



Meteorologisk
institutt

Vær, vind og strøm – Skagen Race 2013

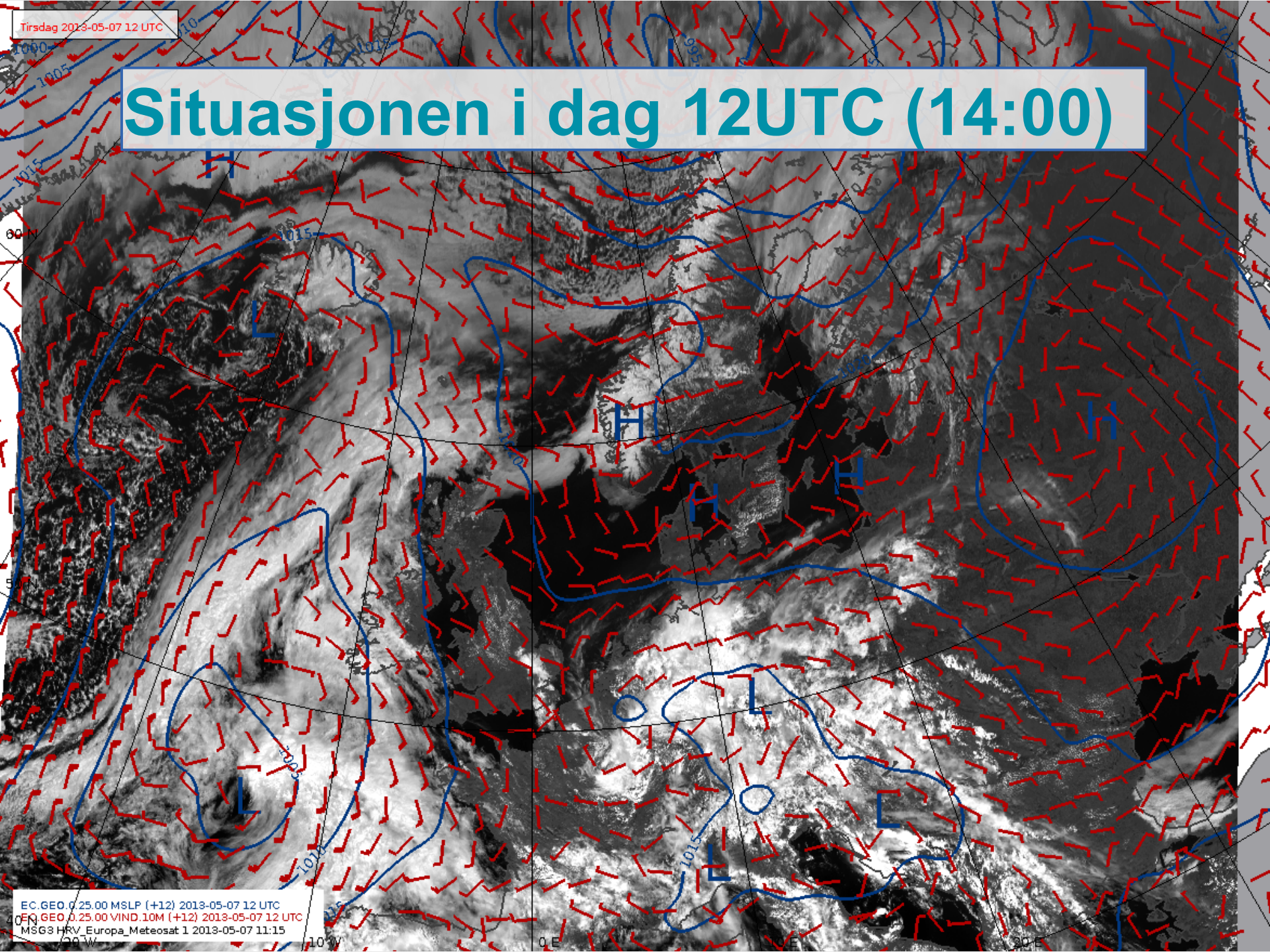
Nils Melsom Kristensen

07.05.13

Først værstsituasjonen...

Tisdag 2013-05-07 12 UTC

Situasjonen i dag 12UTC (14:00)



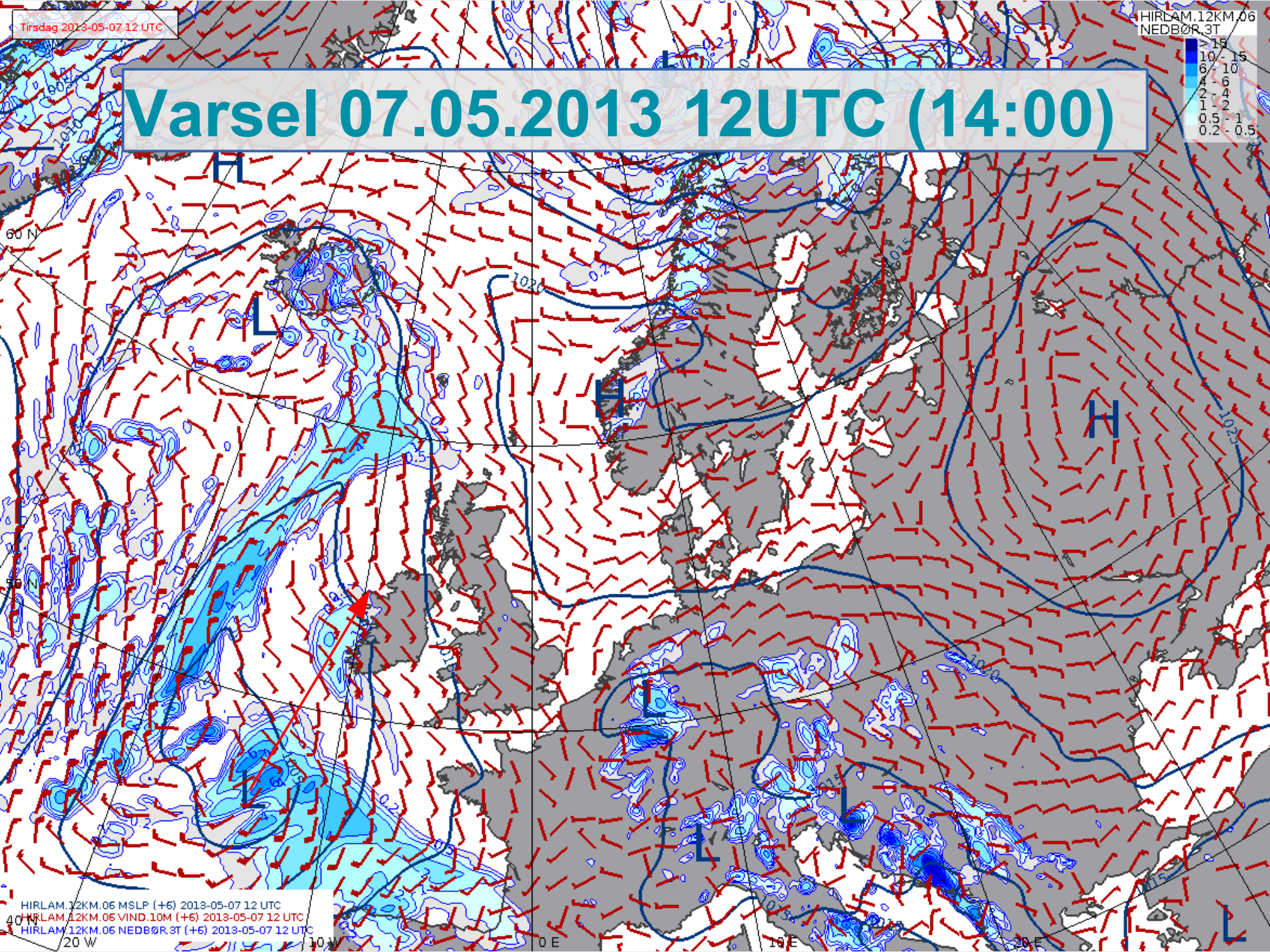
EC_GEO_0.25.00 MSLP (+12) 2013-05-07 12 UTC
EC_GEO_0.25.00 VIND.10M (+12) 2013-05-07 12 UTC
MSG3 HRV_Europa_Meteosat 1 2013-05-07 11:15

Tirsdag 2013-05-07 12 UTC

HIRLAM.12KM.06
NEDBØR.3T

> 15
10 - 15
6 - 10
4 - 6
2 - 4
1 - 2
0.5 - 1
0.2 - 0.5

Varsel 07.05.2013 12UTC (14:00)



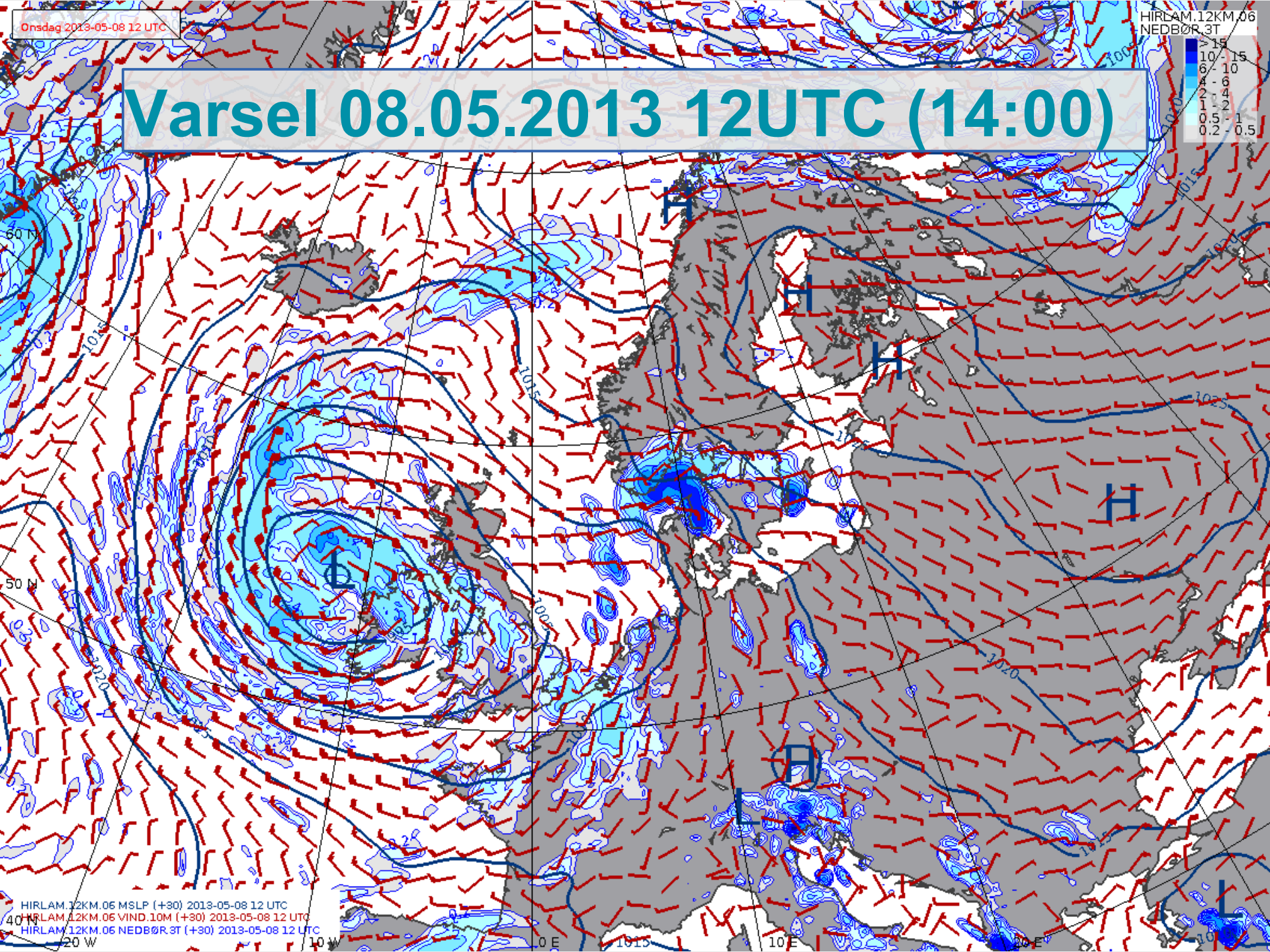
HIRLAM.12KM.06 MSLP (+6) 2013-05-07 12 UTC
HIRLAM.12KM.06 VIND.10M (+6) 2013-05-07 12 UTC
HIRLAM.12KM.06 NEDBØR.3T (+6) 2013-05-07 12 UTC

Onsdag 2013-05-08 12 UTC

HIRLAM.12KM.06
NEDBØR.3T

> 15
10 - 15
6 - 10
4 - 6
2 - 4
1 - 2
0.5 - 1
0.2 - 0.5

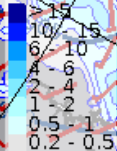
Varsel 08.05.2013 12UTC (14:00)



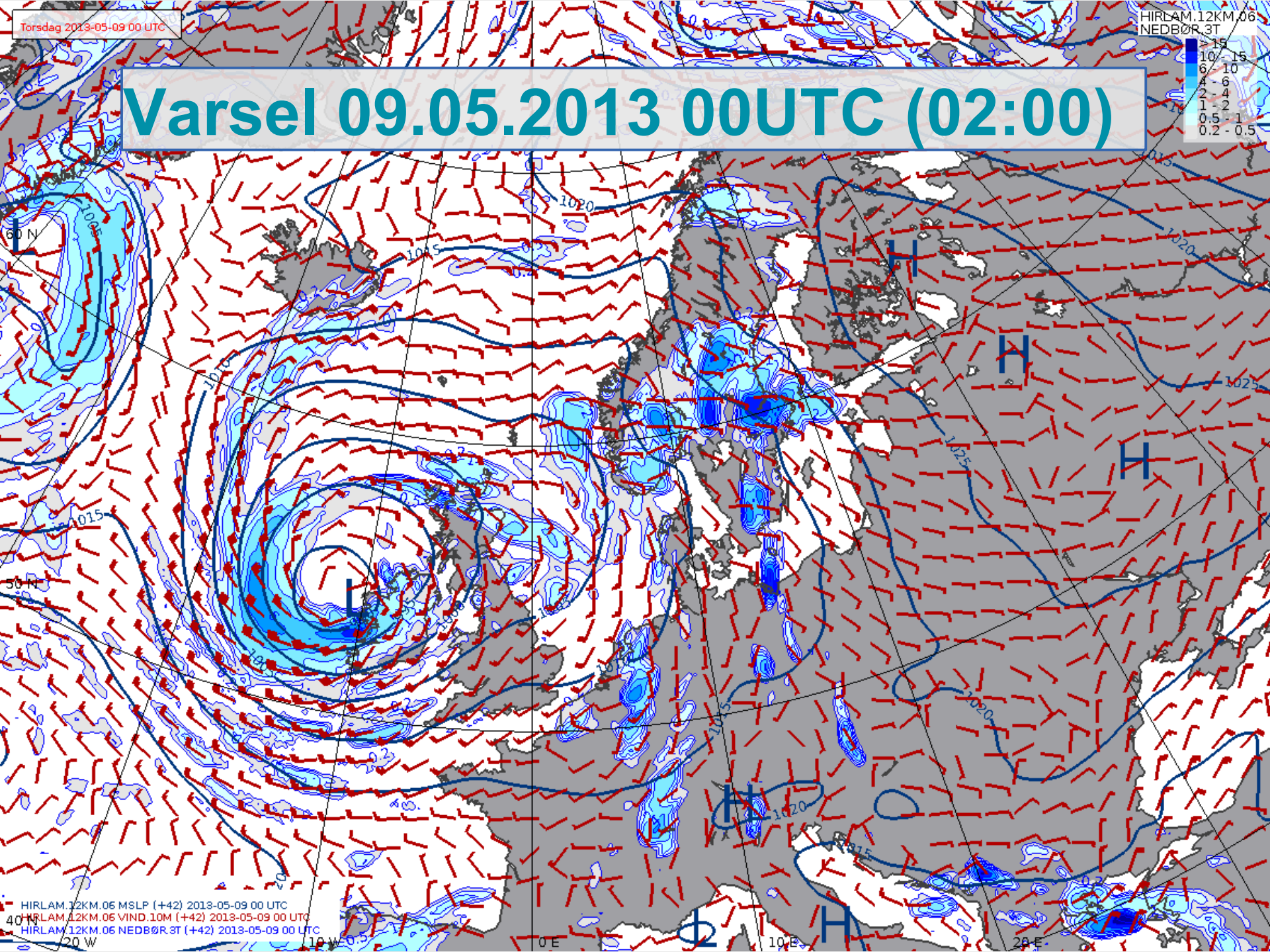
HIRLAM.12KM.06 MSLP (+30) 2013-05-08 12 UTC
40 HIRLAM.12KM.06 VIND.10M (+30) 2013-05-08 12 UTC
HIRLAM.12KM.06 NEDBØR.3T (+30) 2013-05-08 12 UTC

Torsdag 2013-05-09 00 UTC

HIRLAM.12KM.06
NEDBØR.3T



Varsel 09.05.2013 00UTC (02:00)



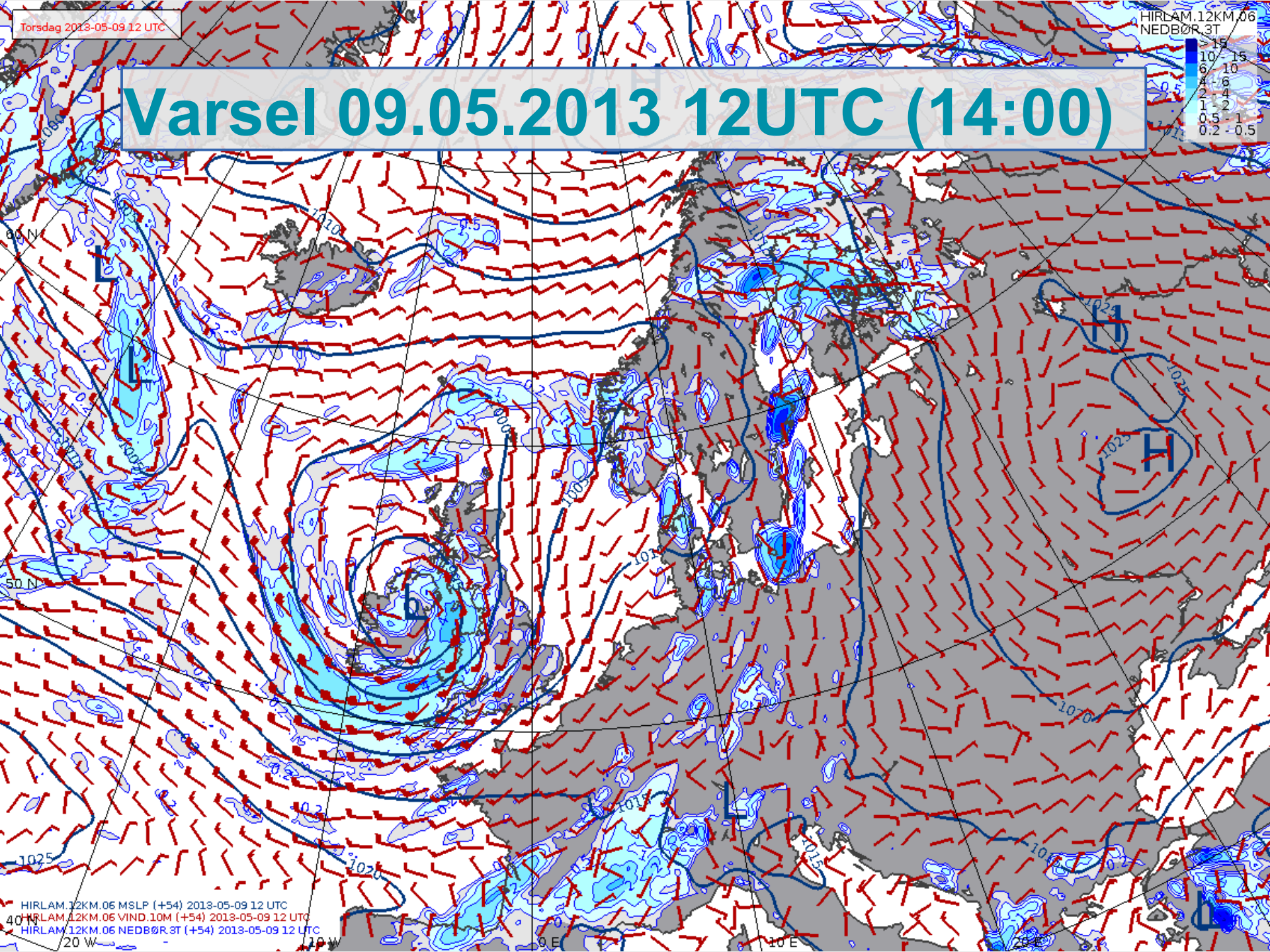
HIRLAM.12KM.06 MSLP (+42) 2013-05-09 00 UTC
40 HIRLAM.12KM.06 VIND.10M (+42) 2013-05-09 00 UTC
HIRLAM.12KM.06 NEDBØR.3T (+42) 2013-05-09 00 UTC

