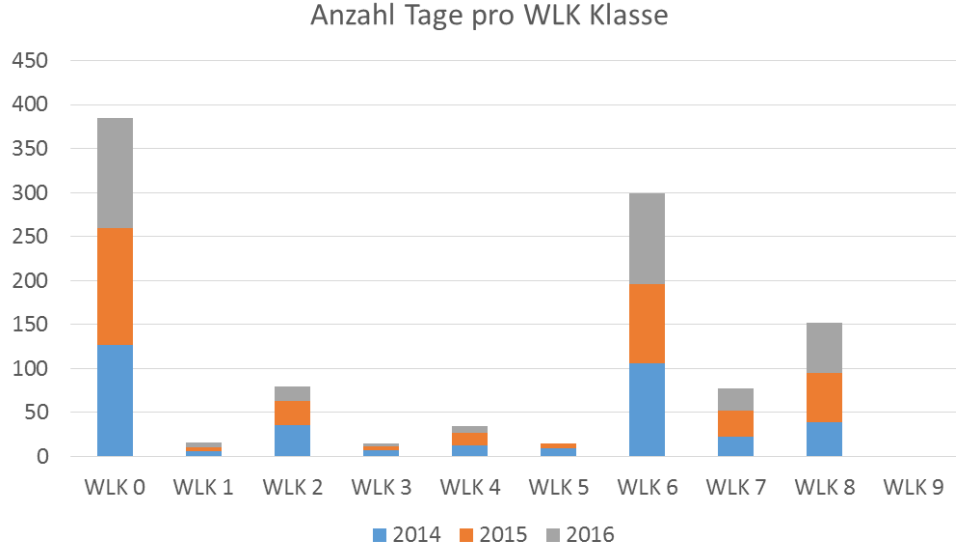
E17-Public Weather Service (PWS)

