



**Czech
Hydrometeorological
Institute**

Convective Group CHMI

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CWG and MTG 3T Forum Workshop
17 May 2022

Motivation



South Moravia F4 tornado on 24 June 2021 17:14 – 17:53 UTC

Motivation

source: Tadeáš Bednarz



South Moravia F4 tornado on 24 June 2021, 6 deaths + 200 injuries, 15 billion CZK ~ 604 million EUR

Convective Group

small group of “experts” – today we are only 8

- forecasters working in shifts
(the brave ones, enthusiasts)
- mostly trained by ESSL Testbeds

inspiration from Poland end ESTOFEX

- dr. Mateusz Barczyk, IMGW
- dr. Tomáš Púčik, ESSL

Convective Group

support group, advisory body

- meteorological service work without the group
- forecasters on duty have responsibility and the last word

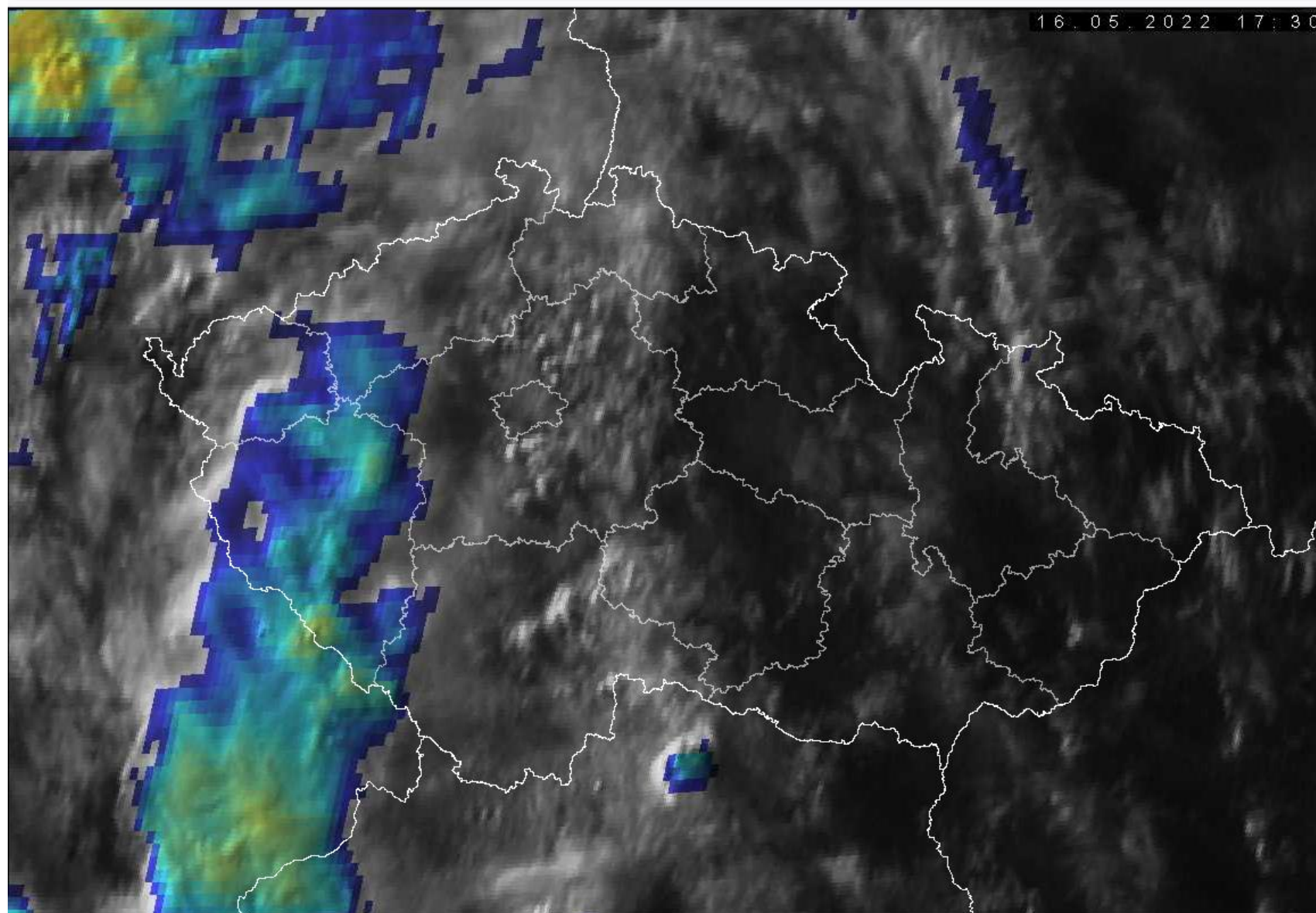
additional shift when convective storms are expected

- from 1 May till 31 August (\pm 2 weeks as needed)
- one “expert” on duty from 6:30 to 14:30 CEST

Main tasks for the Convective Group

- predict convective storms better than before
 - improve outputs for forecasting and nowcasting (cooperation)
 - adaptation of warning criteria and requirements
- study material and data before the morning consultation of forecasters → issue draft alert → join the consultation
- prepare texts for the summary report (the media) and social networks, explain forecast uncertainty
- training for forecasters:
 - Nowcasting quick overview – “cookbook” at hand/on the wall
 - MOODLE course Convective Storm – essential theory in Czech
 - training before the season – practical, case studies and new criteria

How do we use EUMETSAT data?



16. 05. 2022 17:30

JSMSGView

16.05.2022 17:30 UT

Every 8th 4th

- 16.05.2022 19:15 ^
- 16.05.2022 19:00
- 16.05.2022 18:45
- 16.05.2022 18:30
- 16.05.2022 18:15
- 16.05.2022 18:00
- 16.05.2022 17:45
- 16.05.2022 17:30
- 16.05.2022 17:15
- 16.05.2022 17:00 v

LOAD (2 / 4)

