

European UHF/VHF contesting in Multi category

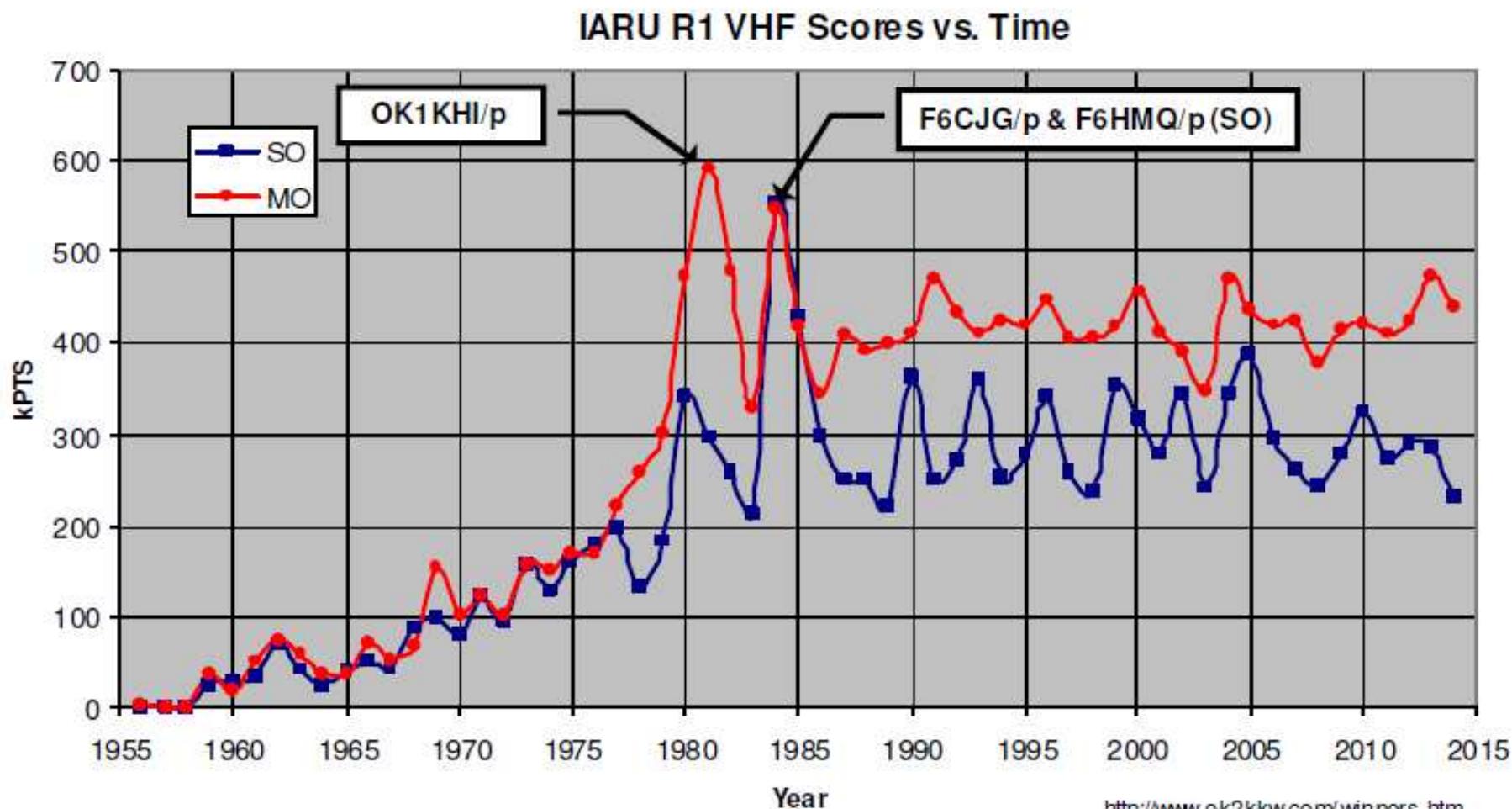


Matěj Petržílka, OK1TEH

www.ok2kkw.com

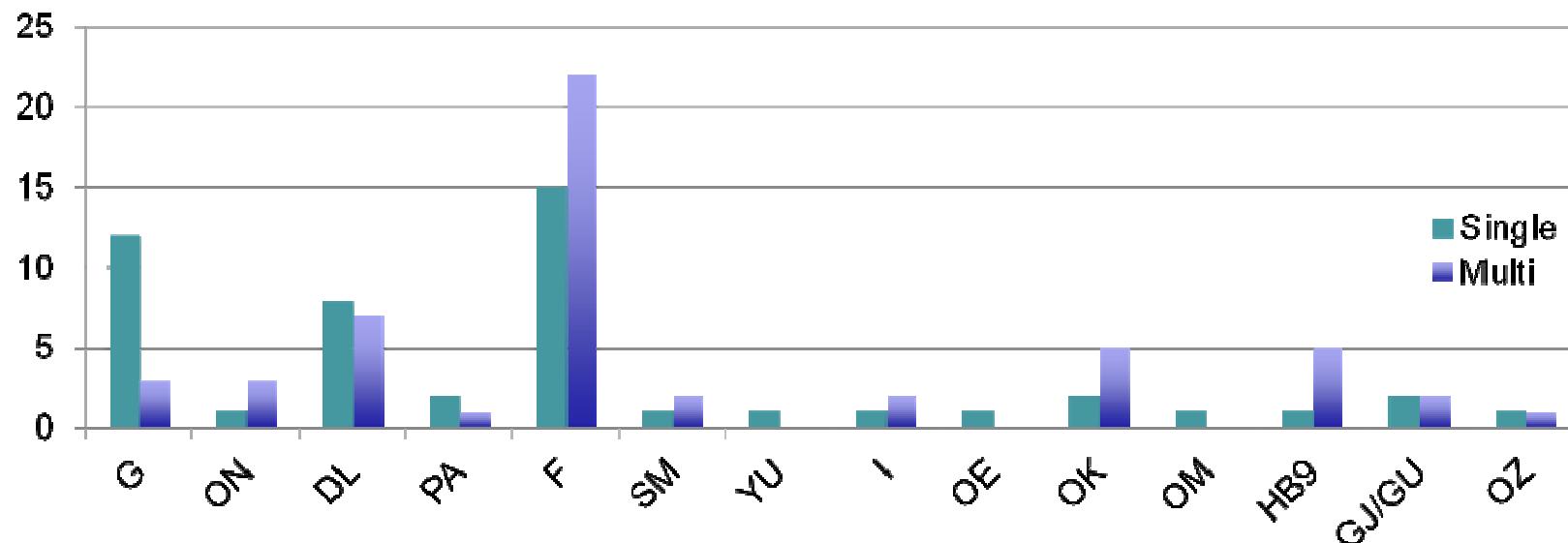
IARU Region 1 VHF Contest – 144 MHz

- All time record **618 792 pts** was achieved by **OK1KHI/P** in year 1981 - **569xDL, 179xPA (!)**
- The maximal number of contacts was made by **DL0GTH** in year 2006 - **1245 QSOs**



