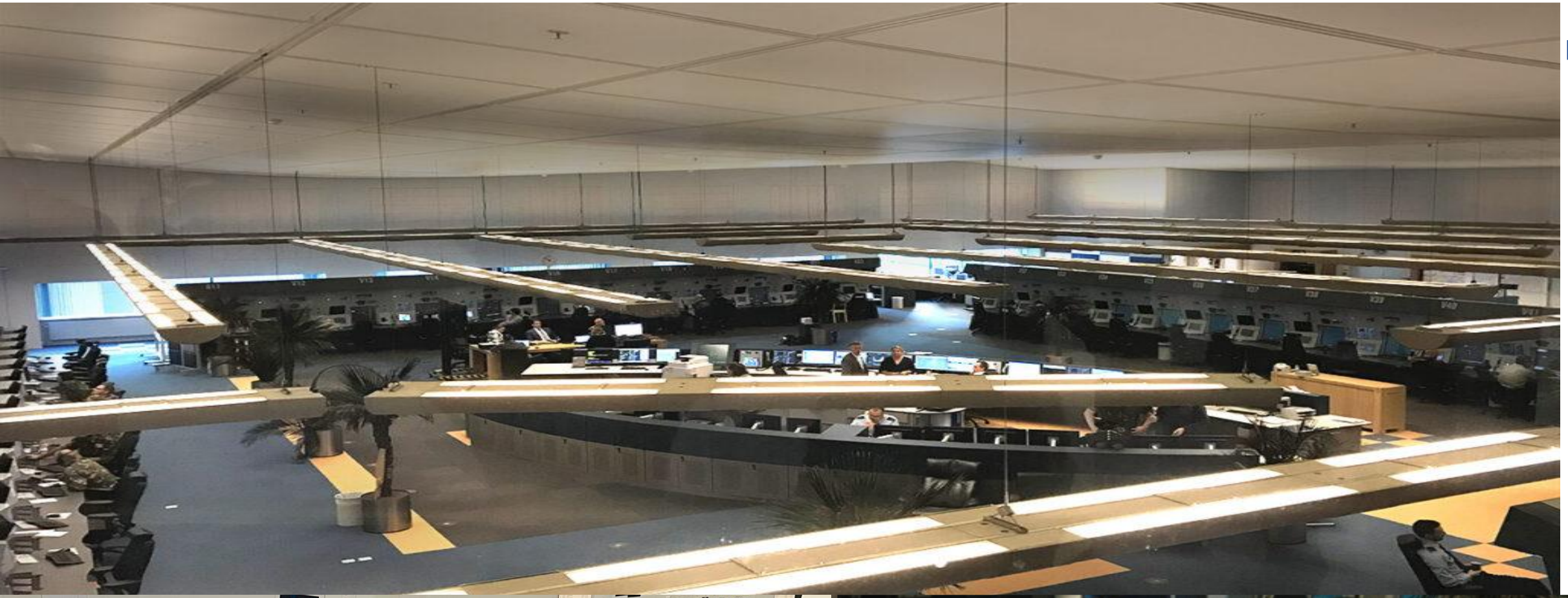

KNVvL
AOPA NETHERLANDS
Ministerie van Infrastructuur
en Waterstaat
LVNL
WELKOM
GA Season Opener 2026

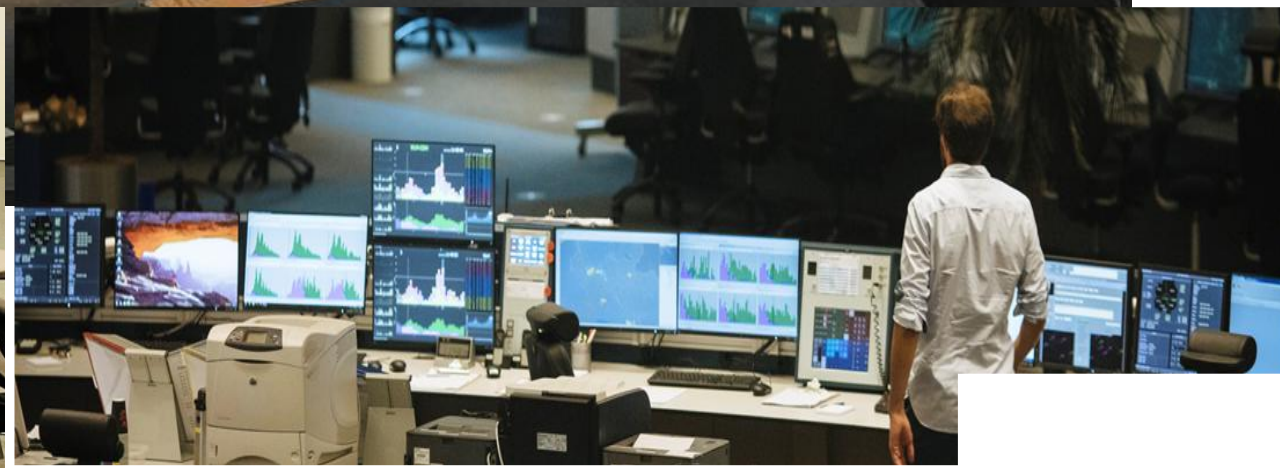
- **Communicatie in de GA**

- **Communicatie in de GA**
- **Basics**

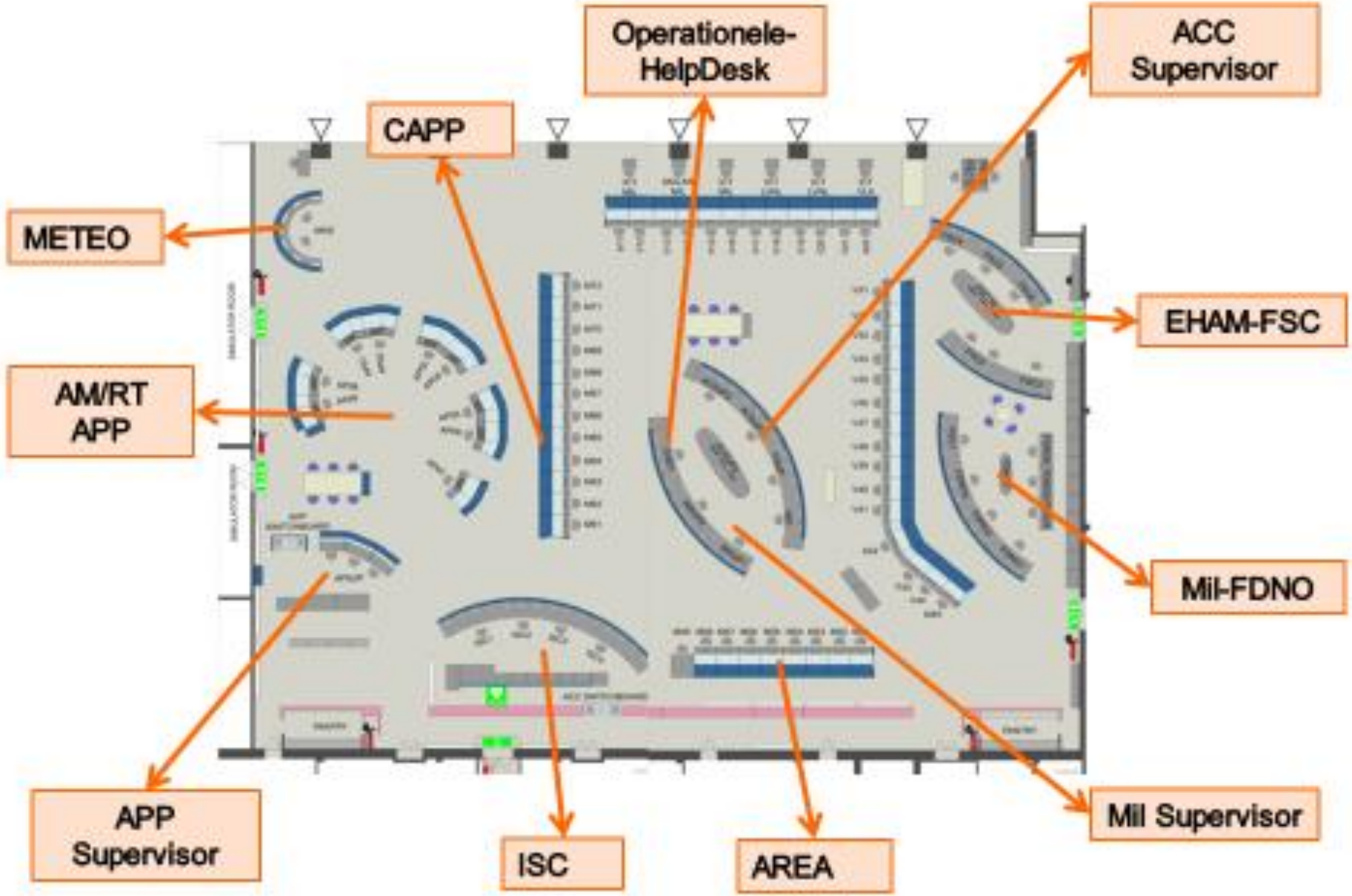
  - **Readback**
  - **Roger of Copied**
  - **Wilco**
  - **Say again**

  - **RT van A naar B**





Layout OPSROOM



Team opbouw

- **FIC/FMP is separate afdeling binnen ACC**
  30 FIC / FMP controllers

  2 werkposities, able to split sectors in peak times
- G airspace IFR en VFR
- **Dutchmil geen separate afdeling.**
  Rooster wordt gevuld door controllers, assistenten soms gecombineerd met DM LOWER
- 1 werkpositie
- G&E airspace VFR


FIC MAIN PAGE
134.775
121.325
125.275
135.425
125.475
124.6
134.030
124.000
119.175 / 259.475
128.500 / 369.625
124.3
128.805
126.9
124.075
124.8
128.525
128.355
125.930
132.350
OBS TIME 190555
RWY 03
WIND 080 02 / 03
VIS 5000 M
WX BR
CLD NO CLOUDS DETECTED
TEMP 4
DP 3
QNH 1027
SUPPL
COLOR WHT
TREND TEMPO 4000 BR MIFG
EHKD ARR 124.230
TWR 120.130
EBOS APP 120.605
EHAM APP 1 121.205
APP 2 119.055
TWR 1 119.230
TWR 2 118.105
TWR W 118.280
EHTX 119.305
EHHO 123.410
EHHV 131.030
EHSE 120.655
EHWO 120.430
EHMZ 119.255
EHLE ARR 134.530
TWR 135.180
EHRD APP radar closed - TWR 118.205
TWR 118.205
ACC INFO
MIL INFO
FIS BRE LANGEN ACC CENTR FIS
ROTOR
EHLE RWY 05
EHR4/A
EHR4BCDF
EHR8/A
EHR49
EHD41ABC
EHD42
EHD69/A
MIL ↘EHD
NSCAW ATS BY FIC
CAS 1
CAS 2
CAS ↘TMA
RHOON
CL UTRECHT
CL BRABANT
CL ZEELAND
TL 40
EHAM Q 1027 ARR I
EHRD Q 1027 ATIS Y RWY 06
EHGG Q 1028 ATIS B RWY 05


UDP 0530 - 1806
MAP EHDs, EHPs, EHRs, EHTRAs, EHTSAs, CBAs
EHRD
EHGG Q 1028 ATIS C RWY 05

Amsterdam/ DM Info

Traffic

- Off shore
- GA
- Military

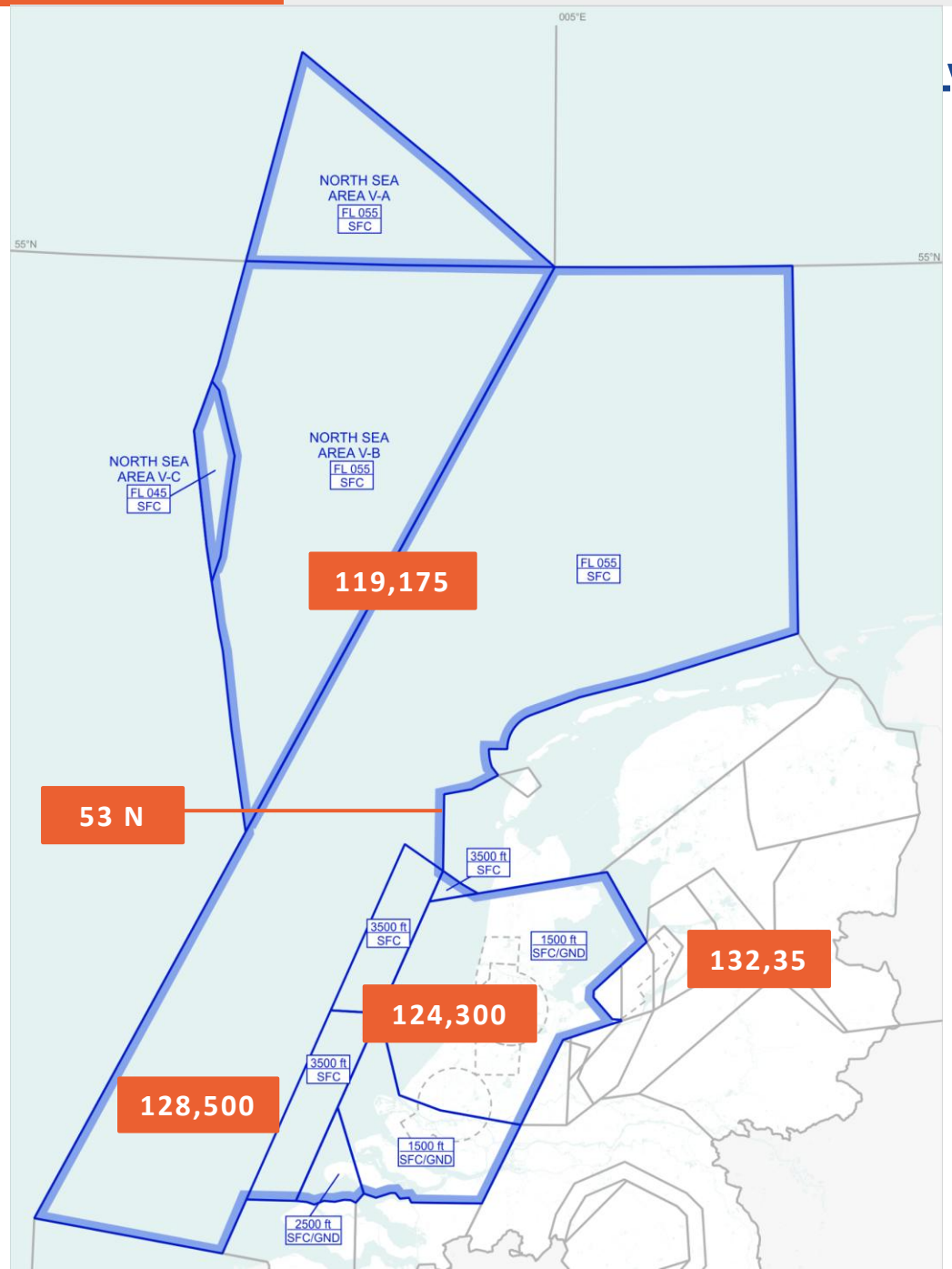
Service

- Flight Information Service
- Alerting service

Frequencies

- Land: 124,300 MHz
- Sea: 128,500 MHz (zuid 53^{0}N)

  119,175 MHz (noord 53^{0}N)
- 132,35MHz

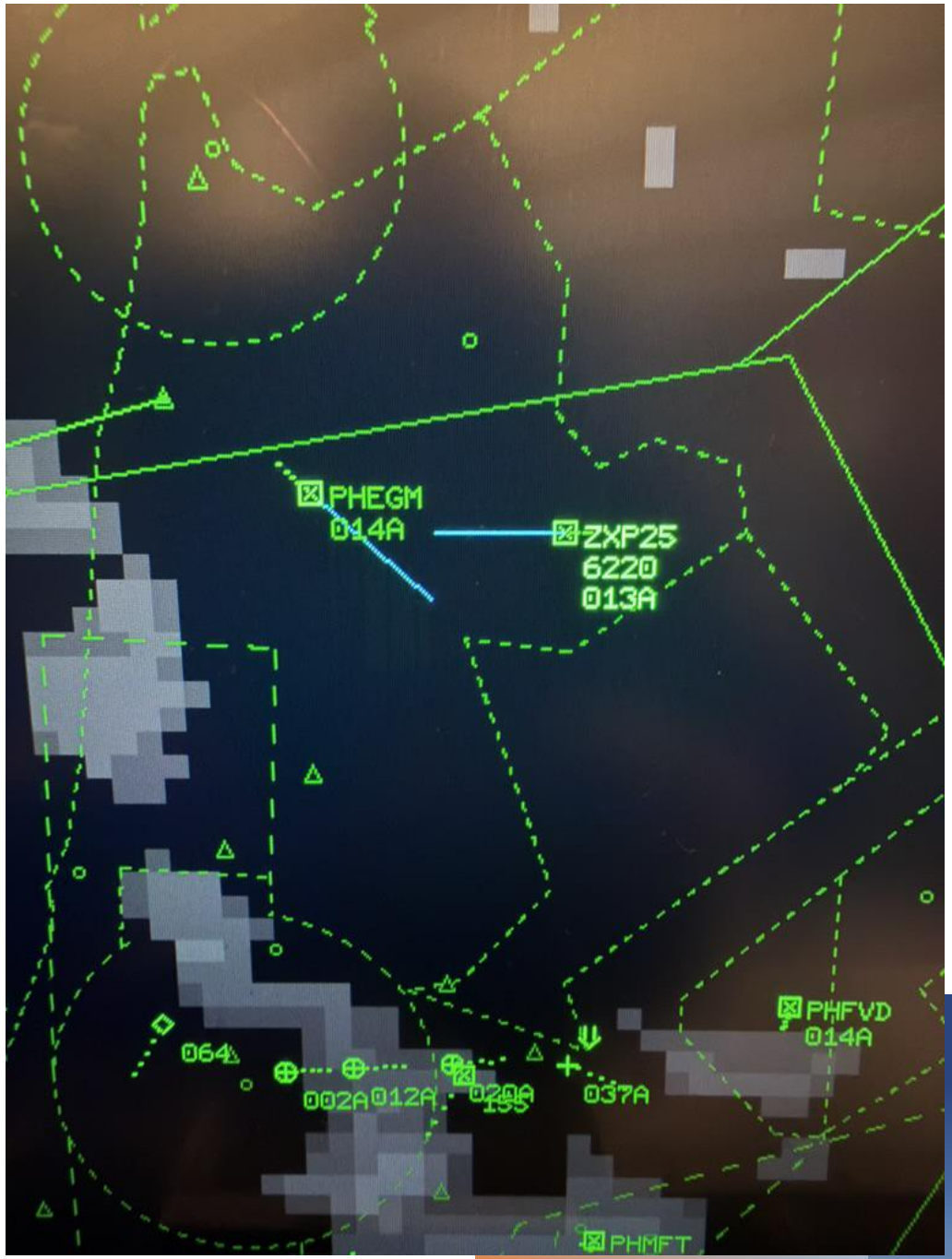



BLOK 140
BLOK 140
BLOK 140


PHMFE
018A
PH1193
019A
PHCOM
011A
216
PH4U9
016A


080
027A
010A
000A
010A
020A
048
020A
045
028A
PHVSY
014A


HNL16B
4316
008A
PHVFE
015A
PH1193
007A
SH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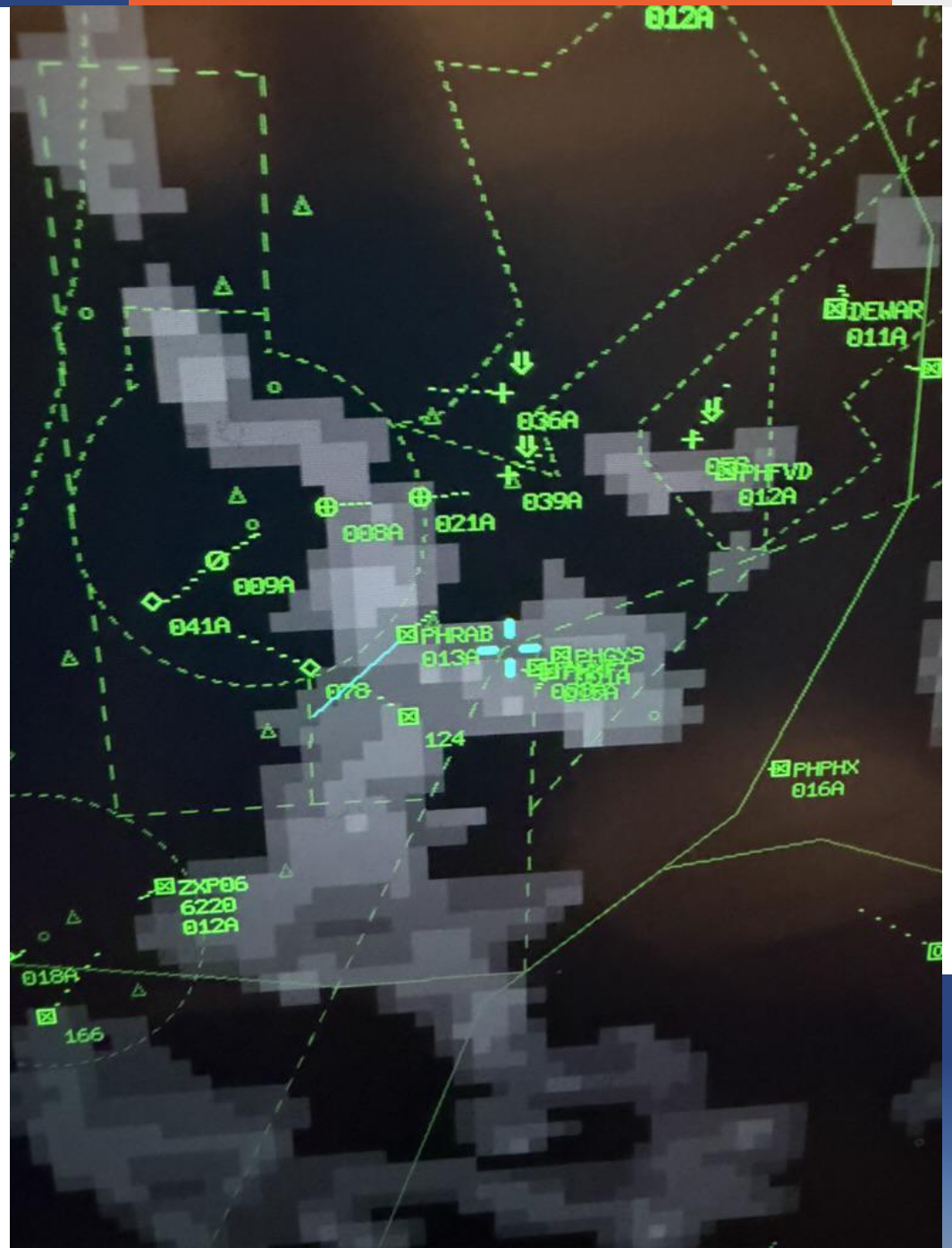
014A
ZXP25
6220
013A
064
002A
012A
037A
PHFVD
014A
PHMFT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DEWAR
011A
036A
039A
PHFVD
012A
008A
021A
009A
041A
PHRAB
013A
PHGYS
078
124
PHPHX
016A
ZXP06
6220
012A
018A
166


SVA215
030AAPP
AM
KLM1754
041AAPP
AM
004A
PHTAX
013A
X7000
022A
PHFRA
150 150
AM
XD1593
029A
KLM40D
245
AM
PHVHA
013A
PHWAL
KLM1789
156 230
230
ECJTY
PHTWM
015A
ITY107
118 190
370
PH1274
043A
PH957
040A
PHKAC
PHGBC
007A
D8338
040A
PHRYF
PH1670
050
PHCBN
PH1031
034A
PHJMP
030A
PH1432
PH1119
043A
XPH1676
029A
PH1131
050
PH1287
041A
PH974
044A
DKARC
DKGHL
041A
D0696
024A
PH1348
036A
PH1273
046
PHVHY
PH1278
048
DKSDD
042A
D1505
047
DKTDD
038A
PH1298
038A
039A
CSC9603
230 150
150 BR
OOYBL
034A
PH1524
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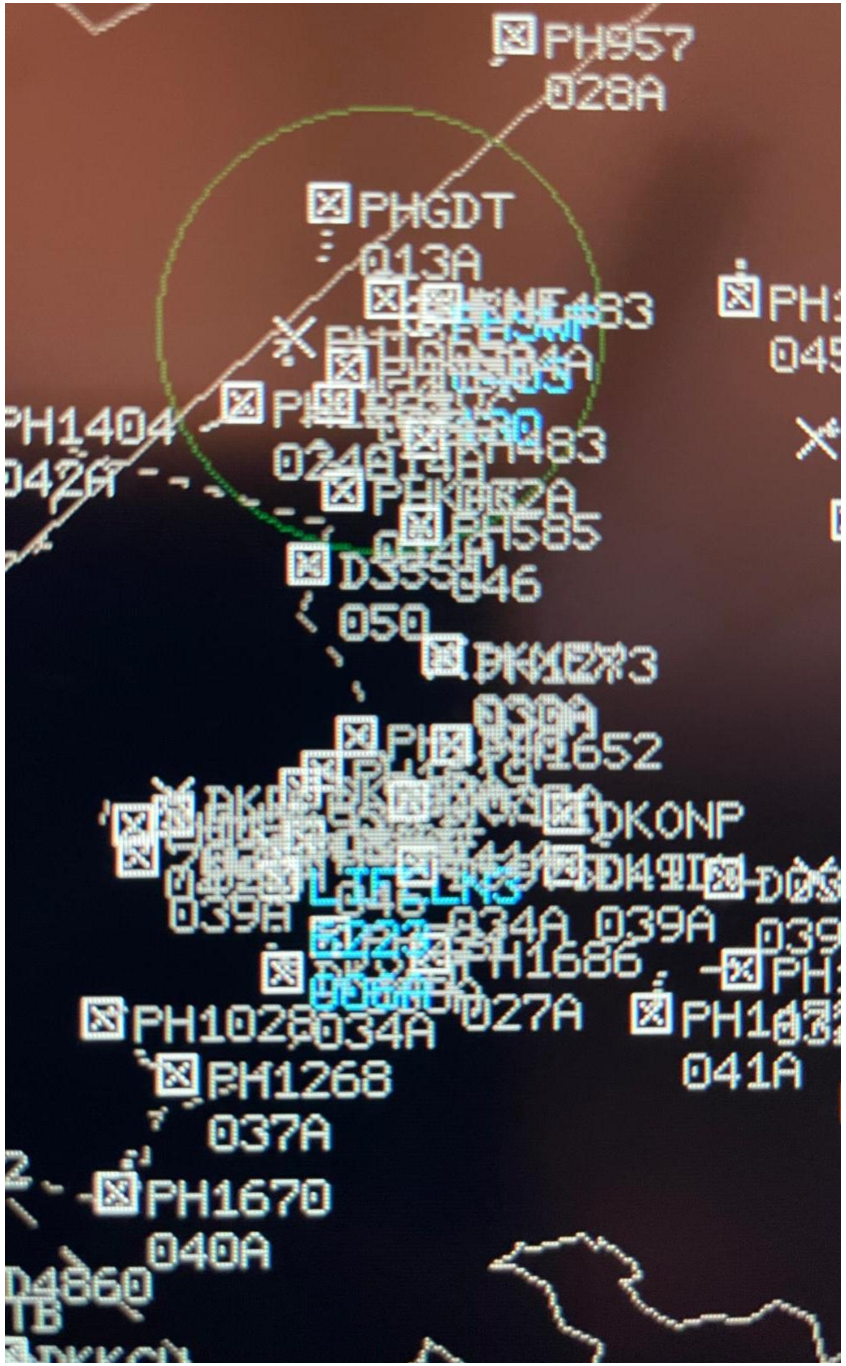
DKBGS
042A
DKNHB
044A
D0692
XD2465
D2982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028A
PHGDT
013A
PH1404
PH585
DKONP
039A
034A
PH1686
027A
041A
PH1268
037A
PH1670
040A
D4860

Working position

VFR LOG SHEET

QNH	hPa			
	Inch			

Time in	OAT	C/S	Type	DEP	DEST/DIV	POB	Remarks	CTR	CTR	Unit	Time out


DIAMOND STAR
PH-TOS
DA40TDI

Airspace Infringements

Hotspots in LVNL airspace

- Schiphol TMA 1: small margins, busy area

  → VFR traffic up to 1500ft

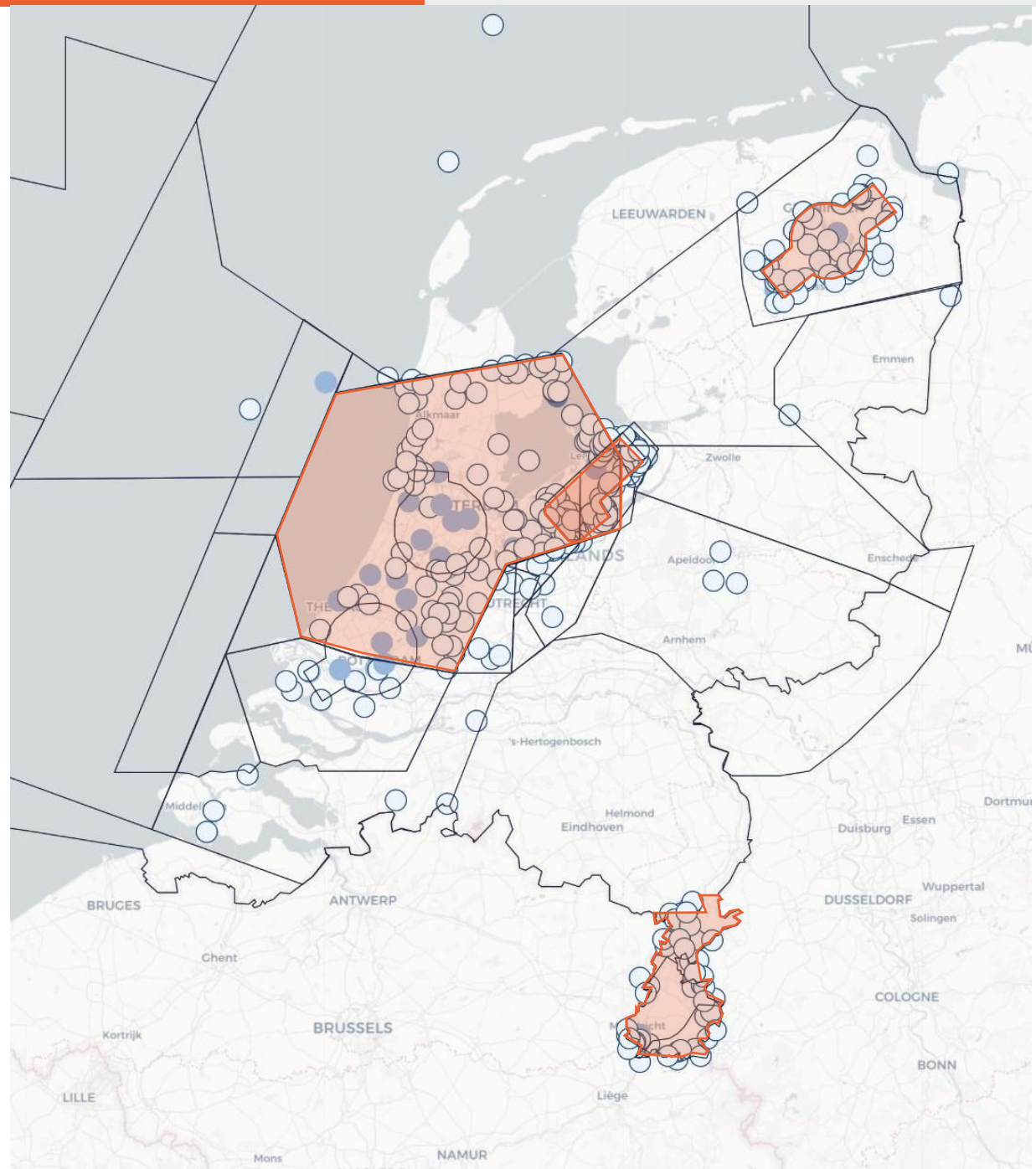
  → IFR inbound airliners at 2000ft

7.3.2 Risk of AIRPROX

The Schiphol TMAs, in which intensive airline traffic is operating, cover a large part of the airspace in the centre of the Netherlands. VFR flights are not permitted in the Schiphol TMAs. The airspace below the Schiphol TMAs is class G airspace. The lower limit of the Schiphol TMA 1 is 1500 FT AMSL. The minimum altitude of IFR flights in the Schiphol TMA 1 is 2000 FT AMSL.

Note: *according to the airspace classifications system, the horizontal boundary between the two airspace classes belongs to the least restrictive class i.e. class G. So VFR flights are permitted up to an altitude of exactly 1500 FT AMSL.*

In the Schiphol TMA 1, AIRPROX occur regularly between IFR flights and VFR flights. It appears that pilots of VFR flights flying at 1500 FT AMSL unintentionally climb into the Schiphol TMA 1 due to turbulence or possible tolerance of the altimeter. Furthermore, the risk of wake turbulence and ACAS warnings exists in relation to airline traffic at 2000 FT AMSL. Therefore, pilots executing a VFR flight below the Schiphol TMA 1 are urgently requested not to operate at, or just below, an altitude of 1500 FT AMSL. Furthermore, it is highly recommended to gather up-to-date information regarding the runways in use at AMSTERDAM/Schiphol Airport, to stay clear of the IFR traffic on intermediate and final approach.

