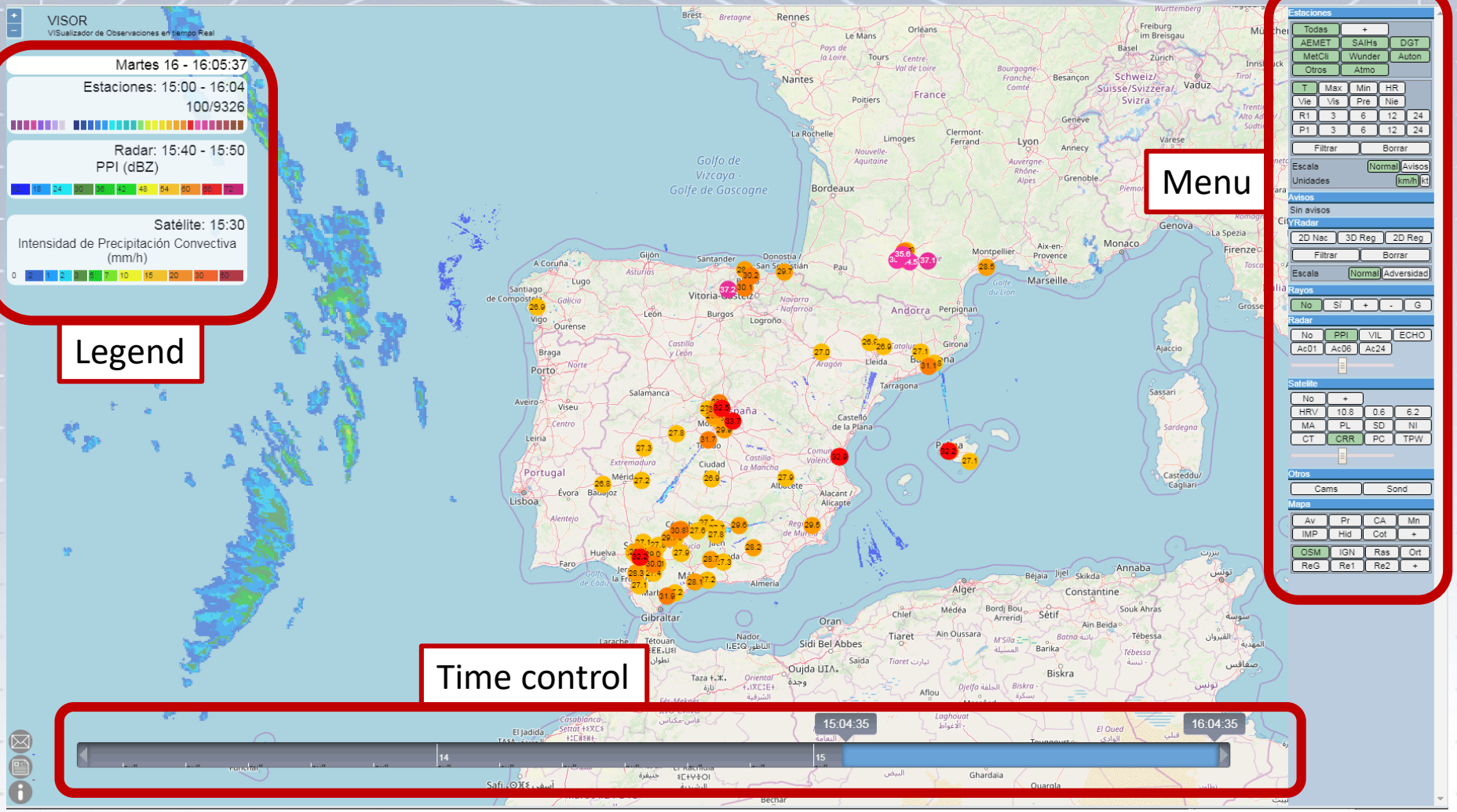
VISOR: Real time observations visualizer

Gómez, M., Aguayo, P., García, M. T., Jiménez, C., Marcos, C., Perea, C., Riesco, J., Roa, A. and San Ambrosio, J. I.
AEMET (Spanish Meteorological Agency)

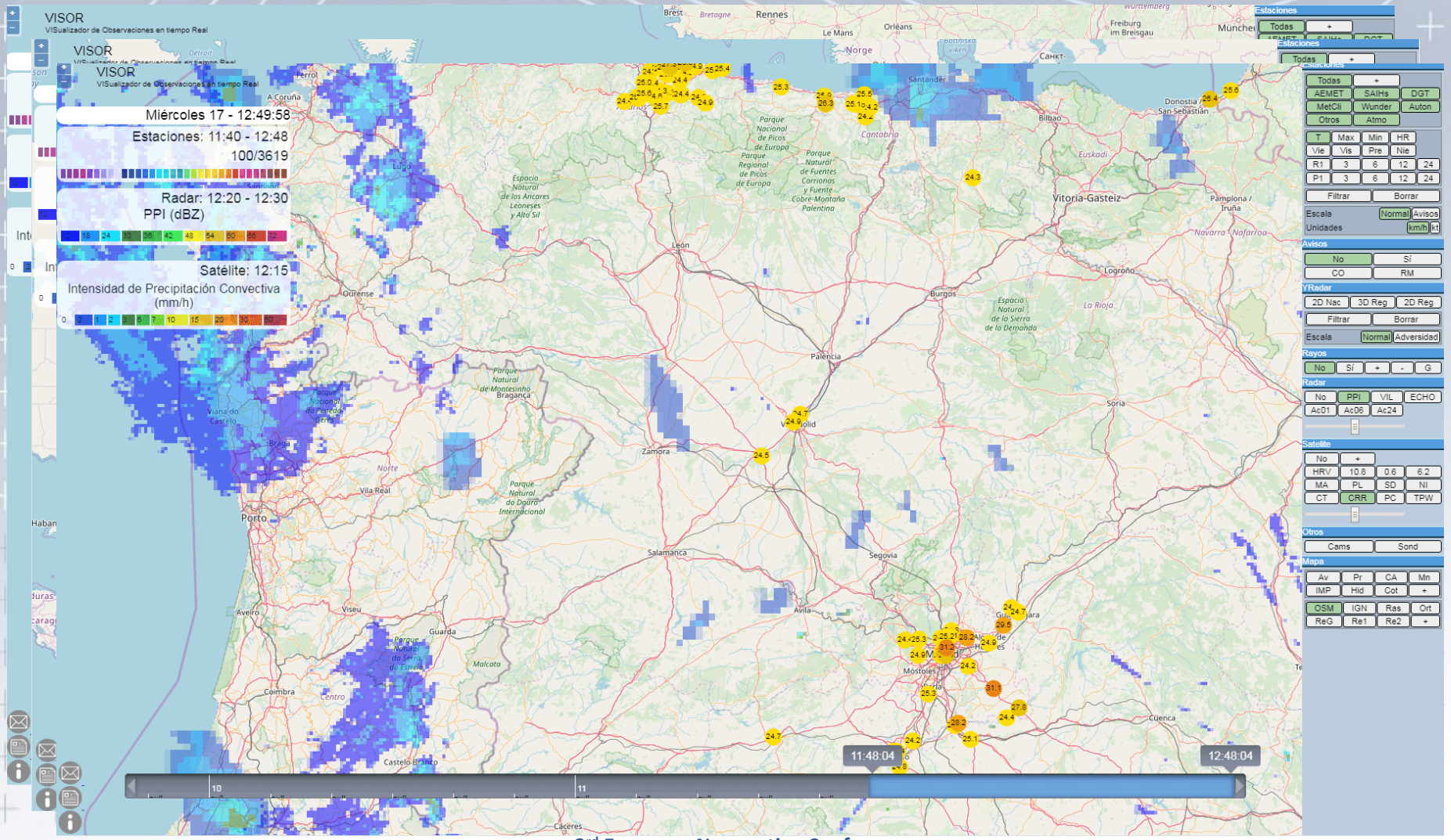
3rd European Nowcasting Conference
24 – 26 April 2019, Madrid, Spain

