

AdriaArray Seismic Network

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&

AdriaArray Seismic Network Working Group

ORFEUS + EPOS SP + AdriaArray Virtual Workshop, 2. - 6. November 2020



permanent station inventory: sheet of 2126 stations (rows) x 25 “properties” (columns)

StationInventory.xls - OpenOffice.org Calc

Soubor Úpravy Zobrazit Vložit Formát Nástroje Data Okno Nápověda

A1

name Name town previous sheet round name corner in [sec] yes=1/no=0 name table if r1=wors operat no=0 EID center GIB+DS9/sug difficulty

Network Name Latitude Longitude elevation show Site name Sensor type Corner period Possible spot Digitizer Sampling rate Institute prelin OA DA OA no Br SN sug

station WGS84 WGS84 [m] village / country see remark on rock, cor marketing sensor low if corner<60s marketing higher active network sens yes=1/DA/ide / da GIB+DS9/sug any

GR CMG-3ESP 100s (200) 100 Janus-Trident 40 Vpp (Gain 1) 1 1 1

D Le3D-1 1

H G120 120

GR Building concrete Lennartz20s+CMG-5T 20 0 SMART24 100 4 NOA Evan 1 1 NOA 1 1

GR Urban free field concrete TrilCompact120s 120 Geobit SR32 100 3 UPAT Soko 1 1 NOA 1 1

RO underground shaft concrete CMG40T 30 1 Q330 100 3 NIEP 1 0 0 0

GR Free field bedrock G120s 120 Guralp Minim 100 2 UPAT Soko 1 1 NOA 1 1

I NANOMETRICS TRILL 40

CZ L43D 1

I GEOTECH KS-2000ED 30

GR Free field bedrock G60s 60 PS6-SC 100 1 NOA Evan 1 1 NOA 1 1

D CMG-3ESPC 60s 60

B A 1

TR 120 120

GR Urban free field concrete G120s 120 Guralp DM24 100 2 UPAT Soko 1 1 NOA 1 1

I NANOMETRICS TRILL 40

GR CMG-3ESP 100s (200) 100 Janus-Trident 40 Vpp (Gain 1) 1 1 1

GR Apeiranthos, Naxos Special bedrock STS2 120 PS6-SC 100 1 NOA Evan 1 1 NOA 1 1

I NANOMETRICS TRILL 40

IV APPI 46.47868 11.22813 1056 1 I LENNARTZ LE3D-5S 5

IV APRC 41.75738 15.54308 672 1 I NANOMETRICS TRILL 120

MN AQU 42.354 13.405 1 L'Aquila, Italy I STS2 120

FR ARBF 43.491700 5.332500 1 technopole de l'Arbois - 13001, F I STS2 120

CA ARBS 42.434492 1.533754 0 E G120 120

RO ARCB 44.4667 26.0758 125 1 Arcul de Triumf RO building concrete Episensor_2g_2_5vfs 2 1 k2 100 4 NIEP 1 0 0 0

IV ARCI 42.8519 11.4754 1080 1 I NANOMETRICS TRILL 40

NL ARCN 51.5013 6.1942 0 NL CMG3ES

RO ARCR 47.0855 24.3537 385 1 Arcalia RO underground shaft concrete STS2 120 Q330 100 3 NIEP 1 0 0 0

HL ARG 36.21356 28.12122 1 Archaggelos, Rhodes GR Special bedrock Lennartz20s 20 0 DR24 100 2 NOA Evan 1 1 NOA 1 1

KO ARMT 40.5683 28.866 320 0 TR 120s, 120

RO ARR 45.3657 24.6332 871 1 Vidraru RO special bedrock CMG3ESP 59 Q330 100 3 NIEP 1 1 NIEP 1 1

IV ARRO 42.57917 12.76567 253 1 I LENNARTZ LE3D-5S 5

OE ARSA 47.250500 15.523200 1 Arzberg, Steiermark A STS2 120

FR ARTF 43.588200 5.806700 1 Artigues - 83006 - Var - Provence F Trillium 120PH 120

IV ARVD 43.49807 12.94153 461 1 I NANOMETRICS TRILL 40

RO ASE 44.4445 26.0904 85 1 Academia de Studii Economice RO building concrete Episensor_2g_2_5vfs 2 1 k2 100 4 NIEP 1 0 0 0

IV ASOL 45.8003 11.9023 181 1 I KINEMETRICS EPISE 1

IV ASQU 43.7967 11.7893 860 1 I NANOMETRICS TRILL 120

IV ASSB 43.0426 12.6587 734 1 I NANOMETRICS TRILL 40

HA ATAL 38.6926 23.0213 1 Atalanti GR G120s 120 100 NKUA G.Ka 1 1 NOA 1 1

IV ATBU 43.47571 12.54828 1000 1 I LENNARTZ LE3D-5S 5

IV ATCC 43.18514 12.63994 557 1 I KINEMETRICS EPISE 1

FR ATE 43.085800 -0.700700 0 Arette - 64040 - Pyrenees-Atlan F STS2 120

IV ATFO 43.3666 12.5715 960 1 I NANOMETRICS TRILL 40

HL ATH 37.97384 23.71767 1 Athens GR Special bedrock STS2 120 DR24 100 1 NOA Evan 1 1 NOA 1 1

HA ATHU 37.9665 23.7845 1 AthensUniversity GR G60s 60 100 NKUA G.Ka 1 1 NOA 1 1

IV ATLO 43.31516 12.40726 584 1 I LENNARTZ LE3D-5S 5

Stations

List 1/1 PageStyle_Stations STD * Celkem=0 110% 110%

- Python script (215 lines) to distill the required information from the sheet
- produces files for plotting by GMT (script 997 lines)

File Edit Selection View Go Run Terminal Help extractpy - Visual Studio Code [Administrator]

```
d: > 16AdriaArray > stations > xmaps2 > extract.py
 85     citacBB30 = citacBB30 + 1
 86     outBB30.write ("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]))) # s
 87     csvBB30.write ("\\$\\n" % (str(inventory.iloc[n,2]) + ' ' + str(inventory.iloc[n,3]) + ''))
 88     csvBB300.write("\\$\\n" % (str(inventory.iloc[n,2]) + ' ' + str(inventory.iloc[n,3]) + ',30
 89     csvBB3040.write("\\$\\n" % (str(inventory.iloc[n,2]) + ' ' + str(inventory.iloc[n,3]) + ',40
 90     labBB30.write ("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]) + '\\t'
 91     # BB 30 out
 92     if inventory.iloc[n,5] == 0 and inventory.iloc[n,11] >= 30 and inventory.iloc[n,11] < 40: # to
 93         citacBB30 = citacBB30 + 1
 94         outBB30.write("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]))) # st
 95         labBB30.write("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]) + '\\t'
 96     # BB 40 in
 97     if inventory.iloc[n,5] == 1 and inventory.iloc[n,11] >= 40 and inventory.iloc[n,11] < 50: # to
 98         citacBB40 = citacBB40 + 1
 99         outBB40.write ("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]))) # s
100        csvBB40.write ("\\$\\n" % (str(inventory.iloc[n,2]) + ' ' + str(inventory.iloc[n,3]) + ''))
101        csvBB4030.write("\\$\\n" % (str(inventory.iloc[n,2]) + ' ' + str(inventory.iloc[n,3]) + ',30
102        csvBB4040.write("\\$\\n" % (str(inventory.iloc[n,2]) + ' ' + str(inventory.iloc[n,3]) + ',40
103        labBB40.write ("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]) + '\\t'
104     # BB 40 out
105     if inventory.iloc[n,5] == 0 and inventory.iloc[n,11] >= 40 and inventory.iloc[n,11] < 50: # to
106         citacBB40 = citacBB40 + 1
107         outBB40.write("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]))) # st
108         labBB40.write("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]) + '\\t'
109     # BB 60 in
110     if inventory.iloc[n,5] == 1 and inventory.iloc[n,11] >= 50: # to
111         citacBB60 = citacBB60 + 1
112         outBB60.write ("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]))) # s
113         csvBB60.write ("\\$\\n" % (str(inventory.iloc[n,2]) + ' ' + str(inventory.iloc[n,3]) + ''))
114         csvBB6030.write("\\$\\n" % (str(inventory.iloc[n,2]) + ' ' + str(inventory.iloc[n,3]) + ',30
115         csvBB6040.write("\\$\\n" % (str(inventory.iloc[n,2]) + ' ' + str(inventory.iloc[n,3]) + ',40
116         labBB60.write ("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]) + '\\t'
117     # BB 60 out
118     if inventory.iloc[n,5] == 0 and inventory.iloc[n,11] >= 50: # to
119         citacBB60 = citacBB60 + 1
120         outBB60.write("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]))) # st
121         labBB60.write("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]) + '\\t'
122     # UNKN in
123     if inventory.iloc[n,5] == 1 and math.isnan(inventory.iloc[n,11]) and math.isnan(inventory.iloc
124         citacUNKN = citacUNKN + 1
125         outUNKN.write("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]))) # sta
126         labUNKN.write("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]) + '\\t'
127         csvUNKN.write("\\$\\n" % (str(inventory.iloc[n,2]) + ' ' + str(inventory.iloc[n,3]) + ''))
128     # UNKN out
129     if inventory.iloc[n,5] == 0 and math.isnan(inventory.iloc[n,11]) and math.isnan(inventory.iloc
130         citacUNKN0 = citacUNKN0 + 1
131         outUNKN0.write("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]))) # st
132         labUNKN0.write("\\$\\n" % (str(inventory.iloc[n,3]) + ' ' + str(inventory.iloc[n,2]) + '\\t'
133     # SPOT - always in
134     if math.isnan(inventory.iloc[n,11]) and inventory.iloc[n,12] == 1: # pokud je corner pr
135         citacSPOT = citacSPOT + 1