Produkt: Sandwich IR BT v

Projekce: CZ v

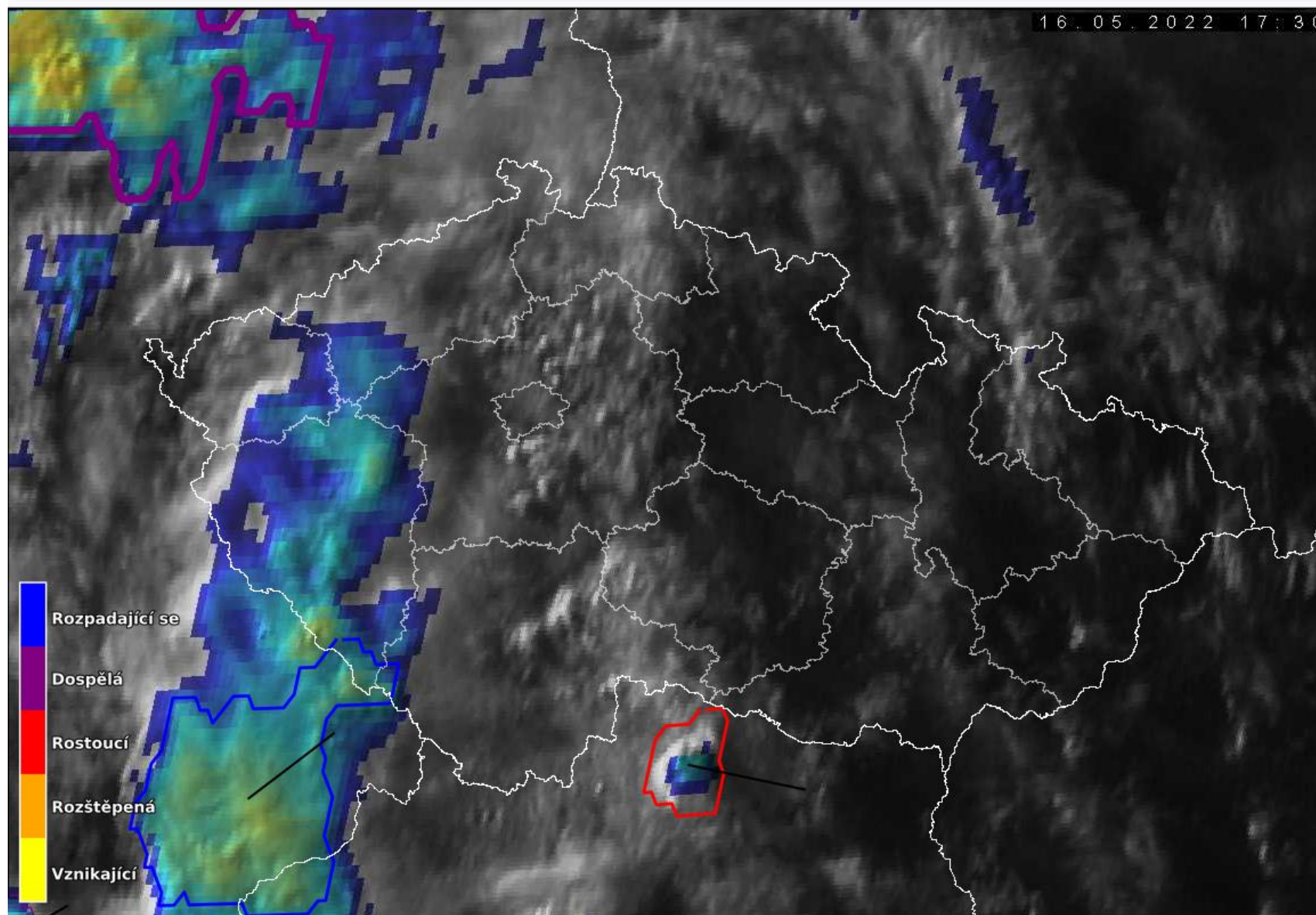
Zdroj: msg (15 min) v

SAFNWC ☐ CMa v 100 v

Legenda ☐ 100 v

< < || >> > >| ANIM: 500 ms/img v LAST: +2 s v AUTO UPDATE 2 min v UPDATE NOW

OVR1 boundaries v 100 v OVR2 none v 100 v OVR3 regions v 100 v



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LOAD (2 / 4)

Produkt: Sandwich IR BT

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Zdroj: msg (15 min)