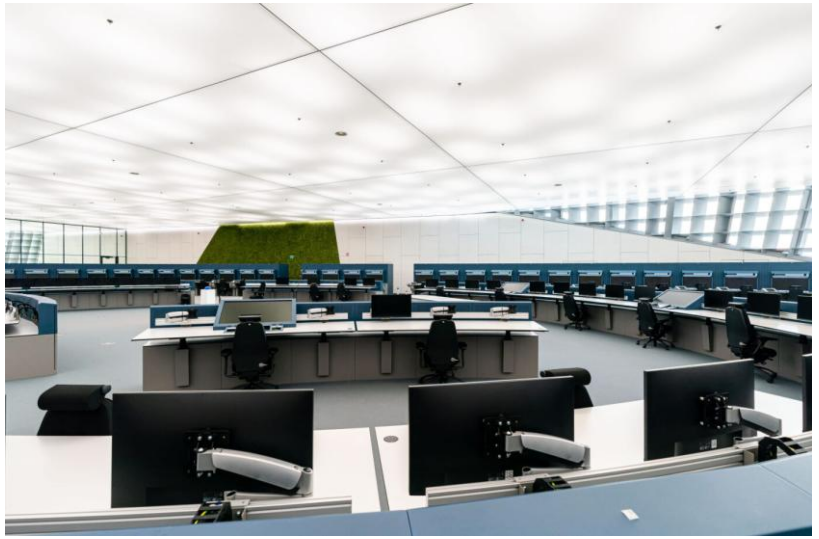


Listening watch obligation - FMC

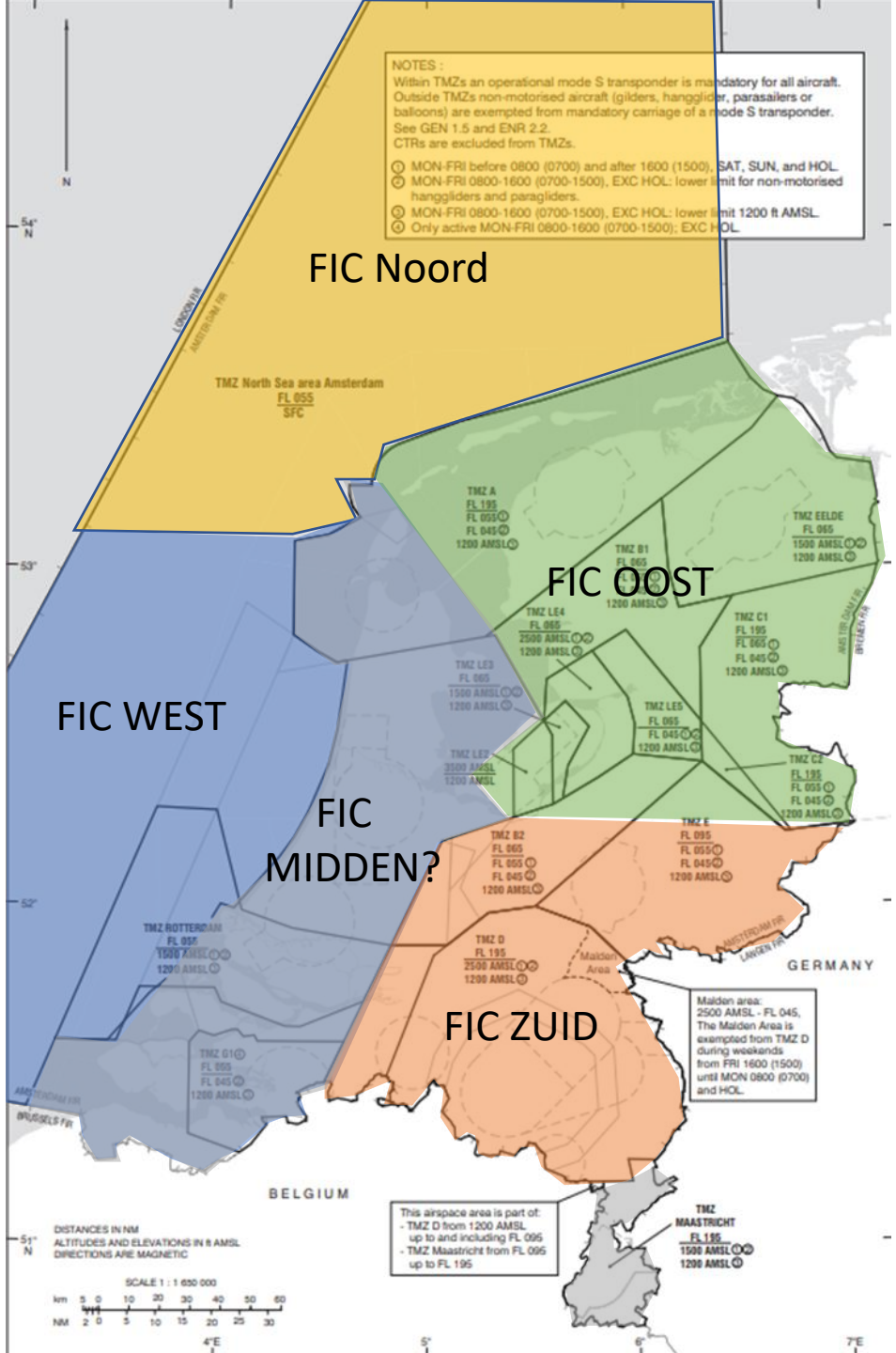
In this TMZ pilots of aircraft equipped with a transponder are required to:

•set the transponder to code 7020, and
•maintain an air-ground voice communication watch on 124.300 (Amsterdam Information).

Future: iCAS



Toekomst luchtruim..



Opm vragen

https://www.instagram.com/reel/DRCxJ_sDQKW/?igsh=emY1N21zZzg5aDli

AVIATORS CLUB

together 4safety

GA Flightpath 2030+

Dutch GA Season Opener 2026

21 March

EASA
European Union Aviation Safety Agency

GA Flightpath 2030+ Mission Statement

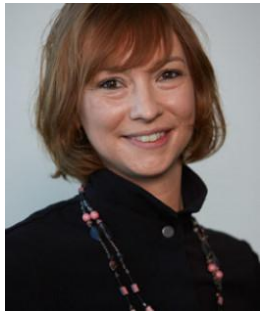
We will enhance the GA safety culture, enable its sustainable growth, and embrace a digital future so that we can maximize the benefits of technology and encourage wider participation and accessibility

Project Team

+ Internal Network of GA Focal Points

Alain LEROY
Champion

Vladimir FOLTIN
Project Manager



Raphaelle BERTHIER
Project Assistant

Gilles Gardiol
Project Coordinator

EASA
European Union Aviation Safety Agency

Main GA Events 2026

→21 Apr – 1st **Combined GA.TeB & GA.CSTG**

→22-25 Apr - **AERO 2026**

→Oct - **Annual cost-shared flights charter**

→Nov – 2nd **Combined GA.TeB & GA.CSTG**

→Jan–Dec – **Other GA Events** - Safety Priorities (e.g. *Gordon Bennet Race 2026*)

AERO 2026 PRIORITIES

Supporting industry & promoting EASA

Through appropriate staffing of the EASA stand, organisation of EASA events and participation in EASA priority industry events.

Promoting ¡*Conspicuity* & ADS-L

Preventing mid-air collisions through ¡*Conspicuity* remains a priority for EASA. ADS-L technology is key to achieving this, as it provides an affordable way for everyone to 'be seen and be aware' anywhere.

Exploring simpler rules for safer GA

Simpler, clearer rules reduce possibility for error. Promoting EASA's Rule Simplification Programme and engaging directly with regulators and the GA industry will help to shape the development of the Declared by Default policy.

AERO 2026 - Key Events

Reflecting EASA Priorities

SAFE

RESILIENT

EASA Conference - 23 April

A dedicated event to promote the **EASA Rule Simplification Programme** and to discuss **existing experiences with the use of declarations** in GA

AERO Career Days – 24-25 April

Promoting work in the Agency and aviation in general by participating in the event

21 April - *GA.TeB & GA.CSTG*

Organisation of a **joint meeting** between EASA, NAAs, industry and associations **to discuss about simpler and more proportionate GA regulatory landscape**

24 April – ¡*Conspicuity* Focus Day

Dedicated sessions organized jointly with the industry focused on the **prevention of mid-air collisions** and the **promotion of ¡*Conspicuity* through ADS-L** compatible technology

INNOVATIVE

SAFE

EASA

AERO 2026 - EASA Conference outline

Exploring simpler rules for safer GA

Objective: Communicate about relevant initiatives, their objectives, methods and timelines

Presentation: EASA Rule Simplification Programme (RSP)

Presentation of the programme update by the RSP manager

Panel: Use of declarations in aviation

Discussion about current experiences (pros and cons) with existing declaratory systems in aviation with a particular focus on GA

Expected Participants: EASA, NAAs, FAA, GA industry

Collaboration

2026 Top Priorities

Declared by Default

EASA Policy 2026

NEW

Develop a policy for using a declarative system in GA instead of requiring prior authorisation or approval, and include the proposal for medical self-declaration in the rule simplification project

PRIORITY

¡*Conspicuity* a Reality

Joint Roadmap with EUROCONTROL

- Adapt regulatory framework to enable ADS-L implementation
- Finalise research on use of e-conspicuity in ATM

PRIORITY

Greener Faster

EASA Policy 2027+

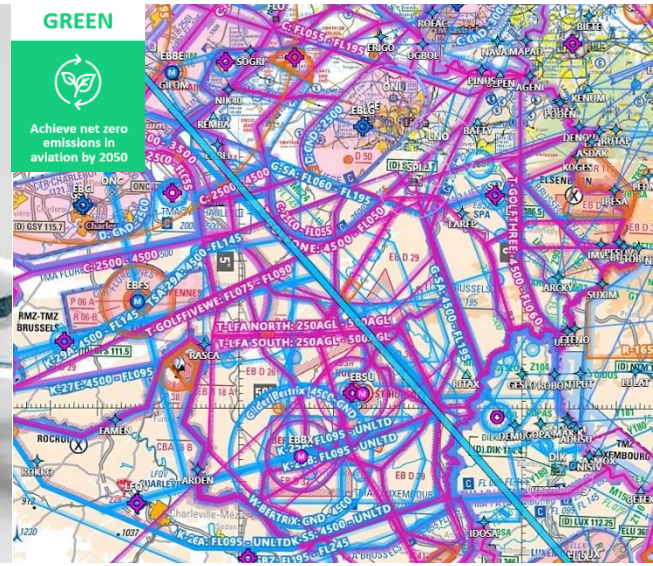
Stimulate availability of:

- Fast-charging infrastructure
- Sustainable / Synthetic Fuels

Fly Direct

EASA Guidelines 2027+

- Implementation of Aeroplane PinS (proceed VFR)
- Harmonizing measures for protecting species and habitats from aviation activities).



SAFE

Safety Risk Management

Develop min of 5 Top Safety Topics dashboards per ESC (EASA Safety Committee) approval; Consolidate 3 Safety Performance Indicators related to Top Safety Topics approved by ESC; Develop 2 Data4Safety (D4S) Use Cases in line with EASA SRM (Safety Risk Mgmt.) needs; Review D4S Governance; New D4S Provider for the OPS phase selected.

Implement SMS & ISMS across Industry

SMS (Safety Mgmt. System) oversight in new domains; Oversight of ISMS (Information Security Mgmt. System) development phase in all OA applicable domains; Introduce gradual approach for ISMS Standardisation with 1 ECMA (Enhanced Continuous Monitoring Approach) in 2026 and inspections starting in 2028.

ATM Equipment Certification & DPOs

Establish internal team and outsourcing (NCAs and QEs) to effectively start performing DPO (Design and Production Organisations) initial investigations and issuance of the first ATM (Air Traffic Mgmt.) equipment certificates.

Risk Based Approach

Align RBO implementation principles among all OA domains; Calibrate the new Standardisation (STD) maturity model in 2026 and conduct at least 1 SMP (Standardisation Monitoring Programme) to mature countries.

Flightpath 2030+

Finalise research's conclusions and recommendations of ADS-L (Automatic Dependent Surveillance – Light) for ATM and prepare the initial regulatory framework that will enable its implementation.

Maintain a safe, resilient aviation ecosystem

Ensure that European safety and oversight standards effectively mitigate all risks affecting safety.

Approve safe products that perform as expected in the system as part of a competitive industry.

Promote a human-centered approach to maintaining safety.

¡*Conspicuity*

Preventing mid-air collisions through a systemic approach

Problem Statement

On average, 11 fatalities and six collisions were recorded annually in EASA States

Strategy

Promoting ¡*Conspicuity* via ADS-L technology compatible with the U-Space mandate to enable affordable "Be Seen and Be Aware" for everyone, anywhere

Objective

Reduce risk by half through Joint Roadmaps with EUROCONROL and NAAs

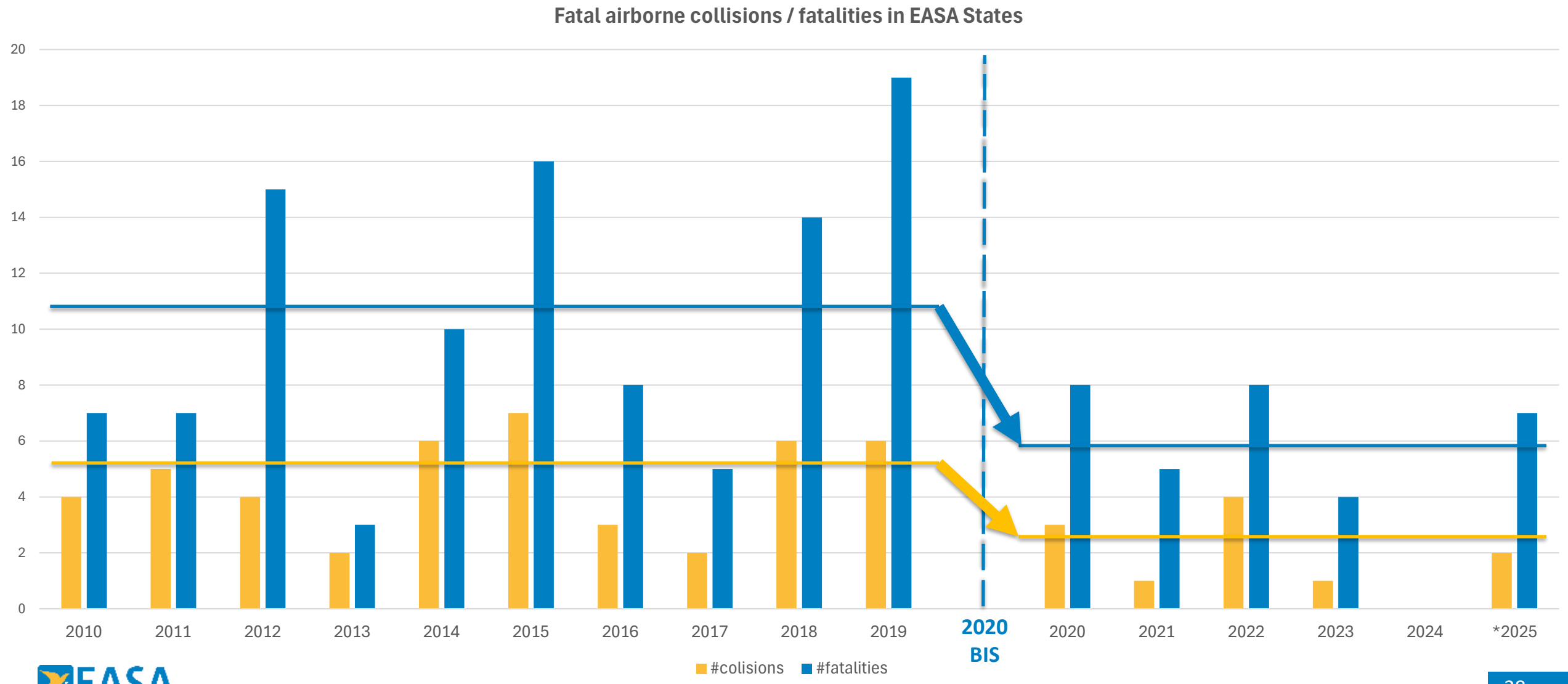
Current Status

The ADS-L *Coalition* was launched at AERO 2025, and the new ADS-L standard (Issue 2) was published on 1 December

Next Steps

Performance testing of candidate technologies in a real environment at very low levels (GA and UAS), and supporting adoption of ADS-L technology through incentives (GA), and potentially mandates (UAS)

Safety 2010 - 2025



Technology

Interoperability

- New ADS-L standard (*1 Dec 2025*)
- Research into ATM use cases

Performance

Testing of candidate technologies in a real-life environment at very low flight levels (GA and UAS)

Affordability

Utilizing unlicensed frequency bands and uncertified devices

Safety Culture

¡*Conspicuity* Declaration

Authorities' public commitment to advance ¡*Conspicuity* and data use to improve aviation safety and operational efficiency through collaborative analysis

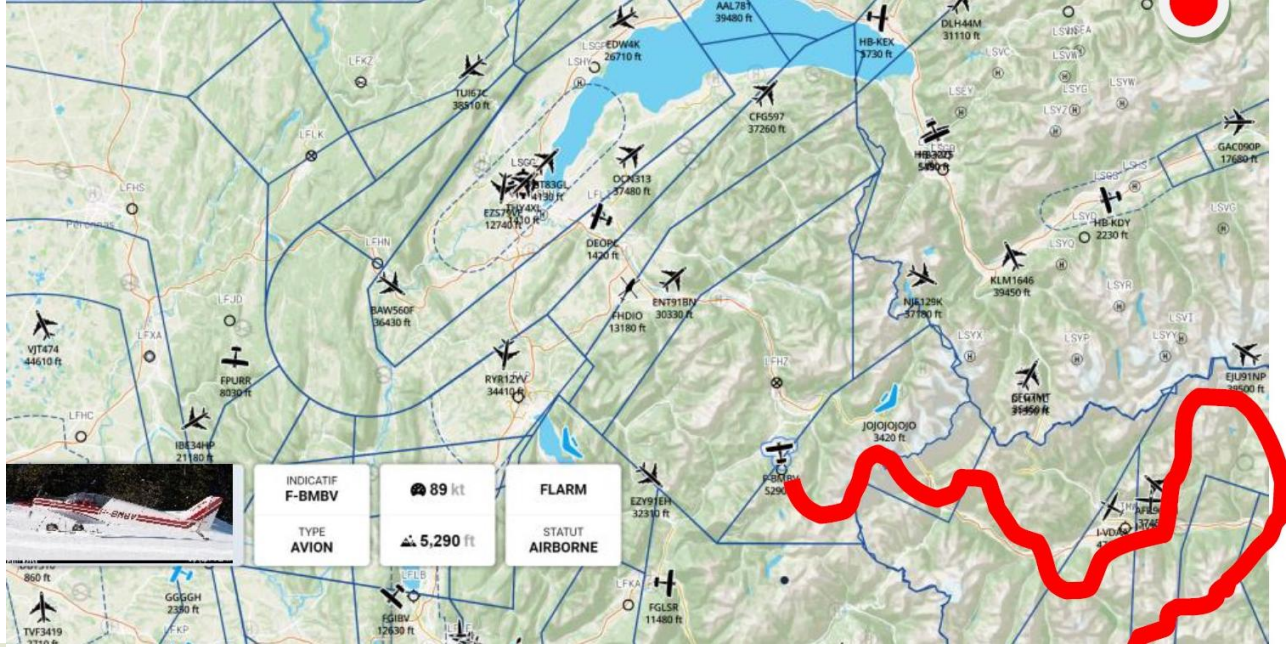
Key Principles

- Voluntary nature
- System-wide insights
- 360-Degree Collaboration
- Transparent Monitoring
- Data protection

FIS enhancement

Improve the quality and safety of existing FIS by providing enhanced situational awareness for the FIS Officers or ATCOs (to similar level of information as is available to pilots) without the need to change existing rules, procedures or operational practices.

A few ANSPs are already engaged in this topic.



SAR enhancement

To help SAR teams distinguish between real and false alarms and minimize search times, e.g. through a single web portal that provides real-time and historical positions of aircraft and other aircraft such as gliders, paragliders and hang-gliders.

Pilot project in preparation (led by FOCA).

And what about Digital Towers or Airside / Runway Safety?

Next Steps

Current Mandates

- GA aircraft to be conspicuous in U space via ADS-L or ADS-B
- Drone remote identification via 

For EASA

- Consolidate technology performance and publish the research's recommendations on use of ¡*Conspicuity* in ATM
- Increase safety and reduce the costs of ADS-L technology through incentives (GA), and potentially mandates (UAS)

For Member States

- Join ¡*Conspicuity* Declaration
- Consider developing national implementation roadmap

Press corner

Available languages: English

PRESS RELEASE | Feb 11, 2026 | Strasbourg | 5 min read

Commission presents action plan to counter drone threats

The European Commission today presented its Action Plan to counter the increasing threats posed by drones to EU security. In recent years, the EU has faced growing and multi-faceted challenges relating to drones and meteorological balloons, including hostile overflights, airspace violations, disruptions to airports, as well as risks to our critical infrastructure, external borders and public spaces.

The Action Plan represents an ambitious blueprint for stronger EU cooperation and solidarity, responding to the calls from EU Member States and the European Parliament for a united EU **approach against threats posed by malicious drones**. It focuses on the **civilian internal security dimension**, while complementing and supporting the work carried out in the **defence domain** by the Commission, and reinforcing civil-military synergies. In addition, the Action Plan contributes to the development of a **competitive European drone market**, unlocking the potential for innovation, growth and job creation across this important sector.

The Action Plan is designed to support Member States through coordinated actions, complementing national measures and focused on key priorities: **enhancing preparedness**, boosting **detection capacities**, **coordinating responses** and **strengthening the EU's defence readiness**.

Key actions on preparedness:

- As a matter of priority, the Commission, together with Member States, where appropriate, will:
  - **Propose a Drone Security Package** by Q3 2026 to rapidly adapt the regulatory framework to new security threats:
    - **Ensure mandatory registration** for all drone operators of smaller drones (above 100g).
    - **Extend drone direct remote identification** obligation to smaller drones (above 100g).
    - **Avoid take-off of drones** unless an operator identification number has been entered.
    - **Introduce regulatory simplification and flexibility** for certain operations.
  - **Work with willing Member States on a voluntary plan to stress test** the resilience of critical infrastructures against drone intrusion.
  - Adopt non-binding **CER guidelines** on resilience enhancing measures for critical

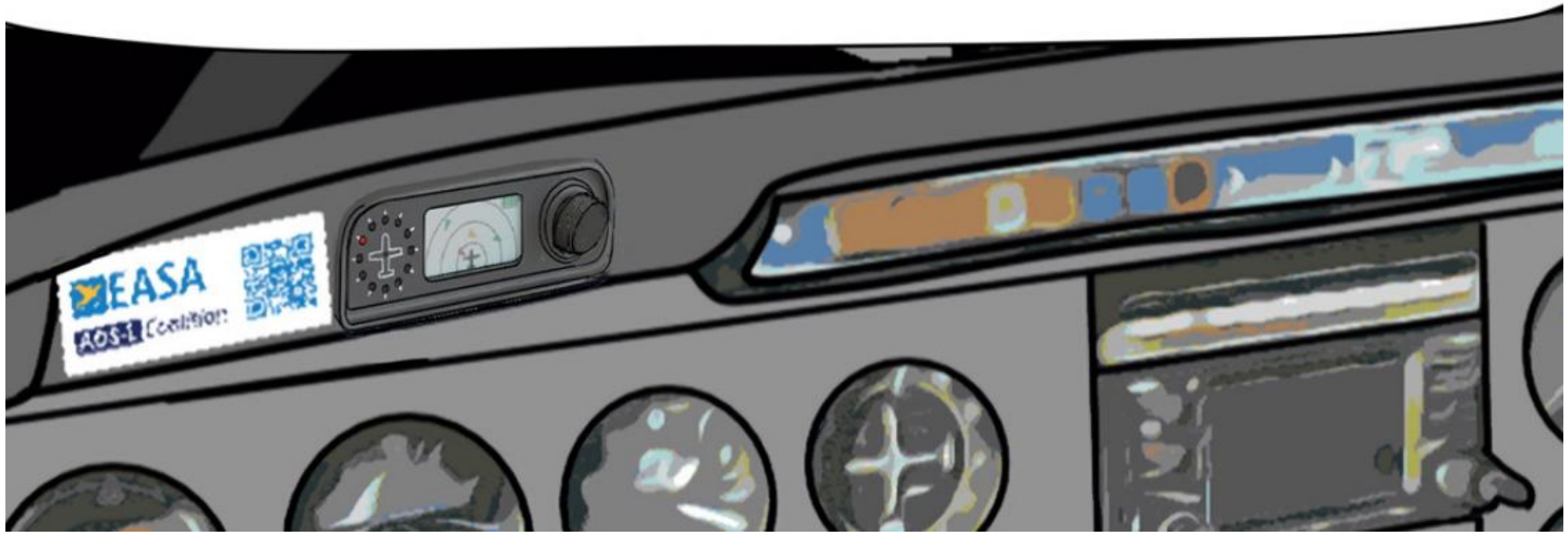
- The Commission, will follow up with Member States, in order to:
  - **Develop by Q4 2026 an** EU Trusted Drone Label to enhance trustworthiness of civil drones placed on the market.
  - **Improve by Q4 2026 the availability of UAS geographical zone information, and by 2027** establish the technical requirements **for geofencing function.**
  - **Establish by Q1 2027 a EU counter-drone centre of excellence** and launch testing programmes, integrating aviation safety requirements. Support the development of **full standard for a harmonised testing methodology** for countering unmanned aircraft systems.
  - **Launch by 2027 a pilot action to enhance maritime domain awareness** to counter surface and undersea drone threats
  - **Expand in Q1 2026** the composition of the Commission-chaired **Counter-drone Expert Group** (CUASG) to include relevant EU Agencies (e.g. Frontex, Europol, EDA, EASA).
  - **Upgrade by Q2 2026 the training cycle for law enforcement operators** to include

EASA

Advice from Sunny Swift

A FRIEND WANTS TO INSTALL SUCH A SYSTEM IN HIS PRIVATE AIRCRAFT. HE'S NOT SURE WHICH SYSTEM TO CHOOSE.

I SUGGEST BUYING AN ADS-L SYSTEM WITH DIRECT RADIO LINE OF SIGHT CAPABILITY, COMPLEMENTED BY MOBILE NETWORK CONNECTIVITY.



ADS-L for General Aviation and Drones

GA Flightpath 2030+

Safety

Enhancing safety culture

Sustainability

Enabling sustainable growth

Digitalization

Embracing a digital future to maximize the benefits of technology

Inclusiveness

Encouraging wider participation and accessibility


KNVvL
AOPA NETHERLANDS
Ministerie van Infrastructuur
en Waterstaat
LVNL
LUNCH
Eet smakelijk!

Koninklijk Nederlands
Meteorologisch Instituut
Ministerie van Infrastructuur en Waterstaat

Luchtvaartmeteorologie voor General Aviation

Helga van der Vegt - Vuist


Reserve
Calamiteit

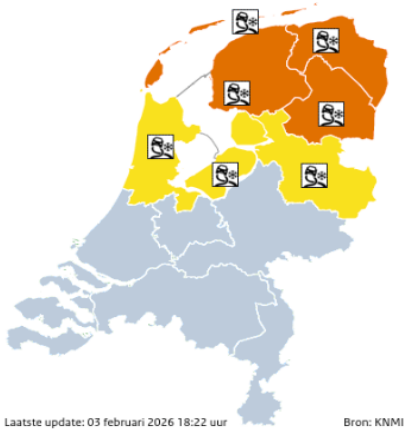
Veiligheidsmeteoroloog

Koninklijk Nederlands
Meteorologisch Instituut
Ministerie van Infrastructuur en Waterstaat

Waarschuwingen

Bekijk weersverwachting → Bekijk waarnemingen →

Code oranje In de loop van de avond in het noorden op steeds meer plaatsen verraderlijke gladheid



Laatste update: 03 februari 2026 18:22 uur Bron: KNMI

dinsdag 03 februari 2026

Volg ons liveblog voor de laatste updates

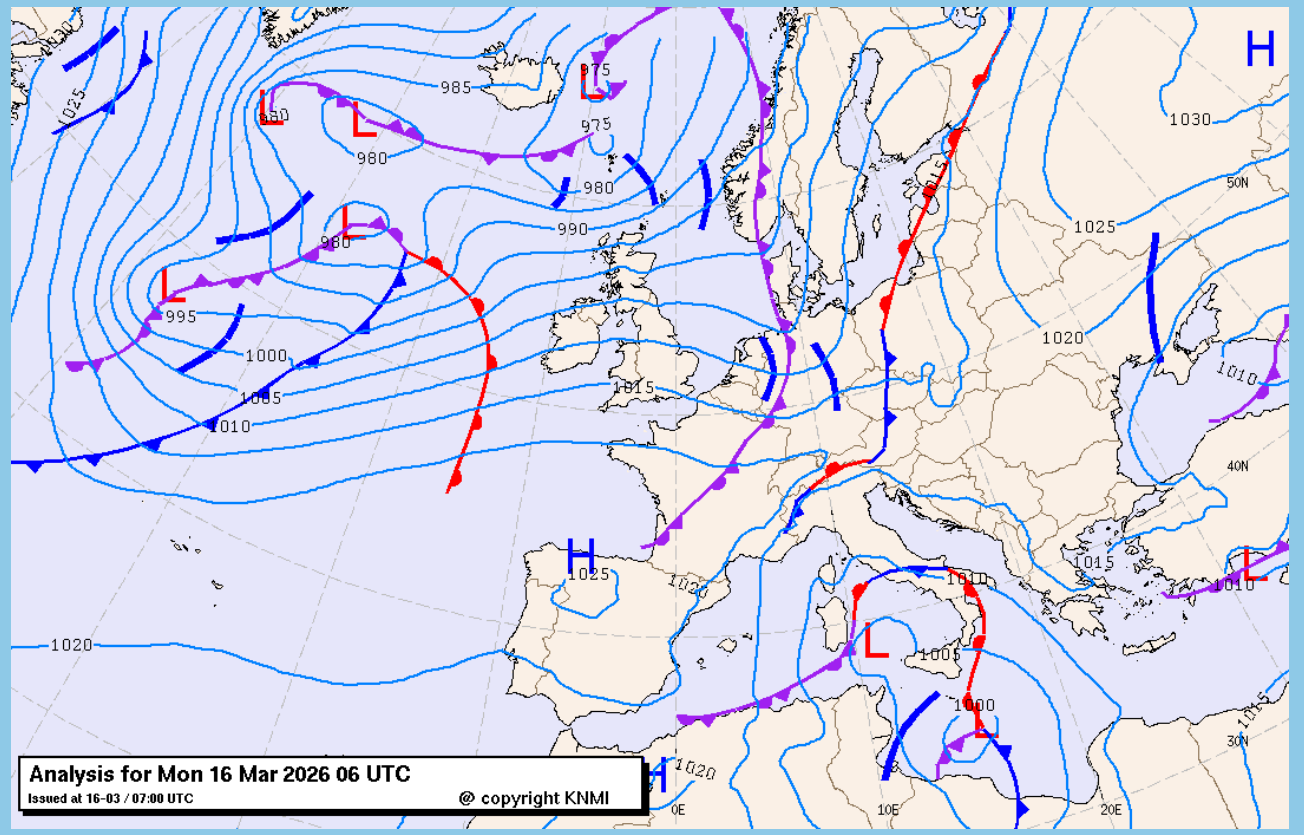
In de loop van de avond in het noorden op steeds meer plaatsen verraderlijke gladheid

In de loop van de avond, vannacht en woensdagochtend is er in het noorden en noordoosten op veel plaatsen verraderlijke gladheid door ijzel. Hierdoor is er een grote kans op ongelukken door gladde wegen, fietspaden, voetpaden en bruggen. Hiervoor is code oranje van kracht van vanavond 22:00 tot woensdagochtend 10:00 uur.

Ook in de noordelijke delen van de provincies Noord-Holland en Flevoland en ook in Overijssel neemt de kans op plaatselijke gladheid vanavond toe. Hiervoor geldt code geel tot woensdagochtend 06:00 uur.

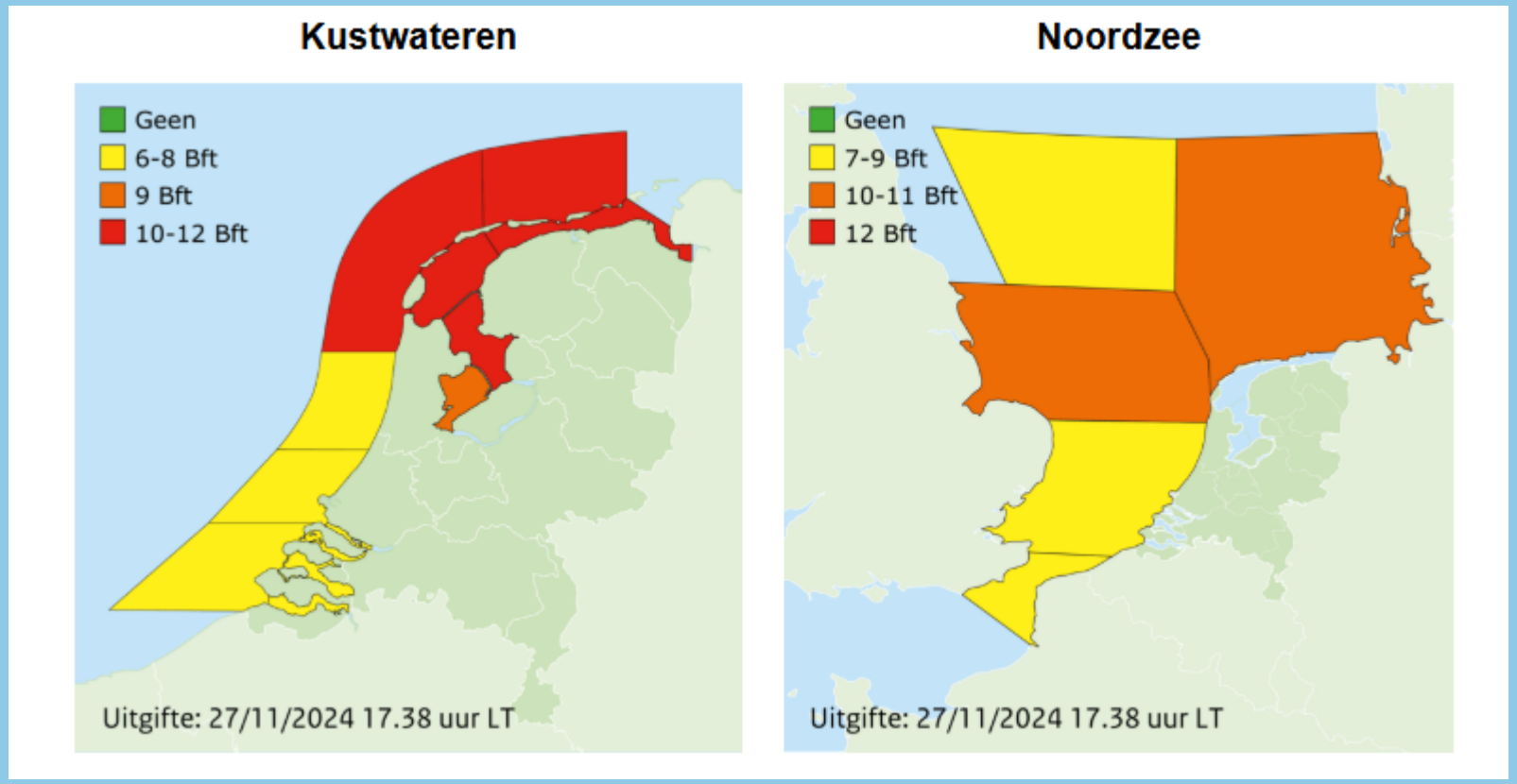
Wat kan ik verwachten en wat kan ik doen?