VISOR: web visualizer for real time observations

How it works?



Zoom in and zoom out



Menu

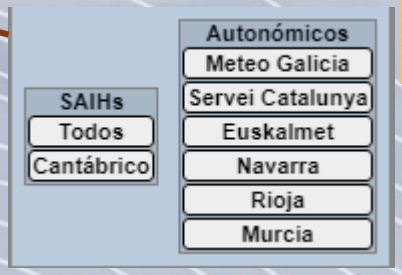
Weather station filters

YRADAR products

RADAR products

Web cams & soundings

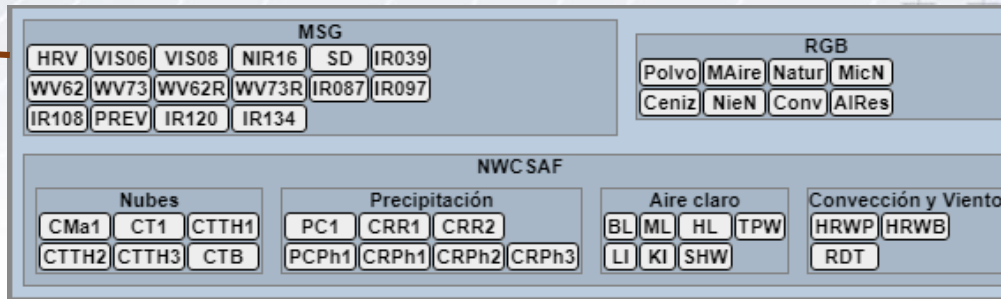
Surface weather stations