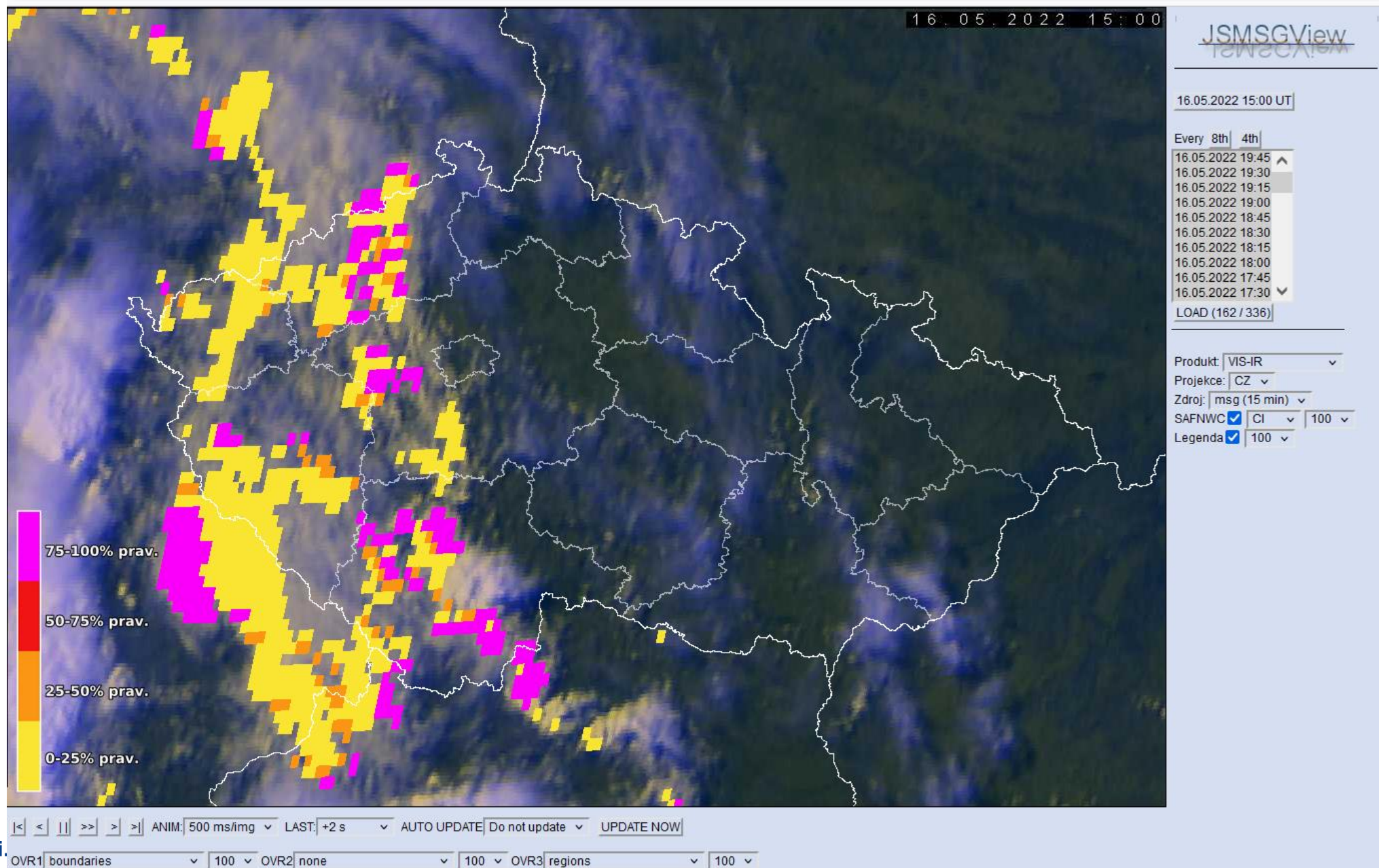
SAFNWC ☒ RDT 100

Legenda ☒ 100

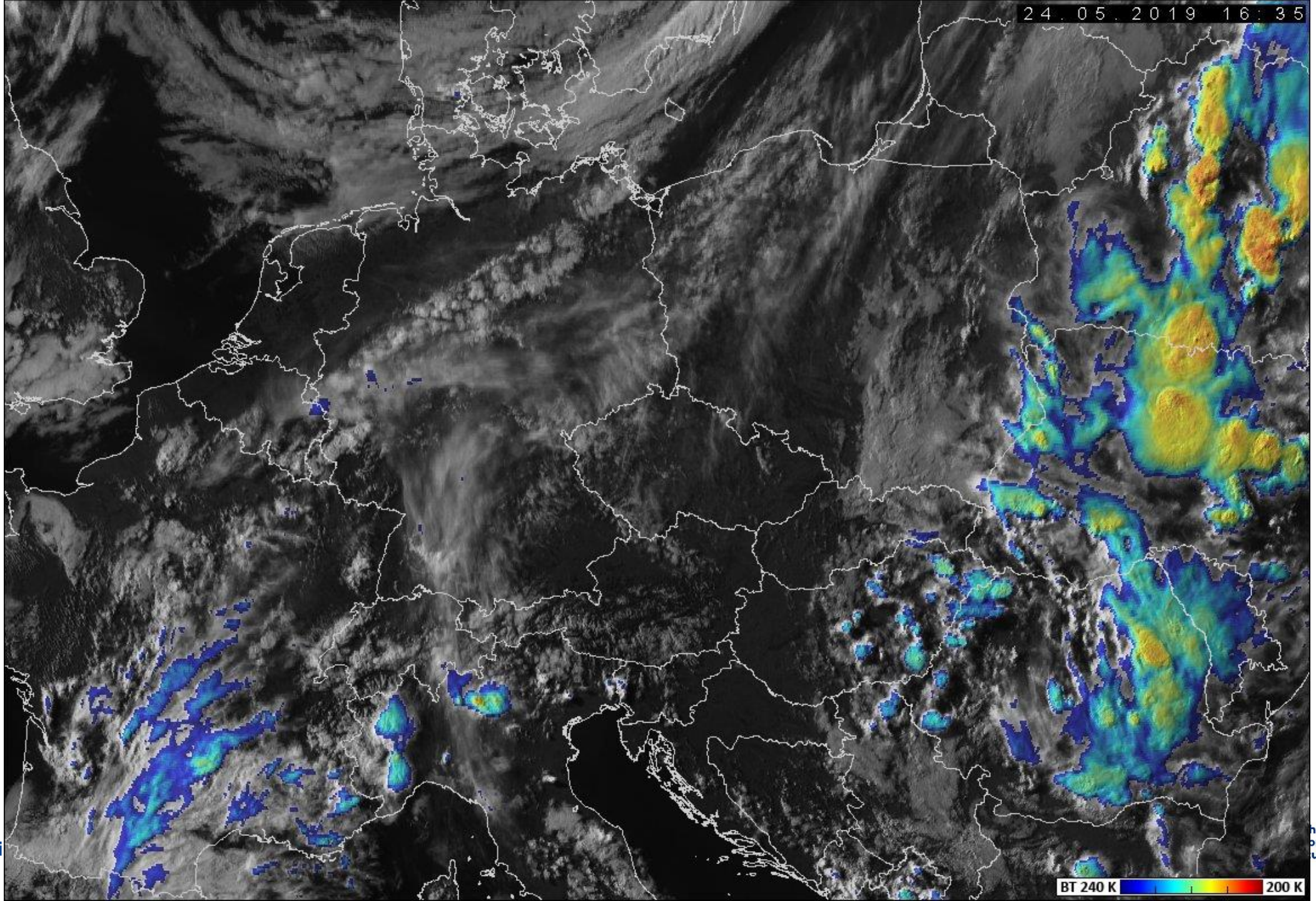
Rozpadající se
Dospělá
Rostoucí
Rozštěpená
