

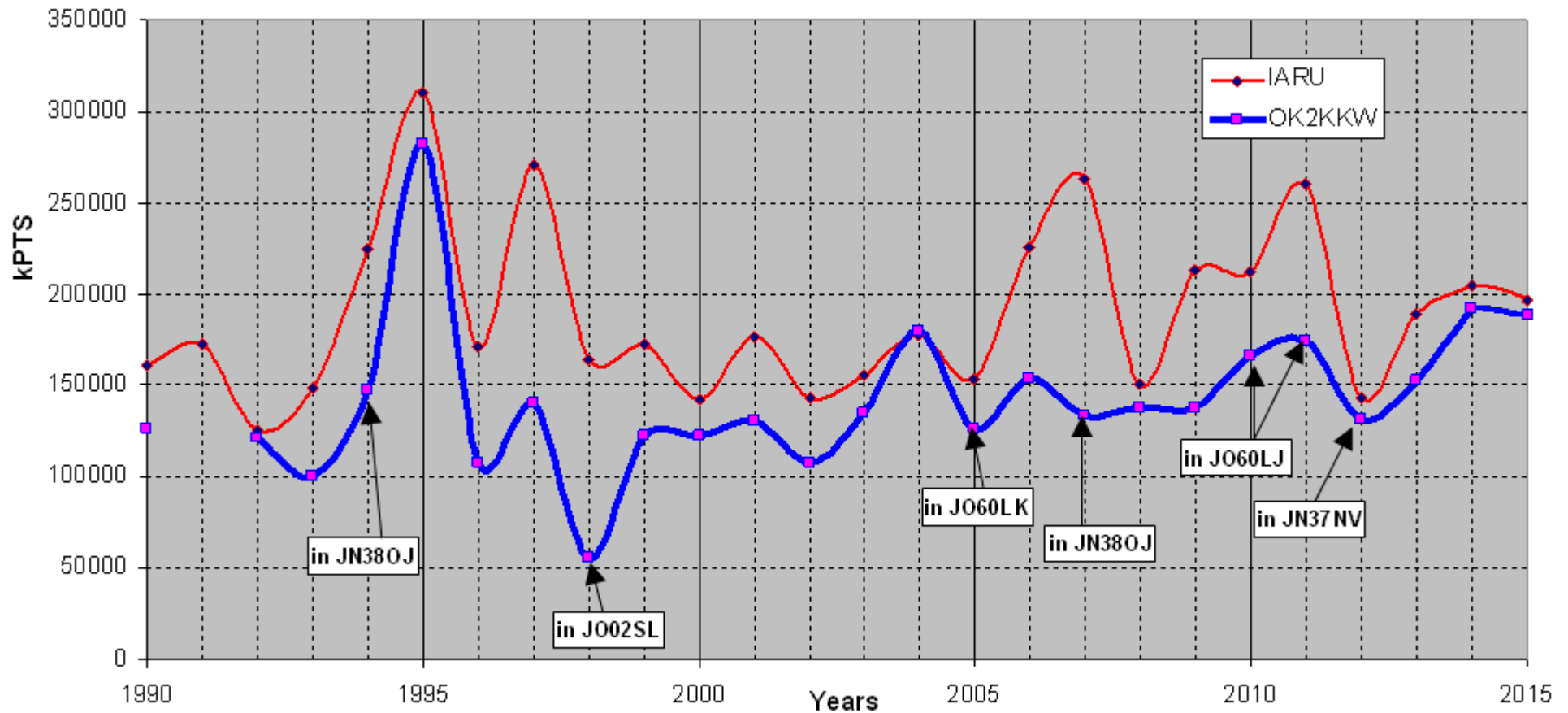
UHF Contest 2015 – srovnání OK2A vs DL0GTH & DR9A & OL3Z

432 MHz



432 MHz – výsledky OK2A (OK2KKW)

ve srovnání s výsledkem vítězné stanice v IARU R1 MULTI



432 MHz – srovnání antén

	OK2A (25m koaxy)	DL0GTH (15m koaxy)	DR9A (50m koaxy)	OL3Z (40m koaxy)
z 360°	celkem 133°	celkem 133°	celkem 126°	celkem 166°
system 1	33el K1FO [17,7dBd 17°]	4x13el flex [18,2 dBd 28°]	6x11el ZB [20,5dBd 31°]	8x 9el ZB [17,7dBd 36°]
system 2	4x10el W [17,7dBd 36°]	4x13el flex [18,2 dBd 28°]	6x11el ZB [20,5dBd 31°]	8x 9el ZB [17,7dBd 36°]
system 3	4x10el W [17,7dBd 36°]	2x 25jxx70 [19,0 dBd 23°]	6x11el ZB [20,5dBd 31°]	8x 9el ZB [17,7dBd 36°]
system 4	12x6el ZB [20,0dBd 44°]	8xdQUAD [12 dBd 54°] ?	4x16el ZB [20,5dBd 24°]	8x 9el ZB [17,7dBd 36°]
system 5			8x23el ZB [24,5dBd 9°]	4x22el M2 [21,2dBd 11°]
system 6				8x22el M2 [24,0dBd 11°]

Zisky antén a úhel prvního laloku pro -3dB spočítán na základě podkladů z webu a VK3UM EME kalkulátoru, výpočet se snaží o co v reálu nejvěrnější hodnotu, proto jsou do zisku stacků započteny i odhadované ztráty na fázovacích kabelech (pro H1000)

Pro info platí (pro TX):

6x38el M2 = 25,7dBd 4x38el M2 = 23,6dBd 3x38el M2 = 22,3dBd
 2x38el M2 = 21,1dBd 1x38el M2 = 18,6dBd 8x10el wimo = 20,2dBd

2x taková anténa = v reálu přínos ~2,5dB

zisk 10el WIMO = zisk 9el DK7ZB

20dB = 100x větší vyzářený výkon

23dB = 200x větší vyzářený výkon

Útlumy pro 700W z hamshacku:

25m H1000 koaxu = 2,1dB = 432W

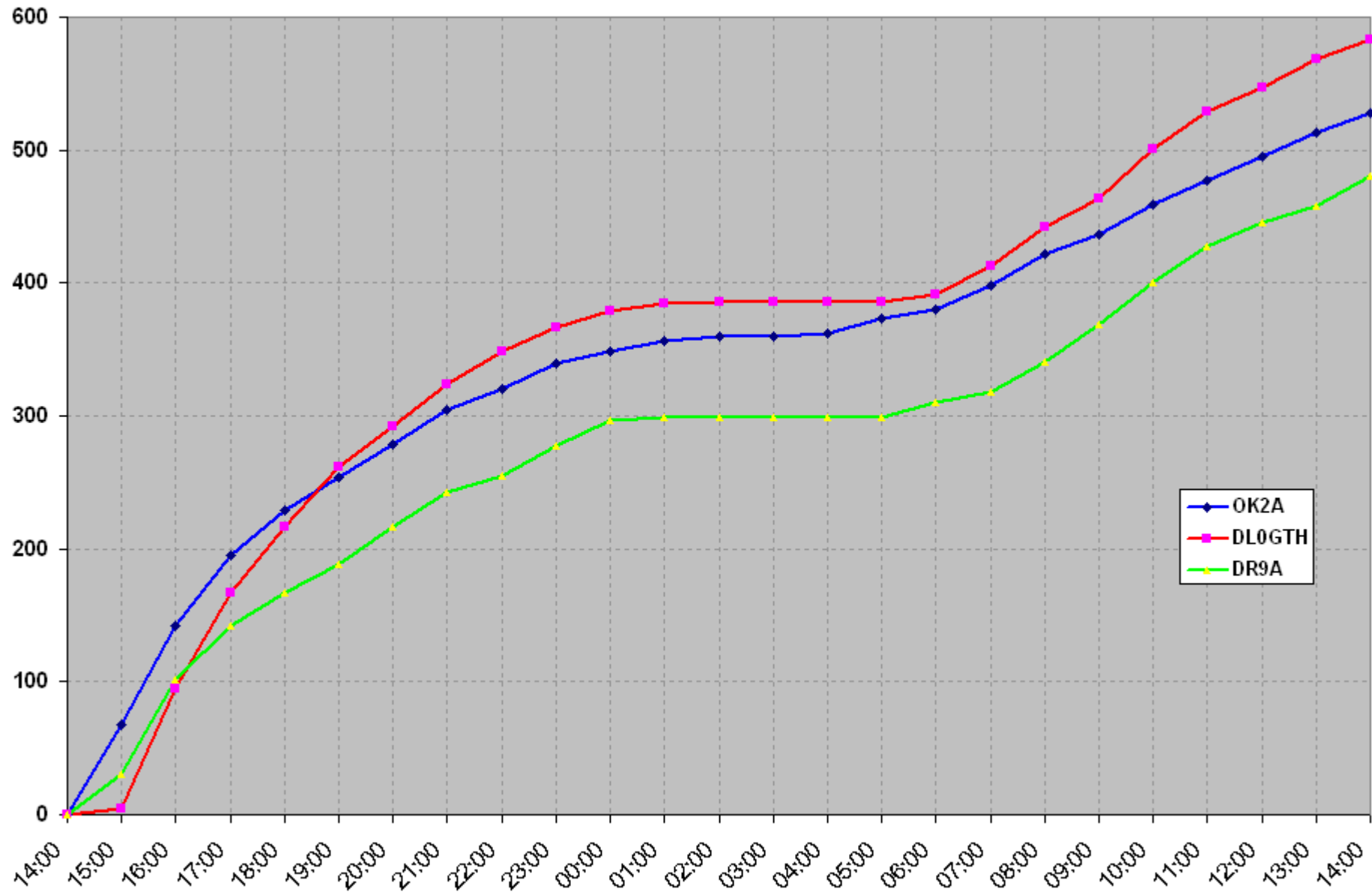
25m 1/2" koaxu = 1,2dB = 531W

25m 7/8" koaxu = 0,6dB = 610W

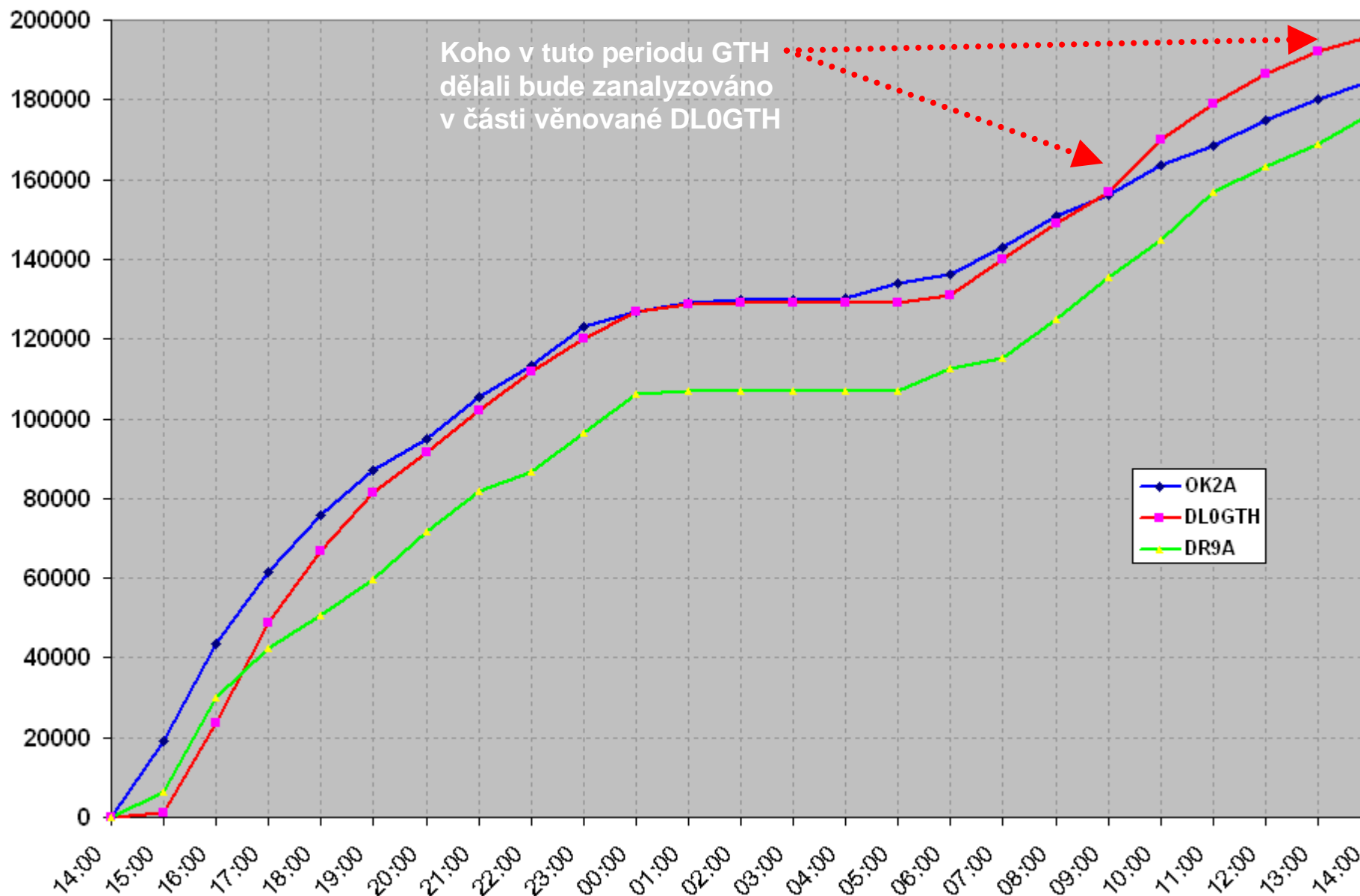
Pro RX ale: více antén = více šumu na koaxech = proto 4x38el M2 H v reálu může poslouchat stejně dobře jako 8x23el DK7ZB i když má papírově nižší zisk (!)

432 MHz – vývoj množství QSO

UHFC 2015

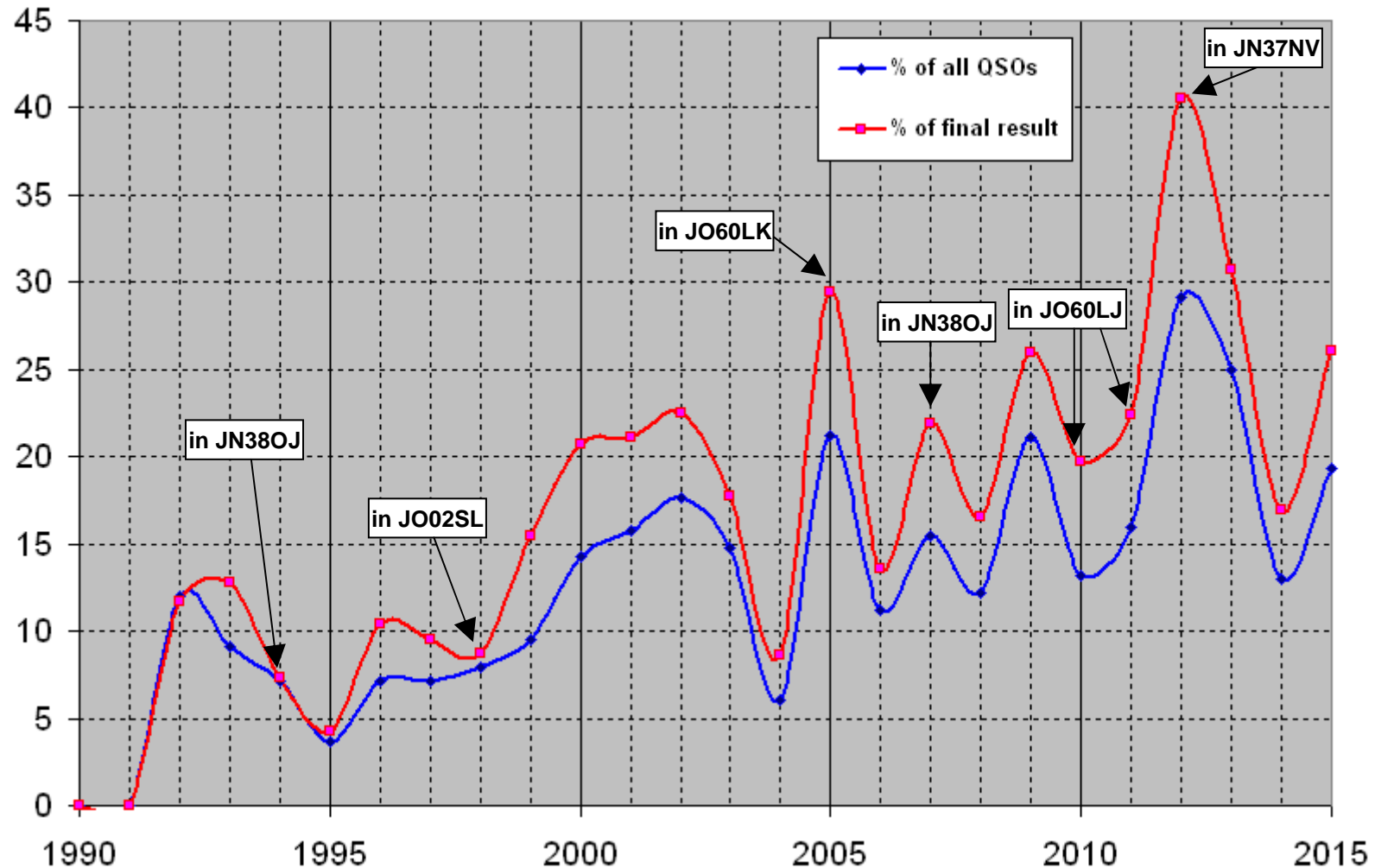


432 MHz – vývoj počtu bodů



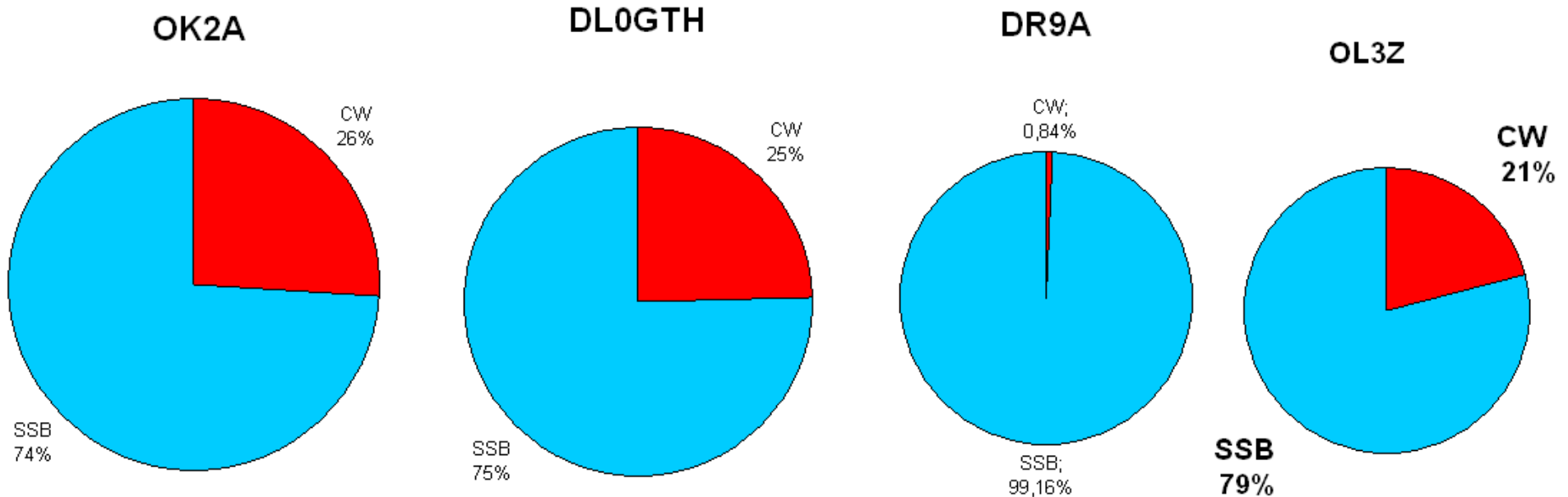
UHF/SHF Contest – 432 MHz CW OK2A

- % bodů za CW QSO z celkového výsledku
- % CW QSO z celkového počtu všech QSO
- méně % CW QSO = lepší tropo condx nebo vysíláno z lepšího QTH