Toon meer

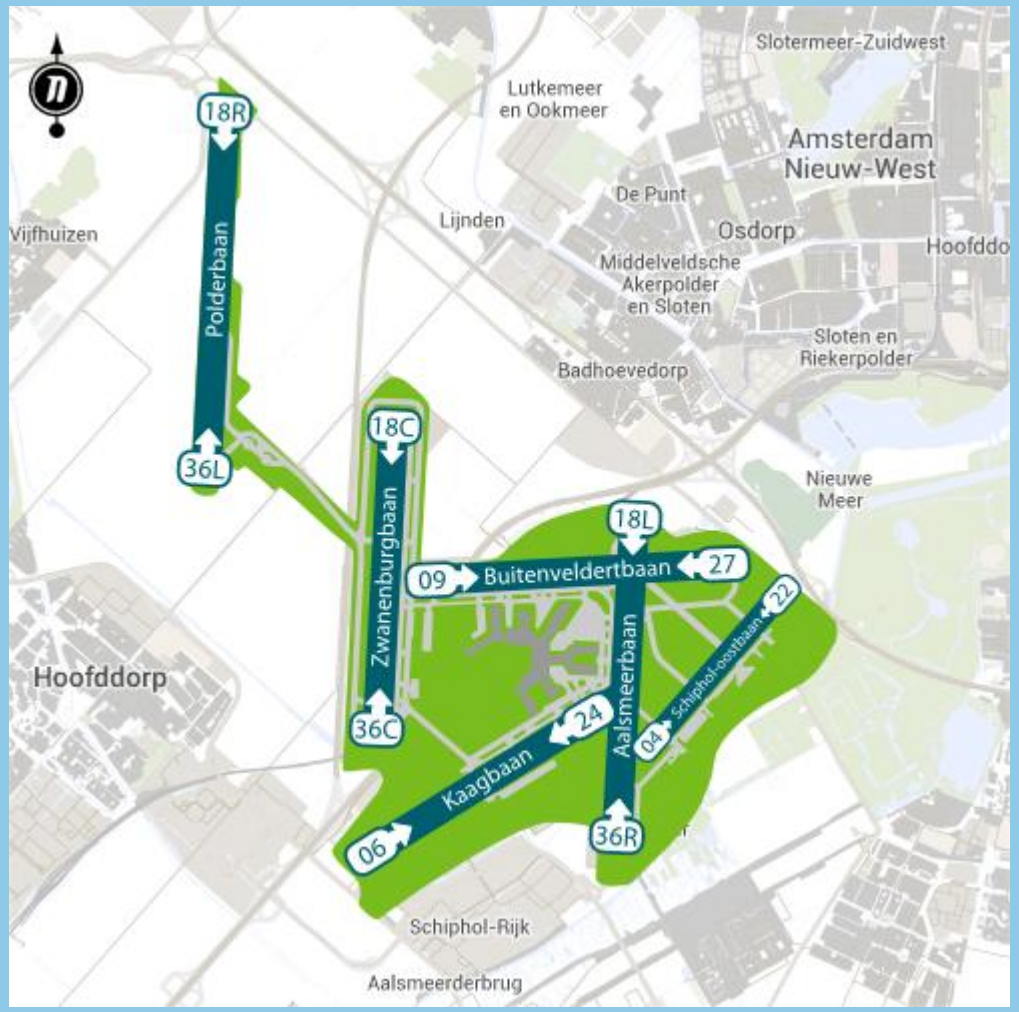


Noordzeemeteoroloog

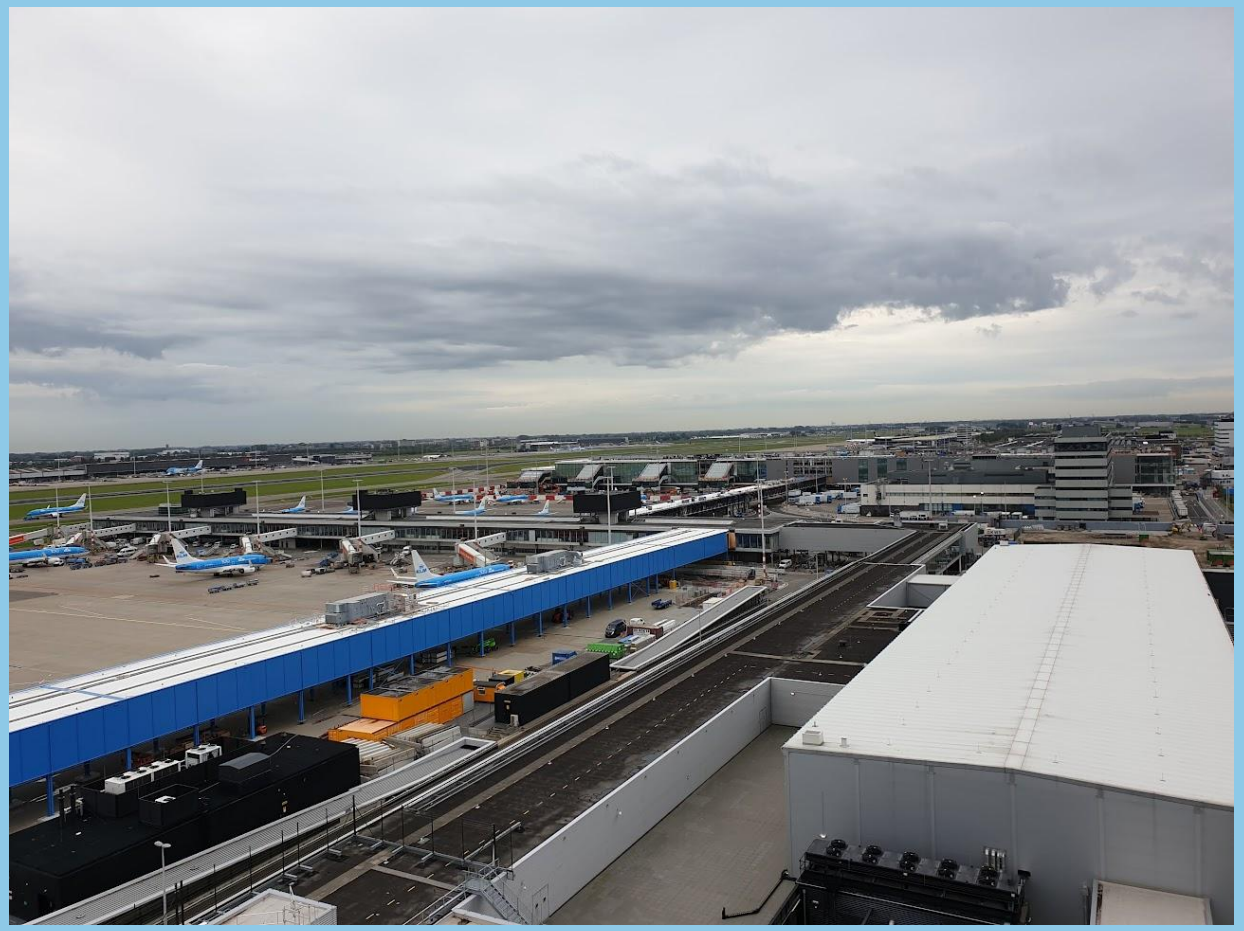
Koninklijk Nederlands
Meteorologisch Instituut
Ministerie van Infrastructuur en Waterstaat



Mainportmeteoroloog

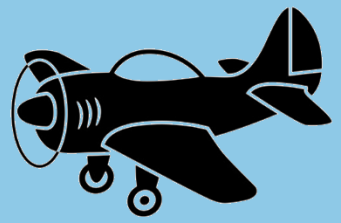


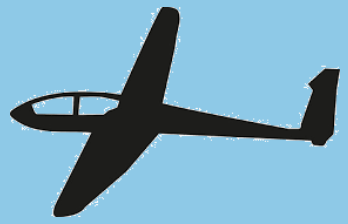
Waarnemer Schiphol

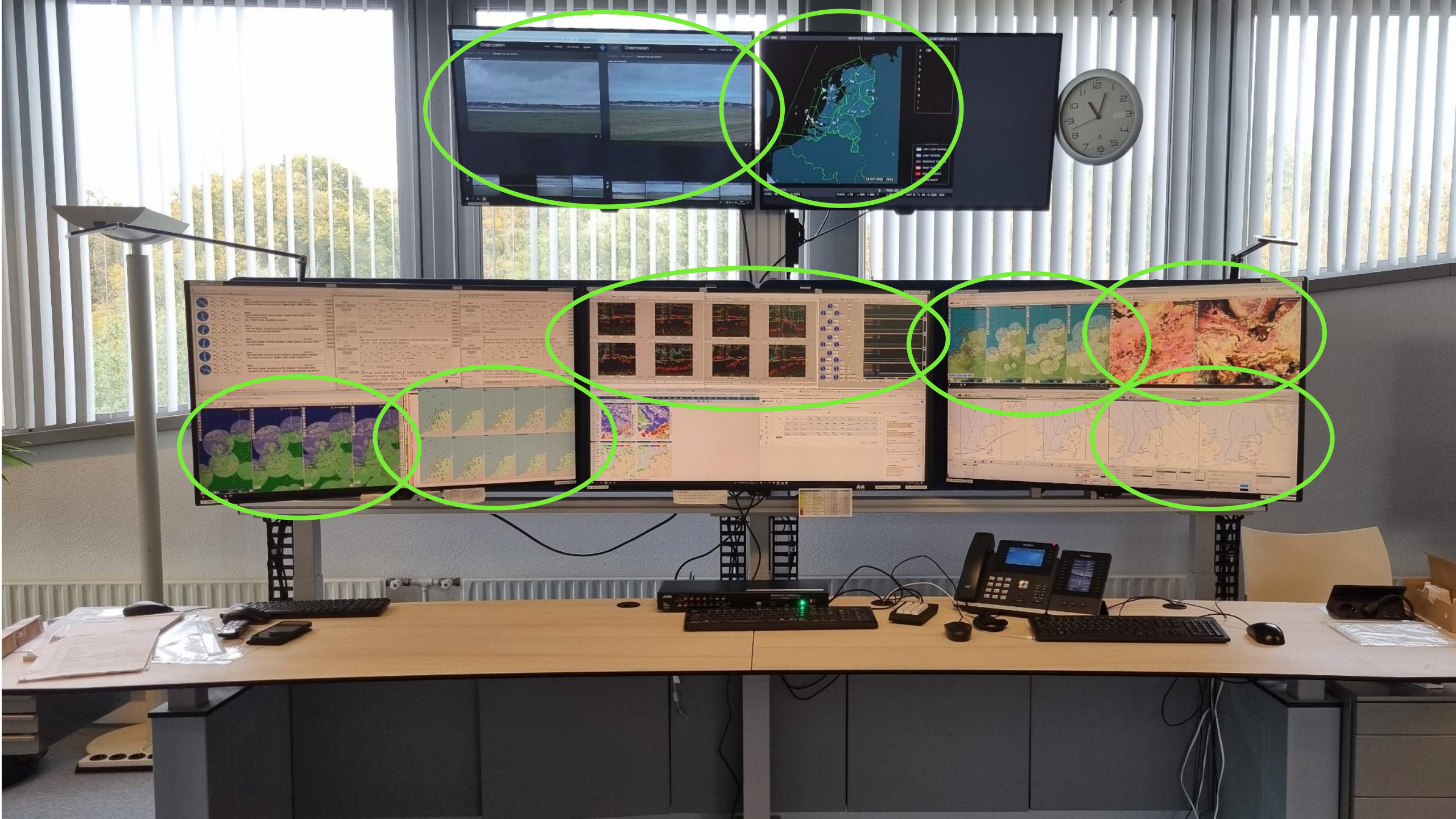


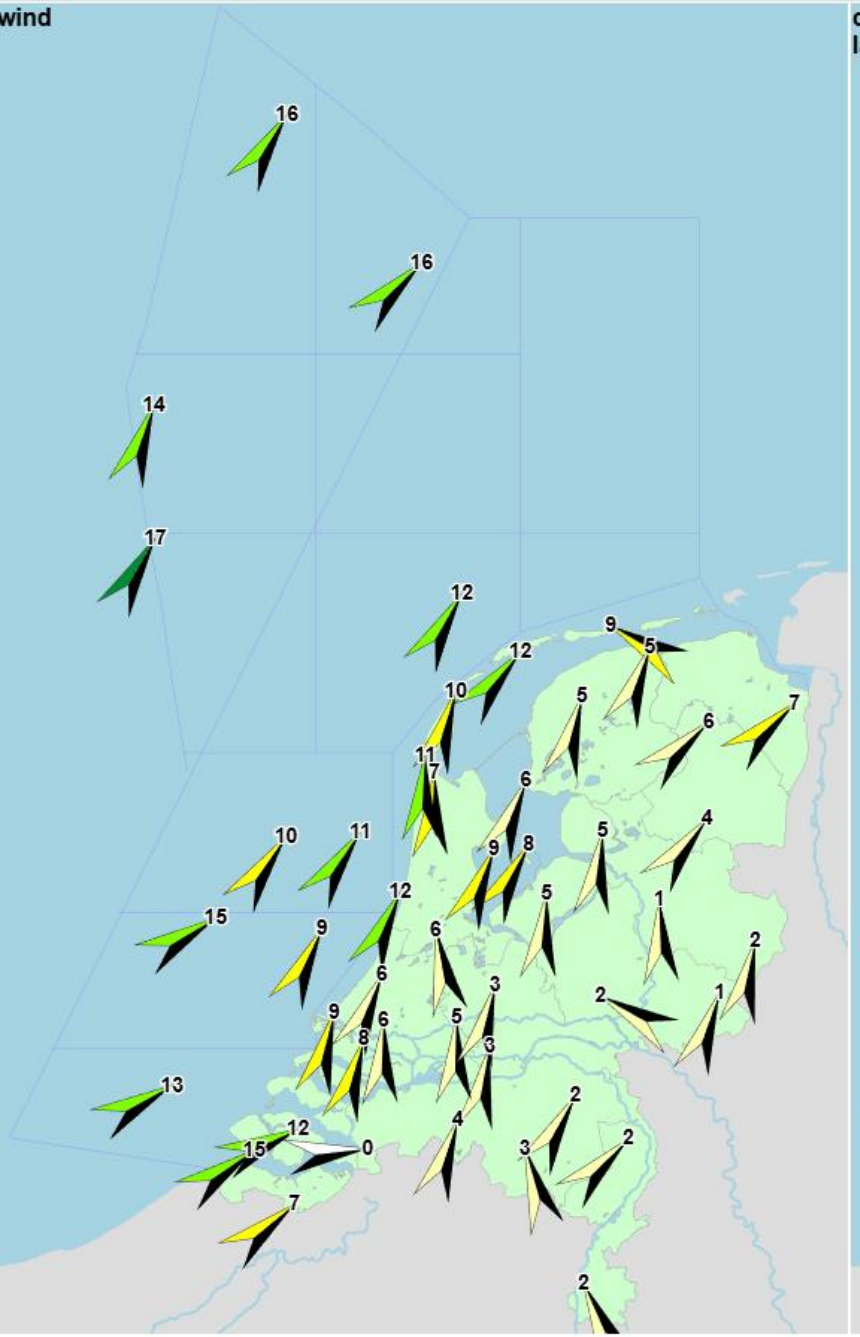
Regiometeoroloog

Koninklijk Nederlands
Meteorologisch Instituut
Ministerie van Infrastructuur en Waterstaat





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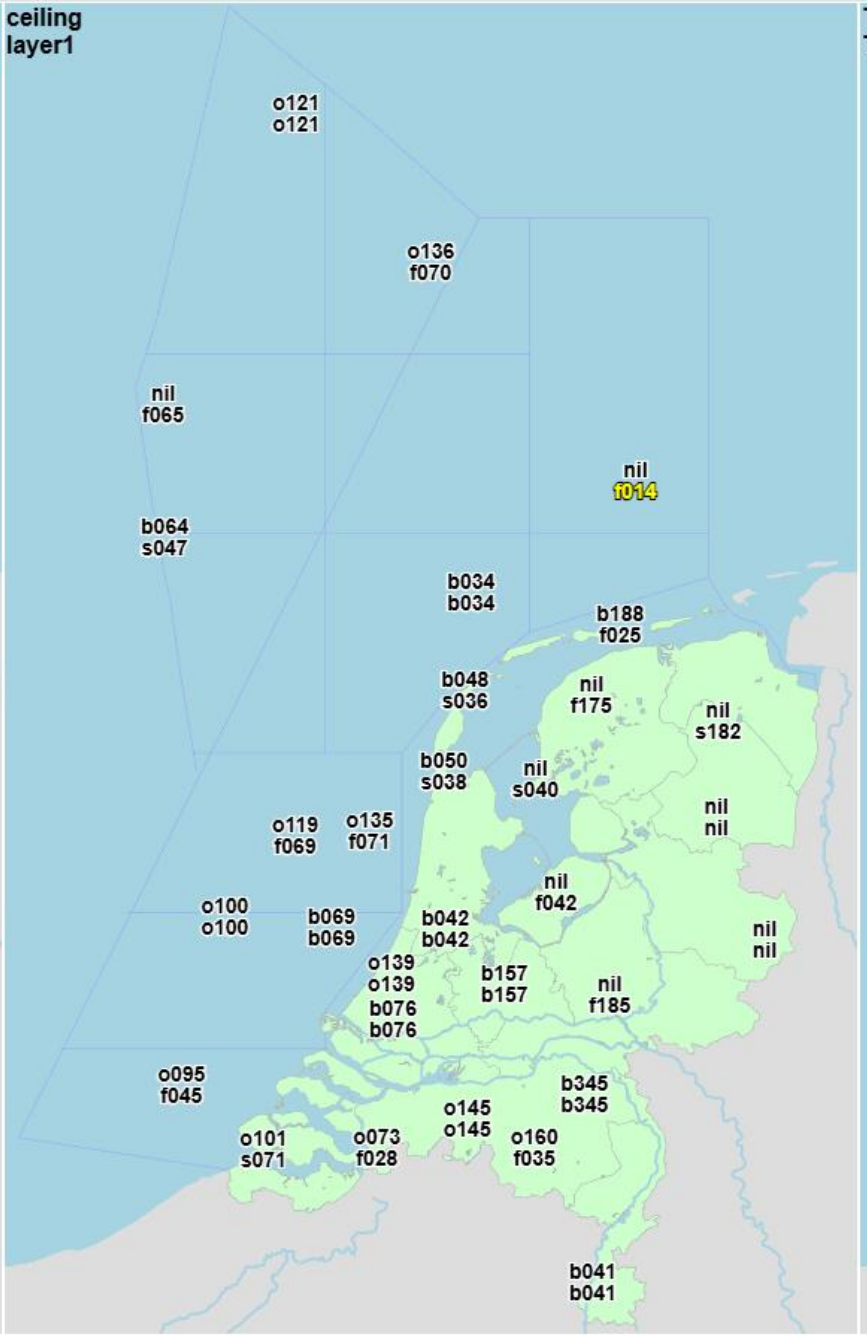
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o135
f071
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f042
o100
o100
b069
b069
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b076
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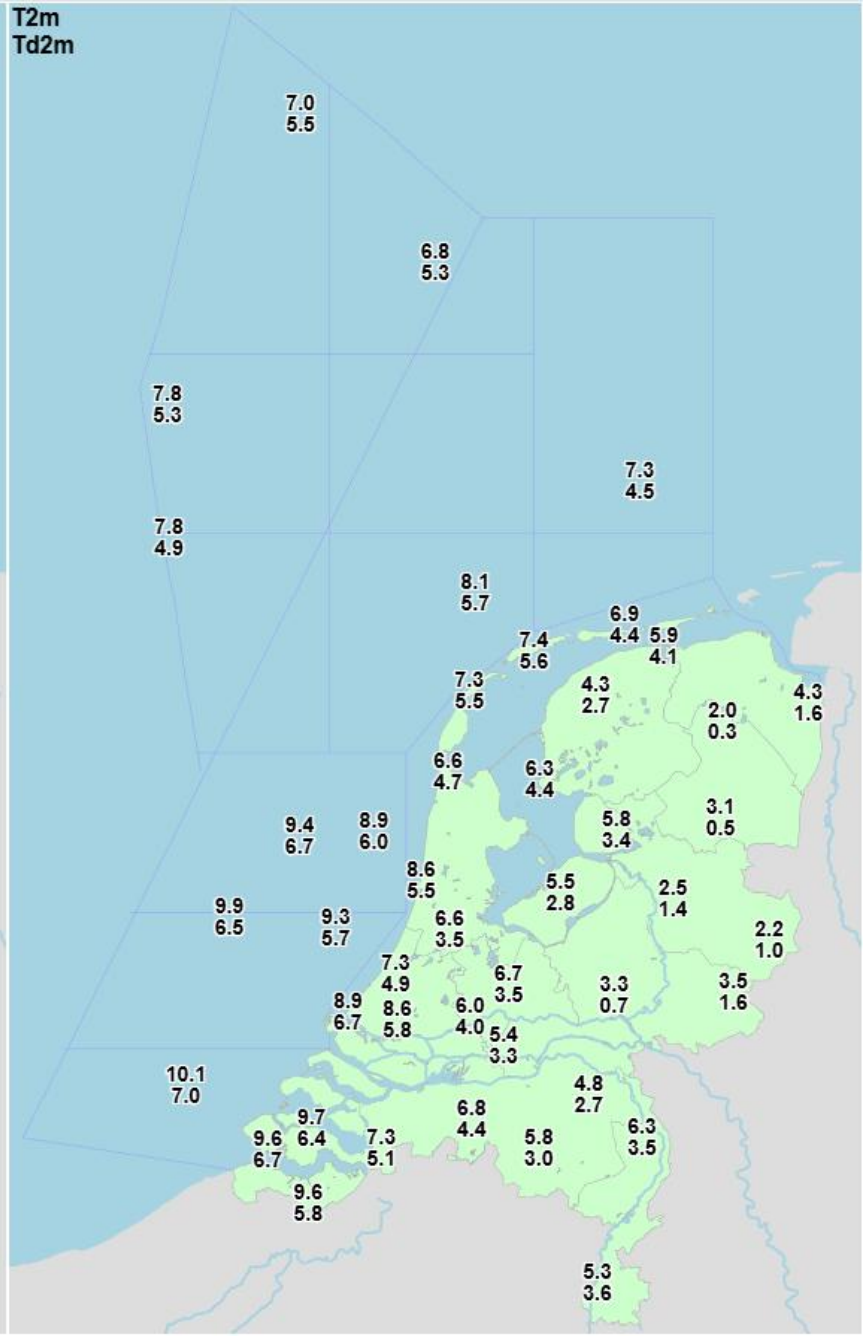
T2m
Td2m
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6.8
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8.1
5.7
6.9
4.4
5.9
4.1
7.4
5.6
7.3
5.5
4.3
2.7
4.3
1.6
2.0
0.3
6.6
4.7
6.3
4.4
3.1
0.5
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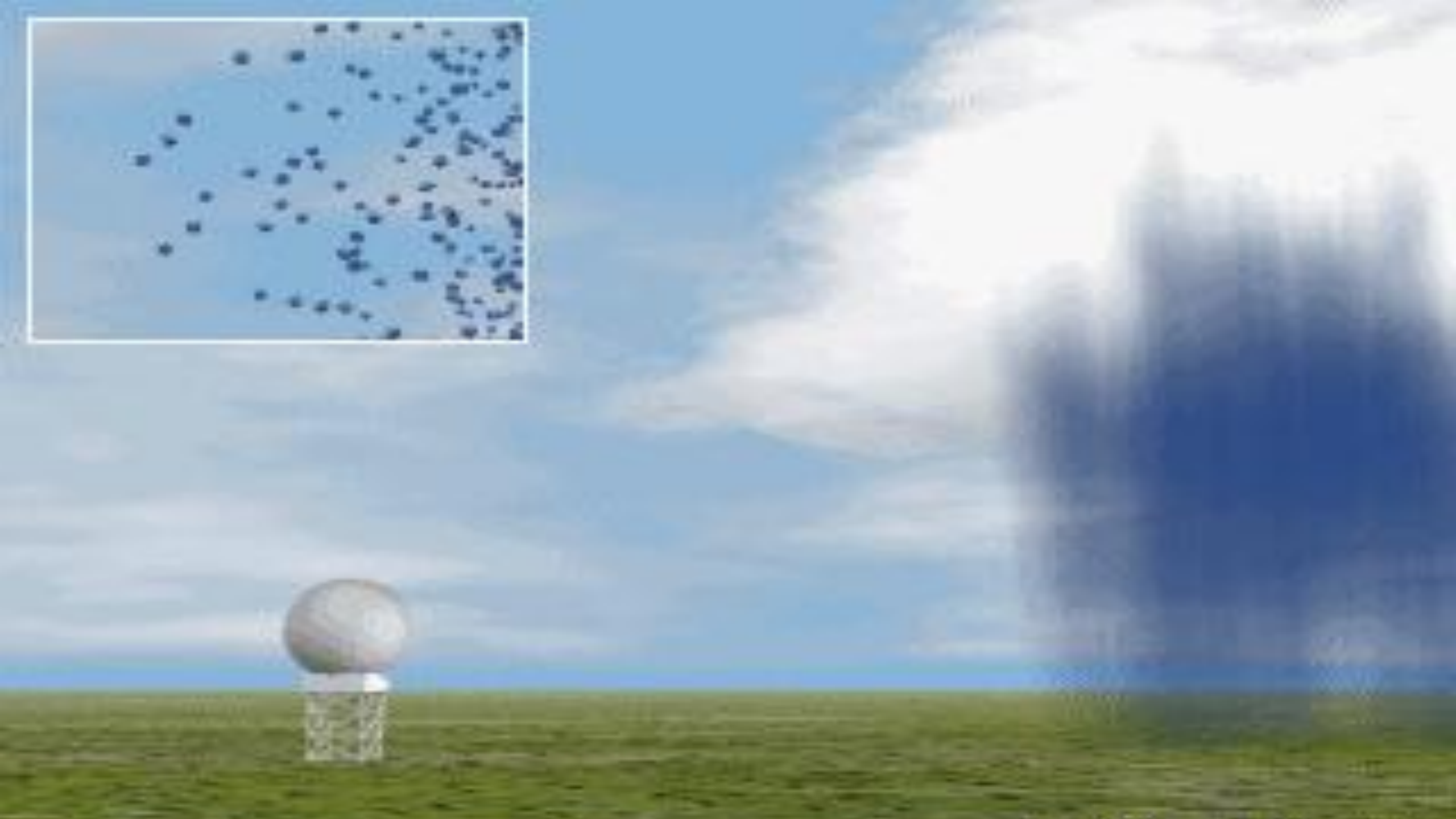
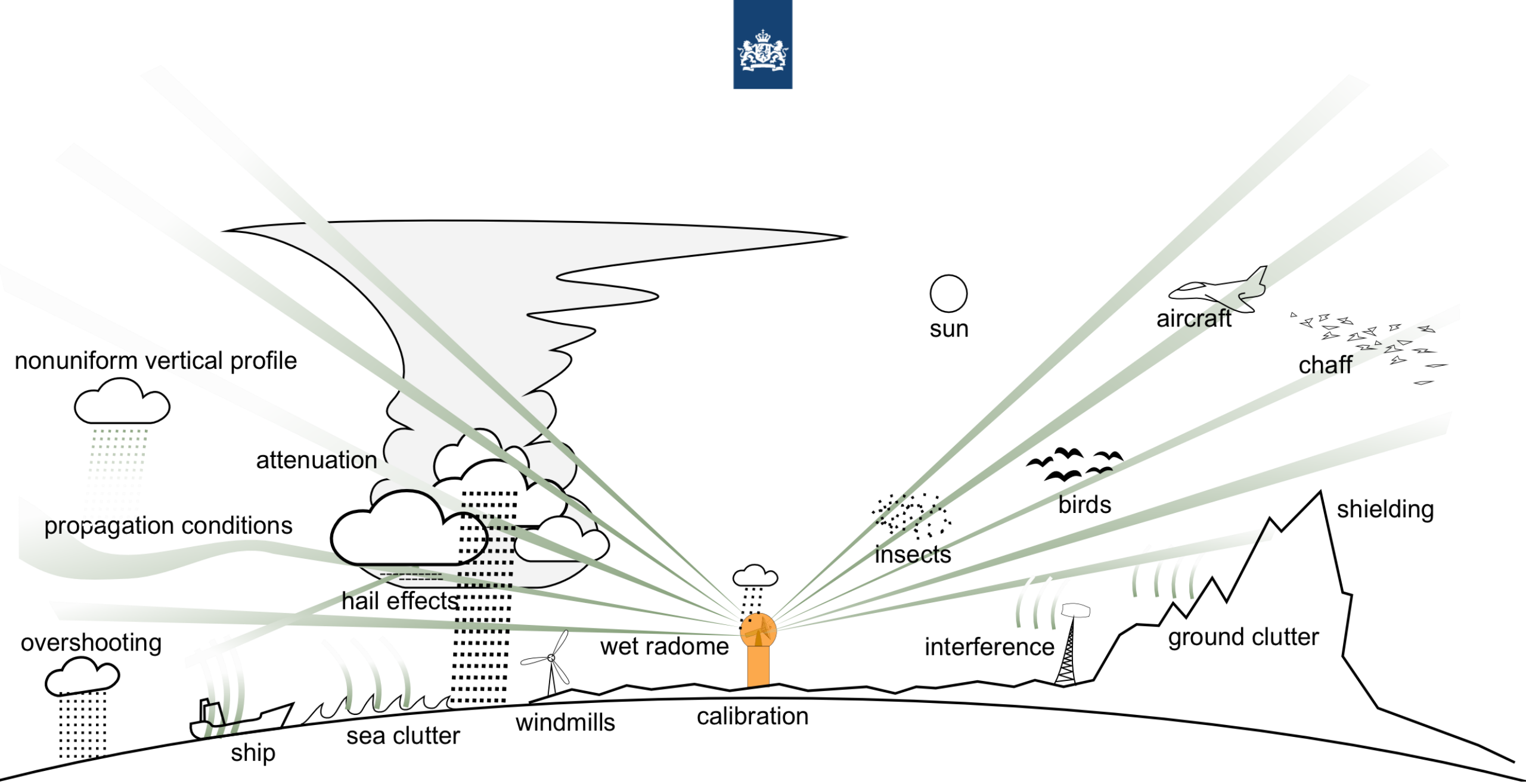
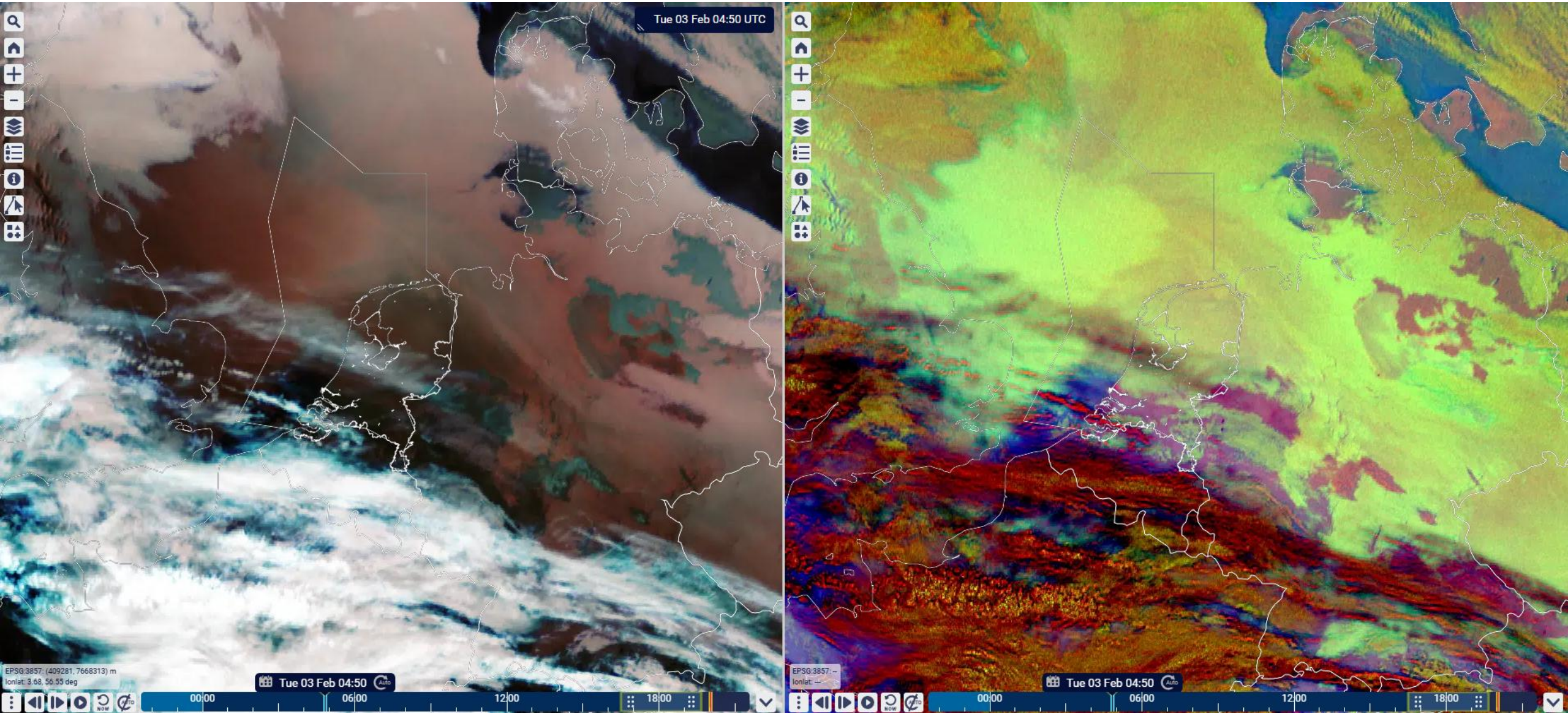
3.6