```

Ln 134, Col 47 Spaces: 4 UTF-8 CRLF Python ⚡ 0 0 0 0

Soubor Projekt Upravy Hledat Zobrazit Formát Nástroje Skripty HTML Nastavení Okno Napovídá

```
1. aktuality.html 2. usuketecne20.html 3. fotkyzakoi20.html 4. menu.html 5. zapisy.html 6. index.html 7. fero.css 8. orbis.sh 9. global.sh availableMap.sh figMap.sh figDensity.sh figAdriaGP.sh
 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000 1010 1020 1030 1040 1050 1060 1070 1080 1090 1100 1110 1120 1130 1140 1150 1160 1170 1180 1190 1200 1210 1220 1230 1240 1250 1260 1270 1280 1290 1300 1310 1320 1330 1340 1350 1360 1370 1380 1390 1400 1410 1420 1430 1440 1450 1460 1470 1480 1490 1500 1510 1520 1530 1540 1550 1560 1570 1580 1590 1600 1610 1620 1630 1640 1650 1660 1670 1680 1690 1700 1710 1720 1730 1740 1750 1760 1770 1780 1790 1800 1810 1820 1830 1840 1850 1860 1870 1880 1890 1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2020 2030 2040 2050 2060 2070 2080 2090 2100 2110 2120 2130 2140 2150 2160 2170 2180 2190 2200 2210 2220 2230 2240 2250 2260 2270 2280 2290 2300 2310 2320 2330 2340 2350 2360 2370 2380 2390 2400 2410 2420 2430 2440 2450 2460 2470 2480 2490 2500 2510 2520 2530 2540 2550 2560 2570 2580 2590 2600 2610 2620 2630 2640 2650 2660 2670 2680 2690 2700 2710 2720 2730 2740 2750 2760 2770 2780 2790 2800 2810 2820 2830 2840 2850 2860 2870 2880 2890 2900 2910 2920 2930 2940 2950 2960 2970 2980 2990 2999
dose2unix pNOSP.txt
psxy pNOSP.txt -R -JL -St$sizeps -G$nbsp -W$thps/$blk -K -O > $psfile01 # vyhodit pro Renatu
psxy pNOSP.txt -R -JL -St$sizeps -G$nbsp -W$thps/$blk -K -O > $psfile10 # vyhodit pro Renatu
dose2unix pWHIT.txt
dose2unix pWHIT0.txt
psxy pWHIT.txt -R -JL -St$sizeps -G$white -W$thps/$blk -K -O > $psfile01
psxy pWHIT.txt -R -JL -St$sizeps -G$white -W$thps/$blk -K -O > $psfile10
psxy pWHITE0.txt -R -JL -St$sizeps -G$white -W$thc/$white -K -O > $psfile01 # out
psxy pWHITE0.txt -R -JL -St$sizeps -G$white -W$thc/$white -K -O > $psfile10 # out
awk -v awk_diam -awk_diam30=$diam30 '(print $1, $2, "0.0 \" awk_diam30" " awk_diam30)"' pWHIT.txt > circlesWHIT30.dat
awk -v awk_diam40=$diam40 '(print $1, $2, "0.0 \" awk_diam40" " awk_diam40)"' pWHIT.txt > circlesWHIT40.dat
dose2unix pSPOT.txt
psxy pSPOT.txt -R -JL -St$sizeps -G$spot -W$thps/$blk -K -O > $psfile01 # vyhodit pro Renatu
psxy pSPOT.txt -R -JL -St$sizeps -G$spot -W$thps/$blk -K -O > $psfile10 # vyhodit pro Renatu
awk -v awk_diam30=$diam30 '(print $1, $2, "0.0 \" awk_diam30" " awk_diam30)"' pSPOT.txt > circlesSPOT30.dat
awk -v awk_diam40=$diam40 '(print $1, $2, "0.0 \" awk_diam40" " awk_diam40)"' pSPOT.txt > circlesSPOT40.dat
dose2unix pUNKN.txt
dose2unix pUNKN0.txt
psxy pUNKN.txt -R -JL -St$sizeps -G$unkn -W$thps/$blk -K -O > $psfile01
psxy pUNKN.txt -R -JL -St$sizeps -G$unkn -W$thps/$blk -K -O > $psfile10
psxy pUNKNO.txt -R -JL -St$sizeps -G$unkn -W$thc/$unkn -K -O > $psfile01
psxy pUNKNO.txt -R -JL -St$sizeps -G$unkn -W$thc/$unkn -K -O > $psfile10
psxy pUNKN0.txt -R -JL -St$sizeps -G$unkn -W$thc/$unkn -K -O > $psfile01
psxy pUNKN0.txt -R -JL -St$sizeps -G$unkn -W$thc/$unkn -K -O > $psfile10
psxy pUNKNN.txt -R -JL -St$sizeps -G$unkn -W$thps/$blk -K -O > $psfile02
psxy pUNKNN.txt -R -JL -St$sizeps -G$unkn -W$thps/$blk -K -O > $psfile02
psxy pUNKNO.txt -R -JL -St$sizeps -G$unkn -W$thc/$unkn -K -O > $psfile02
psxy pUNKNO.txt -R -JL -St$sizeps -G$unkn -W$thc/$unkn -K -O > $psfile02
awk -v awk_diam30=$diam30 '(print $1, $2, "0.0 \" awk_diam30" " awk_diam30)"' pUNKN.txt > circlesUNKN30.dat
awk -v awk_diam40=$diam40 '(print $1, $2, "0.0 \" awk_diam40" " awk_diam40)"' pUNKN.txt > circlesUNKN40.dat
dose2unix pUPGR.txt
psxy pUPGR.txt -R -JL -St$sizeps -G$upgr -W$thps/$blk -K -O > $psfile01
psxy pUPGR.txt -R -JL -St$sizeps -G$upgr -W$thps/$blk -K -O > $psfile10
awk -v awk_diam30=$diam30 '(print $1, $2, "0.0 \" awk_diam30" " awk_diam30)"' pUPGR.txt > circlesUPGR30.dat
awk -v awk_diam40=$diam40 '(print $1, $2, "0.0 \" awk_diam40" " awk_diam40)"' pUPGR.txt > circlesUPGR40.dat
dose2unix PACASEstay.txt
psxy stations-PACASEstay.txt -R -JL -St$sizeps -G$pcse -W$thps/$blk -K -O > $psfile01 # tady muze umazato to "stay" a namal
psxy stations-PACASEstay.txt -R -JL -St$sizeps -G$pcse -W$thps/$blk -K -O > $psfile02 # tady muze umazato to "stay" a namal
awk -v awk_ts=$ts '(print $3, $2, awk ts "0 0 TC", $1)' PACASEstay.txt > stations-PACASEstayLABEL.txt
awk -v awk_diam30=$diam30 '(print $1, $2, "0.0 \" awk_diam30" " awk_diam30)"' stations-PACASEstay.txt > circlesPCSE30.dat
awk -v awk_diam40=$diam40 '(print $1, $2, "0.0 \" awk_diam40" " awk_diam40)"' stations-PACASEstay.txt > circlesPCSE40.dat
dose2unix pBB30.txt
dose2unix pBB300.txt
psxy pBB30.txt -R -JL -St$sizeps -G$bb30 -W$thps/$blk -K -O > $psfile01
psxy pBB30.txt -R -JL -St$sizeps -G$bb30 -W$thc/$bb30 -K -O > $psfile01
psxy pBB30.txt -R -JL -St$sizeps -G$bb30 -W$thps/$blk -K -O > $psfile10
psxy pBB300.txt -R -JL -St$sizeps -G$bb30 -W$thc/$bb30 -K -O > $psfile10
psxy pBB300.txt -R -JL -St$sizeps -G$bb30 -W$thps/$blk -K -O > $psfile01
psxy pBB300.txt -R -JL -St$sizeps -G$bb30 -W$thc/$bb30 -K -O > $psfile01
psxy pBB300.txt -R -JL -St$sizeps -G$bb30 -W$thps/$blk -K -O > $psfile09
psxy pBB300.txt -R -JL -St$sizeps -G$bb30 -W$thc/$bb30 -K -O > $psfile09
psxy pBB300.txt -R -JL -St$sizeps -G$bb30 -W$thps/$blk -K -O > $psfile01
psxy pBB300.txt -R -JL -St$sizeps -G$bb30 -W$thc/$bb30 -K -O > $psfile02
psxy pBB300.txt -R -JL -St$sizeps -G$bb30 -W$thps/$blk -K -O > $psfile02
psxy pBB300.txt -R -JL -St$sizeps -G$bb30 -W$thc/$bb30 -K -O > $psfile03
psxy pBB300.txt -R -JL -St$sizeps -G$bb30 -W$thps/$blk -K -O > $psfile07
psxy pBB300.txt -R -JL -St$sizeps -G$bb30 -W$thps/$blk -K -O > $psfile09
awk -v awk_diam30=$diam30 '(print $1, $2, "0.0 \" awk_diam30" " awk_diam30)"' pBB30.txt > circlesBB3030.dat
!!!
```