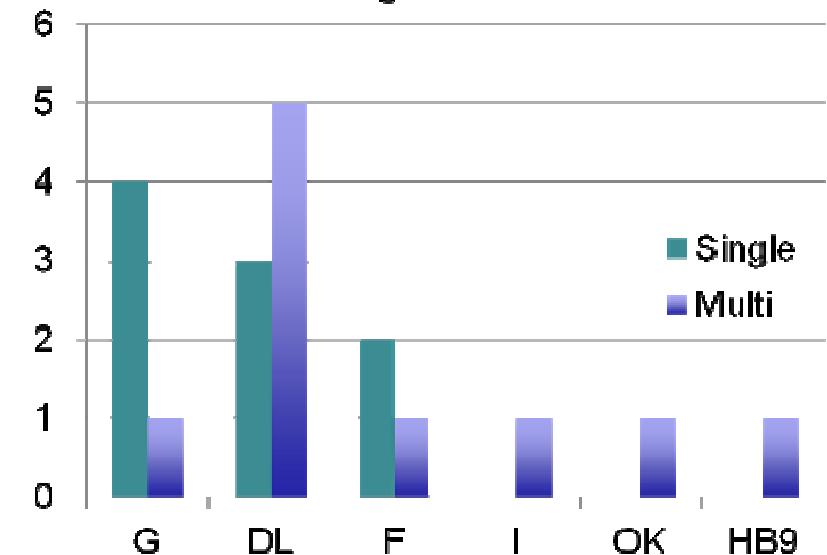
IARU Region 1 VHF Contest – 144 MHz

Distribution of winners by DXCC

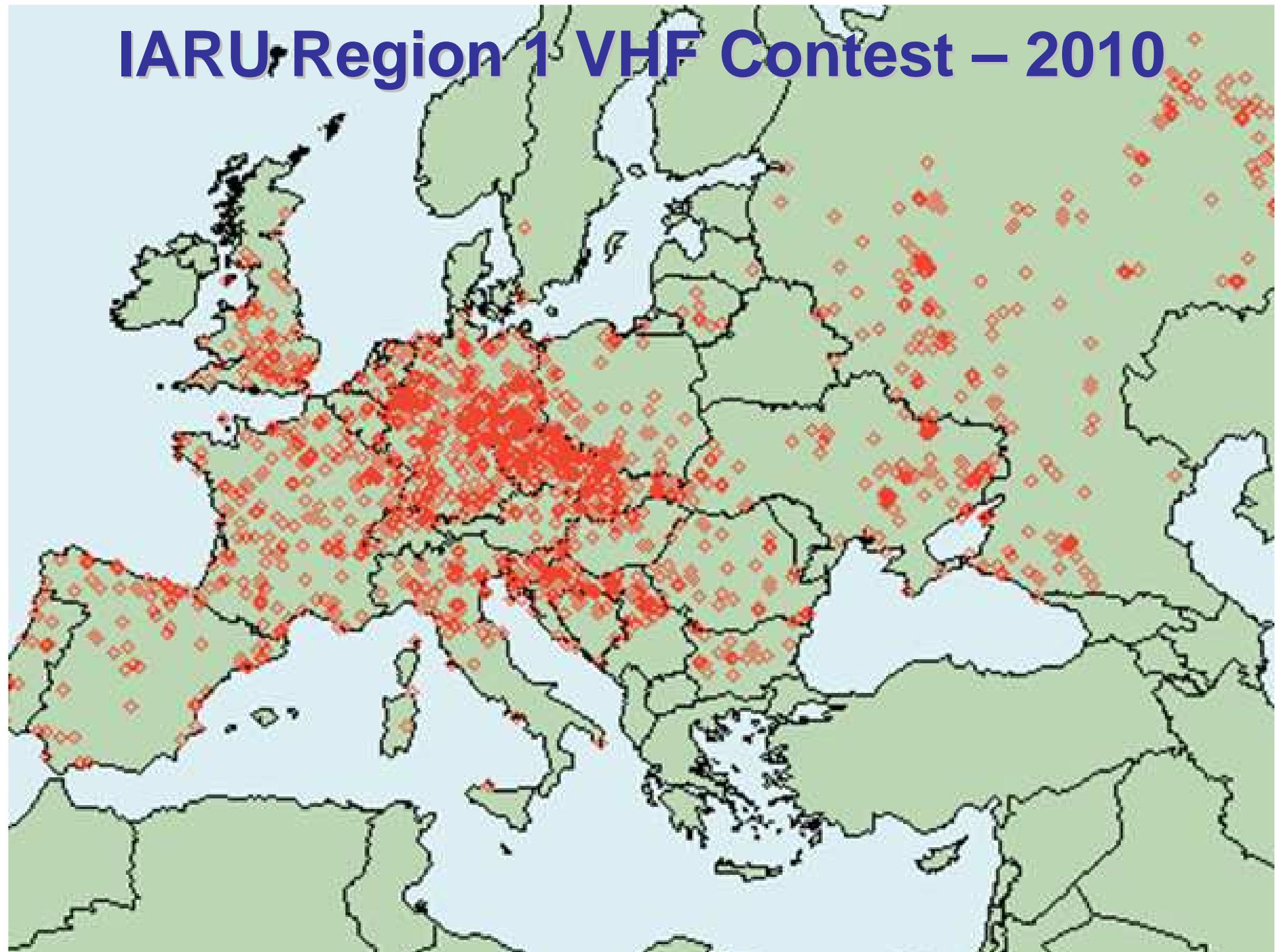


1956-2011