nonuniform vertical profile
attenuation
propagation conditions
hail effects
overshooting
ship
sea clutter
windmills
wet radome
calibration
sun
insects
aircraft
chaff
birds
interference
ground clutter
shielding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lon/lat: 3.68, 56.55 deg
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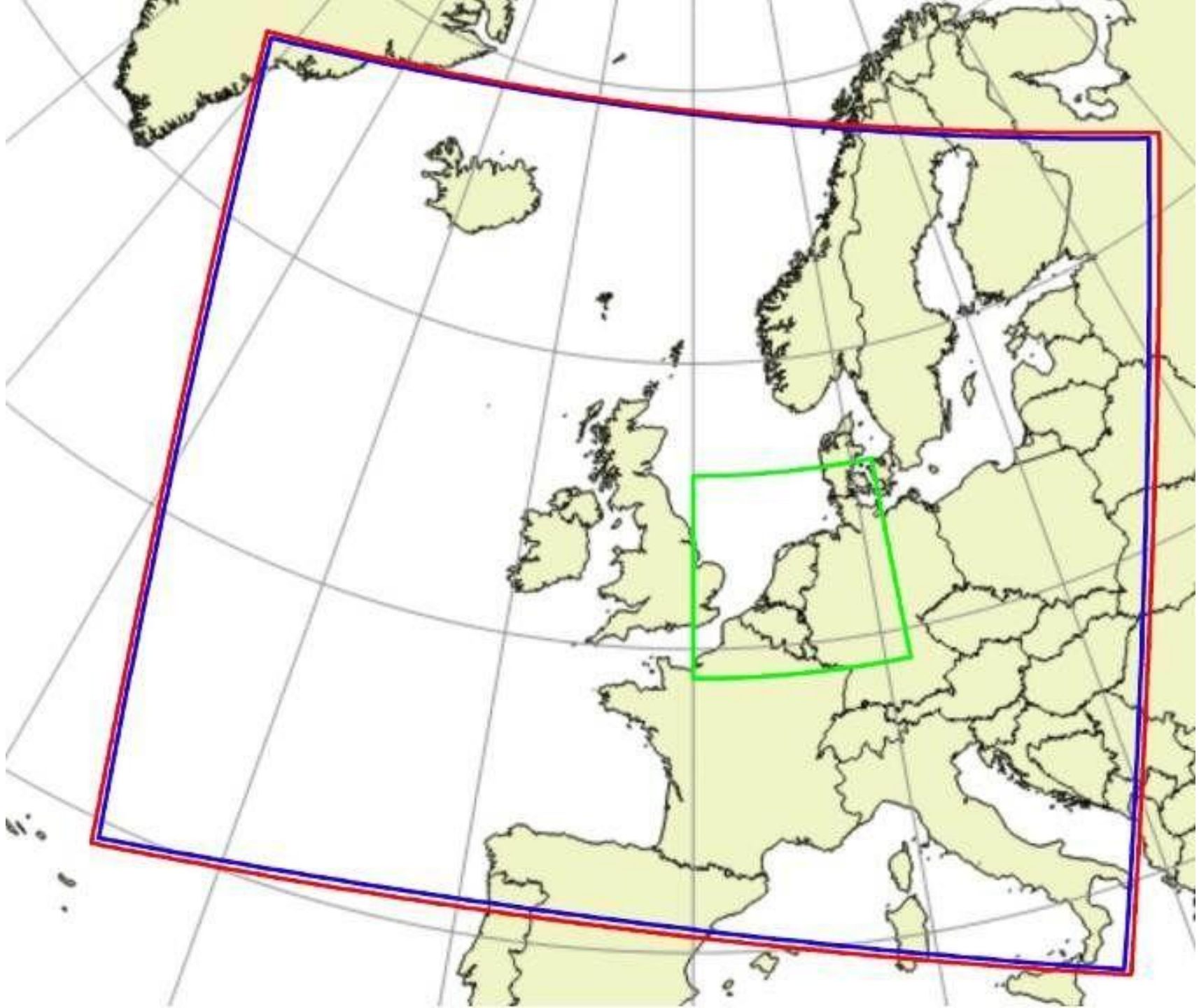
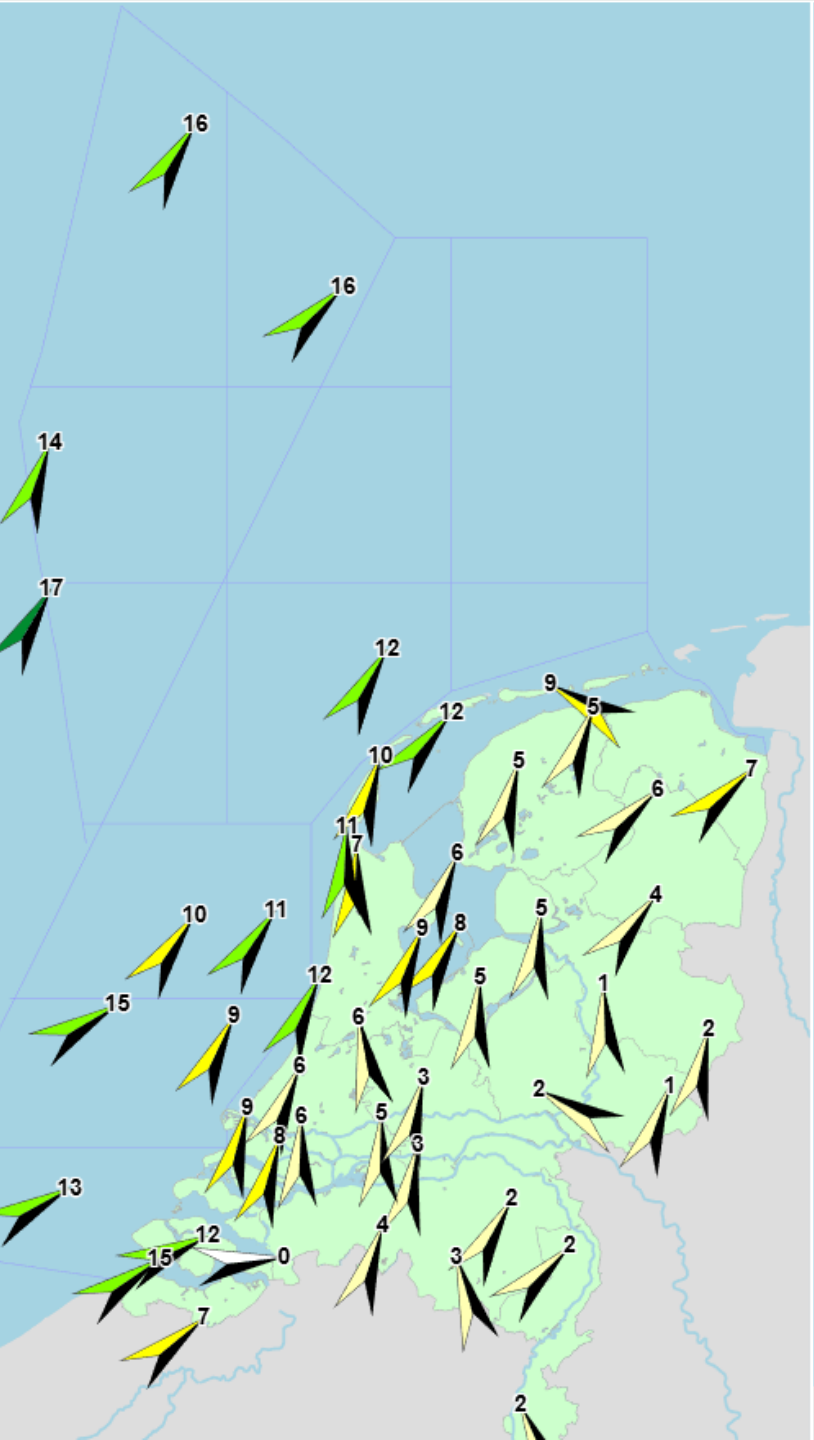
00:00
06:00
12:00
18:00
EPSG:3857: –
lon/lat: –
Tue 03 Feb 04:50
00:00
06:00
12:00
18:00


CRAY
CRAY
CRAY
CRAY
CRAY
CRAY

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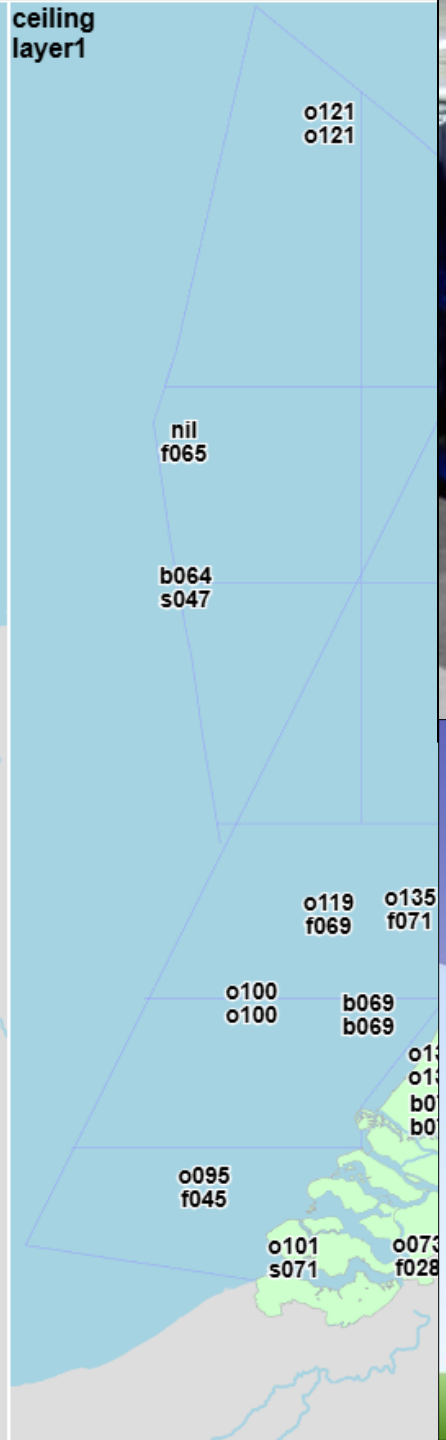
ceiling
layer1
o121
o121
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b064
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o119
f069
o135
f071
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o095
f045
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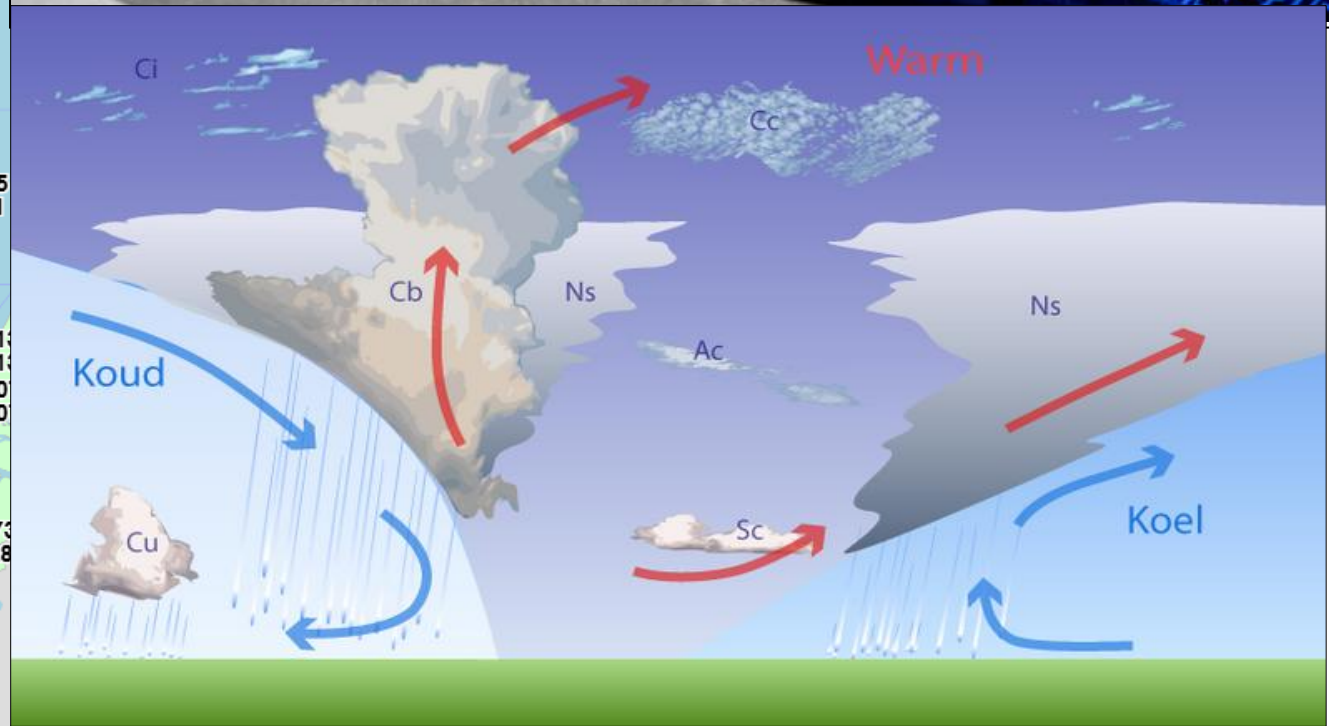
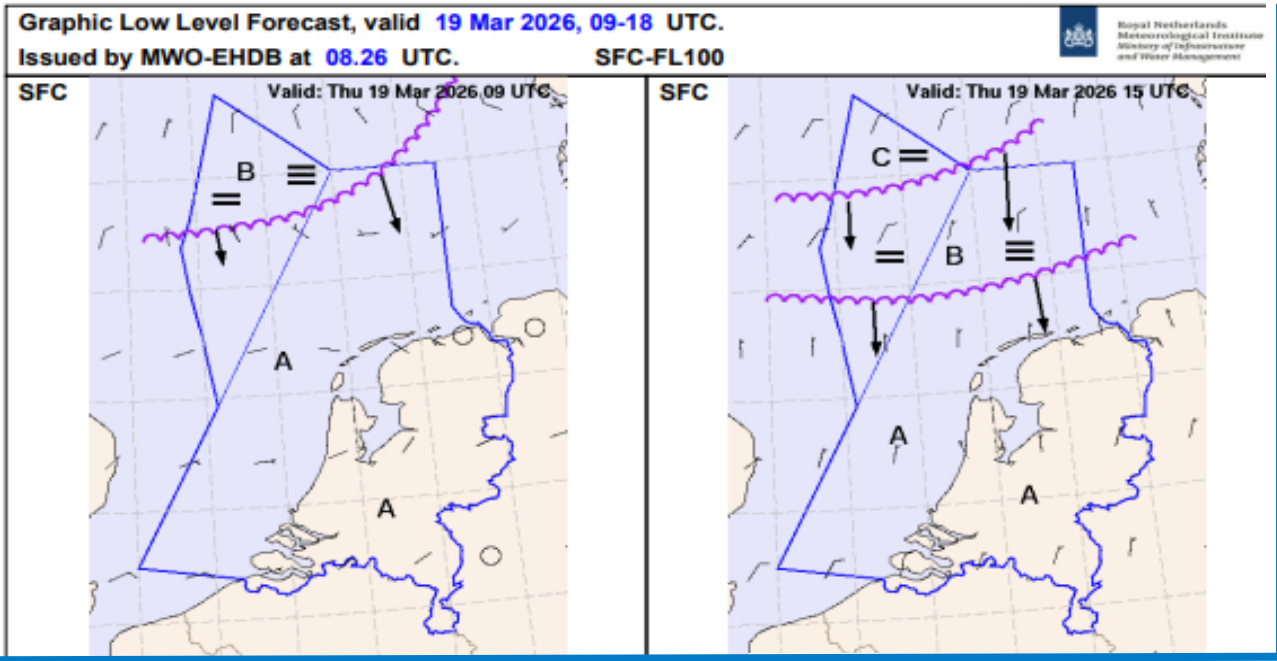
s071
o073
f028


CRAY
CRAY
CRAY
CRAY
CRAY


Warm
Ci
Cc
Cb
Ns
Ns
Ac
Koud
Cu
Sc
Koel



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TAF EHBK 190508Z 1906/2012 06006KT CAVOK
PROB30 2004/2007 4000 MIFG BR=

ZCZC
FT190500 EHGG GRONINGEN/EELDE NLD 5 m.
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TEMPO 1906/1907 4000 MIFG
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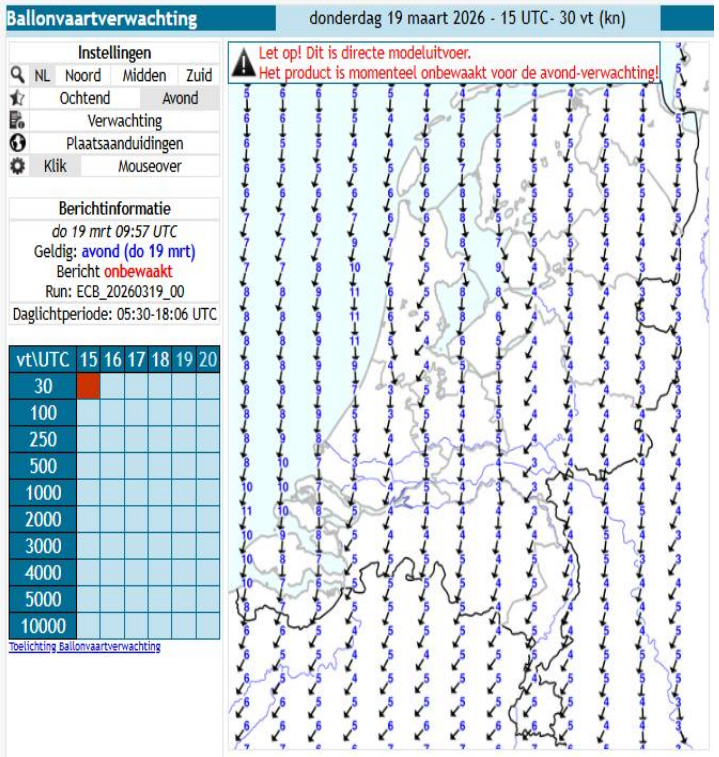


ZCZC
FBNL50 EHDB 190826
WEERBULLETIN VOOR DE LUCHTVAART -

.

GELDIG 190900/191500 UTC

.

SITUATIE: AAN DE ZUIDOOSTFLANK VAN EEN HOGEDRUKGEBIED BOVEN SCHOTLAND VOERT EEN ZWAKKE NOORDOOSTELIJKE STROMING DROGE LUCHT AAN. DE ATMOSFEER WORDT SPOEDIG ONSTABIEL VAN OPBOUW CA. 1000 VT, AAN HET EINDE VAN DE PERIODE TOT CA. 4000 VT.

.

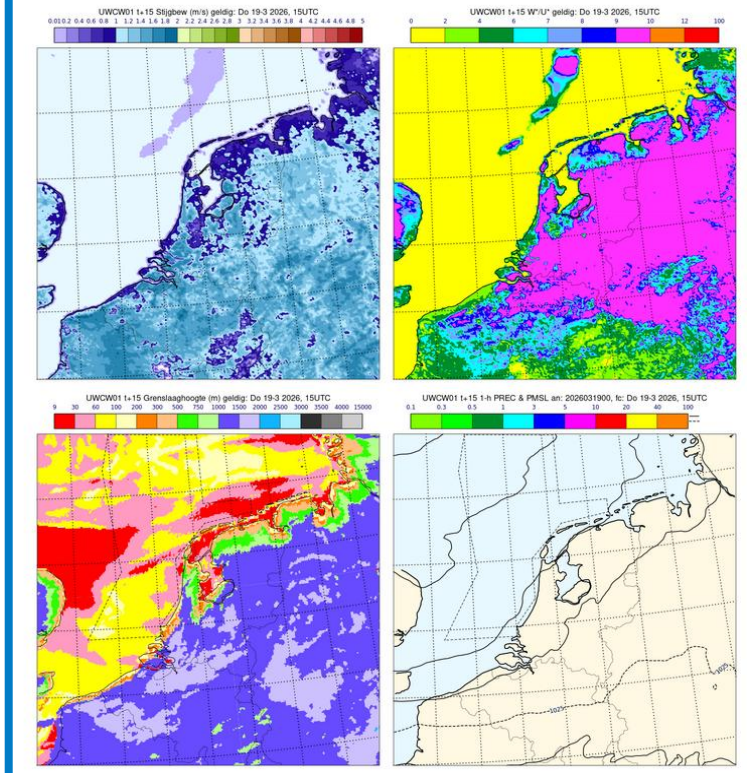
SIGNIFICANT WEER: GEEN.

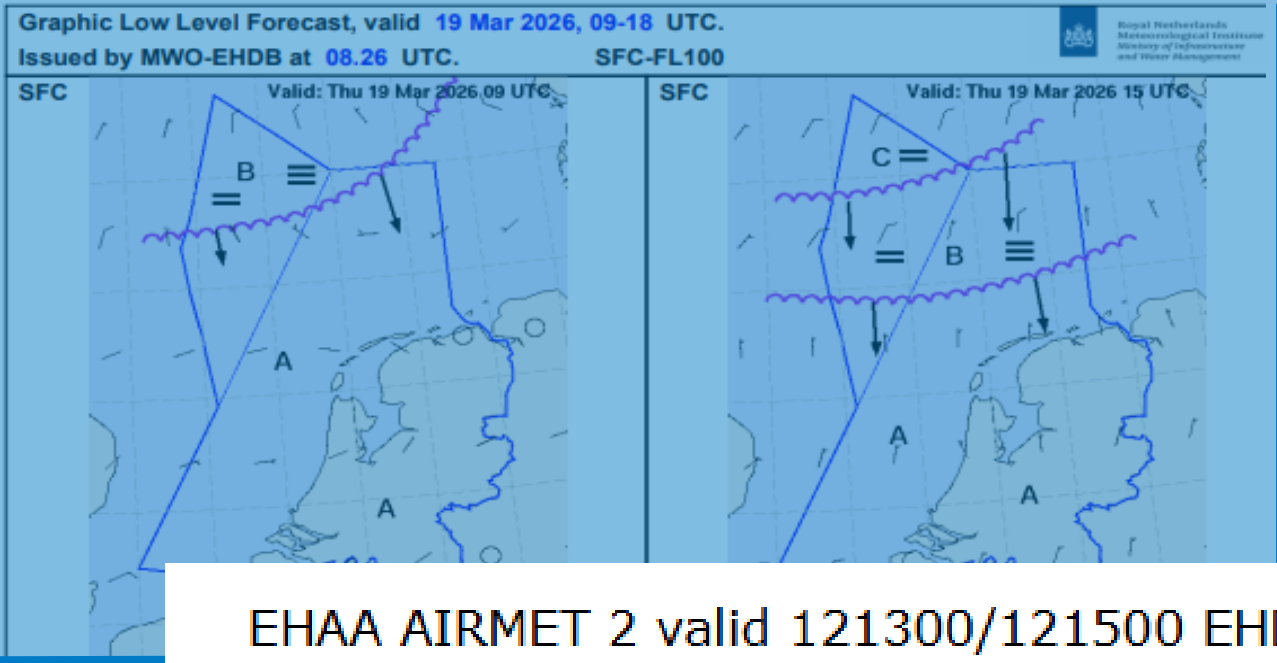
.

WIND: NOORDOOSTELIJK 3-7 KN, IN DE EERSTE HELFT VAN DE PERIODE LOKAAL VARIABEL 1-3 KN. IN DE TWEEDE HELFT VAN DE PERIODE IN DE KUSTGEBIEDEN EN BOVEN HET IJSSELMEER NOORDELIJK 7-11 KN.

.

BEWOLKING: GEEN SIGNIFICANTE BEWOLKING.





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ZCZC
FT190500 EHGG GRONINGEN/EELDE NLD 5 m.
TAF EHGG 190508Z 1906/2012 06003KT CAVOK
TEMPO 1906/1907 4000 MIFG

EHAA AIRMET 2 valid 121300/121500 EHDB-
EHAA AMSTERDAM FIR ISOL TSGR OBS N5210 E00548 TOP ABV FL100 MOV NNE 35KT INTSF

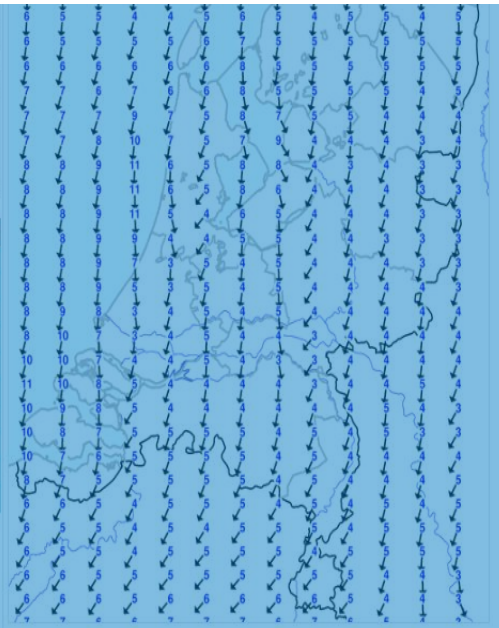
Ballonvaartverwach

Instellingen
NL Noord Midden
Ochtend
Verwachting
Plaatsaanduidingen
Klik Mouseover

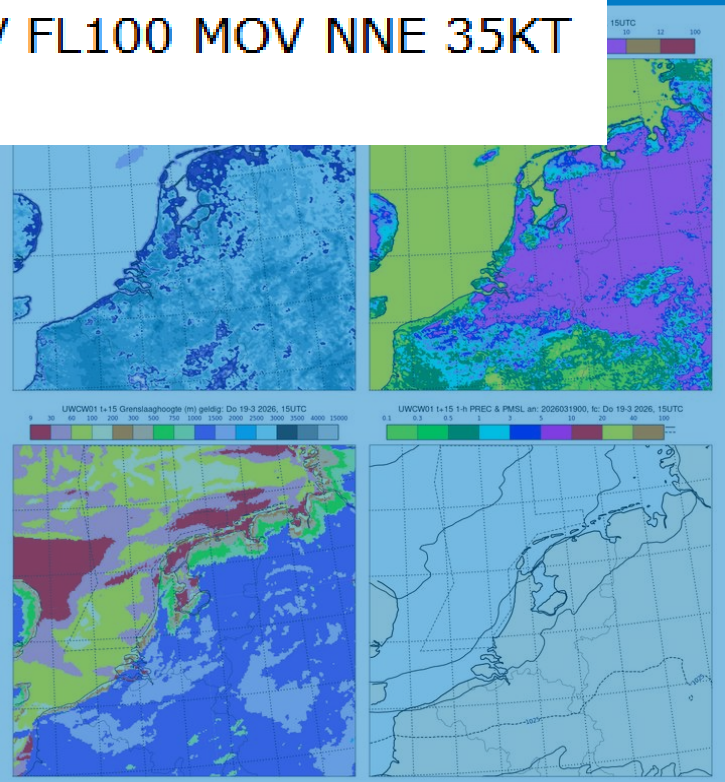
Berichtinformatie
do 19 mrt 09:57 UTC
Geldig: avond (do 19 mrt)
Bericht onbewaakt
Run: ECB_20260319_00
Daglichtperiode: 05:30-18:06 UTC

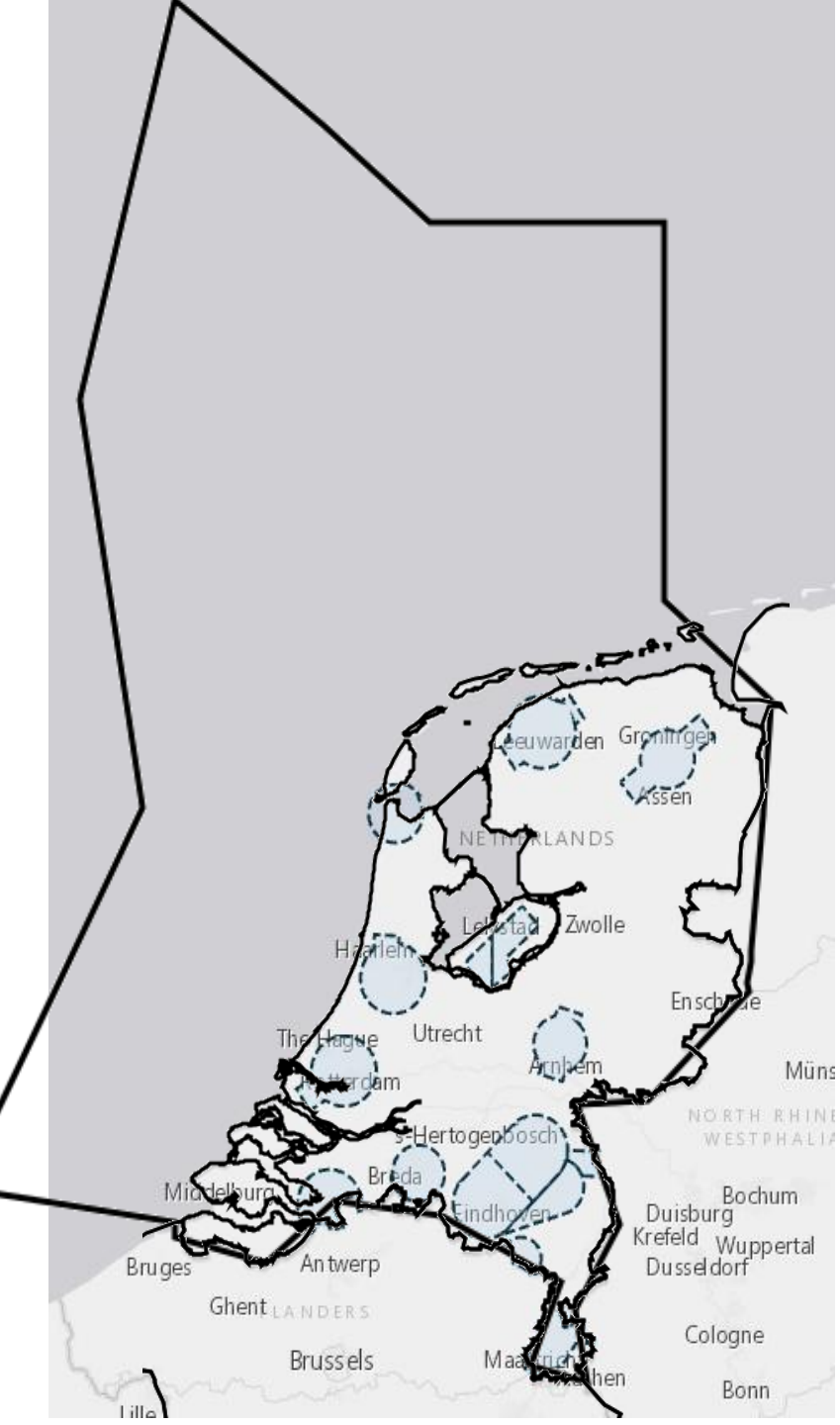
vt\UTC	15	16	17	18	19	20
30						
100						
250						
500						
1000						
2000						
3000						
4000						
5000						
10000						

Toelichting Ballonvaartverwachting



.
GELDIG 190900/191500 UTC
.
SITUATIE: AAN DE ZUIDOOSTFLANK VAN EEN HOGEDRUKGEBIED BOVEN SCHOTLAND VOERT EEN ZWAKKE NOORDOOSTELIJKE STROMING DROGE LUCHT AAN. DE ATMOSFEER WORDT SPOEDIG ONSTABIEL VAN OPBOUW CA. 1000 VT, AAN HET EINDE VAN DE PERIODE TOT CA. 4000 VT.
.
SIGNIFICANT WEER: GEEN.
.
WIND: NOORDOOSTELIJK 3-7 KN, IN DE EERSTE HELFT VAN DE PERIODE LOKAAL VARIABEL 1-3 KN. IN DE TWEEDE HELFT VAN DE PERIODE IN DE KUSTGEBIEDEN EN BOVEN HET IJSSELMEER NOORDELIJK 7-11 KN.
.
BEWOLKING: GEEN SIGNIFICANTE BEWOLKING.