1:1 (997) [51349] # 35 23 UNIX Shell Script UNIX Kódování Windows (CP1250)

permanent stations - properties of interest:

sensor corner period	< 30s
	=> 30 s and < 40 s (effectively = 30 s)
	=> 40 s and < 60 s (effectively = 40 s)
	=> 60 s

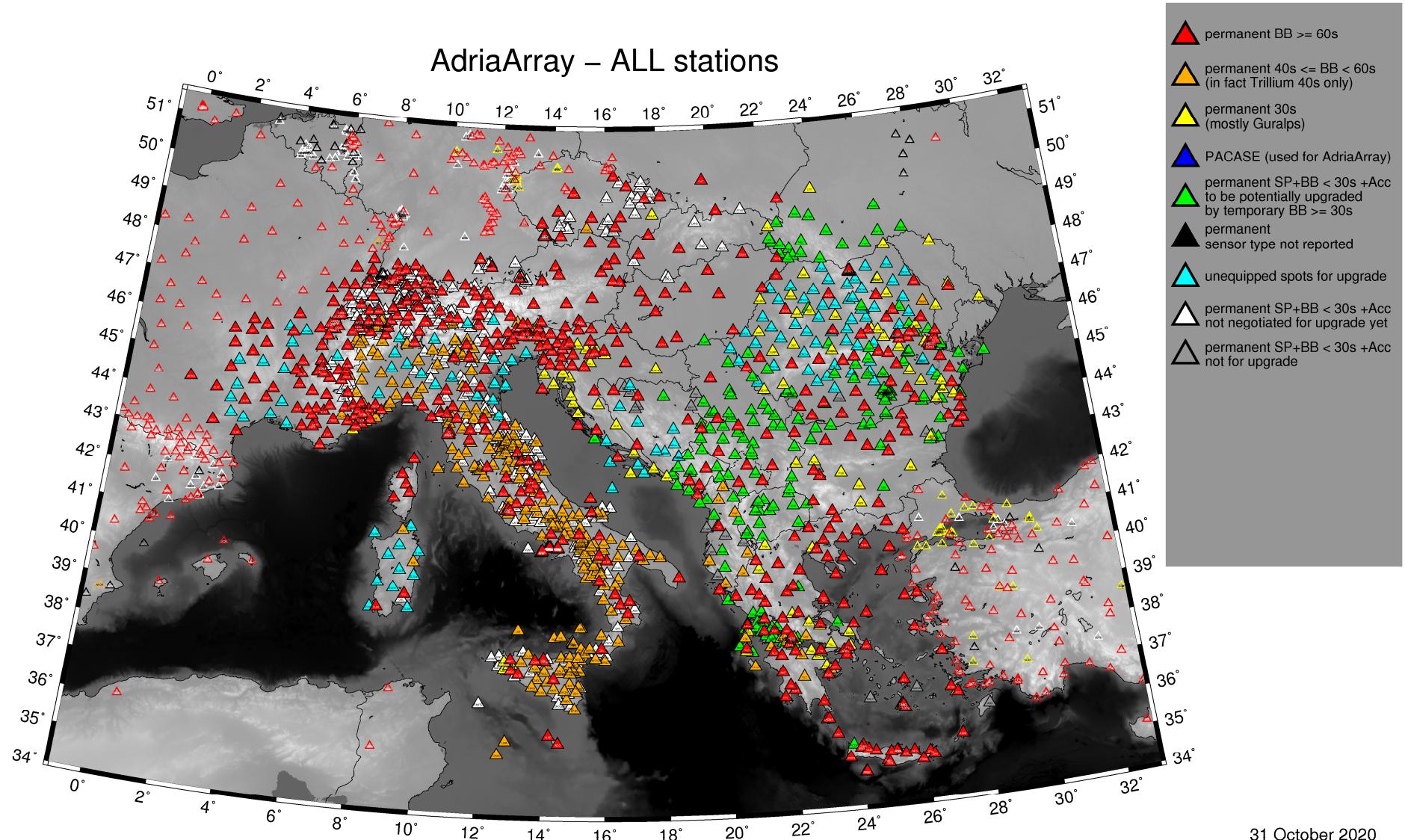
binary properties:

EIDA	yes / no
online	yes / no
StationBook	yes / no
FDSN	yes / no
inside	yes / no (to flexibly change the AdriaArray outline)
for upgrade	yes / no (if corner < 60 s)

idea: whenever you change or add a line (station properties) in the inventory,

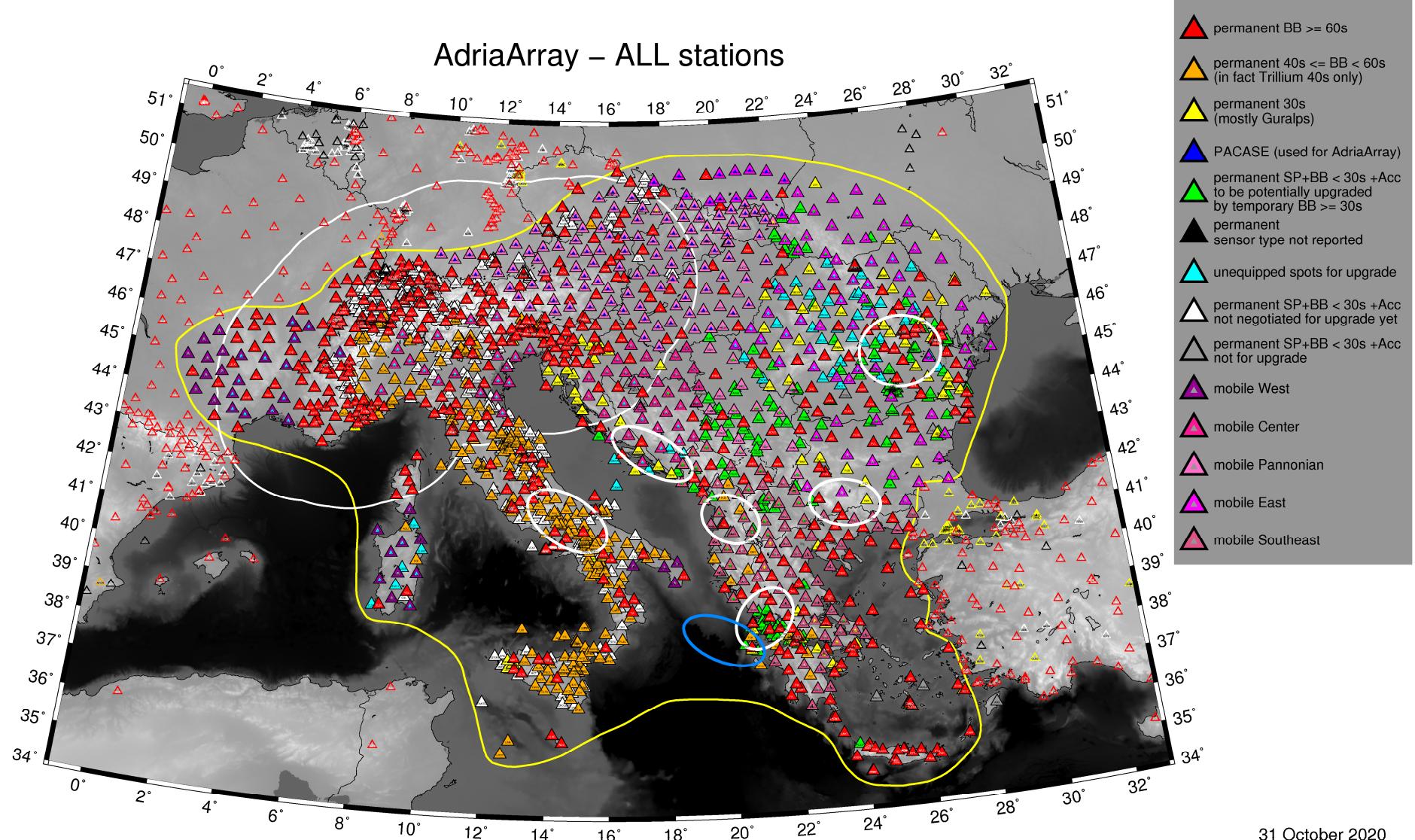
- you run the Python script
- and you get an updated map by the GMT script

Adria Array – all permanent stations



31 October 2020

Adria Array – all permanent stations + mobile stations



31 October 2020

AdriaArray

Seismic Network

Working Group

(November 1, 2020)

46 members (= networks)

- 1 permanent stations in the region
- 2 availability of the mobile stations
- 3 distribution of mobile stations