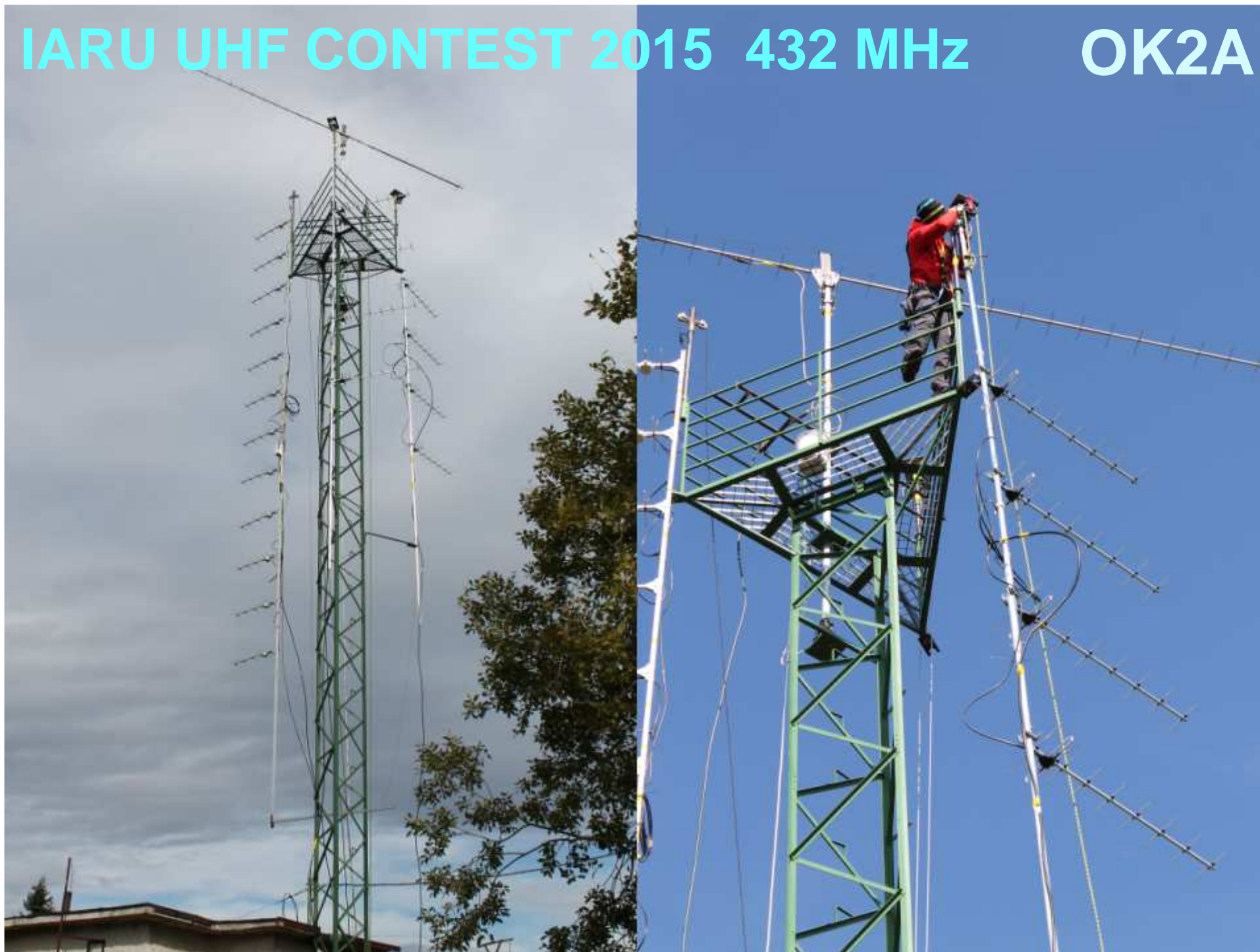
UHF/SHF Contest – 432 MHz CW

- % bodů za CW QSO z celkového výsledku

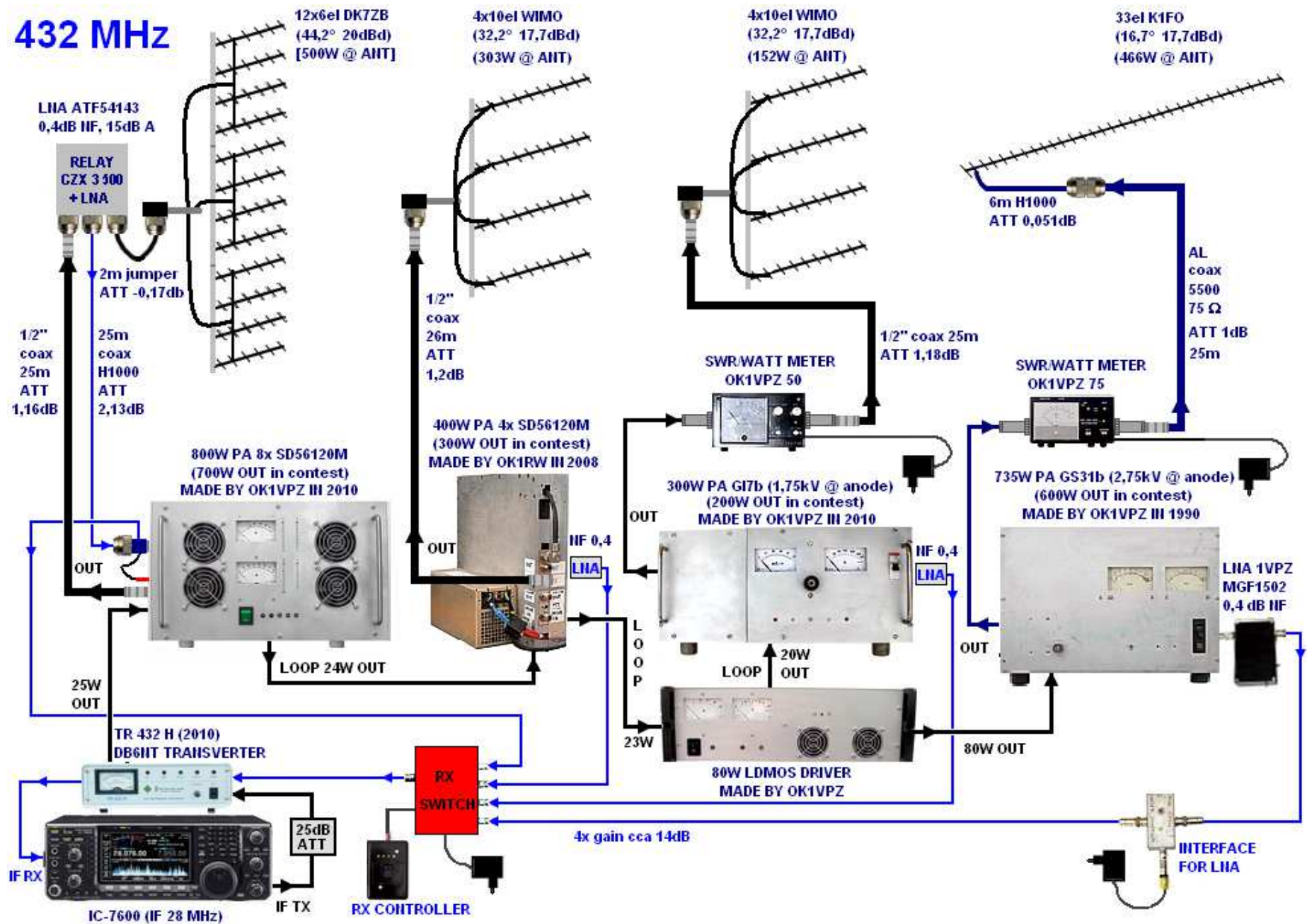


IARU UHF CONTEST 2015 432 MHz

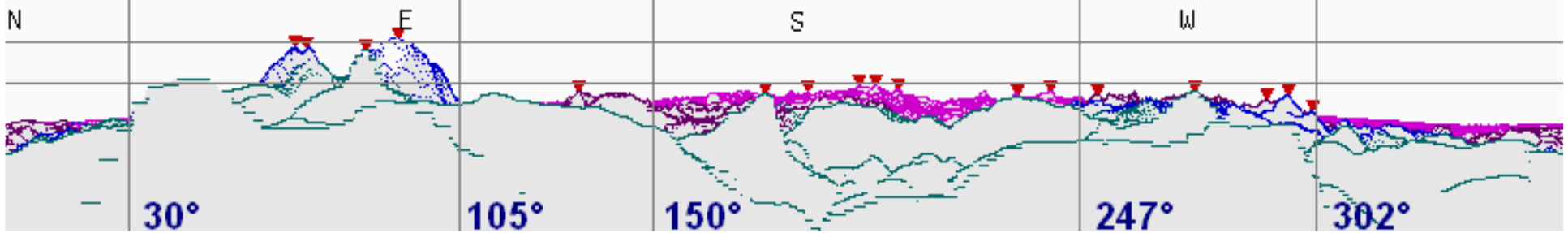
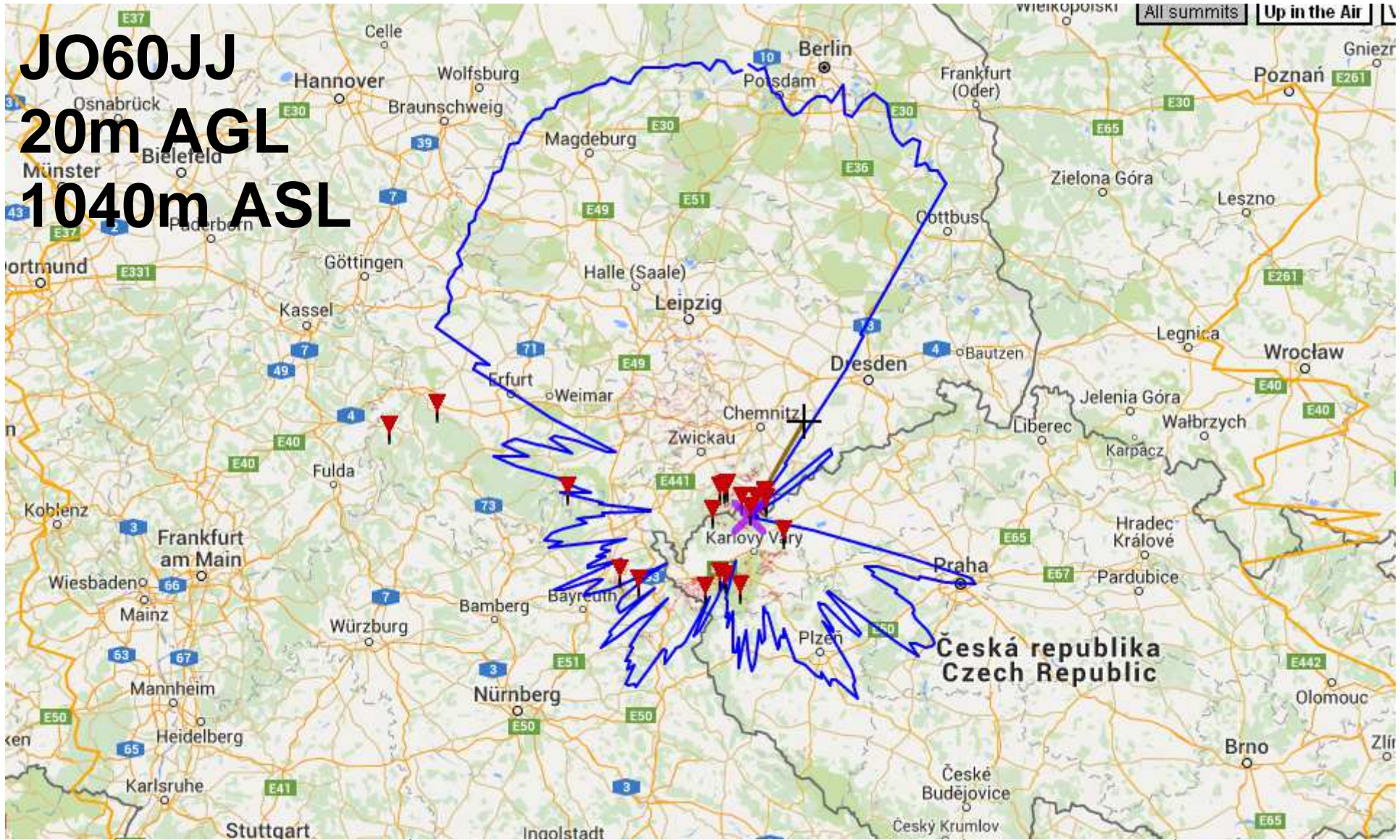
OK2A



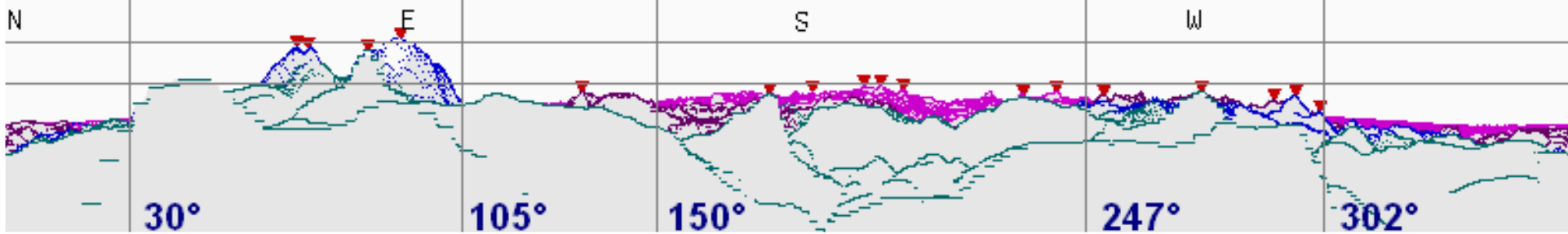
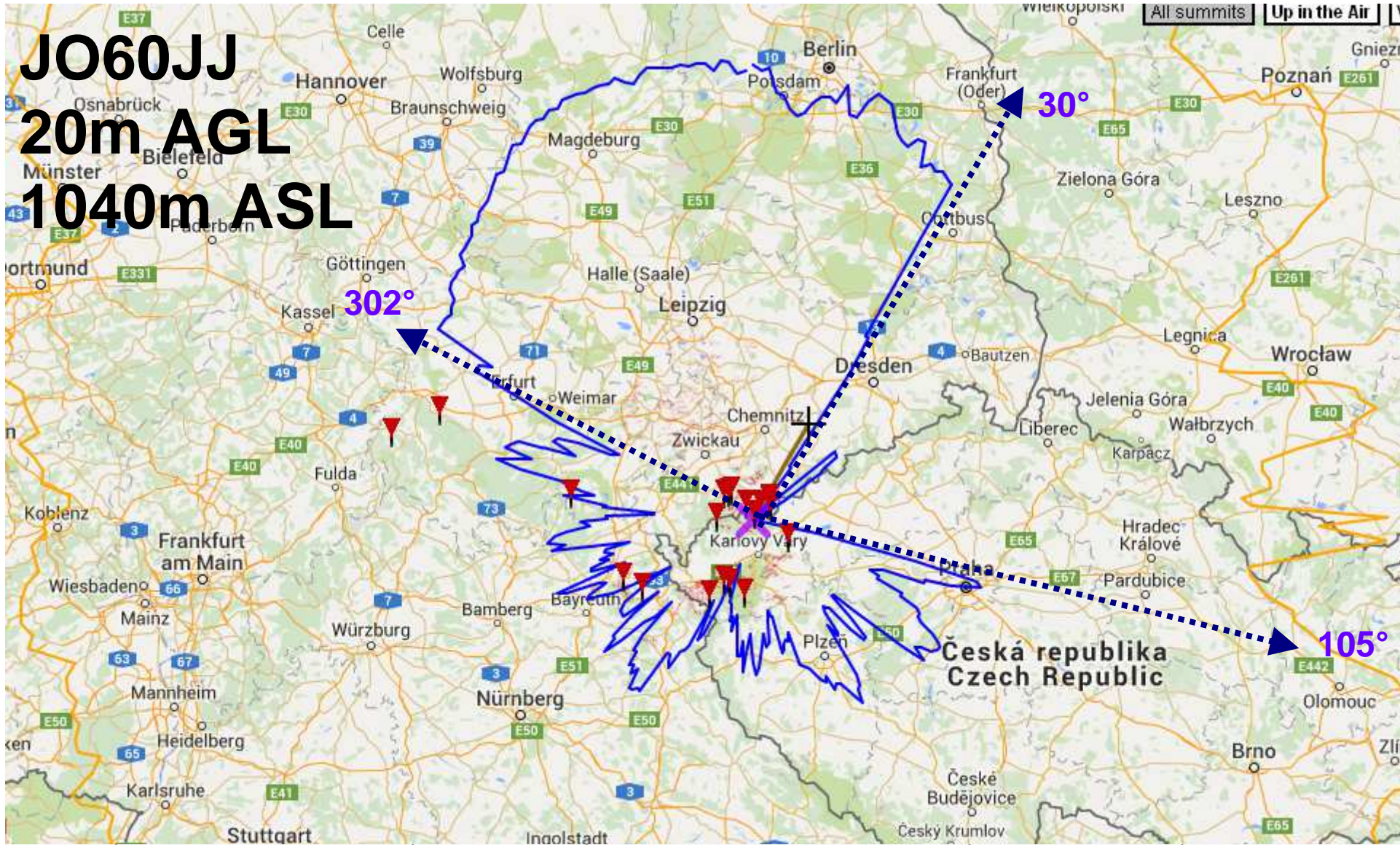
IARU UHF CONTEST 2015 432 MHz OK2A



JO60JJ
20m AGL
1040m ASL

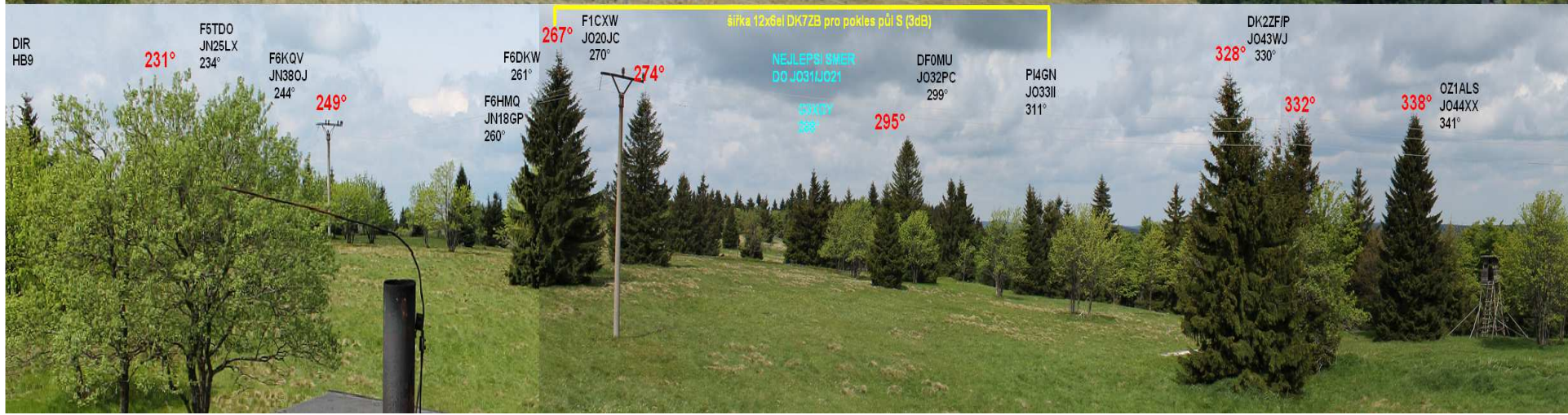


JO60JJ
20m AGL
1040m ASL



JO60JJ
20m AGL
1040m ASL

ZÁPAD
5m AGL vs 18m AGL

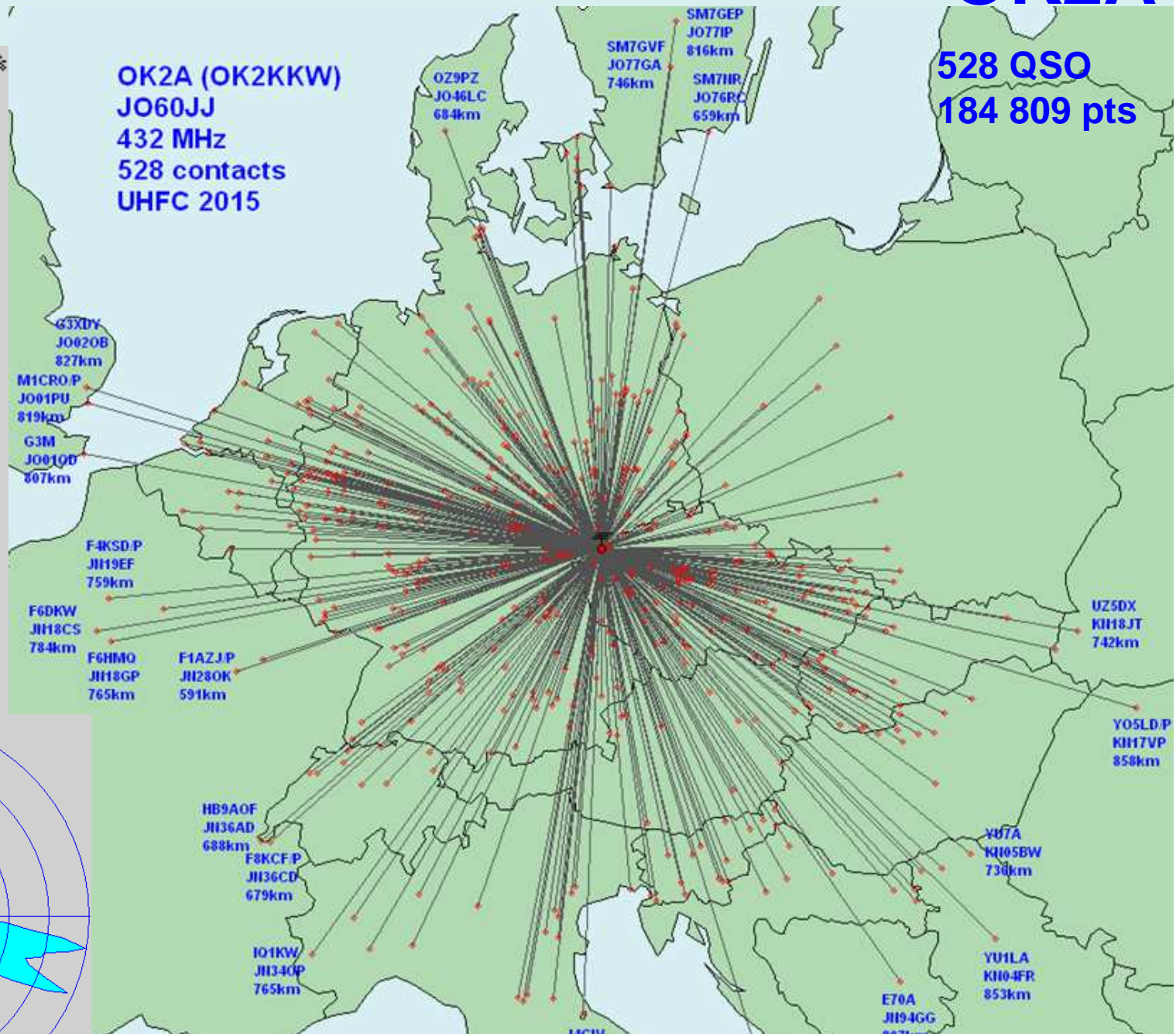


IARU UHF CONTEST 2015 432 MHz OK2A

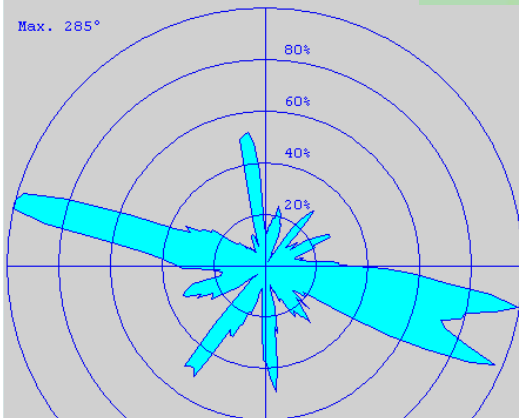
268	x DL	71796	38%
85	x OK	17050	9%
20	x I	13093	7%
19	x PA	10393	5%
22	x OM	9731	5%
15	x S5	7686	4%
16	x SP	6506	3%
9	x F	5801	3%
9	x 9A	5642	3%
10	x HG	5532	2%
9	x OZ	5461	2%
10	x HB	5123	2%
12	x OE	3967	2%
7	x ON	3955	2%
4	x YU	3004	1%
4	x SM	2778	1%
3	x YO	2574	1%
3	x G	2453	1%
2	x UR	1457	0%
1	x E7	807	0%

OK2A (OK2KKW)
JO60JJ
432 MHz
528 contacts
UHFC 2015

528 QSO
184 809 pts

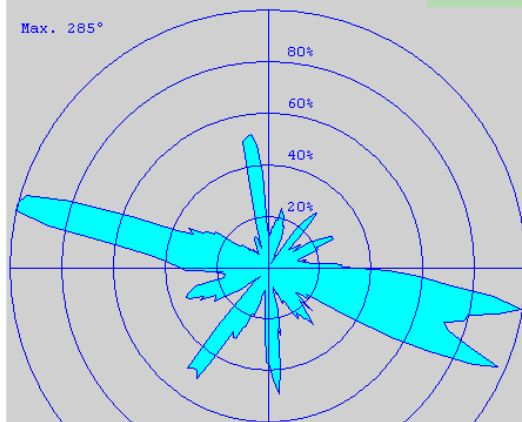
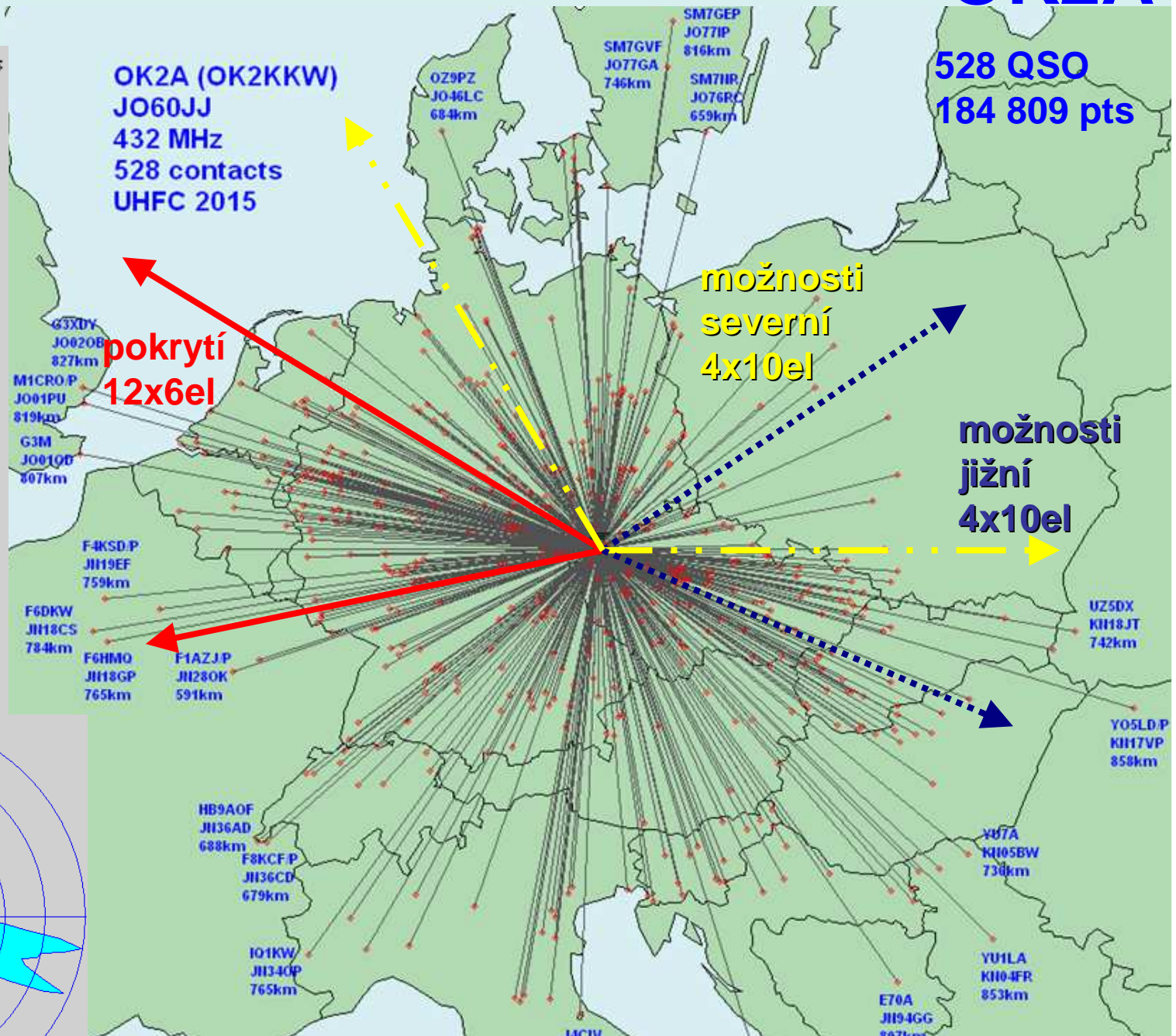


Max. 285°



IARU UHF CONTEST 2015 432 MHz OK2A

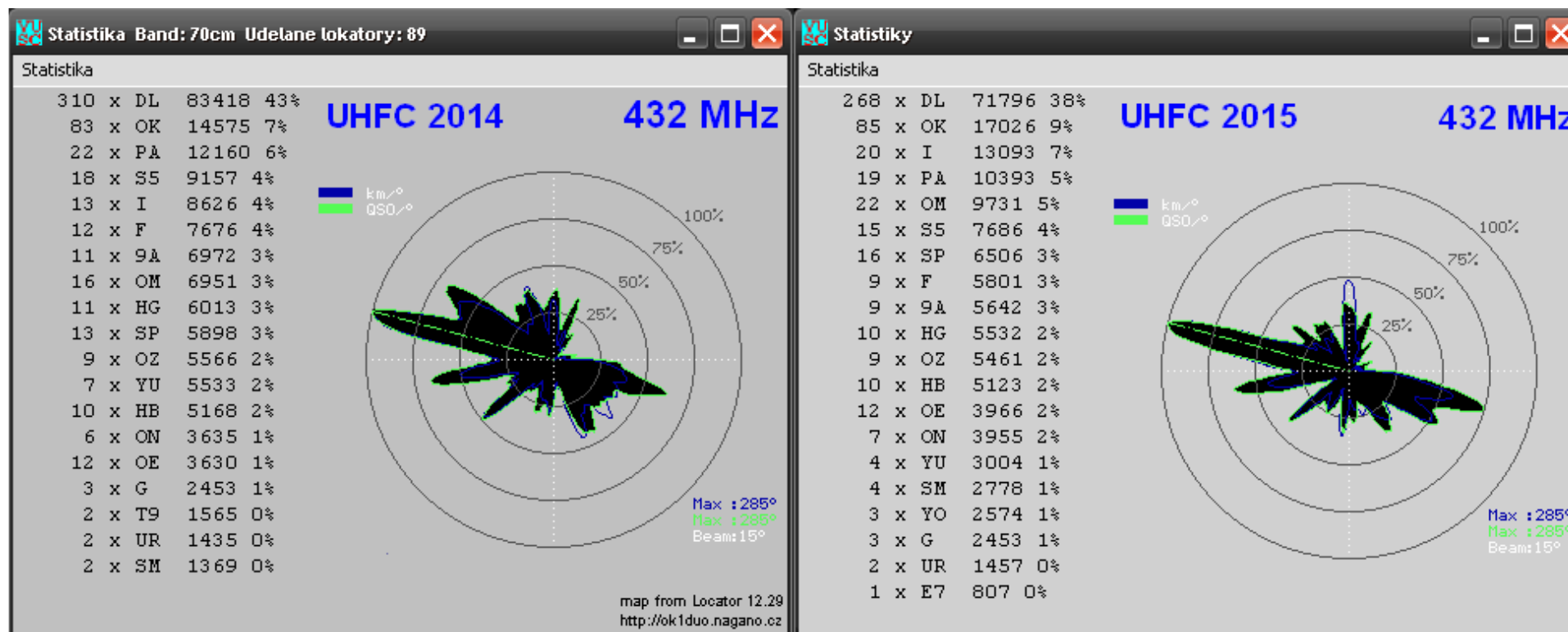
268	x	DL	71796	38%
85	x	OK	17050	9%
20	x	I	13093	7%
19	x	PA	10393	5%
22	x	OM	9731	5%
15	x	S5	7686	4%
16	x	SP	6506	3%
9	x	F	5801	3%
9	x	9A	5642	3%
10	x	HG	5532	2%
9	x	OZ	5461	2%
10	x	HB	5123	2%
12	x	OE	3967	2%
7	x	ON	3955	2%
4	x	YU	3004	1%
4	x	SM	2778	1%
3	x	YO	2574	1%
3	x	G	2453	1%
2	x	UR	1457	0%
1	x	E7	807	0%