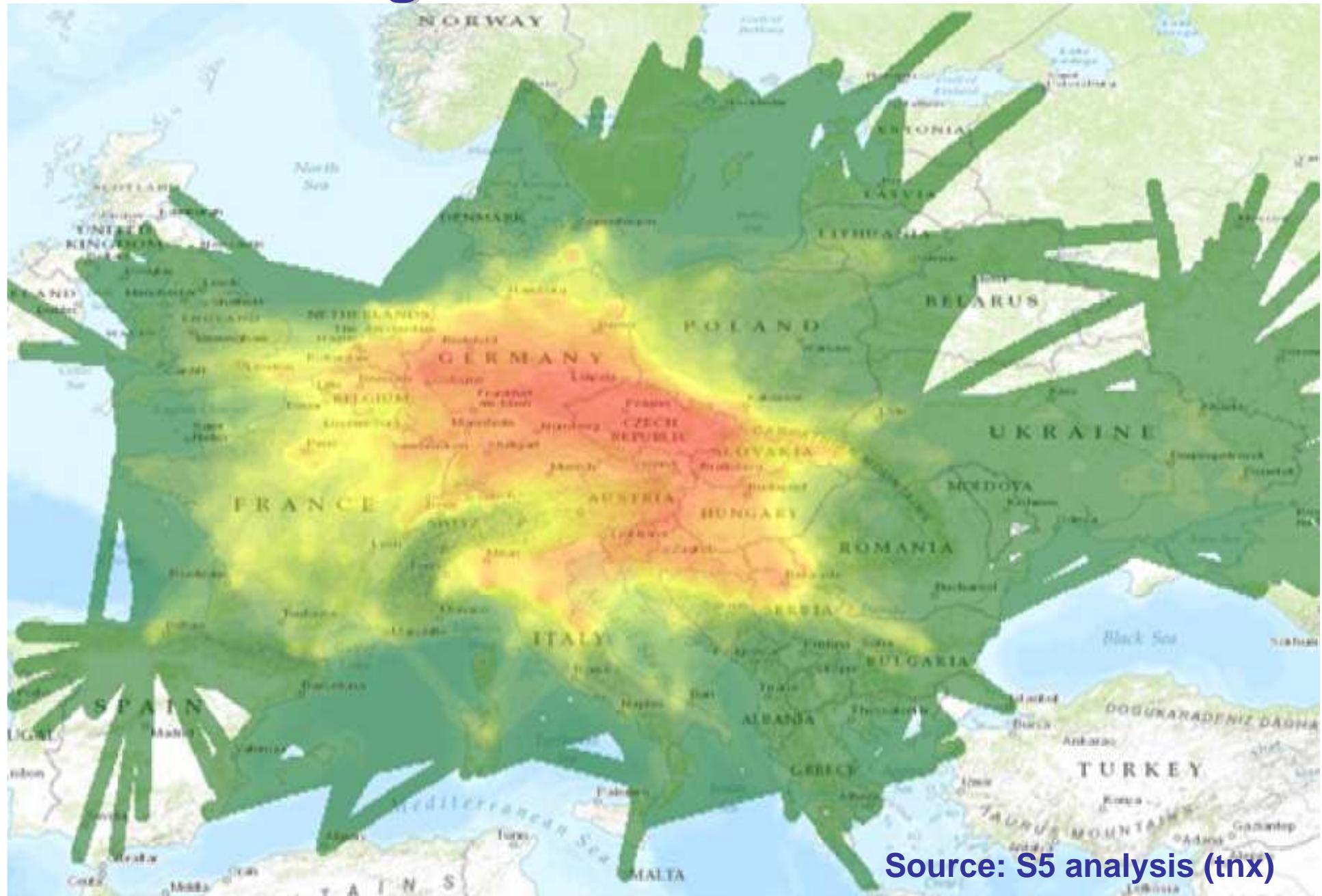
2001-2011



IARU Region 1 VHF Contest – 2010

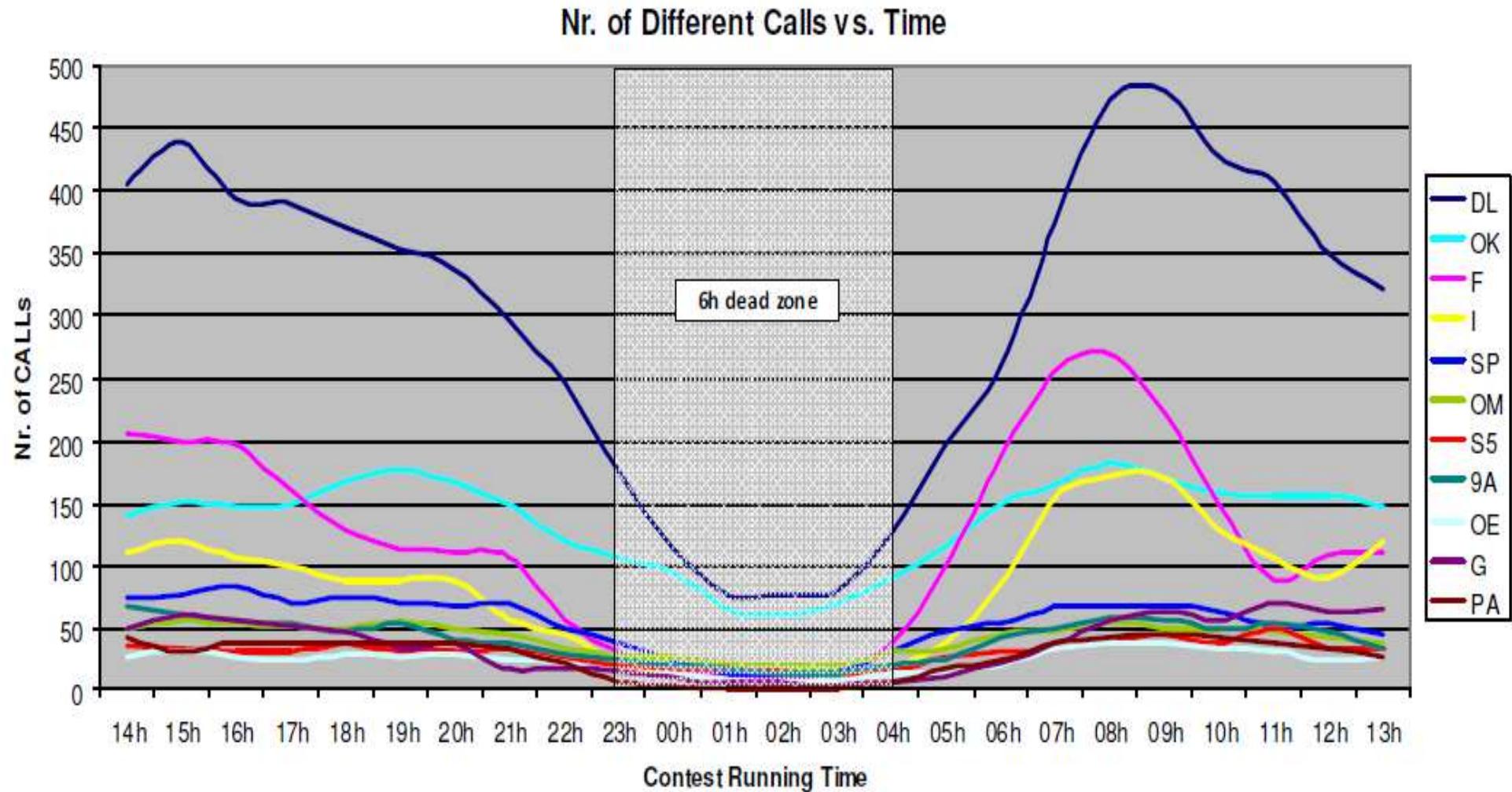


IARU Region 1 VHF Contest – 2014



Source: S5 analysis (tnx)