- 4 iterate 1 – 3 to update

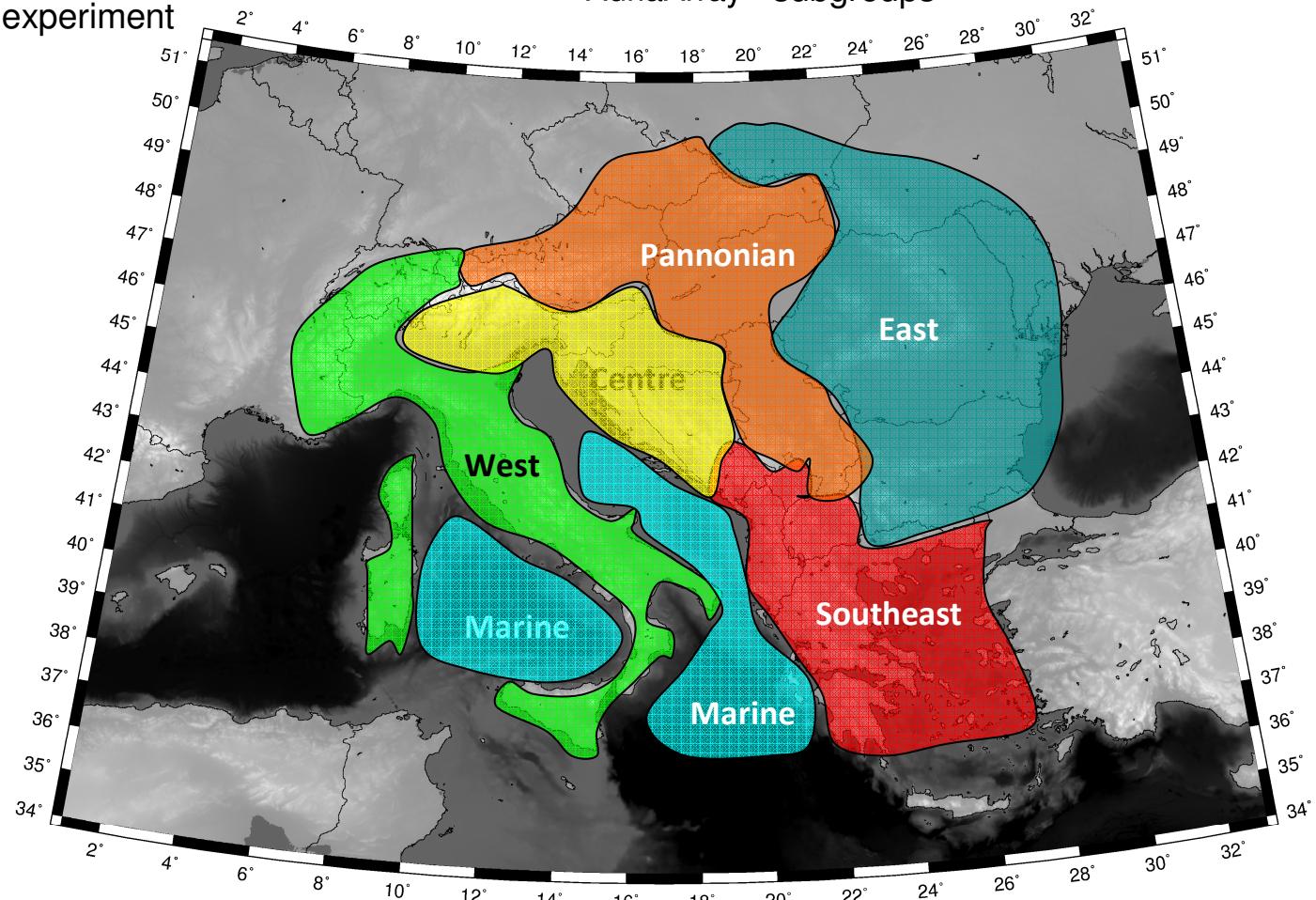
2019 – 2020 – ...

Name	Institution
Borleanu, Felix	NIEP, Romania
Brlek, Ivan	SC Sarajevo, Bosnia and Herzegovina
Chernih-Anastasovska, Dragana	University Sts. Cyril and Methodius, Skopje, N. Macedonia
Cvijic-Amulic, Snjezana	GS Republic of Srpska, Bosnia and Herzegovina
Csicsay, Kristián	ESI SAV, Bratislava, Slovakia
Czuba, Wojciech	IG PAS, Warsaw, Poland
D'Amico, Sebastiano	Uni Malta
Danececk, Peter	INGV, Italy
Diaz, Jordi	ICTJA-CSIC, Barcelona, Spain
Dimitrova, Liliya	BAS, Bulgaria
Dushi, Edmond	IGEWE-PUT, Tirana, Albania
Evangelidis Christos	NOA, Greece/ORFEUS
Fiket, Tomislav	CSS, Zagreb, Croatia
Friederich, Wolfgang	Univ. Bochum, Germany
Govoni, Aladino	INGV, Italy
Jia, Yan	ZAMG, Austria
Kandic, Randovan	MSS, Podgorica, Montenegro
Kolínský, Petr	Univ. Vienna, Austria
Marmuraenu, Alexandru	NIEP, Romania
Lukešová, Renata	IRSM, CAS, Prague, Czech Republic
Kopp, Heidrun	GEOMAR Kiel, Germany
Meier, Thomas	Univ. Kiel, Germany
Mustafa, Shemsi	GS Kosovo, Pristina, Kosovo
Nagel, Thorsten	Univ. Aarhus, Denmark
Paul, Anne	Univ. Grenoble, France
Papazachos, Costas	Univ. Thessaloniki, Greece
Piromallo, Claudia	INGV, Italy
Pesaresi, Damiano	OGS, Trieste, Italy
Plicka, Vladimír	Charles Uni, Prague, Czech Republic
Plomerova, Jaroslava	IG, CAS, Prague, Czech Republic
Radovanovic, Slavica	SSS Belgrade, Serbia
Rietbrock, Andreas	Univ. Karlsruhe, Germany
Rondenay, Stephane	Univ. Bergen, Norway
Rümpker, Georg	Univ. Frankfurt, Germany
Sakellariou, Dimitris	HCMR, Athens, Greece
Sokos, Efthimios	Univ. Patras, Greece
Solakov, Dimcho	BAS, Sofia, Bulgaria
Stipcevic, Josip	Univ. Zagreb, Croatia
Špaček, Petr	IPe, Masaryk Uni, Brno, Czech Rep.
Thomas, Christine	Univ. Münster, Germany
Tiira, Timo	Univ. Helsinki, Finland
Valoroso, Luisa	INGV, Italy
Van der Meijde, Mark	Univ. Twente, The Netherlands
Verbytskyy, Serge	IoG, NAS, Ukraine
Weber, Zoltan	HAS, Budapest, Hungary
Zivcic, Mladen	SSS, Ljubljana, Slovenia

mobile stations

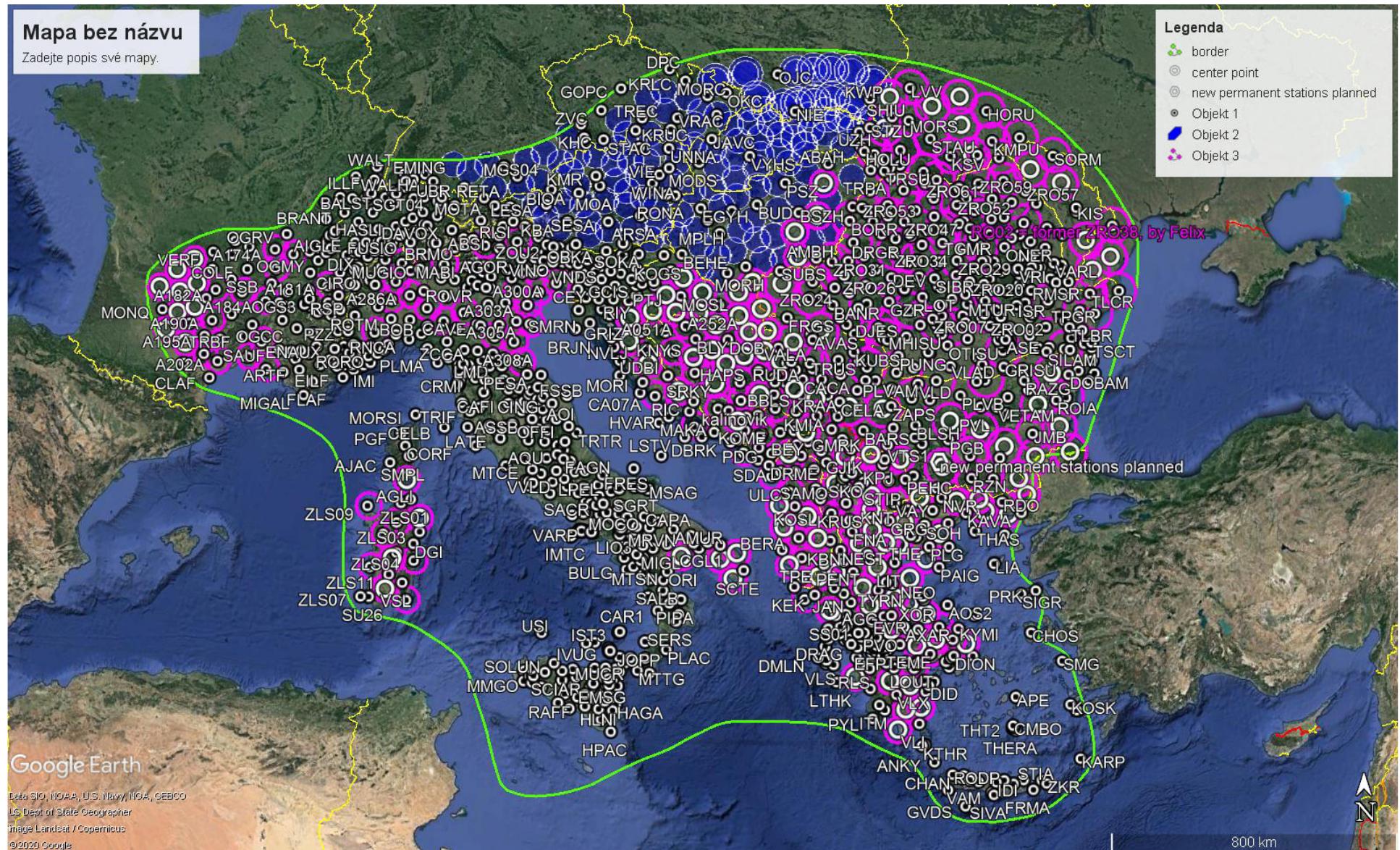
Austria	30
Croatia:	10
Czech Republic IG:	50
Czech Republic IRSM	4 + local experiment
Denmark:	20 + local experiment
Finland:	20
France:	30
Germany DSEBRA+:	110 + local on-shore/off-shore experiments
Hungary	11
Italy	local experiment
Netherlands:	10
Norway:	20
Poland:	30
Spain:	20
Switzerland:	20
total	385