Torsdag 2013-05-09 12 UTC

HIRLAM.12KM.06
NEDBØR.3T

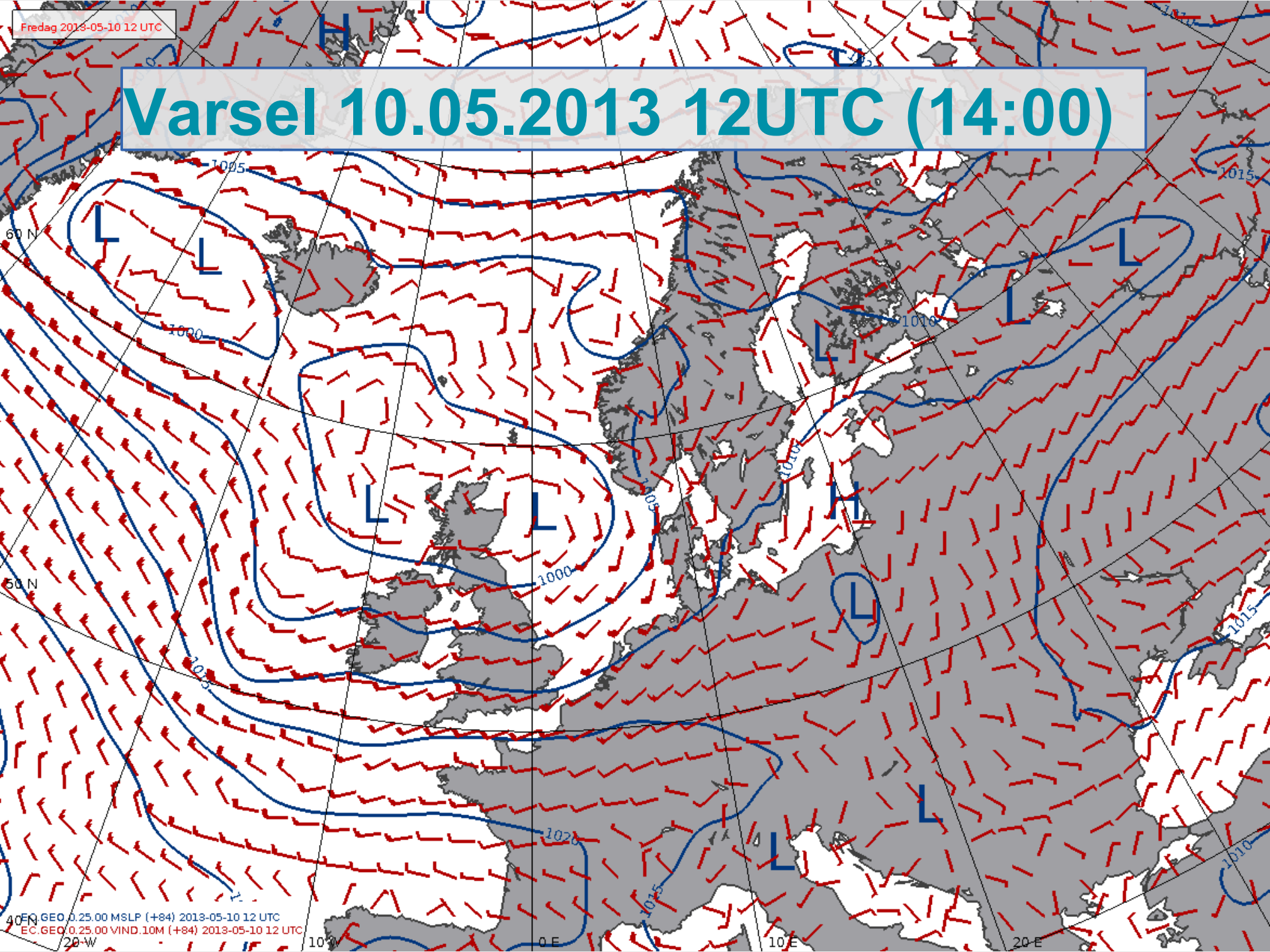
> 15
10 - 15
6 - 10
4 - 6
2 - 4
1 - 2
0.5 - 1
0.2 - 0.5

Varsel 09.05.2013 12UTC (14:00)



HIRLAM.12KM.06 MSLP (+54) 2013-05-09 12 UTC
40 HIRLAM.12KM.06 VIND.10M (+54) 2013-05-09 12 UTC
HIRLAM.12KM.06 NEDBØR.3T (+54) 2013-05-09 12 UTC

Varsel 10.05.2013 12UTC (14:00)

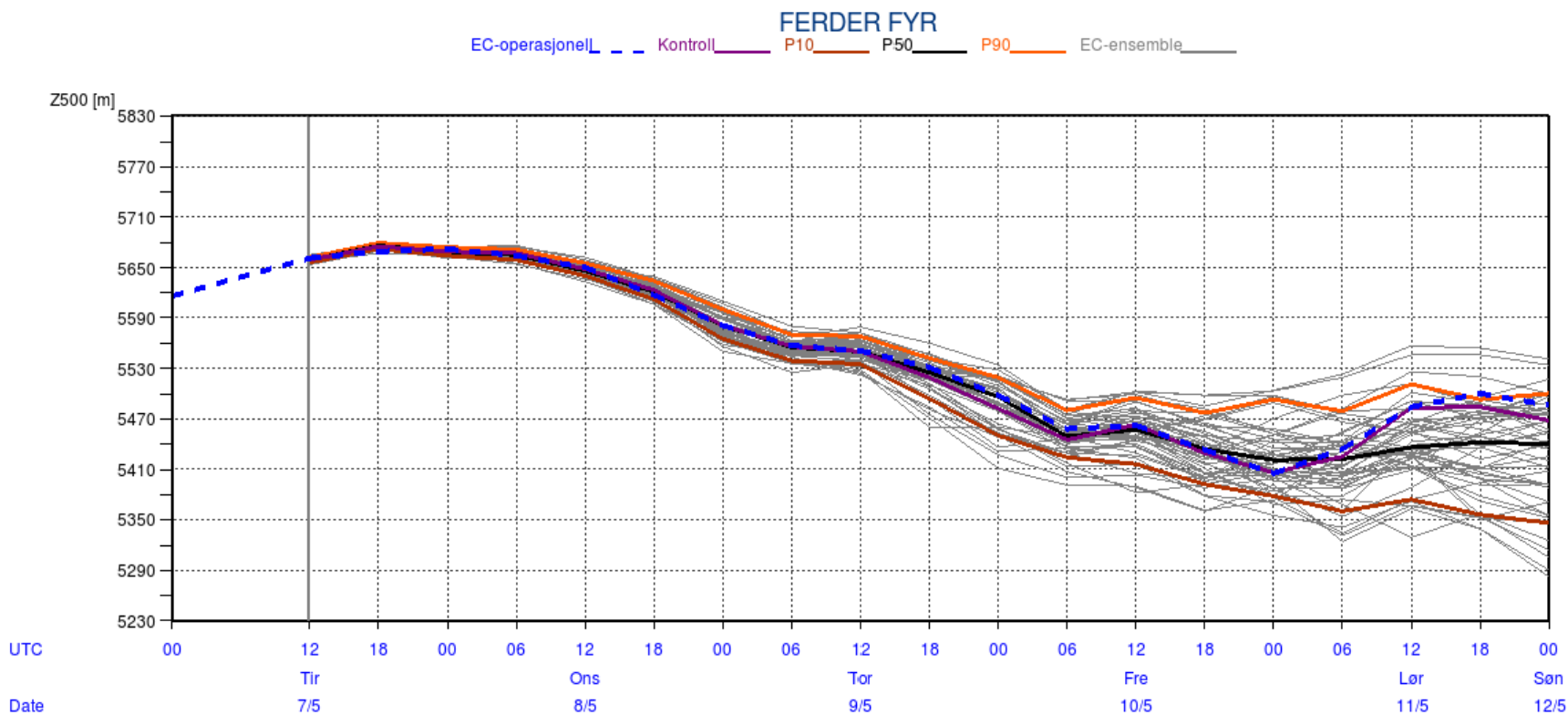


Usikkerhet

Usikkerhet i varselet

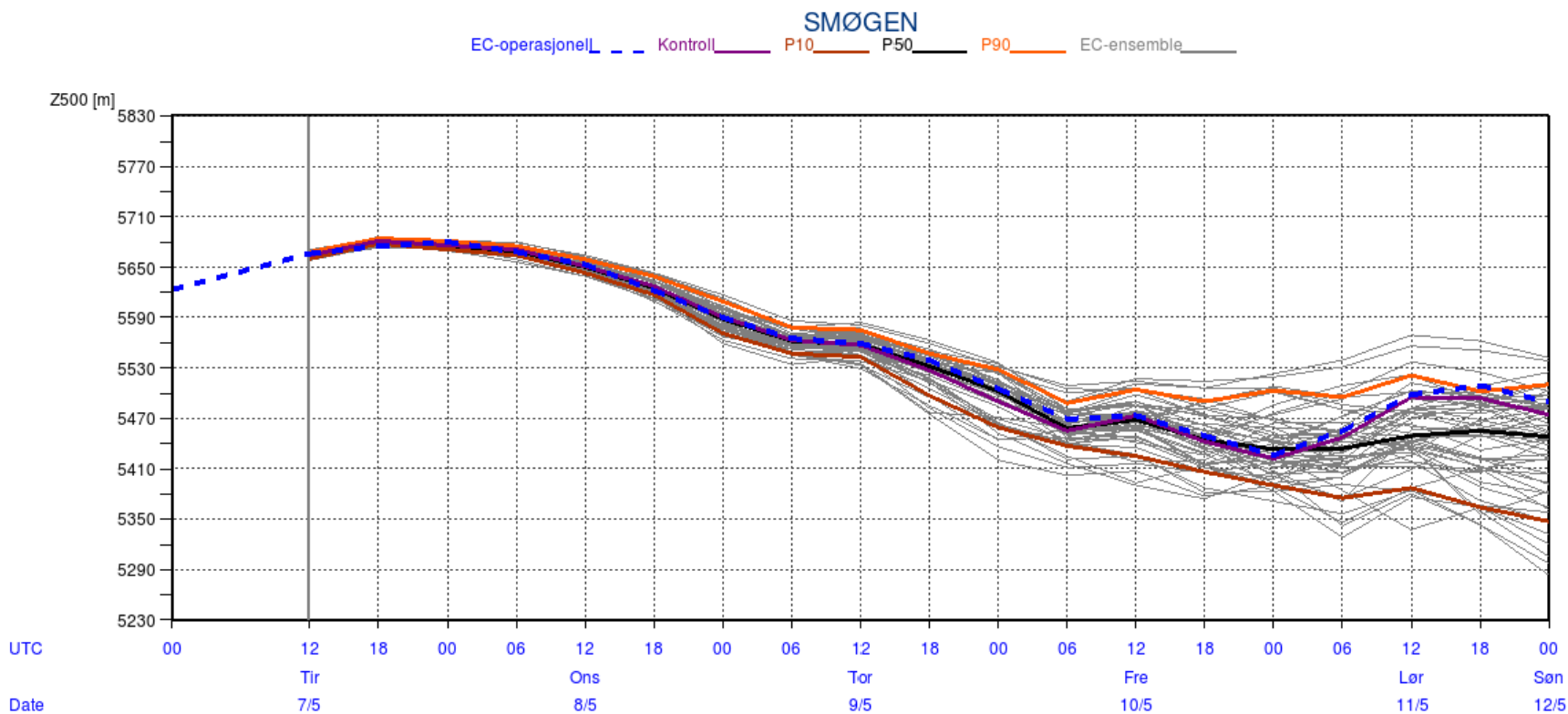
- Modellvarslene har endret seg noe fra kjøring til kjøring
- Selve vær-situasjonen er ganske sikker
- Usikkerheten ligger i når vinden dreier, ikke om den dreier
- Følg med på varslene opp mot start
- Værvarselet er ferskvare for årets Skagen Race!