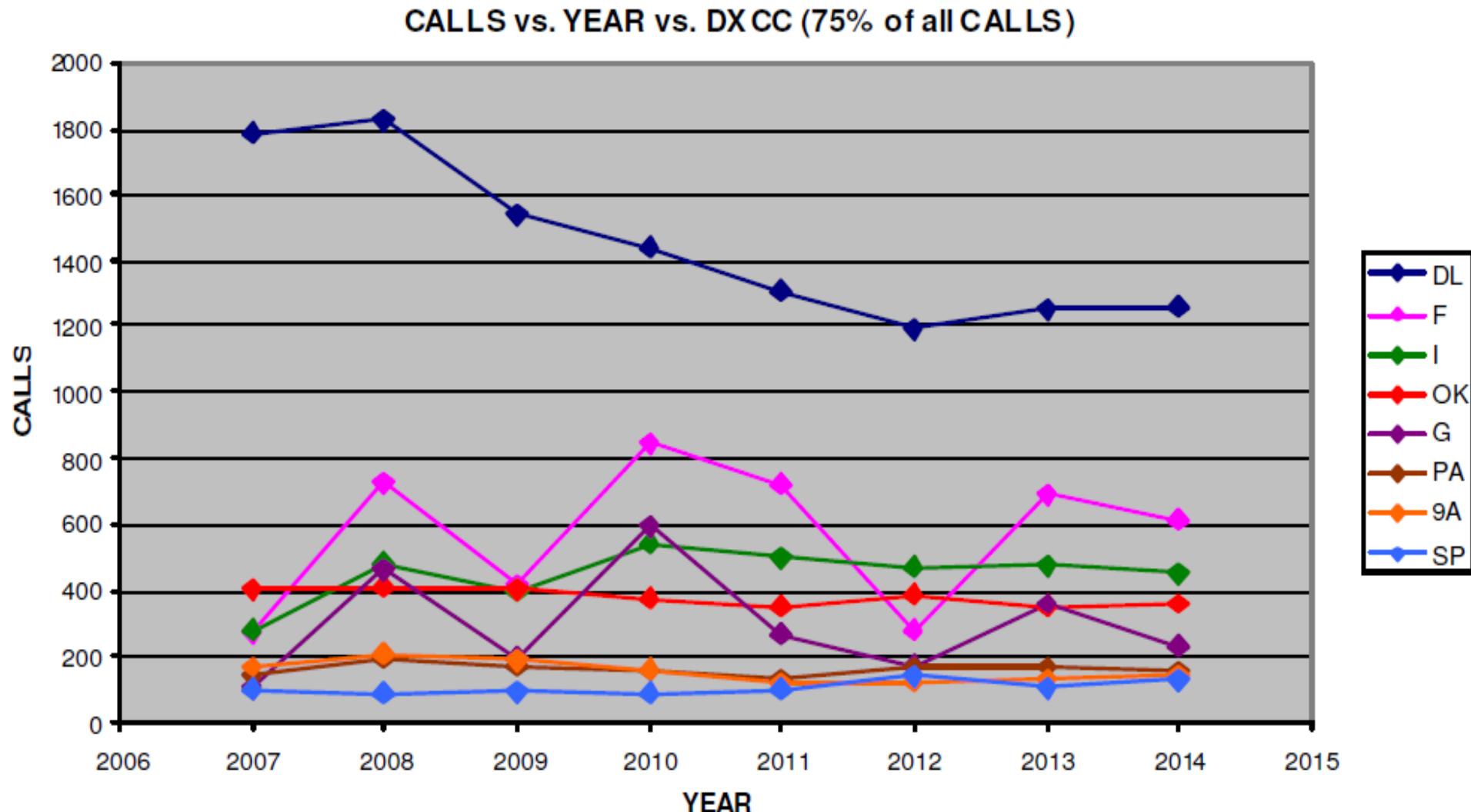
IARU Region 1 VHF Contest – 2014



Based on 1050 logs

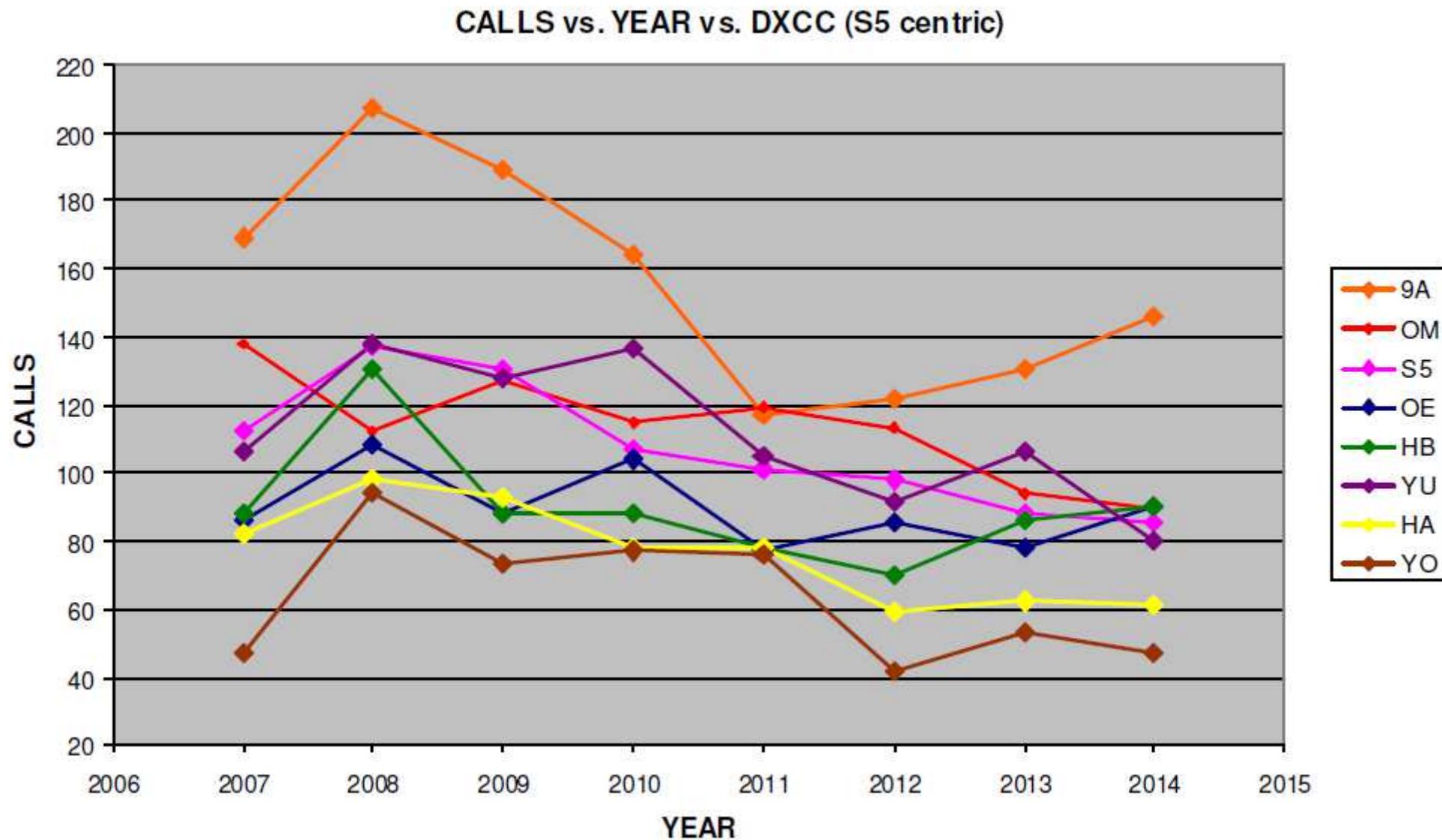
Source: S5 analysis (tnx)

IARU Region 1 VHF Contest – 2014



Source: S5 analysis (tnx)

IARU Region 1 VHF Contest – 2014



Source: S5 analysis (tnx)