AdriaArray - subgroups

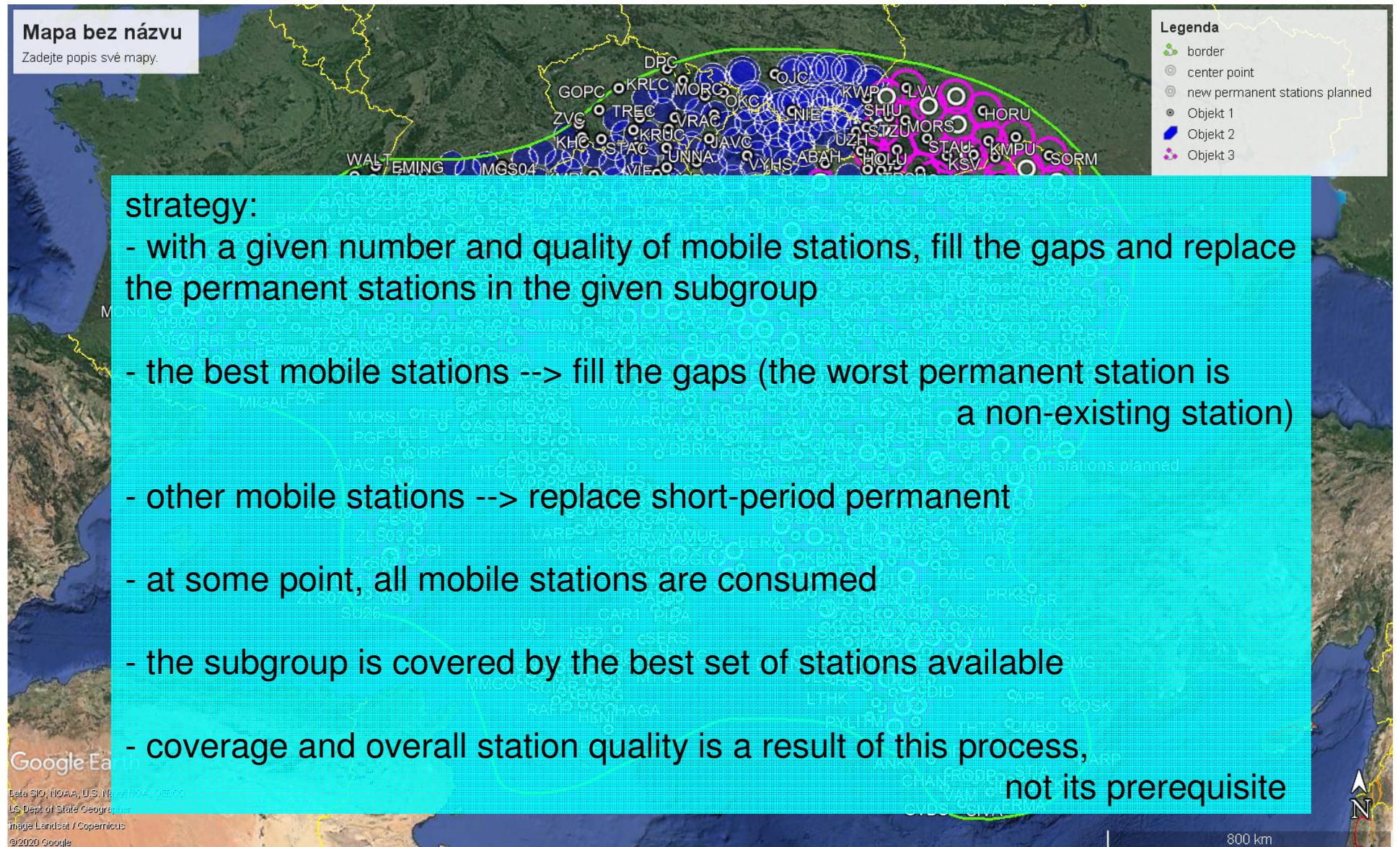


	MOBILES	REGION	PACASE already in place						122 !
EAST	Poland	Ukraine-Carp.	Ukraine-Coast	Moldavia	Romania	Bulgaria	sum rows	available	spare
IG CzechRep					5	8	13	14	1
IRSM Czech Rep					4		4	4	0
Denmark					12	6	18	20	2
Finland				3	14		17	20	3
Poland	14	16					30	30	0
							82	88	6
sum columns	14	16	0	3	35	14	82 sums	available	spare
needed	14	16	2	3	35	14	84 needed		
30s NOT replaced									
PANNONIAN	CzechRep	Austria	Slovakia	Hungary	Serbia	Germany	sum rows	available	spare
UniWien		17	9				26	30	4
IG CzechRep	9		22	4			35	36	1
Hungary				11			11	11	0
DSEBRA		15		15	5		35	35	0
Germany					10		10	10	
Netherlands				10			10	10	0
							127	132	5
sum columns	9	32	31	30	15	10	117 sums	available	spare
needed	9	32	31	30	15	10	127 needed		
CENTRE	Croatia	BiH	N. Italy	Slovenia			sum rows	available	spare
Croatia	10						10	10	0
Norway		18					18	20	2
France			6				6	6	0
Switzerland	6		14				20	20	0
							54	56	2
sum columns	16	18	20	0			54 sums	available	spare
needed	16	18	20	0			54 needed		
SOUTHEAST	Albania	N. Macedonia	Montenegro	Kosovo	Greece		sum rows	available	spare
DSEBRA	10	13	7	3	41		74	65	-9
							74	65	-9
sum columns	10	13	7	3	41		74 sums	available	spare
needed	10	13	7	3	41		74 needed		
WEST	Apulia	Sicily	Sardinia	Corsica	Massif Central	Switzerland	sum rows	available	spare
Spain	4		9				13	20	7
France				1	23		24	24	0
							37	44	7
sum columns	4	0	9	1	23	0	37 sums	available	spare
needed	4	0	9	1	23	0	37 needed		
							total needed	376 total available	385
								total spare	11

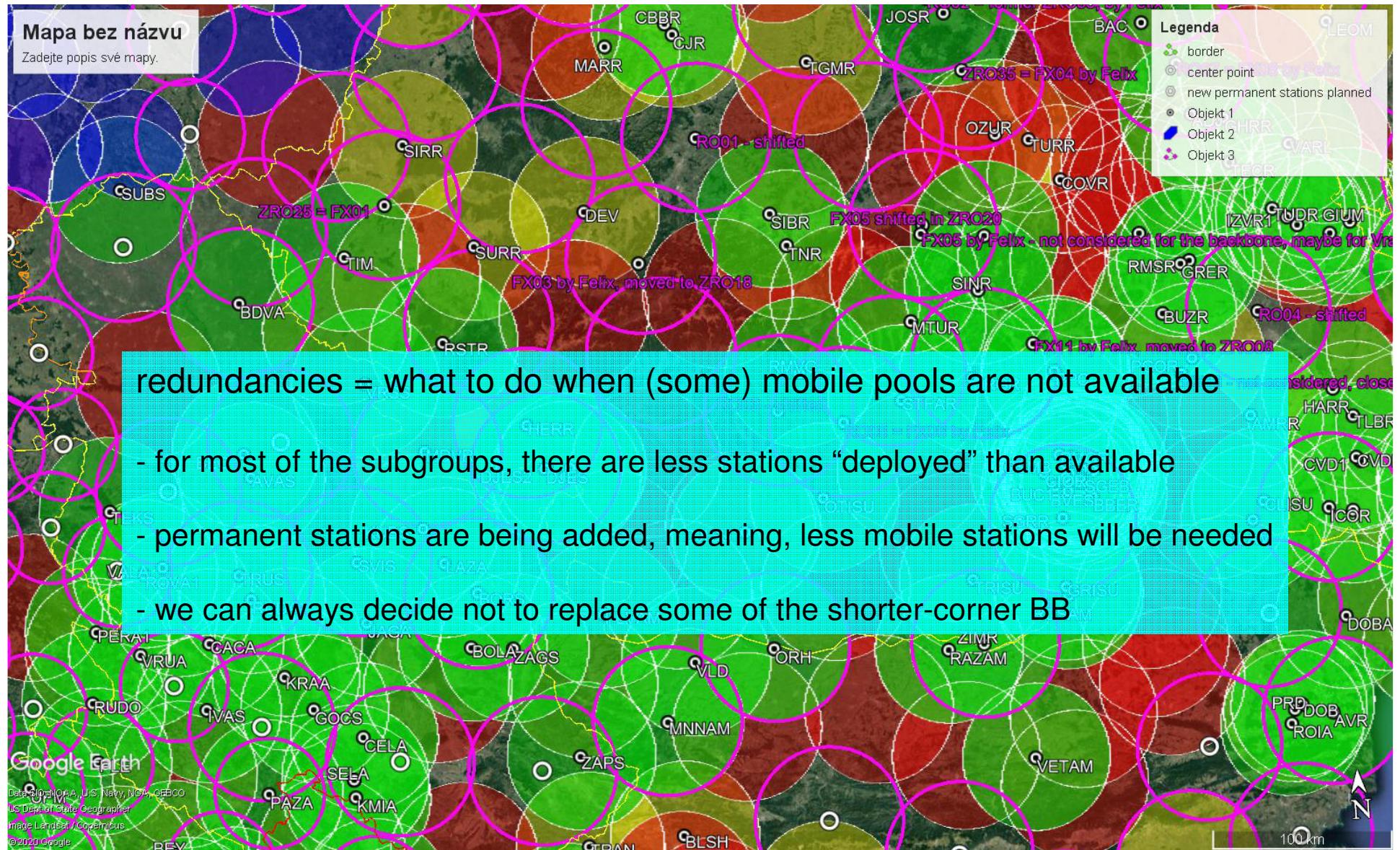
deployment of mobile stations – handmade in GoogleEarth