Warnings

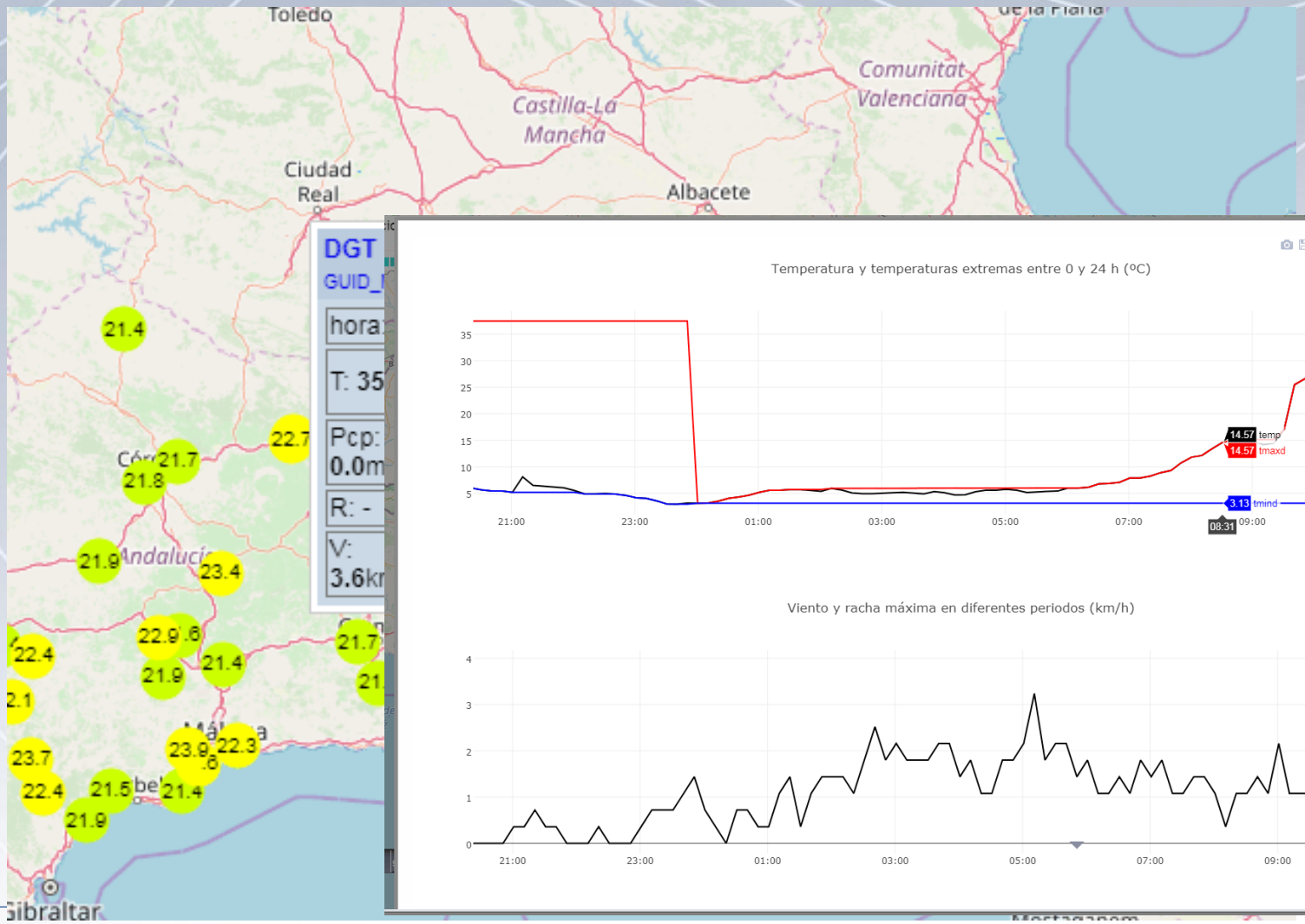
Lightning information

Satellite products

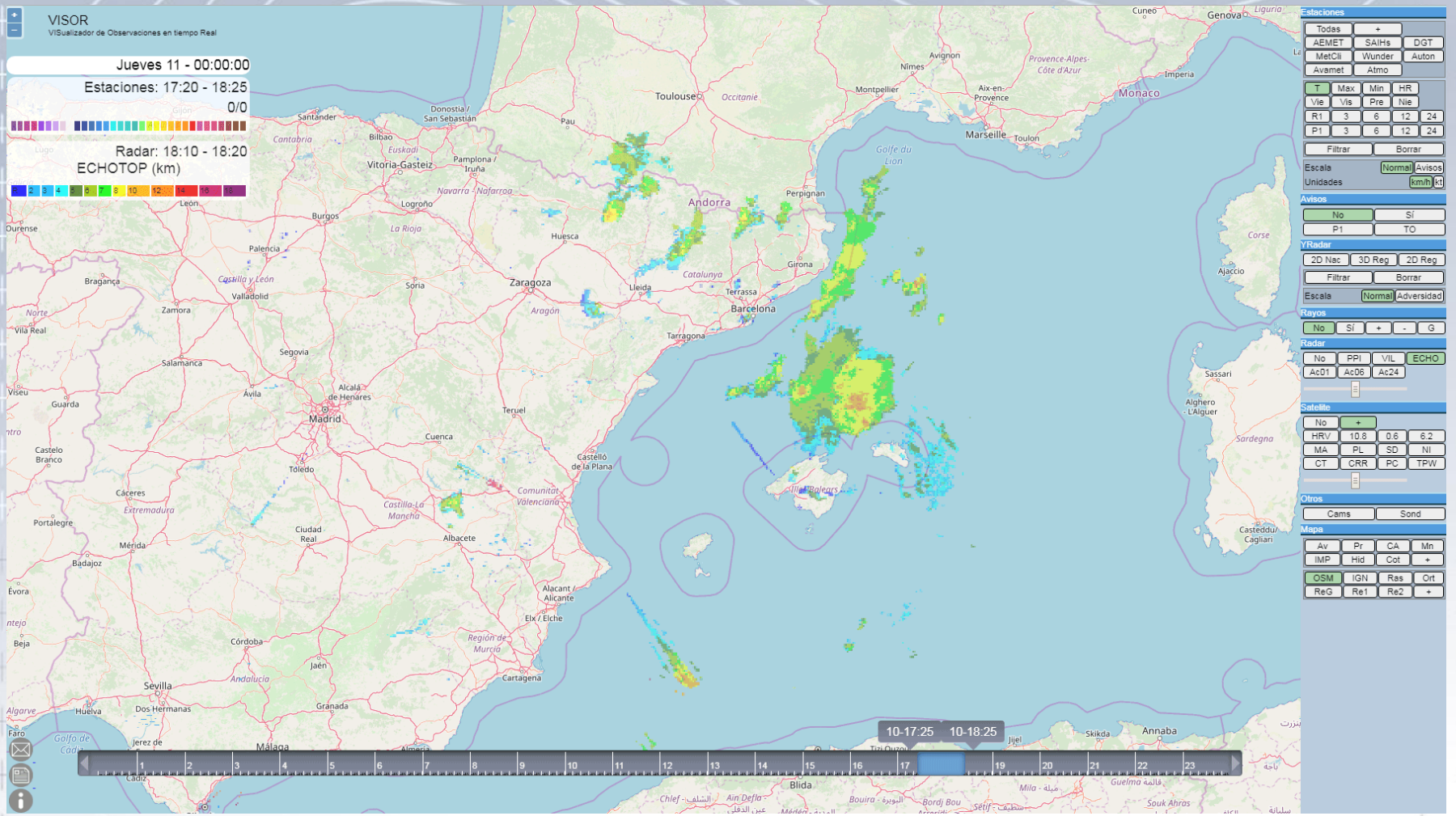


Several maps, limits, color scales…

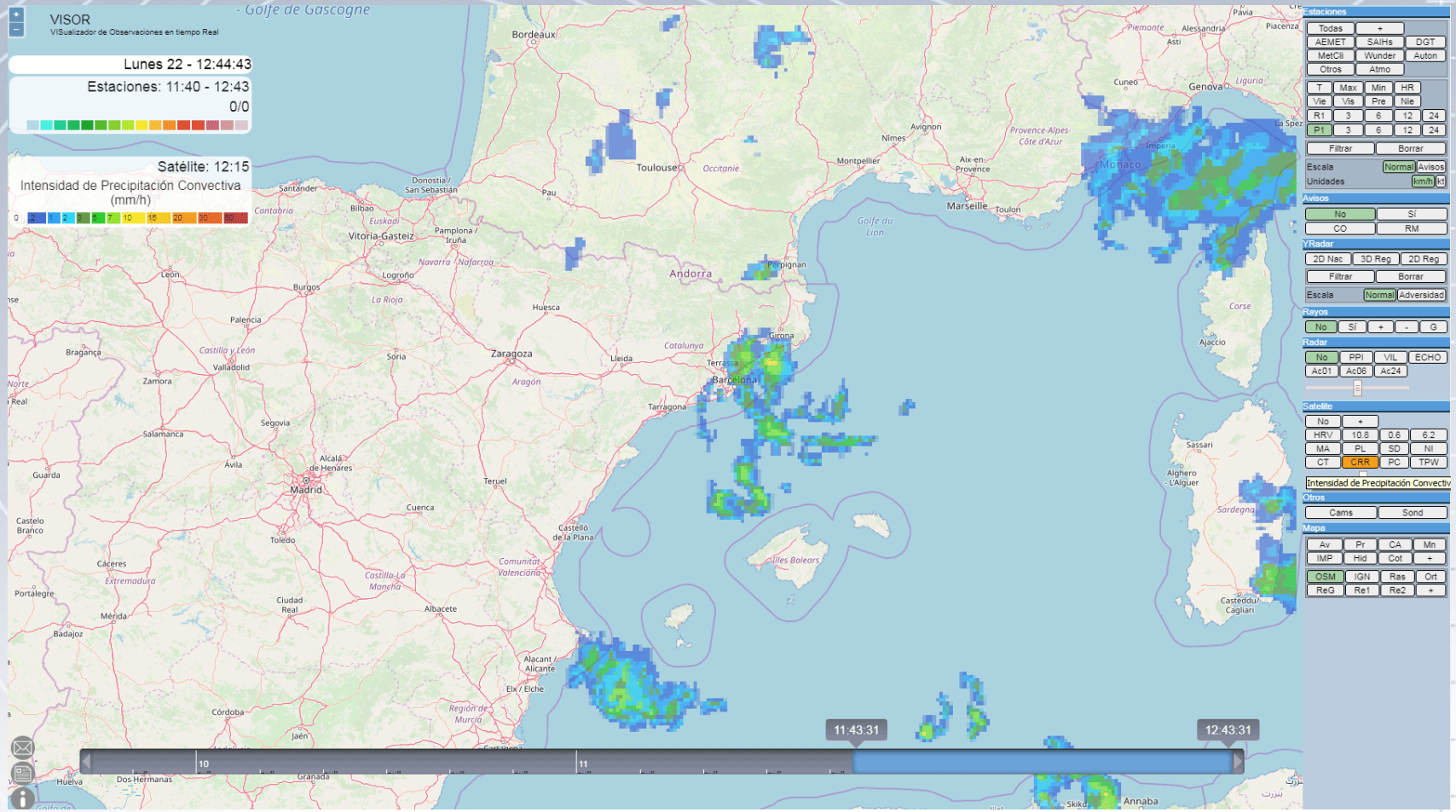
Surface weather stations



Radar (ECHOTOP)