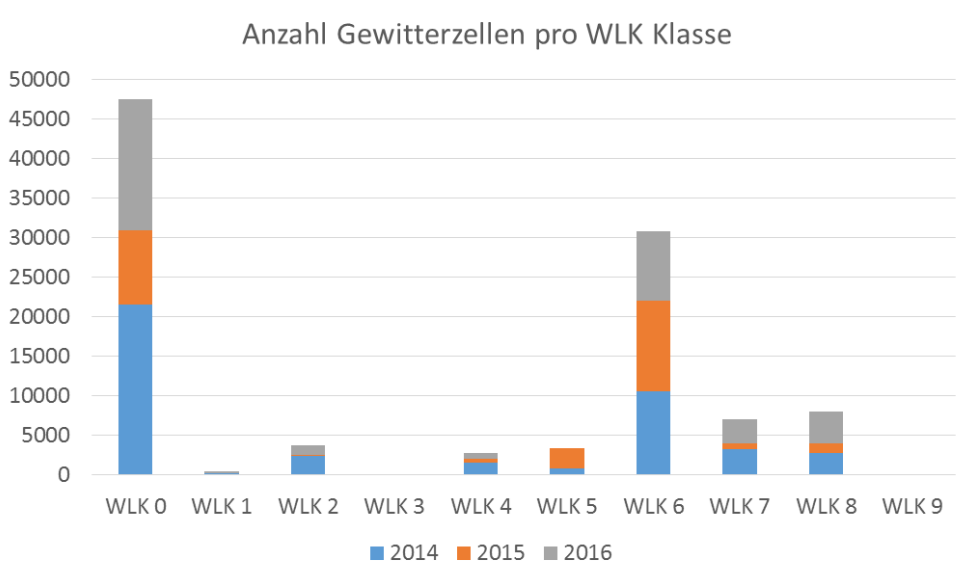
THUNDERSTORM CLIMATOLOGY

01.01.2014-31.12.2016

ZAMG
Zentralanstalt für Meteorologie und Geodynamik

WLK KLASSIFIKATION





ZAMG
Zentralanstalt für Meteorologie und Geodynamik

ZELLSELEKTION

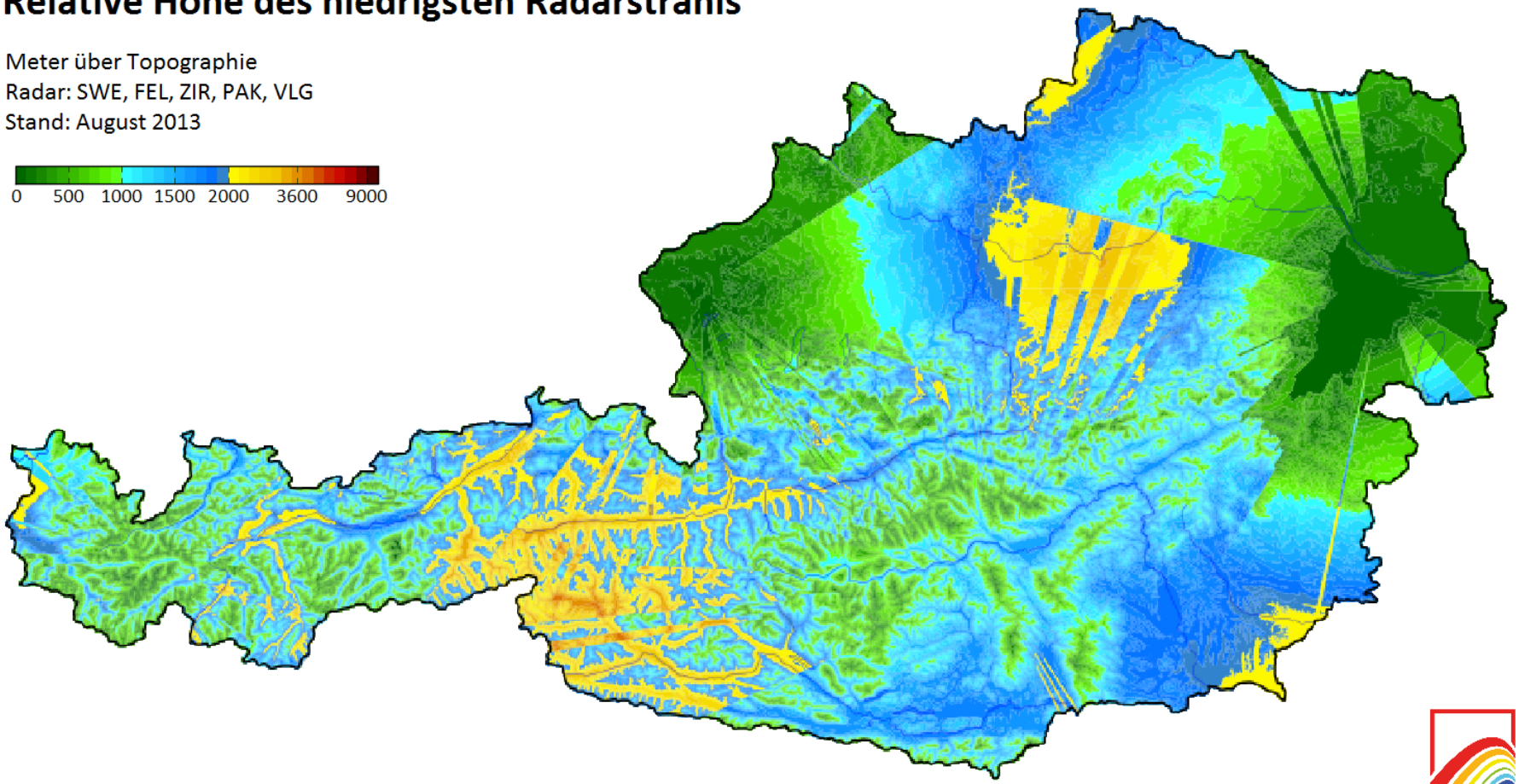
Radarzellen mit mindestens einmal pro Zeitschritt 2 oder mehr Blitze (Gewitter)
Lebenszeit > 10 Min.