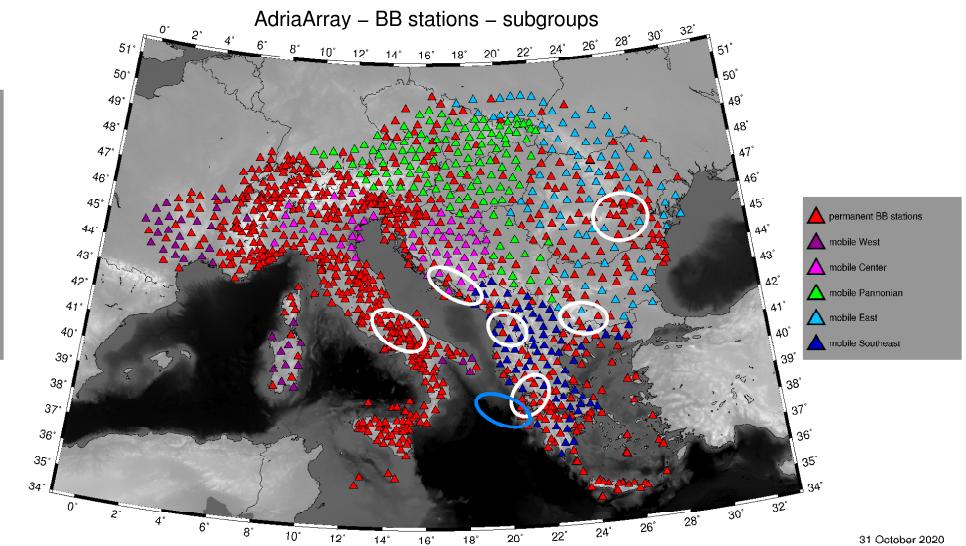
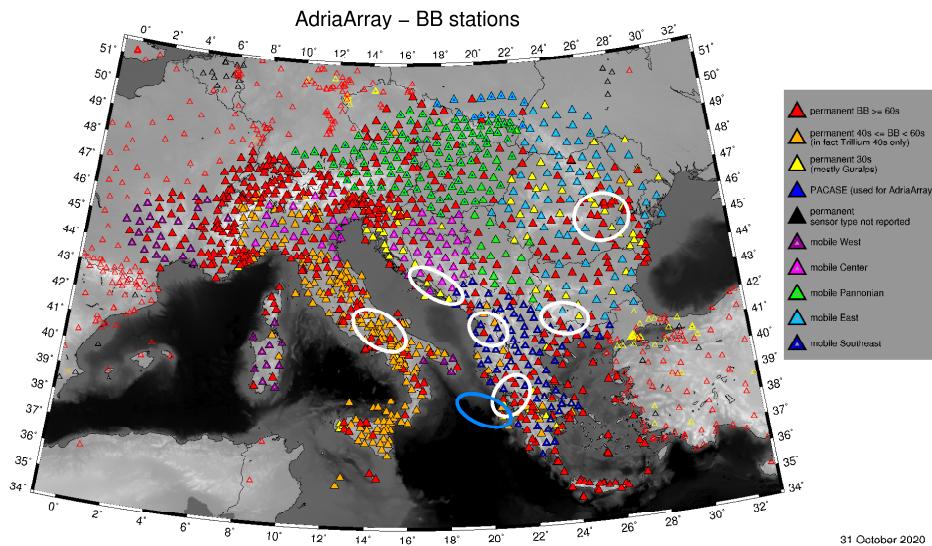


deployment of mobile stations – handmade in GoogleEarth

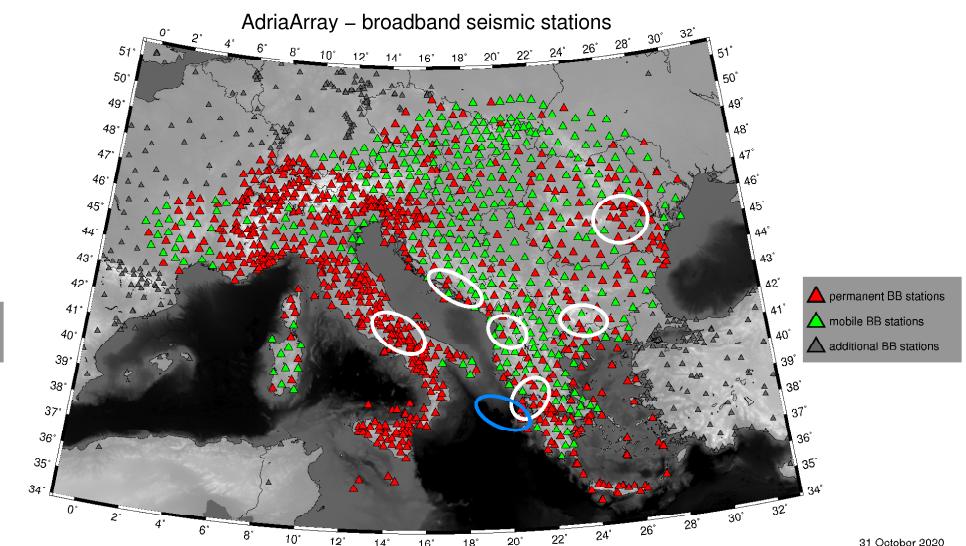
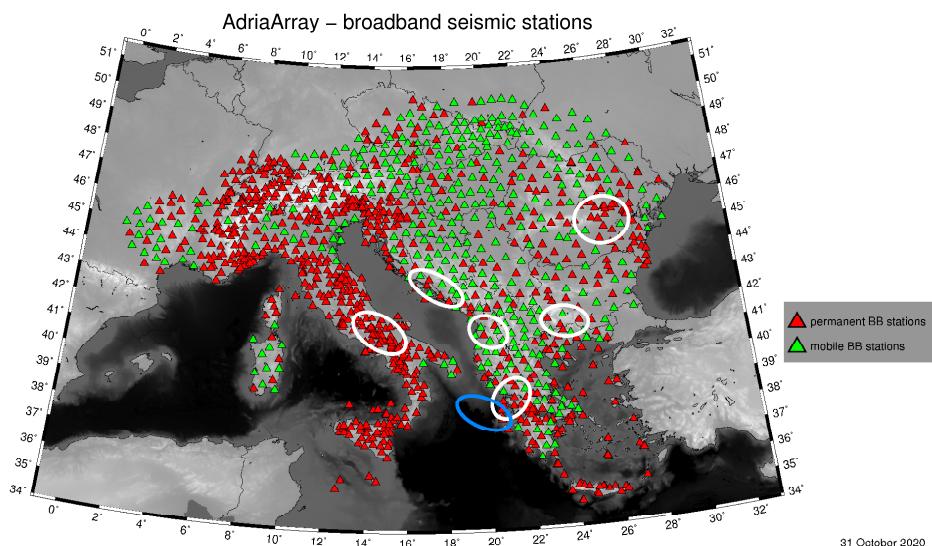