Vznikající

ANIM: 500 ms/img LAST: +2 s AUTO UPDATE 2 min UPDATE NOW

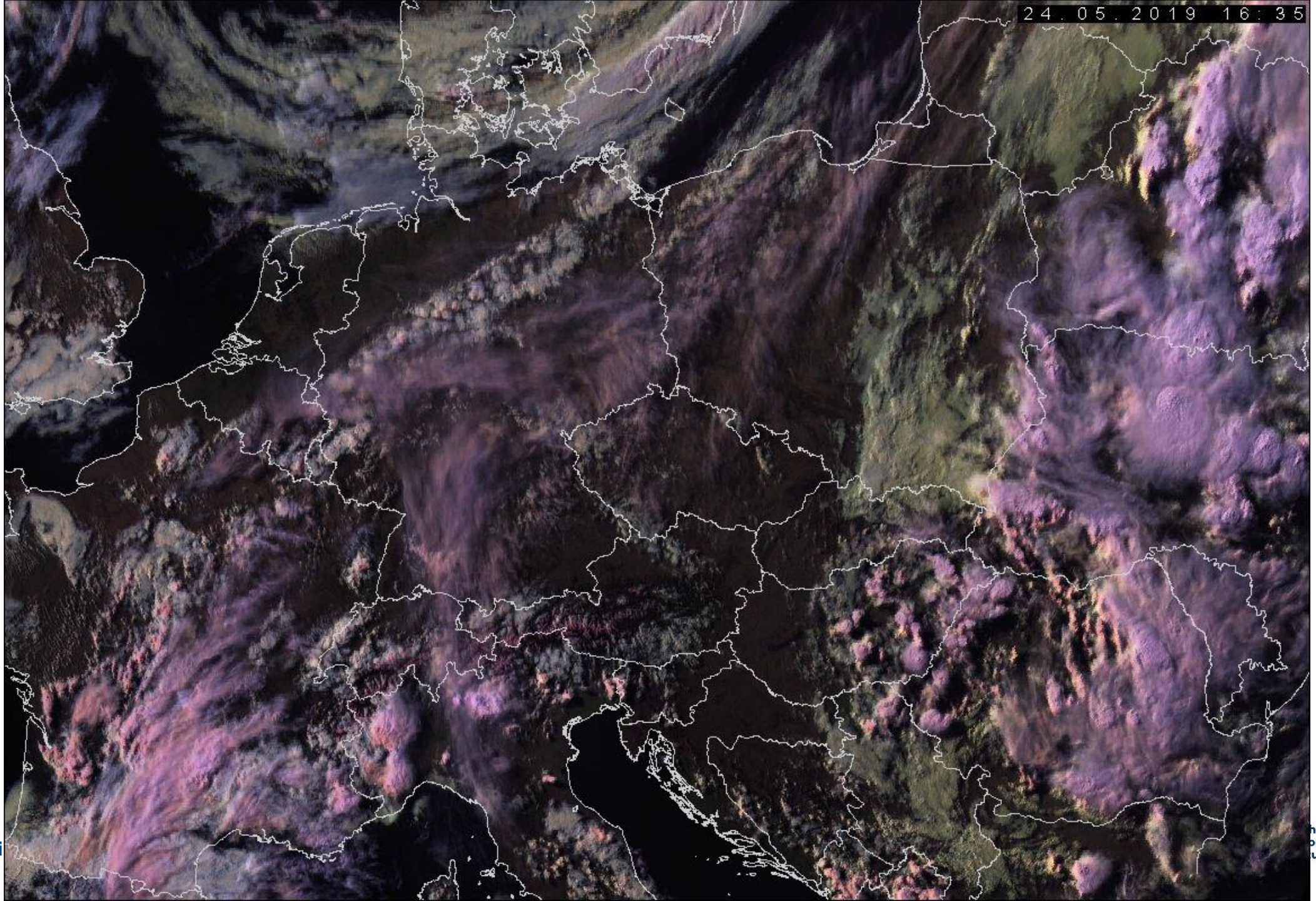
OVR1 boundaries 100 OVR2 none 100 OVR3 regions 100