Leeuwarden
Groningen
Assen
NETHERLANDS
Lelystad
Zwolle
Haarlem
Enschede
The Hague
Utrecht
Arnhem
Münst
Rotterdam
NORTH RHINE
WESTPHALIA
's-Hertogenbosch
Breda
Middelburg
Eindhoven
Bochum
Duisburg
Krefeld
Wuppertal
Bruges
Antwerp
Dusseldorf
Ghent
LANDERS
Cologne
Brussels
Maastricht
Aachen
Bonn
Lille


Leeuwarden
Groningen
Assen
NETHERLANDS
Lelystad
Zwolle
Haarlem
Enschede
The Hague
Utrecht
Arnhem
Münst
Rotterdam
NORTH RHINE
WESTPHALIA
's-Hertogenbosch
Breda
Middelburg
Eindhoven
Bochum
Duisburg
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LANDERS
Cologne
Brussels
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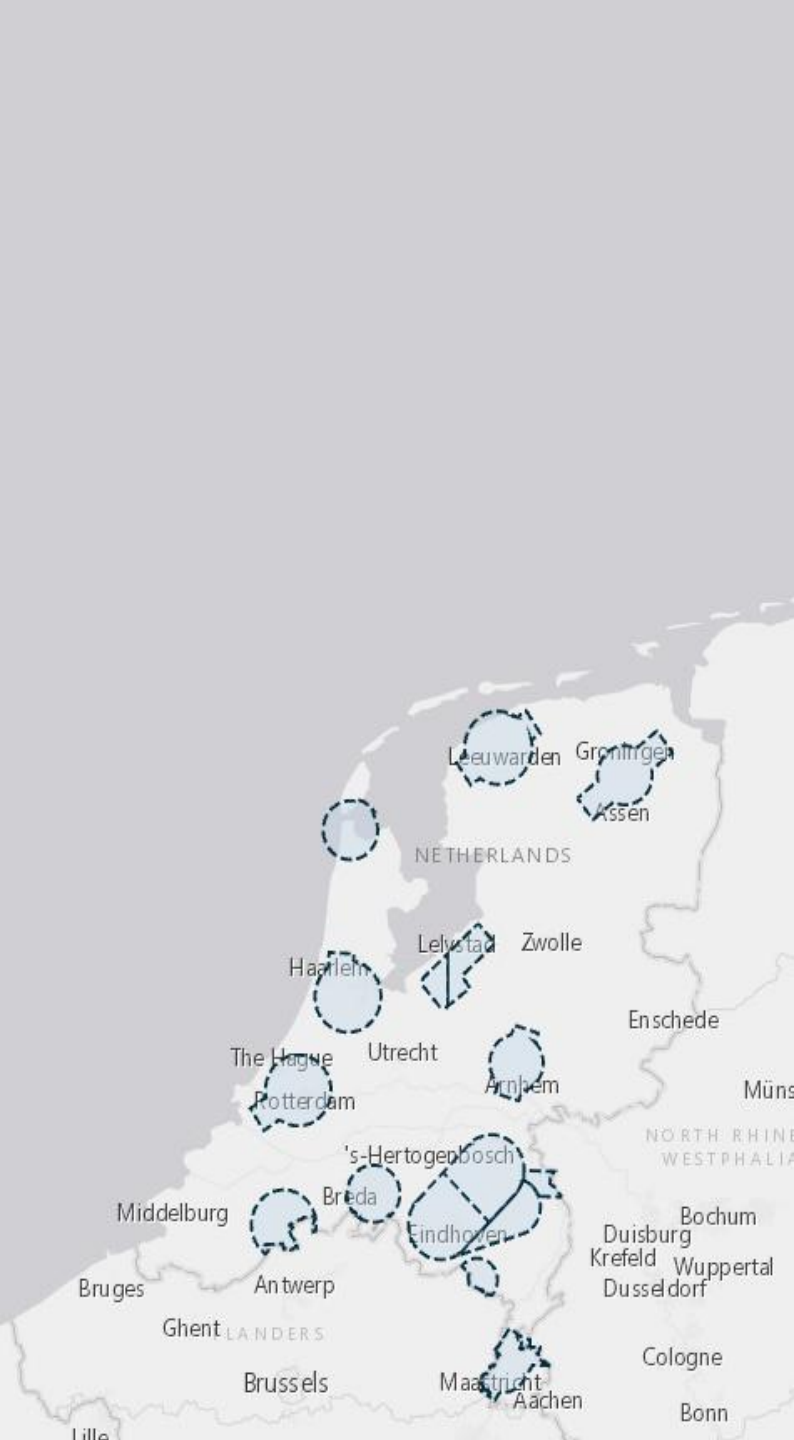

Leeuwarden
Groningen
Assen
NETHERLANDS
Lelystad
Zwolle
Haarlem
Enschede
The Hague
Utrecht
Arnhem
Münst
Rotterdam
NORTH RHINE
WESTPHALIA
's-Hertogenbosch
Breda
Middelburg
Eindhoven
Bochum
Duisburg
Krefeld
Wuppertal
Bruges
Antwerp
Dusseldorf
Ghent
LANDERS
Cologne
Brussels
Maastricht
Aachen
Bonn
Lille

VIS (m)

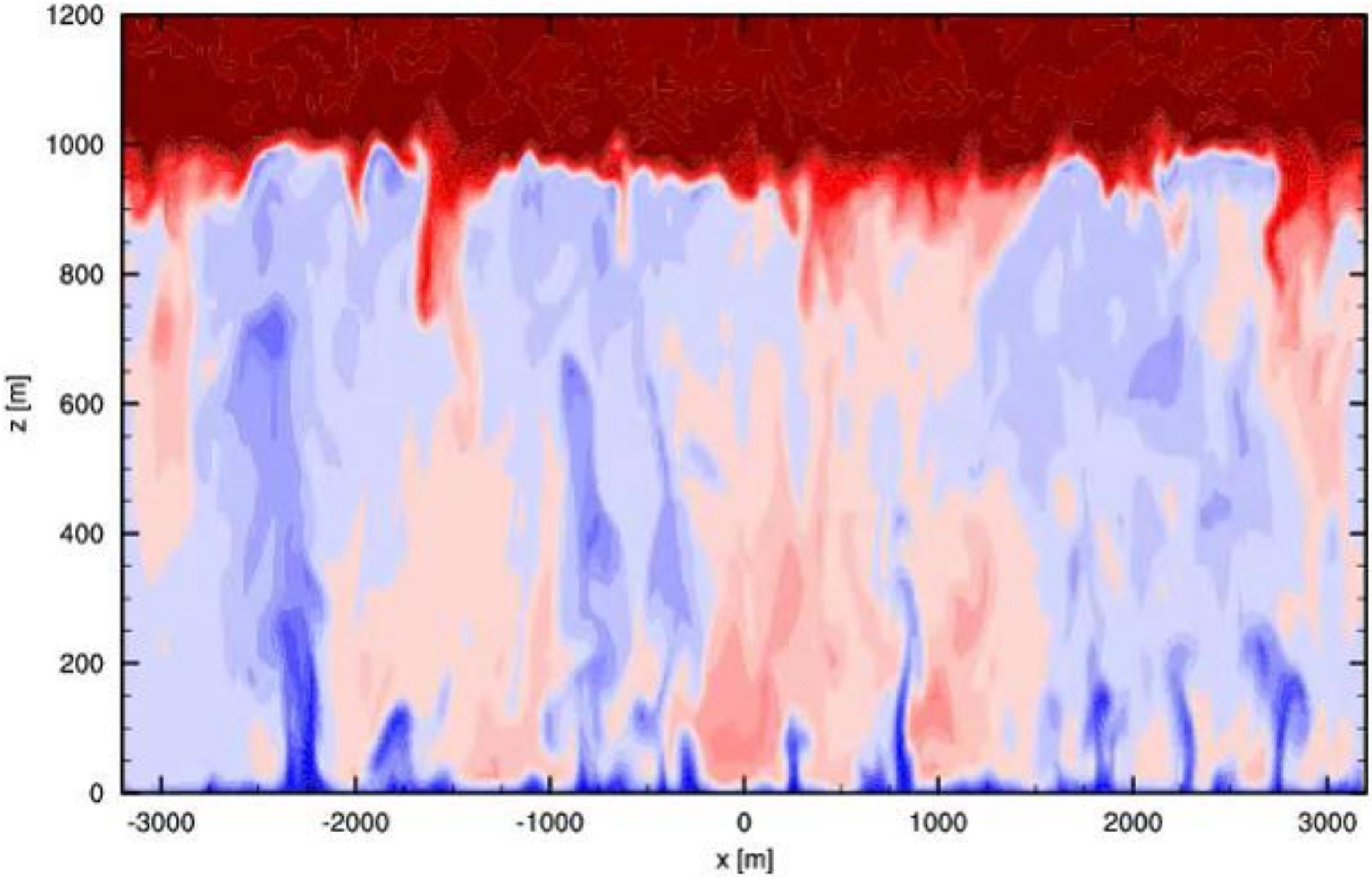
- 8000
- 5000
- 3000
- 1500
- 0800
- 0600
- 0350
- 0150

Cloud (ft)

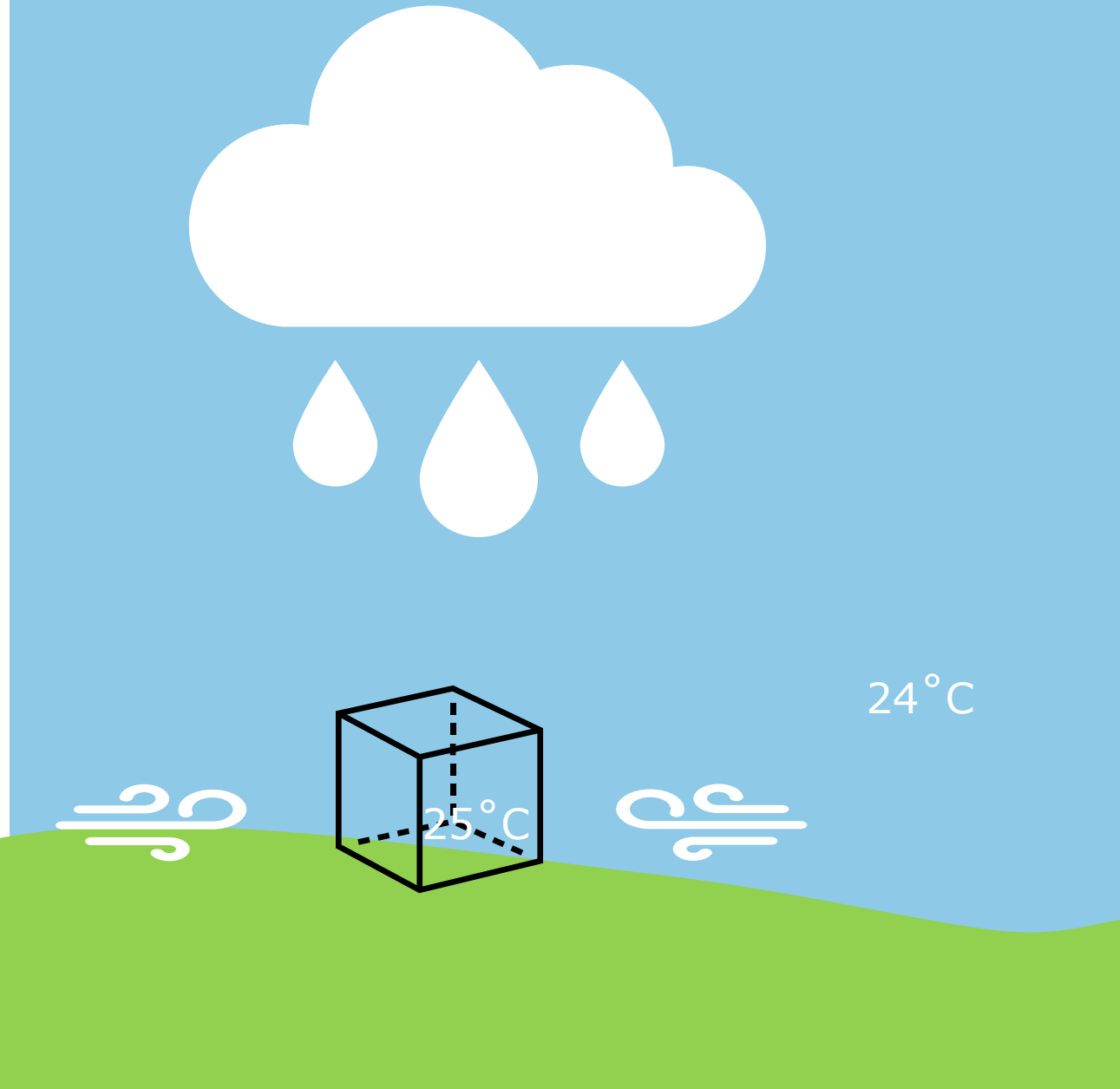
- 1500
- 1000
- 0500
- 0300
- 0200
- 0100

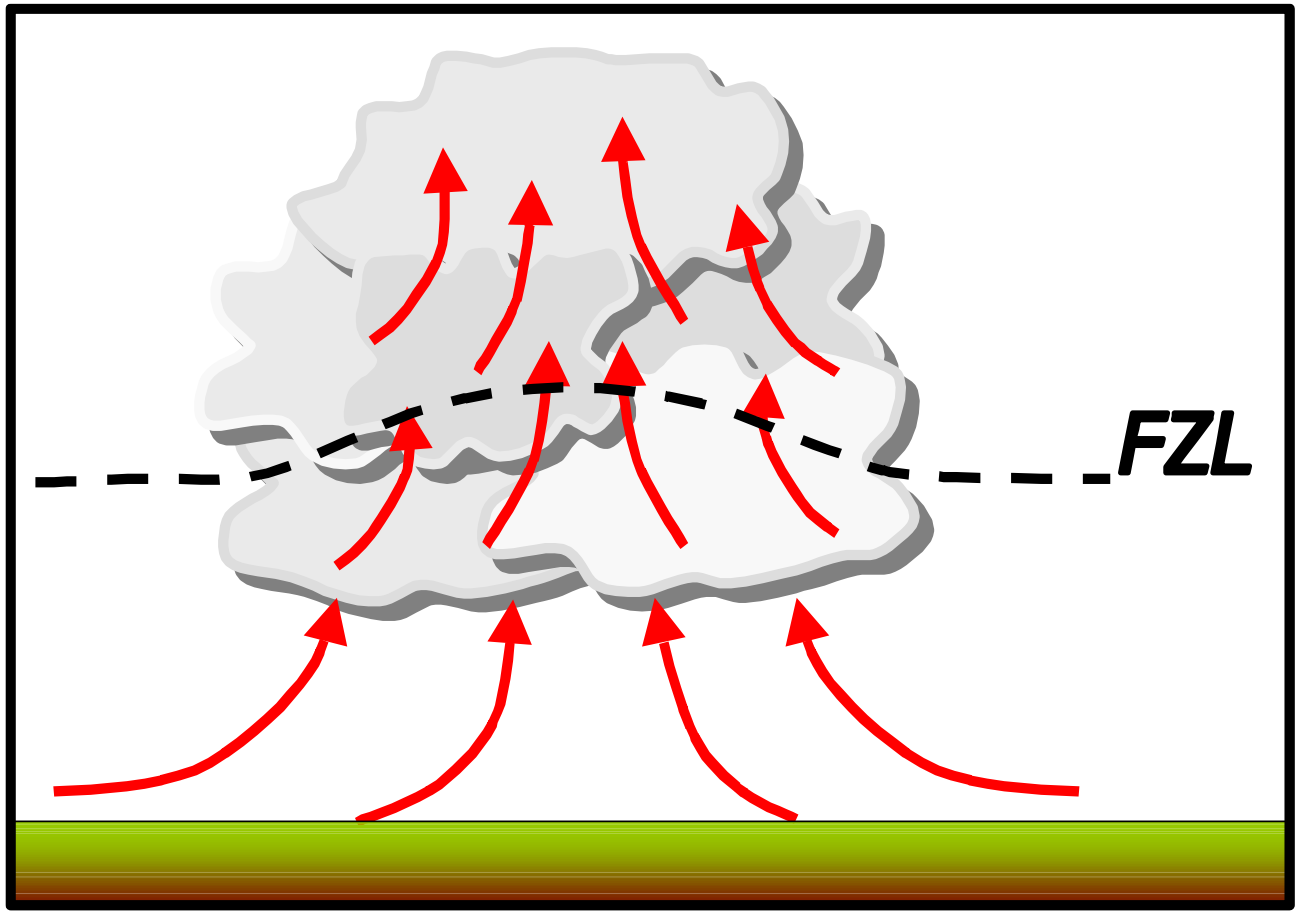
Wind

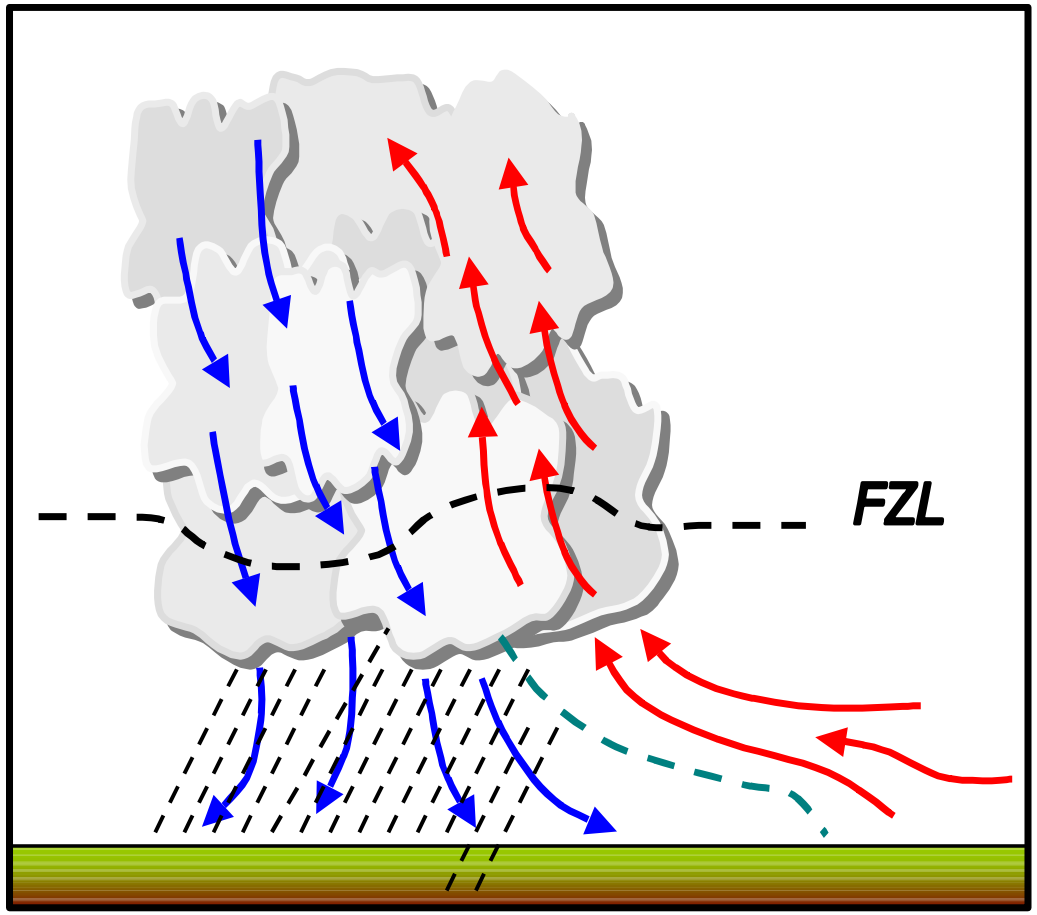
- Snelheidsverandering > 10 kn
- Richtingverandering > 30° (als snelheid > 10 kn is)


1200
1000
800
600
400
200
0
z [m]
-3000
-2000
-1000
0
1000
2000
3000
x [m]

Onstabiliteit
Lift
Vocht




FZL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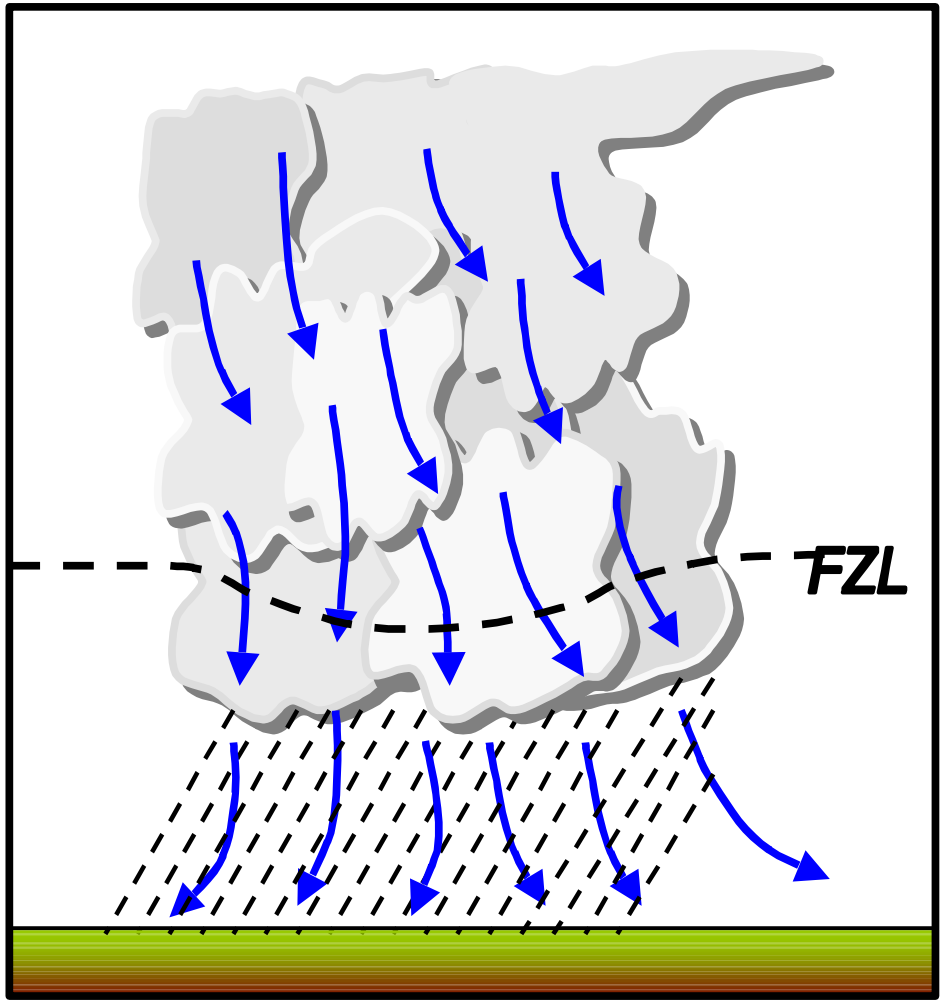
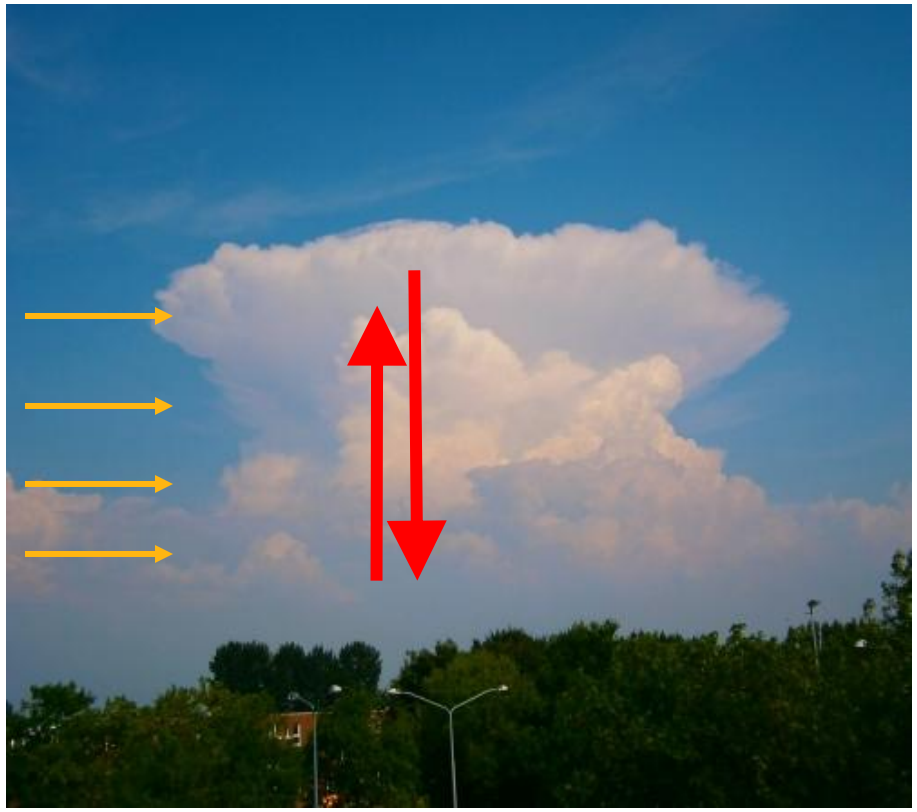
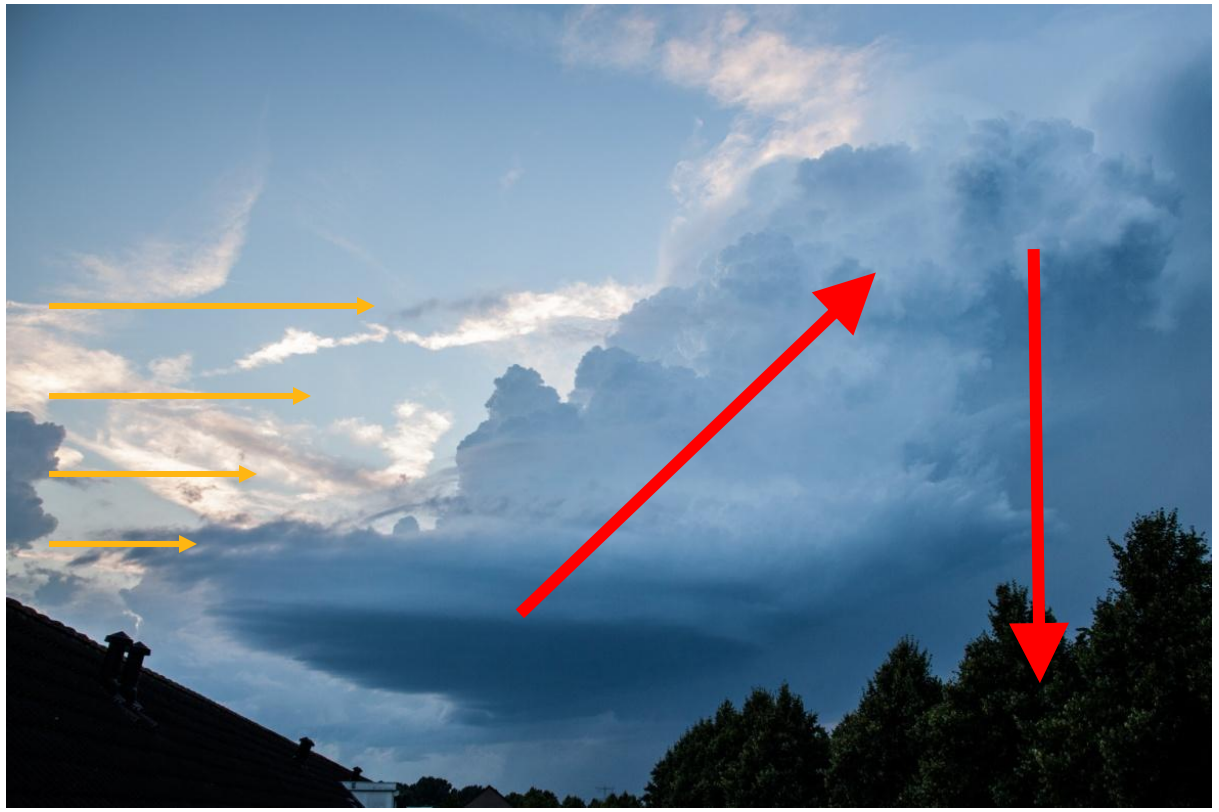
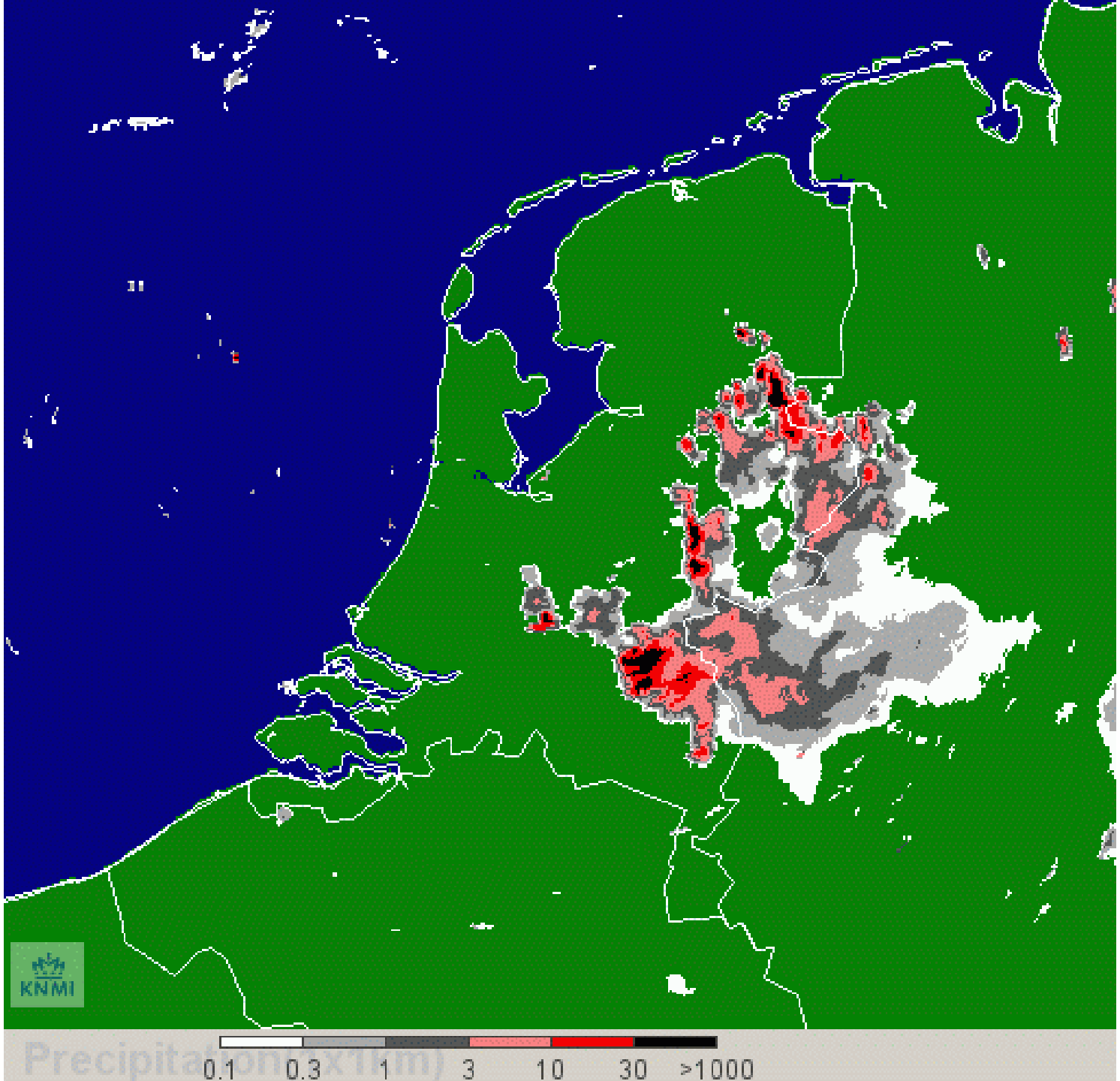

FZL

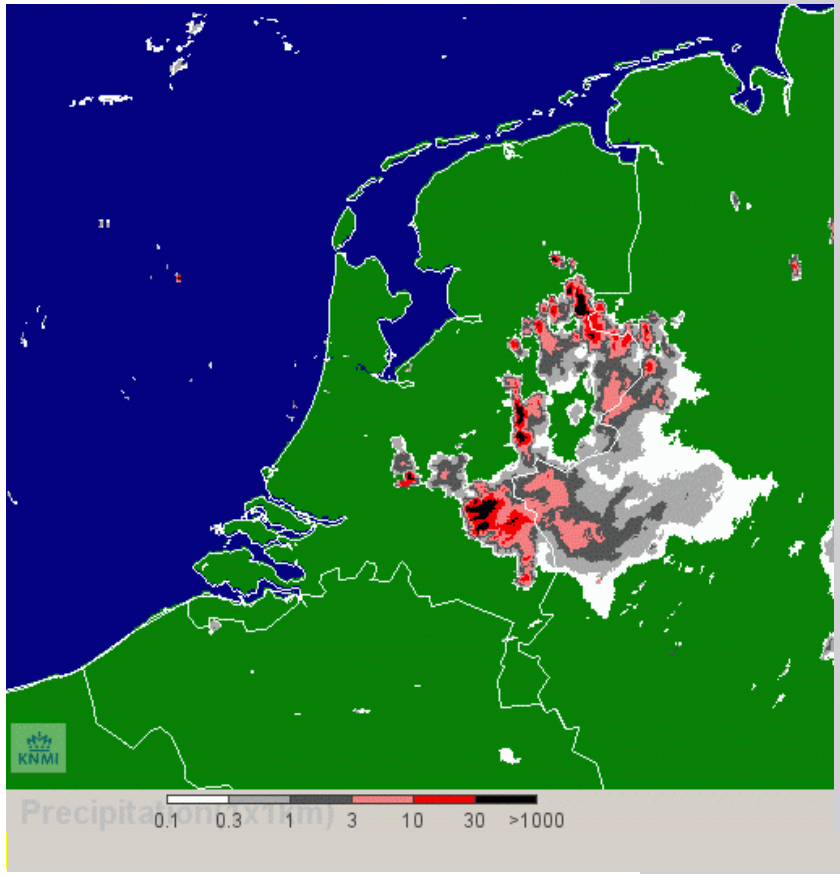
Pulse storm

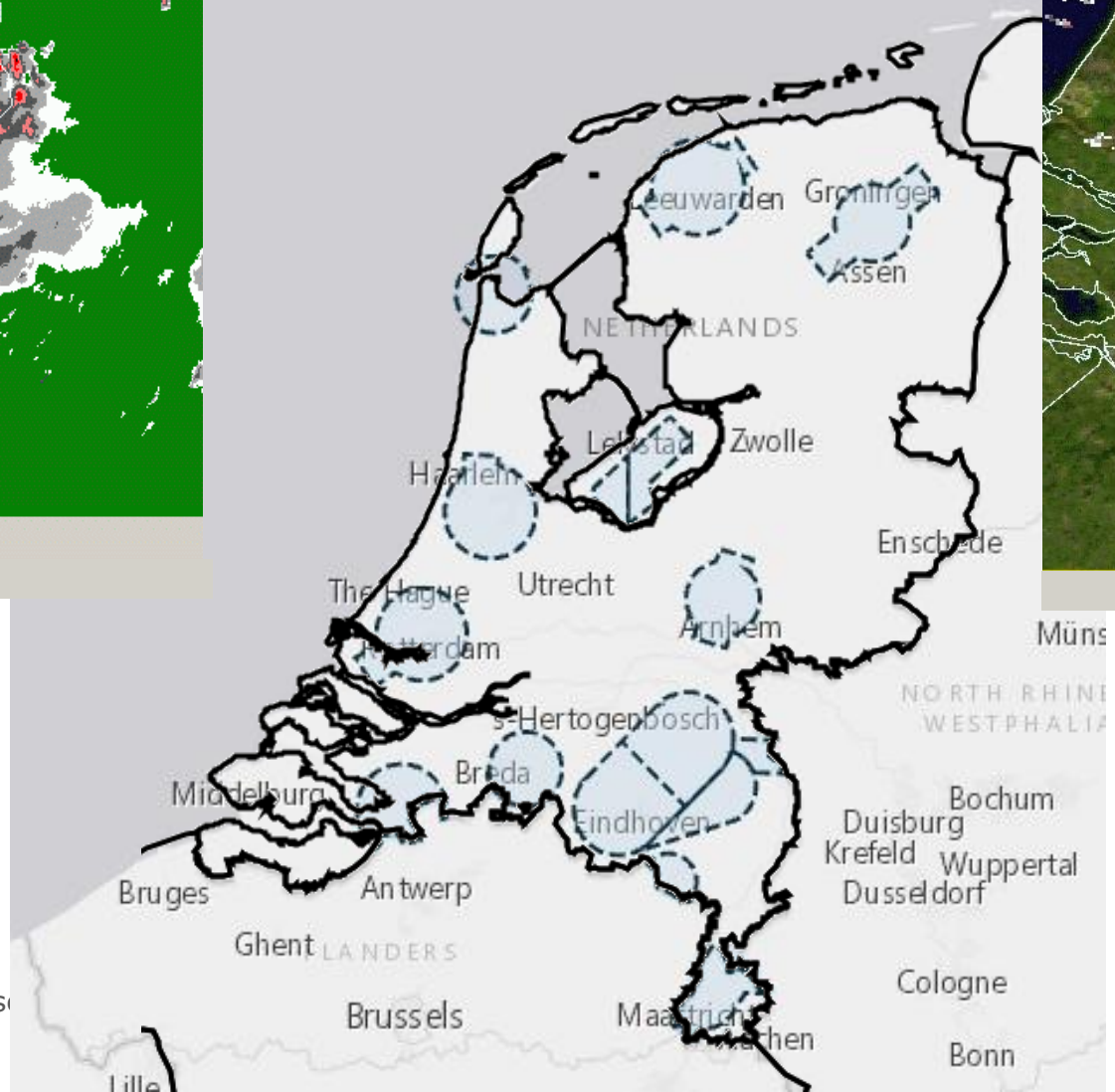


Multi-cell




KNMI
Precipitation (mm/1h)
0.1
0.3
1
3
10
30
>1000


KNMI
0.1 0.3 1 3 10 30 >1000


Leeuwarden
Groningen
Assen
NETHERLANDS
Lelystad
Zwolle
Haarlem
Enschede
The Hague
Utrecht
Arnhem
's-Hertogenbosch
Breda
Middelburg
Eindhoven
Bochum
Duisburg
Krefeld
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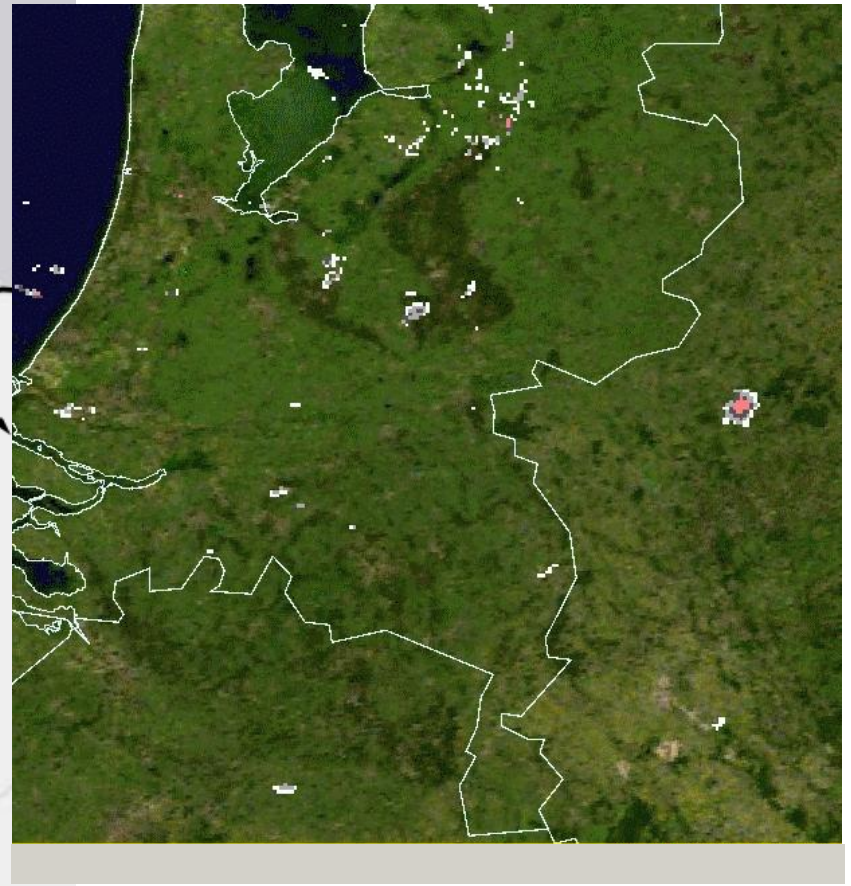
Bruges
Antwerp
Ghent
Cologne
Brussels
Bonn
Lille