IARU Region 1 VHF Contest

Brief review between years

1981 – 2014

IARU VHF CONTEST 1981



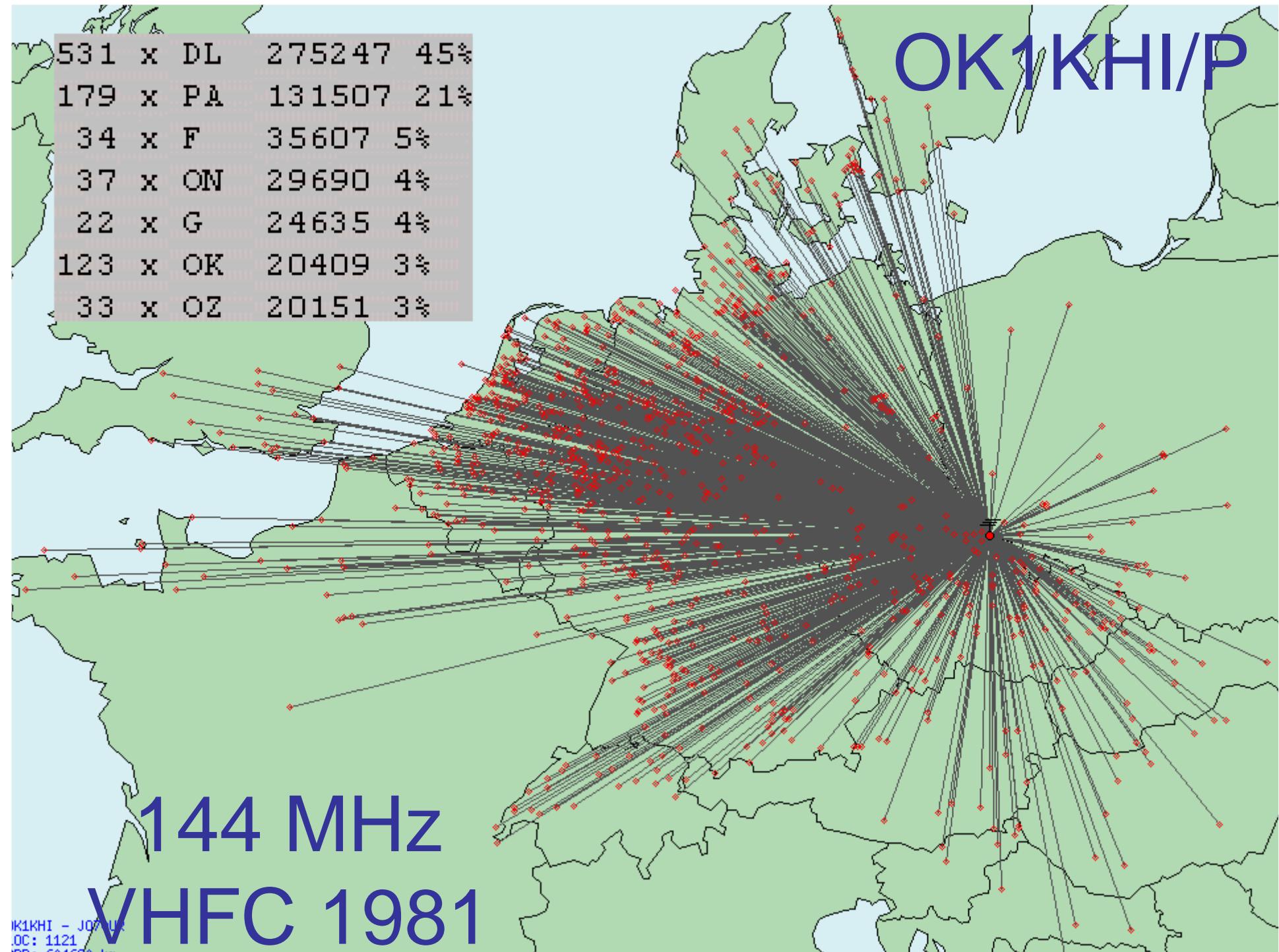
Snezka 1602 m ASL JO70UR (HK29b)



OK1KHI/P

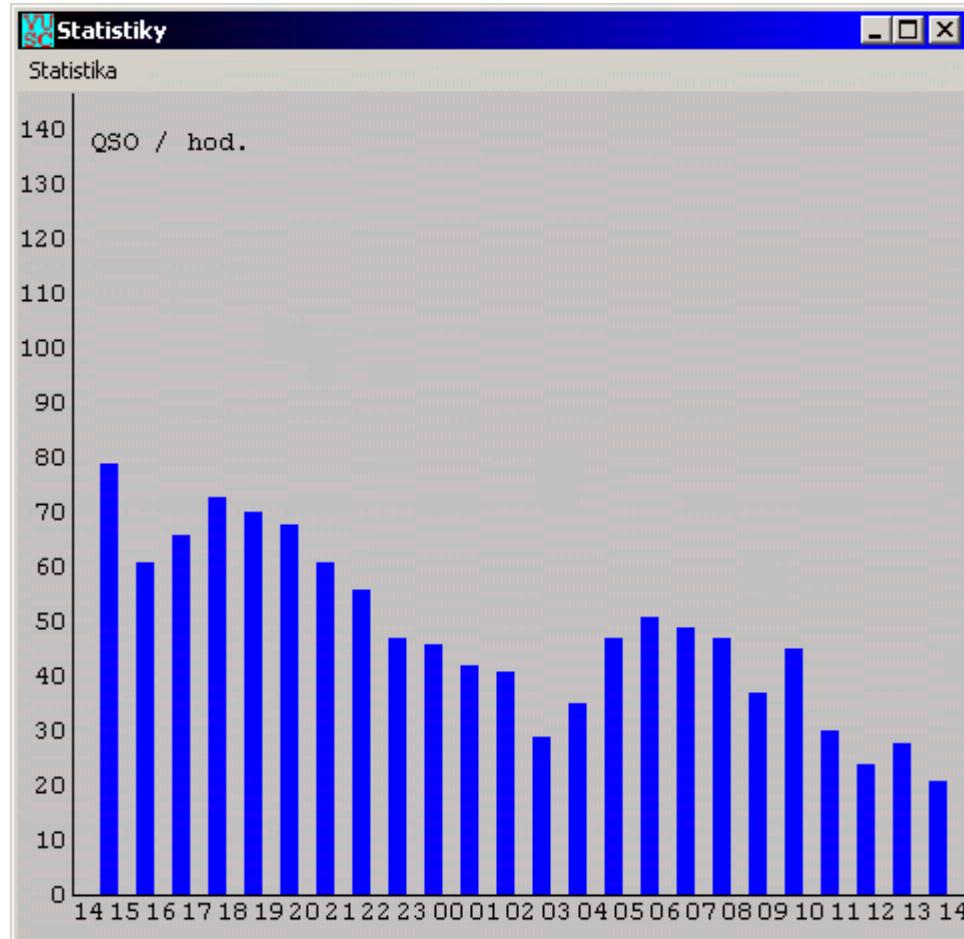
- 10el PA0MS Y, 7el Y
- 1xPA with QQE 06/40 80 W
- Absolute all time record of
618 792 points and **1153 QSO**
on 144 MHz
(591 193pts after crosscheck)
- Average 539km/QSO