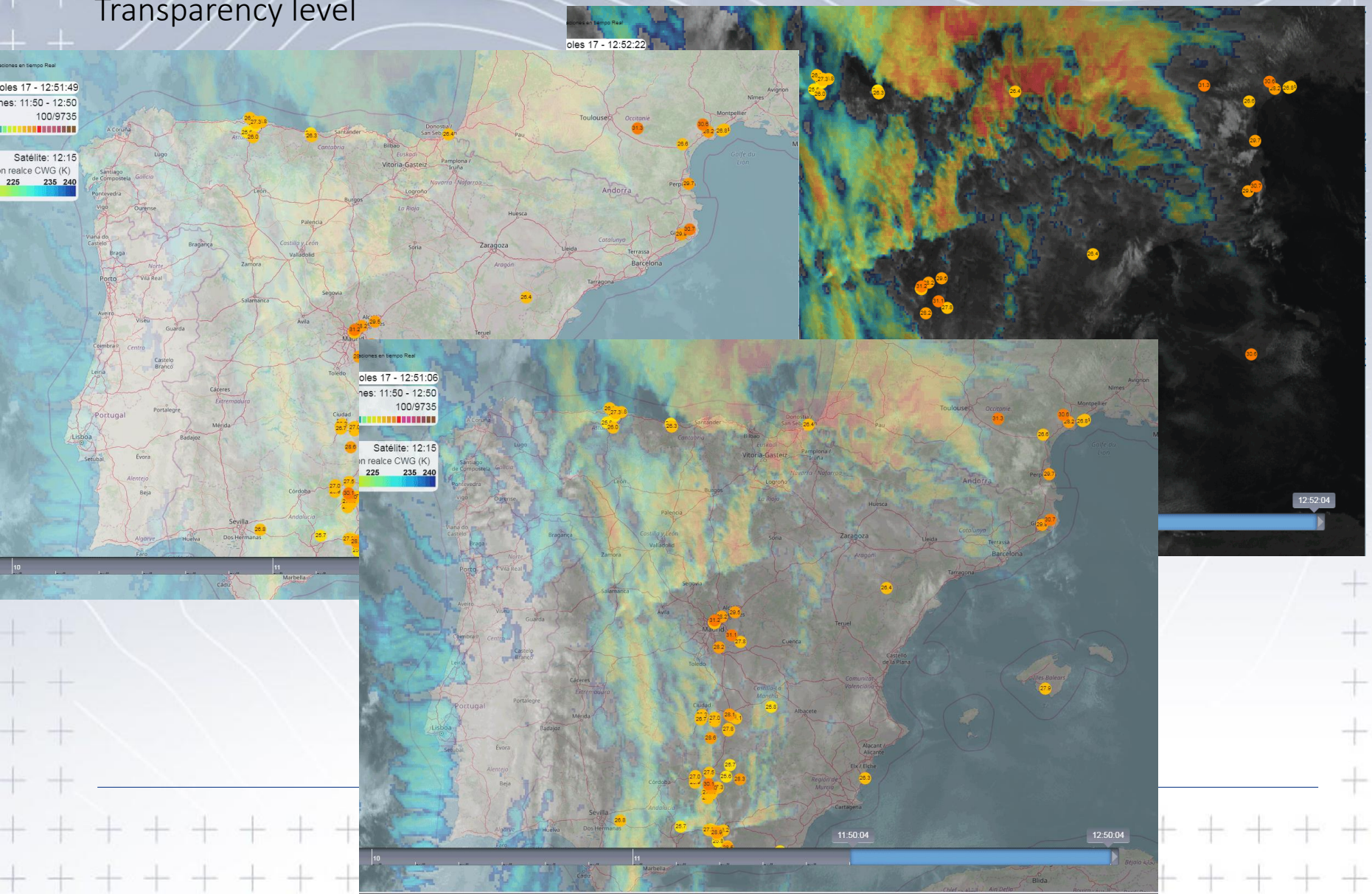


Satellite (NWCSAF CRR)