IARU UHF CONTEST 2015 432 MHz

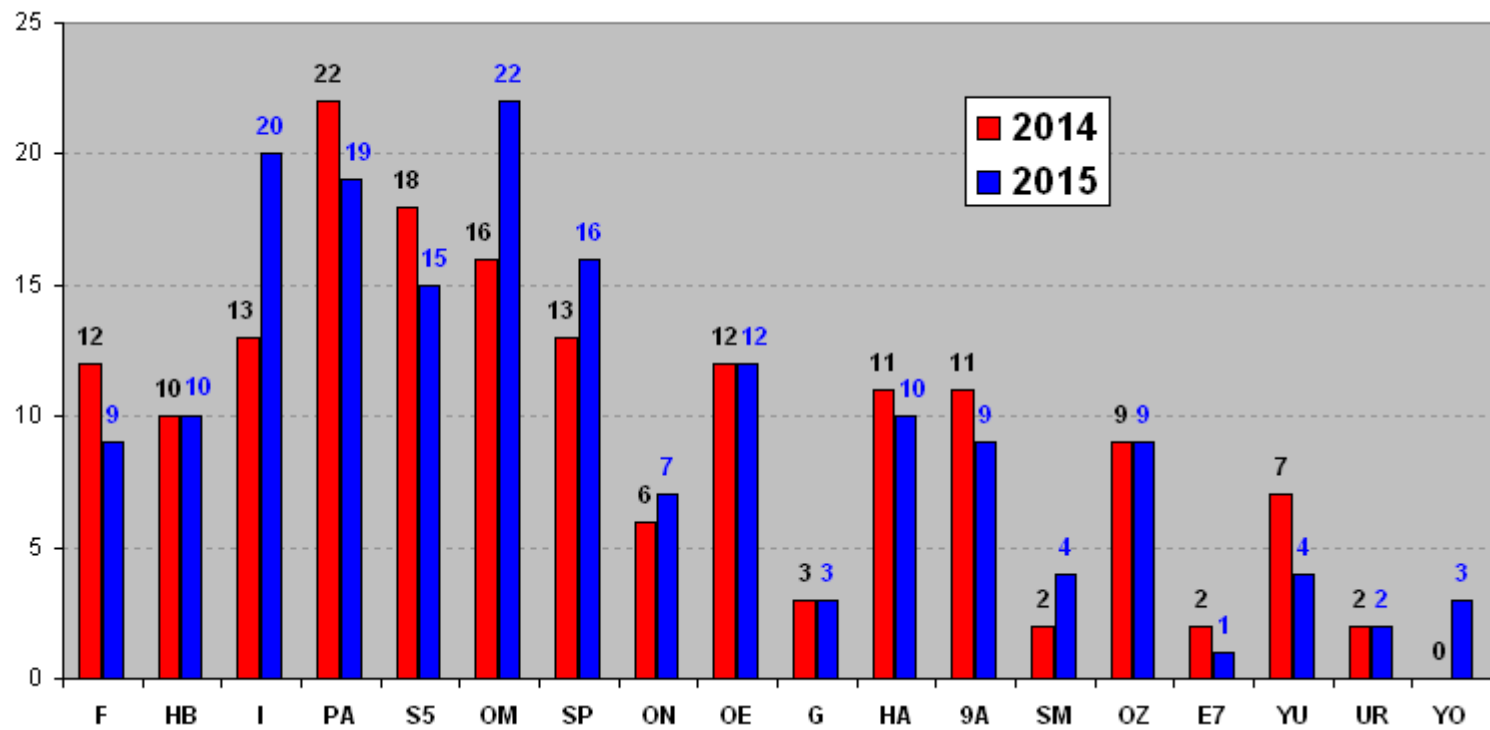
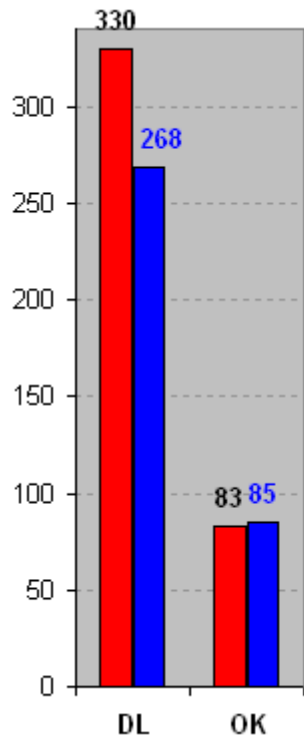
OK2A

OK2A DXCC UHFC 2014 / UHFC 2015



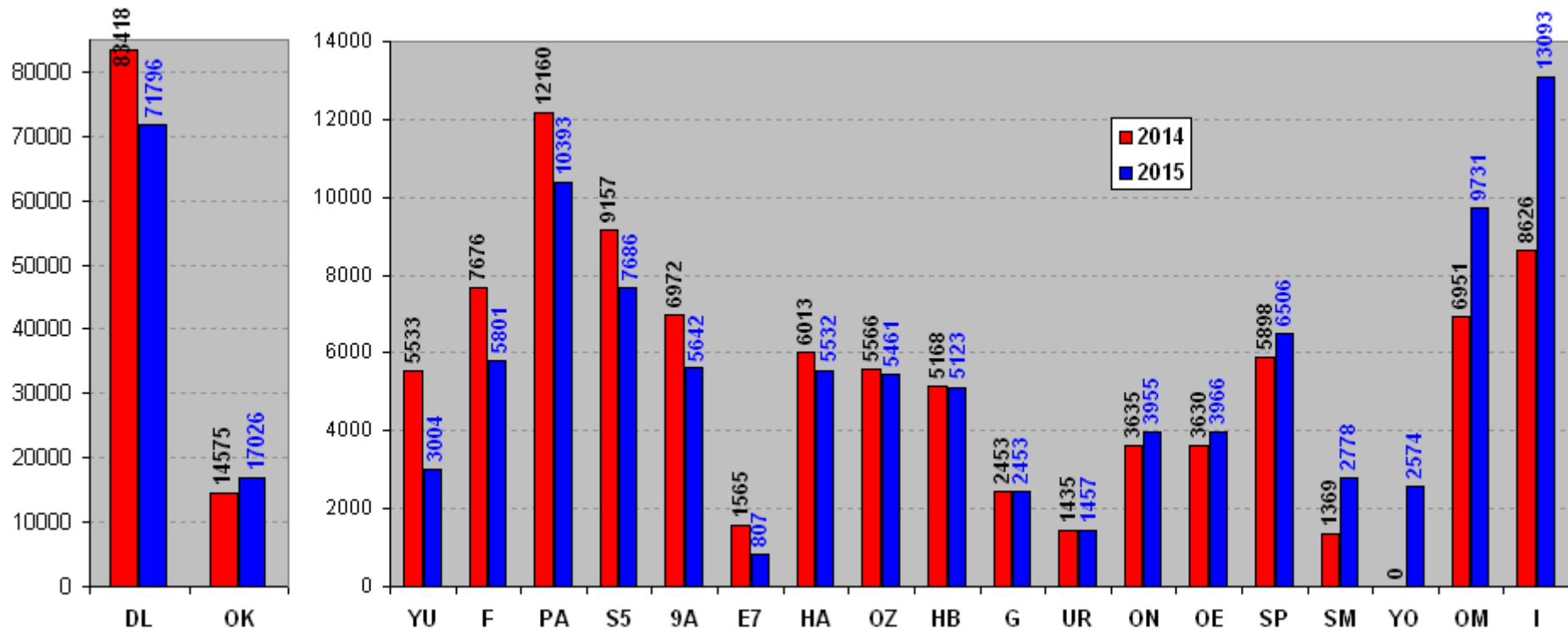
IARU UHF CONTEST 2015 432 MHz

OK2A počet QSO per DXCC UHFC 2014 / UHFC 2015



IARU UHF CONTEST 2015 432 MHz

OK2A body per DXCC UHFC 2014 / UHFC 2015

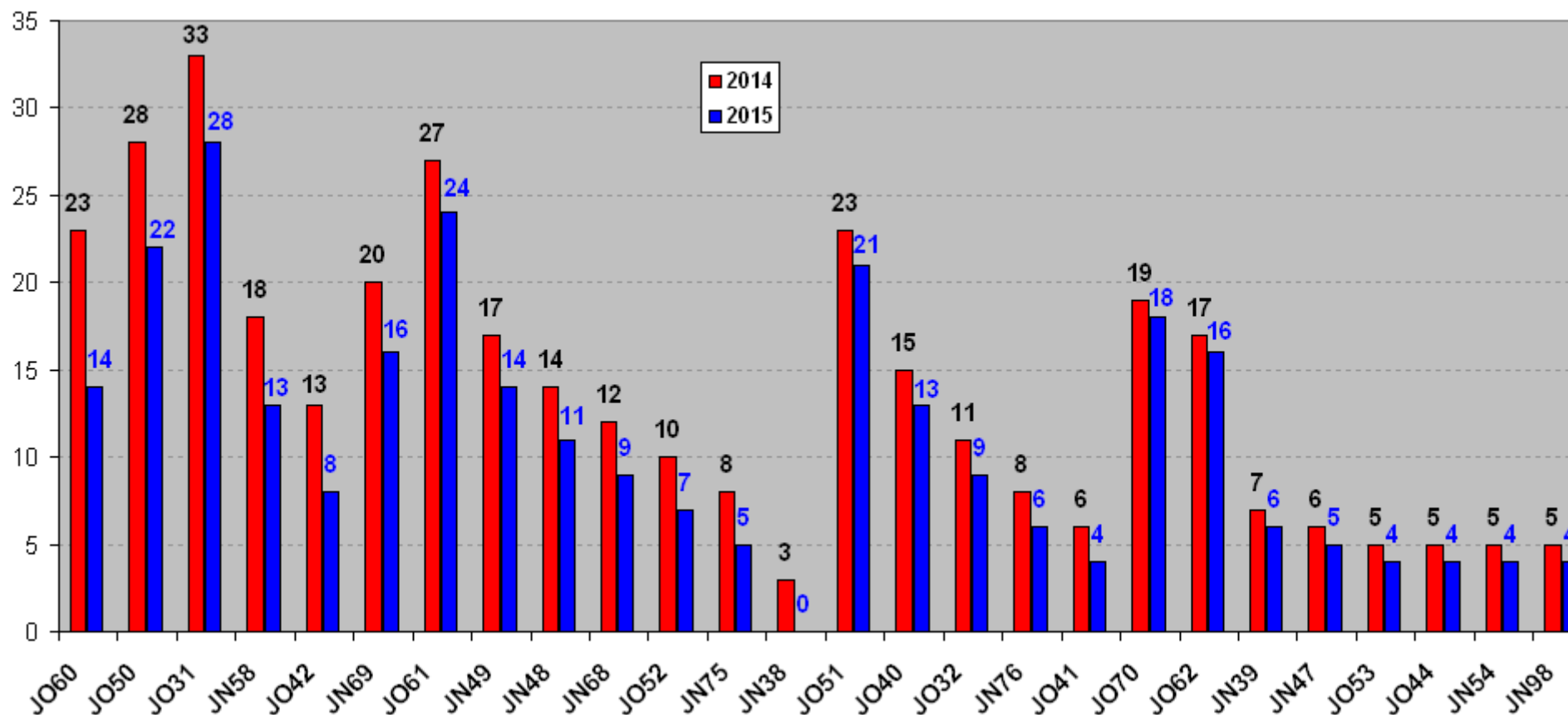


	2014	2015	rozdil
DL	83418	71796	-11622
YU	5533	3004	-2529
F	7676	5801	-1875
PA	12160	10393	-1767
S5	9157	7686	-1471
9A	6972	5642	-1330
E7	1565	807	-758
HA	6013	5532	-481
OZ	5566	5461	-105
HB	5168	5123	-45

	2014	2015	rozdil
G	2453	2453	0
UR	1435	1457	22
ON	3635	3955	320
OE	3630	3966	336
SP	5898	6506	608
SM	1369	2778	1409
OK	14575	17026	2451
YO	0	2574	2574
OM	6951	9731	2780
I	8626	13093	4467

IARU UHF CONTEST 2015 432 MHz

2014 & 2015: srovnání množství stanic z jednotlivých velkých LOC (řazeno od stanic z LOC, ze kterých v roce 2015 nejvíc ztrácíme)



IARU UHF CONTEST 2015 432 MHz

DR9A



New 5th direction
4x16el DK7ZB
[20,5dBd 24°]

IARU UHF CONTEST 2015 432 MHz

DR9A



8x23el DK7ZB
ZISK = 24,5 dBd
Šířka hlavního
lalku pro -3dB = 8,8°



IARU UHF CONTEST 2015 432 MHz DR9A



IARU UHF CONTEST 2015 432 MHz

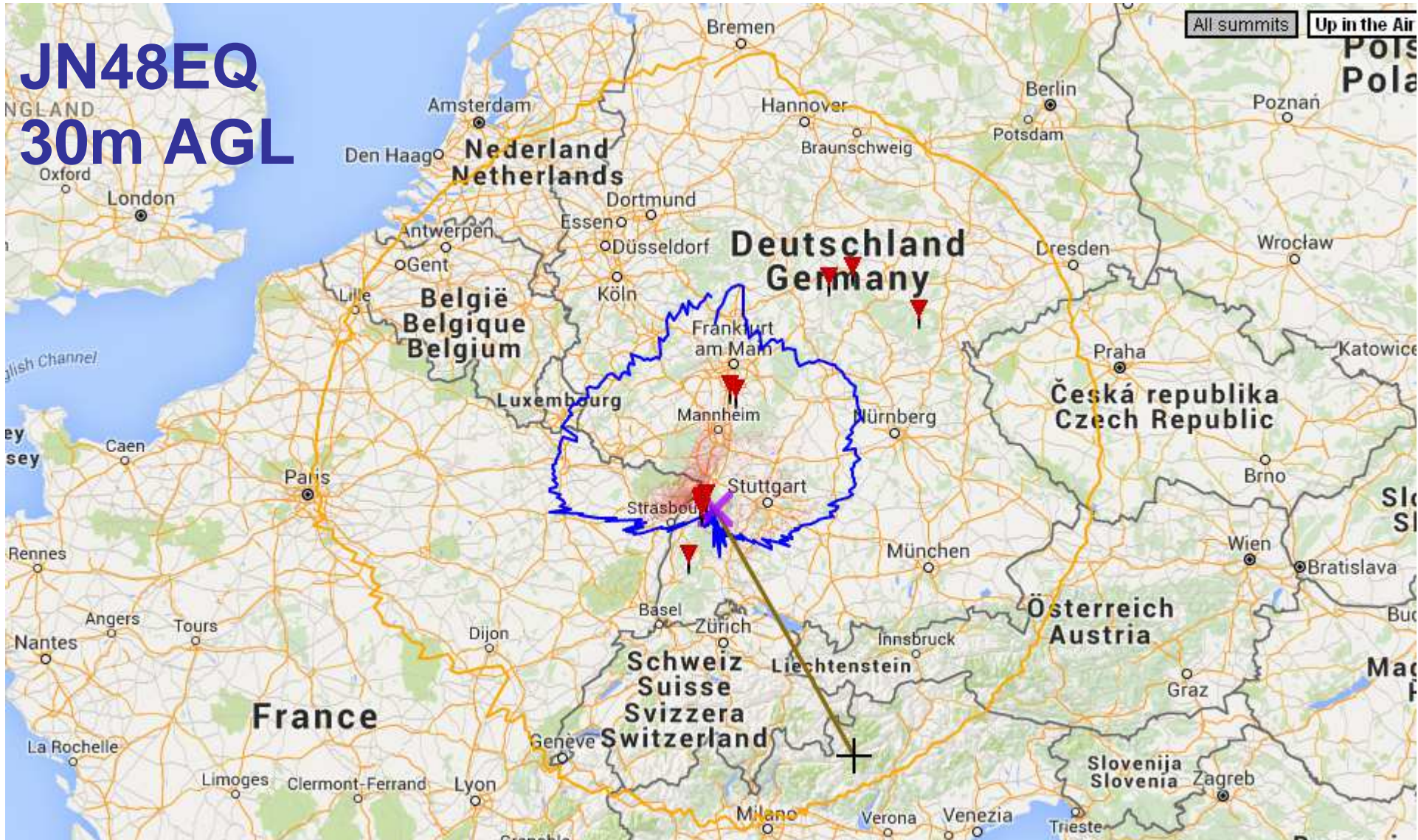
DR9A

JN48EQ

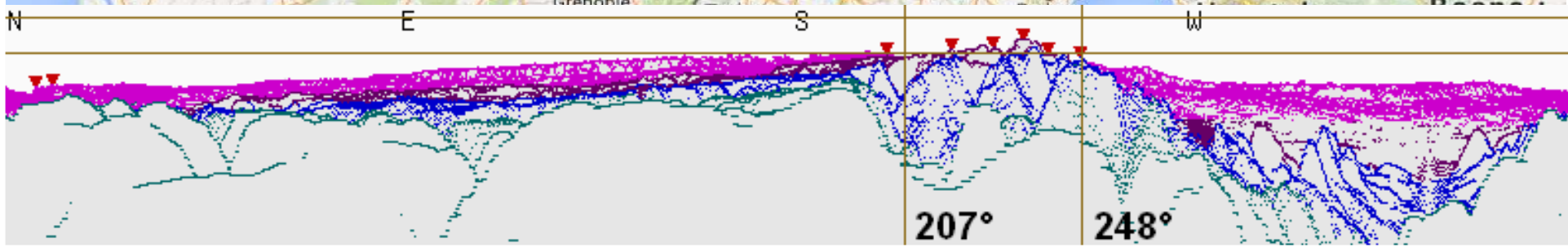
1029m ASL



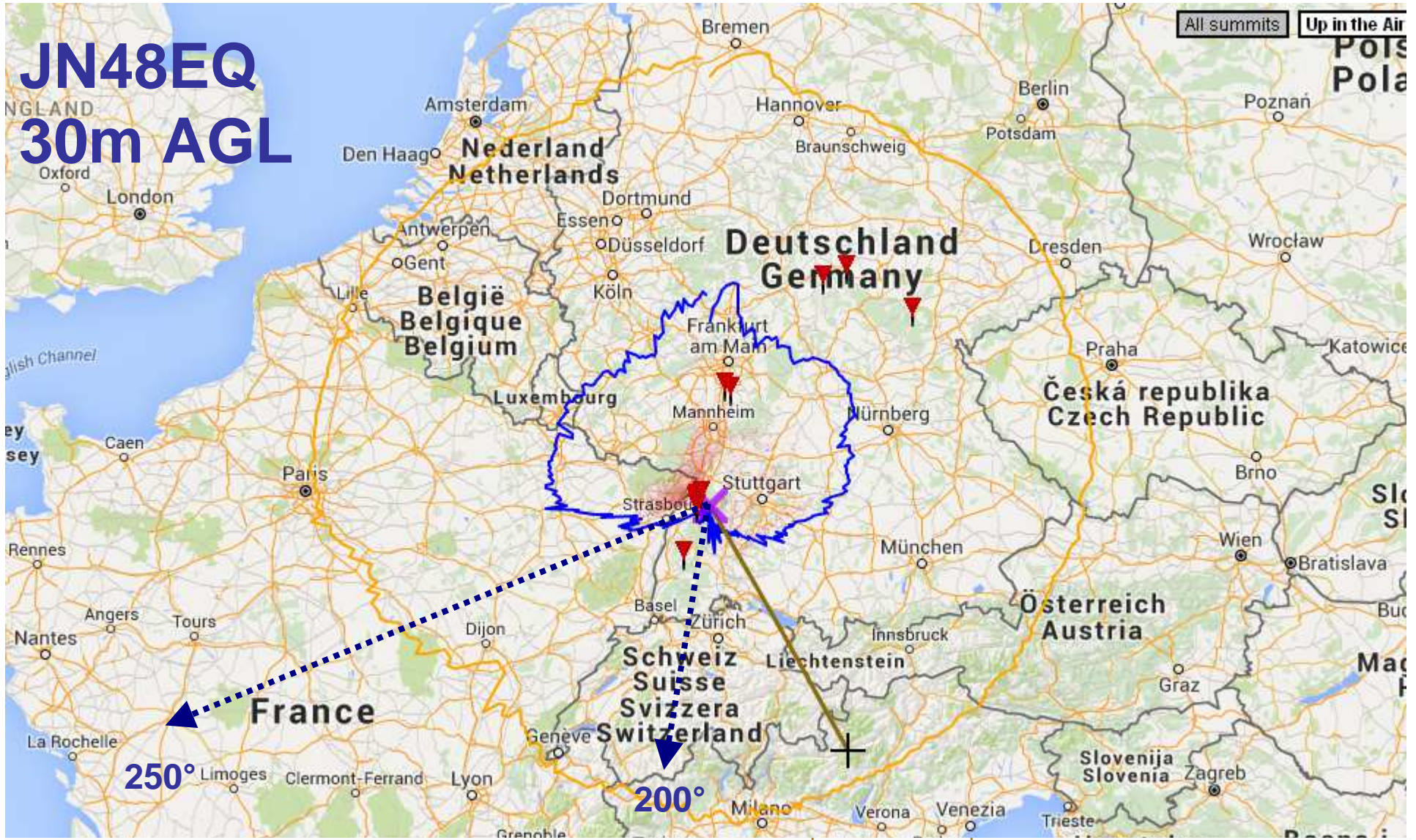
JN48EQ 30m AGL



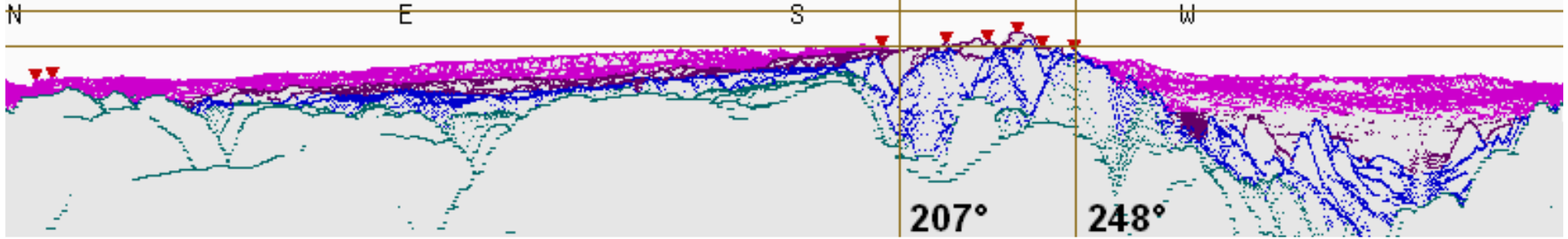
All summits Up in the Air
POTS
Pola



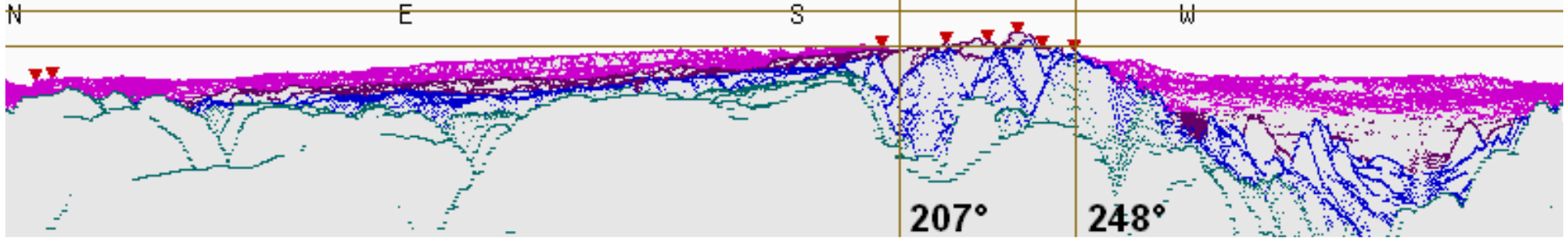
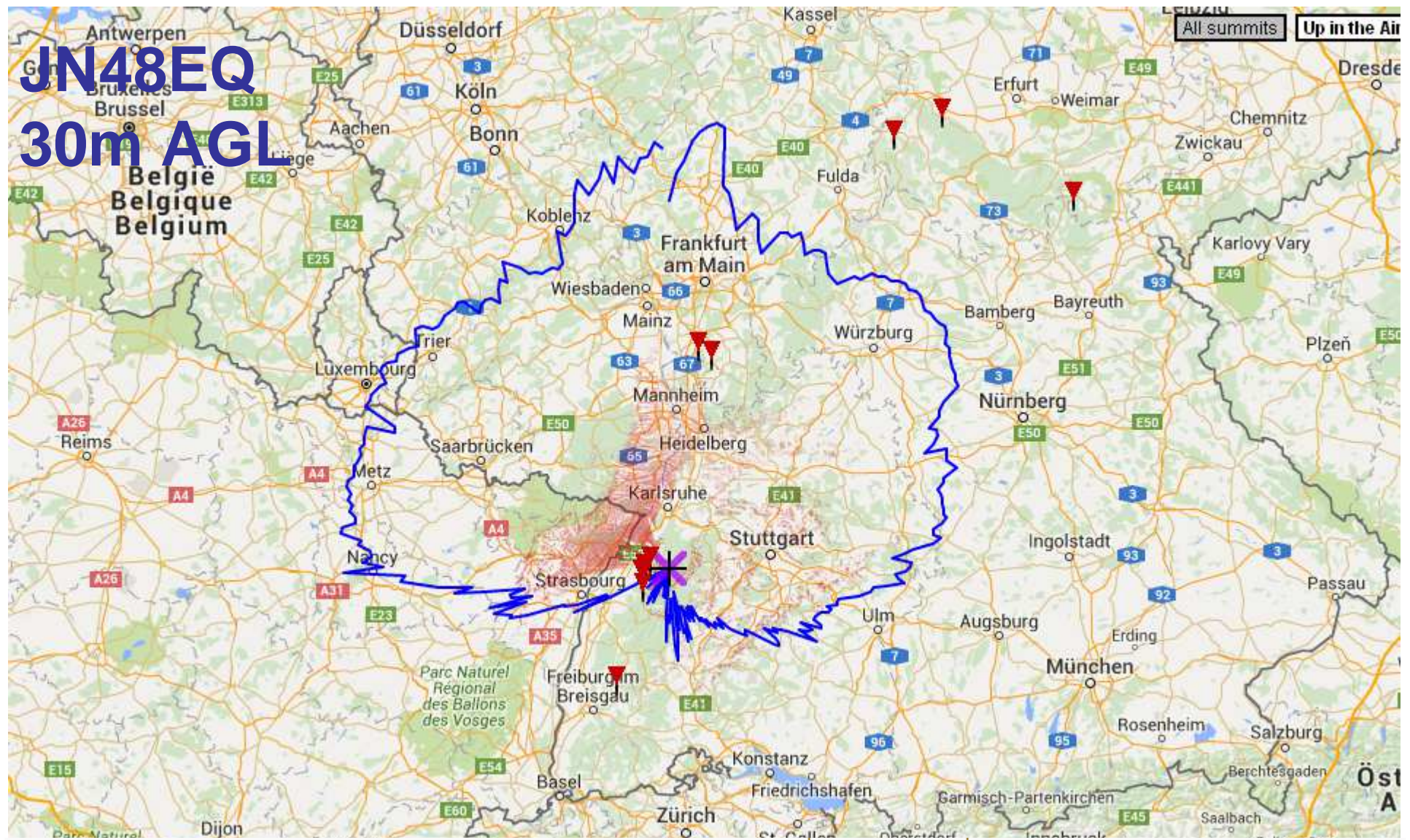
JN48EQ 30m AGL