deployment of mobile stations – handmade in GoogleEarth



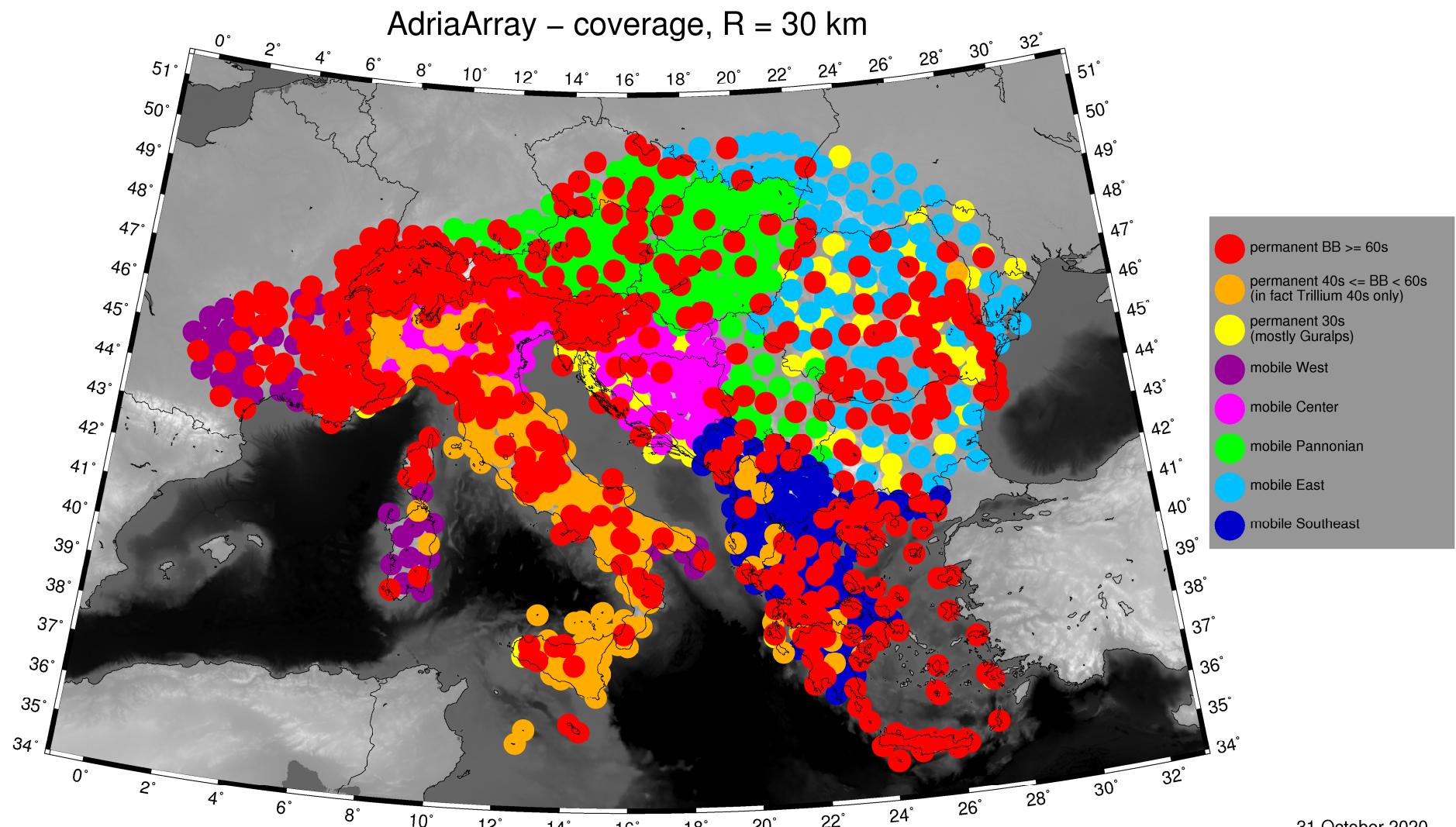


various versions of the map – different levels of information plotted



coverage

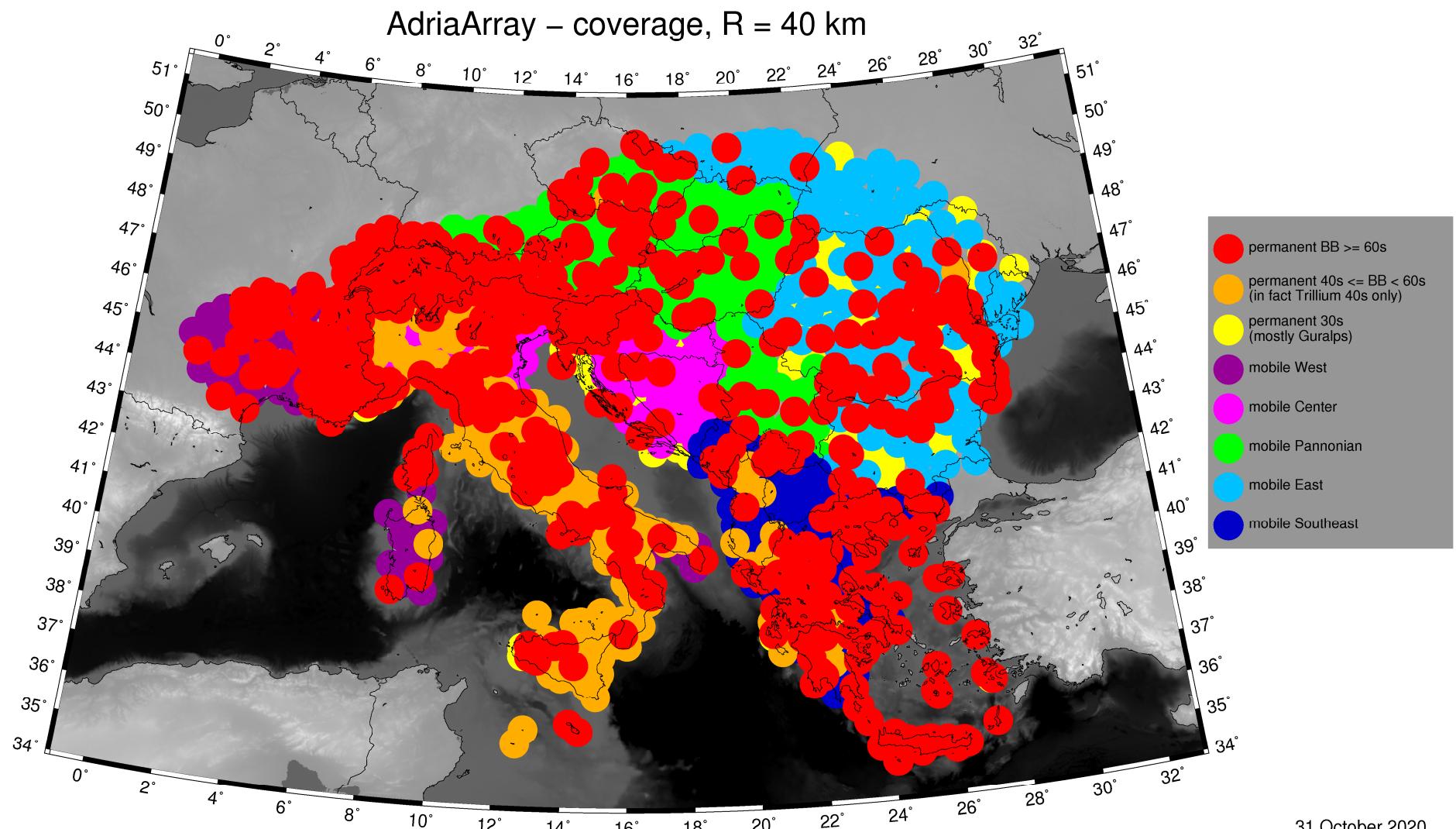
30 km



31 October 2020

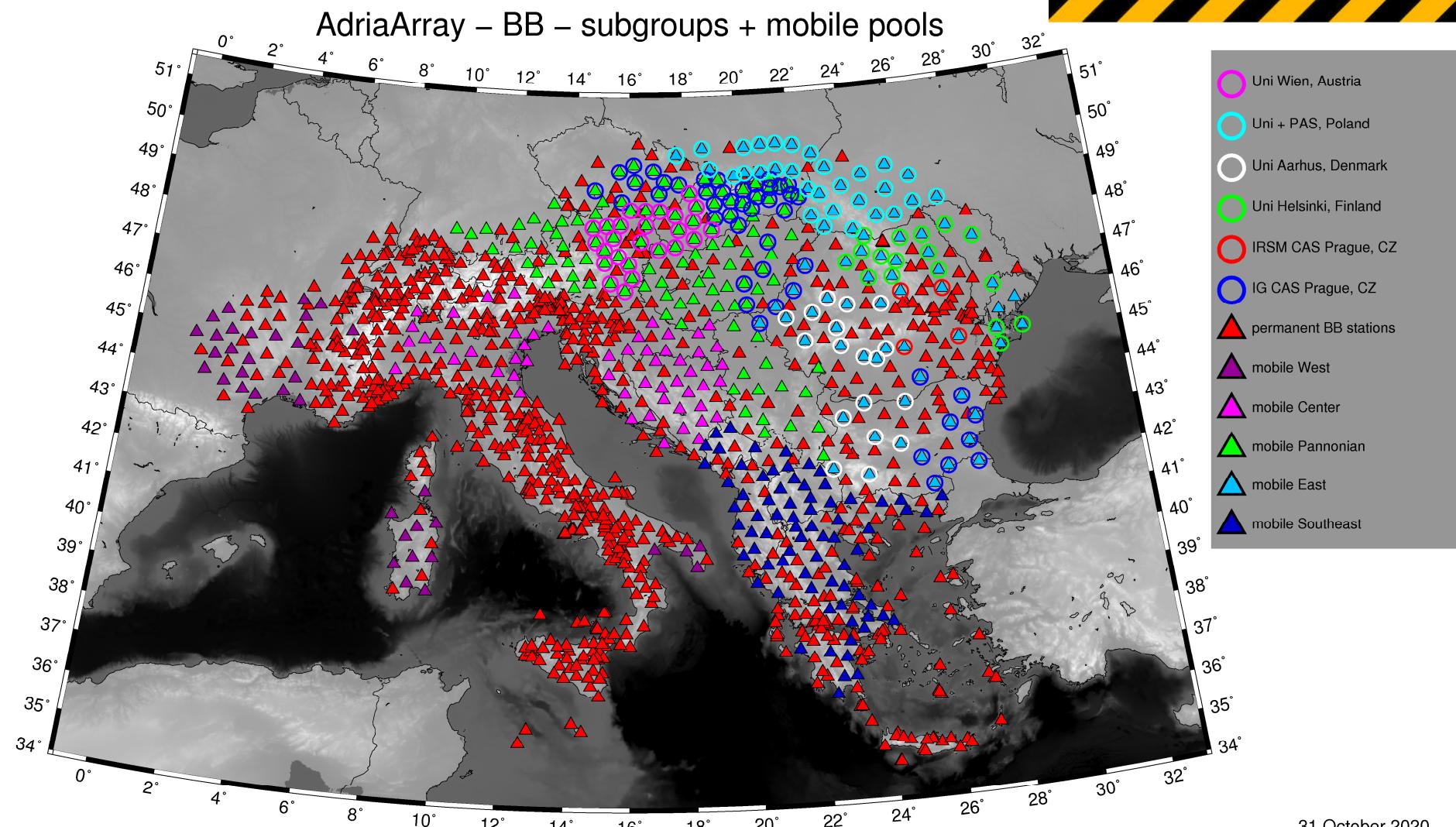
coverage

40 km



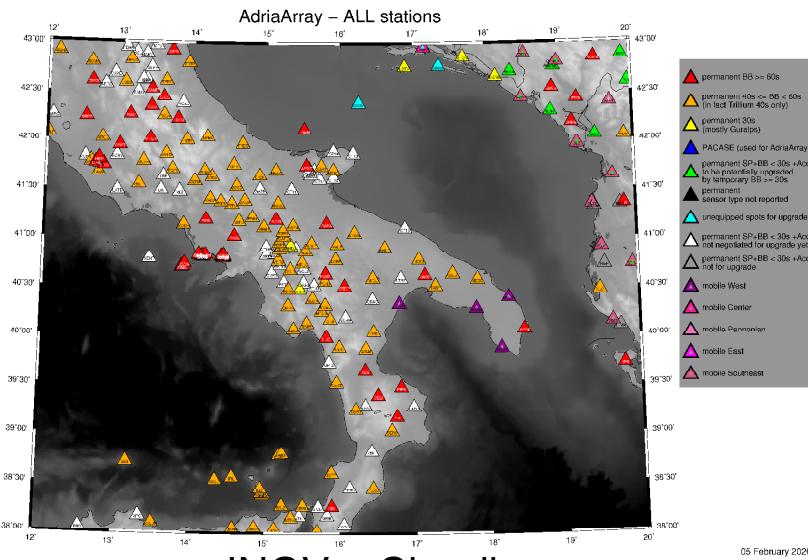
31 October 2020

mobile pools assigned to the stations – work in progress

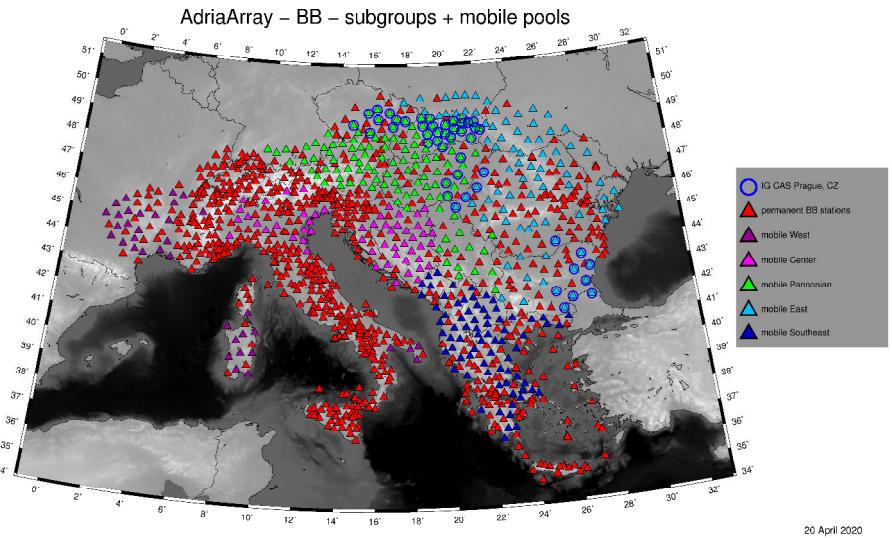


31 October 2020

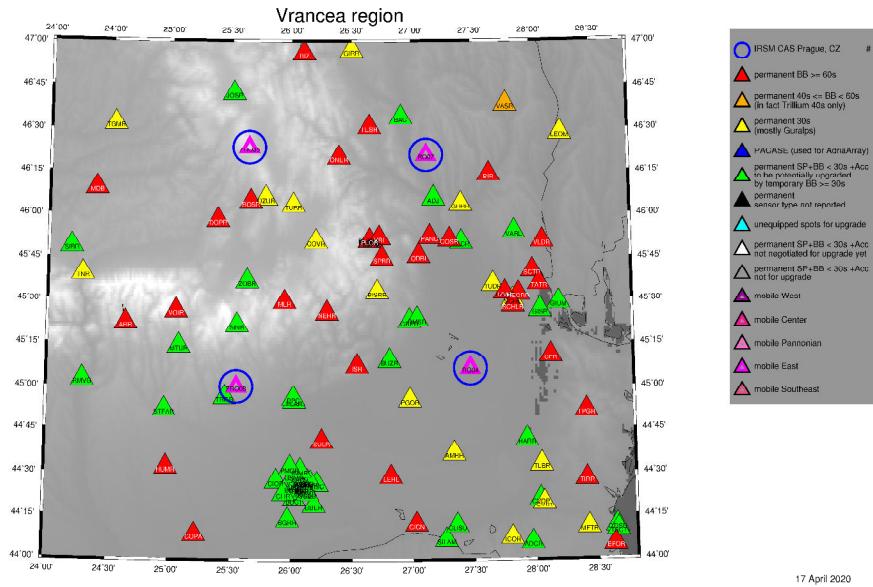
examples of maps to support project proposals



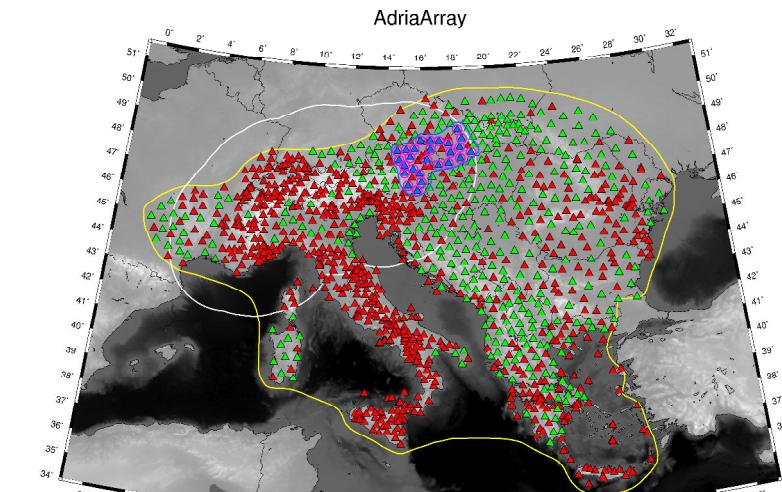
INGV – Claudia



IG CAS CZ – Jarka



IRSM CAS CZ – Renata



UniWien – Götz

ORFEUS + EPOS

support from Orfeus/EPOS is crucial for the AdriaArray

AdriaArray idea and Orfeus/EPOS are aiming
in the same direction, focusing on different aspects

infrastructure + science + networking

- archival of data at regional EIDA nodes
- support to AdA workshops via EPOS SP (e.g. this week!)

Datacenter ID	Description and Focus Region
ODC - KNMI	European-Mediterranean, Netherlands
GFZ	European, Global, temporary deployments
RESIF	France + Global temporary deployments
INGV	Italy, European-Mediterranean (MedNet)
ETHZ	Switzerland
BGR	Germany
LMU	Germany (BayernNetz)
NIEP	Romania
KOERI	Turkey
NOA	Greece
UIB - NORSAR	Norway
ICGC	Spain

from the Orfeus web page:

ORFEUS Observatories & Research Facilities for European Seismology

ORFEUS is the non-profit foundation to coordinate and promote digital, broadband seismology in the European-Mediterranean area.

EIDA is the European Integrated Data Archive infrastructure within ORFEUS to provide access to seismic waveform data in European archives.

- guidelines for quality control and data management being developed

acknowledgements

Maps plotted using GMT by Wessel, P., Smith, W. H. F., Scharroo, R., Luis, J. F. and Wobbe, F., 2013: Generic Mapping Tools: Improved version released, EOS Trans. AGU, 94, 409-410.

AlpArray stations by the AlpArray Working Group www.alparray.ethz.ch.

Permanent stations by national seismological services and ORFEUS-EIDA.

Big thanks to all the network operators for supplying the permanent station information.

PACASE station information thanks to György, Jarka and Antje.

Thanks to Orfeus + Epos for supporting AdriaArray.

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