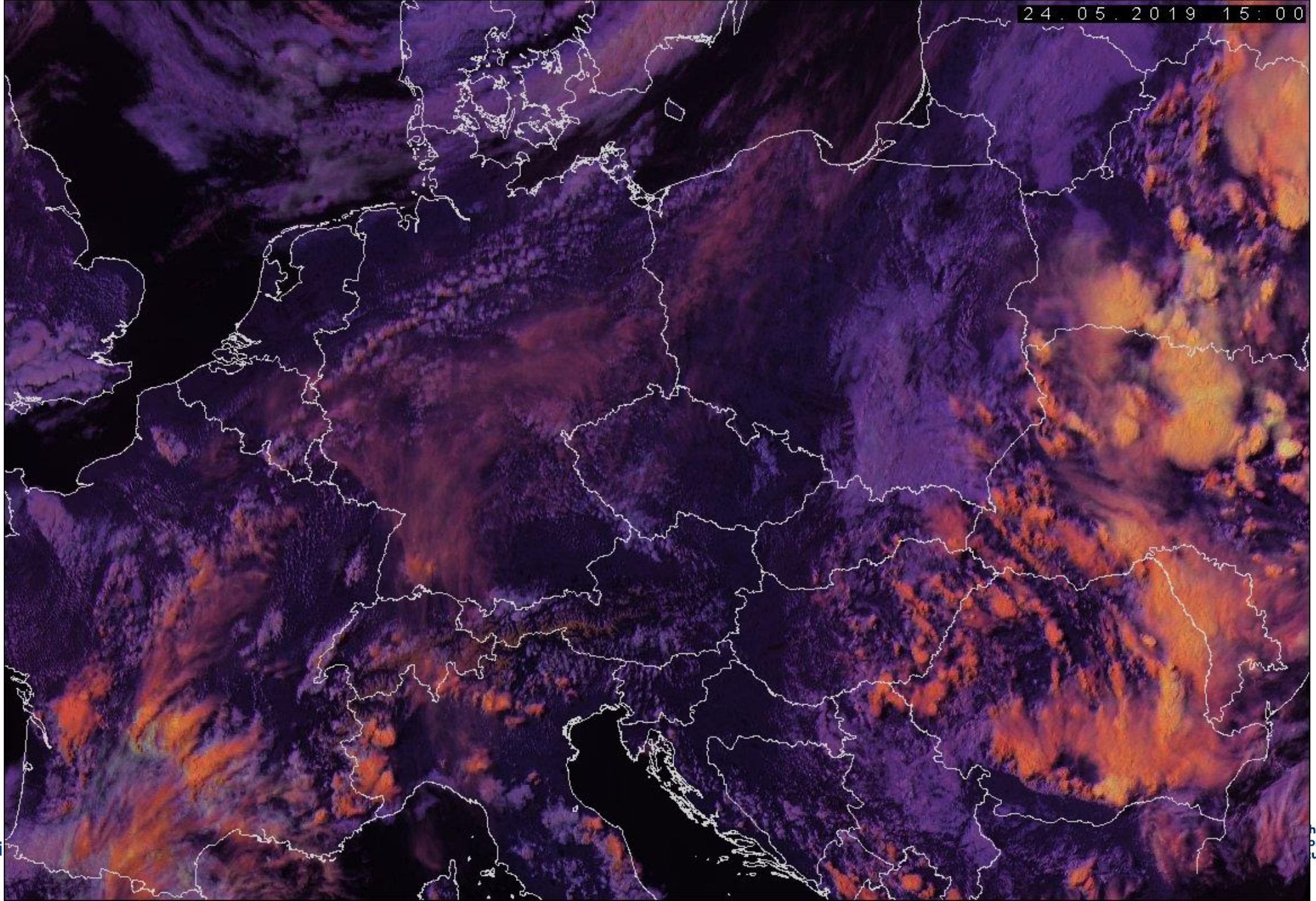
24.05.2019 16:35



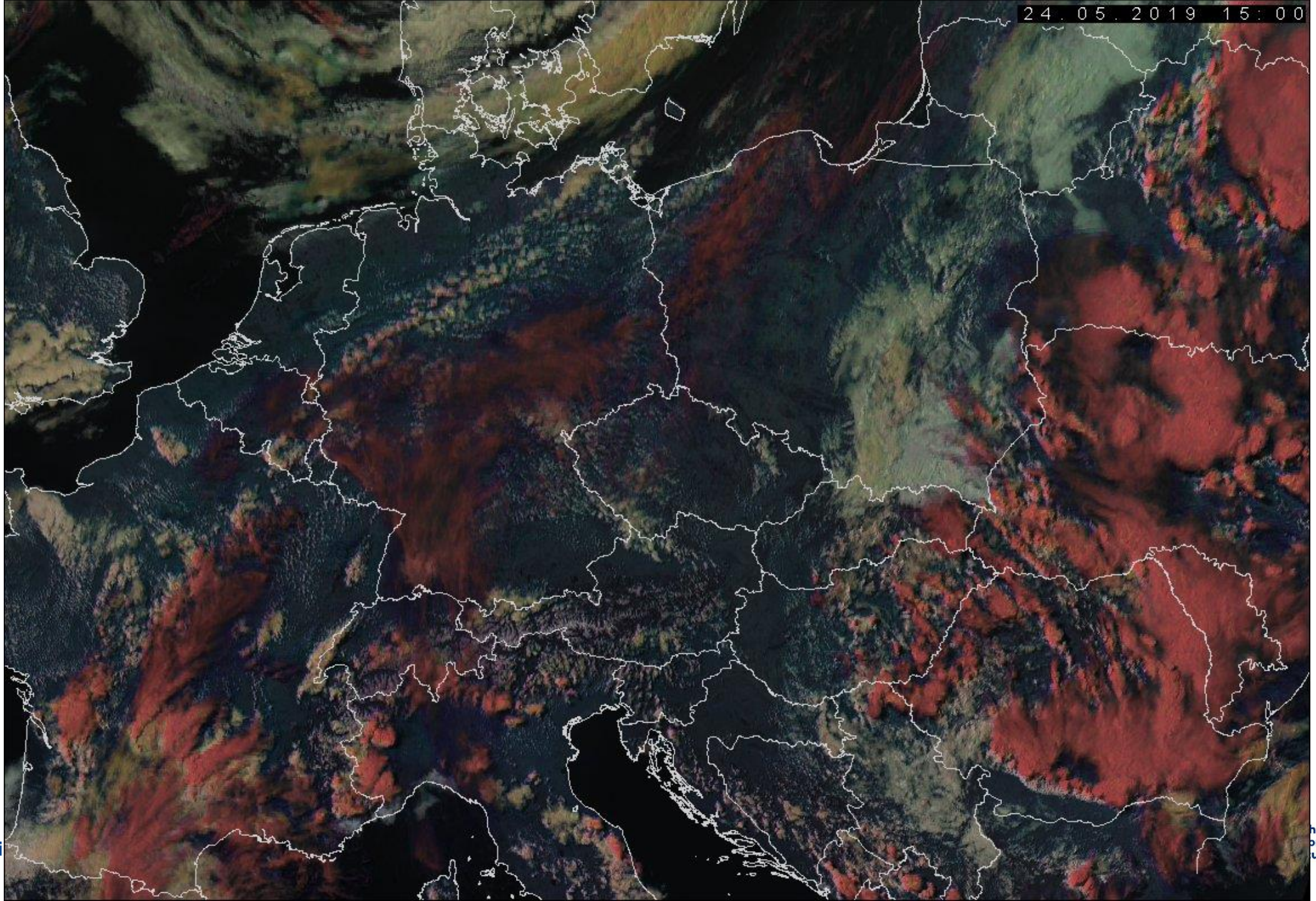