All summits
Up in the Air
POTS
Pola

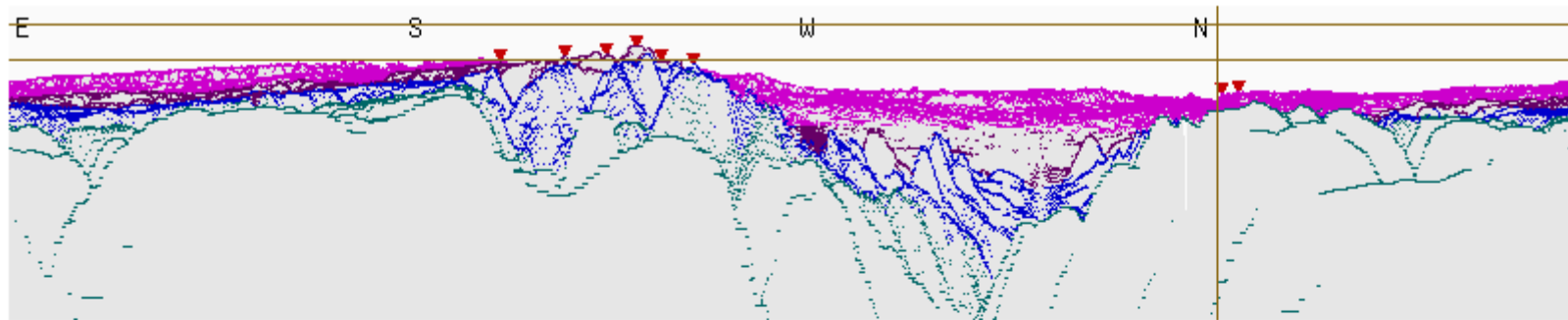


JN48EQ
30m AGL



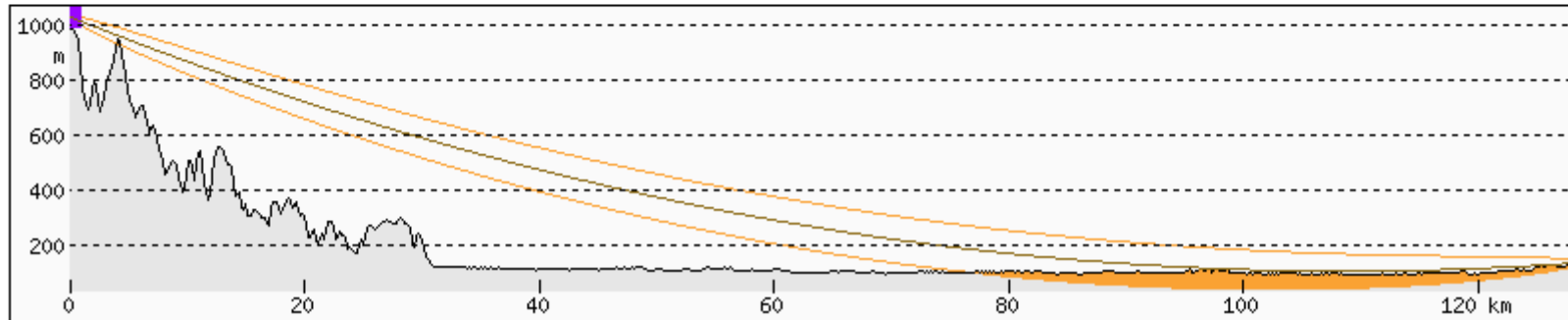
All summits Up in the Air

JN48EQ ->>>> QTF 0 30m AGL



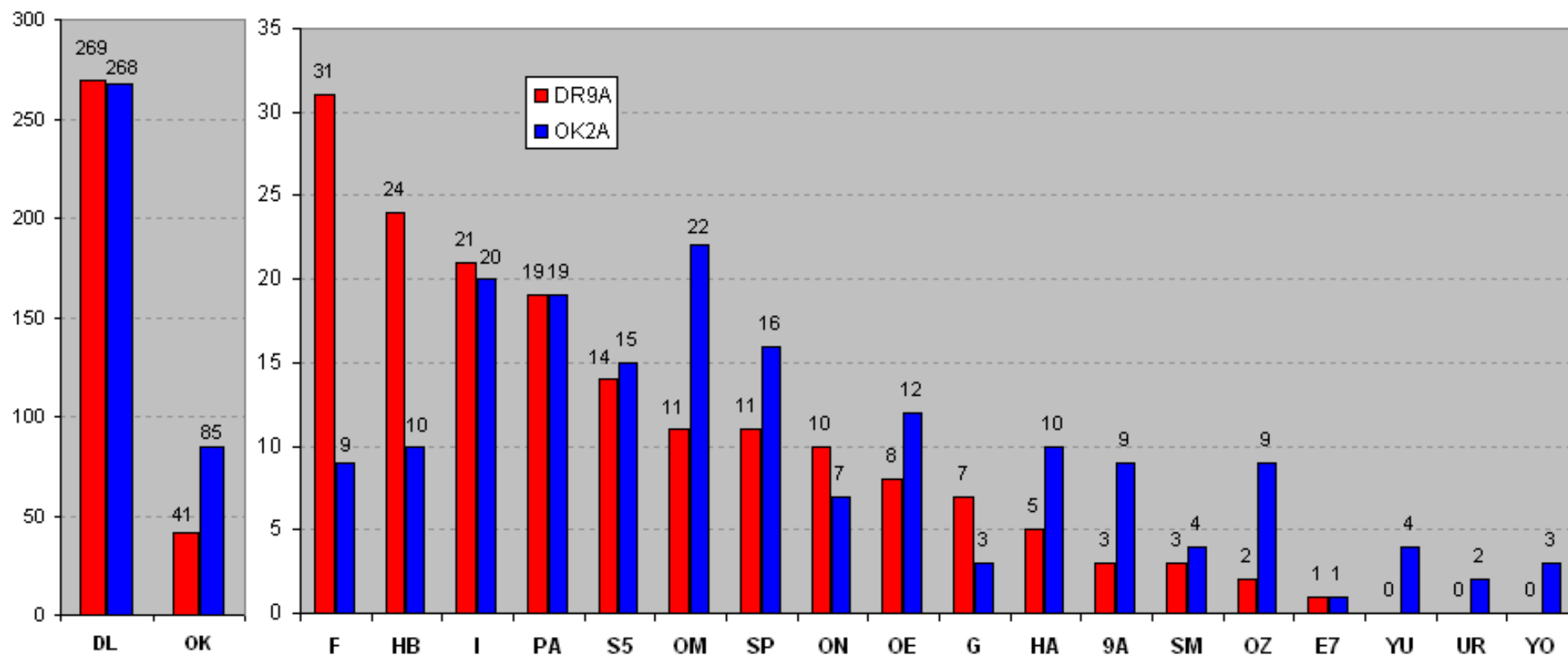
(vertical scale exaggerated 8.5x)

show 0° and 1° alt



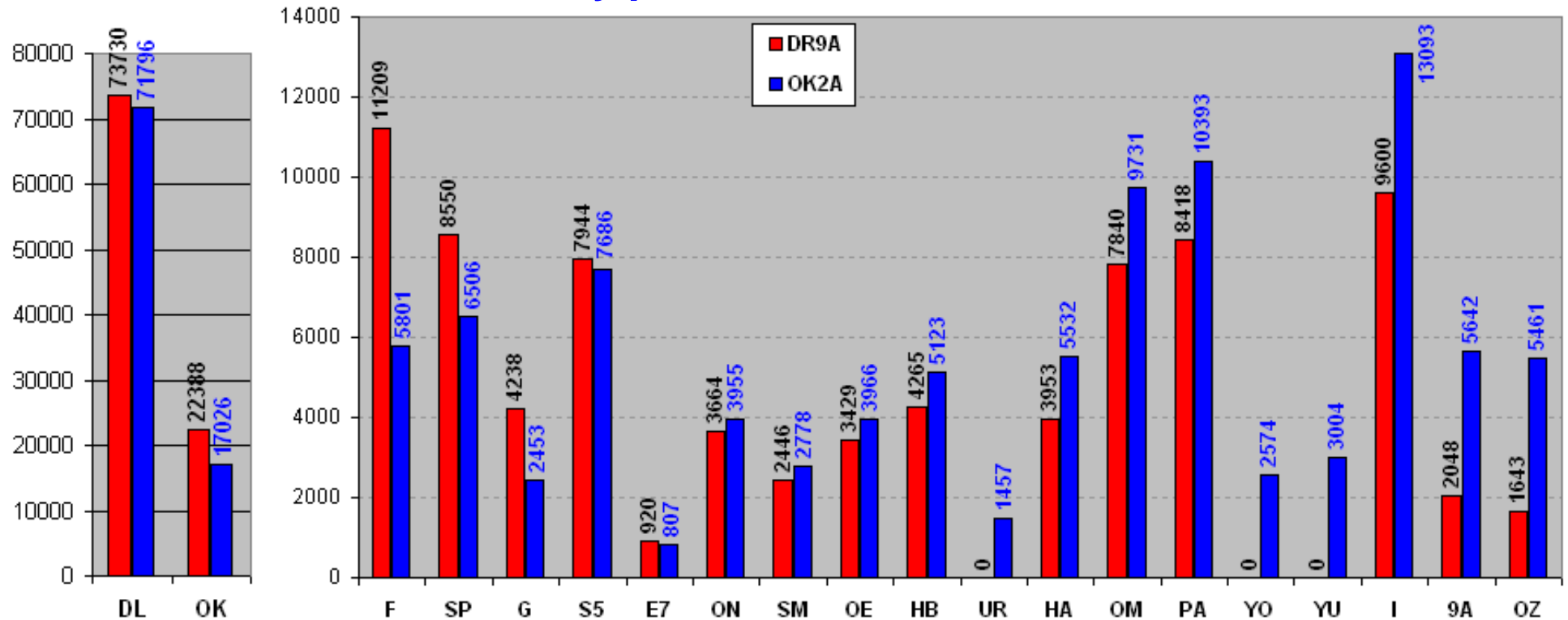
IARU UHF CONTEST 2015 432 MHz

počet QSO per DXCC DR9A / OK2A



IARU UHF CONTEST 2015 432 MHz

body per DXCC DR9A / OK2A

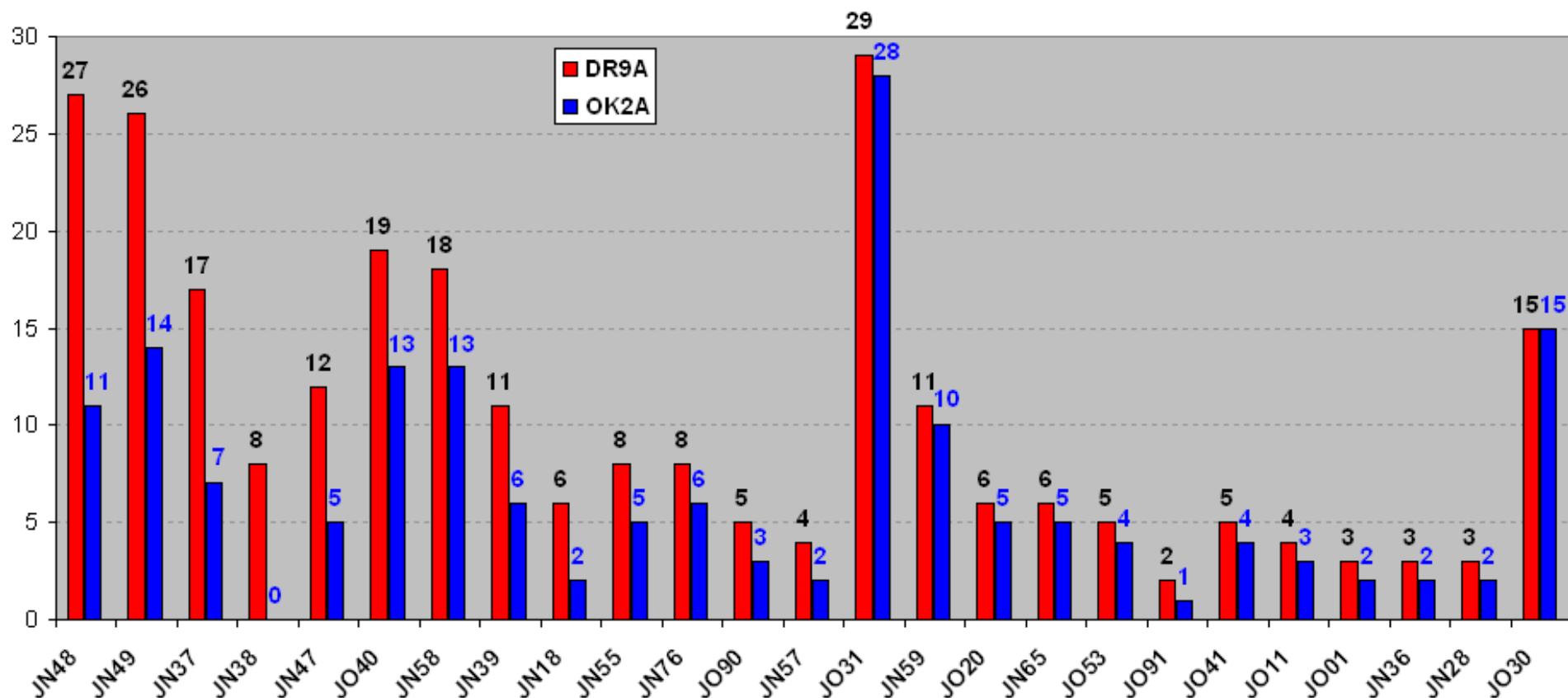


	DR9A	OK2A	rozdil
F	11209	5801	-5408
OK	22388	17026	-5362
SP	8550	6506	-2044
DL	73730	71796	-1934
G	4238	2453	-1785
S5	7944	7686	-258
E7	920	807	-113
ON	3664	3955	291
SM	2446	2778	332
OE	3429	3966	537

	DR9A	OK2A	rozdil
HB	4265	5123	858
UR	0	1457	1457
HA	3953	5532	1579
OM	7840	9731	1891
PA	8418	10393	1975
YO	0	2574	2574
YU	0	3004	3004
I	9600	13093	3493
9A	2048	5642	3594
OZ	1643	5461	3818

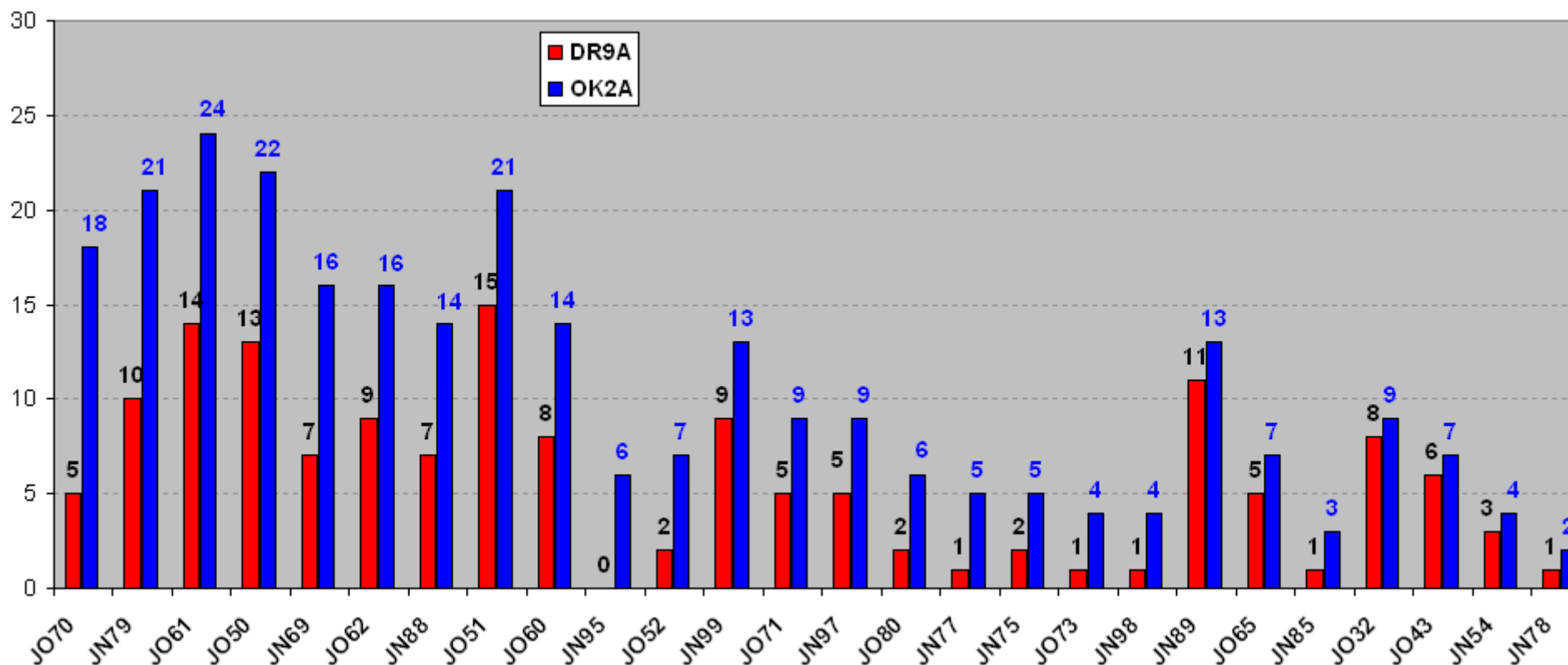
IARU UHF CONTEST 2015 432 MHz

DR9A & OK2A: srovnání množství stanic z jednotlivých velkých LOC
(řazeno od stanic z LOC, ze kterých na DR9A nejvíc ztrácíme)



IARU UHF CONTEST 2015 432 MHz

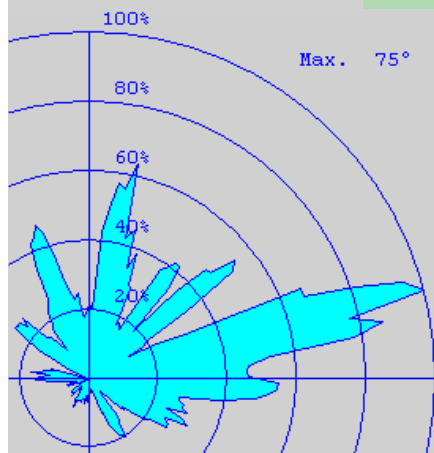
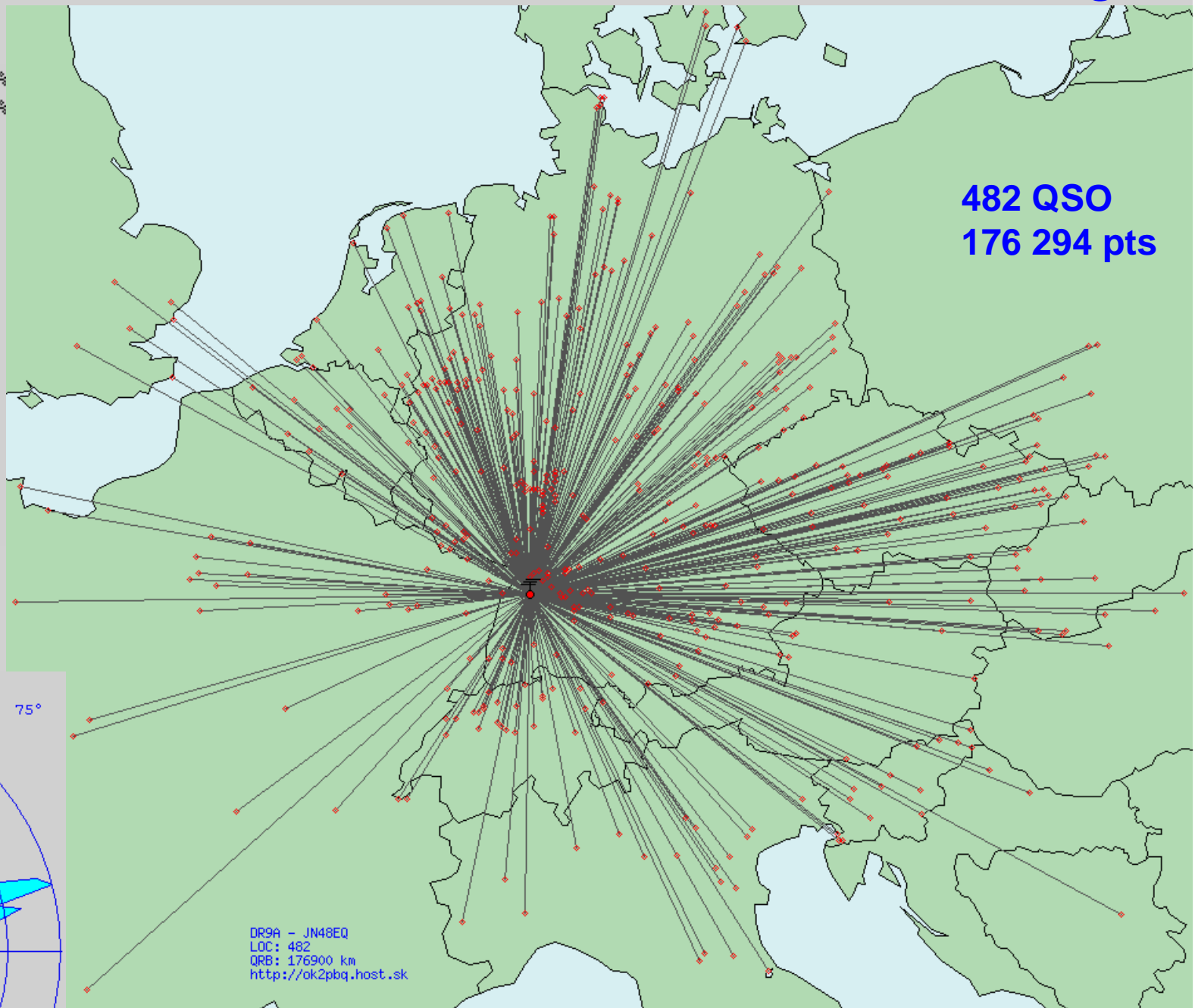
DR9A & OK2A: srovnání množství stanic z jednotlivých velkých LOC (řazeno od stanic z LOC, ze kterých na DR9A nejvíc získáváme)