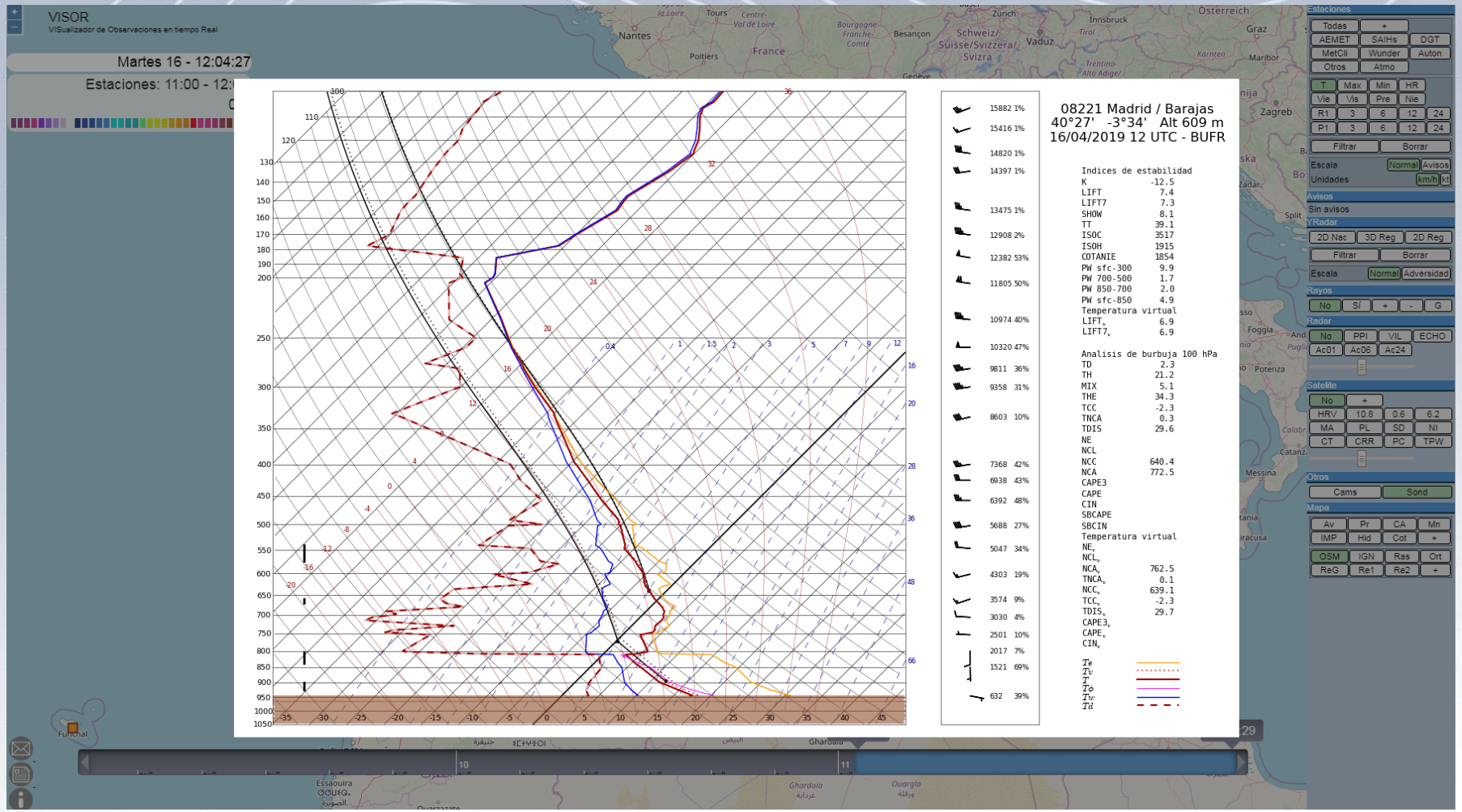


Satellite (Sandwich)

Transparency level



Weather soundings



Webcams

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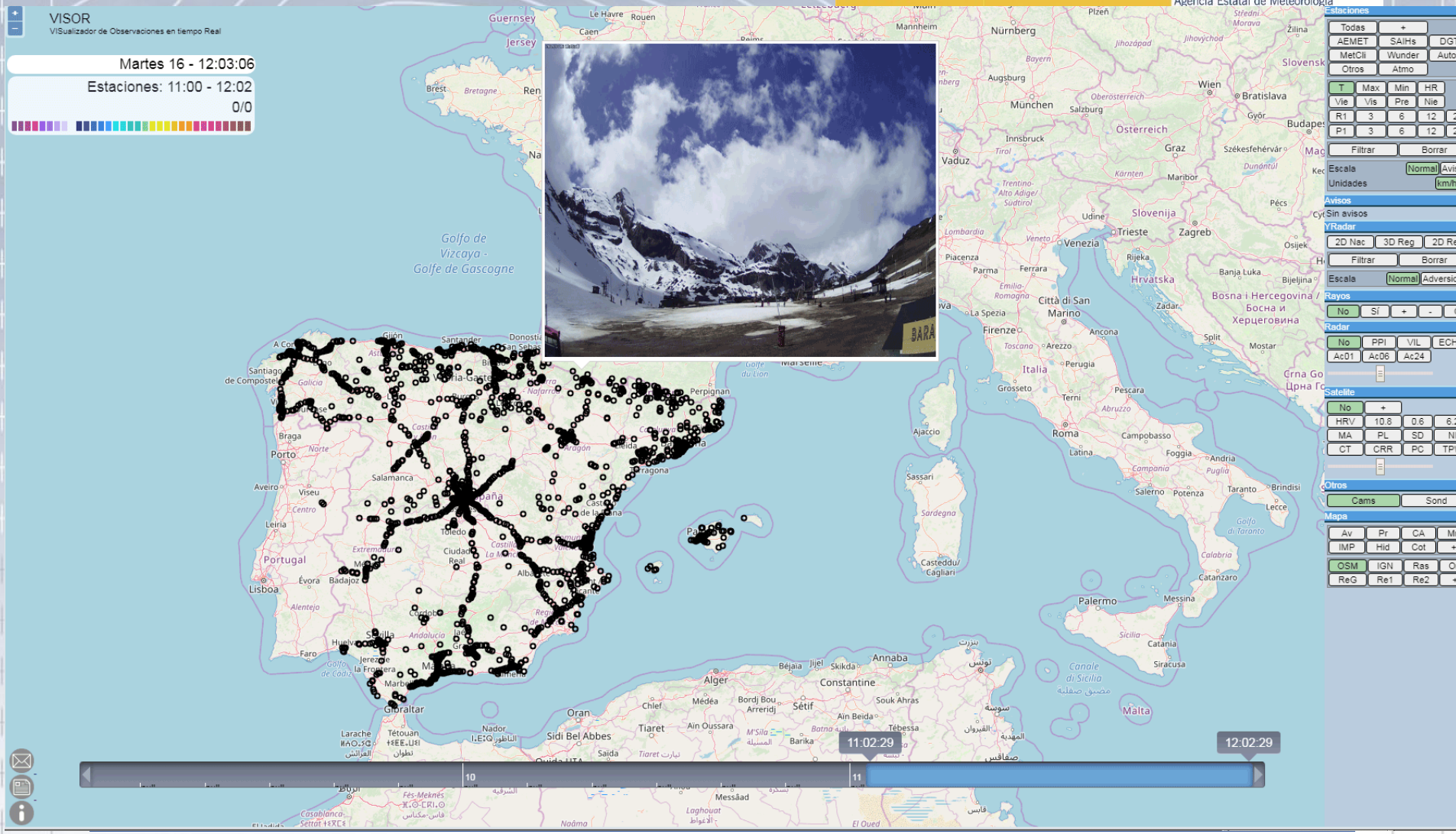
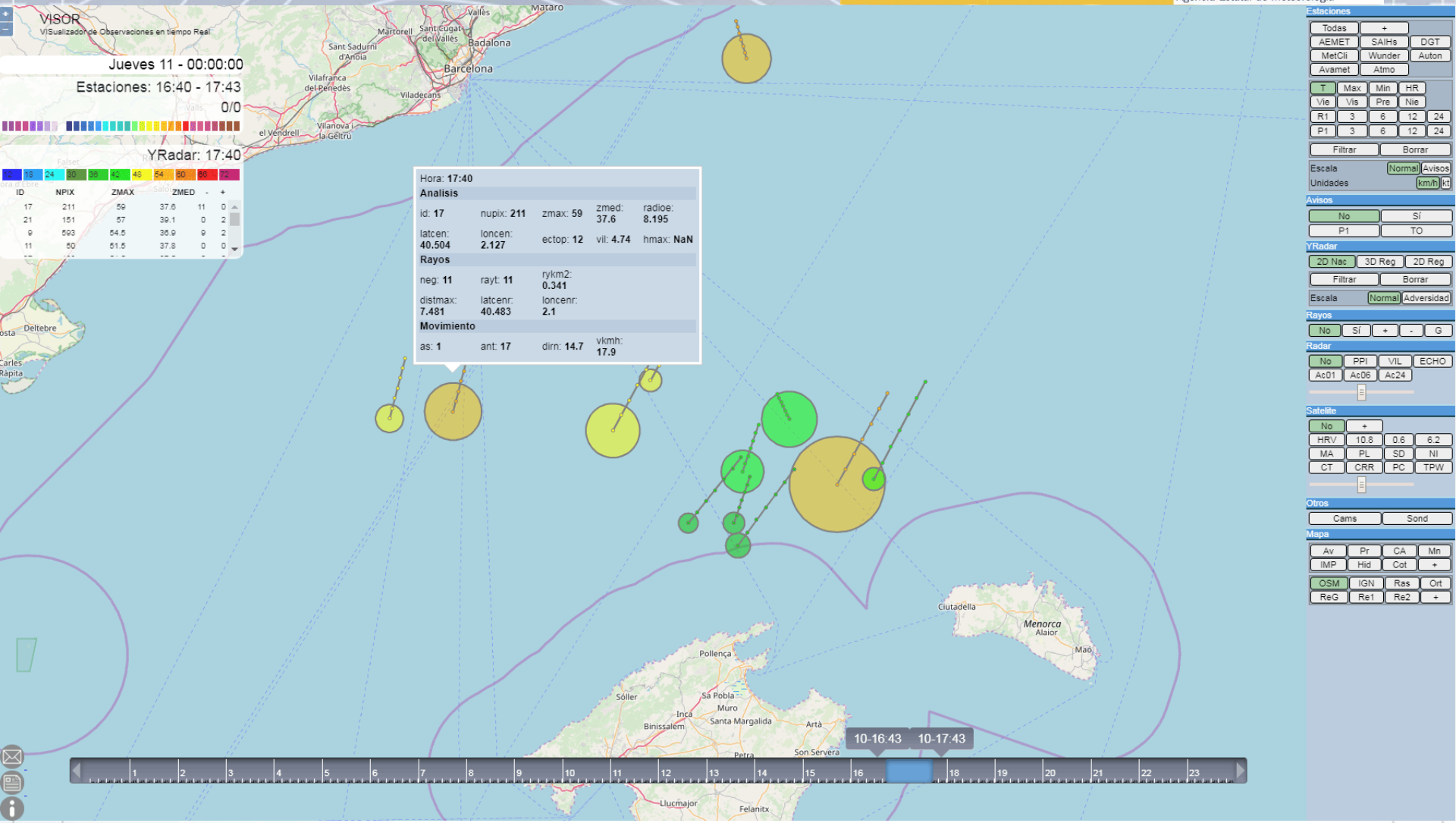
MINISTERIO PARA LA TRANSICIÓN ECOLÓGICA
AEMet Agencia Estatal de Meteorología