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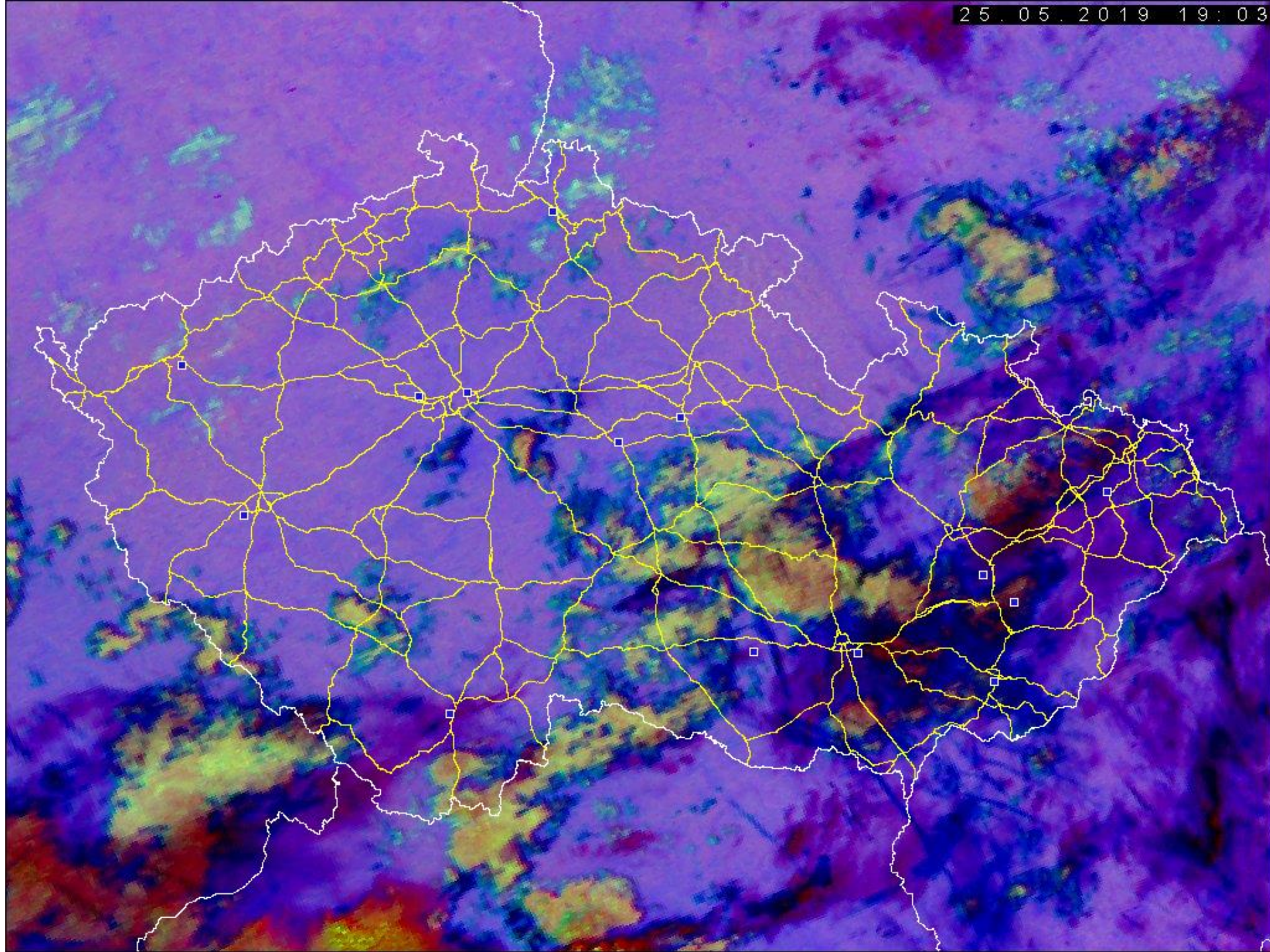
24.05.2019 15:00