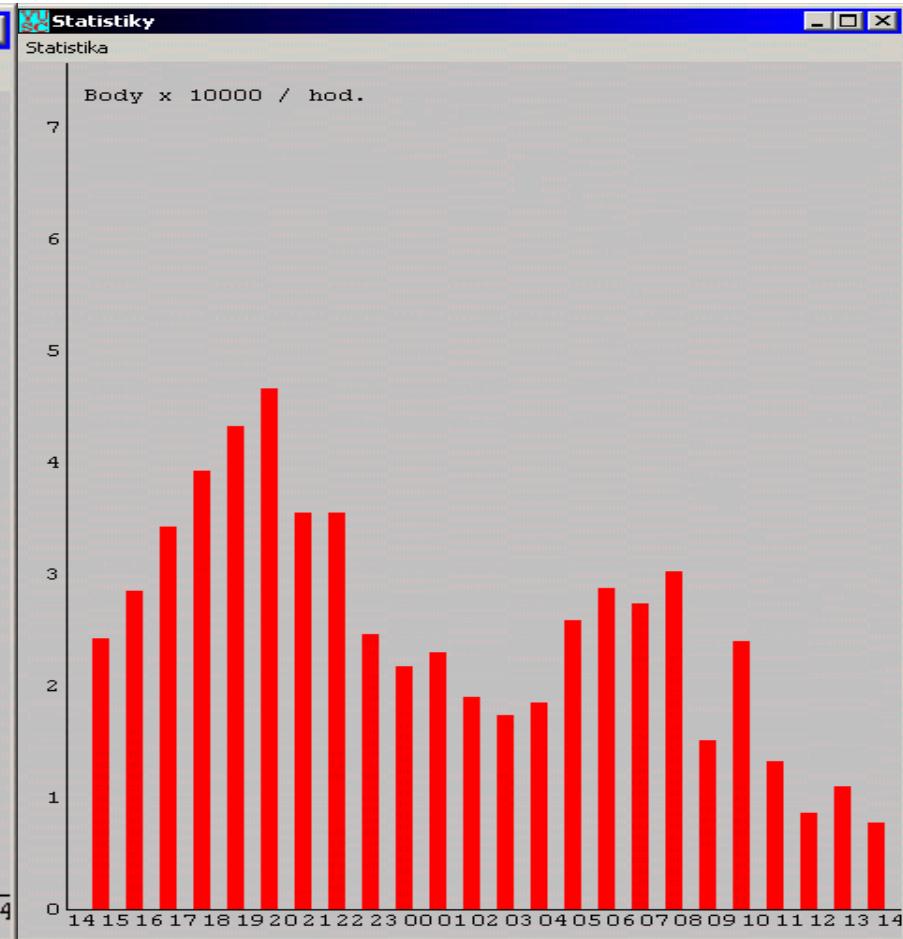


OK1KHI - JO21UK
OC: 1121
RP: 644500 km

OK1KHI/P - VHF CONTEST 1981

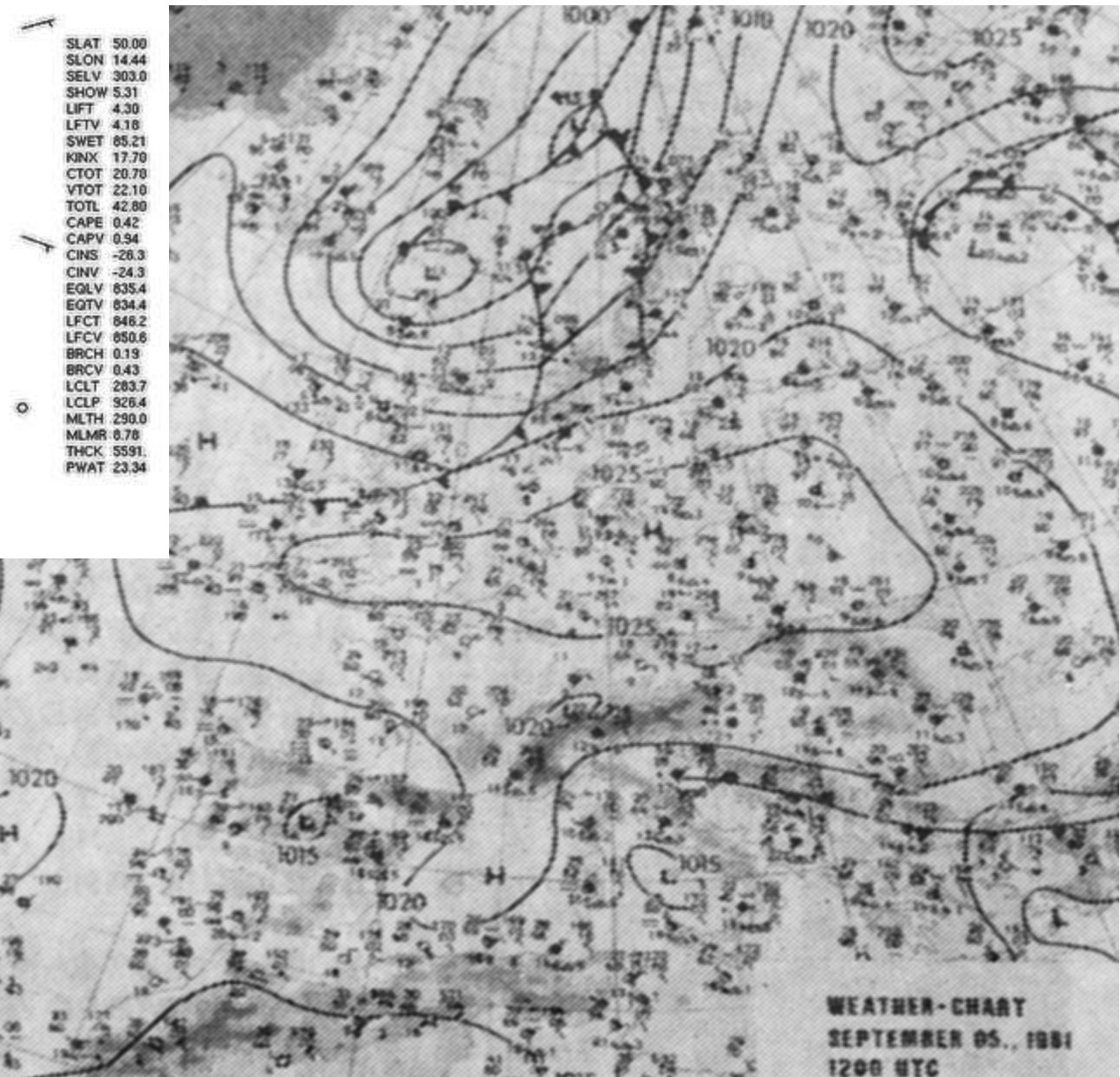
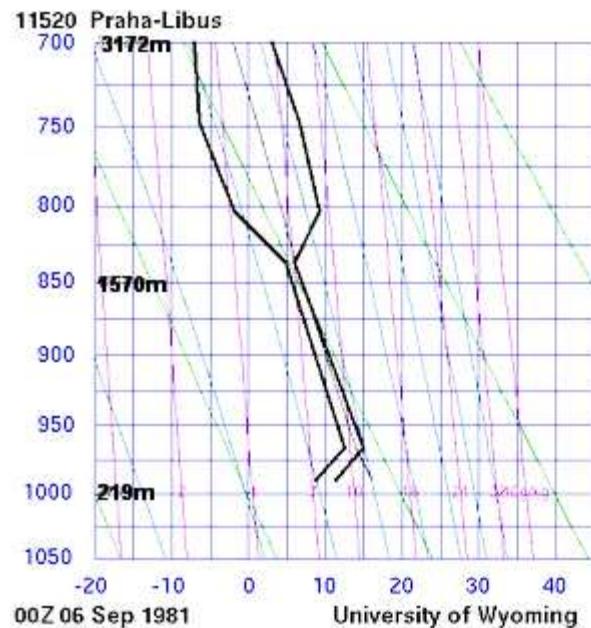