YRADAR 2D


VISOR
VISualizador de Observaciones en tiempo Real
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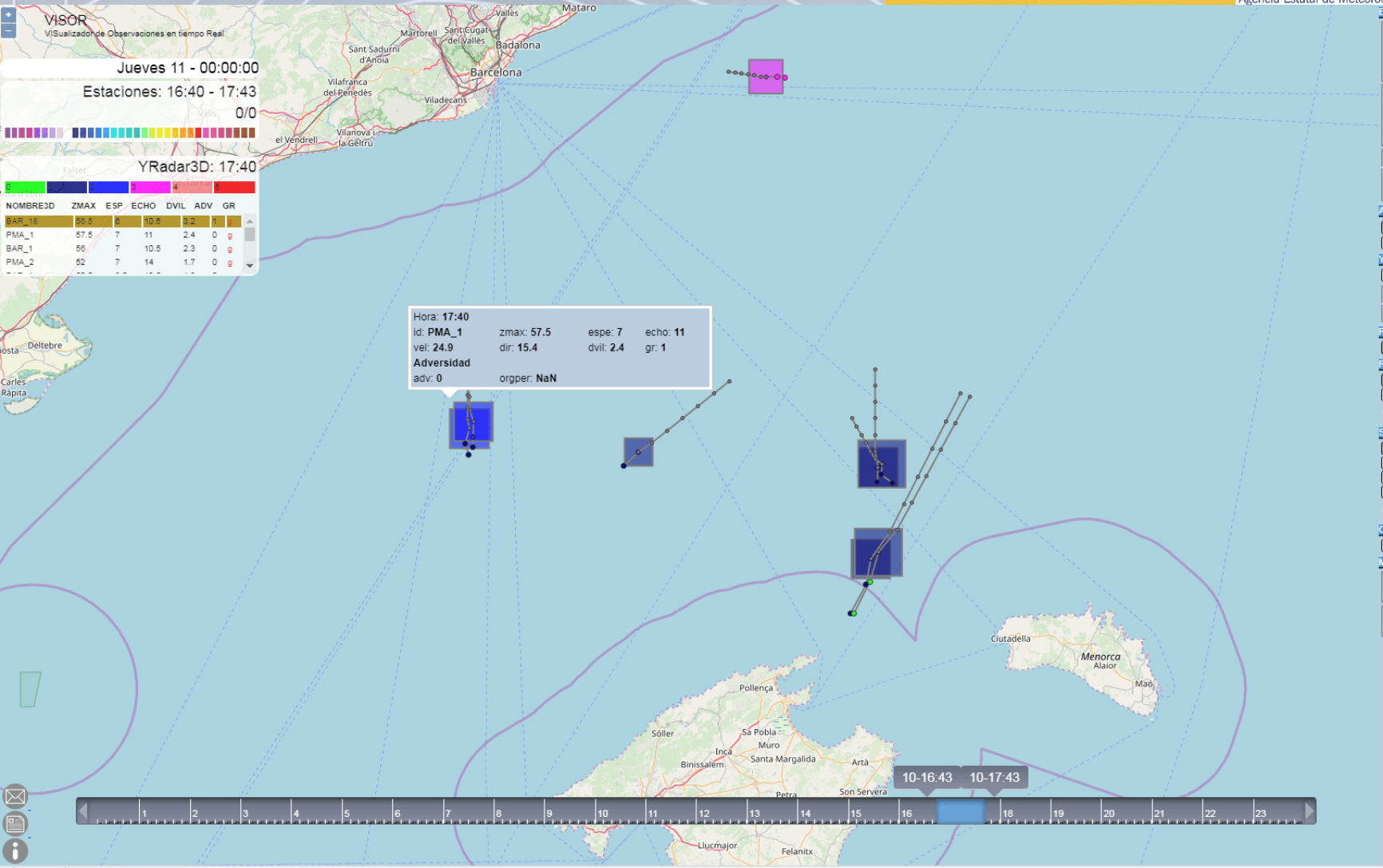
Estaciones: 16:40 - 17:43
0/0
YRadar: 17:40
ID NPIX ZMAX ZMED - +
17 211 59 37.6 11 0
21 151 57 39.1 0 2
9 593 54.5 36.9 9 2
11 50 51.5 37.8 0 0
Hora: 17:40
Analisis
id: 17 nupix: 211 zmax: 59 zmed: 37.6 radioe: 8.195
latcen: 40.504 loncen: 2.127 ectop: 12 vil: 4.74 hmax: NaN
Rayos
neg: 11 rayt: 11 rykm2: 0.341
distmax: 7.481 latcenr: 40.483 loncenr: 2.1
Movimiento
as: 1 ant: 17 dirn: 14.7 vkmh: 17.9
Estaciones
Todas + AEMET SAIHs DGT MetCli Wunder Auton Avamet Atmo
T Max Min HR Vie Vis Pre Nie
R1 3 6 12 24
P1 3 6 12 24
Filtrar Borrar
Escala Normal Avisos
Unidades km/h kt
Avisos
No Sí P1 TO
YRadar
2D Nac 3D Reg 2D Reg
Filtrar Borrar
Escala Normal Adversidad
Rayos
No Sí + - G
Radar
No PPI VIL ECHO Ac01 Ac06 Ac24
Satelite
No +
HRV 10.8 0.6 6.2 MA PL SD NI CT CRR PC TPW
Otros
Cams Sond
Mapa
Av Pr CA Mn IMP Hid Cot +
OSM IGN Ras Ort ReG Re1 Re2 +
10-16:43 10-17:43
Mataró
Valles
Martorell
Sant Cugat del Vallès
Badalona
Barcelona
Sant Sadurní d'Anoia
Vilafranca del Penedès
Viladecans
el Vendrell
Vilanova i la Geltrú
Deltebre
Ciutadella
Menorca
Alaior
Maó
Pollença
Sóller
Sa Pobla
Muro
Inca
Santa Margalida
Binissalem
Artà
Petra
Son Servera
Llucmajor
Felanitx