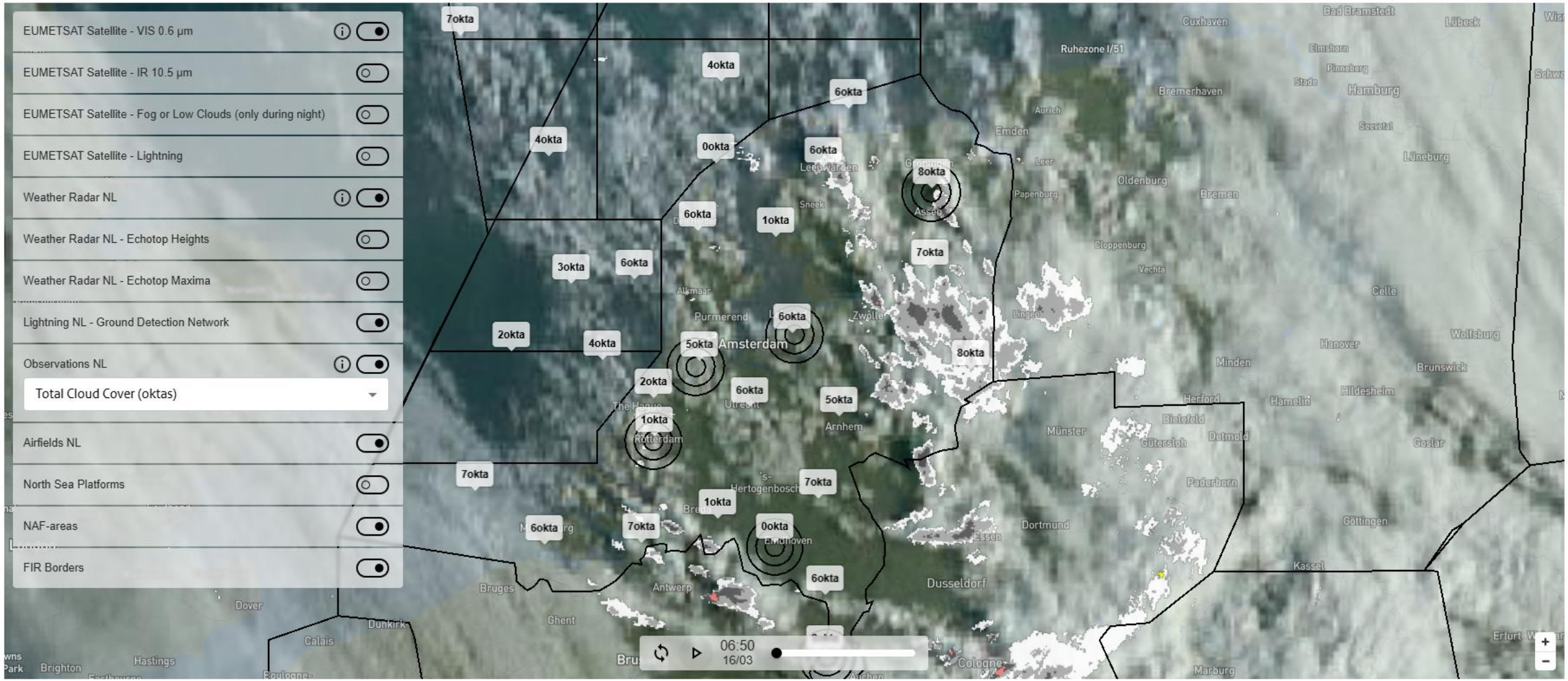

SNEAK PEEK

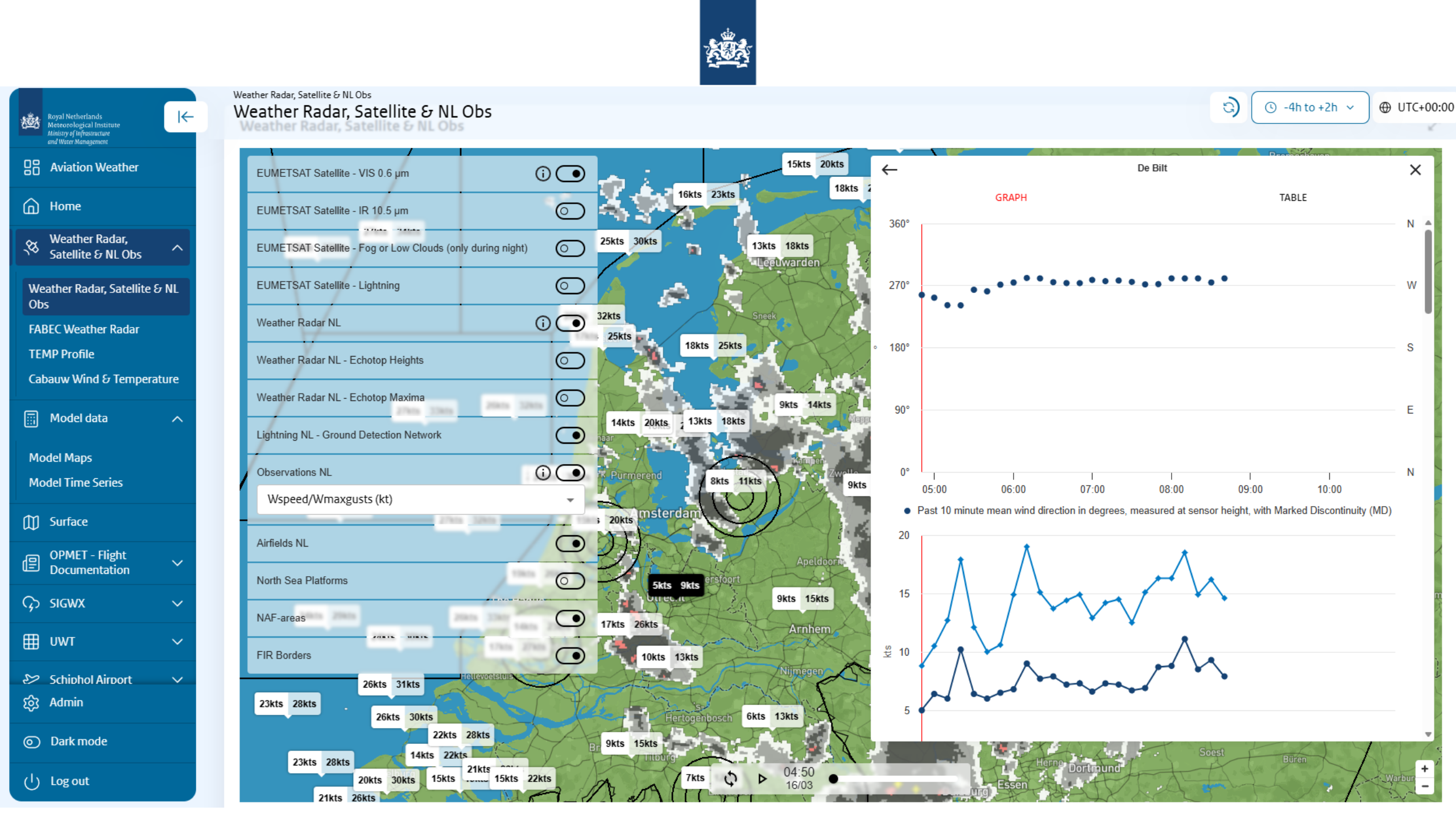
Weather Radar, Satellite & NL Obs

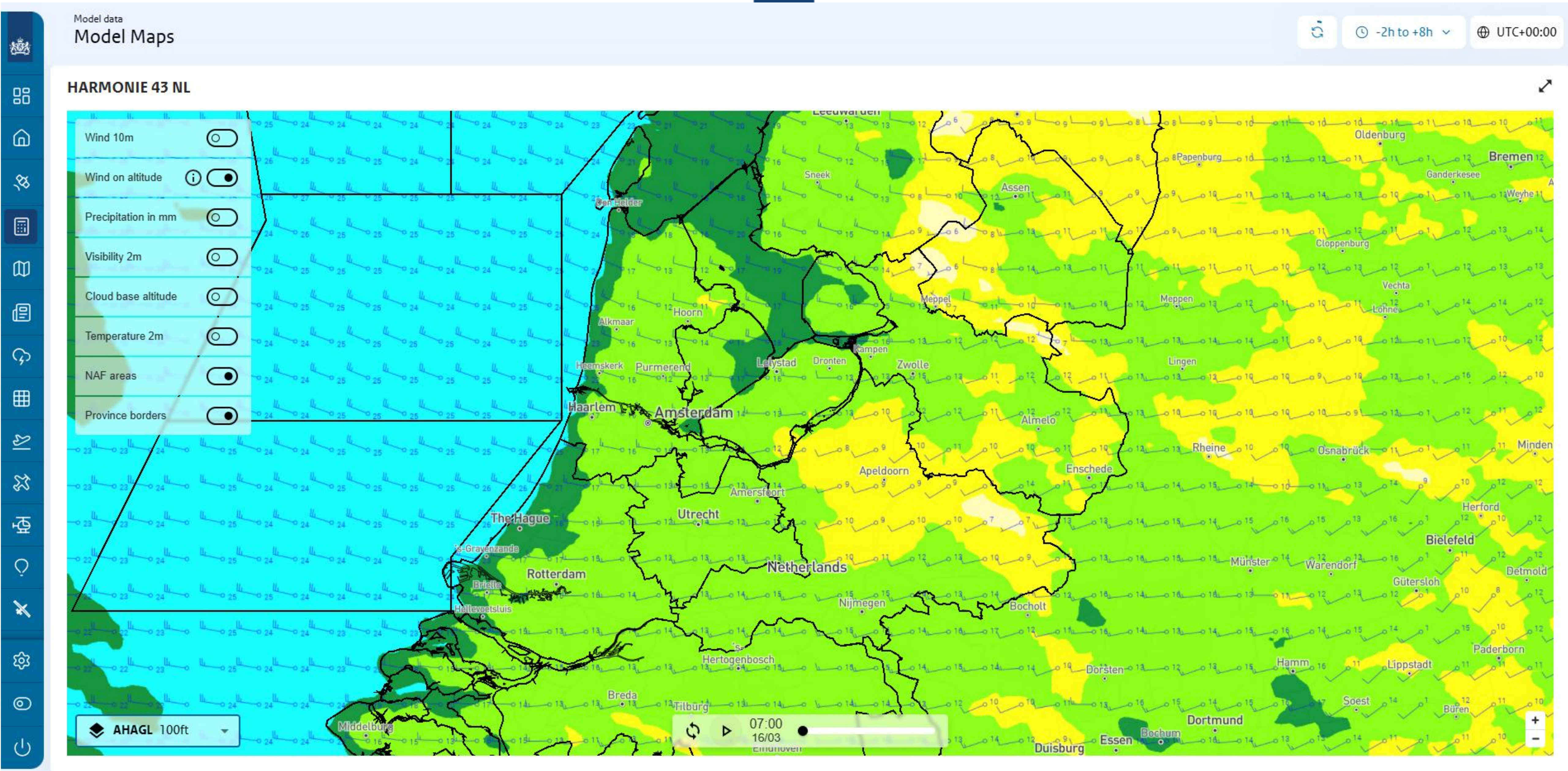
-2h to +8h

UTC+00:00

Weather Radar, Satellite & NL Obs




Royal Netherlands Meteorological Institute
Ministry of Infrastructure and Water Management
Aviation Weather
Home
Weather Radar, Satellite & NL Obs
Weather Radar, Satellite & NL Obs
FABEC Weather Radar
TEMP Profile
Cabauw Wind & Temperature
Model data
Model Maps
Model Time Series
Surface
OPMET - Flight Documentation
SIGWX
UWT
Schiphol Airport
Admin
Dark mode
Log out
Weather Radar, Satellite & NL Obs
Weather Radar, Satellite & NL Obs
-4h to +2h
UTC+00:00
EUMETSAT Satellite - VIS 0.6 µm
EUMETSAT Satellite - IR 10.5 µm
EUMETSAT Satellite - Fog or Low Clouds (only during night)
EUMETSAT Satellite - Lightning
Weather Radar NL
Weather Radar NL - Echotop Heights
Weather Radar NL - Echotop Maxima
Lightning NL - Ground Detection Network
Observations NL
Wspeed/Wmaxgusts (kt)
Airfields NL
North Sea Platforms
NAF-areas
FIR Borders
De Bilt
GRAPH
TABLE
360°
270°
180°
90°
0°
N
W
S
E
N
05:00
06:00
07:00
08:00
09:00
10:00
Past 10 minute mean wind direction in degrees, measured at sensor height, with Marked Discontinuity (MD)
20
15
10
5
kts
Leeuwarden
Sneek
Amsterdam
Purmerend
Apeldoorn
Arnhem
Nijmegen
Hertogenbosch
Tilburg
Dortmund
Essen
Soest
Büren
04:50
16/03



Model data
Model Maps
-2h to +8h
UTC+00:00
HARMONIE 43 NL
Wind 10m
Wind on altitude
Precipitation in mm
Visibility 2m
Cloud base altitude
Temperature 2m
NAF areas
Province borders
AHAGL 100ft
07:00
16/03
Amsterdam
Haarlem
Rotterdam
The Hague
Utrecht
Netherlands
Apeldoorn
Zwolle
Enschede
Nijmegen
Breda
Tilburg
Oldenburg
Bremen
Osnabrück
Münster
Bielefeld
Dortmund
Essen
Duisburg

Royal Netherlands Meteorological Institute
Ministry of Infrastructure and Water Management

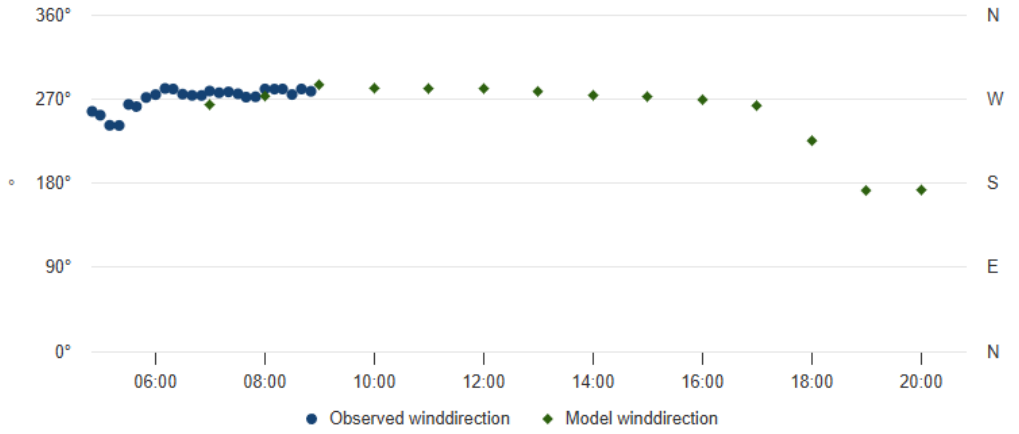
- Aviation Weather
- Home
- Weather Radar, Satellite & NL Obs
- Model data
  - Model Maps
  - Model Time Series
- Surface
- OPMET - Flight Documentation
- SIGWX
- UWT
- Schiphol Airport
- General Aviation
- Offshore Helicopters
- Balloon
- Admin
- Dark mode
- Log out

Model data

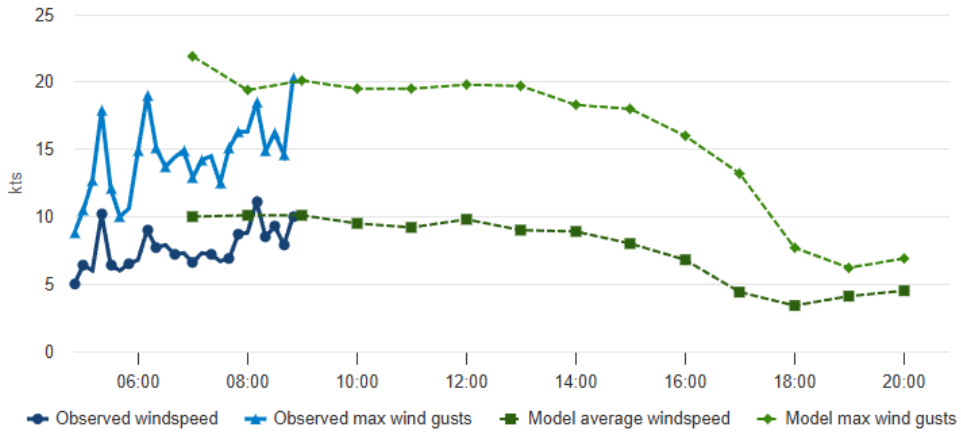
Model Time Series

De Bilt (AWS) | -4h to +12h | UTC+00:00

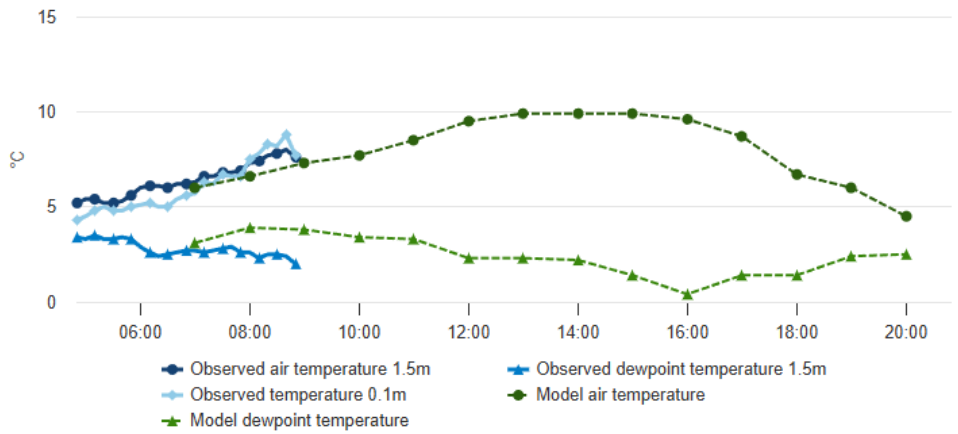
Winddirection 10m



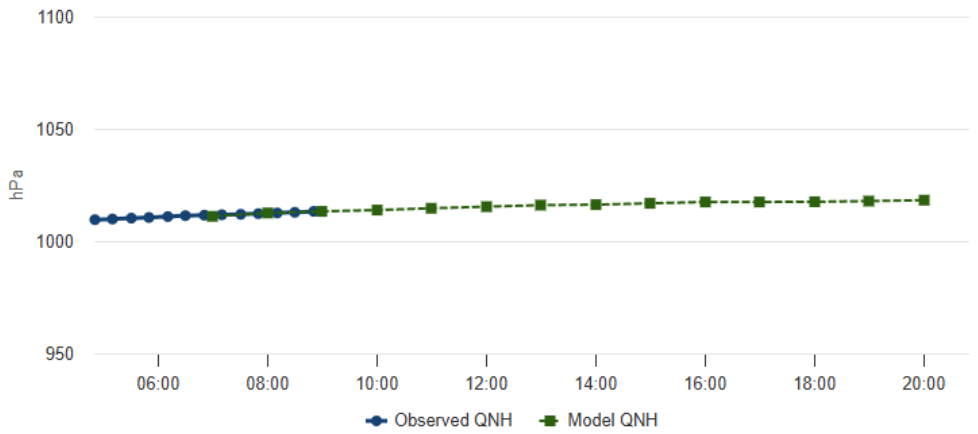
Windspeed 10m

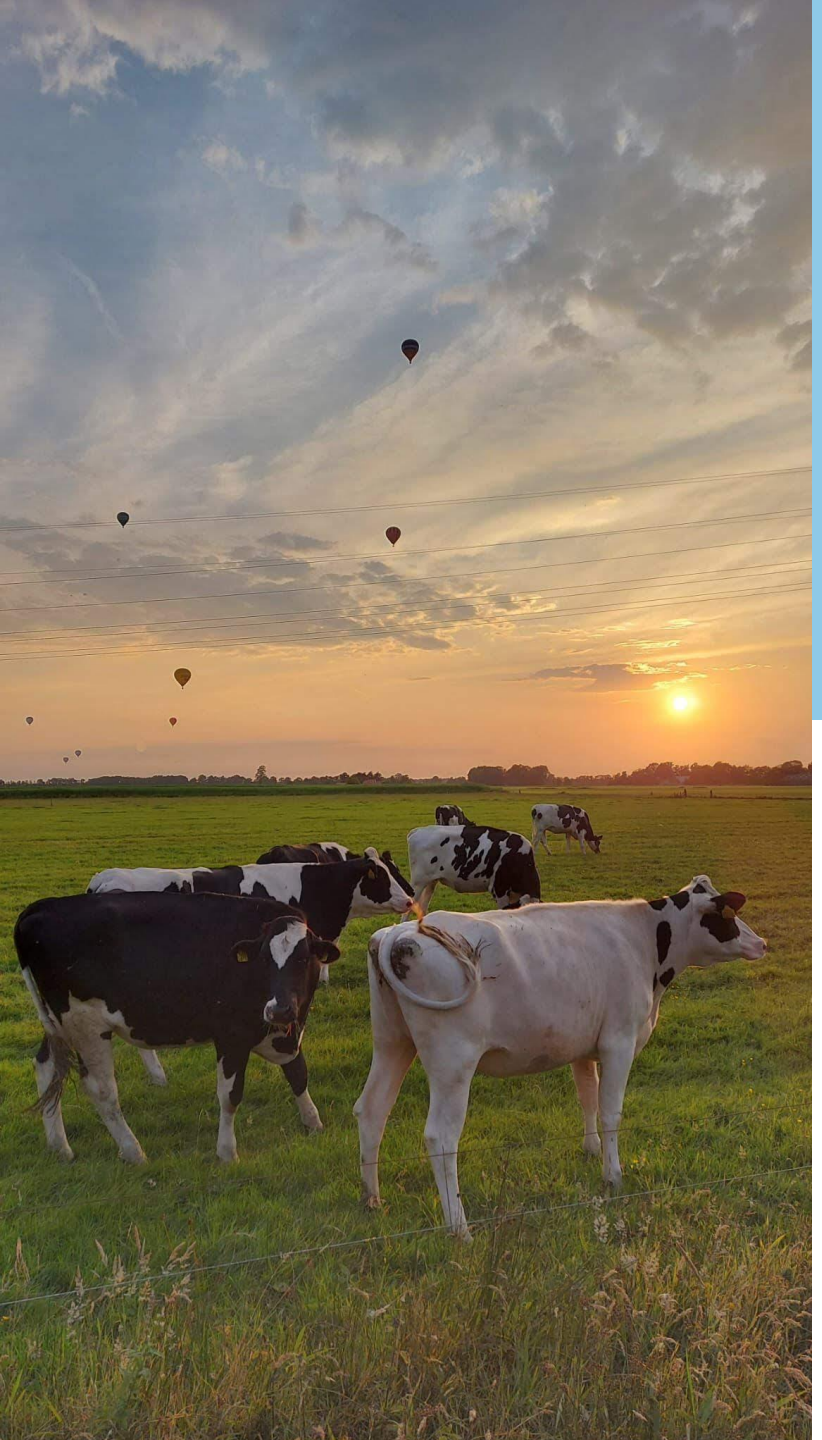


Temperature



QNH





Geniet van het zomerseizoen!

Testgebruiker luchtvaartmeteo.nl: roy.gommer@knmi.nl

Ballon: 0900 202 33 40

VFR: 0900 202 33 41

IFR: 0900 202 33 43

Ministerie van Infrastructuur
en Waterstaat

Ontwikkelingen General Aviation

GA Season Opener

21-03-2026

Introductie

Arjan Vermeij

Senior beleidsmedewerker

CPL SEP brevethouder

Ministerie van IenW

Directie Onbemande Luchtvaart, Luchtruim en Luchthavens

Afdeling Luchtruim

Hoofdthema’s vandaag

- Actualiteiten
- Economische betekenis van GA in Nederland
- Vliegen in de nabijheid van snel militair verkeer

Schuivende panelen - veiligheid

- Hernieuwde focus op nationale veiligheid
- Nationaal Programma Ruimte voor Defensie (NPRD)
- Wet op de defensie gereedheid (WODG)
- Toenemende vraag naar luchtruim voor gebruik (nieuwe) onbemande systemen defensie
- Groot oefengebied F-35 in het noorden (Cross Border Area Noord)
- GA speelt een rol bij weerbaarheid Nederland met o.a. opleidingen, inspecties cruciale infrastructuur en vervoer naar offshore locaties

Schuivende panelen – interne prioriteiten

- Regeerakkoord: toekomst Lelystad Airport
- Nieuw luchthavenverkeersbesluit Schiphol en luchthavenbesluit Rotterdam – positie GA
- GA op de slotgealloceerde luchthavens (Schiphol, Rotterdam, Eindhoven, toekomstig Lelystad)
- Verduurzaming GA en vervanger van loodhoudende brandstoffen
- Steeds grotere behoefte vanuit onbemand voor vliegen middels beyond visual line of sight (BVLOS)
- U-Space en elektronische zichtbaarheid (E-conspicuity)
- Verhoging vliegbelasting voor passagiers zakelijke GA

Voortgang programma Luchtruimherziening

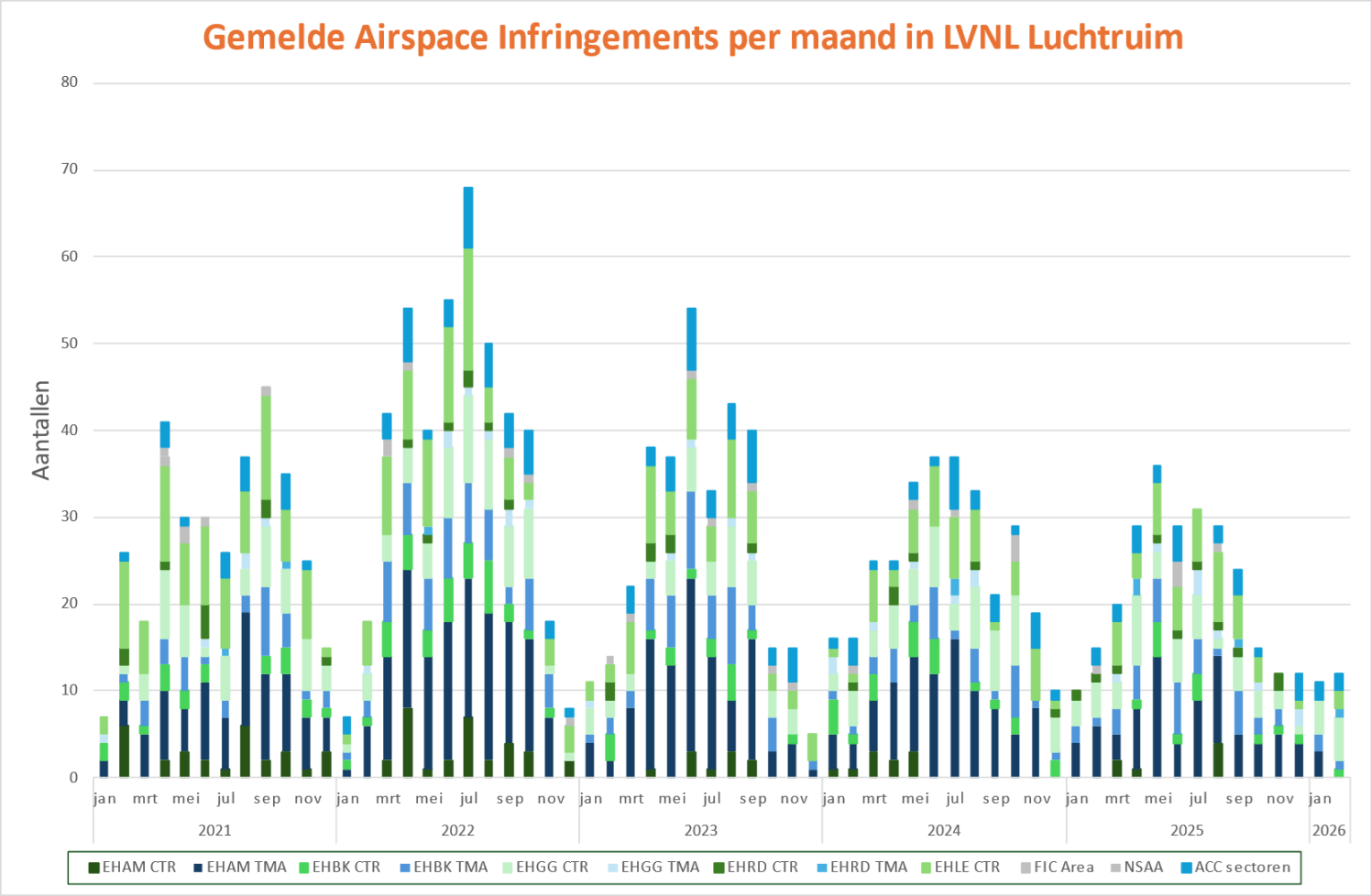
- Inhoudelijke appreciatie van het adviesrapport van de Adviescommissie ‘uitvoering programma Luchtruimherziening’ - **eind Q1 2026 naar Tweede Kamer**;

- Advies wordt betrokken bij de uitwerking in het Voorlopig Ontwerp; ook worden onafhankelijke effectanalyses uitgevoerd naar de milieu-effecten (geluid, CO2, stikstof).

- Voorstel voor besluitvorming samen met dit pakket naar Tweede Kamer - **tweede helft van 2026**.

- Daarna volgt meerjarige voorbereidingsfase van de implementatie. Dit omvat o.a. validatie, toetsing door ILT/MLA, training verkeersleiders en invoering in de systemen.