- Ausgeschlossen: Entstehung aus Zellplitting oder Dissipation in Zellmerging
- Nur Zellen, die zu 100% in der Domain waren (keine „Randeffekte“, echte Lebenszeiten)

ALL WLK CLASSES

Relative Höhe des niedrigsten Radarstrahls

Meter über Topographie
Radar: SWE, FEL, ZIR, PAK, VLG
Stand: August 2013



ZAMG

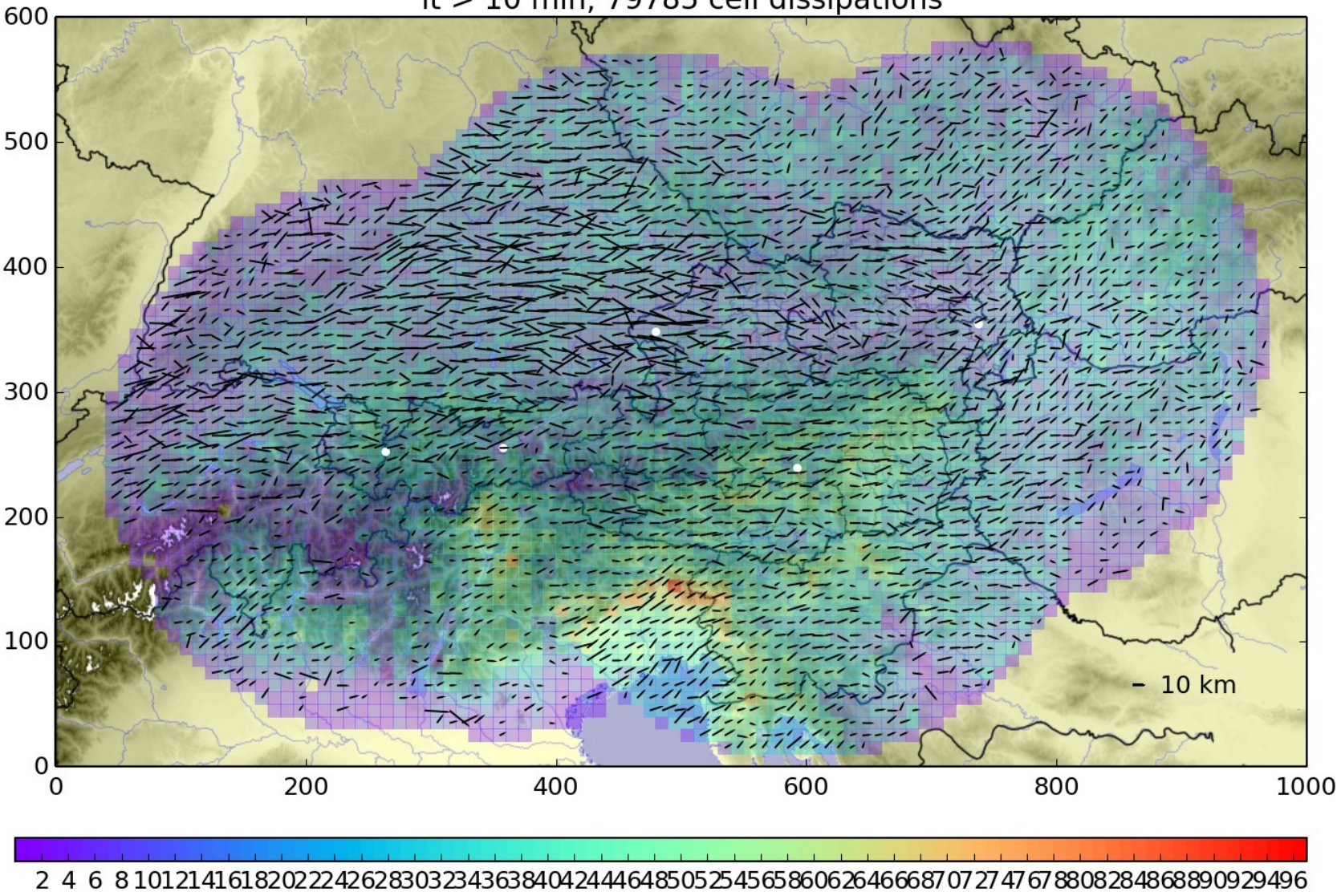
SOURCE and SINK INTENSITY MAPS

-> Only thunderstorms with lifetimes of 10 min and more

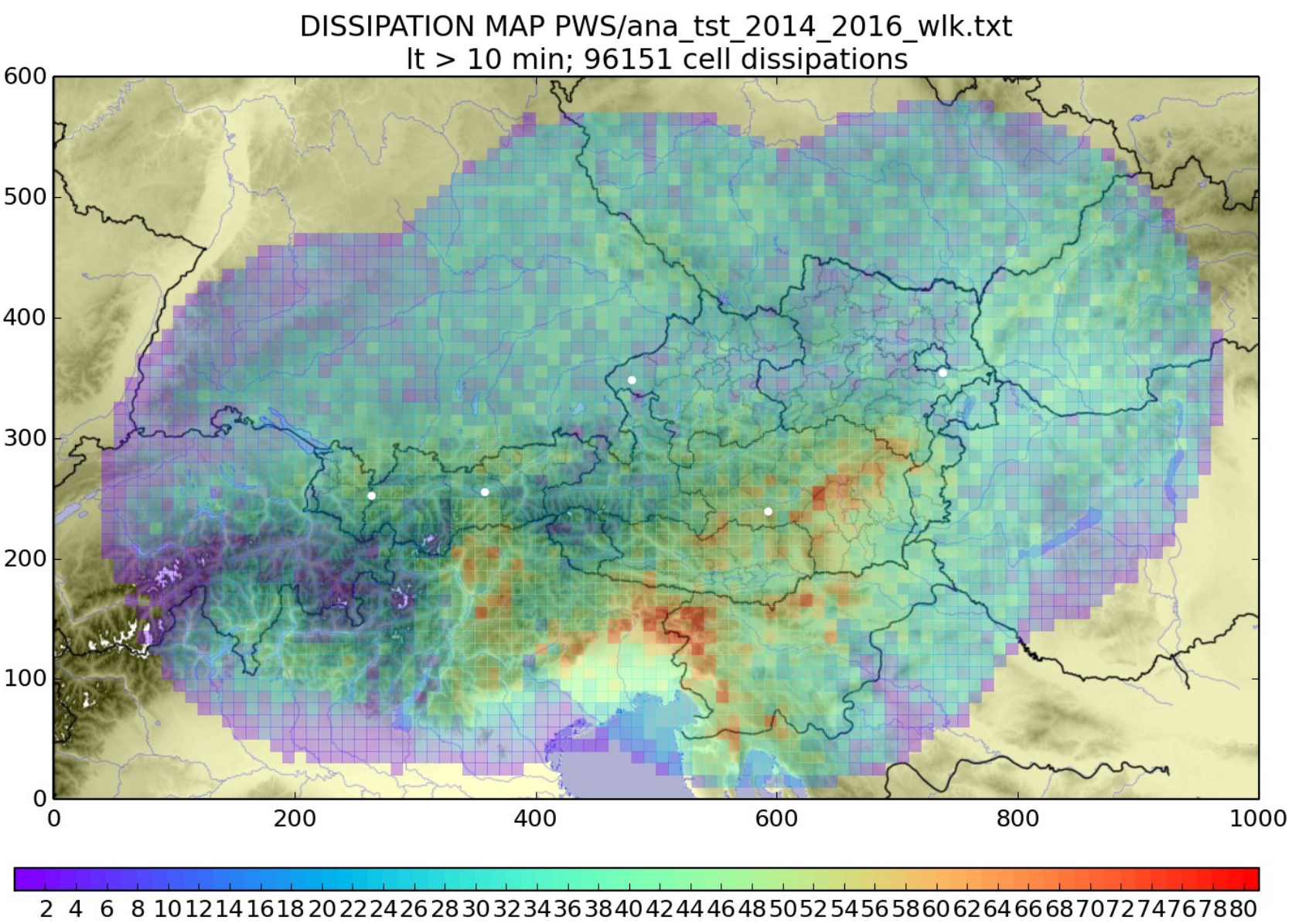
-> Histogram on 10 km x 10 km grid

-> Arrows indicate mean direction and mean travel distance when >10 km

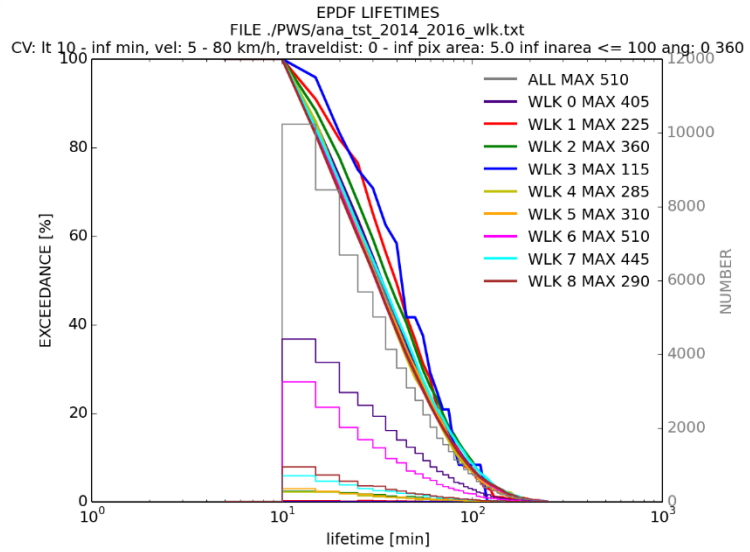