YRADAR 3D


VISOR
ViSualizador de Observaciones en tiempo Real
Jueves 11 - 00:00:00
Estaciones: 16:40 - 17:43
0/0
YRadar3D: 17:40
NOMBRE3D ZMAX ESP ECHO DVIL ADV GR
BAR_18 56.5 6 10.5 3.2 1
PMA_1 57.5 7 11 2.4 0
BAR_1 56 7 10.5 2.3 0
PMA_2 52 7 14 1.7 0
Hora: 17:40
id: PMA_1 zmax: 57.5 espe: 7 echo: 11
vel: 24.9 dir: 15.4 dvil: 2.4 gr: 1
Adversidad
adv: 0 orgper: NaN
Mataro
Badalona
Barcelona
Deltebre
Ciutadella
Menorca
Pollença
Sóller
Sa Pobla
Inca
Santa Margalida
Artà
Son Servera
Llucmajor
Felanitx
10-16:43
10-17:43
Estaciones
Todas
AEMET SAIHs DGT
MetCli Wunder Auton
Avamet Atmo
Filtrar Borrar
Escala Normal Avisos
Unidades km/h kt
Avisos
No Sí
P1 TO
YRadar
2D Nac 3D Reg 2D Reg
Filtrar Borrar
Escala Normal Adversidad
Rayos
No Sí + - G
Radar
No PPI VIL ECHO
Ac01 Ac06 Ac24
Satelite
No +
HRV 10.8 0.6 6.2
MA PL SD NI
CT CRR PC TPW
Otros
Cams Sond
Mapa
Av Pr CA Mn
IMP Hid Cot +
OSM IGN Ras Ort
ReG Re1 Re2 +

Potential Adversity Parameters PAD2 and PAD3

Parameters PAD2 and PAD3 represent the Potential ADversity 2D y 3D, respectively.
It is clasification that provides fast information to the forecaster.

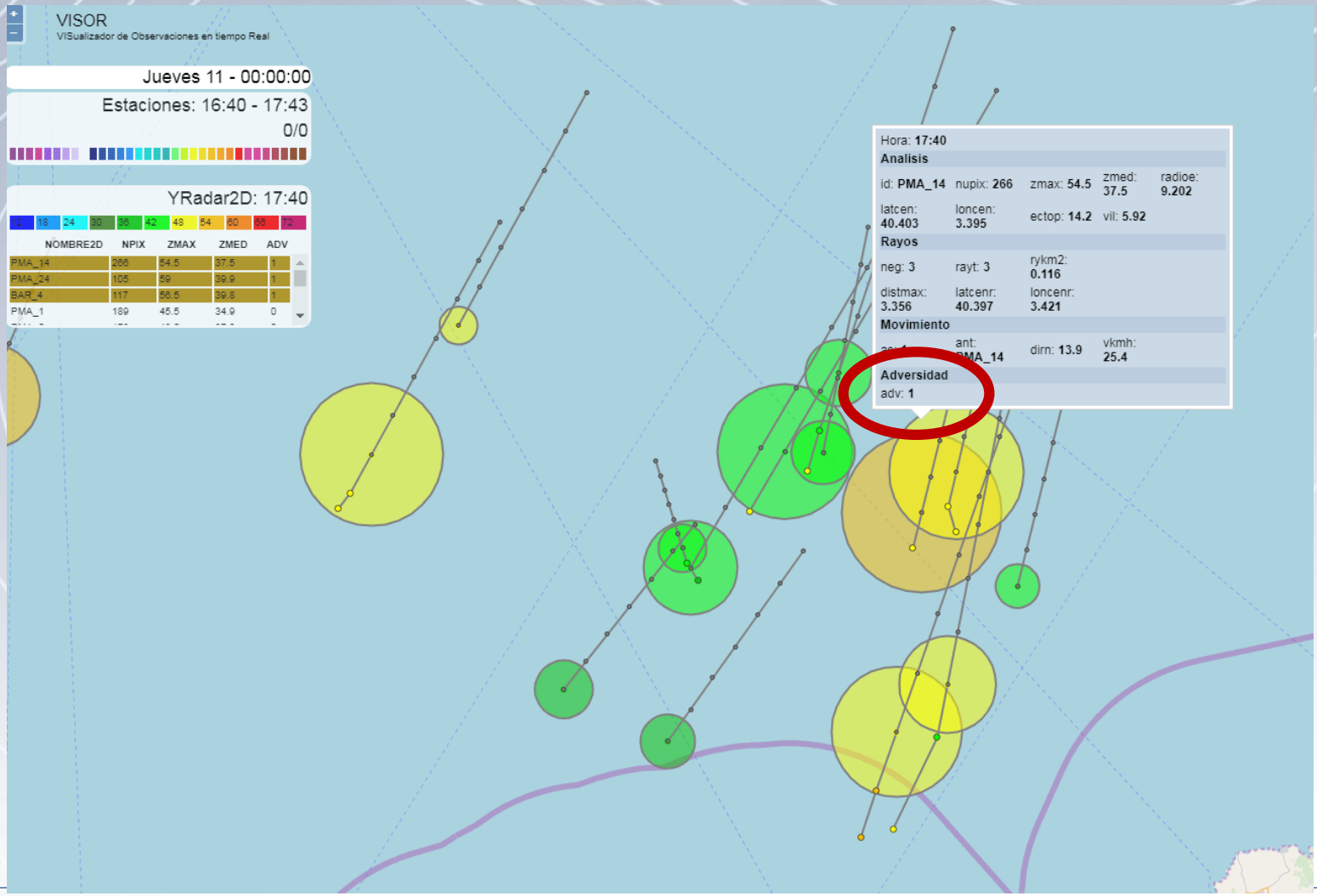
Cell characteristics used to compute PAD2 and PAD3:

YRADAR 2D:
- Horizontal size
- Max horizontal reflectivity
- Max VIL
- Speed
- Lightning activity

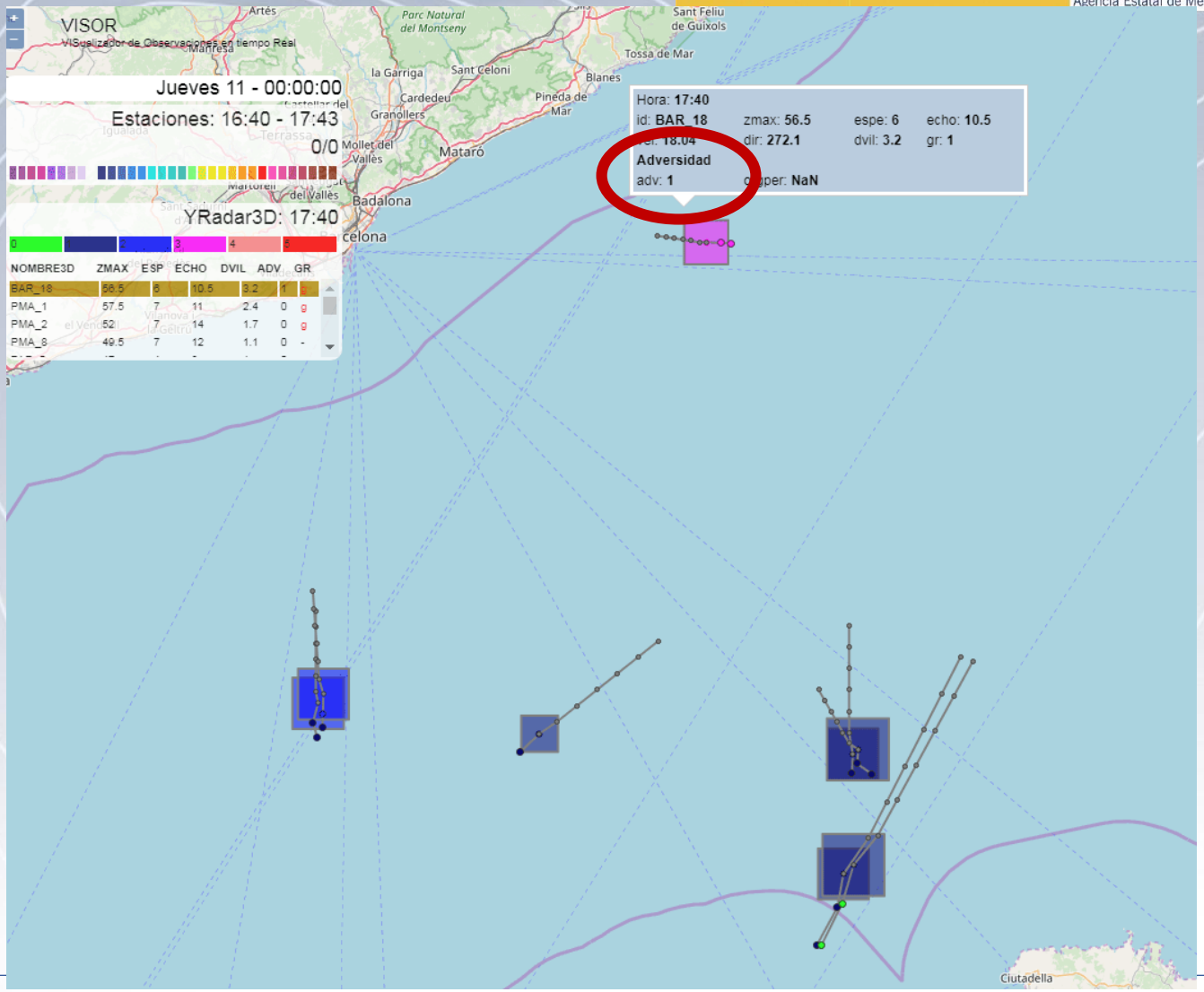
YRADAR 3D:
- Max. Reflectivity
- Speed
- VIL Density
- Vertical size
- Organized convection
- Hail occurrence

Levels:
0 – no adversity
1 – high adversity
2 – very high adversity

PAD2D


VISOR
VISualizador de Observaciones en tiempo Real
Jueves 11 - 00:00:00
Estaciones: 16:40 - 17:43
0/0
YRadar2D: 17:40
12 18 24 30 36 42 48 54 60 66 72
NOMBRE2D NPIX ZMAX ZMED ADV
PMA_14 266 54.5 37.5 1
PMA_24 105 59 39.9 1
BAR_4 117 56.5 39.8 1
PMA_1 189 45.5 34.9 0
Hora: 17:40
Analisis
id: PMA_14 nupix: 266 zmax: 54.5 zmed: 37.5 radioe: 9.202
latcen: 40.403 loncen: 3.395 ectop: 14.2 vil: 5.92
Rayos
neg: 3 rayt: 3 rykm2: 0.116
distmax: 3.356 latcenr: 40.397 loncenr: 3.421
Movimiento
ant: PMA_14 dirn: 13.9 vkmh: 25.4
Adversidad
adv: 1

PAD3D


VISOR
VISualizador de Observaciones en tiempo Real
Jueves 11 - 00:00:00
Estaciones: 16:40 - 17:43
0/0
YRadar3D: 17:40
NOMBRE3D ZMAX ESP ECHO DVIL ADV GR
BAR_18 56.5 6 10.5 3.2 1 g
PMA_1 57.5 7 11 2.4 0 g
PMA_2 52 7 14 1.7 0 g
PMA_8 49.5 7 12 1.1 0 -
Hora: 17:40
id: BAR_18
zmax: 56.5
espe: 6
echo: 10.5
dir: 272.1
dvil: 3.2
gr: 1
Adversidad
adv: 1
NaN
Mataró
Badalona
Granollers
Cardedeu
Sant Celoni
Blanes
Tossa de Mar
Pineda de Mar
Mollet del Vallès
Parc Natural del Montseny
Sant Feliu de Guíxols
Ciutadella

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Thanks for your attention!!