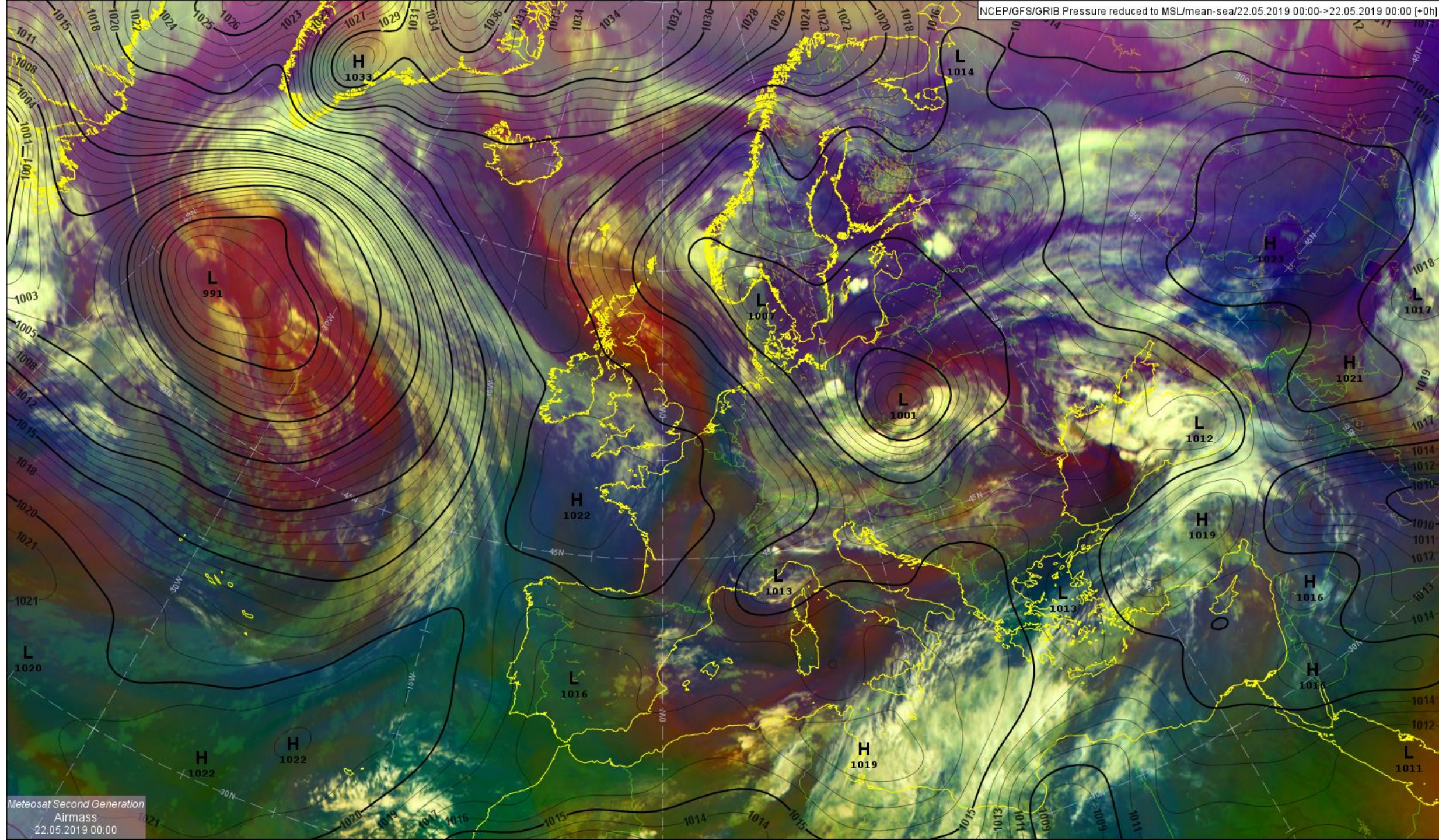


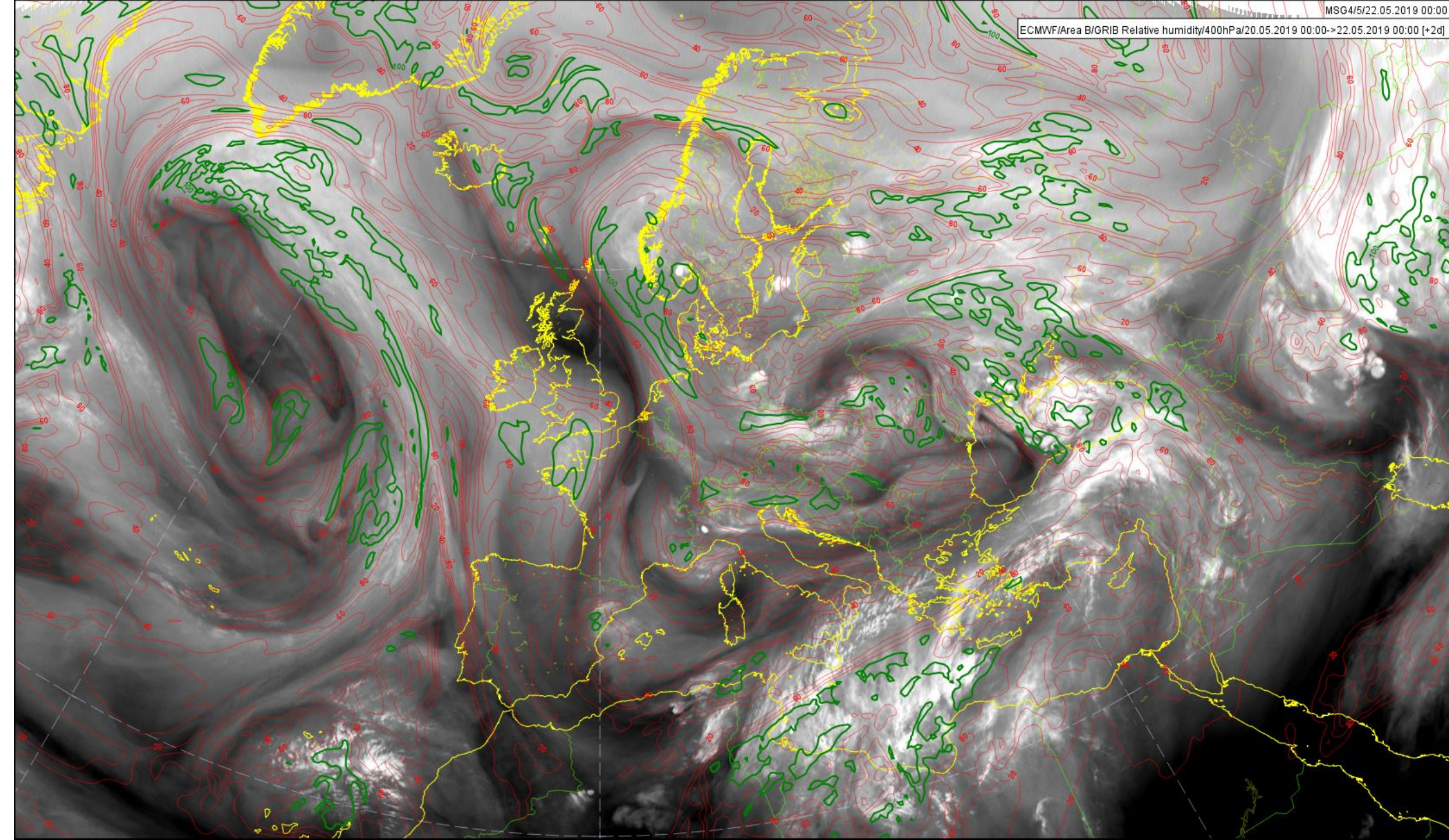
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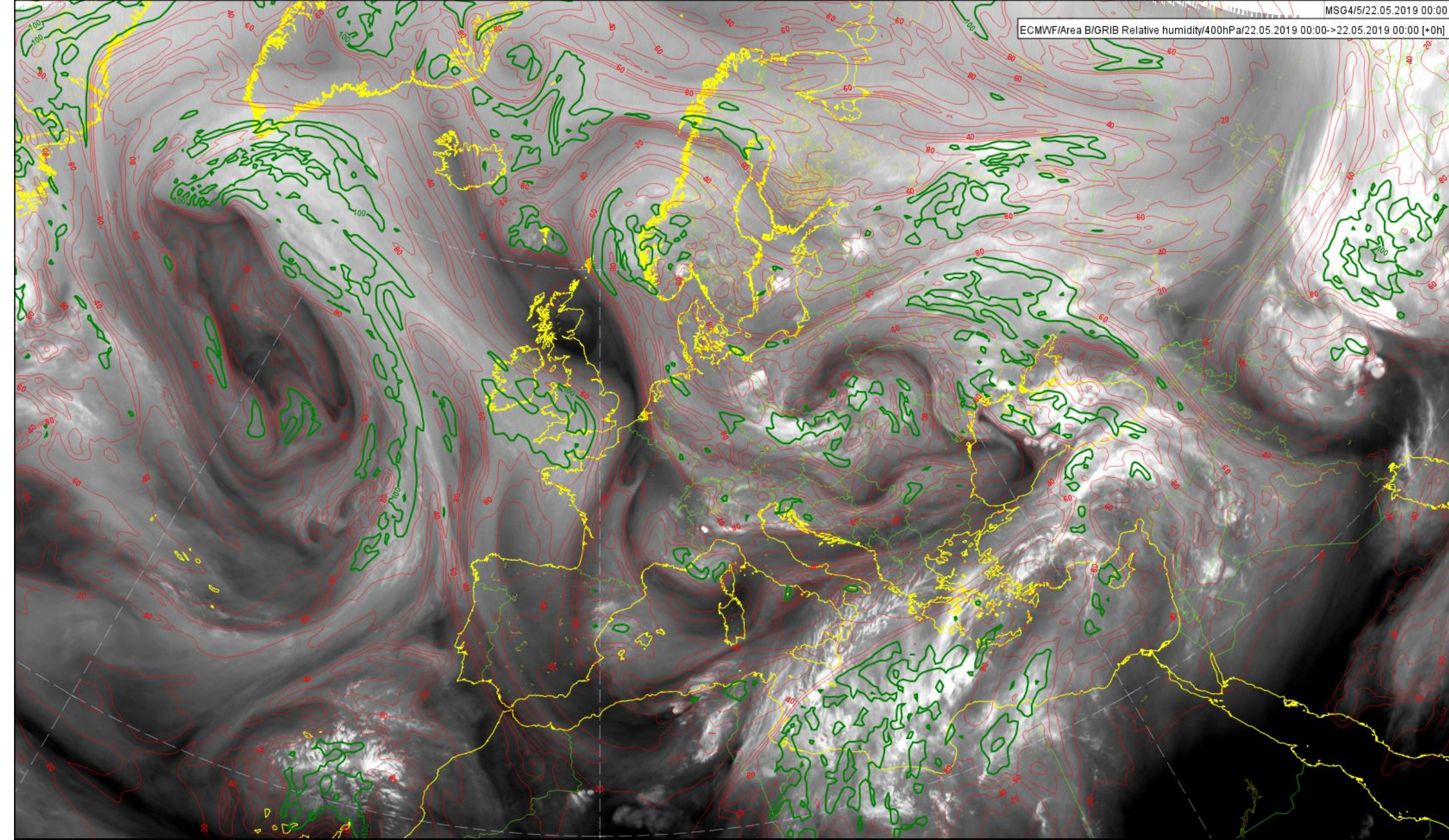