IARU UHF CONTEST 2015 432 MHz

DR9A

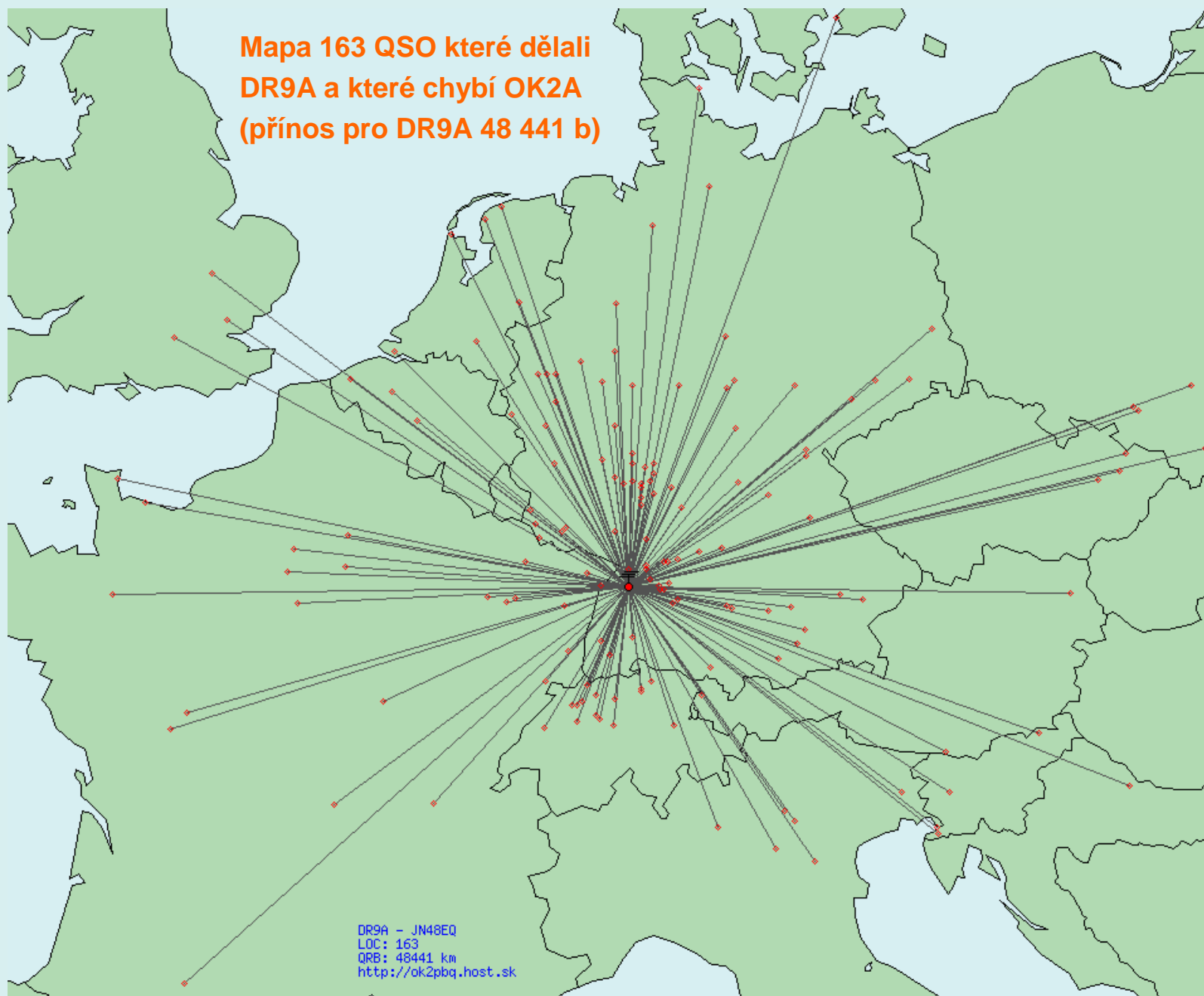
269	x	DL	73737	41%
42	x	OK	22739	12%
31	x	F	11209	6%
21	x	I	9600	5%
11	x	SP	8550	4%
19	x	PA	8418	4%
14	x	S5	7944	4%
11	x	OM	7841	4%
24	x	HB	4266	2%
5	x	HG	3953	2%
6	x	G	3887	2%
10	x	ON	3664	2%
8	x	OE	3429	1%
3	x	SM	2446	1%
3	x	9A	2048	1%
2	x	OZ	1643	0%
1	x	E7	920	0%



IARU UHF CONTEST 2015 432 MHz

DR9A

Mapa 163 QSO které dělali
DR9A a které chybí OK2A
(přínos pro DR9A 48 441 b)



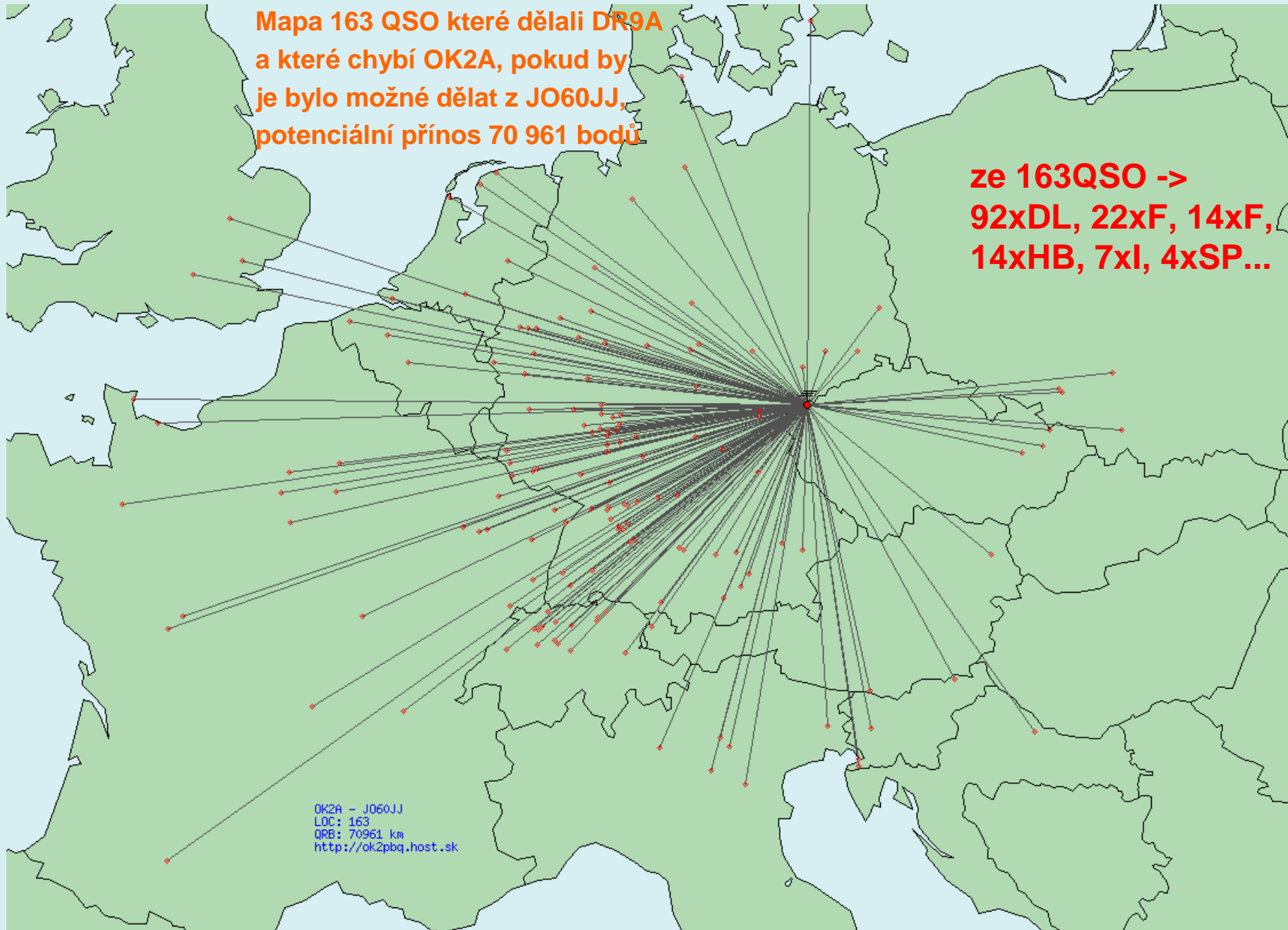
DR9A - JN48EQ
LOC: 163
QRB: 48441 km
<http://ok2pbq.host.sk>

IARU UHF CONTEST 2015 432 MHz DR9A

Mapa 163 QSO které dělali DR9A
a které chybí OK2A, pokud by
je bylo možné dělat z JO60JJ,
potenciální přínos 70 961 bodů

ze 163QSO ->
92xDL, 22xF, 14xF,
14xHB, 7xI, 4xSP...

OK2A - JO60JJ
LOC: 163
QRB: 70961 km
<http://ok2pbq.host.sk>



IARU UHF CONTEST 2015 432 MHz

DR9A

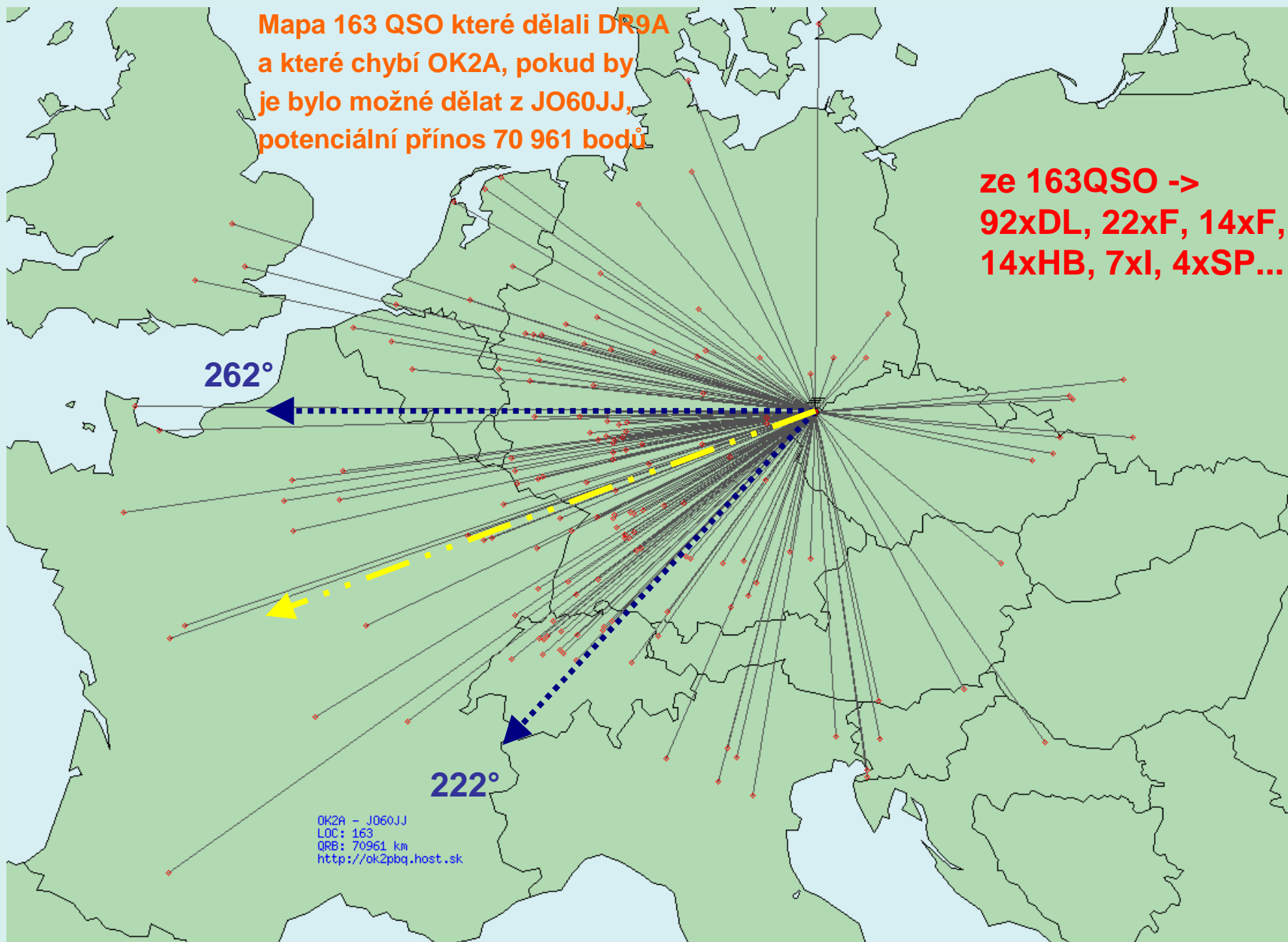
Mapa 163 QSO které dělali DR9A
a které chybí OK2A, pokud by
je bylo možné dělat z JO60JJ,
potenciální přínos 70 961 bodů

ze 163QSO ->
92xDL, 22xF, 14xF,
14xHB, 7xI, 4xSP...

262°

222°

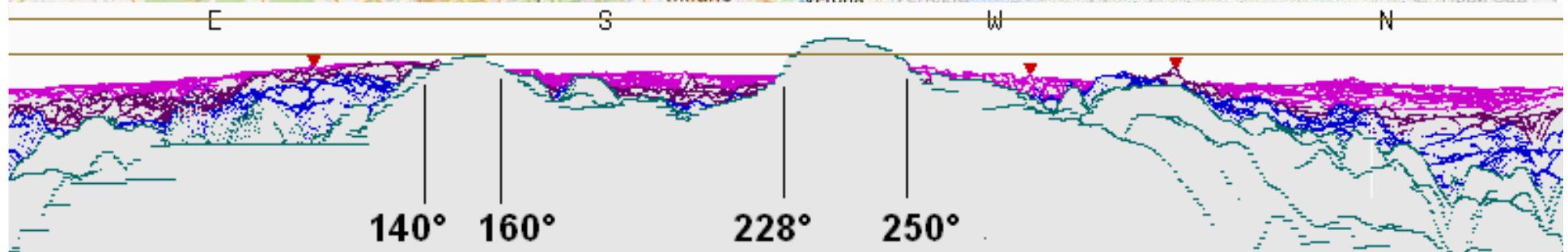
OK2A - JO60JJ
LOC: 163
QRB: 70961 km
<http://ok2pbq.host.sk>



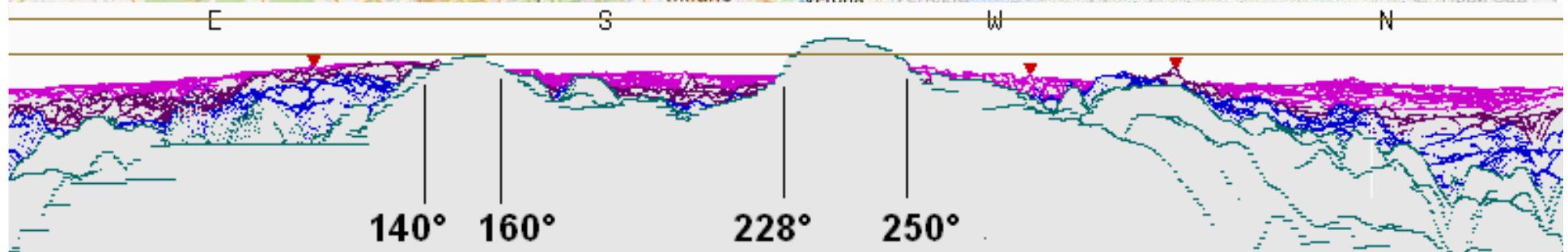
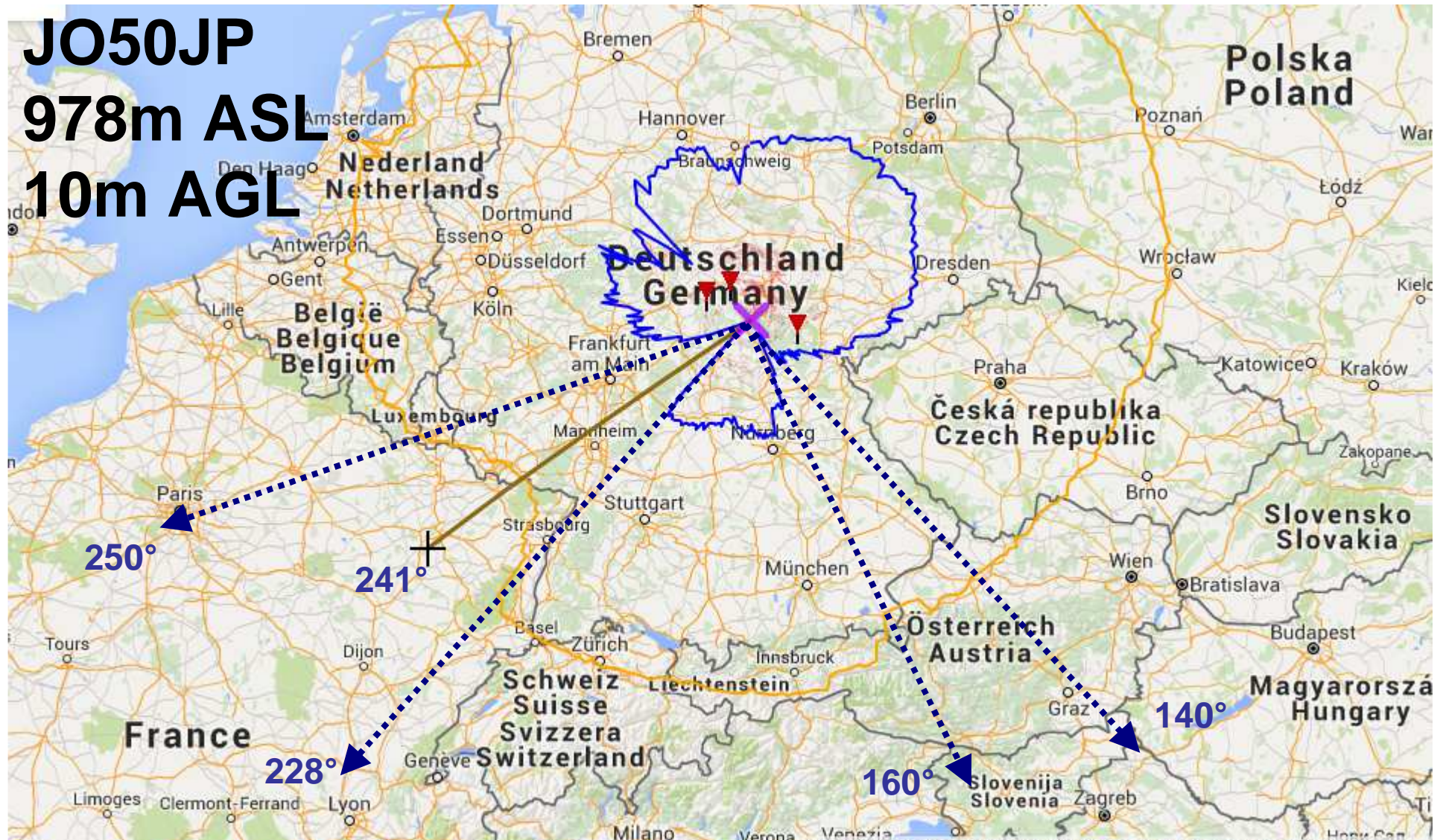
IARU UHF CONTEST 2015 432 MHz DL0GTH
JO50JP



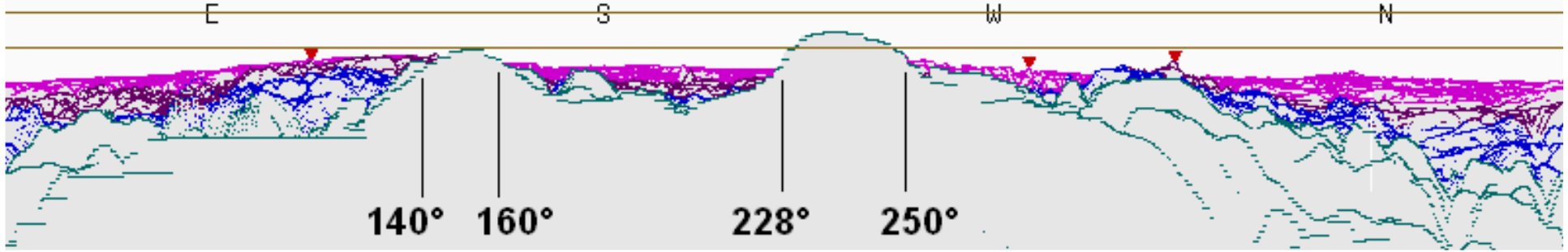
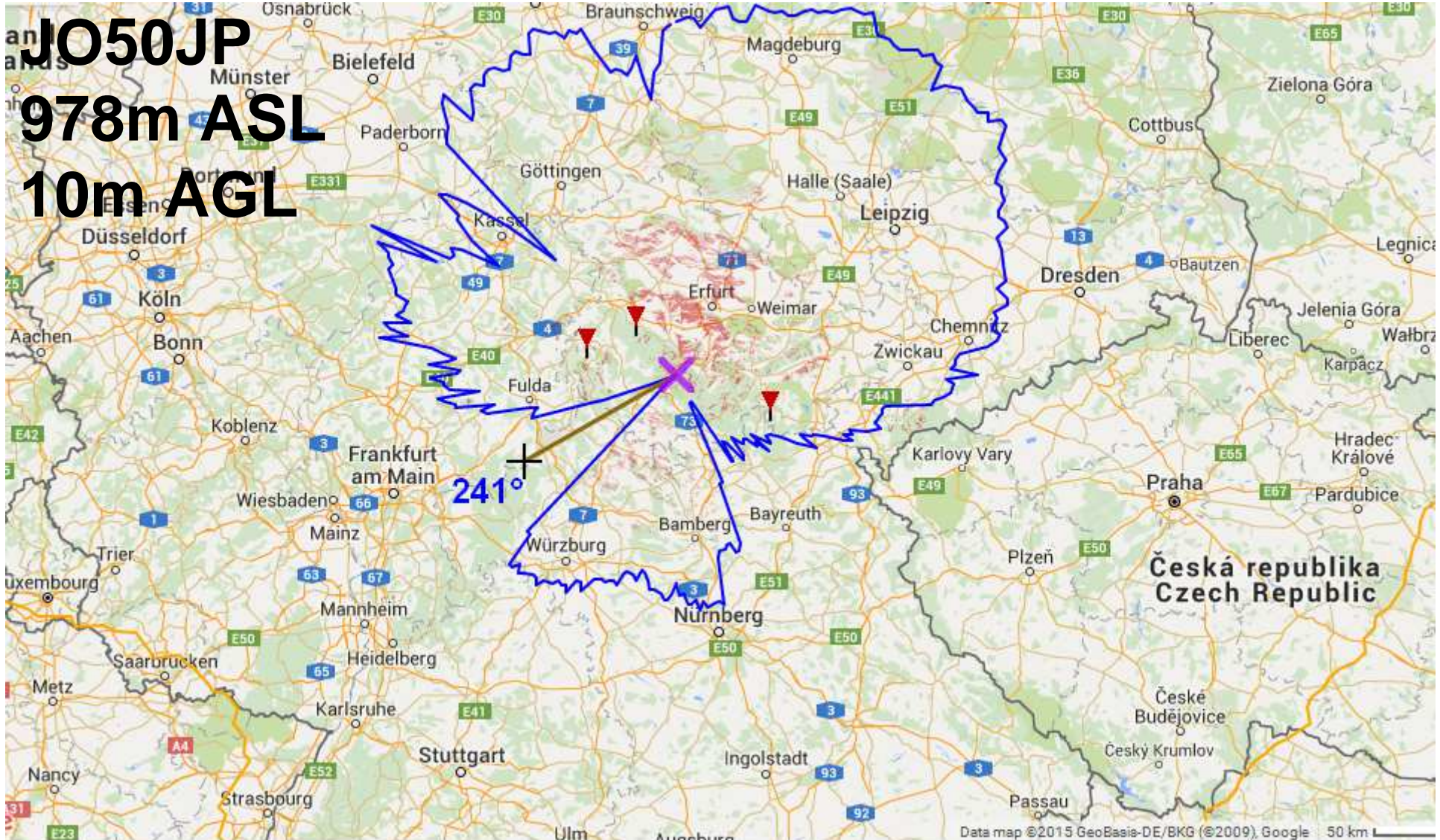
JO50JP
978m ASL
10m AGL



JO50JP
978m ASL
10m AGL



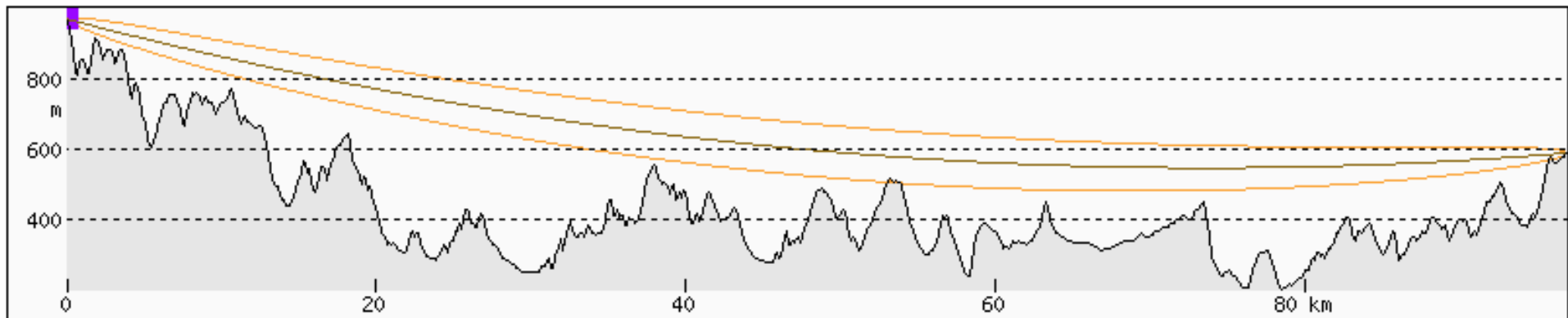
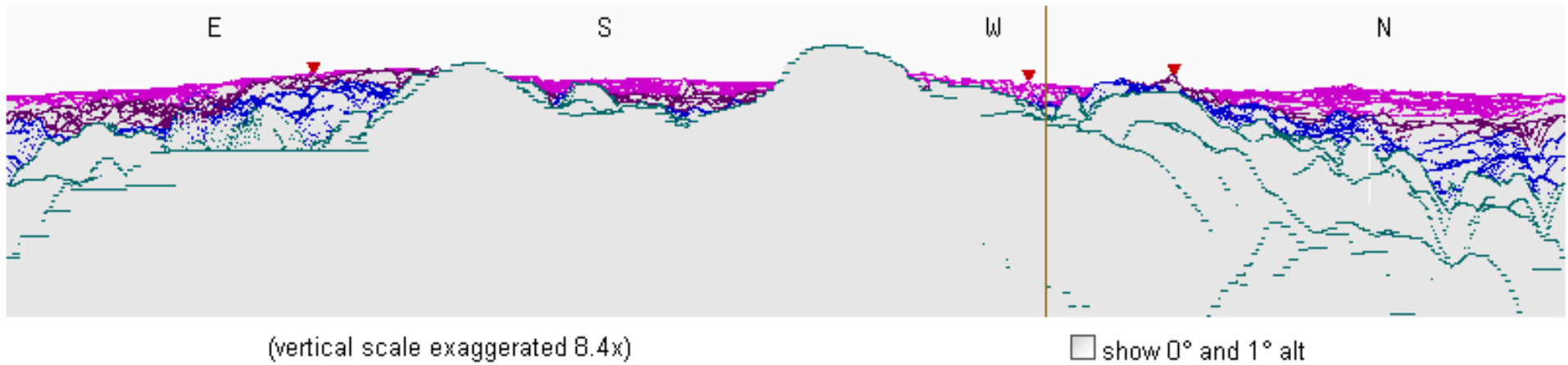
JO50JP
978m ASL
10m AGL