QSOs/hour



points/hour

IARU VHF CONTEST 1981



IARU VHF CONTEST 2001

IO3V JN56WK

Mt. Marmolada, shack in 3264m ASL



Winner with

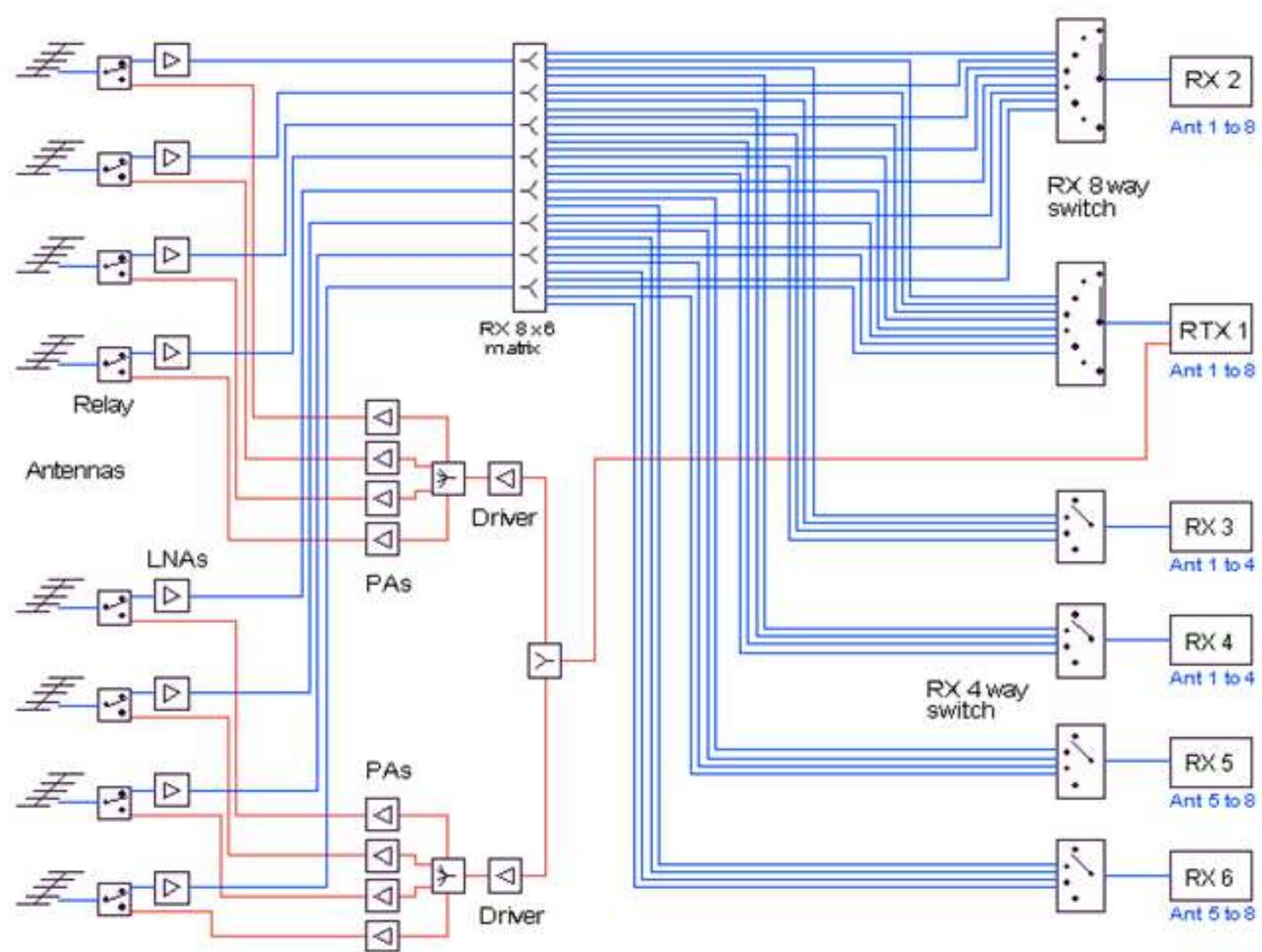
417 583 points

**987 QSO (373xDL, 167xI, 146xOK, 64xS5, 43xOM
34xPA, 29xF, 29xOE, 25x9A, 18xHB, ...)**

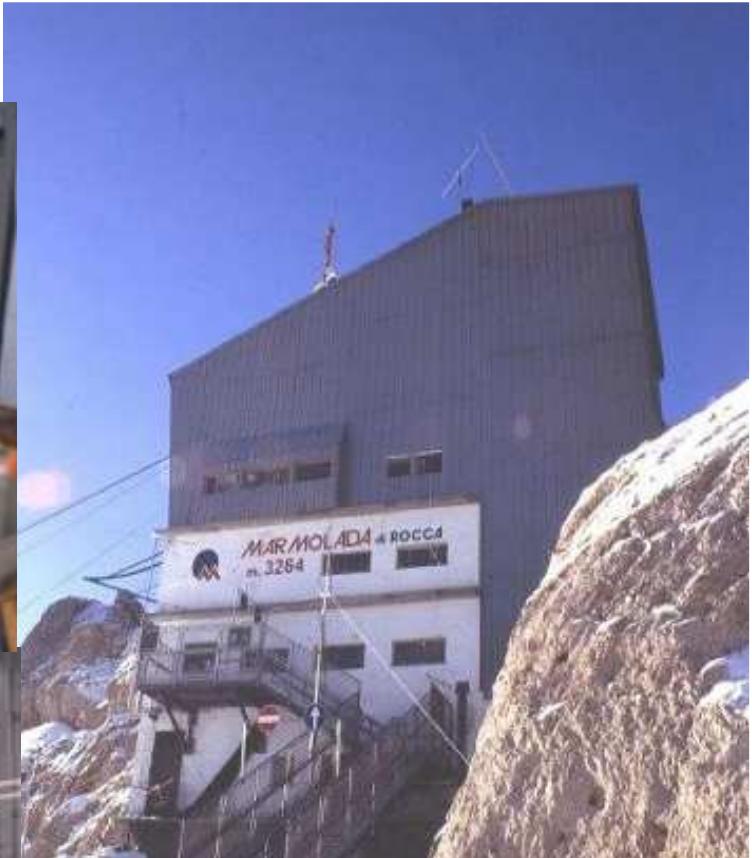
IARU VHF CONTEST 2001

IO3V – 1st place

- 8 x antenna systems
(4x4x7el,
2x10el,
1x7el, ...)
- 8 x QRO PA
- 4 x 2nd RX
- 17x hams
on hill (!)
from S5/IK