Usikkerhet - Færder



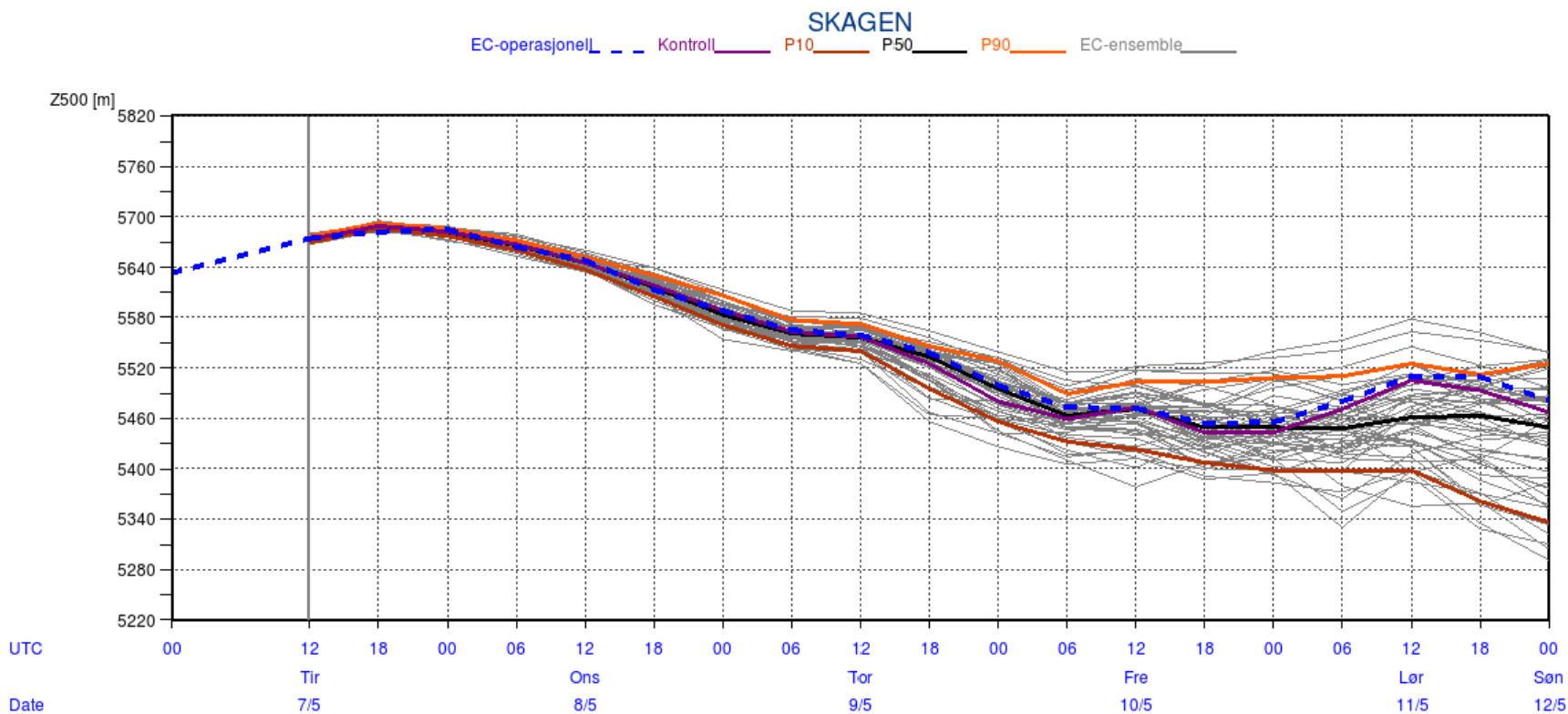
© met.no

Usikkerhet - Smøgen



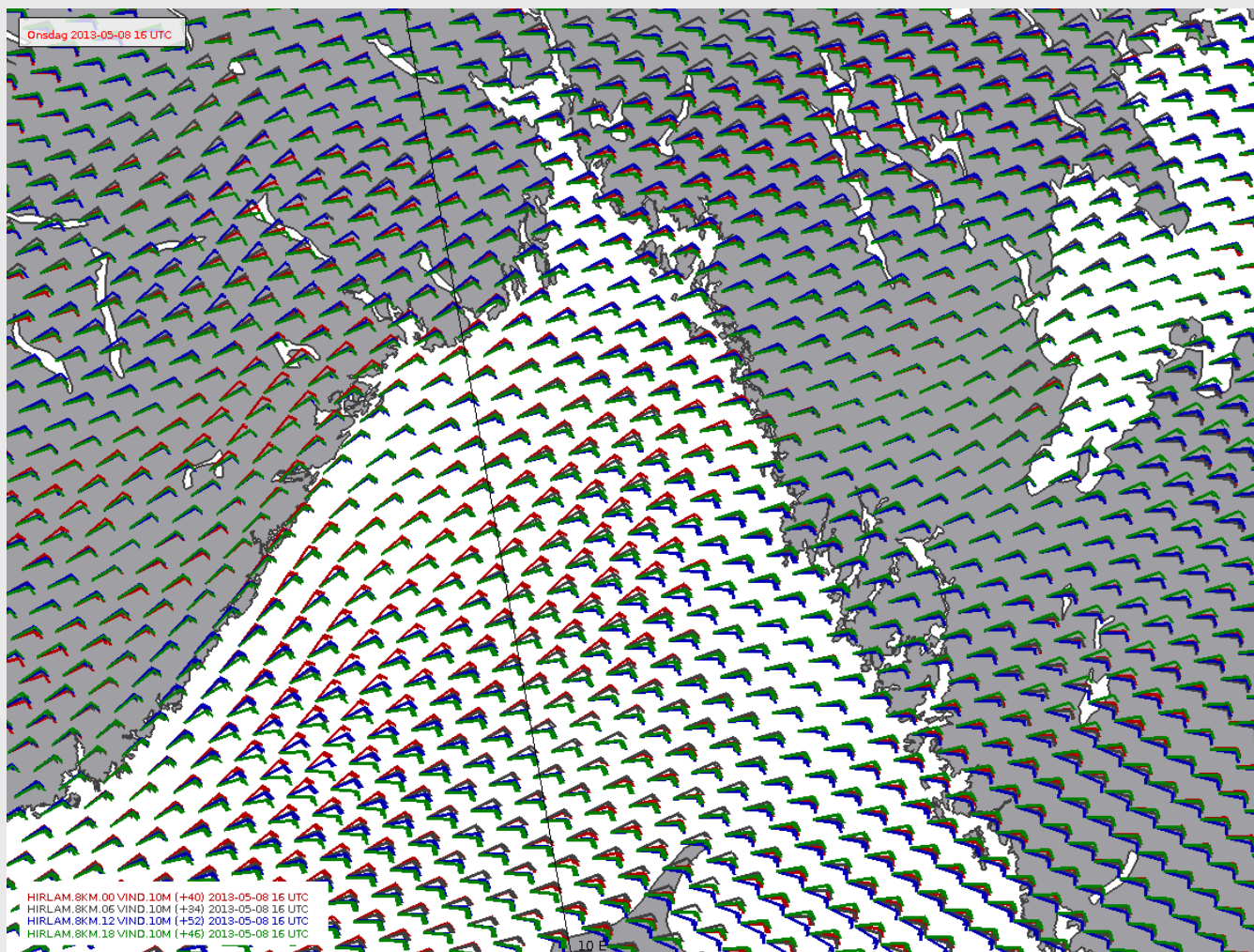
© met.no

Usikkerhet - Skagen

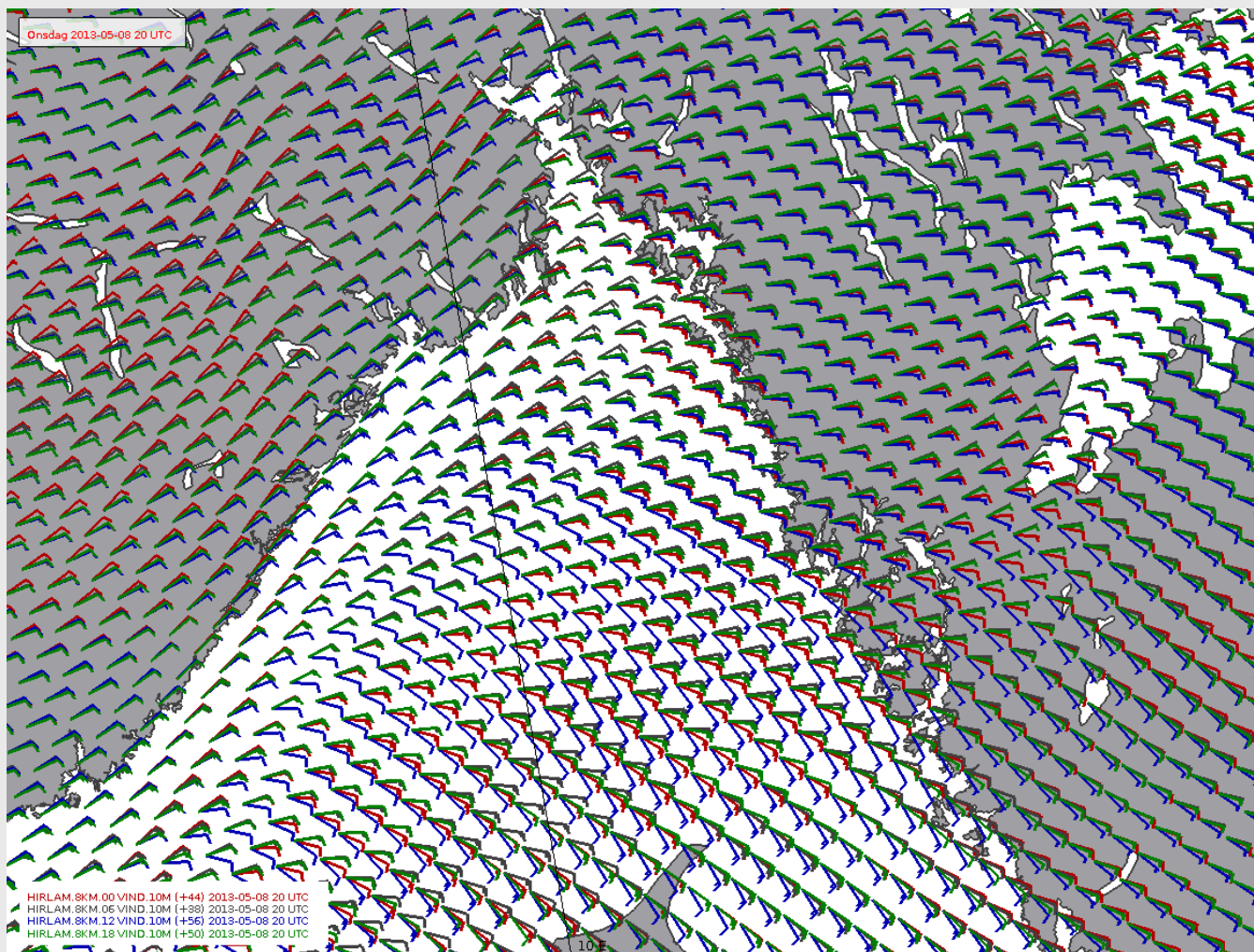


© met.no

Endringer mellom kjøringer



Endringer mellom kjøringene

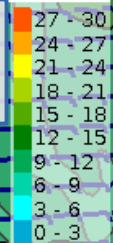


Vinddetaljer – første halvdel

Onsdag 2013-05-08 16 UTC

AROME-Norway.2.5KM.06
FF.10M.KNOP

08.05.2013 16UTC



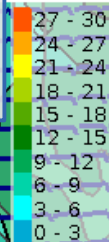
Vindstyrke i knop

AROME-Norway.2.5KM.06 VIND.10M (+34) 2013-05-08 16 UTC
AROME-Norway.2.5KM.06 FF.10M.KNOP (+34) 2013-05-08 16 UTC
10 E

Onsdag 2013-05-08 18 UTC

AROME-Norway.2.5KM.06
FF.10M.KNOP

08.05.2013 18UTC



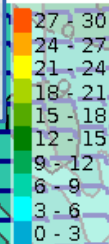
Vindstyrke i knop

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AROME-Norway.2.5KM.06 FF.10M.KNOP (+36) 2013-05-08 18 UTC
10 E

Onsdag 2013-05-08 20 UTC

AROME-Norway.2.5KM.06
FF.10M.KNOP

08.05.2013 20UTC



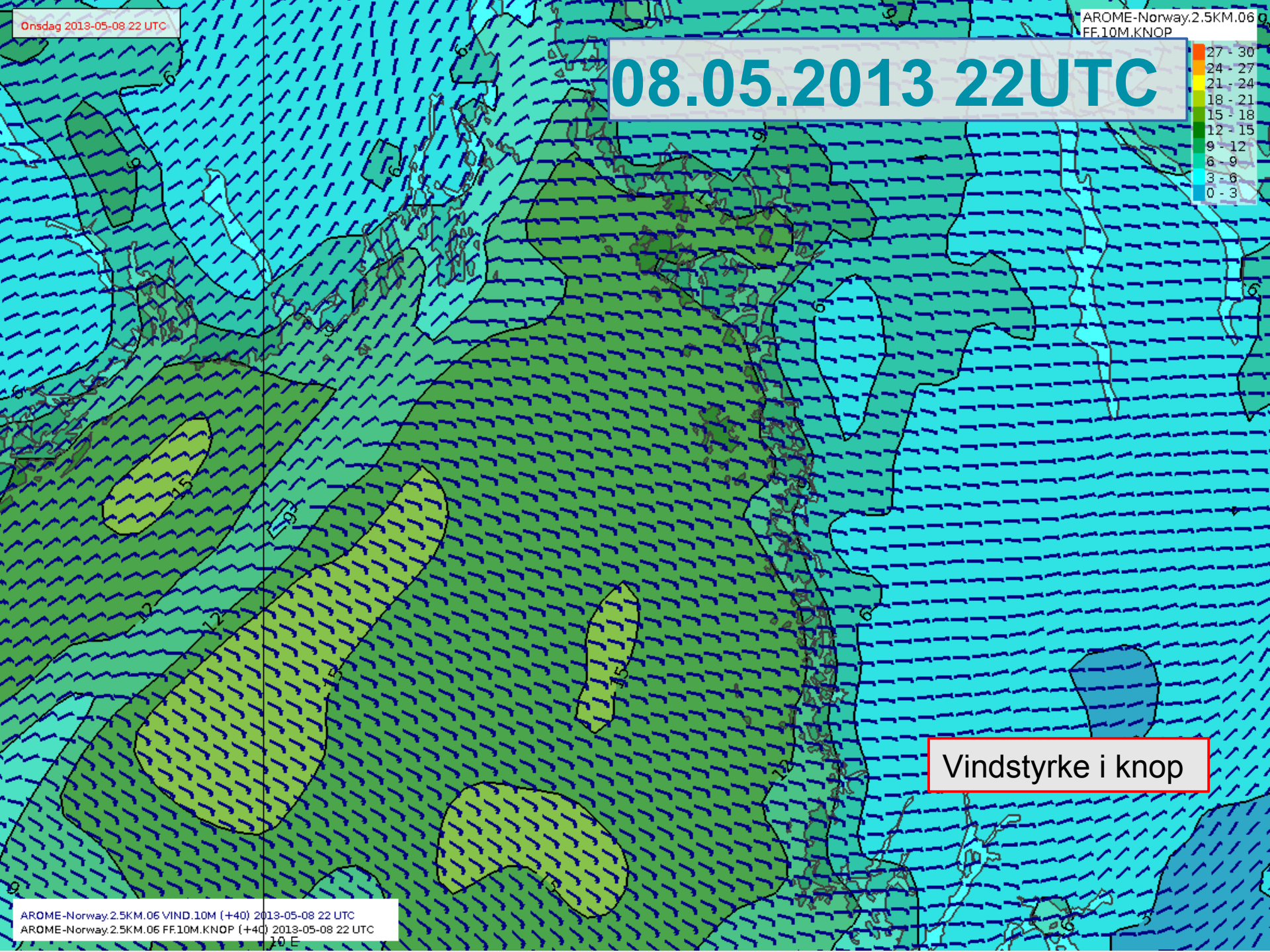
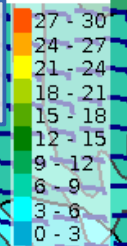
Vindstyrke i knop

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AROME-Norway.2.5KM.06 FF.10M.KNOP (+38) 2013-05-08 20 UTC
10 E

Onsdag 2013-05-08 22 UTC

AROME-Norway.2.5KM.06
FF.10M.KNOP

08.05.2013 22UTC

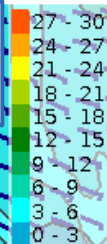


Vindstyrke i knop

Torsdag 2013-05-09 00 UTC

AROME-Norway.2.5KM.06
FF.10M.KNOP

09.05.2013 00UTC

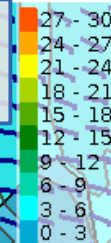


Vindstyrke i knop

Torsdag 2013-05-09 02 UTC

AROME-Norway.2.5KM.06
FF.10M.KNOP

09.05.2013 02UTC



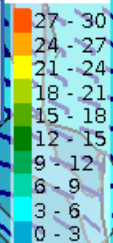
Vindstyrke i knop

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Torsdag 2013-05-09 04 UTC

AROME-Norway.2.5KM.06
FF.10M.KNOP

09.05.2013 04UTC

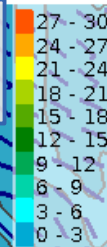


Vindstyrke i knop

Torsdag 2013-05-09 06 UTC

AROME-Norway.2.5KM.06
FF.10M.KNOP

09.05.2013 06UTC



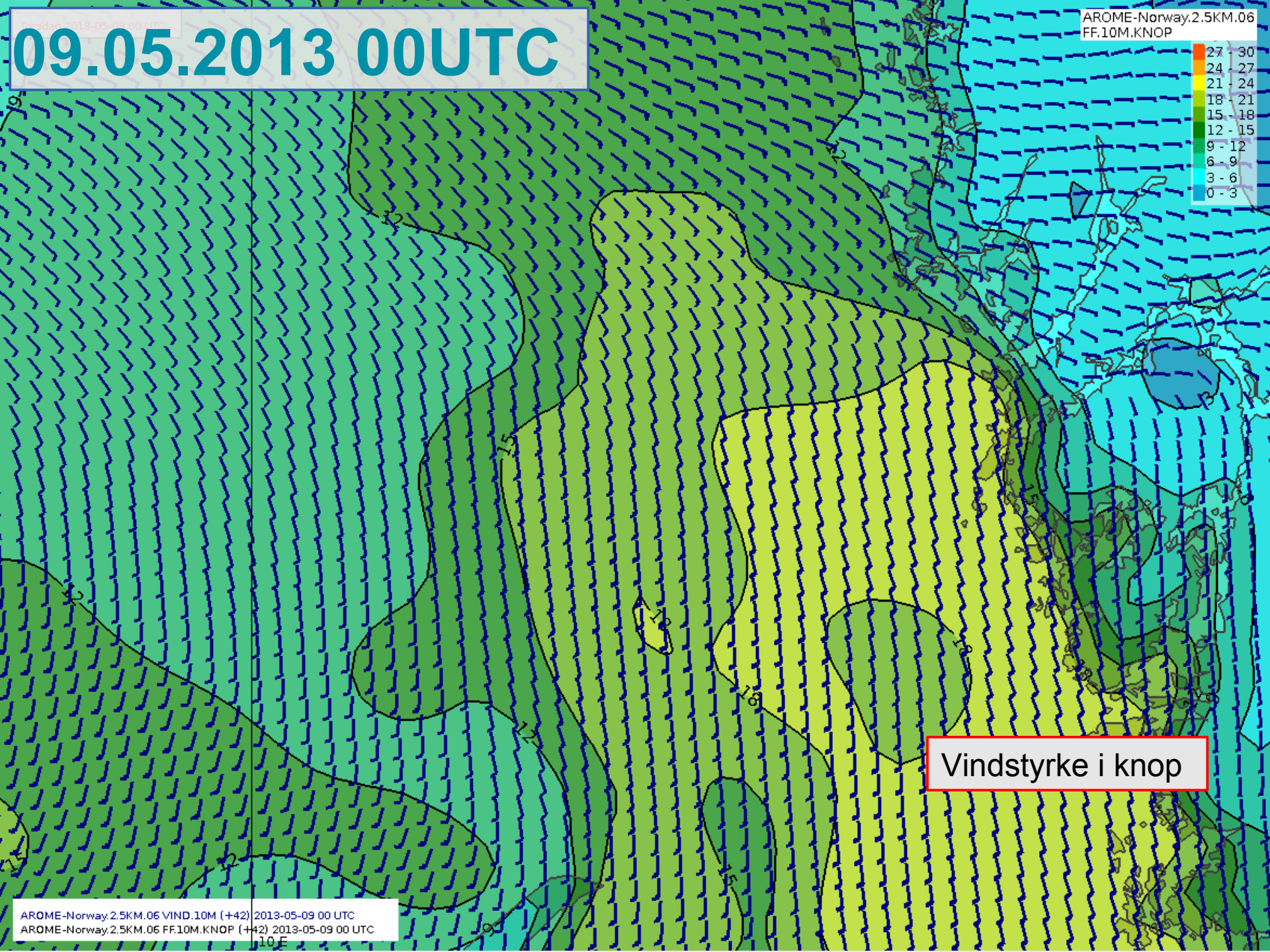
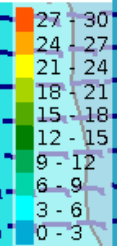
Vindstyrke i knop

AROME-Norway.2.5KM.06 VIND.10M (+48) 2013-05-09 06 UTC
AROME-Norway.2.5KM.06 FF.10M.KNOP (+48) 2013-05-09 06 UTC

Vinddetaljer – andre halvdel

09.05.2013 00UTC

AROME-Norway.2.5KM.06
FF.10M.KNOP

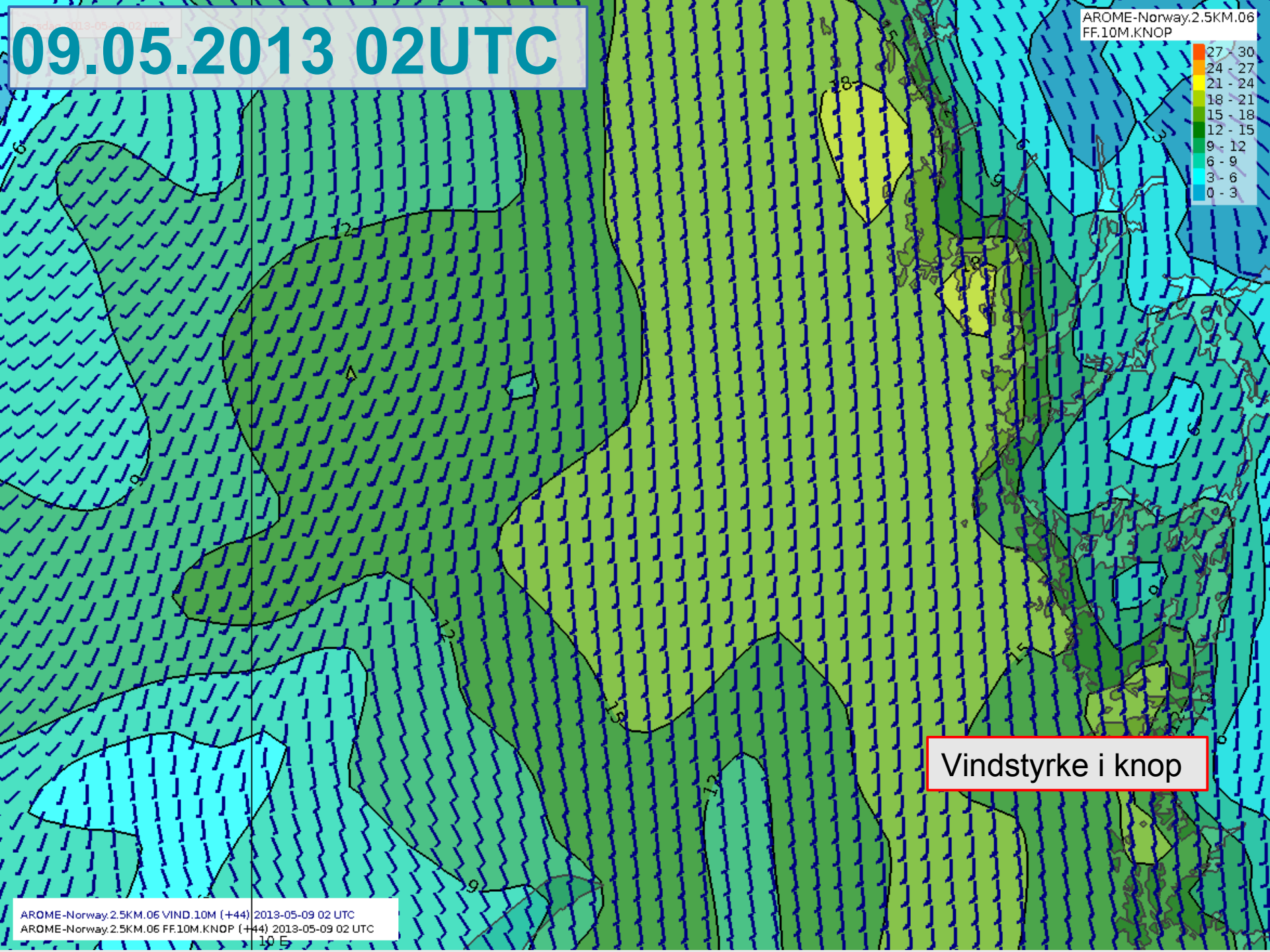
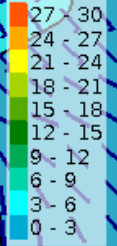