JO50JP ->>> JO31

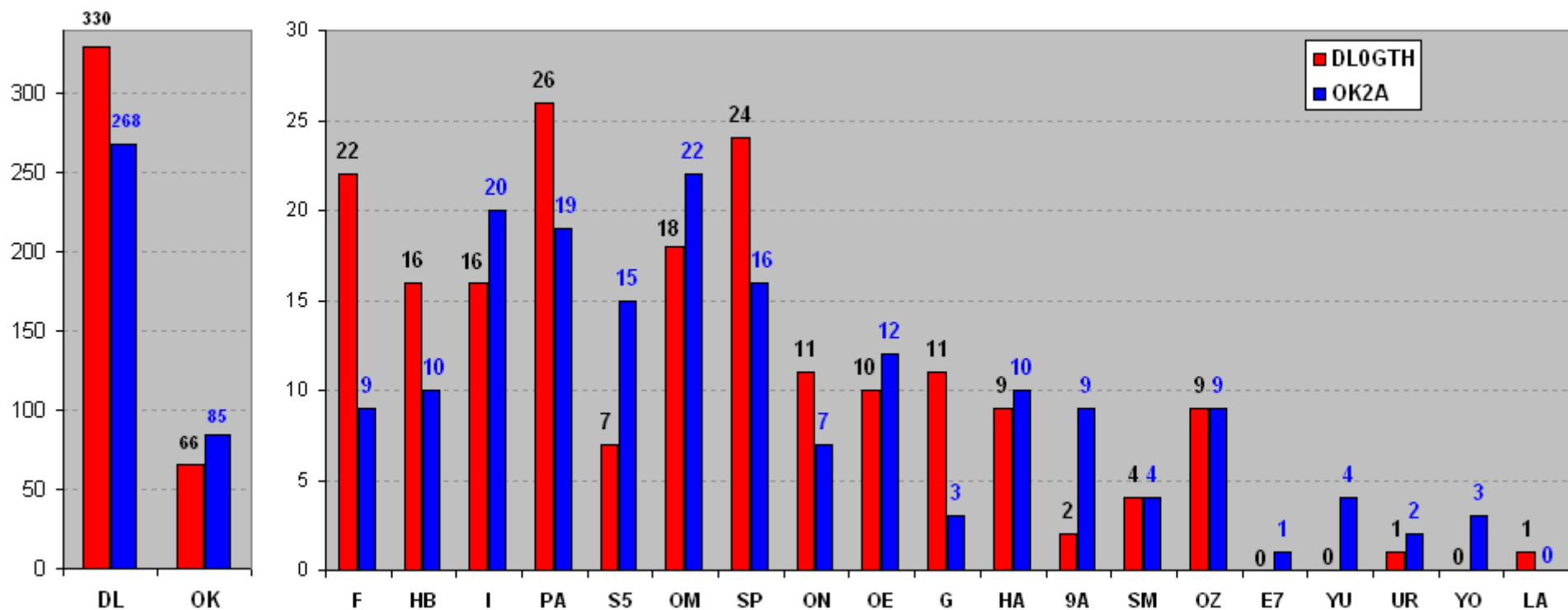
978m ASL

10m AGL



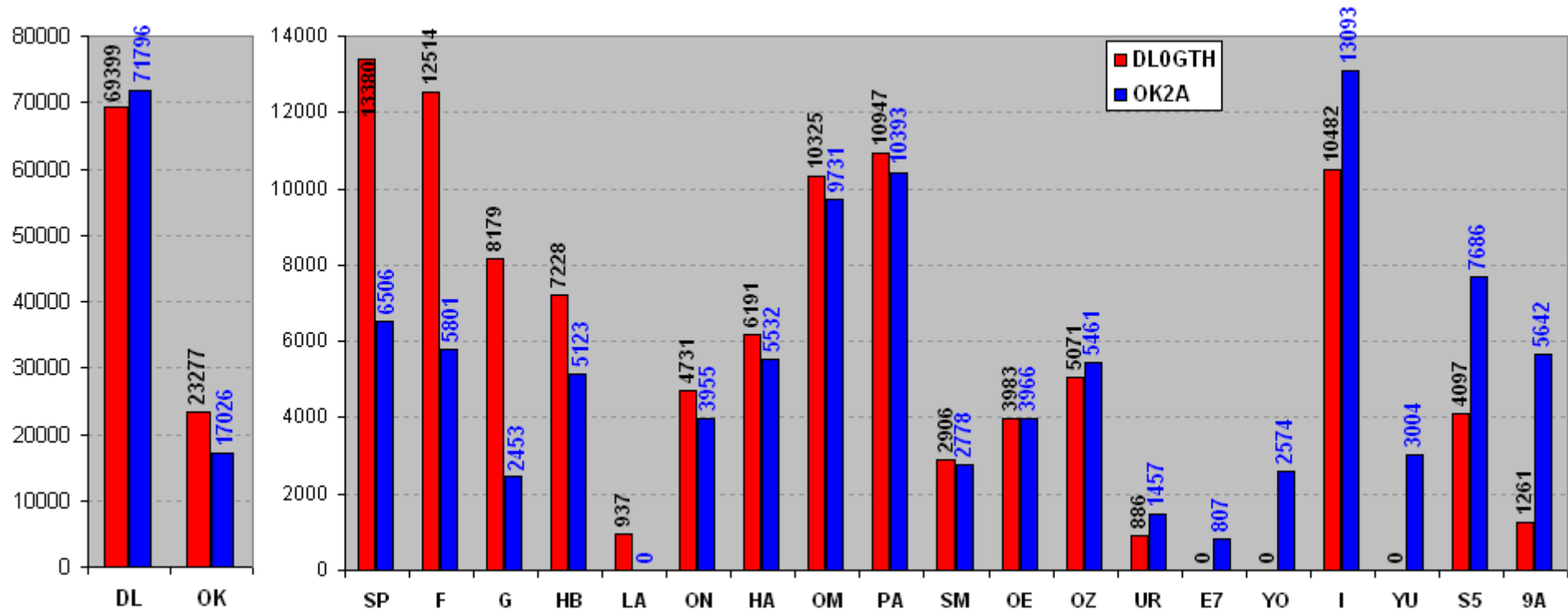
IARU UHF CONTEST 2015 432 MHz

počet QSO per DXCC **DL0GTH** / **OK2A**



IARU UHF CONTEST 2015 432 MHz

body per DXCC DL0GTH / OK2A

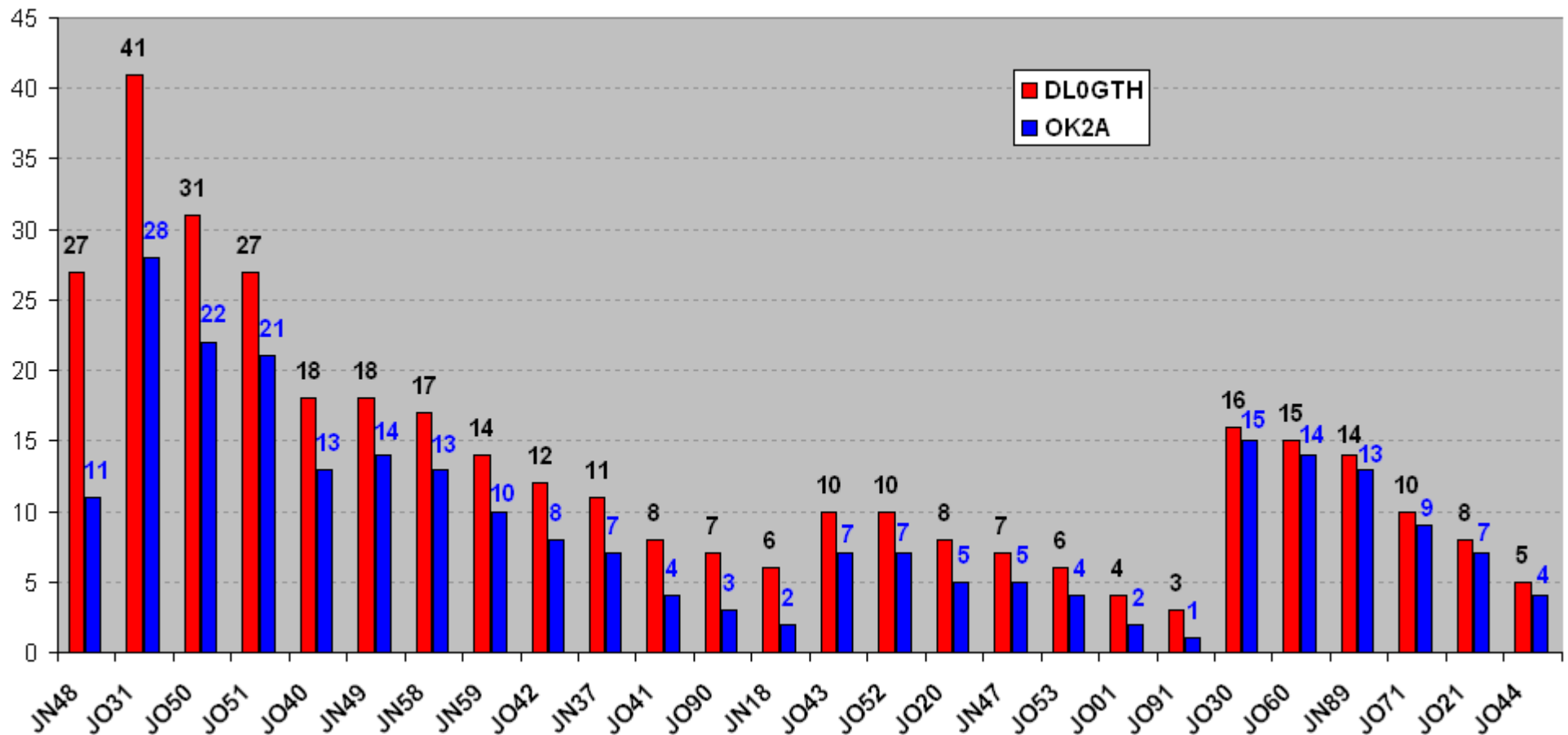


	DL0GTH	OK2A	rozdil
SP	13380	6506	-6874
F	12514	5801	-6713
OK	23277	17026	-6251
G	8179	2453	-5726
HB	7228	5123	-2105
LA	937	0	-937
ON	4731	3955	-776
HA	6191	5532	-659
OM	10325	9731	-594
PA	10947	10393	-554
SM	2906	2778	-128

	DL0GTH	OK2A	rozdil
OE	3983	3966	-17
OZ	5071	5461	390
UR	886	1457	571
E7	0	807	807
DL	69399	71796	2397
YO	0	2574	2574
I	10482	13093	2611
YU	0	3004	3004
S5	4097	7686	3589
9A	1261	5642	4381

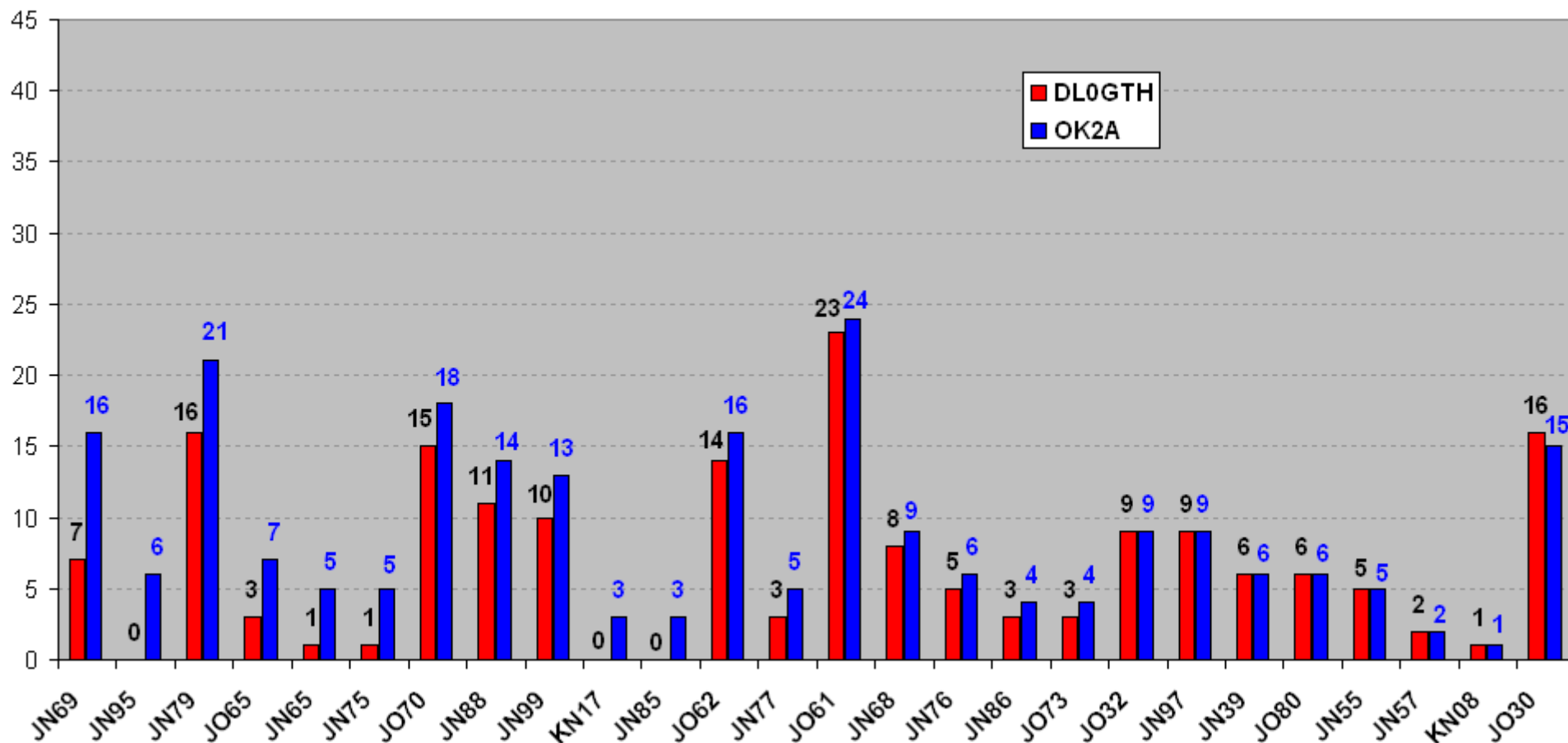
IARU UHF CONTEST 2015 432 MHz

DL0GTH & OK2A: srovnání množství stanic z jednotlivých velkých LOC
(řazeno od stanic z LOC, ze kterých na DL0GTH nejvíc ztrácíme)



IARU UHF CONTEST 2015 432 MHz

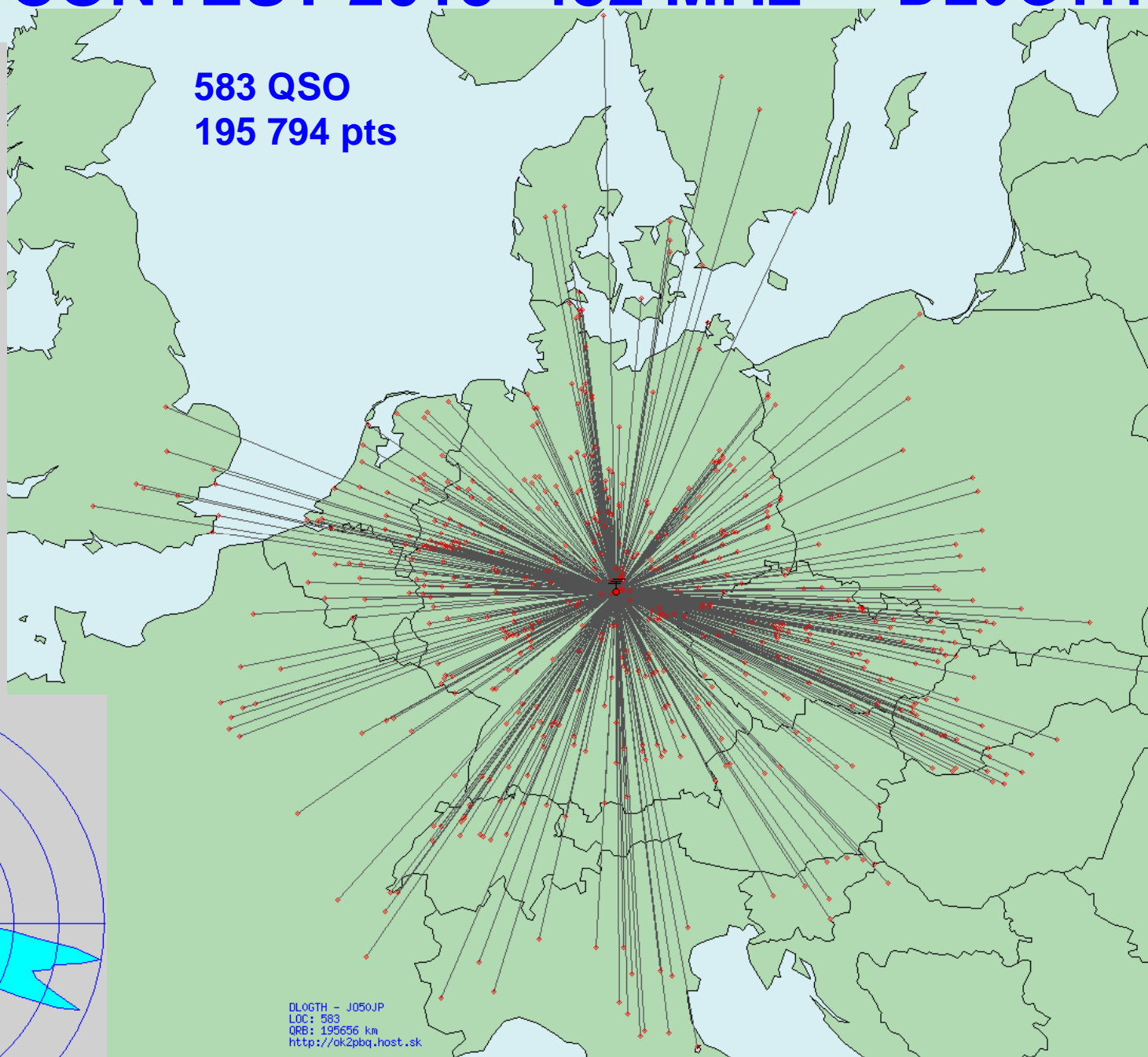
DL0GTH & OK2A: srovnání množství stanic z jednotlivých velkých LOC
(řazeno od stanic z LOC, ze kterých na DL0GTH nejvíc získáváme)



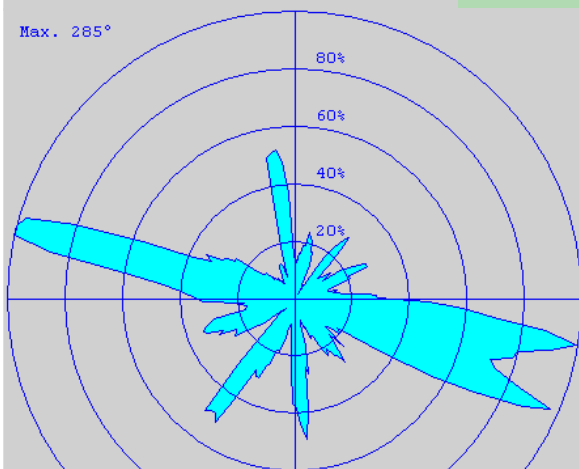
IARU UHF CONTEST 2015 432 MHz DL0GTH

330	x	DL	69399	35%
66	x	OK	23277	11%
24	x	SP	13380	6%
22	x	F	12514	6%
26	x	PA	10947	5%
16	x	I	10482	5%
18	x	OM	10325	5%
11	x	G	8179	4%
16	x	HB	7228	3%
9	x	HG	6191	3%
9	x	OZ	5071	2%
11	x	ON	4731	2%
7	x	S5	4097	2%
10	x	OE	3983	2%
4	x	SM	2906	1%
2	x	9A	1261	0%
1	x	LA	937	0%
1	x	UR	886	0%

583 QSO
195 794 pts



Max. 285°

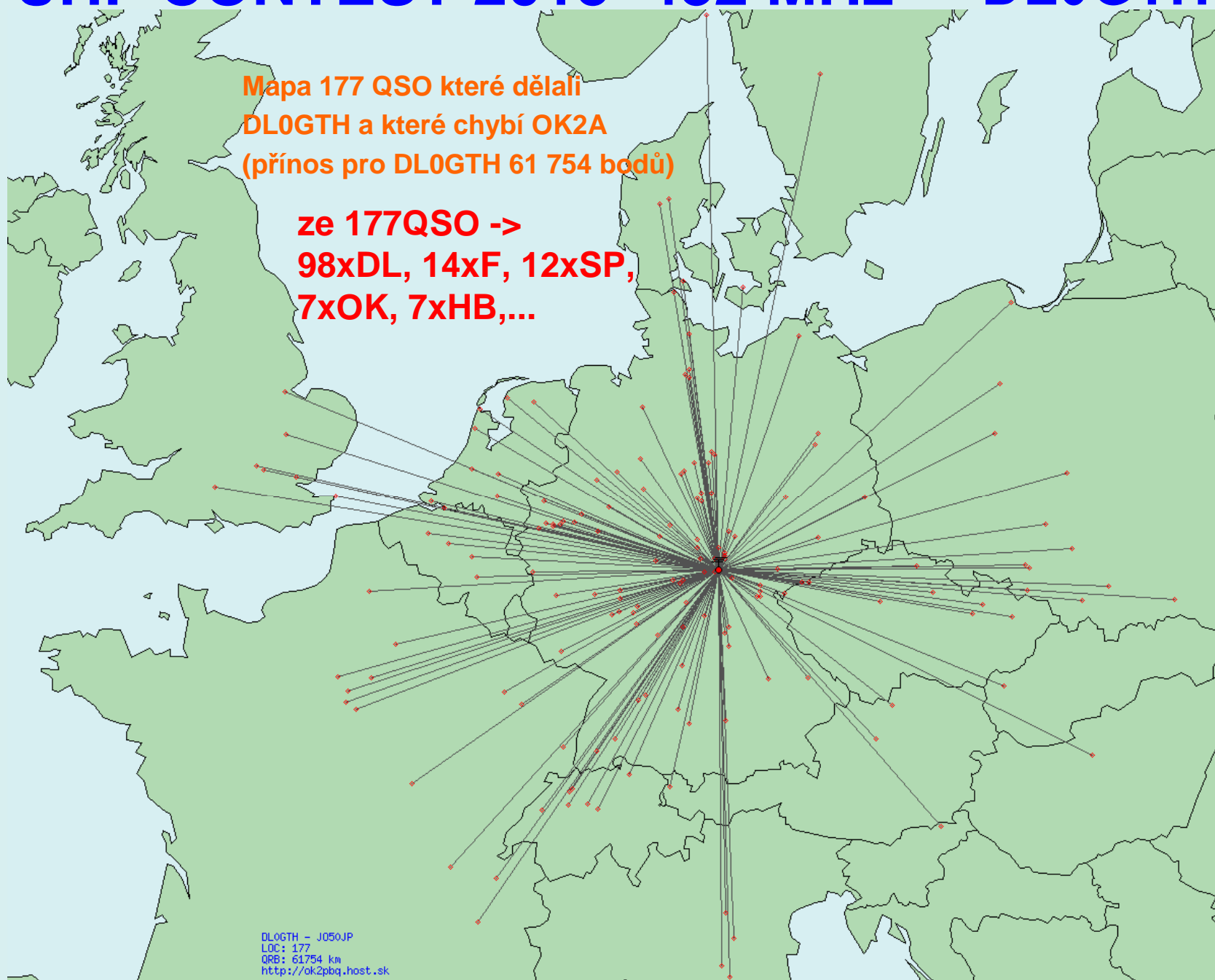


DL0GTH - J050JP
LOC: 583
QRB: 195656 km
<http://ok2pbq.host.sk>

IARU UHF CONTEST 2015 432 MHz DL0GTH

Mapa 177 QSO které dělali
DL0GTH a které chybí OK2A
(přínos pro DL0GTH 61 754 bodů)

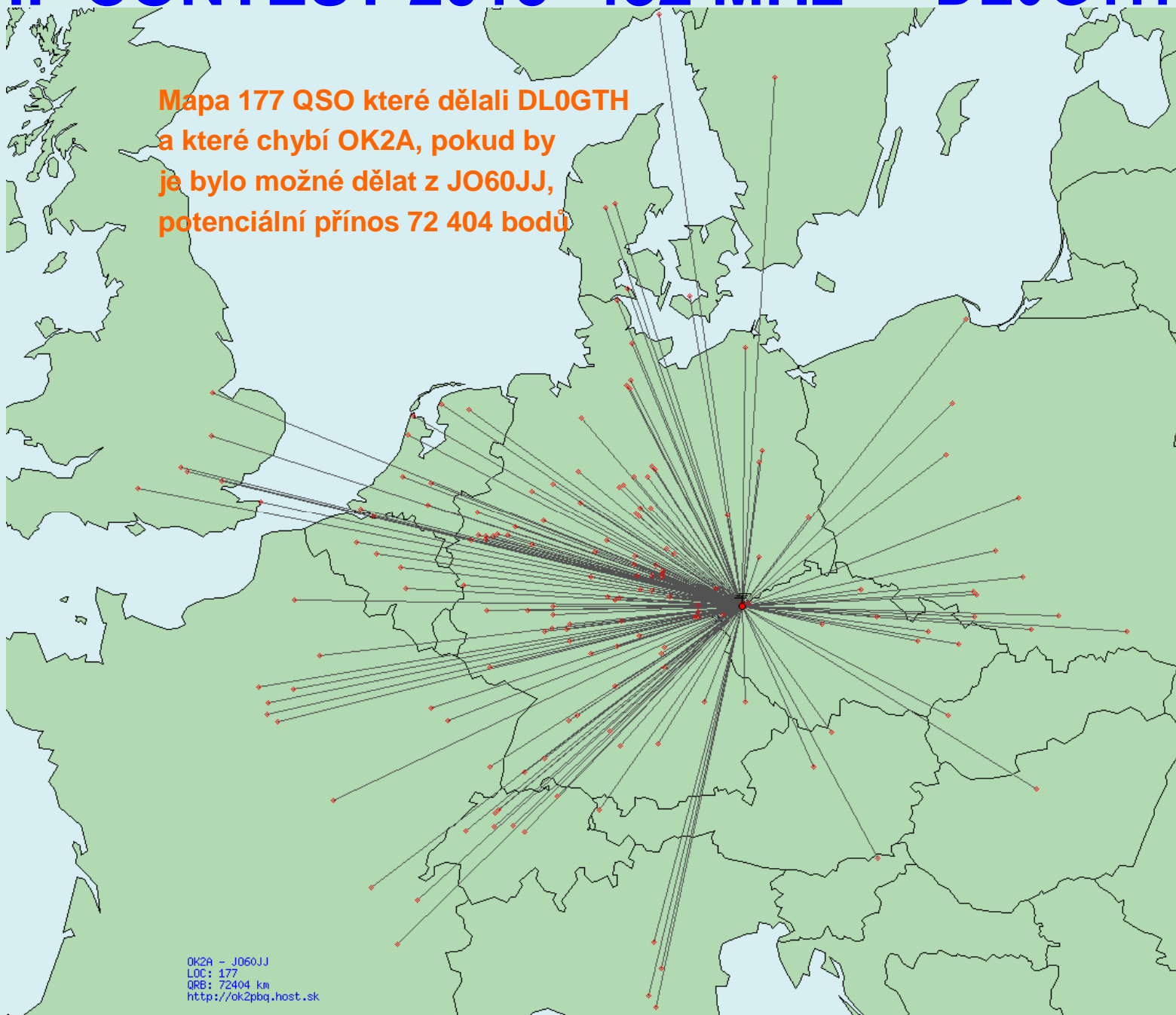
ze 177QSO ->
98xDL, 14xF, 12xSP,
7xOK, 7xHB,...