ALL WLK CLASSES

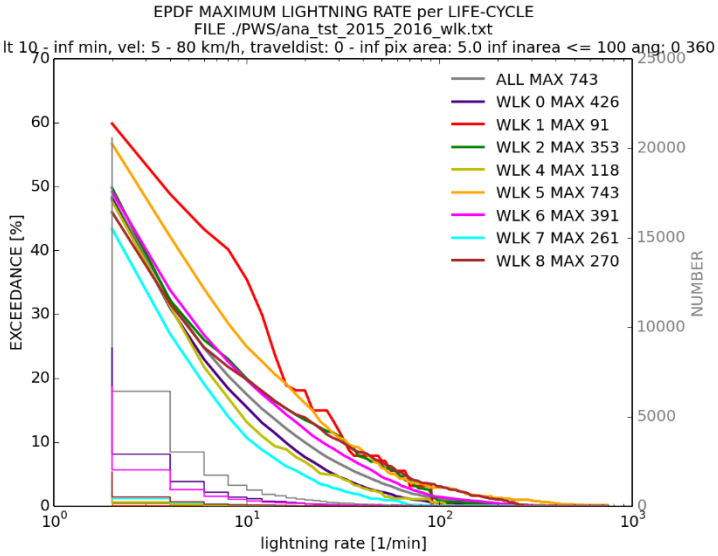


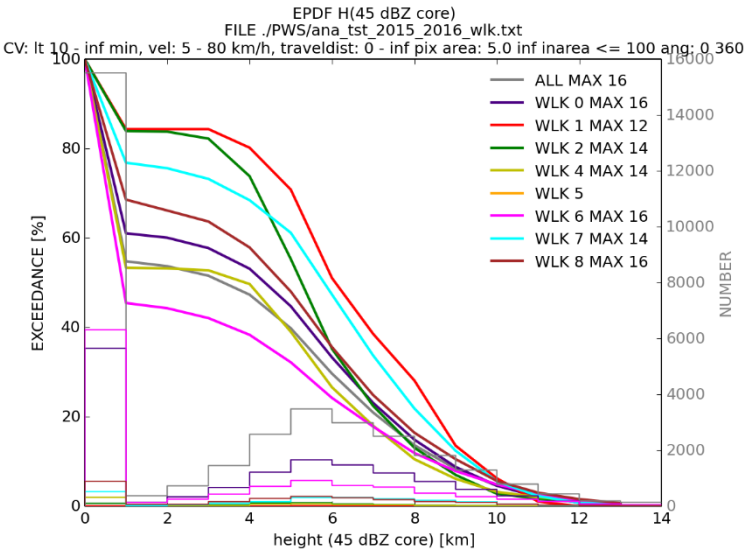
ALL WLK CLASSES

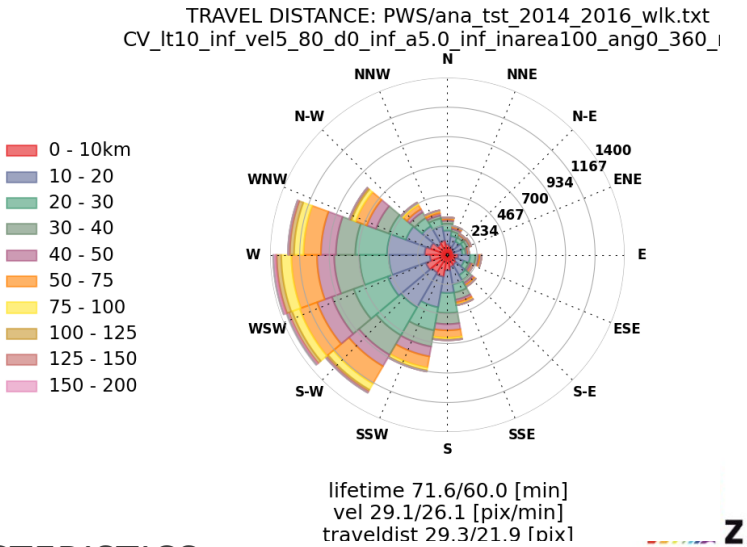


ALL WLK CLASSES – EXCEEDANCE PROBABILITY FUNCTIONS





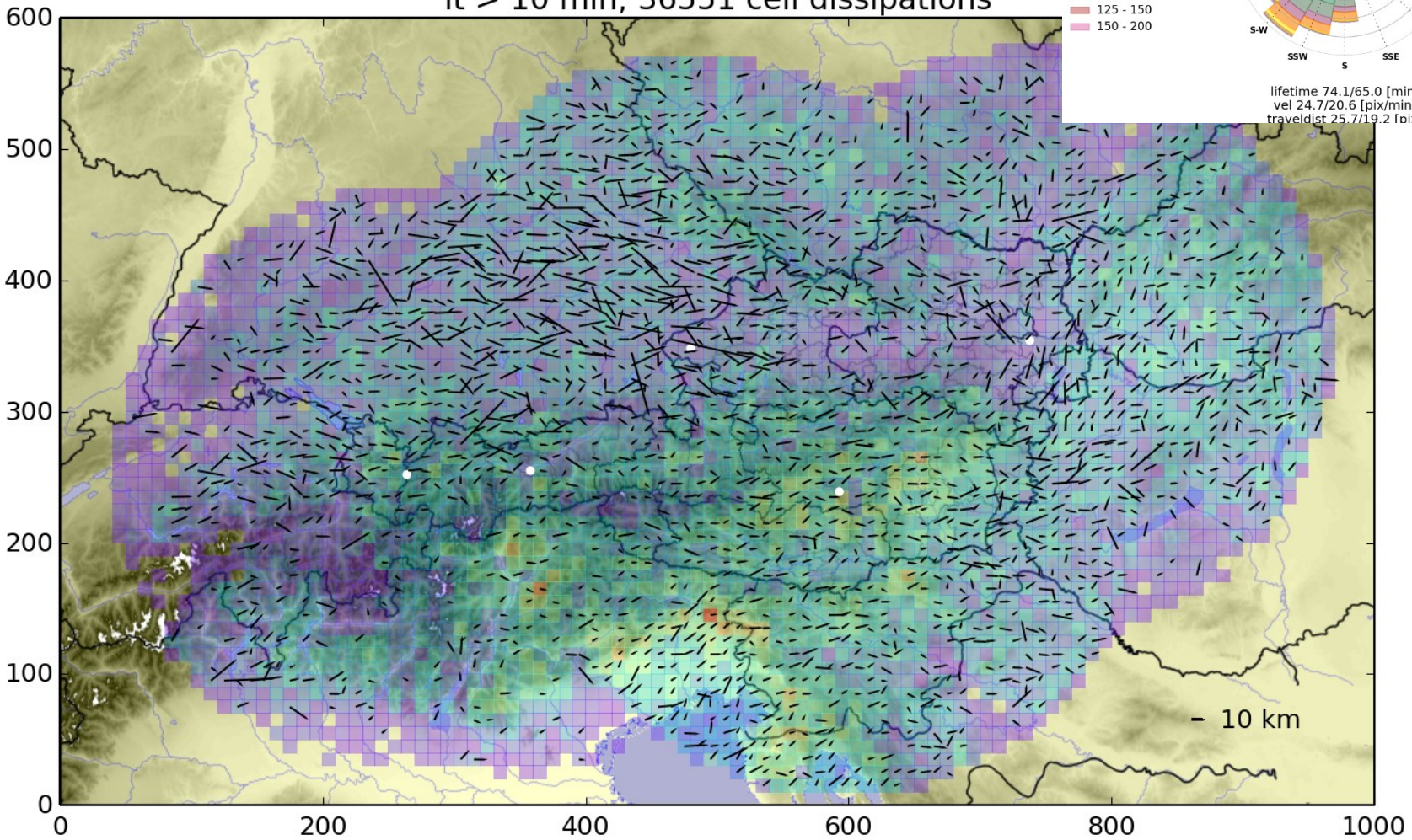


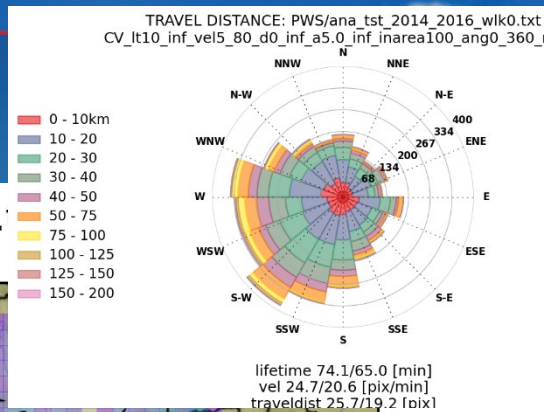