Vindstyrke i knop

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09.05.2013 02UTC

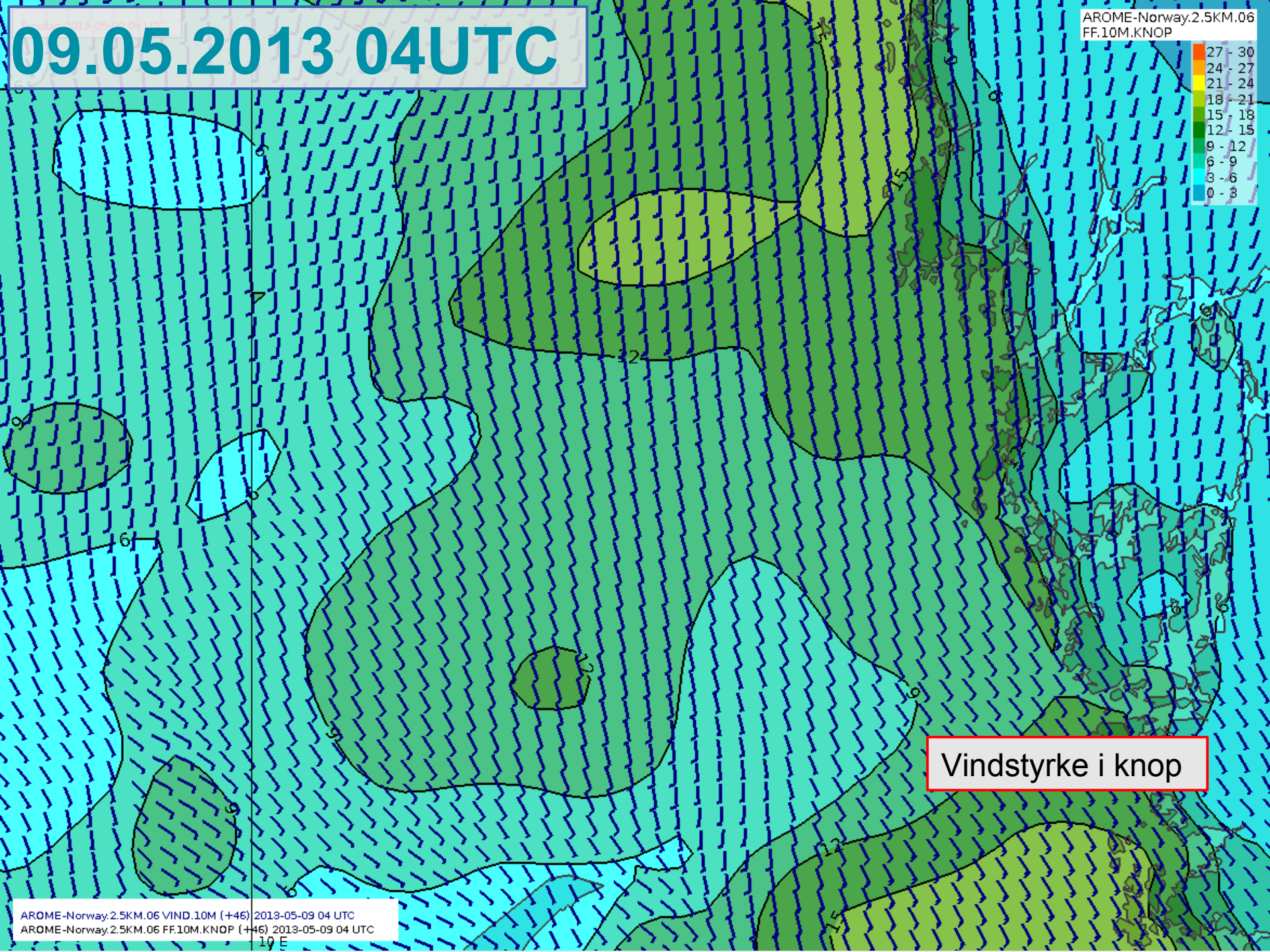
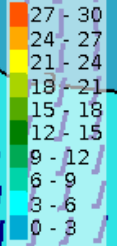
AROME-Norway.2.5KM.06
FF.10M.KNOP



Vindstyrke i knop

09.05.2013 04UTC

AROME-Norway.2.5KM.06
FF.10M.KNOP

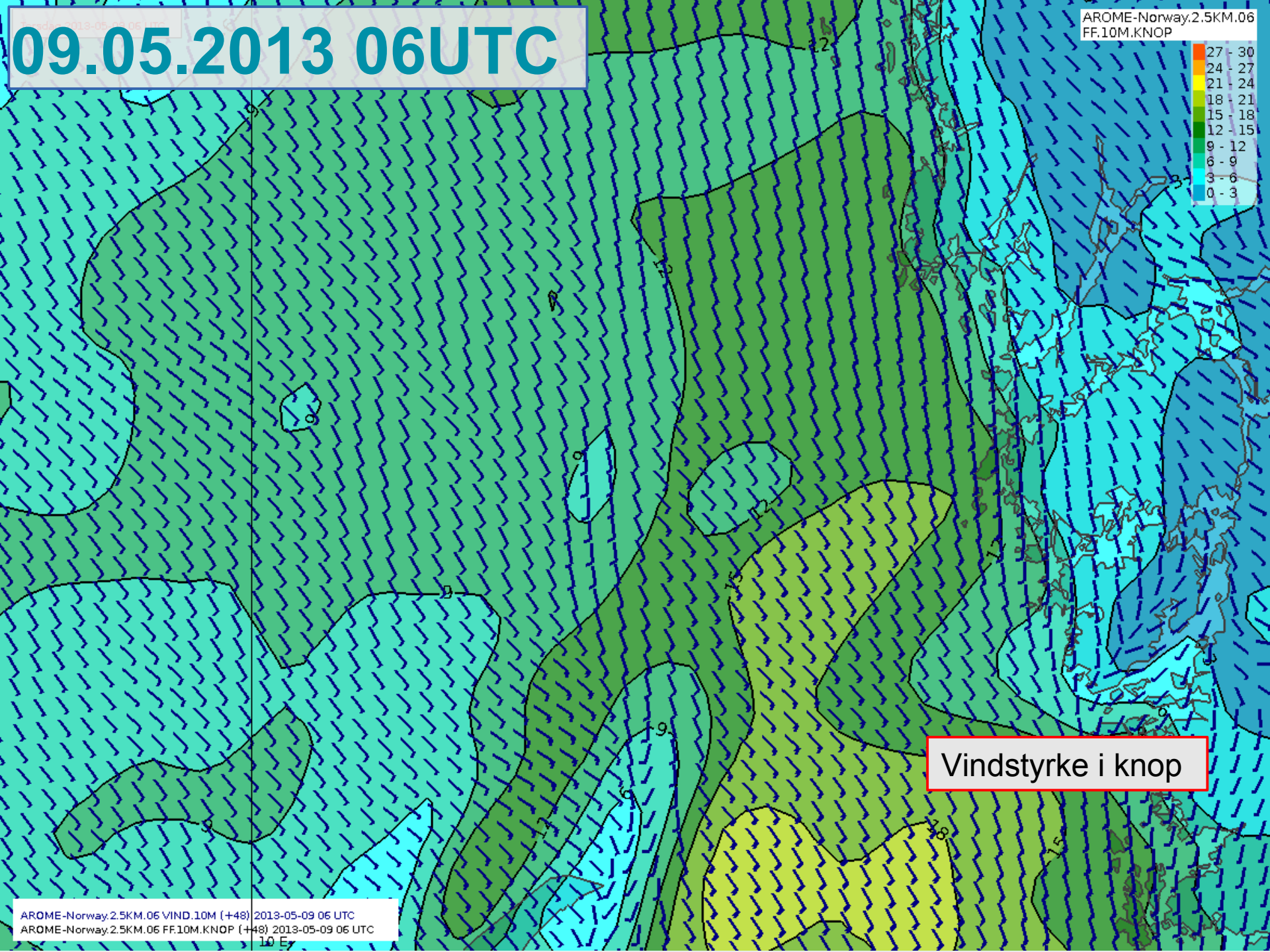
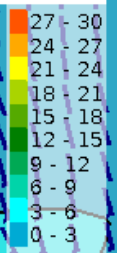


Vindstyrke i knop

AROME-Norway.2.5KM.06 VIND.10M (+46) 2013-05-09 04 UTC
AROME-Norway.2.5KM.06 FF.10M.KNOP (+46) 2013-05-09 04 UTC
10 E

09.05.2013 06UTC

AROME-Norway.2.5KM.06
FF.10M.KNOP

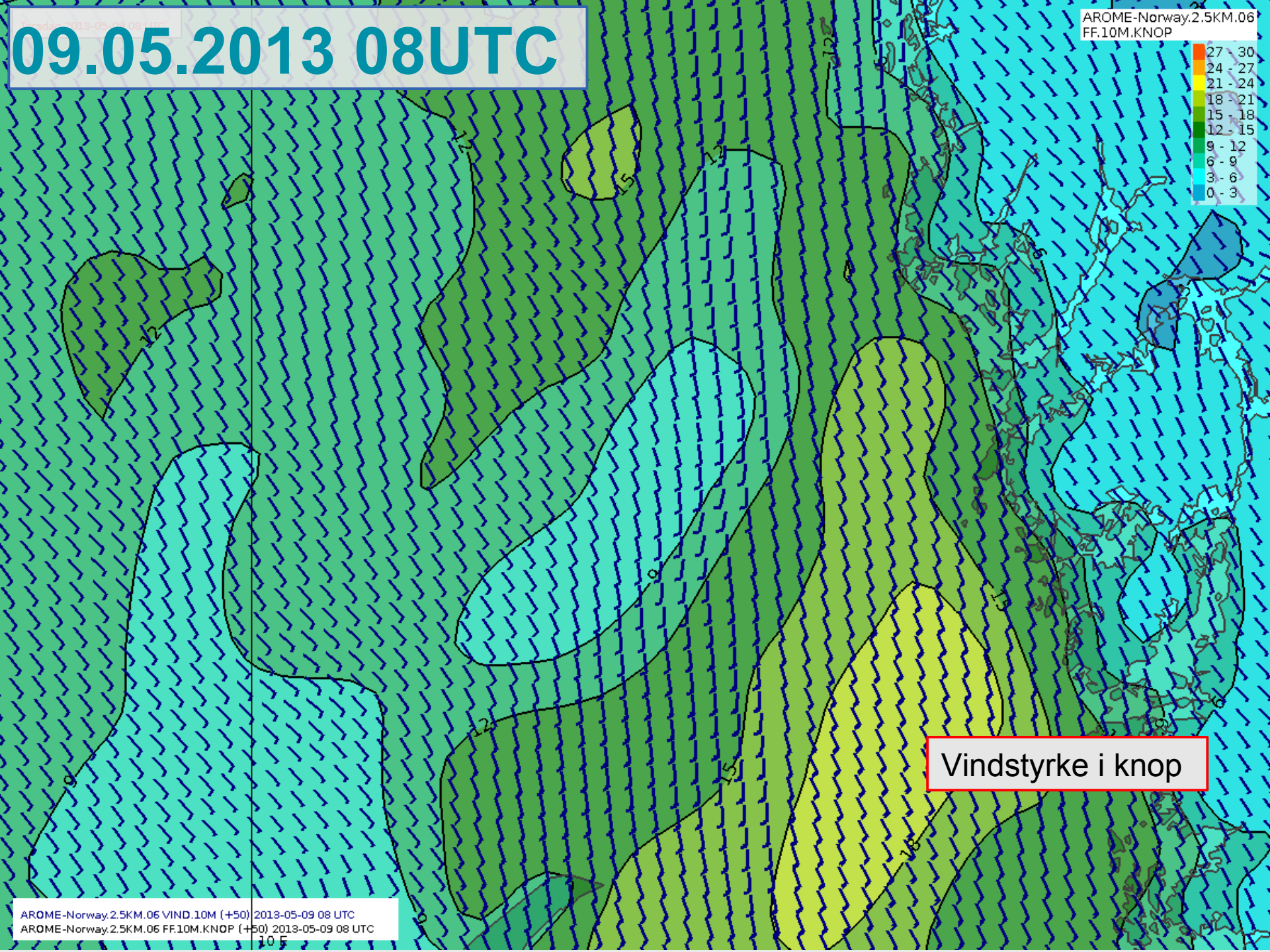
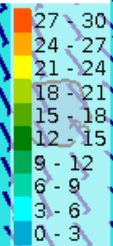


Vindstyrke i knop

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AROME-Norway.2.5KM.06 FF.10M.KNOP (+48) 2013-05-09 06 UTC
10 E

2013-05-09 08 UTC
09.05.2013 08UTC

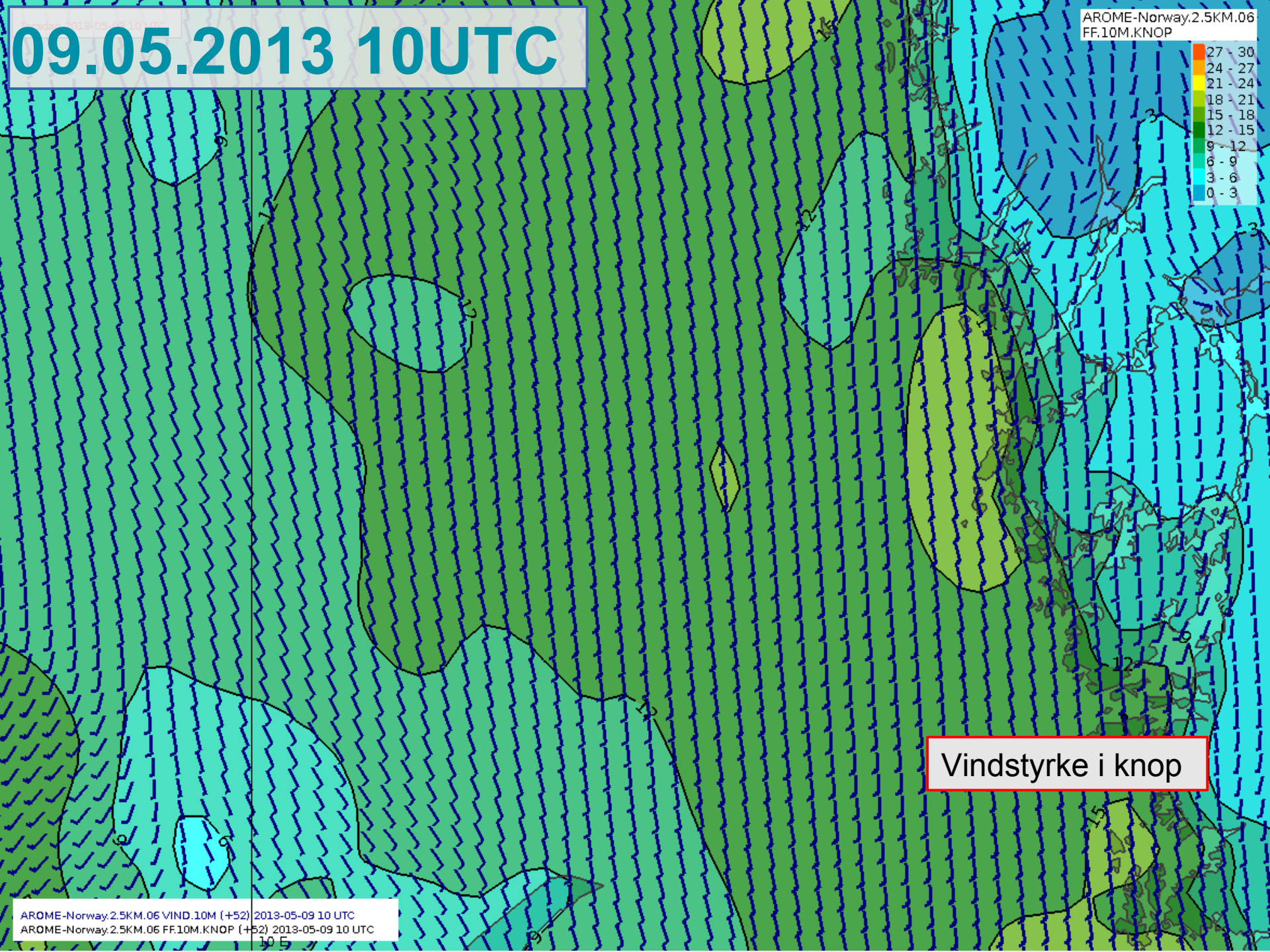
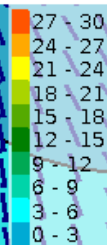
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FF.10M.KNOP



Vindstyrke i knop

09.05.2013 10UTC

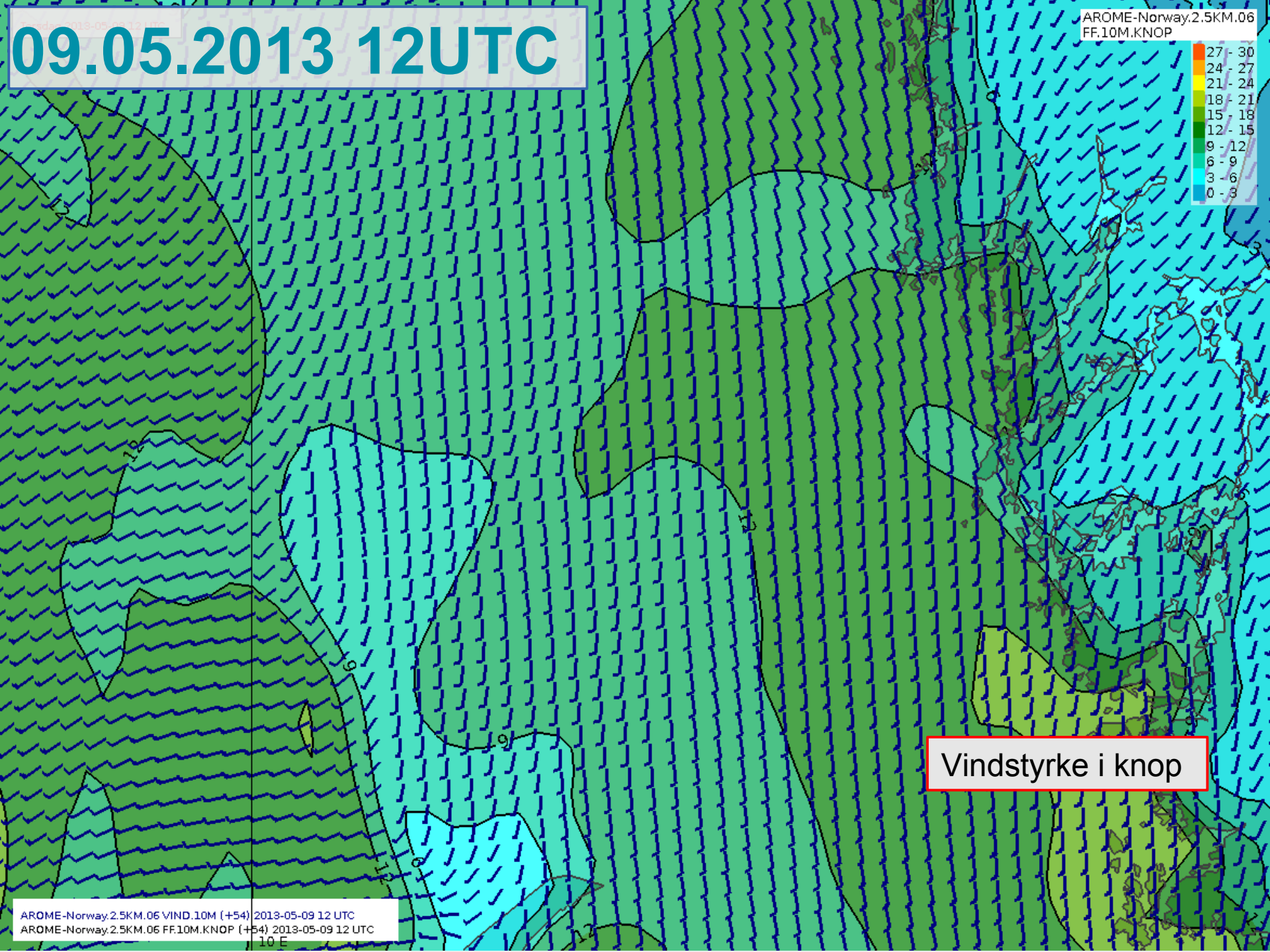
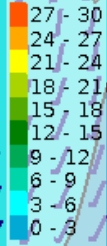
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Vindstyrke i knop