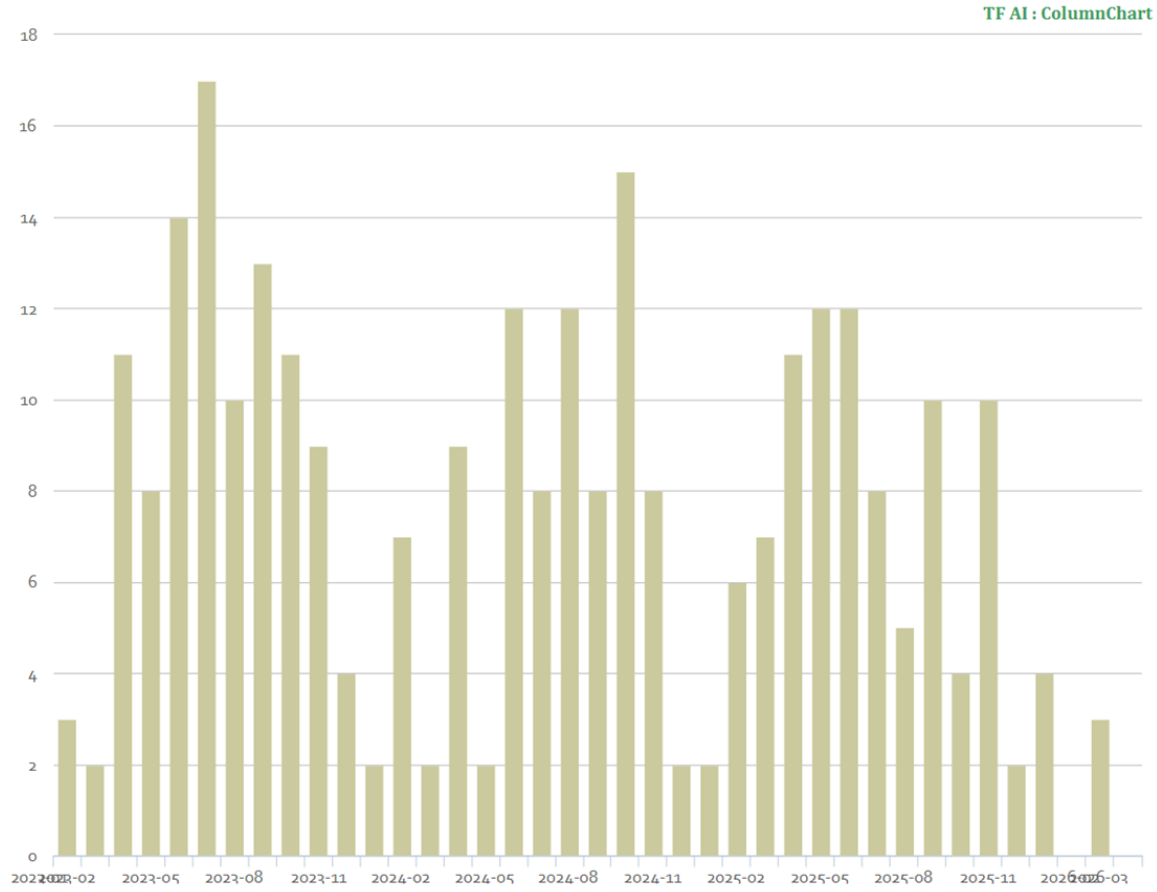
Aantal luchtruimschendingen omlaag



- Het aantal gemelde Airspace Infringements voor 2025 zit onder het niveau van de voorgaande jaren

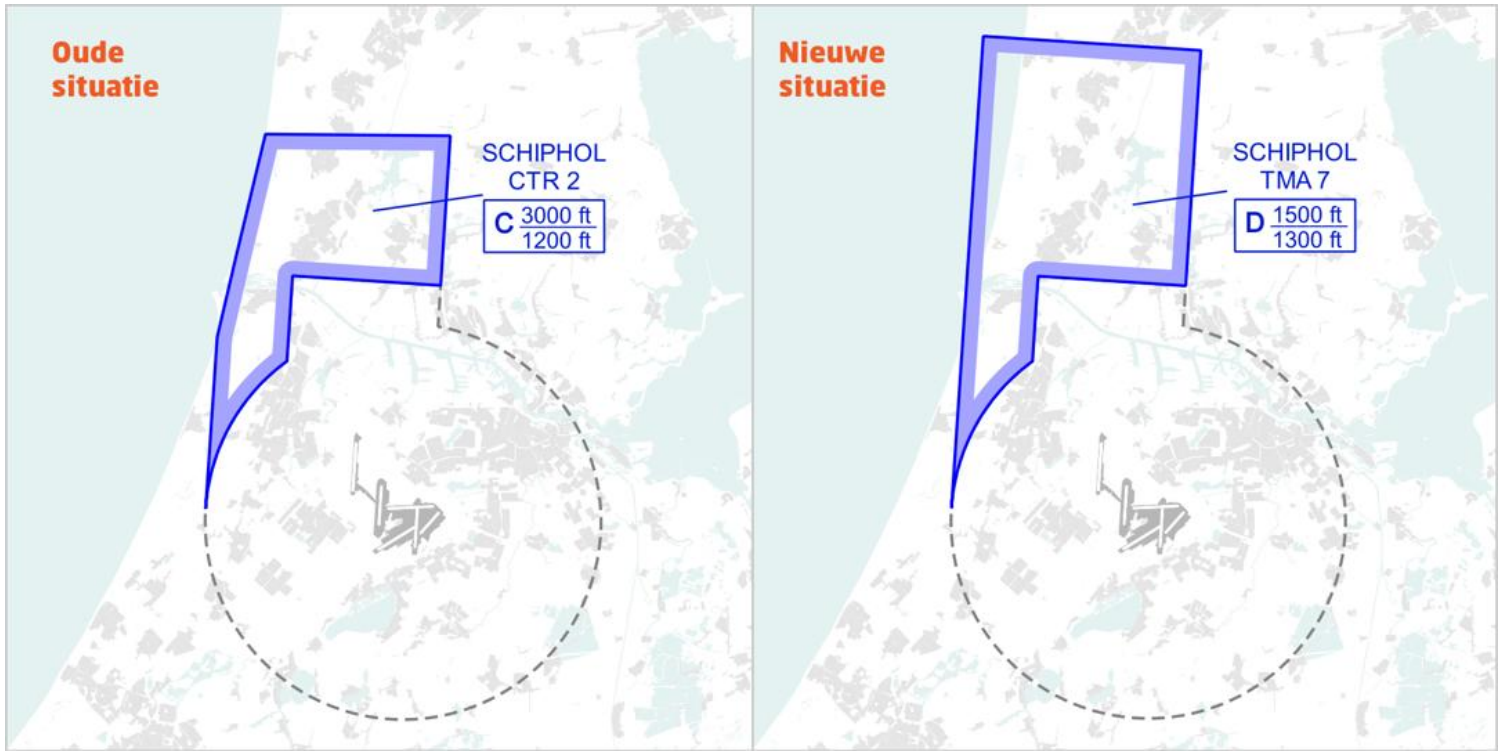
- 2023: 320
  2024: 296
  2025: 257

Aantal luchtruimschendingen omlaag



- Gemelde Airspace Infringements per maand in MilATCC luchtruim
- Blijf luchtruimschendingen melden bij het ABL

TMA 7 en 8 succesvol



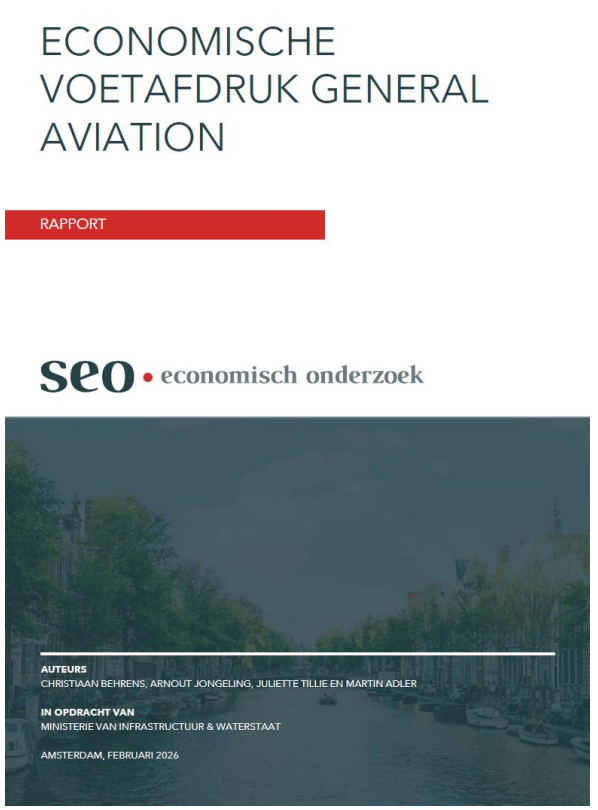
- Het aantal TCAS RA's sterk afgenomen, van gemiddeld 9 per jaar na nog maar 1 in het jaar sinds invoering maatregel
- Situatie opnieuw evalueren bij implementatie hoger naderen

Economische betekenis van GA in Nederland

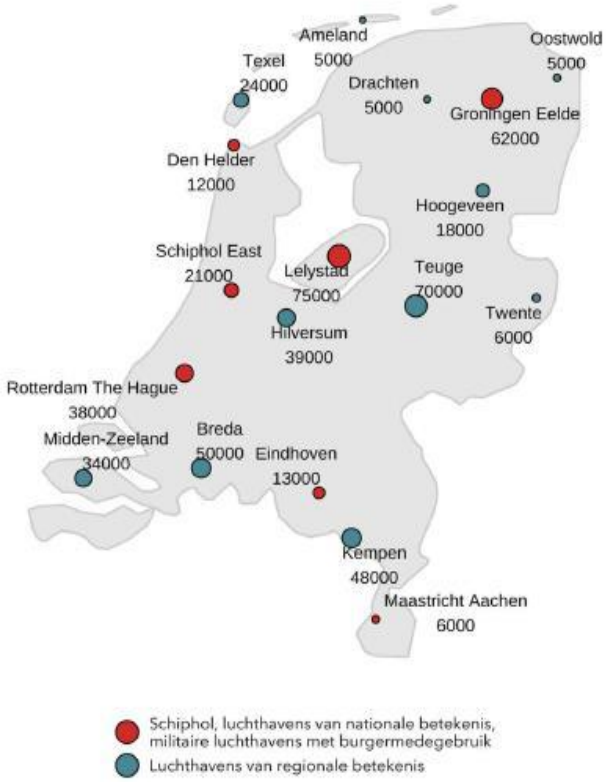
- Onderzoek uit laten voeren door SEO
- Ruim 7 duizend banen (fte) en bijna 1 miljard toegevoegde waarde verbonden aan GA

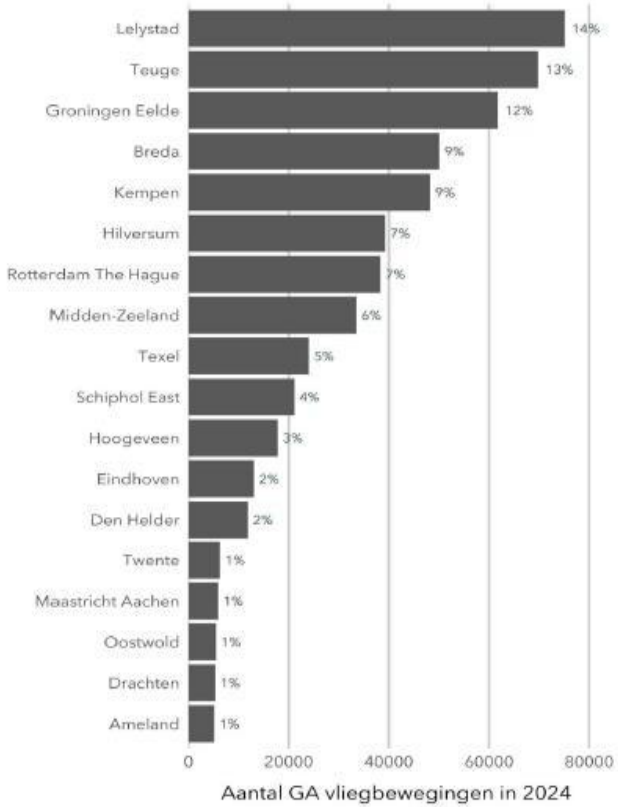
	Economische betekenis GA-sector in 2024	
Type impact	**Toegevoegde waarde**	**Werkgelegenheid**
Direct (op luchthaven-terreinen en daarbuiten)	€ 480 mln.	3.000 fte
Indirect	€ 270 mln.	2.600 fte
Afgeleid	€ 210 mln.	1.700 fte
Totaal	**€ 960 mln.**	**7.300 fte**

Bron: SEO Economisch Onderzoek op basis van economische impactanalyse



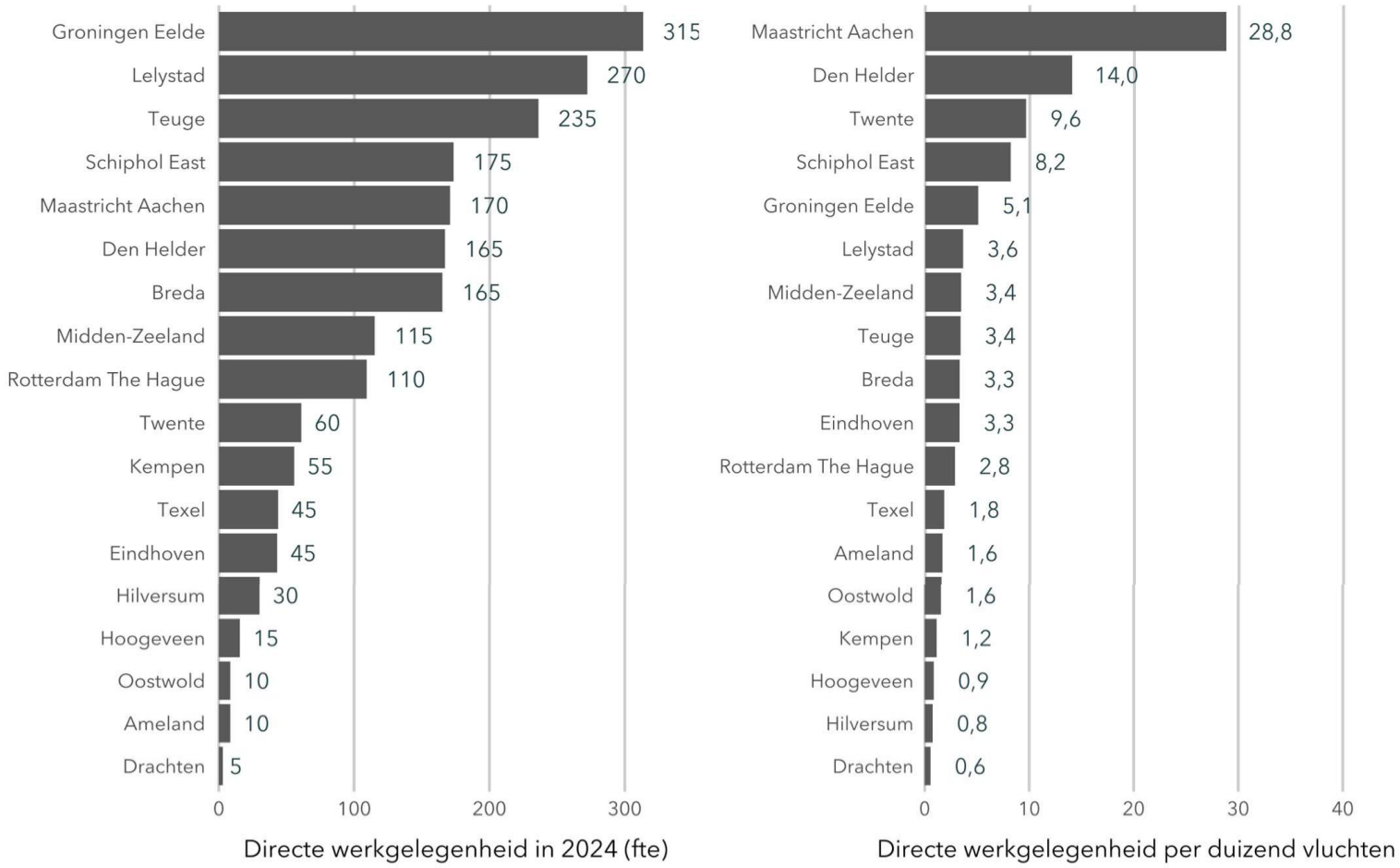
Verdeling GA in Nederland





60 procent op de luchthavens van regionale betekenis,
40 procent op luchthavens van nationale betekenis

Werkgelegenheid op de velden



Diverse sector

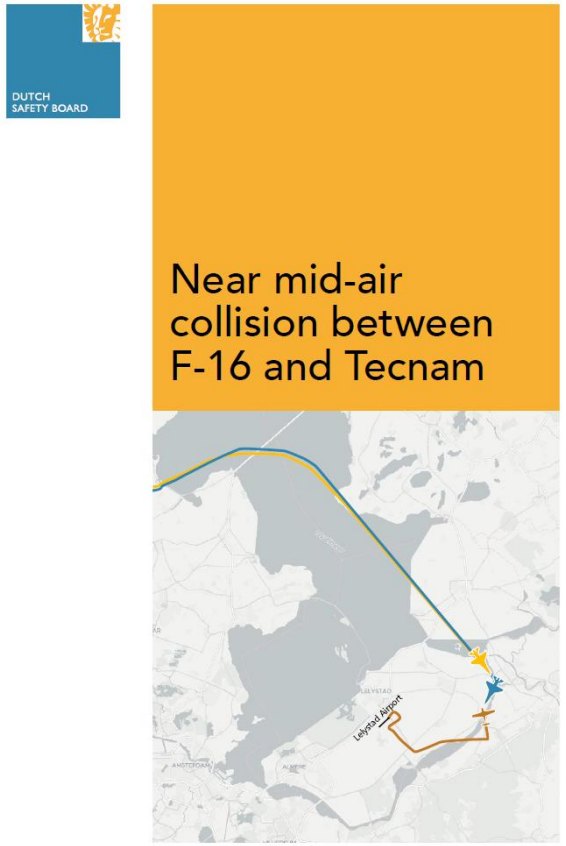
- Verscheidenheid aan luchtruimgebruikers vallen onder de paraplu GA, met grote verschillen in onderlinge operaties en type toestellen

- Veelzijdigheid van de sector zorgt voor een gebrek aan centrale organisatie

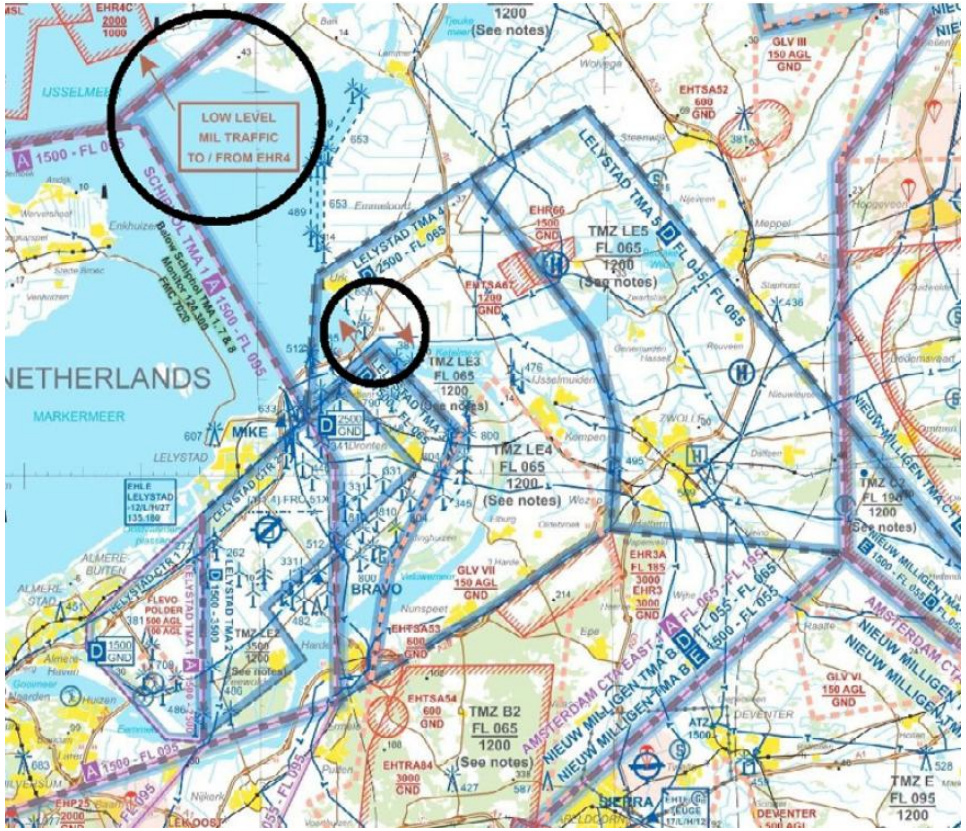
Zelfde toestel, verschillend doel

OVV rapport bijna botsing Tecnam en F-16

- Rapport in oktober 2025 gepubliceerd
- Vraagt aandacht voor grote snelheidsverschil tussen GA verkeer en straaljagers
- *“Het Commando Lucht- en Ruimtestrijdkrachten (CLRS) en het ministerie van IenW zullen gezamenlijk een risico-assessment doorlopen waarin mogelijke risico's van het operationele gebruik van militaire hogesnelheidsvliegtuigen in het Nederlandse luchtruim - in relatie tot de veilige scheiding tussen militair en burger luchtverkeer, inclusief de general aviation - worden bekeken. Vervolgens worden, indien het risicoprofiel daartoe aanleiding geeft, mitigerende maatregelen genomen om het risico te verlagen.”*



Indicaties op de kaart



Vliegen in klasse E luchtruim

	IFR	VFR
Service provided	Air traffic control service; VFR traffic information (as far as practical).	Traffic information (as far as practical).
Separation provided	IFR from IFR	Not provided
VMC minima	Not applicable	**At and above FL 100** 8 km visibility; 1500 m horizontal and 300 m (1000 ft) vertical distance from cloud. **Below FL 100** 5 km visibility; 1500 m horizontal and 300 m (1000 ft) vertical distance from cloud.
Speed limitation	250 KIAS[1)] below FL 100	250 KIAS[1)] below FL 100
Radio communication capability requirement	Yes	No[2)]
Continuous two-way air-ground voice communication required	Yes	No[2)]
Flight plan required	Yes	No
Subject to an ATC clearance	Yes	No

[1)] The speed limitation is not applicable to military jet fighters with a minimum air speed of 250 KIAS, provided that the flight visibility is more than 8 km (CTRs exempted).
[2)] Pilots shall maintain continuous air-ground voice communication watch and establish two-way communication, as necessary, on the appropriate communication channel in RMZ.

- In luchtruimklasse E geldt het principe van *see and avoid*
- Ontheffing militaire jachtvliegtuigen voor 250 knopen maximale vliegsnelheid
- Er geldt beneden de 3.000 voet hoogte wel een maximale snelheid van 450 knopen voor militaire jachtvliegtuigen
- Hou rekening met IFR vlieghoogtes bij het uitvoeren van VFR oefeningen in klasse E luchtruim (incident was op 3000 voet)

Bewustzijn omhoog

- Hou in uw vluchtvoorbereiding rekening met gebieden en type luchtruim waar militaire activiteiten kunnen plaatsvinden
- Straaljagerverkeer maakt ook gebruik van militaire luchthavens anders dan Volkel en Leeuwarden
- F-35 missies zijn hoger, minder noodzaak tot vliegen in het lagere luchtruim.
- NAVO luchtmachten maken ook gebruik van NL luchtruim
- Hou rekening met grotere hoeveelheid straaljagerverkeer in de dagen voor en na grote oefeningen (Frisian Flag/Ramstein Flag)
- Nieuwe routes F-35 voor Lelystad

Vragen?

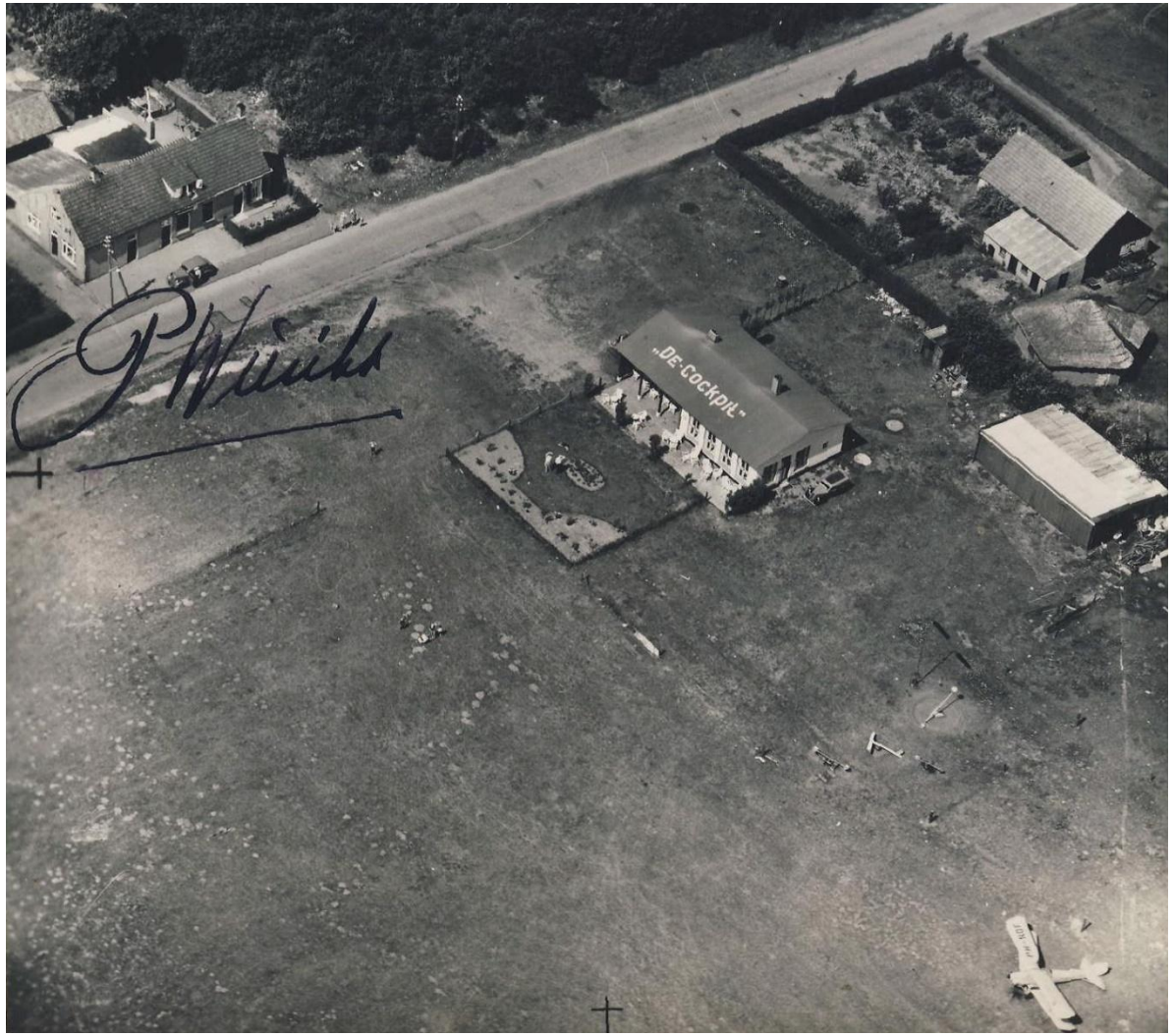
75 years BIA

Our journey to the100th anniversary

Jan Voeten & Max Boogaers

29 augustus 1949

19??



20 juli 1952

juli – augustus 1952

Positioning EHSE

- Third GA-airfield in movements
- Second GA-airfield in flight training movements

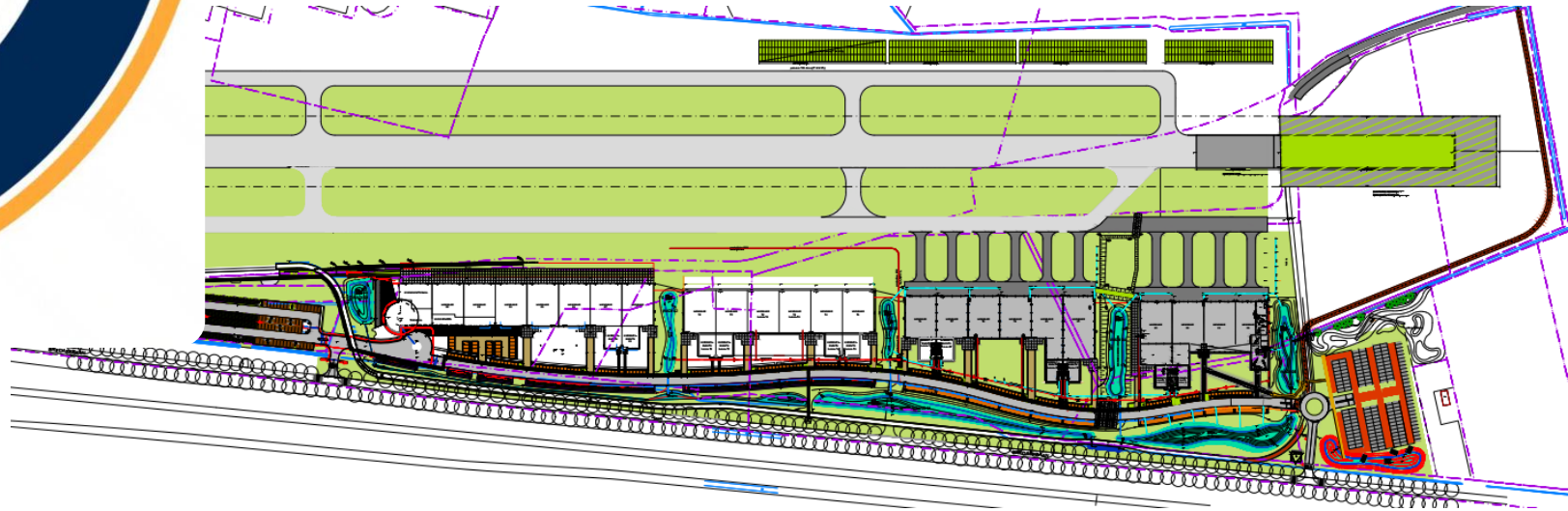
	EHLE	EHTE	EHSE	EHBD	EHHV
2024 total	75.112	69.831	50.098	48.201	39.249
2024 training fl.	46.094	33.931	35.276	26.334	19.729
2025 total	81.766	68.924	55.863	45.405	39.210
2025 training fl.	44.415	38.224	40.888	27.745	17.761

Positioning EHSE

Breda-Seppe is:

- A Point of Entry for Extra Schengen traffic: Passport Control by Royal Militairy Police
- A Transit Port for goods to and from countries outside EU: Customs & Excise

Positioning EHSE



We are proud member of ELECTRIC FLYING CONNECTION

transavia ventures

Provincie Noord-Holland

NRG 2FLY

E FLIGHT ACADEMY

KLM Royal Dutch Airlines

HANGAR ONE TECHNICS & AVIONICS

MAEVE

NACO

TU/e EINDHOVEN UNIVERSITY OF TECHNOLOGY

FIM!H energy solutions

COAST TO COAST e

dutch-shape

Brabantse Ontwikkelings Maatschappij BOM

Lelystad Airport

PLATFORM DUURZAAM VLIEGEN

EindhovenAirport

Twente Airport

NG

Provincie Flevoland

POWER UP

BROEKEMA AVIATION

DRONEPORT Sint-Truiden N 50°47'20" E 05°12'06"

ELYSIAN

nlr

BREDA INTERNATIONAL AIRPORT Sedge 1949

VÆRIDION

inholland university of applied sciences

BIA’s role in the national mobility system

- Present Position: vulnerable/ cyclically sensitive;
- Objective: more stable position, innovative and sustainable approach;
- Priority Target Group: economical triangle Breda/Tilburg-Rotterdam-Antwerp
- Intended Result: reliable, sustainable and efficient connectivity within Europe

The World Around Us

Interaction with Surrounding Airports:

REGULATIONS AND GOVERNMENT

Amsterdam Schiphol Airport Plans To Ban Business Aircraft in 2025

Amsterdam Schiphol Airport is proposing a ban on business aircraft starting in 2025 as part of a wider strategy to reduce noise and CO2 emissions.

1 januari 2026

Met ingang van **1 januari 2026** biedt Eindhoven Airport N.V. deze services niet meer aan. Klik hier meer informatie.

www.eindhovenairport.nl

General Aviation & Business Aviation - Eindhoven Airport

Defensie koopt Kempen Airport, vlak over provinciegrens bij Weert

Lelystad Airport wordt derde Nederlandse F-35A-basis

Is er een toekomst voor Rotterdam The Hague Airport?

Rotterdam The Hague Airport krijgt steeds meer kritiek.

Donkerrode cijfers, subsidietwisten en een alarmerend zinnetje: hoe moet het verder met de luchthaven van Deurne?

The World Around Us

IATA-baas: 'Nederland het grootste anti-luchtvaartland in Europa'

'Hogesnelheidslijn ten zuiden van Schiphol bijna drie maanden dicht voor renovatie'

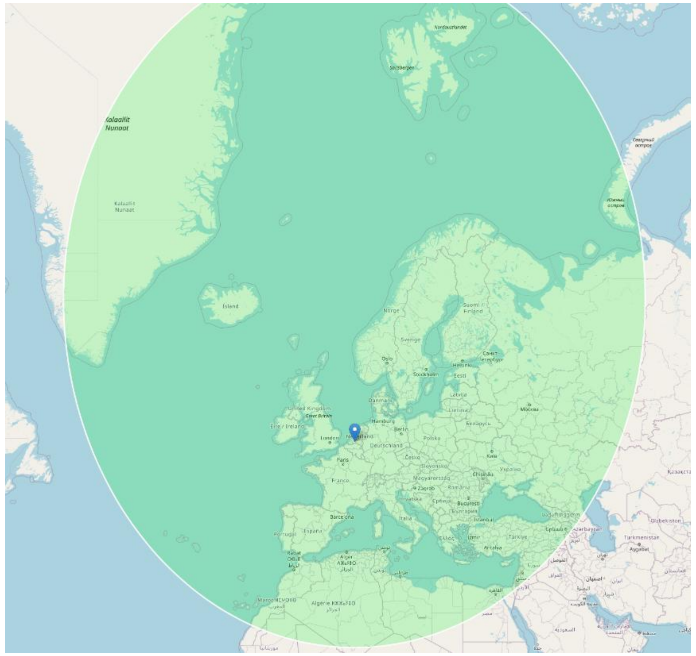
Storing in Kanaaltunnel verholpen: Eurostar naar Londen rijdt vandaag weer

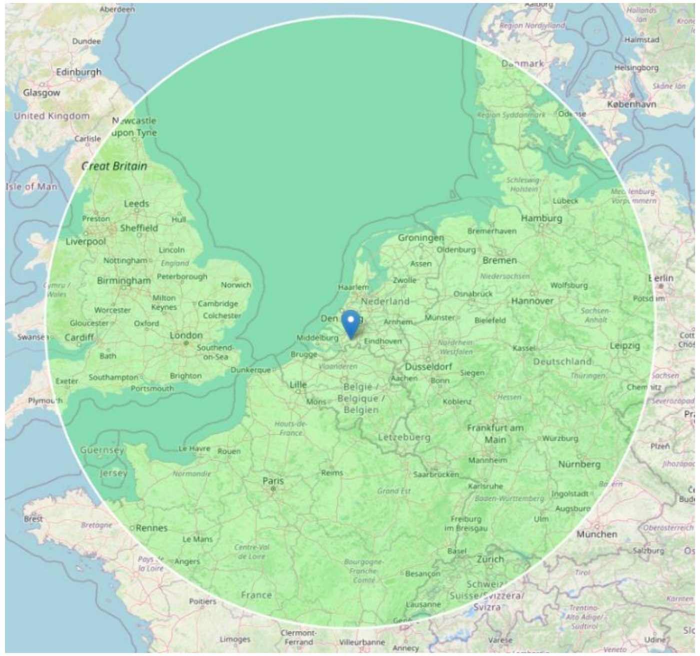
Development Scenarios: 2030 - 2049

- 2025-2030: voorbereiding
- 2030-2049: gefaseerde ontwikkeling
- Assumptions and Starting Points:
  - New Market Segments;
  - Complementary to Airports of National Importance;
  - Stronger Role in the Region.