STORM CHARACTERISTICS

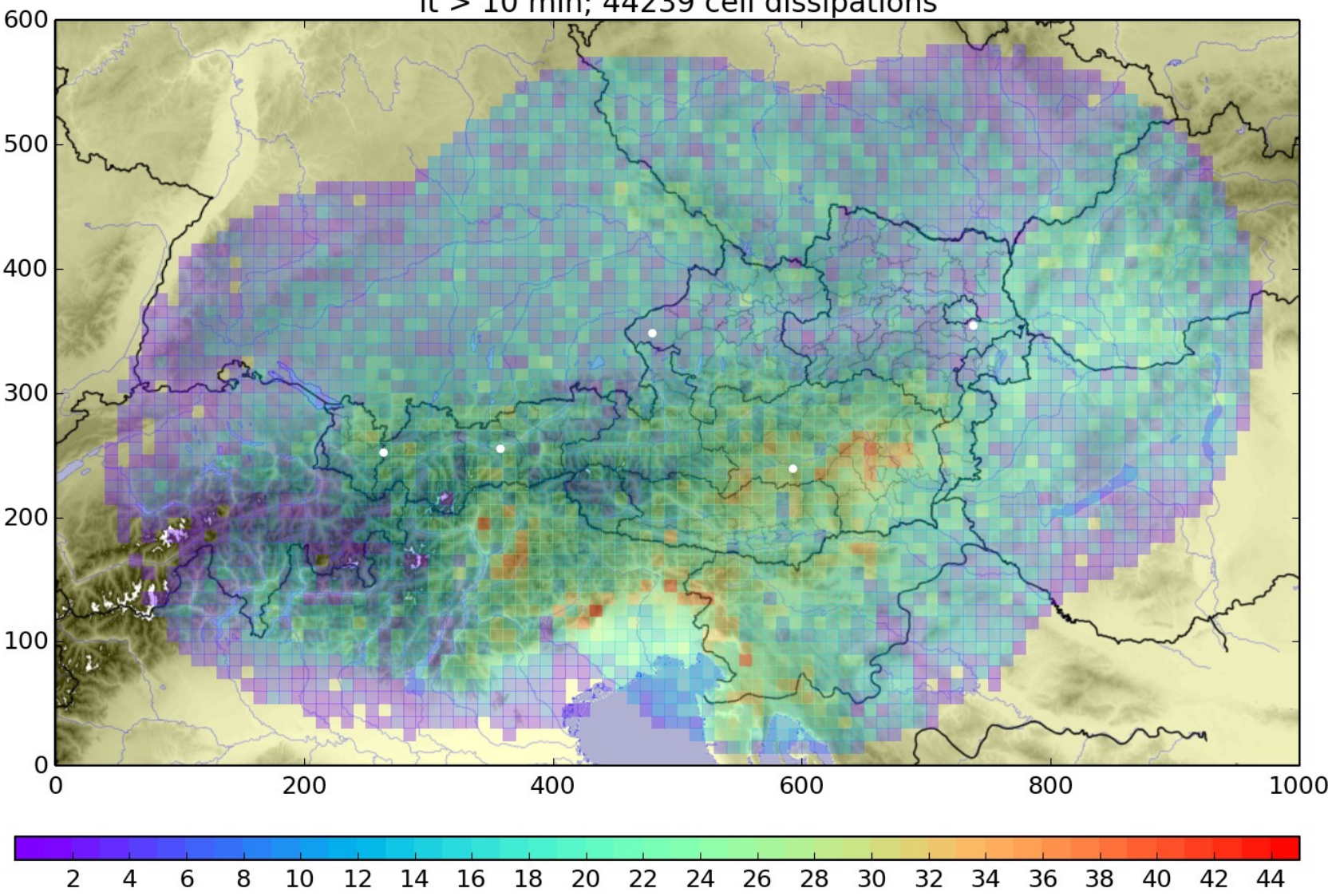
ZAMG
Zentralanstalt für Meteorologie und Geodynamik

WLK CLASS 0


INITIATION MAP PWS/ana_tst_2014_2016_wlk0.
lt > 10 min; 36551 cell dissipations
600
500
400
300
200
100
0
0
200
400
600
800
1000
10 km
2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48


TRAVEL DISTANCE: PWS/ana_tst_2014_2016_wlk0.txt
CV_lt10_inf_vel5_80_d0_inf_a5.0_inf_inarea100_ang0_360_
0 - 10km
10 - 20
20 - 30
30 - 40
40 - 50
50 - 75
75 - 100
100 - 125
125 - 150
150 - 200
N
NNE
N-E
ENE
E
ESE
S-E
SSE
S
SSW
S-W
WSW
W
WNW
N-W
NNW
68
134
200
267
334
400
lifetime 74.1/65.0 [min]
vel 24.7/20.6 [pix/min]
traveldist 25.7/19.2 [pix]

WLK CLASS 0


DISSIPATION MAP PWS/ana_tst_2014_2016_wlk0.txt
lt > 10 min; 44239 cell dissipations
600
500
400
300
200
100
0
0
200
400
600
800
1000
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44

Für alle WLK Klassen
Zur Diskussion