09.05.2013 12UTC

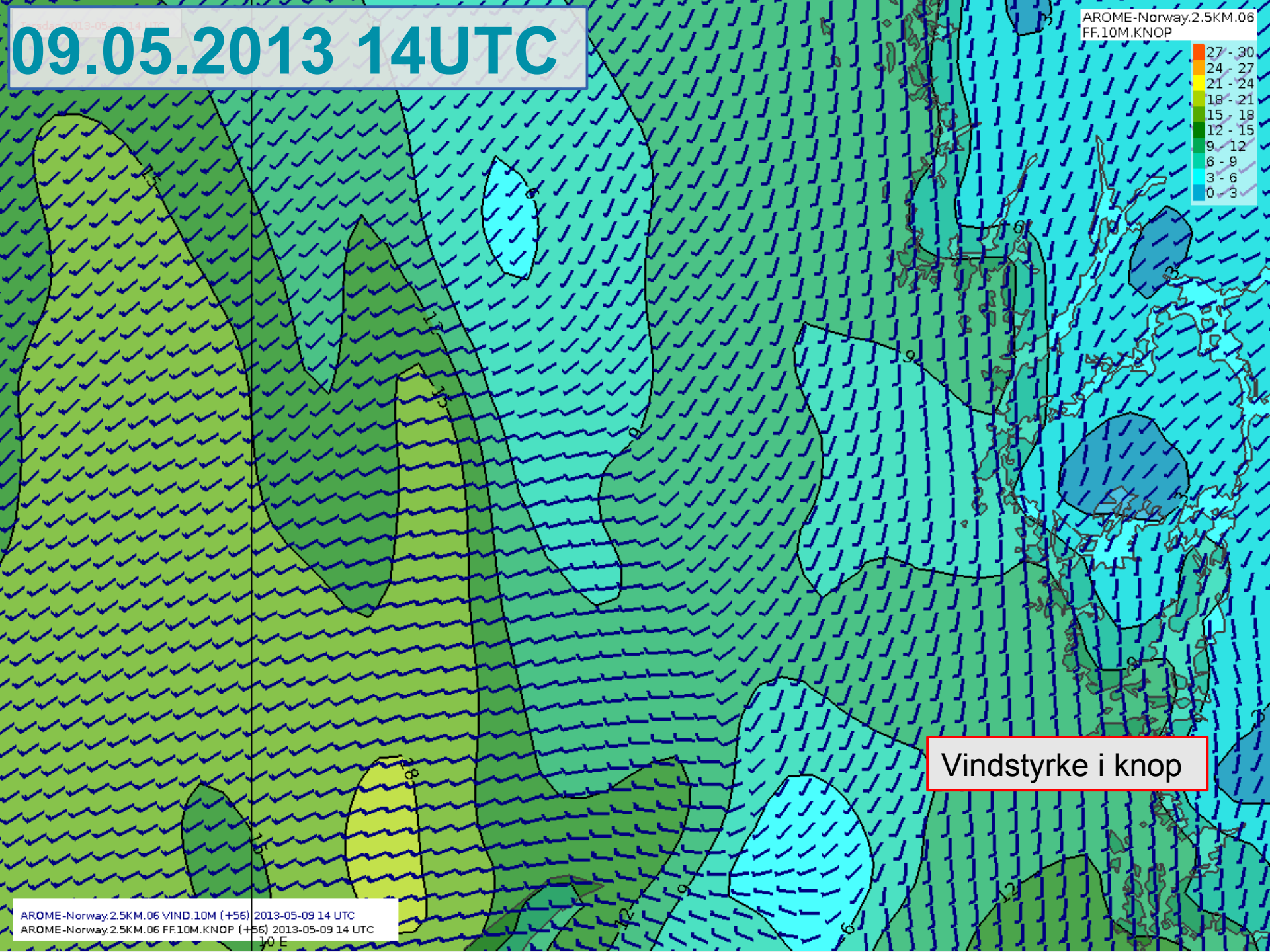
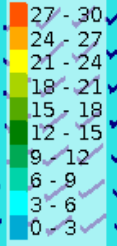
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Vindstyrke i knop

09.05.2013 14UTC

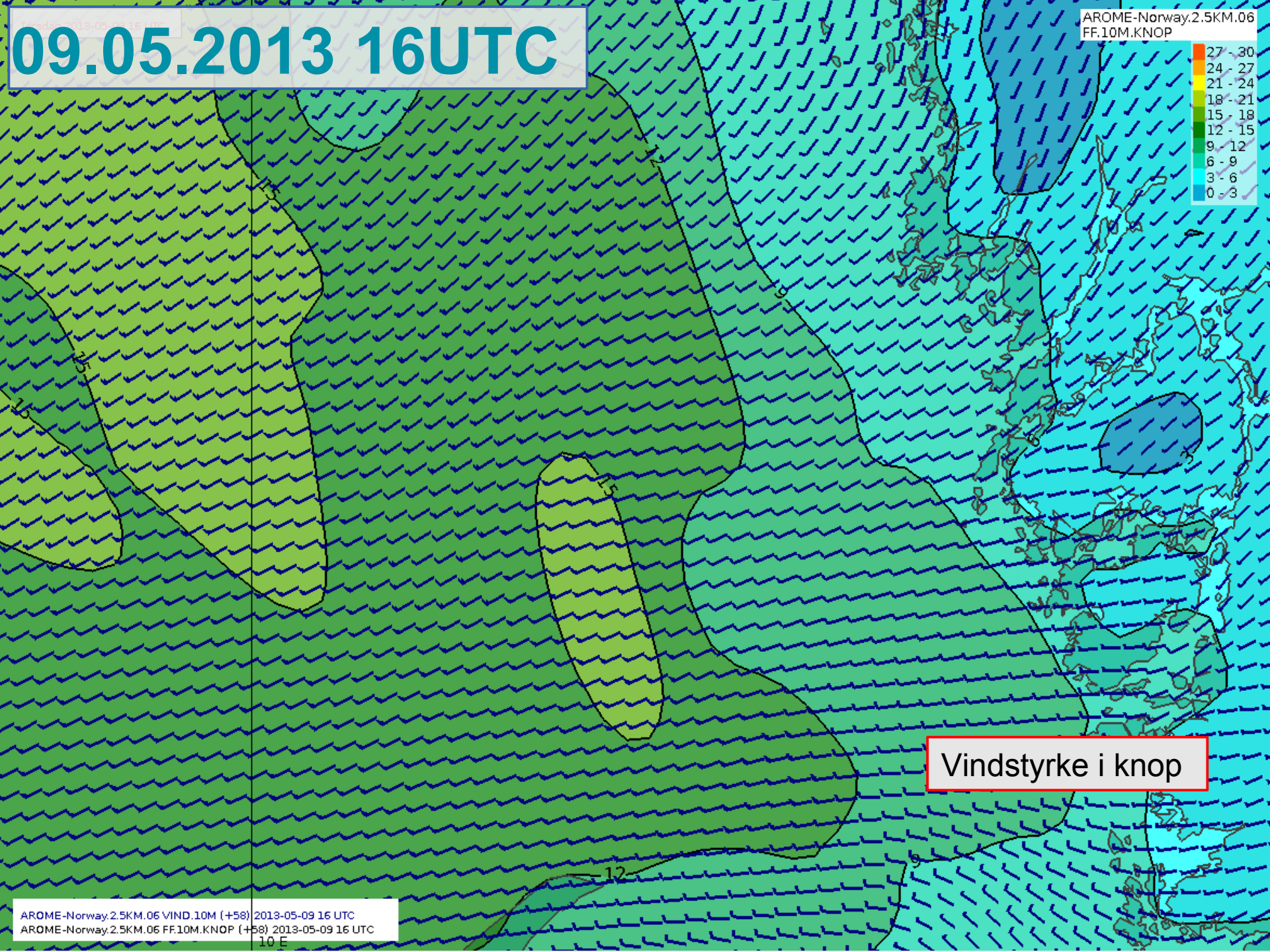
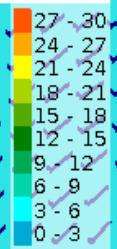
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Vindstyrke i knop

09.05.2013 16UTC

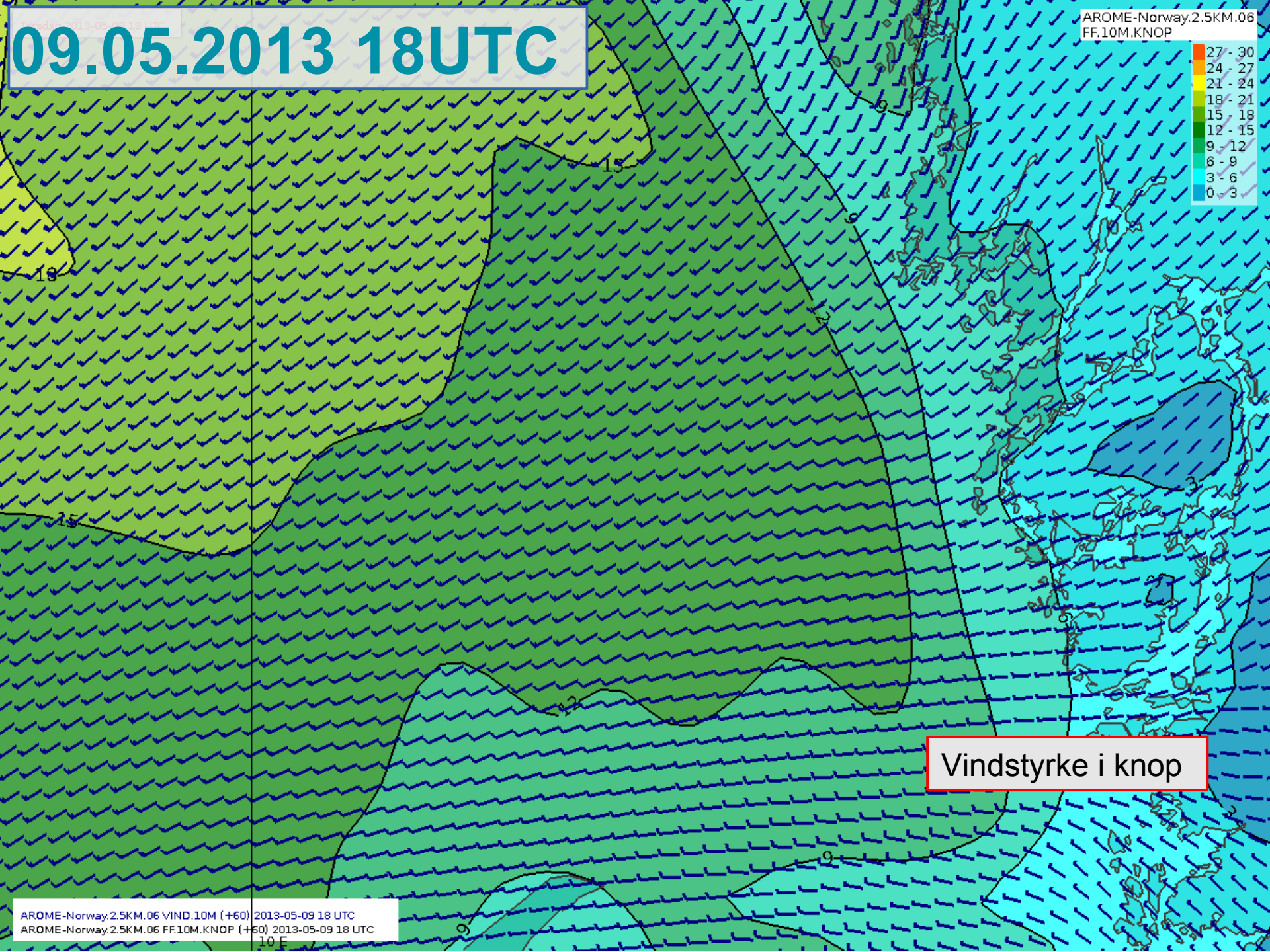
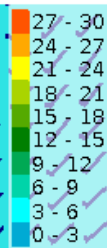
AROME-Norway.2.5KM.06
FF.10M.KNOP



Vindstyrke i knop

09.05.2013 18UTC

AROME-Norway.2.5KM.06
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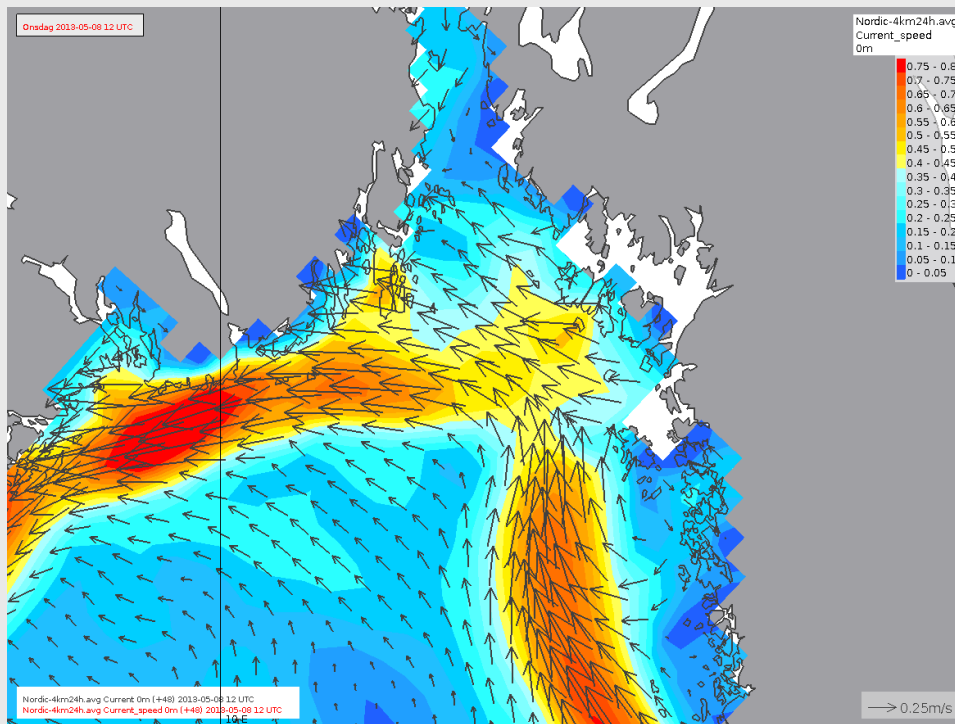


Vindstyrke i knop

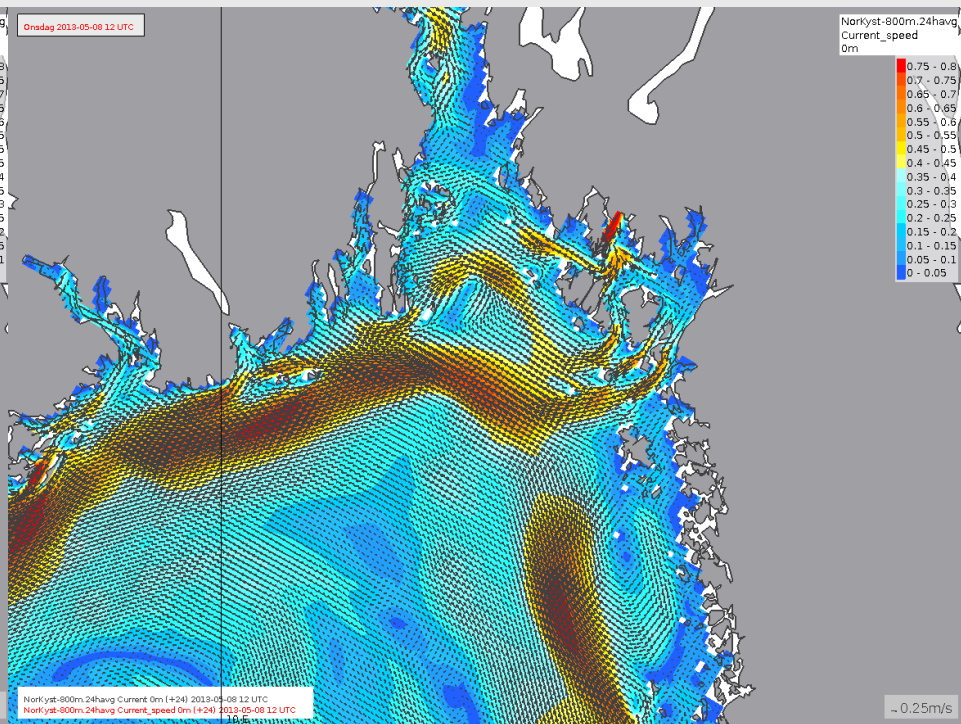
Strøm

Ny og mer detaljert strømmode!!

"Gammel" 4km modell:



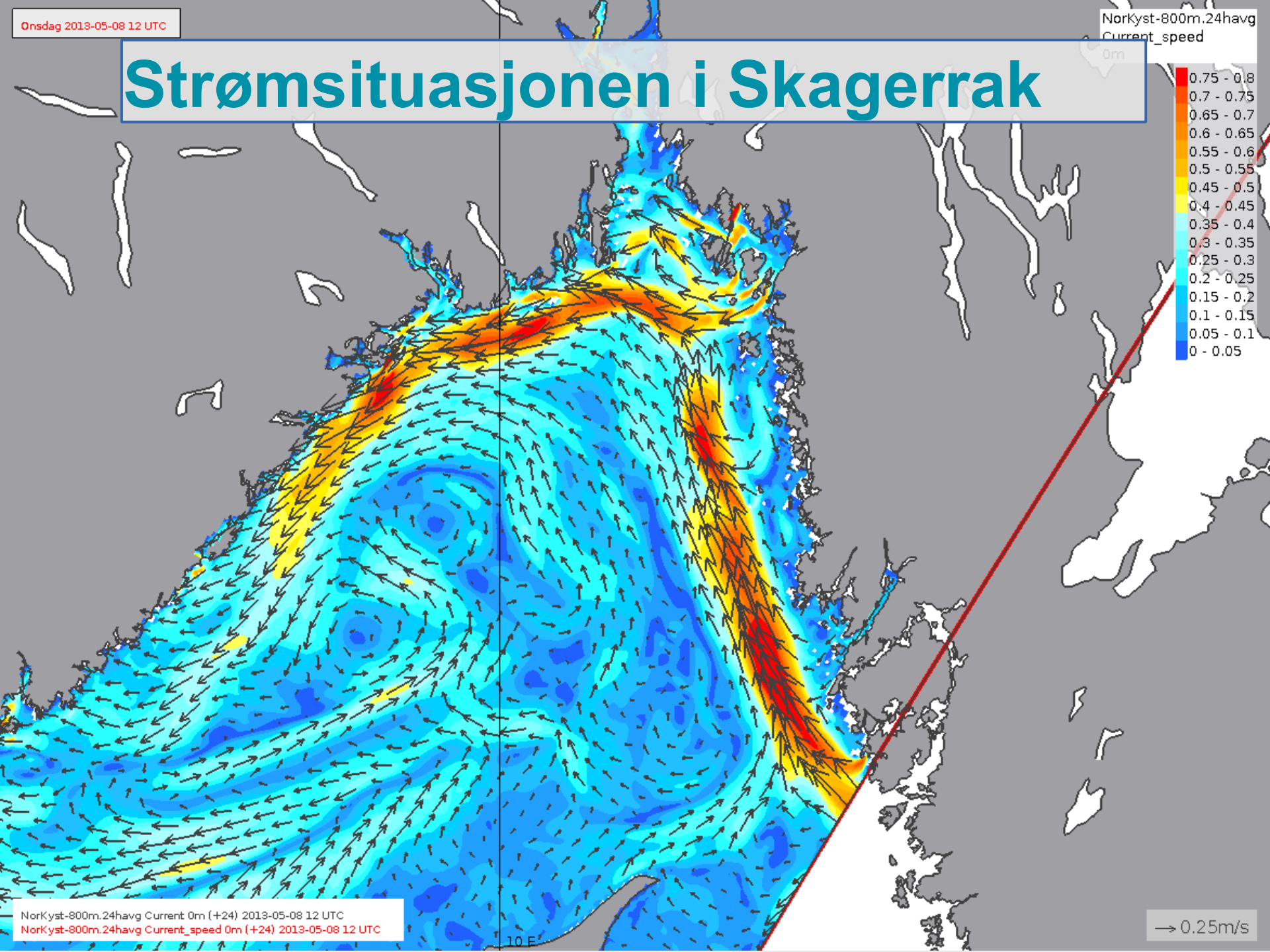
Ny 800m modell:



Onsdag 2013-05-08 12 UTC

Norkyst-800m.24havg
Current_speed

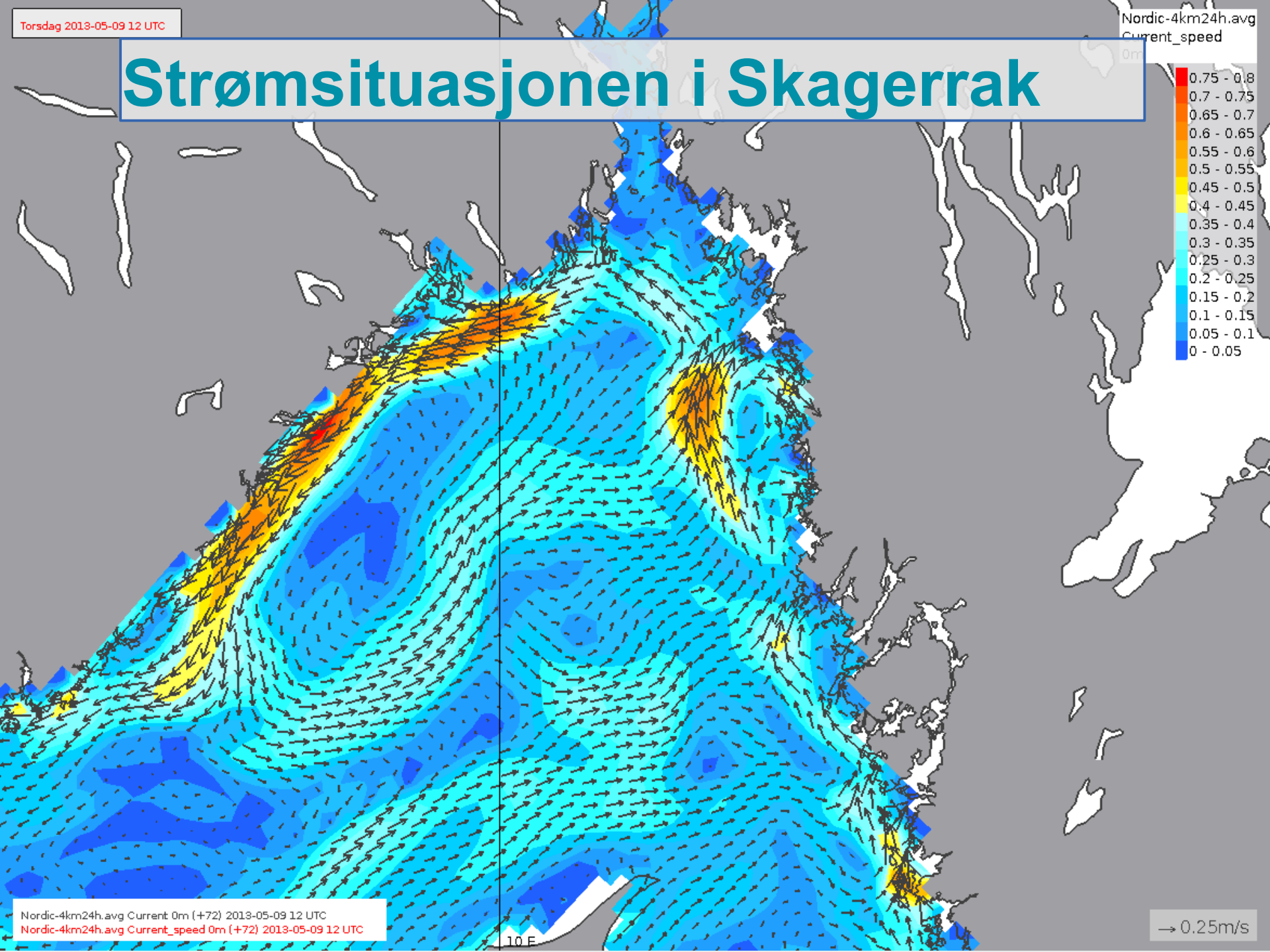
Strømsituasjonen i Skagerrak



Torsdag 2013-05-09 12 UTC

Nordic-4km24h.avg
Current_speed

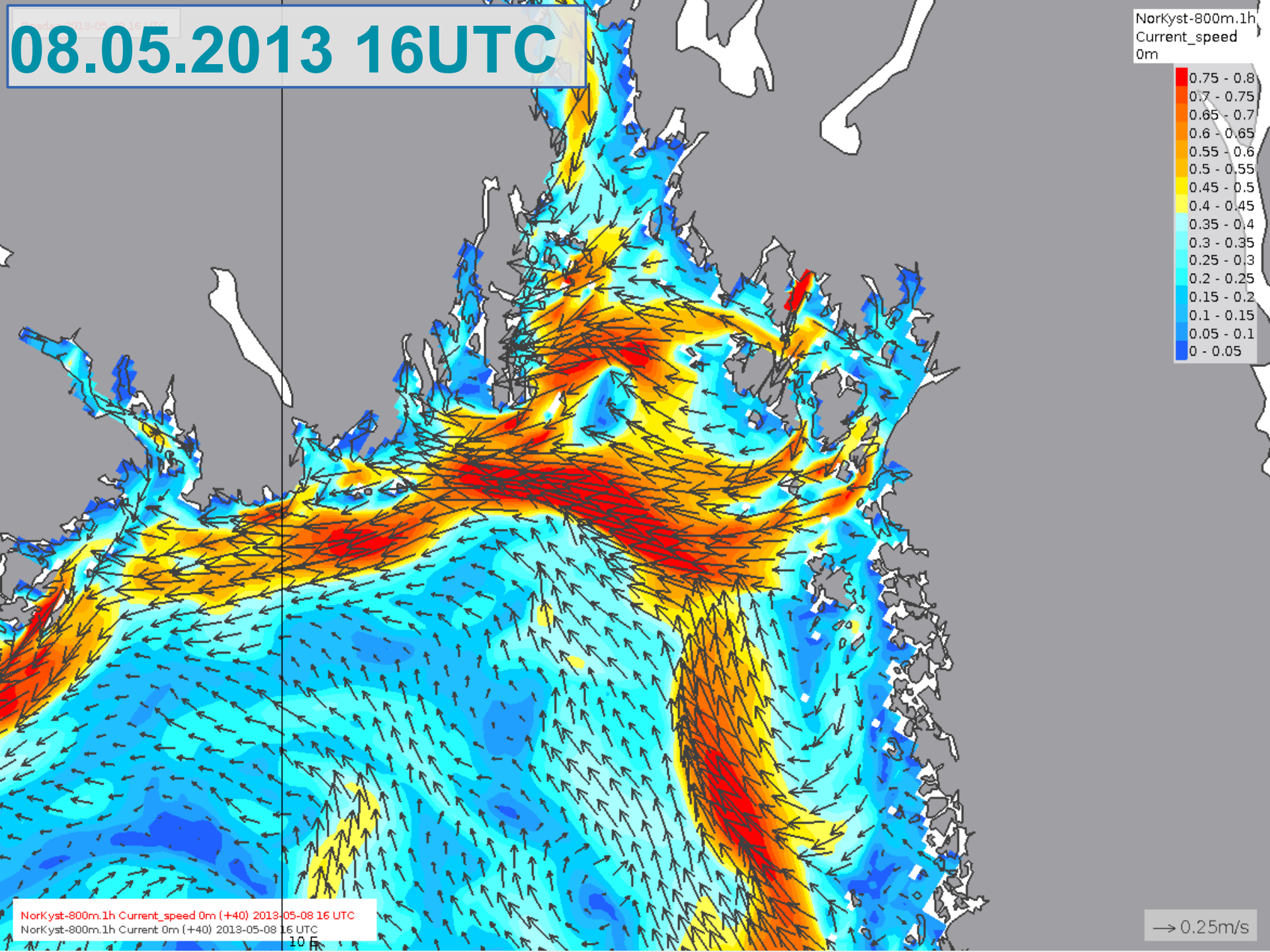
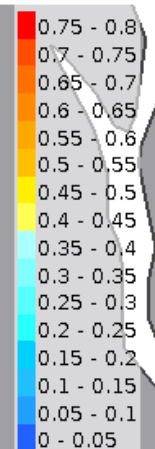
Strømsituasjonen i Skagerrak



Strømdetaljer – første halvdel

08.05.2013 16UTC

Norkyst-800m.1h
Current_speed
0m

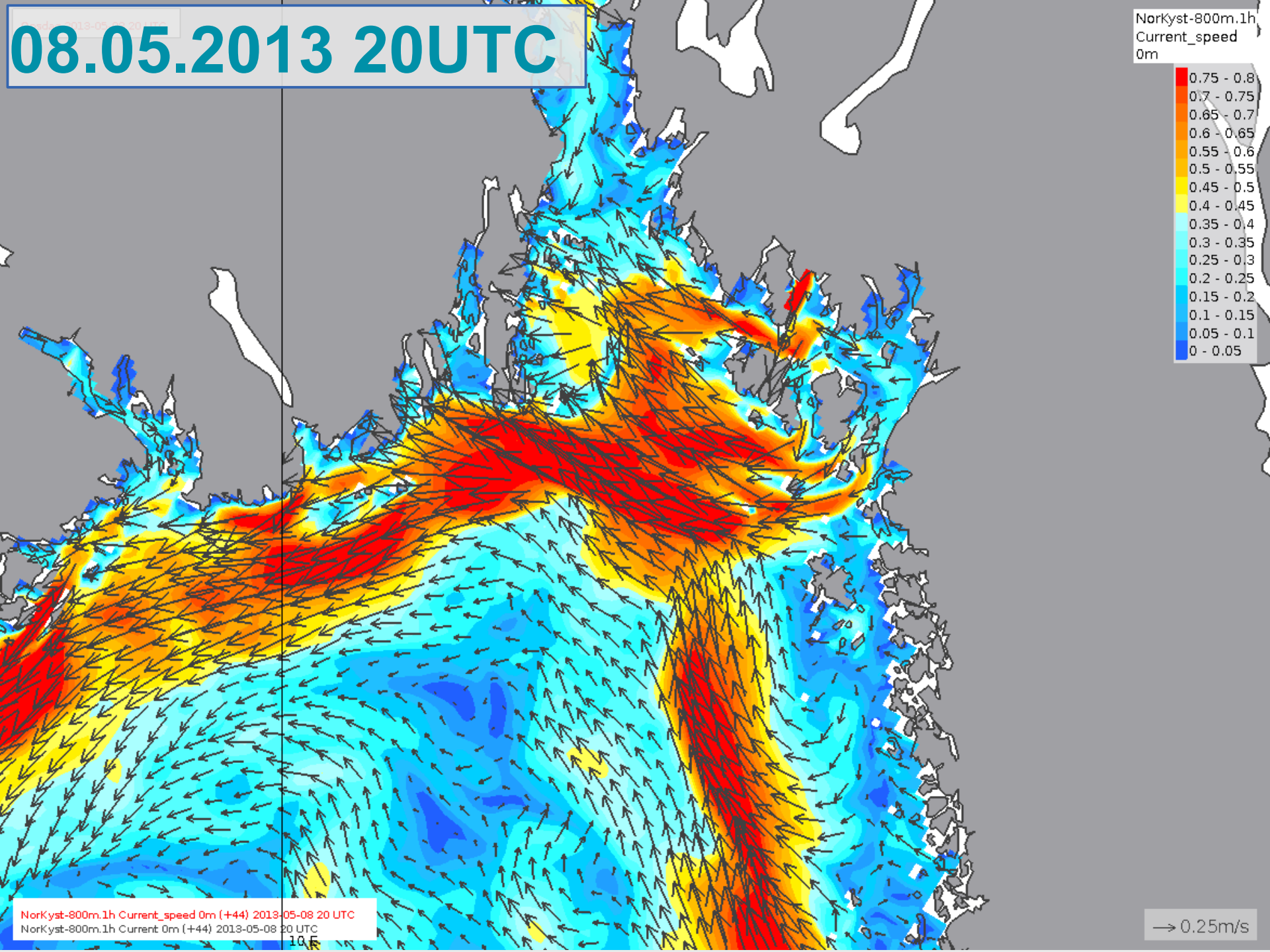
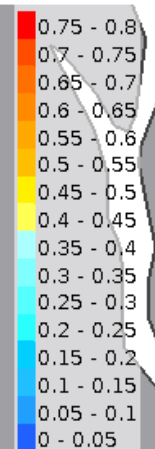


Norkyst-800m.1h Current_speed 0m (+40) 2013-05-08 16 UTC
Norkyst-800m.1h Current 0m (+40) 2013-05-08 16 UTC

→ 0.25m/s

08.05.2013 20UTC

Norkyst-800m.1h
Current_speed
0m

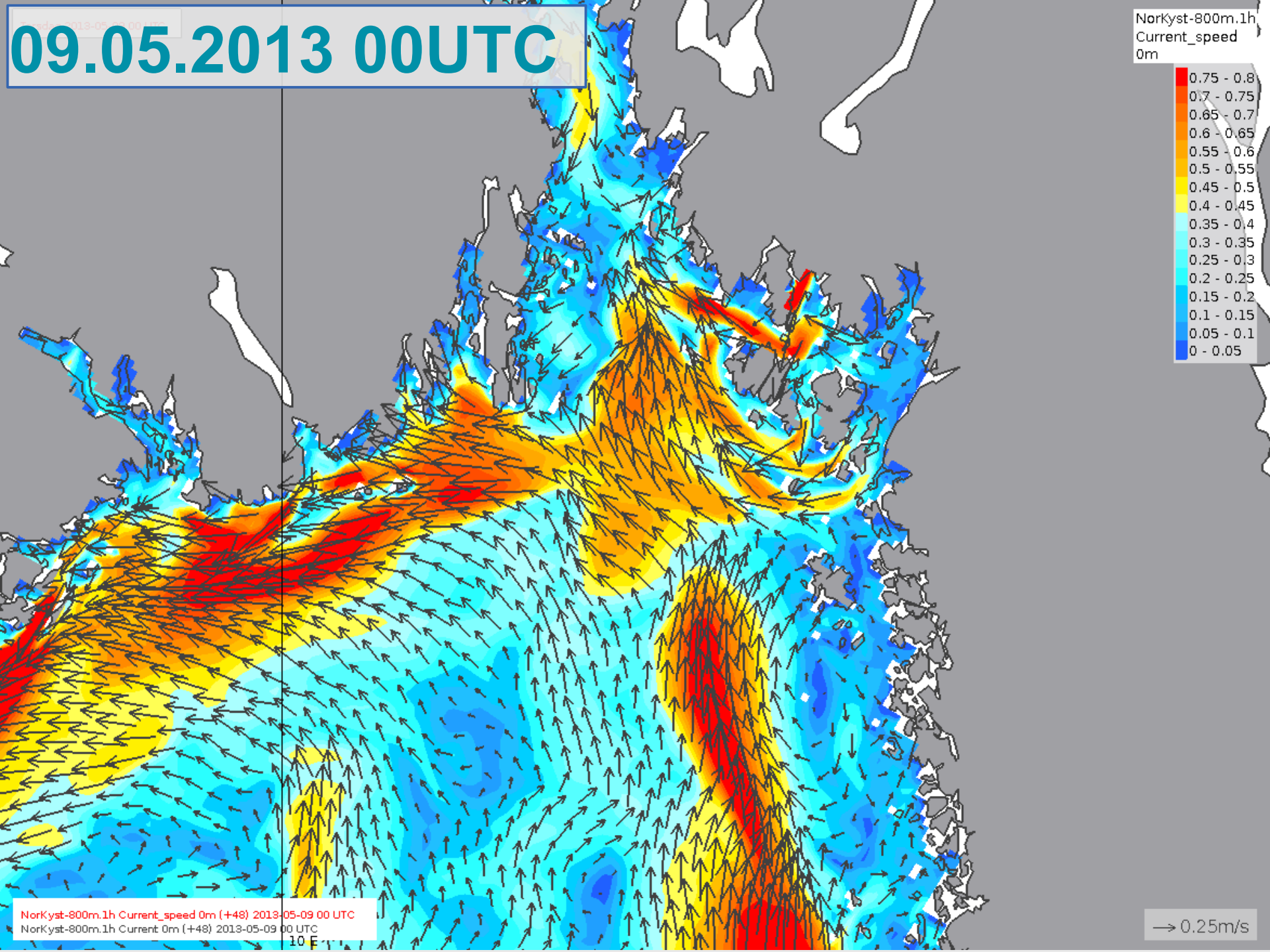
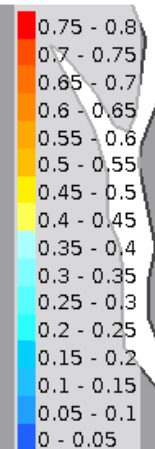


Norkyst-800m.1h Current_speed 0m (+44) 2013-05-08 20 UTC
Norkyst-800m.1h Current 0m (+44) 2013-05-08 20 UTC

→ 0.25m/s

09.05.2013 00UTC

Norkyst-800m.1h
Current_speed
0m

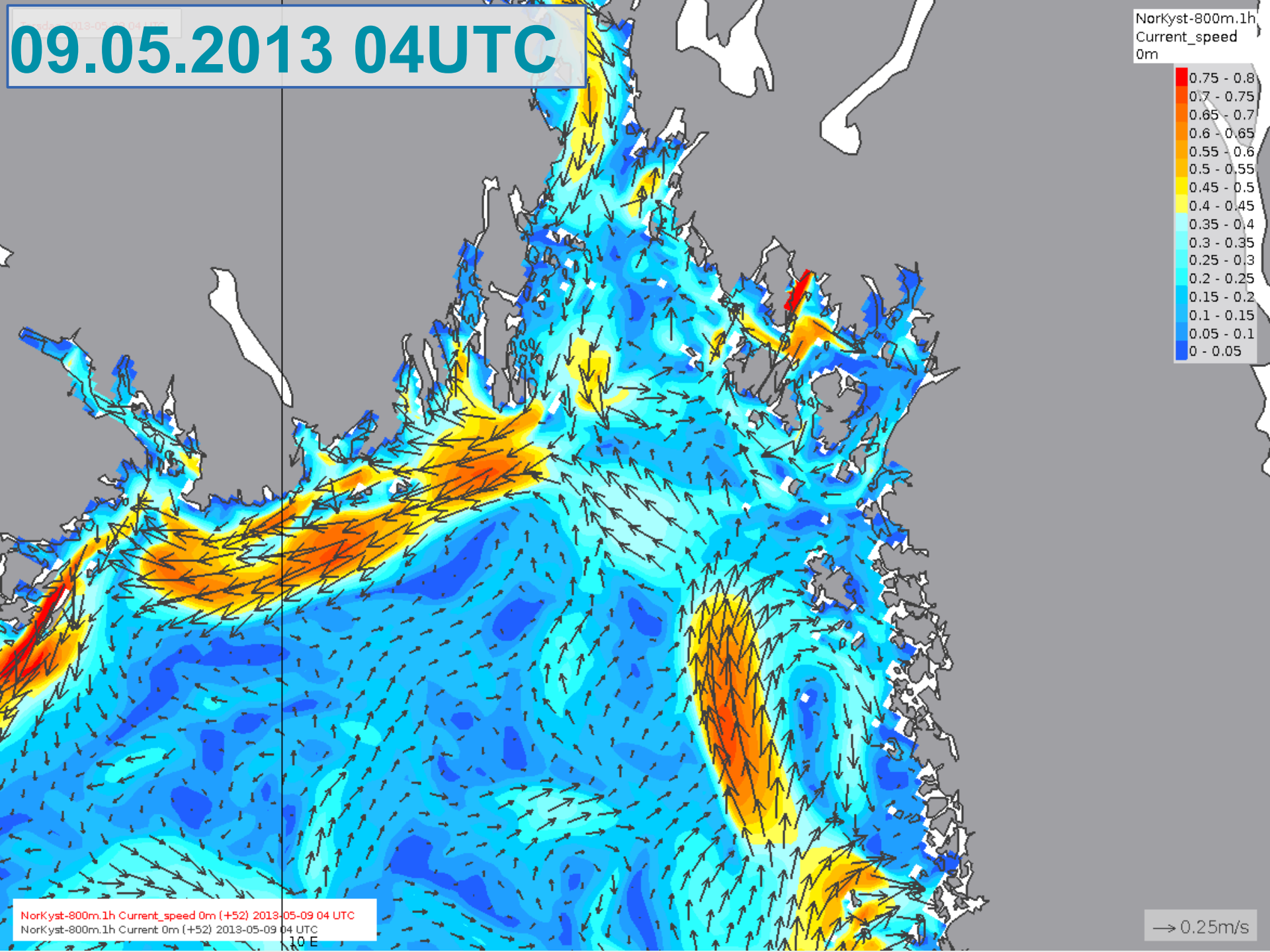
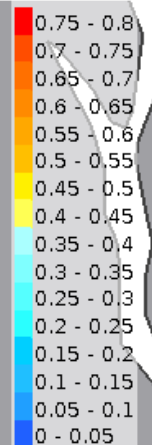