DL0GTH - J050JP
LOC: 177
QRB: 61754 km
<http://ok2pbq.host.sk>

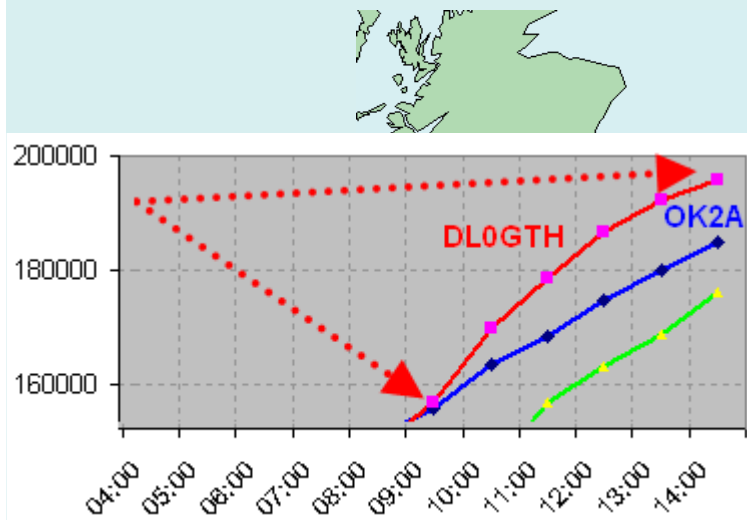
IARU UHF CONTEST 2015 432 MHz DL0GTH

Mapa 177 QSO které dělali DL0GTH
a které chybí OK2A, pokud by
je bylo možné dělat z JO60JJ,
potenciální přínos 72 404 bodů

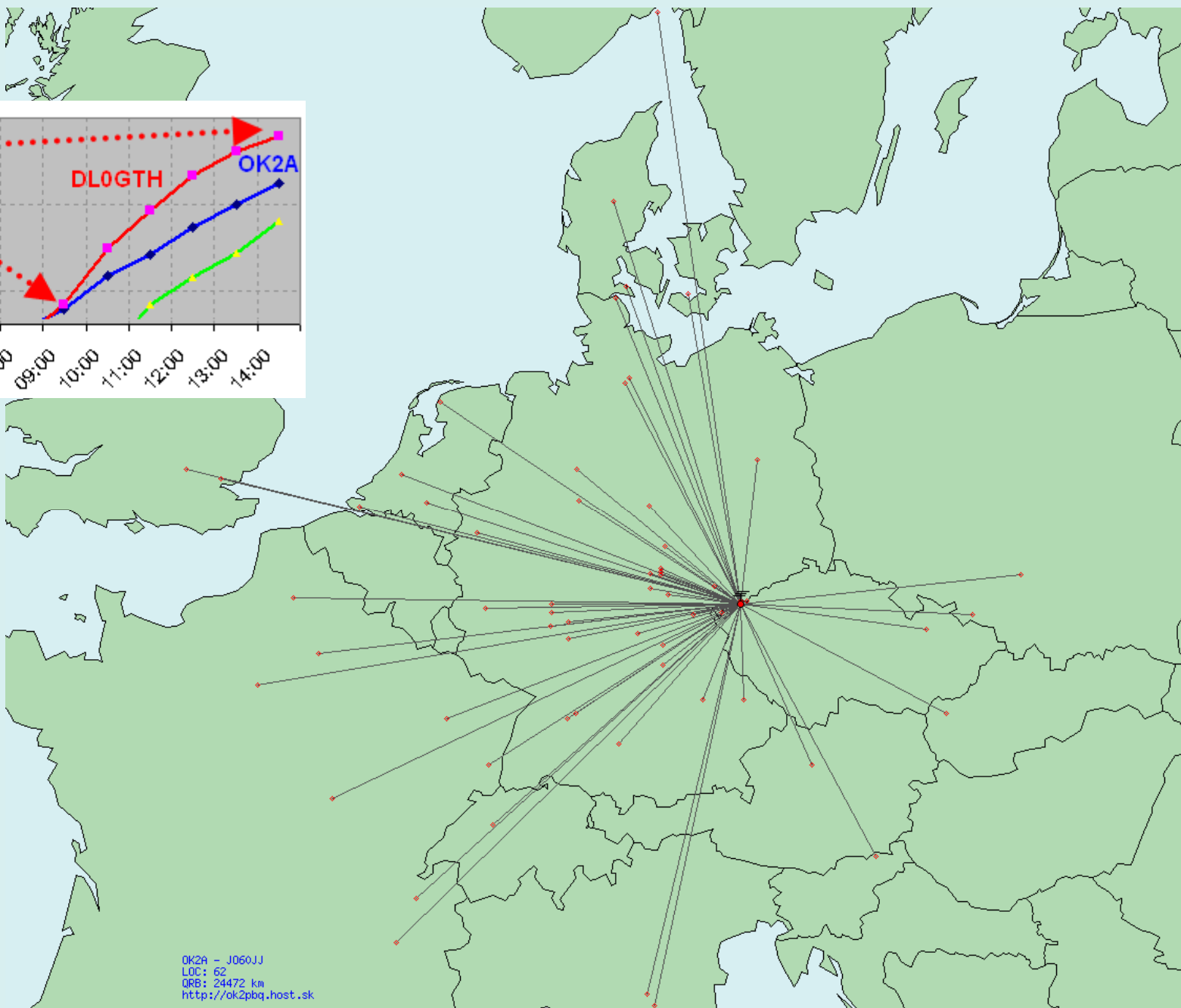


OK2A - JO60JJ
LOC: 177
QRB: 72404 km
<http://ok2pbq.host.sk>

IARU UHF CONTEST 2015 432 MHz DL0GTH

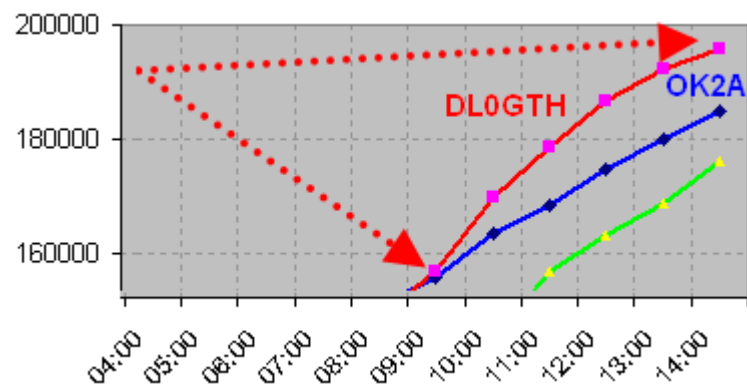


Mapa QSO které dělali DL0GTH od 9h UTC a které chybí OK2A (ztráta pro OK2A -24 472 bodů)



OK2A - J060JJ
LDC: 62
QRB: 24472 km
<http://ok2pbq.host.sk>

IARU UHF CONTEST 2015 432 MHz DL0GTH



seznam QSO které
dělali DL0GTH
od 9h UTC a které
chybí OK2A
(ztráta pro OK2A
-24 472 bodů)

M0SAT	IO91TP	787
F5JFU/P	JN17XE	631
F4BCG	JN18AQ	667
F1NPX/P	JN19PG	558
F1JKY/P	JN25TE	719
F1GCX	JN25XU	642
F1TRE	JN37PV	398
HB9DPY	JN37RA	472
F6DDW	JN38DM	402
DJ7GX	JN48LP	259
DK0SU	JN48NR	245
DO2TDT	JN49FX	182
DN8MM	JN49KT	165
IK4HLQ	JN54KP	668
IK1YNZ/4	JN54ML	686
DK0IL	JN58BH	264
DL5RDI	JN58XX	204
DR6A	JN59FW	83
DK0FLT	JN59FW	83
DC9JVN	JN59ML	131
DK8AF	JN59MS	99
DJ7GK	JN68KX	239
S51IV	JN76UP	573
OE5MKN	JN78EA	391
OM3TCC	JN88QQ	522
OK2NJI	JN89MW	452
G8HGN	JO01FO	729
F5DRD	JO10GA	590
PA3HFJ	JO11VL	498
PE1BTL	JO21QP	394
PA8R	JO22IA	450

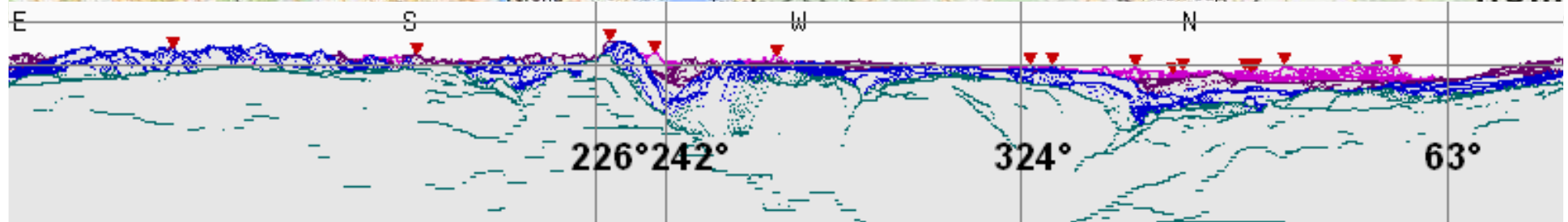
PE1DAB	JO23RD	460
DO1DJJ/P	JO30LE	277
DD4JK	JO31HG	301
DO1KUB	JO40FE	174
DH3FAN	JO40FH	170
DH9FAC	JO40KB	151
DL5BAQ	JO41LU	186
DL0MI	JO42KH	228
DO4ZA	JO43XO	334
OZ6TW	JO44TU	475
OZ6HY	JO45WA	491
OV3T	JO46RG	632
DL4AWK	JO50IO	8
DL1ANN	JO50IT	20
DL1ARH	JO50LT	22
DM2ORI	JO50LU	26
DM3XI	JO50LV	31
DG0AU	JO50NM	28
DK2EA	JO50UF	80
DL5FCE/P	JO51HT	131
DL1ATI	JO51MF	68
DL7HAR	JO53AQ	343
OZ7JRL	JO54RW	480
LA2IMA	JO59FB	937
DN5KA	JO60CP	100
OK1IBI	JO60EG	120
DL9NCI/P	JO60JK	144
DL6DVU	JO60LK	155
DC9WX	JO62OM	268
SP9UOP	JO90BC	524
SN9D	JO90PP	600

**IARU UHF CONTEST 2015 432 MHz OL3Z
JN79FX**



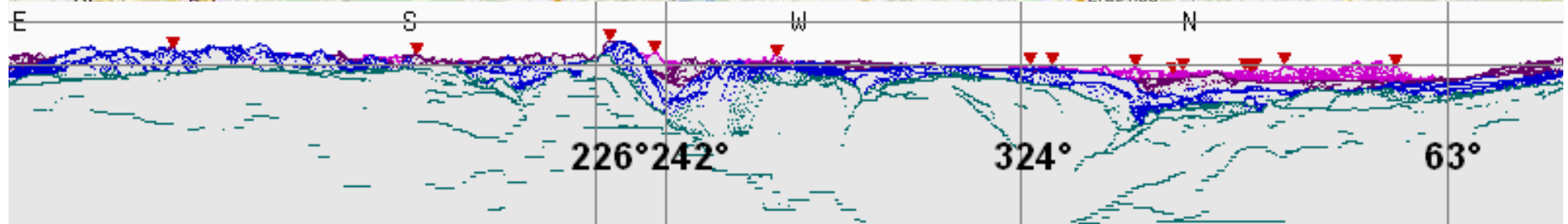
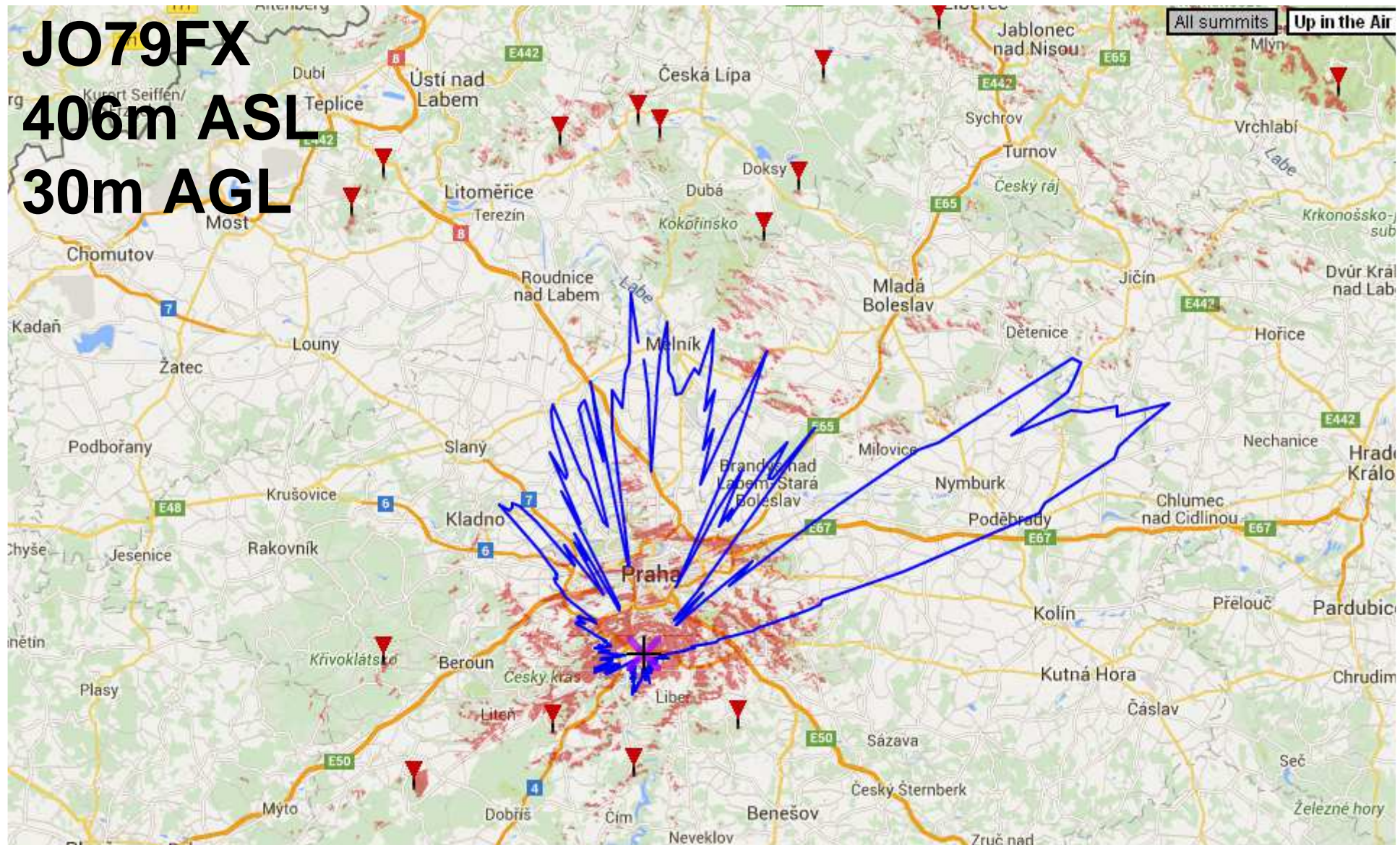
JO79FX
406m ASL
30m AGL

All summits Up in the Air



JO79FX
406m ASL
30m AGL

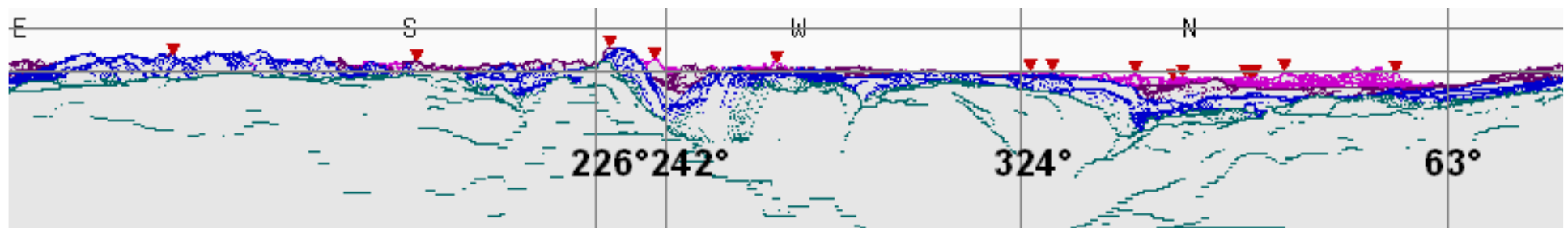
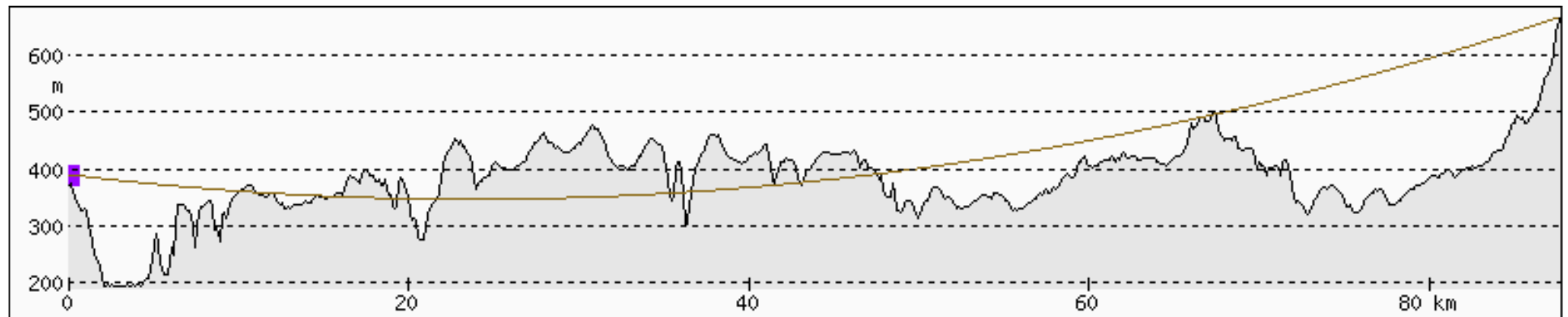
All summits Up in the Air