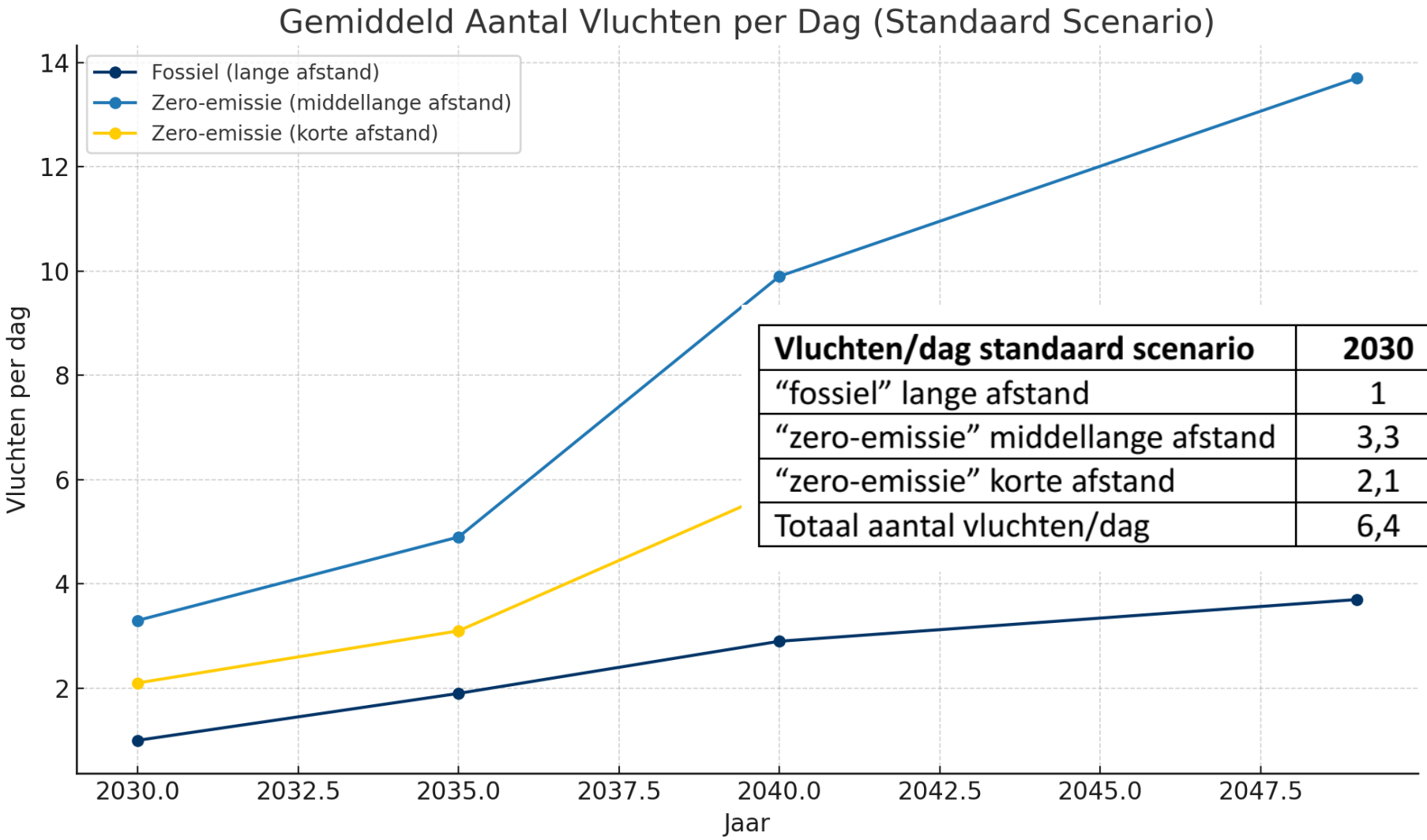
New Market Segments

- Business Flights (Fossil) →non-stop to the edges of Europe
- Medium Range Zero-Emission Flights: 400 → 600 km range
- Regional/Urban Zero-Emission Flights e-VTOLs:100 →150k urban/regional
- Freight Operations (Fossil and Zero-Emission)





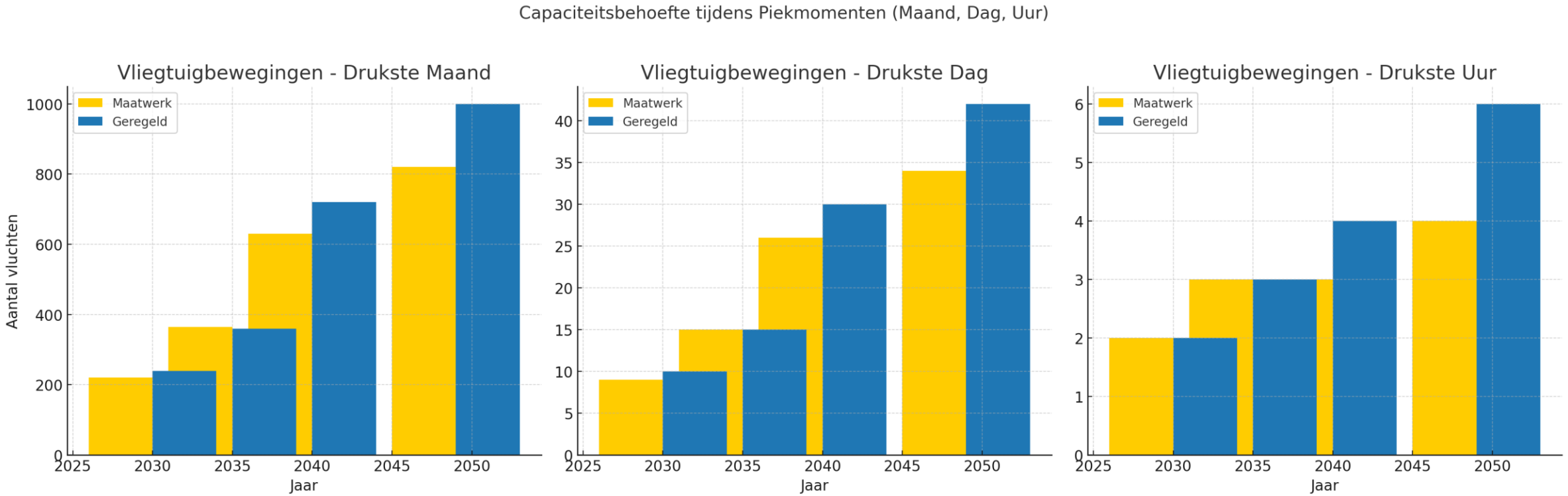
Forecast per Segment



Vluchten/dag standaard scenario	2030	2035	2040	2049
“fossiel” lange afstand	1	1,9	2,9	3,7
“zero-emissie” middellange afstand	3,3	4,9	9,9	13,7
“zero-emissie” korte afstand	2,1	3,1	5,8	7,5
Totaal aantal vluchten/dag	6,4	9,9	18,6	24,9

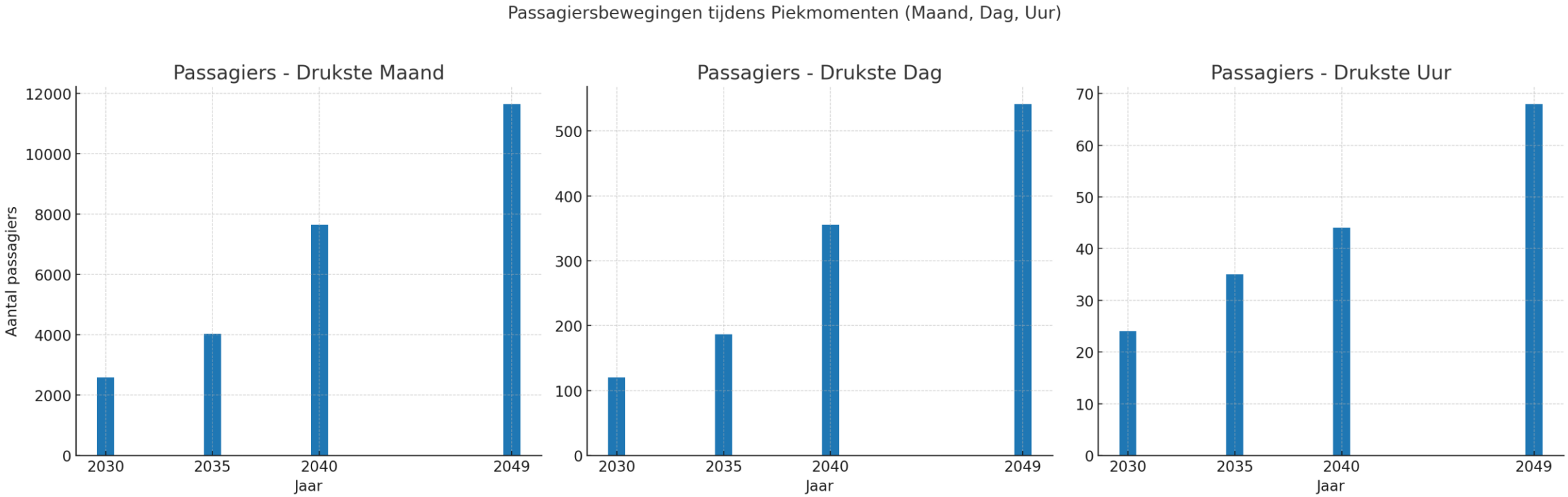
Capacity Planning

- Aircraft Movements



Capacity Planning

- No capacity problems foreseen



Unique Selling Point

Balance in all processes and ....

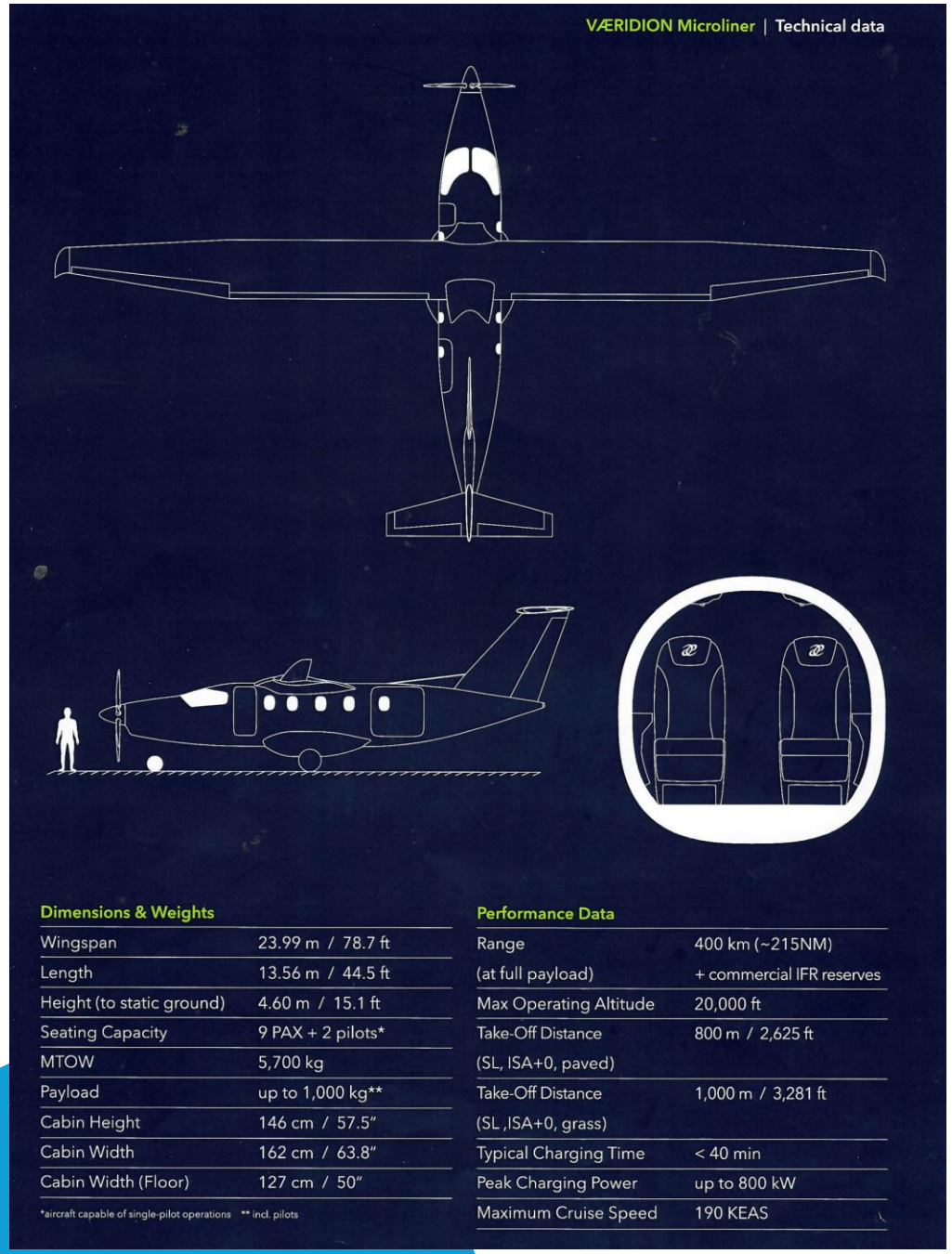
- **max 20 minutes between parking your car and taxiing out for take-off.**
- **Max 20 minutes between landing and leaving the airport.**

Design Aircraft

Pilatus PC-12: non-stop edges of Europe

Design Aircraft

Pilatus PC-24: non-stop edges of Europe



Design Aircraft

Vaeridion - zero emission - Germany

2030: 400 km range
2035: 500 km range
2040: 600 km range

Design Aircraft

2029
- SOP (Start Of Production)

2027
- Testing
- Certifications
- Authorisation

2026
- Flying demonstrator (prototype)
- Customer Presentations Worldwide

2023
- Start preliminary design

MDA1
Germany

The MDA1 has a capacity for up to 10 passengers or 3 IBC containers. A quick conversion from passenger to cargo is possible.

Design Aircraft

AURA-Aero: hybrid – 19 pax - France

Design Aircraft

ALIA VTOL

Vertical takeoff & landing
all-electric aircraft

ALIA CTOL

Conventional takeoff & landing
all-electric aircraft

$28 per hour	84% less emissions	$18 per hour	75% less emissions
ALIA VTOL energy cost vs. $311/hr Bell 407	ALIA VTOL vs. Bell 407	ALIA CTOL energy cost vs. $347/hr Cessna 208	ALIA CTOL vs. Cessna 208

280 km/u – actieradius 600+ km

Beta Technologies – 5 pax - USA

Design Aircraft - Freight

1000 kgs

Non stop

1000 km

6200 @ 90tb = 1m3

20.000 @ 50g = 1 tonne

Cessna C208B Super Cargomaster

Design Aircraft

eVTOL: Regional and Urban Transport to and from Zero-Emission Breda Airport Hub for Onward Zero-Emission Connection to Europe- mid range distance flights

Lilium testflight

Preconditions as from 2030

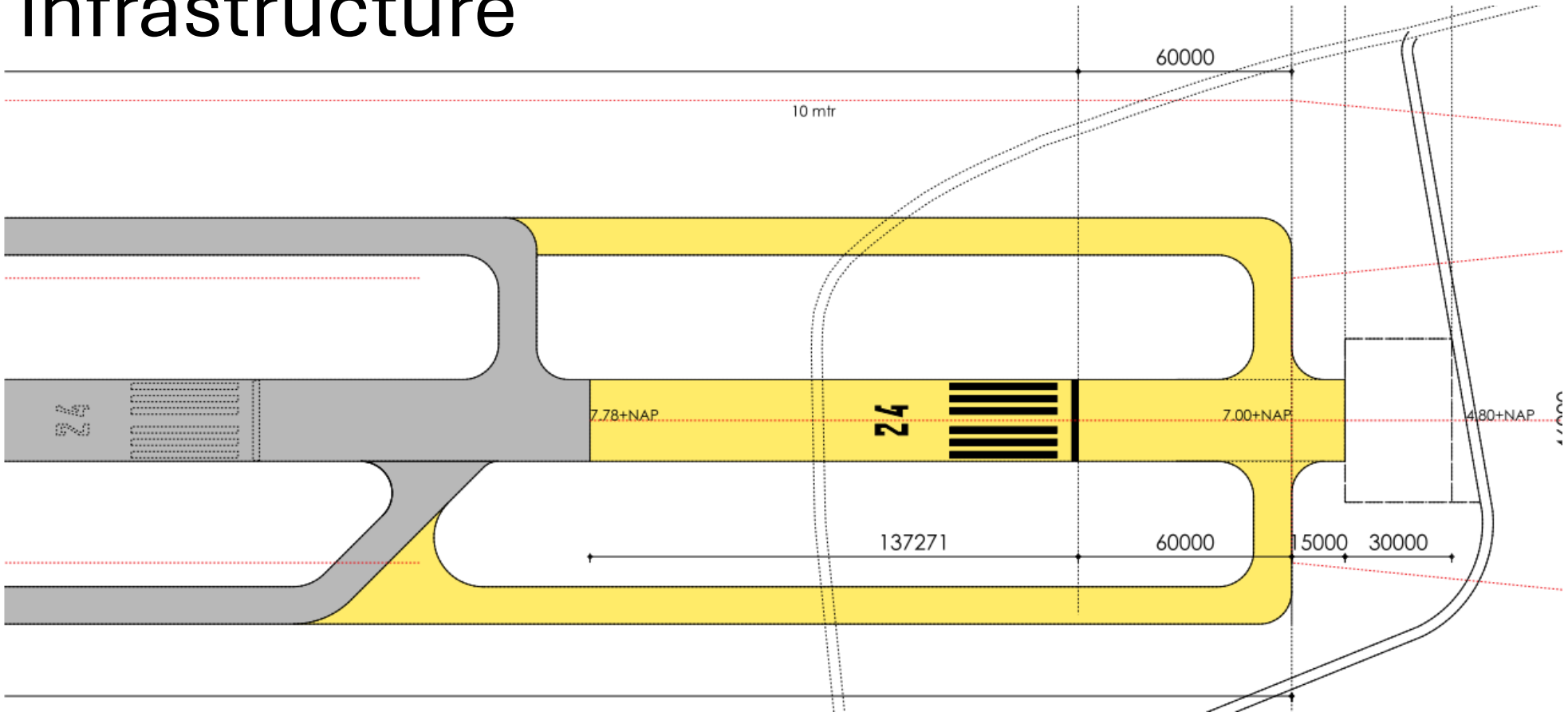
1. Airside Infrastructure and Design Aircraft Operational Capacities: e.g. Runway Length Fits Design Aircraft Operational Demands;

2. Operational Requirement: All Days Are Equal in Length for Aircraft Operations;

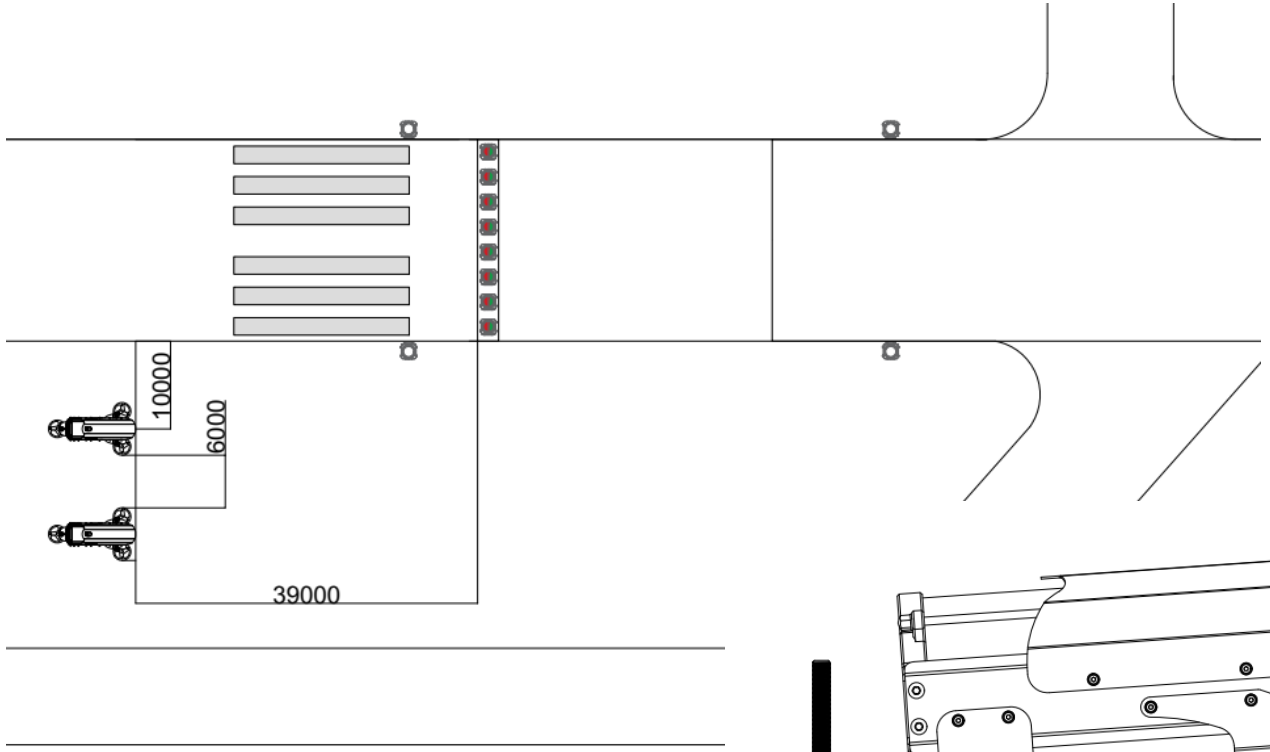
3. Reliability and Availability During Marginal/ Adverse Weather Conditions.

Meeting Preconditions…

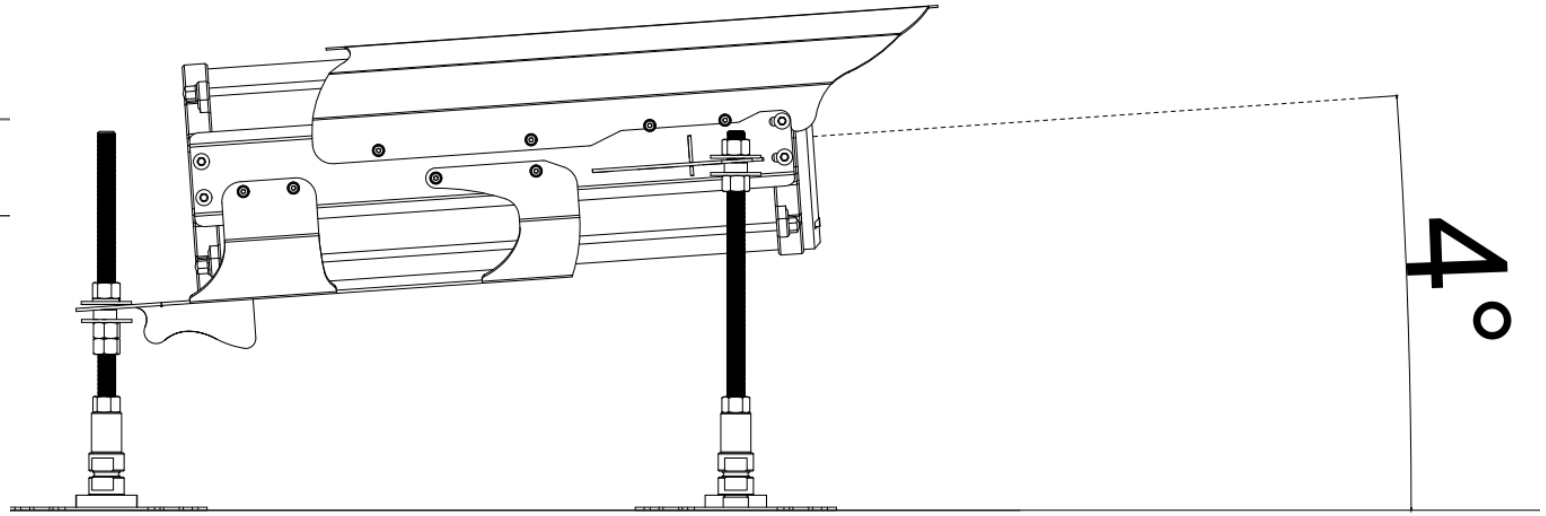
Design Aircraft match with Airside infrastructure



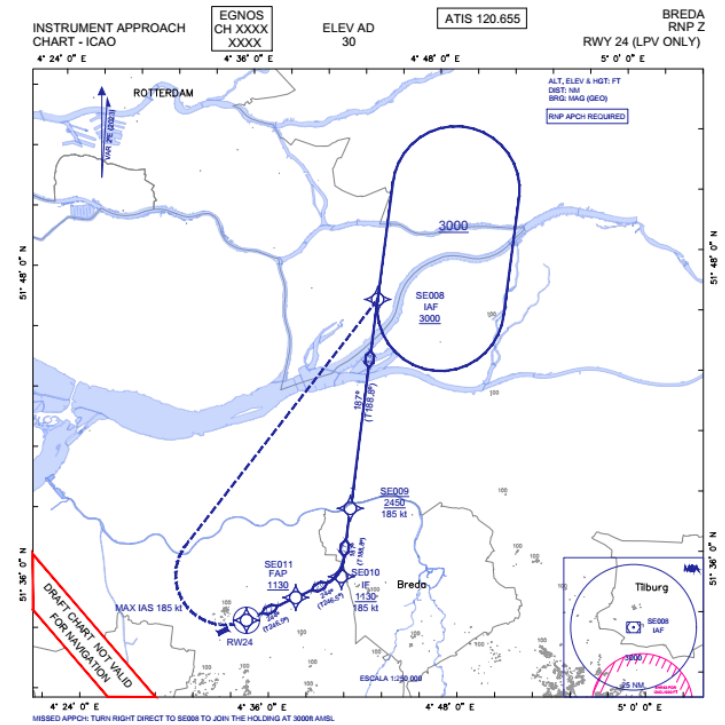
Meeting Preconditions ...

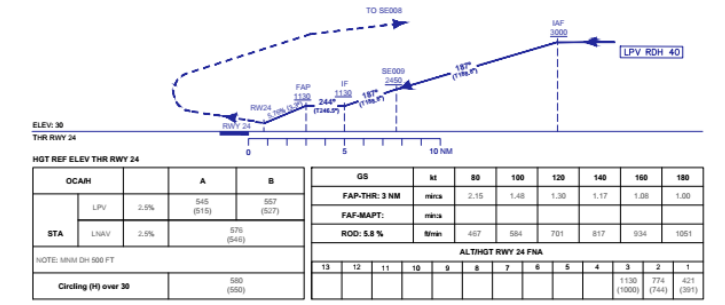


- PILOT Project;
- All Days Equal in Length;
- **Limited to Winter Periods**;
- 2026: Pilot with APAPI RWY06.



Meeting Preconditions .....



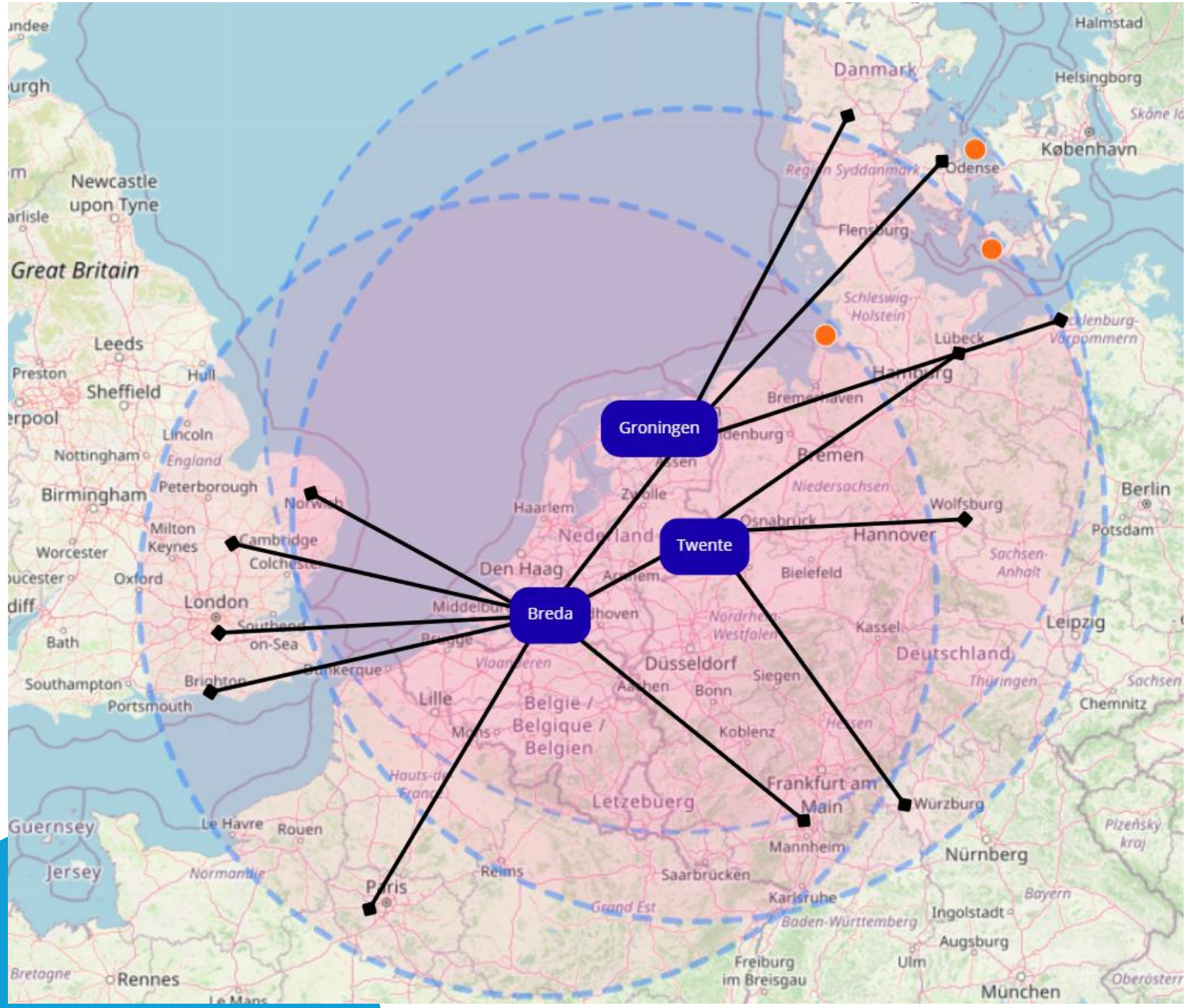


PILOT project important for NL and other countries

Phased project with evaluation moments

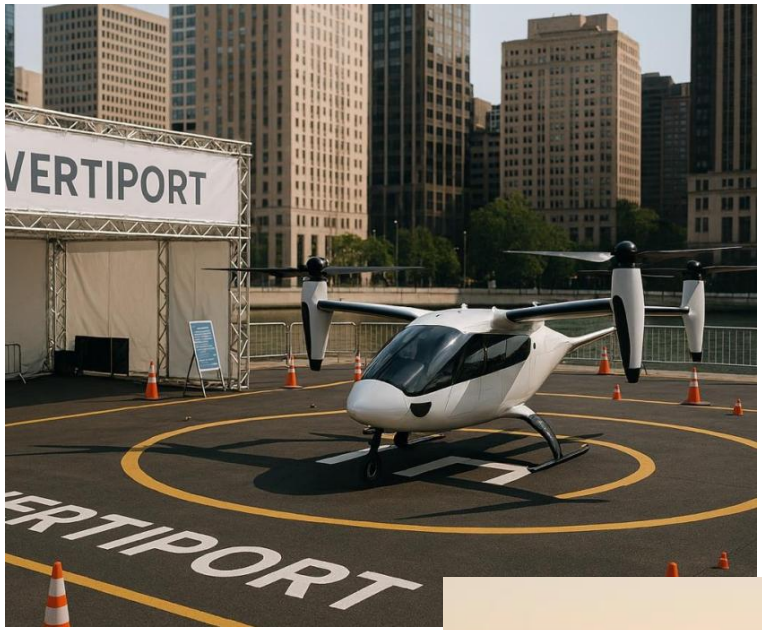
Summary Basic Points

- Forecast realistic/ conservative: to be confirmed by market research
- Market opportunities
- Innovative and Sustainable
- Pionier for Other Airports in and around The Netherlands
- Infrastructural Projects to start preparations: participation processes, building permits, project preparations,construction planning
- Partnership/ Collaboration/ Cooperation with other Airports, Aircraft Manufacturers and Operators.



First outlook potential route structures:

door-to-door zero emission connectivity



First outlook potential vertiport municipal infrastructure:

door-to-door zero emission connectivity

source: EFC Event – 29 October 2025 – NACO/Haskoning

Next Steps

- Confirmation of traffic forecast by:
  - Market research e-CTOL medium range;
  - Market Research Freight Development.
- Potential development of e-VTOL mobility in the economic region in general and for Breda Airport hub-function in particular (Regional and Urban Air Mobility);
- Definition of the integral Passenger and Freight Handling Process: requirements landside-terminal-airside;
- Phased Airside development, start up Planning Permission Procedure;
- Further detailing Airside Infrastructure:
  - Civil Works Airside;
  - Airfield Lighting concept;
  - Marginal/adverse weather operations, including Airspace considerations.
- Definition of required operational processes: e.g. Fire Cover, Winter Operations;
- Feasibility Study and Business Cases for the various business opportunities;

Thank you for your attention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Ministerie van Infrastructuur
en Waterstaat
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WRAP UP
GA Season Opener 2026