Norkyst-800m.1h Current_speed 0m (+48) 2013-05-09 00 UTC
Norkyst-800m.1h Current 0m (+48) 2013-05-09 00 UTC

→ 0.25m/s

09.05.2013 04UTC

Norkyst-800m.1h
Current_speed
0m

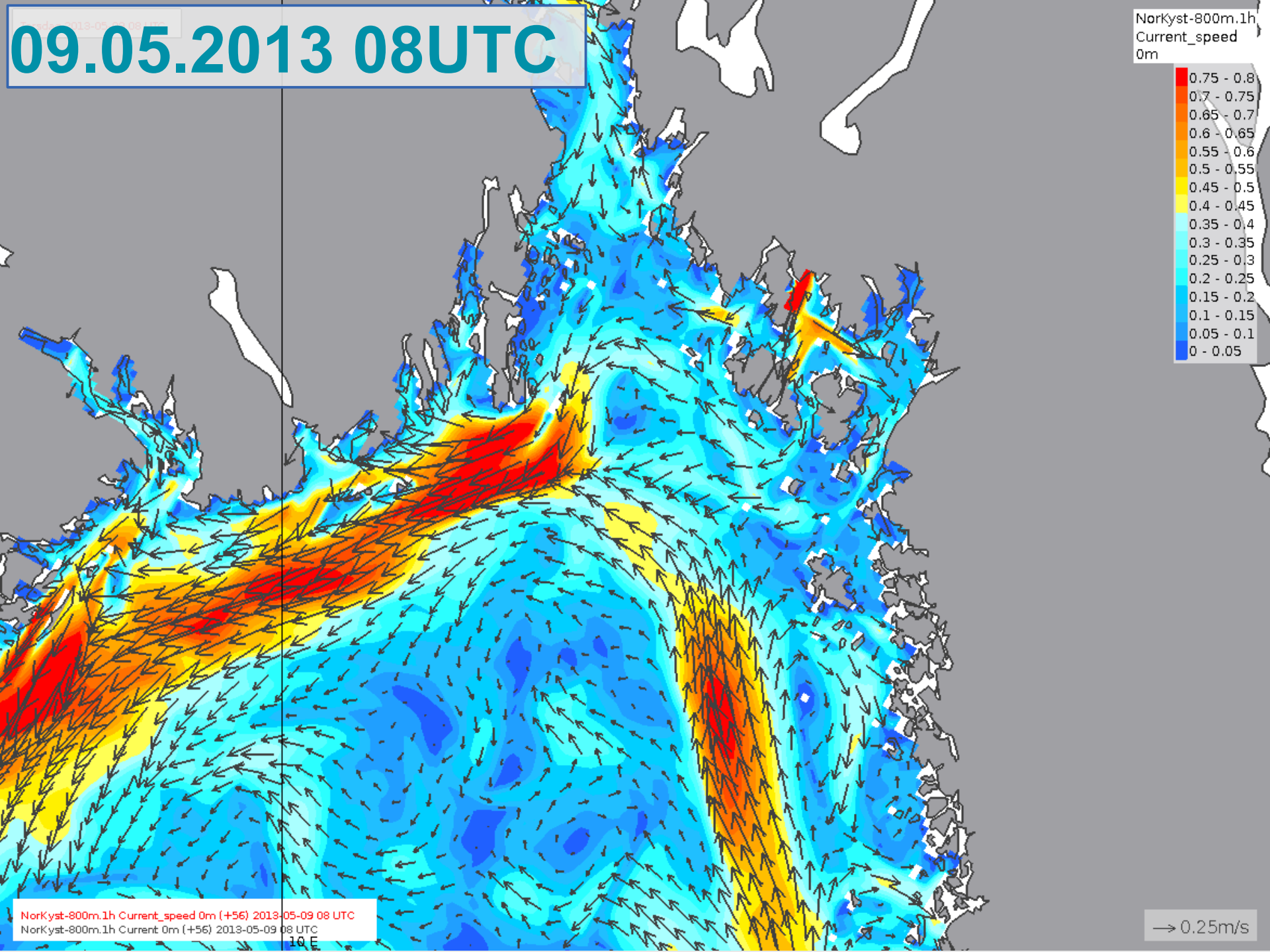
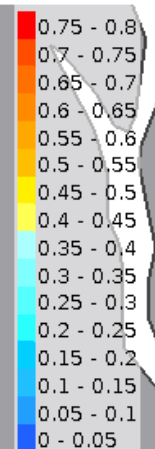


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Norkyst-800m.1h Current 0m (+52) 2013-05-09 04 UTC

→ 0.25m/s

09.05.2013 08UTC

Norkyst-800m.1h
Current_speed
0m



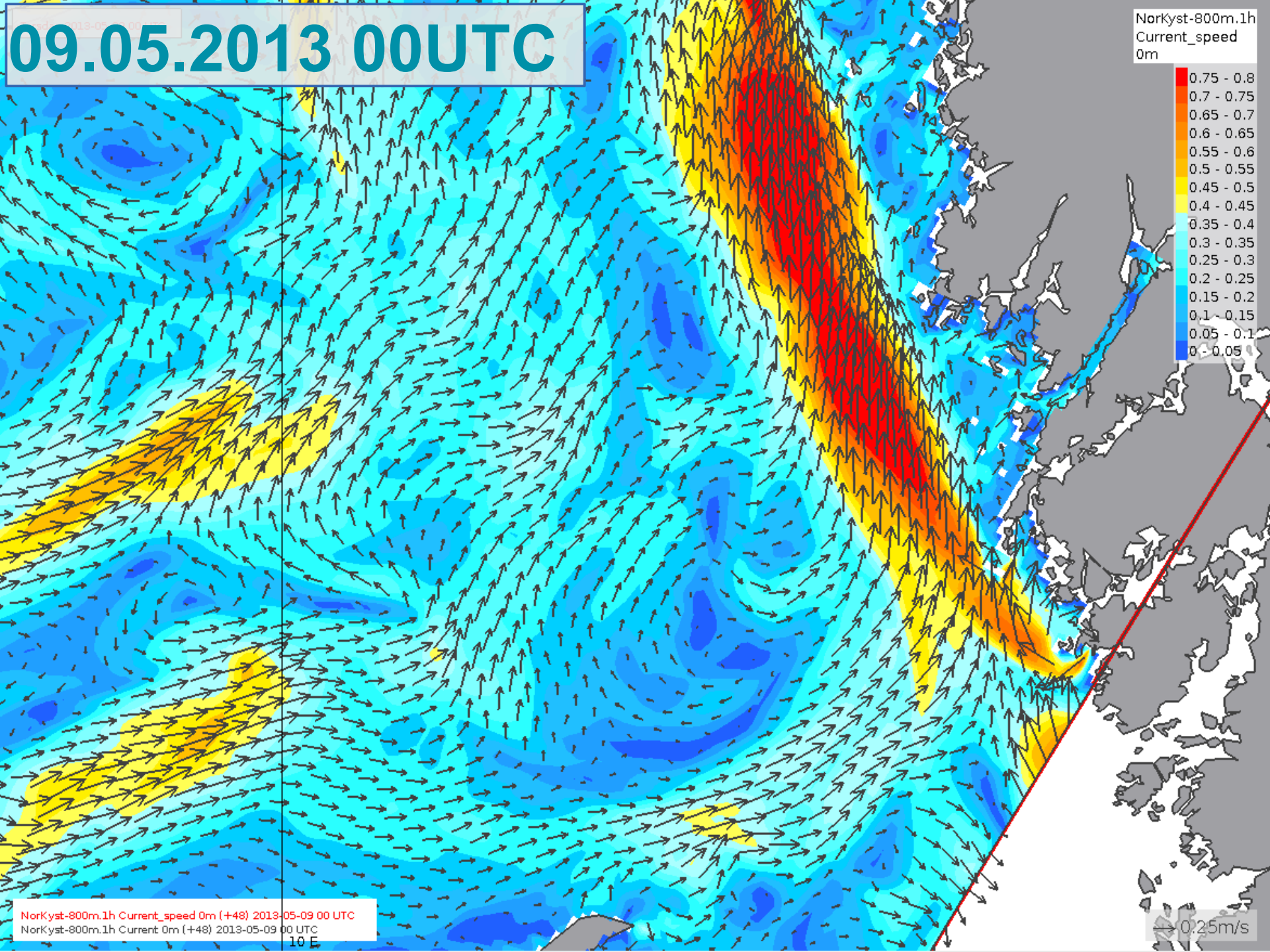
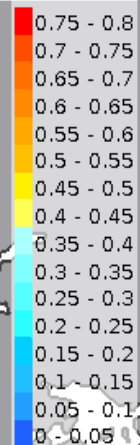
Norkyst-800m.1h Current_speed 0m (+56) 2013-05-09 08 UTC
Norkyst-800m.1h Current 0m (+56) 2013-05-09 08 UTC

→ 0.25m/s

Strømdetaljer – andre halvdel

09.05.2013 00UTC

Norkyst-800m.1h
Current_speed
0m



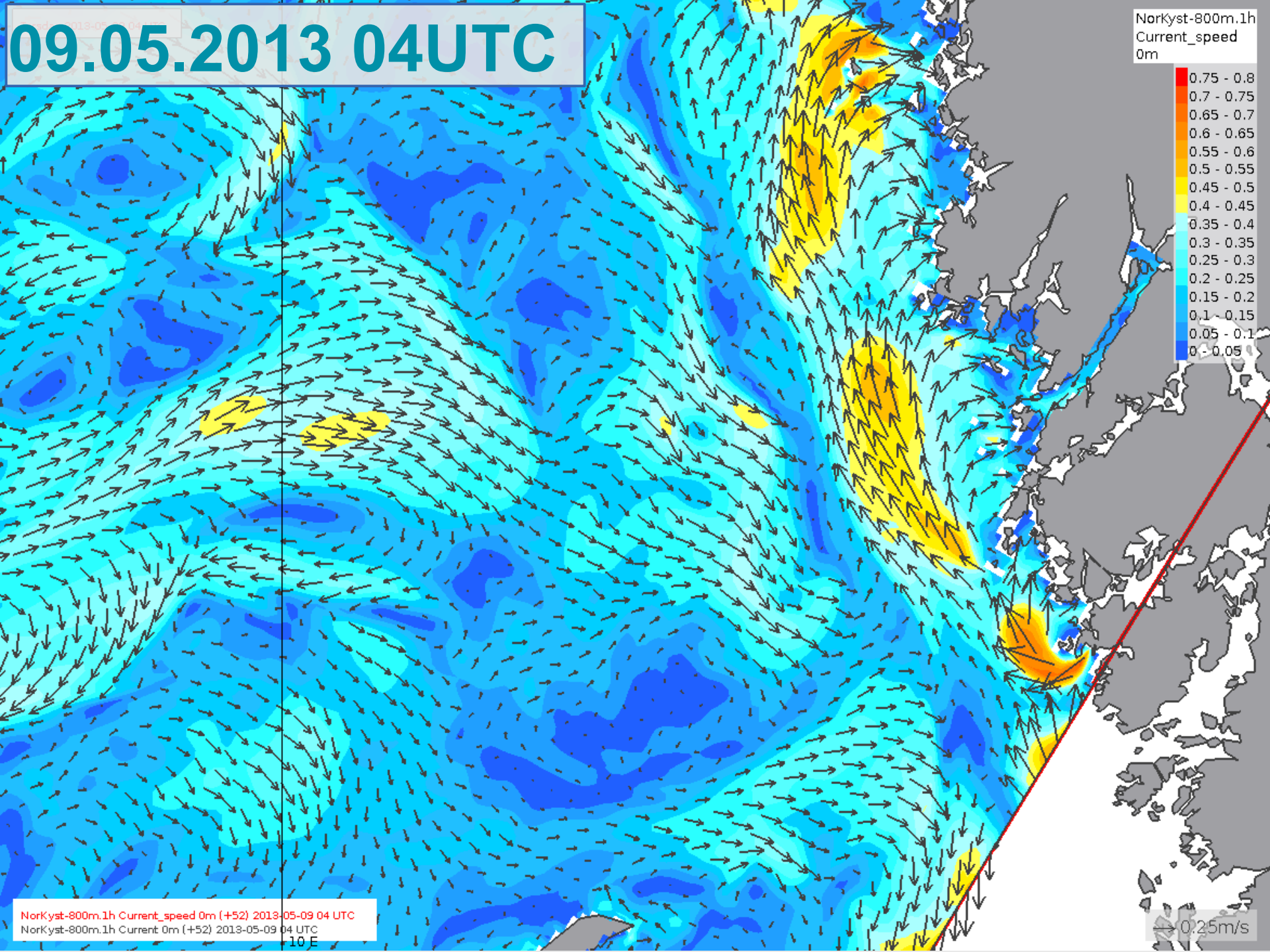
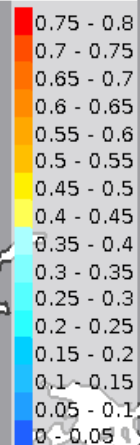
Norkyst-800m.1h Current_speed 0m (+48) 2013-05-09 00 UTC
Norkyst-800m.1h Current 0m (+48) 2013-05-09 00 UTC

10 E

0.25m/s

09.05.2013 04UTC

Norkyst-800m.1h
Current_speed
0m



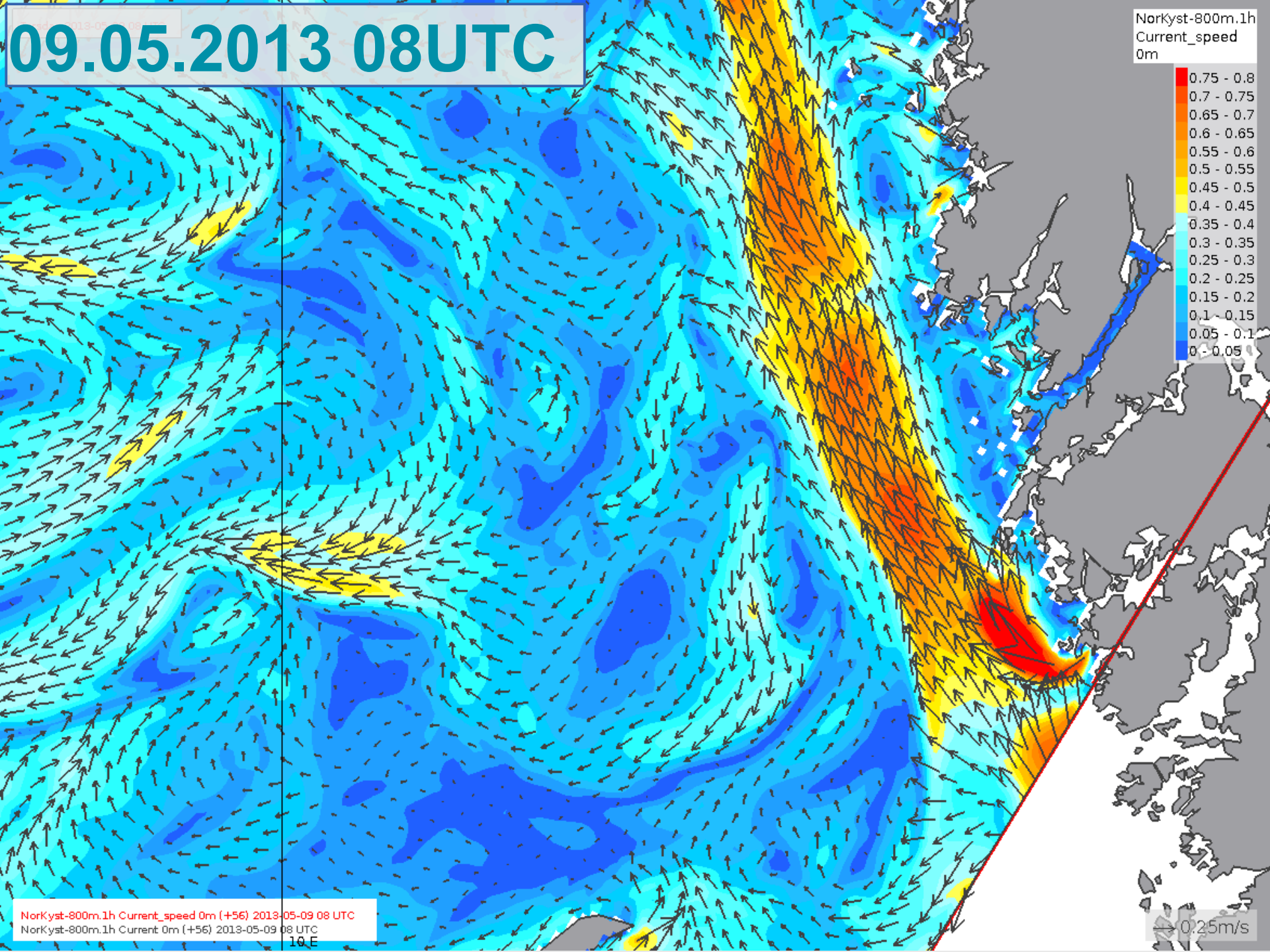
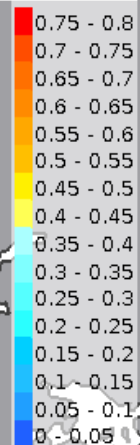
Norkyst-800m.1h Current_speed 0m (+52) 2013-05-09 04 UTC
Norkyst-800m.1h Current 0m (+52) 2013-05-09 04 UTC

10 E

0.25m/s

09.05.2013 08UTC

Norkyst-800m.1h
Current_speed
0m



Norkyst-800m.1h Current_speed 0m (+56) 2013-05-09 08 UTC

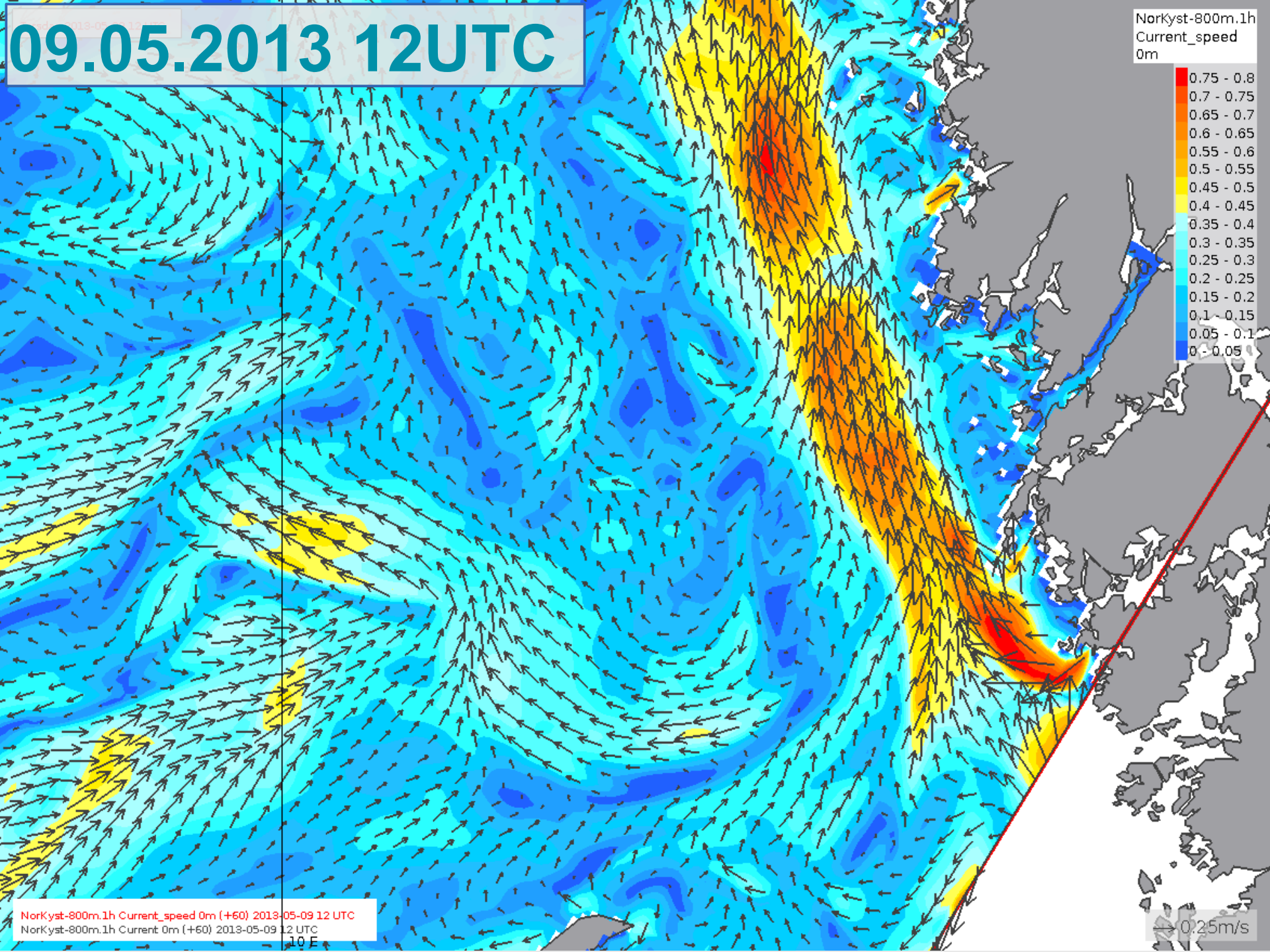
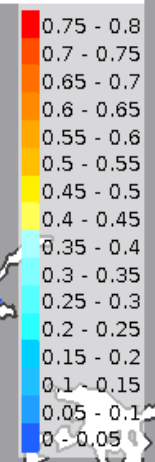
Norkyst-800m.1h Current 0m (+56) 2013-05-09 08 UTC