JN79FX ->>> JO31 285°

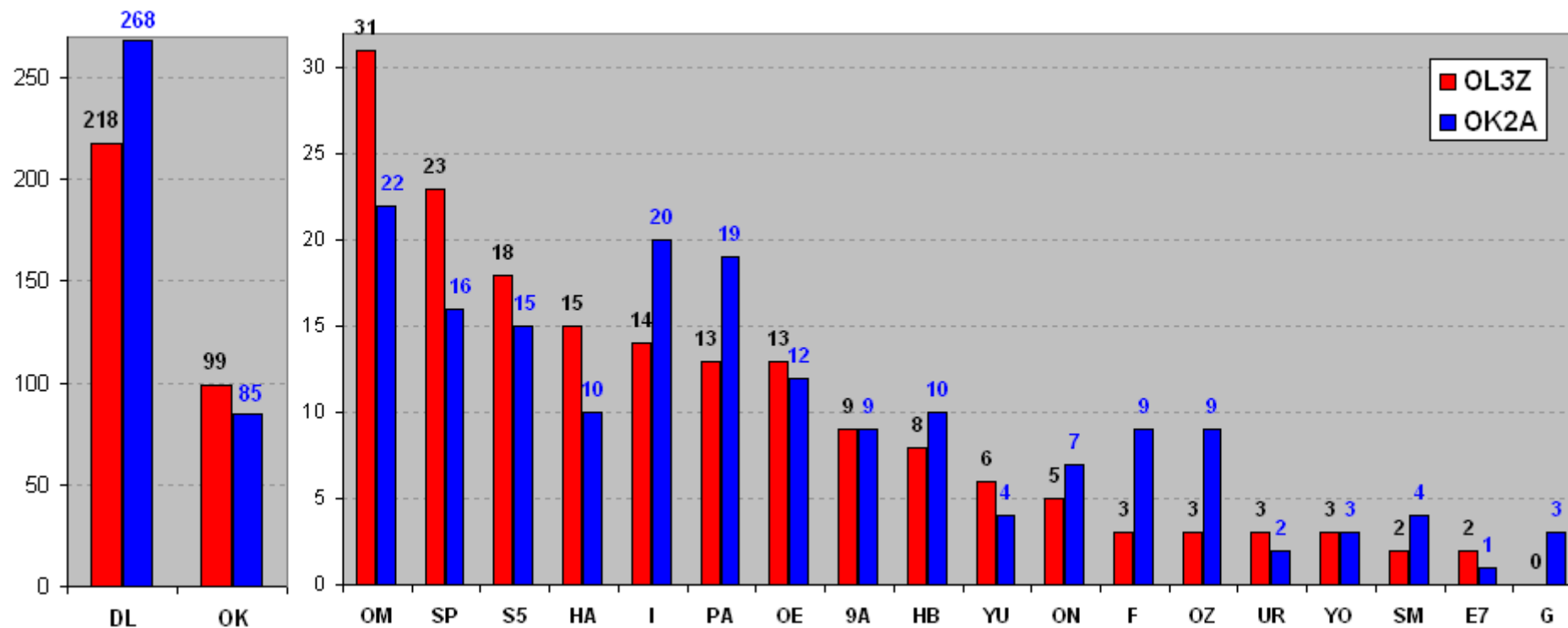
460m ASL

30m AGL



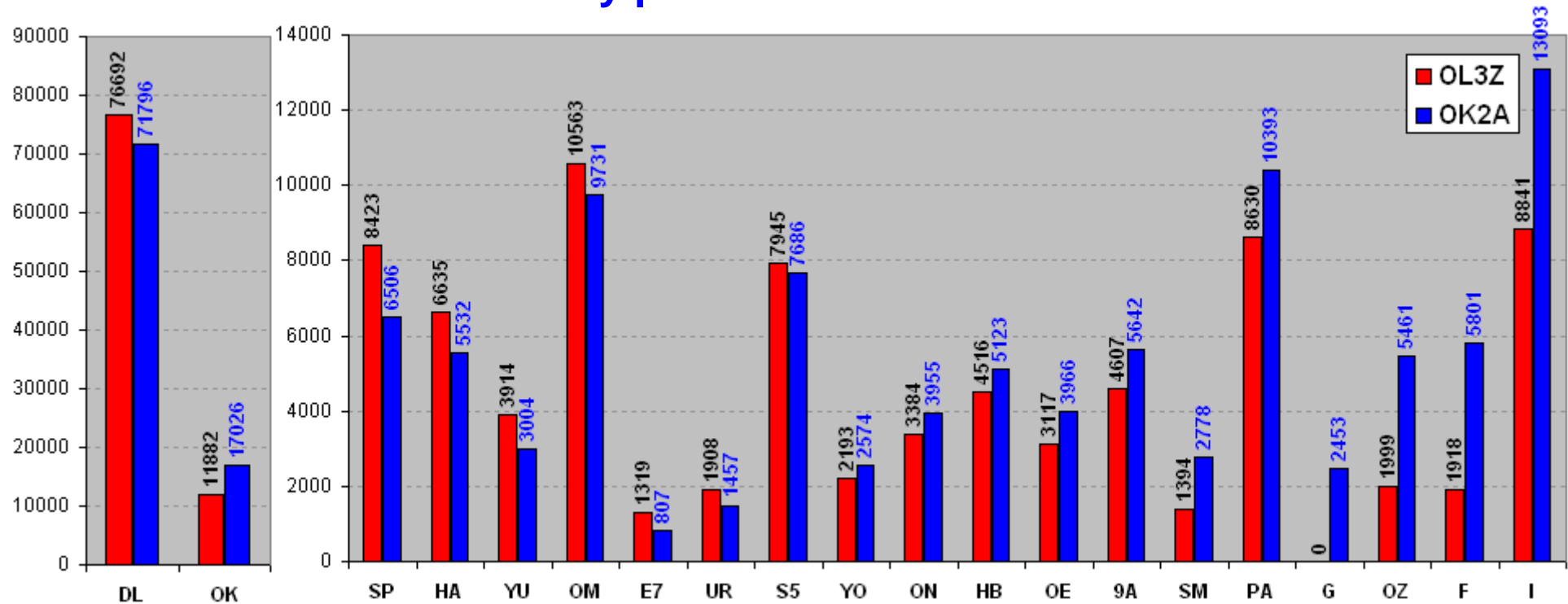
IARU UHF CONTEST 2015 432 MHz

počet QSO per DXCC OL3Z / OK2A



IARU UHF CONTEST 2015 432 MHz

body per DXCC **OL3Z** / **OK2A**

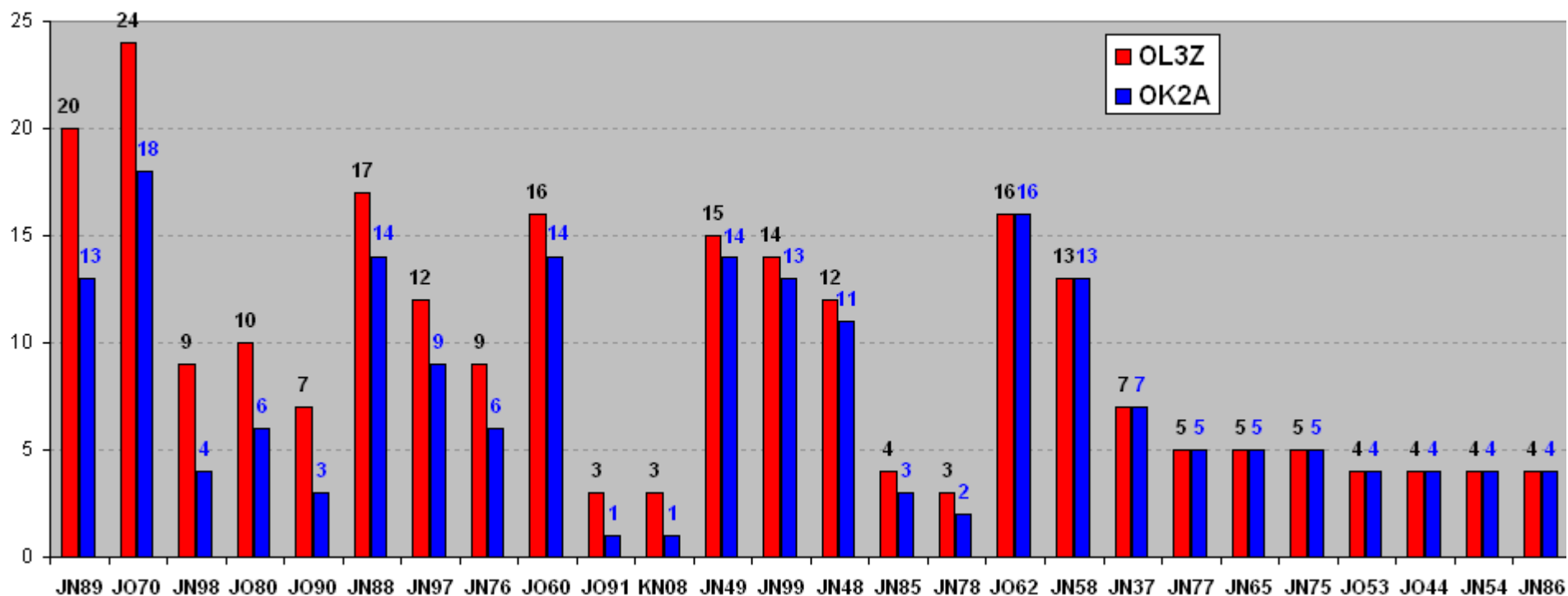


	OL3Z	OK2A	rozdil
DL	76692	71796	-4896
SP	8423	6506	-1917
HA	6635	5532	-1103
YU	3914	3004	-910
OM	10563	9731	-832
E7	1319	807	-512
UR	1908	1457	-451
S5	7945	7686	-259
YO	2193	2574	381
ON	3384	3955	571

	OL3Z	OK2A	rozdil
HB	4516	5123	607
OE	3117	3966	849
9A	4607	5642	1035
SM	1394	2778	1384
PA	8630	10393	1763
G	0	2453	2453
OZ	1999	5461	3462
F	1918	5801	3883
I	8841	13093	4252
OK	11882	17026	5144

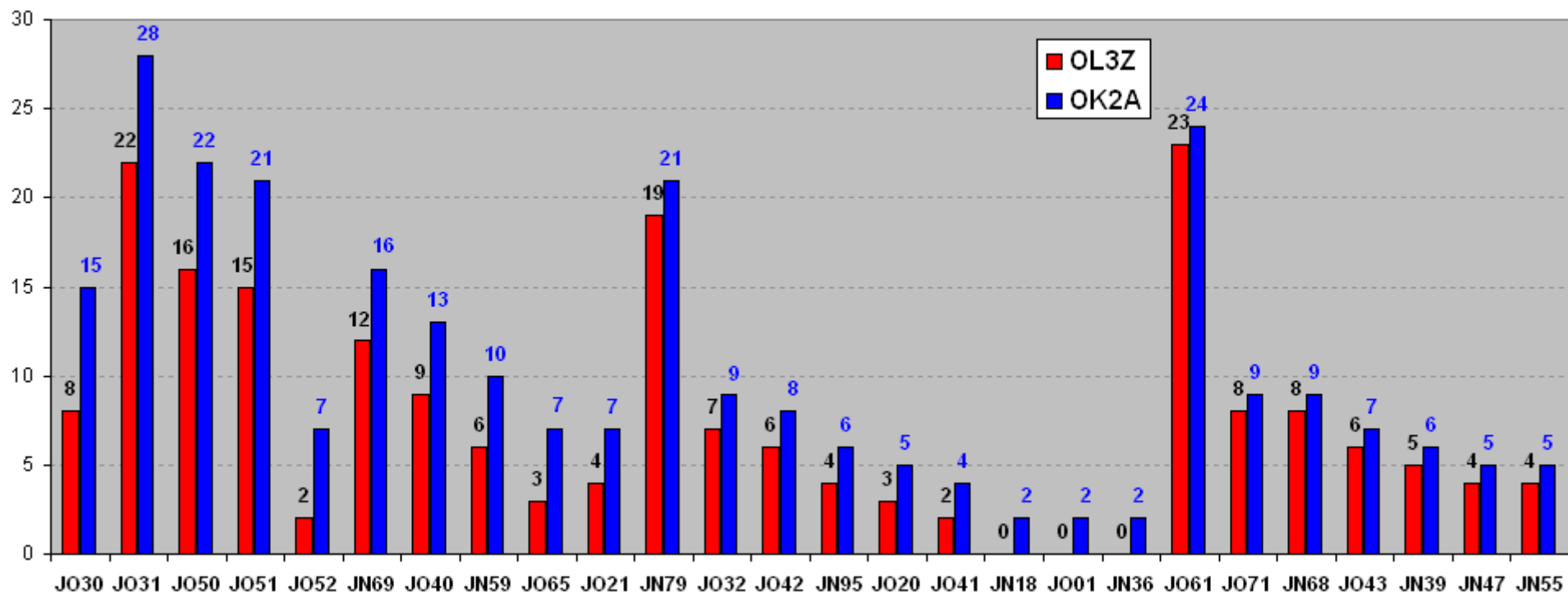
IARU UHF CONTEST 2015 432 MHz

OL3Z & OK2A: srovnání množství stanic z jednotlivých velkých LOC (řazeno od stanic z LOC, ze kterých na OL3Z nejvíc ztrácíme)



IARU UHF CONTEST 2015 432 MHz

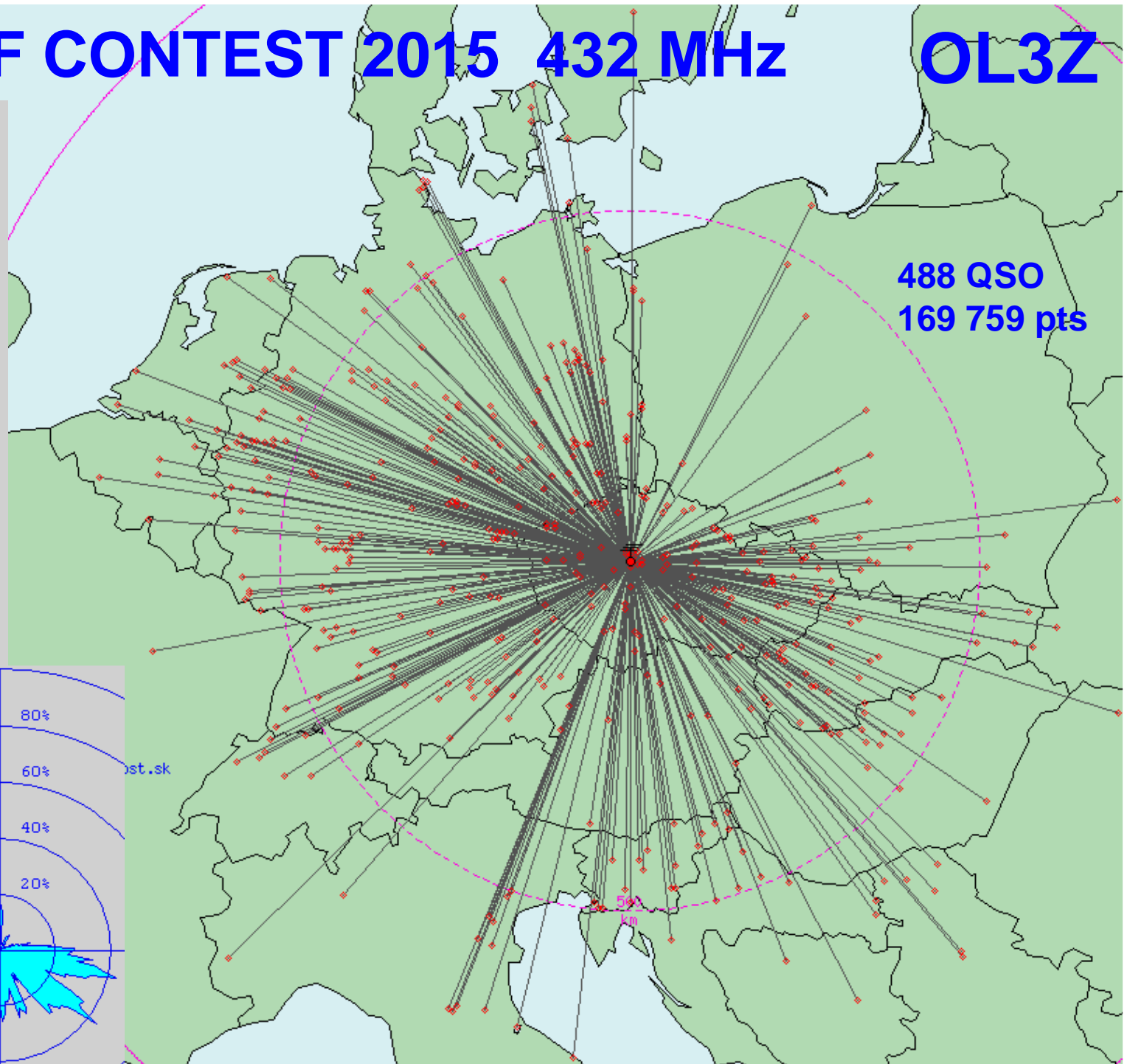
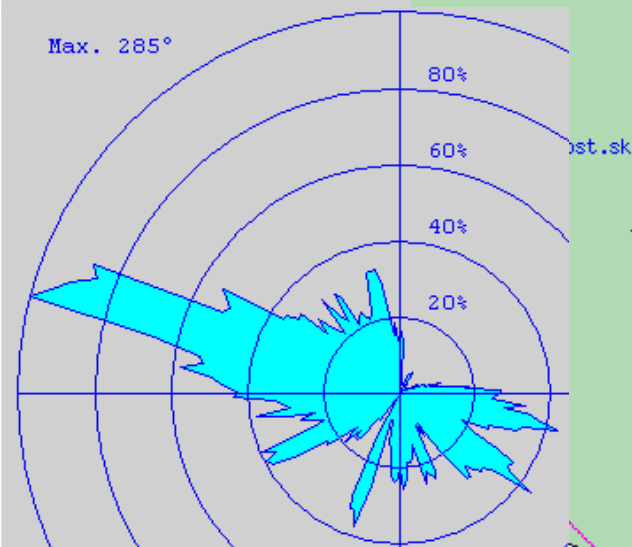
OL3Z & OK2A: srovnání množství stanic z jednotlivých velkých LOC (řazeno od stanic z LOC, ze kterých na OL3Z nejvíc získáváme)



IARU UHF CONTEST 2015 432 MHz OL3Z

218 x DL	76692	45%
99 x OK	11882	6%
31 x OM	10563	6%
14 x I	8841	5%
13 x PA	8630	5%
23 x SP	8423	4%
18 x S5	7945	4%
15 x HG	6635	3%
9 x 9A	4607	2%
8 x HB	4516	2%
6 x YU	3914	2%
5 x ON	3384	1%
13 x OE	3117	1%
3 x YO	2193	1%
3 x OZ	1999	1%
3 x F	1918	1%
3 x UR	1908	1%
2 x SM	1394	0%
2 x E7	1319	0%

488 QSO
169 759 pts

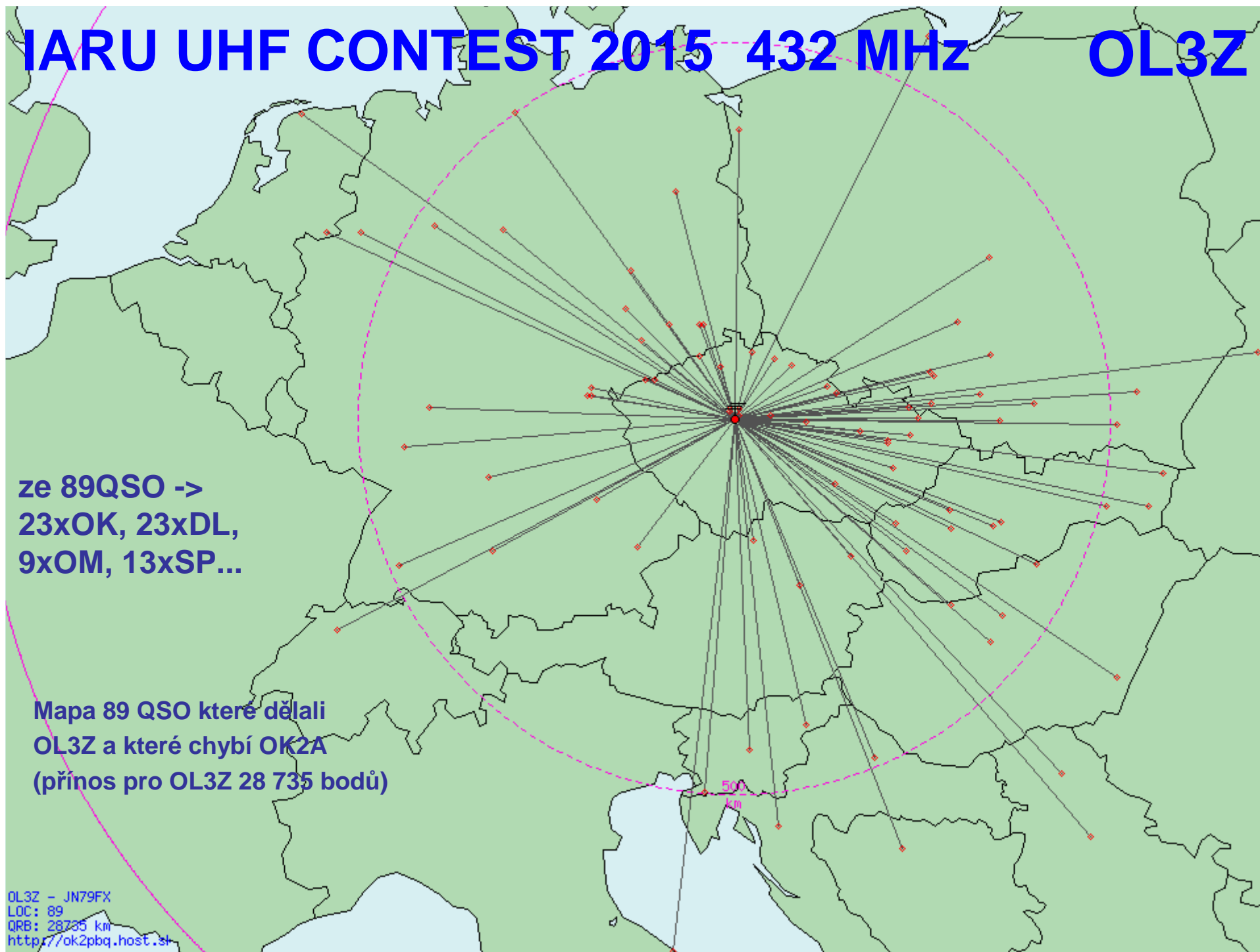


IARU UHF CONTEST 2015 432 MHz OL3Z

ze 89QSO ->
23xOK, 23xDL,
9xOM, 13xSP...

Mapa 89 QSO které dělali
OL3Z a které chybí OK2A
(přínos pro OL3Z 28 735 bodů)

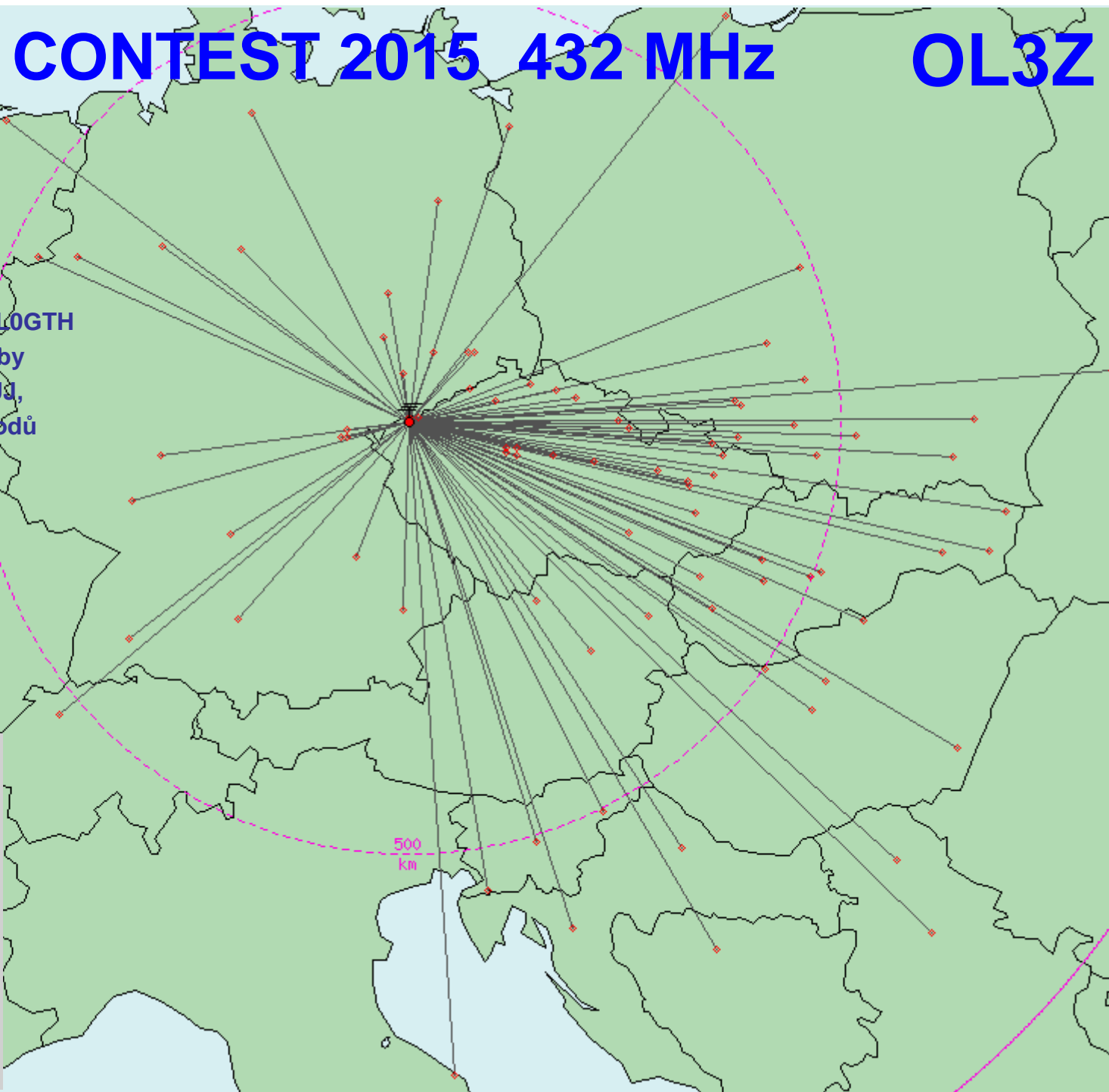
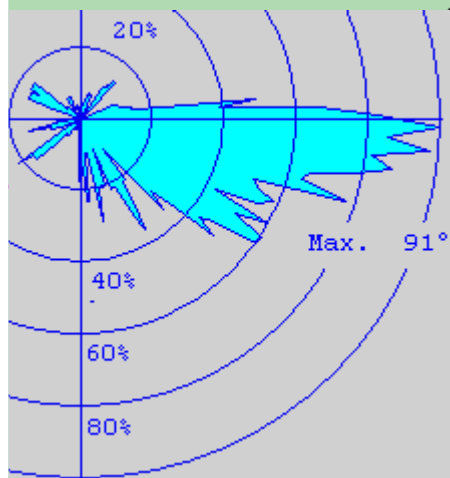
OL3Z - JN79FX
LOC: 89
QRB: 28735 km
<http://ok2pbq.host.sk>



IARU UHF CONTEST 2015 432 MHz OL3Z

Mapa 89 QSO které dělali DL0GTH
a které chybí OK2A, pokud by
je bylo možné dělat z JO60J3,
potenciální přínos 32 912 bodů

ze 89QSO ->
23xOK, 23xDL,
9xOM, 13xSP...



IARU UHF CONTEST 2015 432 MHz

Seznam OK stanic které OK2A za celý závod nezavolaly, ale dělaly QSO s DL0GTH, DR9A a OL3Z

DL0GTH ano, OK2A ne

OK5YY	JN89JT	437
OK2NJI	JN89MW	452
OK2IGL	JN89UR	503
OK1XDY	JO70SO	336
OK1TRM	JO70HC	279
OK1KT	JO70WE	364
OK1IBI	JO60EG	120

DR9A ano, OK2A ne

OK2SSJ	JN89WW	703
OK2OHA	JN89PP	657
OK2IGL	JN89UR	688

[OK2A ano, OL3Z ne (PD 2015)]

OK1AIY/P	JO70SQ	198
OK1AVP	JN69QS	82
OK1GP	JO60JF	19
OK1IEI	JO70EC	118
OK1VAM	JN79IX	145
OK1VUF	JN79IO	163

OL3Z ano, OK2A ne

OK1DEU	JO80EG	141
OK1FQK	JO70NA	48
OK1HEH	JN79VW	96
OK1IMJ	JO70EB	12
OK1IVO	JO70JS	92
OK1JPP	JO70OQ	96
OK1KHA	JO80CI	132
OK1KUR	JO70EC	16
OK1MBT	JO70CO	72
OK1UJQ	JO70GC	16
OK1VM	JO60VR	96
OK1XDY	JO70SO	104

OK2BRZ	JN89PQ	206
OK2EW	JN89DE	159
OK2IGL	JN89UR	235
OK2KPD	JO80UB	233
OK2OHA	JN89PP	207
OK2PMS	JN89WW	245
OK2SSJ	JN89WW	245
OK2UIN	JN89QI	222
OK5YY	JN89JT	169
OK6TT	JO80CI	132
OL6A	JO70GA	8

[OL3Z ano, OK2A ne (PD 2015)]

OK1CJH	JO70WG	107
OK1DEK	JN79EP	38
OK1DMV	JN78DR	140
OK1FDJ	JO70KF	41
OK1IVO	JO70JS	92
OK1JAF	JO70TA	84
OK1JPP	JO70OQ	96
OK1JPS	JO70CT	95
OK1MBT	JO70CO	72
OK1NIT	JO70UH	97
OK1OA	JO70MO	81
OK1RN	JN79QJ	93
OK1UFF	JO60XR	91
OK1UJQ	JO70GC	16
OK1VJN	JN79XU	109

OK1VPA	JN89WW	245
OK1VVS	JO60WP	85
OK1WGW	JO60WP	85
OK1XTX/P	JN78DR	140
OK1XZA	JN79NU	50
OK2BRX	JN89PR	206
OK2BSQ	JN89VS	241
OK2BVE	JN99JQ	313
OK2FSK	JN89DO	139
OK2KEA	JN89EJ	153
OK2KFK	JN79XN	118
OK2KOP	JO80NE	192
OK2OHA	JN89QO	214
OK7VV	JN99IO	309

A to je k pásmu 70cm vše...

Matej, OK1TEH
(OK2KKW/OK2A club)
ok1teh@seznam.cz