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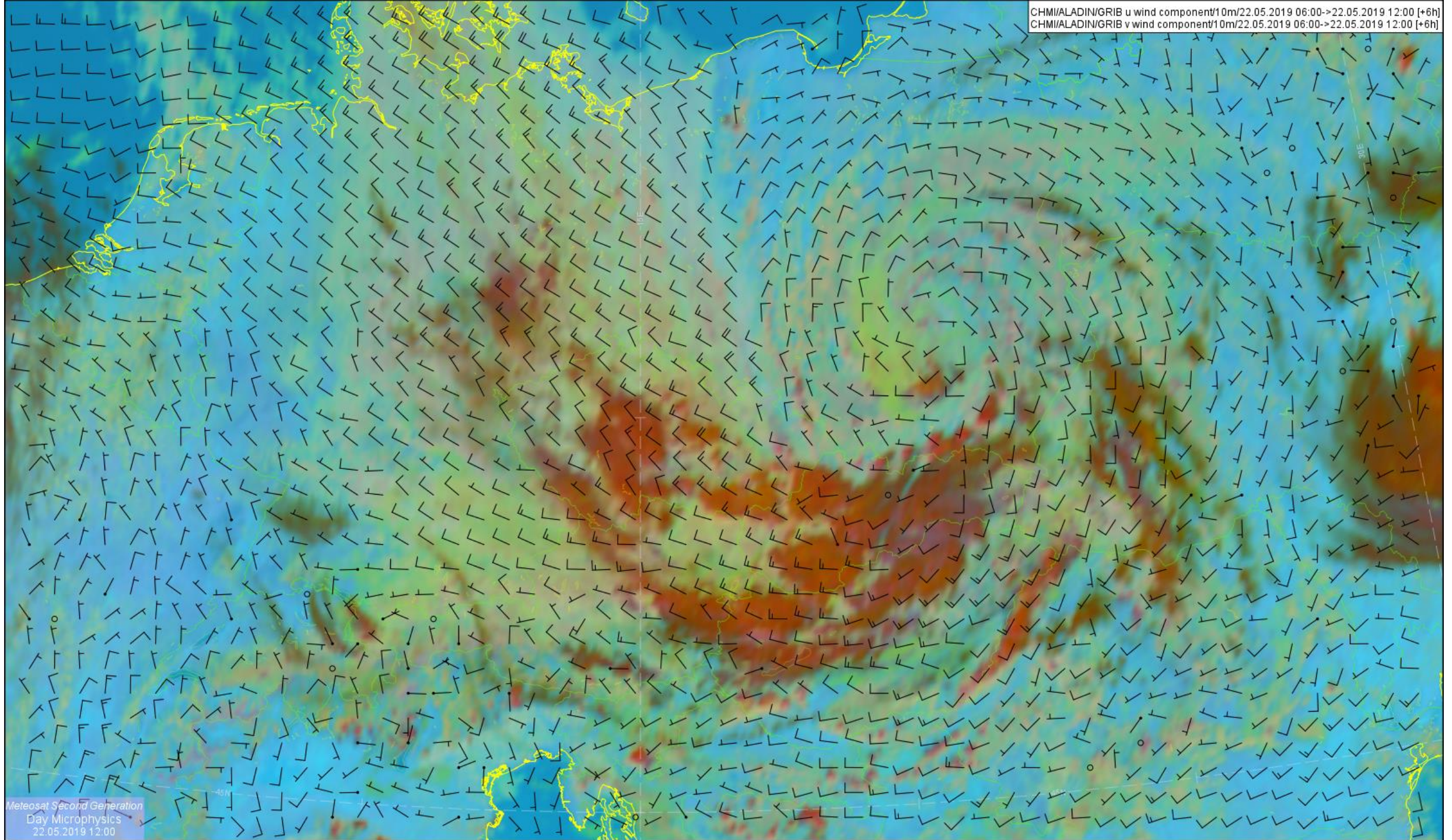


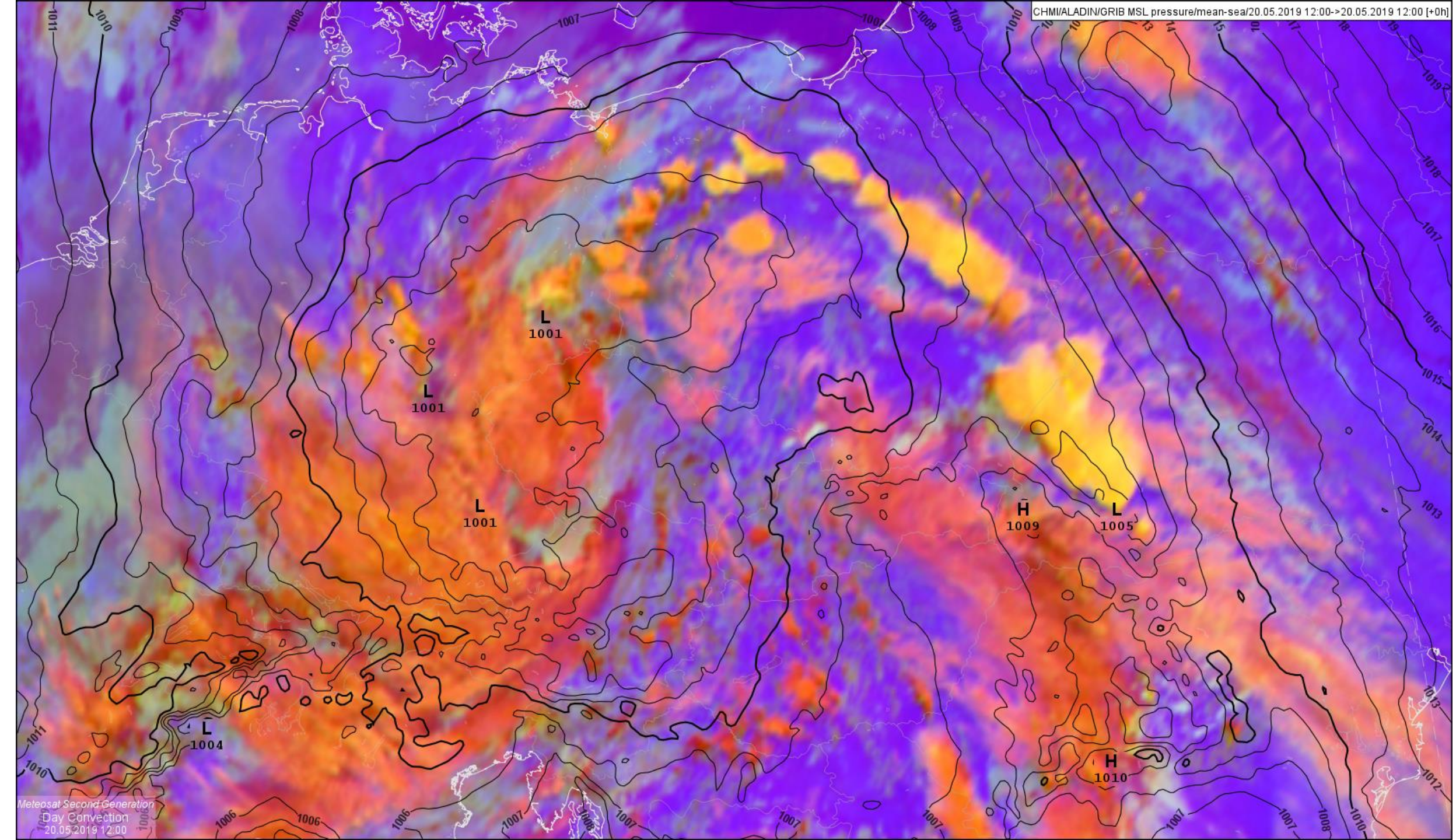






CHMI/ALADIN/GRIB u wind component/10m/22.05.2019 06:00->22.05.2019 12:00 [+6h]
CHMI/ALADIN/GRIB v wind component/10m/22.05.2019 06:00->22.05.2019 12:00 [+6h]





How could we use EUMETSAT data more?

- real-time satellite data
 - RGB and Sandwich products
 - NWC SAF – RDT, CI
- combination with NWP (ePort, Visual Weather)
- Case Studies
- training for forecasters (EUMeTrain, Summer School)

What is your experience?

slido

Join at
slido.com
#CWG



Thank you for sharing

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