10 E

0.25m/s

09.05.2013 12UTC

Norkyst-800m.1h
Current_speed
0m

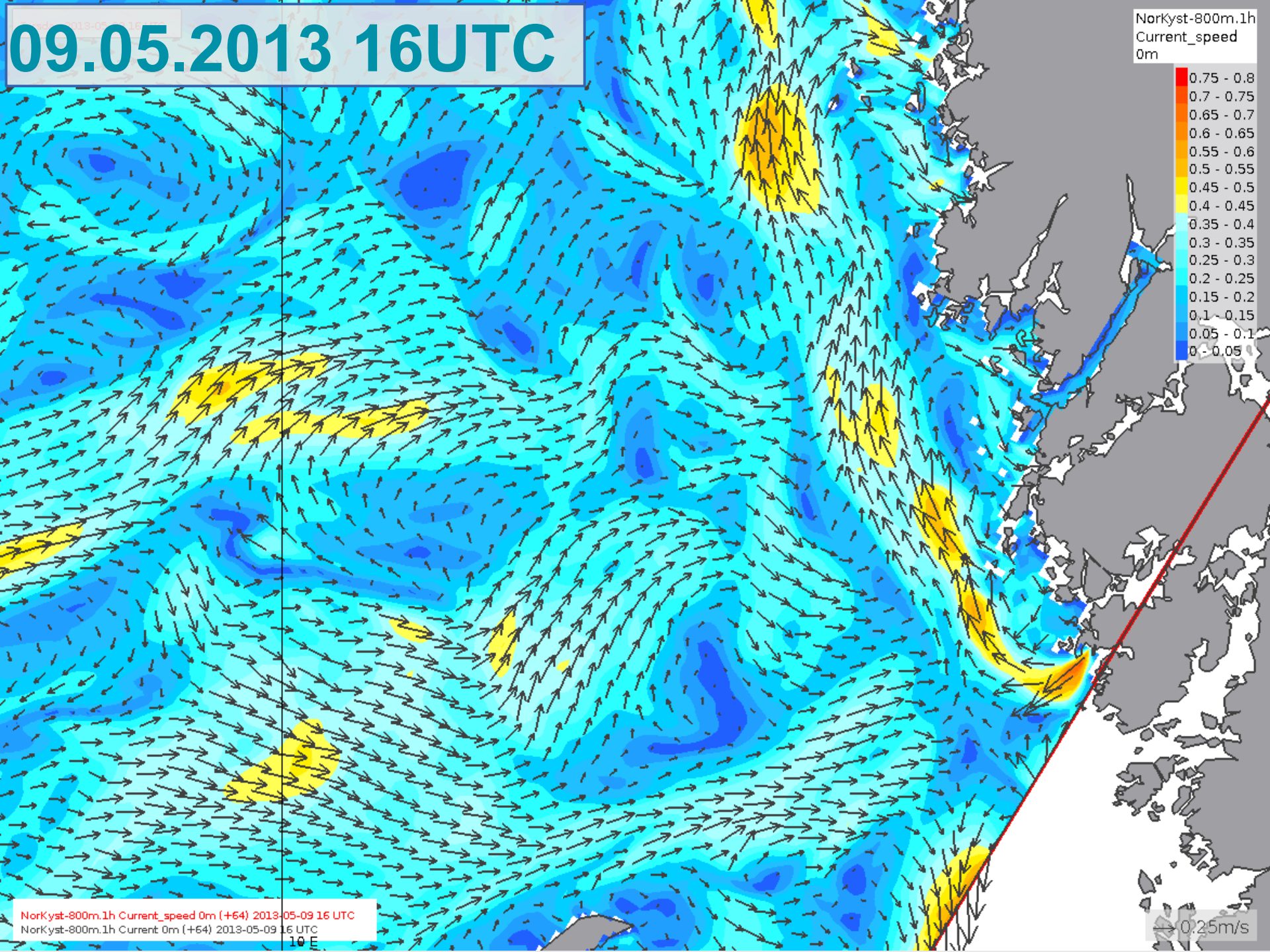
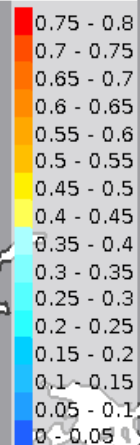


Norkyst-800m.1h Current_speed 0m (+60) 2013-05-09 12 UTC
Norkyst-800m.1h Current 0m (+60) 2013-05-09 12 UTC
10 E

0.25m/s

09.05.2013 16UTC

Norkyst-800m.1h
Current_speed
0m



Norkyst-800m.1h Current_speed 0m (+64) 2013-05-09 16 UTC

Norkyst-800m.1h Current 0m (+64) 2013-05-09 16 UTC

10 E

0.25m/s

Bølger

- Bølgenretningen følger vinden
- Signifikant bølgehøyde 0.5 – 1 meter

Værinformasjon på nett

- På yr.no/kart finnes levende kart for
 - Nedbør
 - Temperatur
 - Vind
 - Trykk
 - Strøm
 - Bølger
 - Etc.
- På yr.no/hav_og_kyst kan du hente ut marinogrammer for alle posisjoner

























yr.no

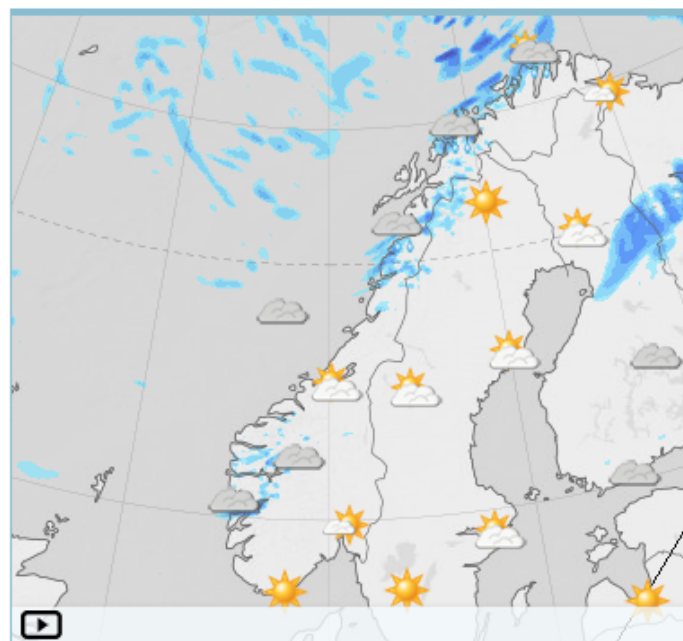
Søk blant værvarsel i Norge og verden:

SØK

NRK

Meteorologisk
instituttSkriv stedsnavn, f.eks. Stavanger, Røst eller Beijing. Avansert søk

Steder	Tirsdag	Onsdag	Torsdag	Hurtigmeny
Nesoddtangen	 16°	 14°	 9°	Time for time Langtidsvarsel
Skagen	 12°	 11°	 11°	Time for time Langtidsvarsel
Skagen 	 5°	 6°	 8°	Time for time Langtidsvarsel
Færder fyr målestasjon	 7°	 11°	 9°	Time for time Langtidsvarsel
Leangbukta	 17°	 14°	 9°	Time for time Langtidsvarsel
Tåsen skole	 18°	 16°	 10°	Time for time Langtidsvarsel
Kjeller	 19°	 16°	 10°	Time for time Langtidsvarsel
Nøsen Fjellhotell	 9°	 9°	 5°	Time for time Langtidsvarsel



Værkart



Hav og kyst



Værradar



Se skydekke



Snøskredvarsel



Fjelloverganger



Skiførekart



Pollenvarsel



Siste observasjoner



Varmest, kaldest, våtest



Siste snødybder



Klima i Norge og Verden



Meteorologens værkart



Tekstvarsel



Meteorologileksikon



Spør meteorologen



Slik forstår du varslene



Kontakt og hjelp



Gratis værdata



Se hva andre har laget



YR.no

NRK

Meteorologisk
institutt

Nord-Europa

Verden

+

-

Tirsdag

Onsdag

Torsdag

Tidssone

Norge

UTC+02:00

Nedbør og skyer

Værradar

Temperatur

Vind

Trykk

Trykk i hektopascal (hPa)

UV-varsel

Havtemperatur

Havstrømmer

Bølgehøyde

200 km



YR.no

NRK

Meteorologisk
institutt

Nord-Europa

Verden

+

-

Tirsdag

Onsdag

Torsdag

Tidssone

Norge

UTC+02:00

Nedbør og skyer

Værradar

Temperatur

Vind

Vind i meter per sekund

Trykk

UV-varsel

Havtemperatur

Havstrømmer

Bølgehøyde

200 km



YR.no

NRK

Meteorologisk
institutt

Nord-Europa

Verden



Tirsdag

Onsdag

Torsdag

Fredag

Lørdag

Tidssone

Norge

13 16 19 22 01 04 07 10 13 16 19 22 01 04 07 10 13 16 19 22 01 04 07 10 13 16 19 22 01 UTC+02:00

Nedbør og skyer

Værradar

Temperatur

Vind

Trykk

UV-varsel

Havtemperatur

Havstrømmer

Pilene viser retning. Små piler
indikerer svak strøm, store piler
sterk strøm.

Bølgehøyde

200 km



YR.no

NRK

Meteorologisk
institutt

Nord-Europa

Verden

+

Nedbør

Temperatur

Vind

Vind i meter per sekund

Trykk



Onsdag

Torsdag

Fredag

Lørdag

Søndag

Mandag

Tirsdag

Onsdag

Torsdag

Tidssone

Norge

UTC+02:00

14

02

14

02

14

02

14

02

14

02

14

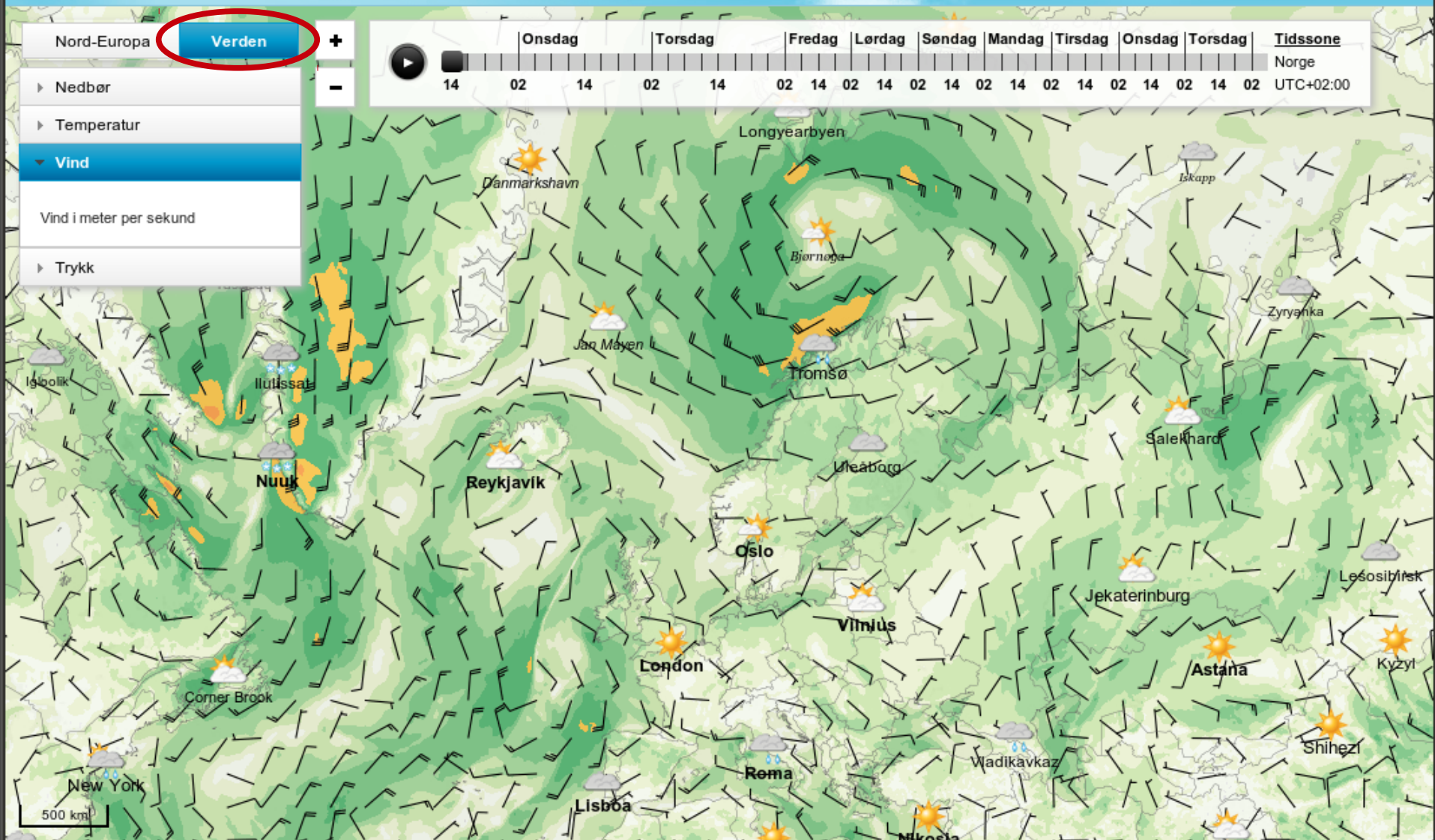
02

14

02

14

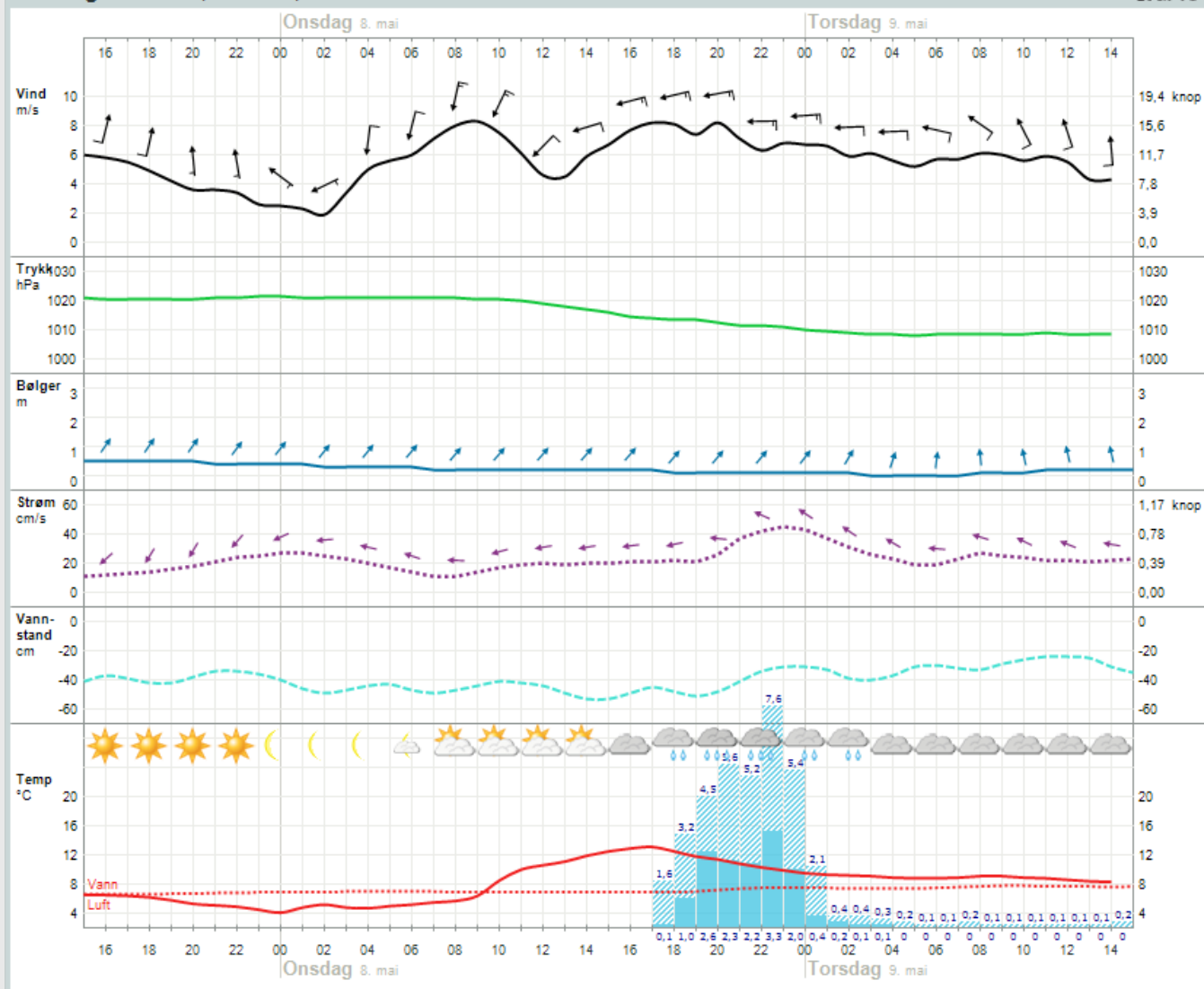
02



yr.no/hav_og_kyst

Marinogram for 59,08023 10,55508 Neste 48 timer

yr.no



GRIB-filer fra MET

- Spesialtjeneste for Skagen Race:
 - <http://projects.met.no/~nilsmk/skagen2013/>
 - Oppdateres flere ganger i døgnet
 - Varsler for vind, strøm og bølger
- yr.no:
 - <http://om.yr.no/verdata/grib/>

GRIB-filer for Skagen Race 2013

Leveret av [Meteorologisk institutt](#)



Meteorologisk
institutt

Atmosfæremodeller:

Hirlam-12km: [00 UTC](#), [06 UTC](#), [12 UTC](#), [18 UTC](#)

Hirlam-8km: [00 UTC](#), [06 UTC](#), [12 UTC](#), [18 UTC](#).

Havmodeller:

Nordic-4km: [00 UTC](#)

NorKyst-800m: [00 UTC](#)

Bølgemodeller:

WAM-10km: [00 UTC](#), [12 UTC](#)

WAM-4km: [00 UTC](#), [12 UTC](#)

Se også [GRIB-filer fra yr.no](#), og levende kart på [yr.no/kart](#).

Oppsummering

- Varslene er noe usikre
- Dreiningen fra øst til syd kan komme før eller etter den er varslet
- Nordgående strøm langs svenskekysten
- Det er kaldt i både vannet og lufta!
- Værvarselet er ferskvare for årets Skagen Race!

Lykke til!