IO3V
JN56WK
2001



IARU VHF CONTEST 2011 OL9W

(supported by guys from OK2KKW) JO60LJ
Klinovec, 1244m ASL



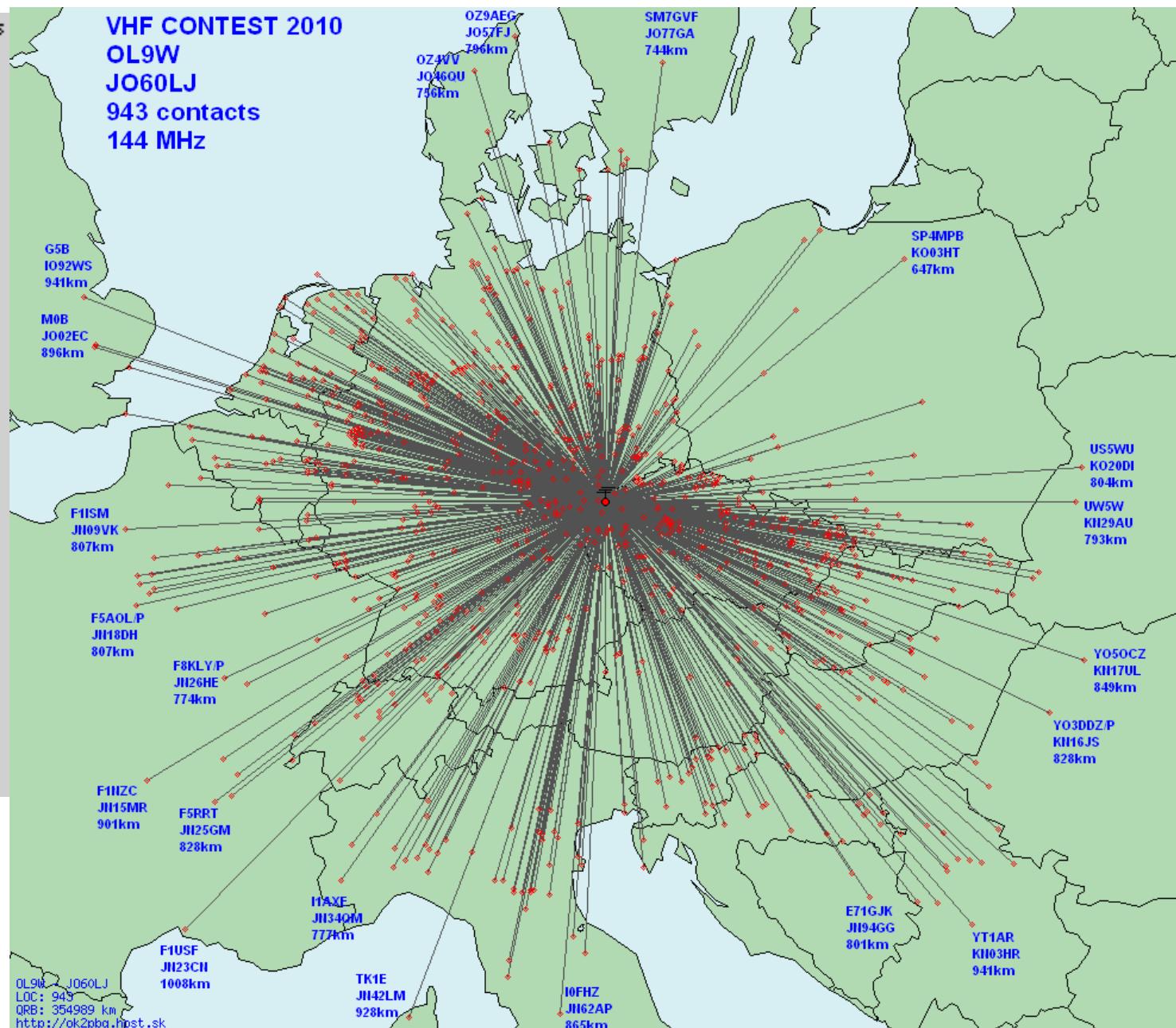
IARU VHF CONTEST 2011 OL9W

Klinovec, JO60LJ - 1244m ASL

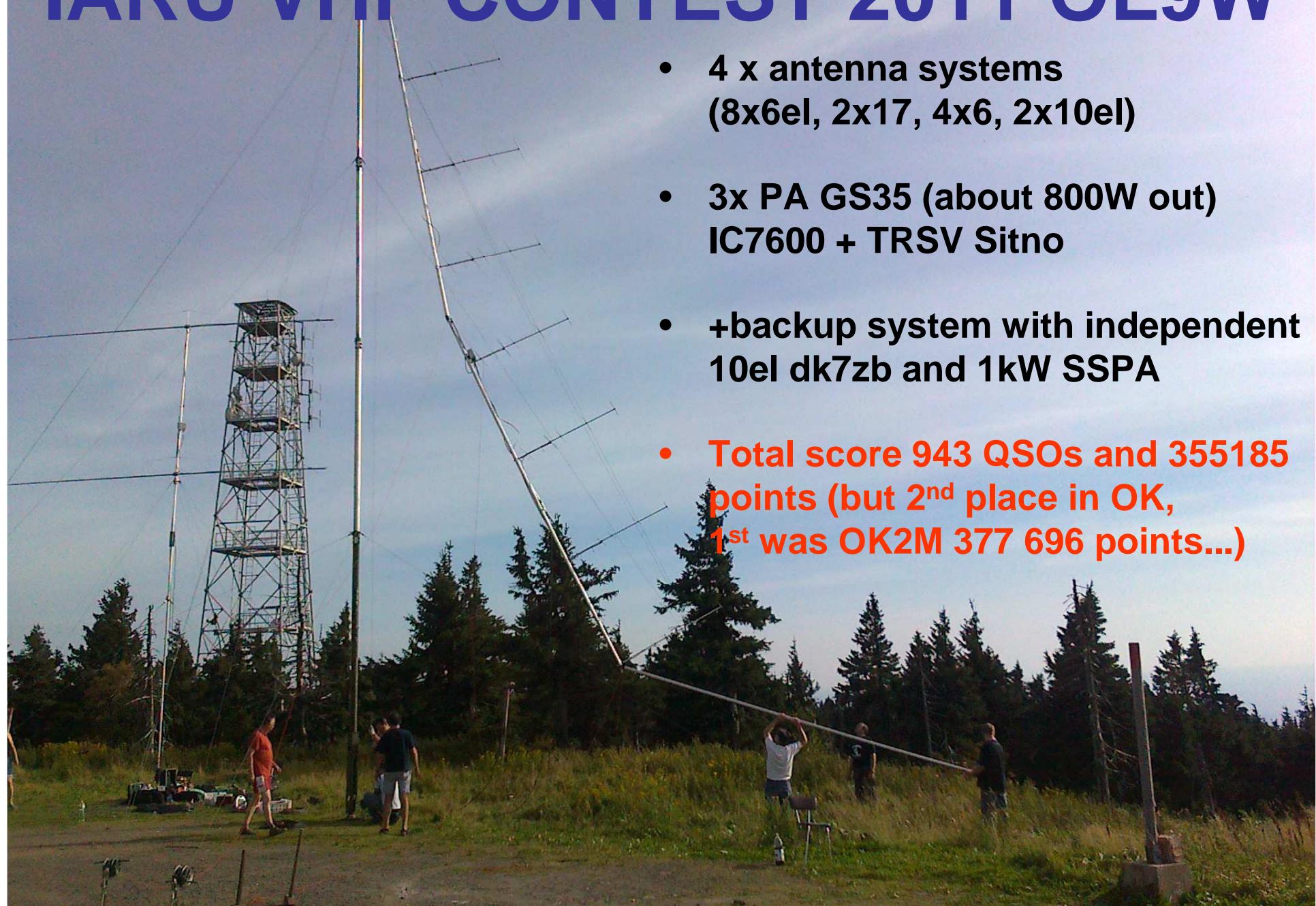


IARU VHF CONTEST 2011 OL9W

419	x	DL	117667	33%
171	x	OK	35806	10%
45	x	I	29233	8%
46	x	PA	25657	7%
36	x	F	24533	6%
42	x	OM	19548	5%
34	x	SP	13977	3%
20	x	9A	12578	3%
20	x	HB	10388	2%
12	x	YU	10287	2%
18	x	HG	10226	2%
20	x	S5	9762	2%
14	x	ON	8257	2%
7	x	OZ	4435	1%
5	x	G	4381	1%
13	x	OE	4238	1%
5	x	UR	3769	1%
4	x	YO	3244	0%
5	x	SM	3034	0%
4	x	LX	1996	0%
2	x	T9	1552	0%
1	x	TK	928	0%



IARU VHF CONTEST 2011 OL9W



- 4 x antenna systems
(8x6el, 2x17, 4x6, 2x10el)
- 3x PA GS35 (about 800W out)
IC7600 + TRSV Sitno
- +backup system with independent
10el dk7zb and 1kW SSPA
- Total score 943 QSOs and 355185
points (but 2nd place in OK,
1st was OK2M 377 696 points...)

IARU VHF CONTEST 2011 OL9W

- Direction to Italy was in shadow of 3m BC FM tower
- Worked only 45xI – 29k (OK2M had 73xI – 43k)
- Problem with 2xPA..



IARU VHF CONTEST 2011 OL9W



IARU VHF CONTEST 2011 OL9W



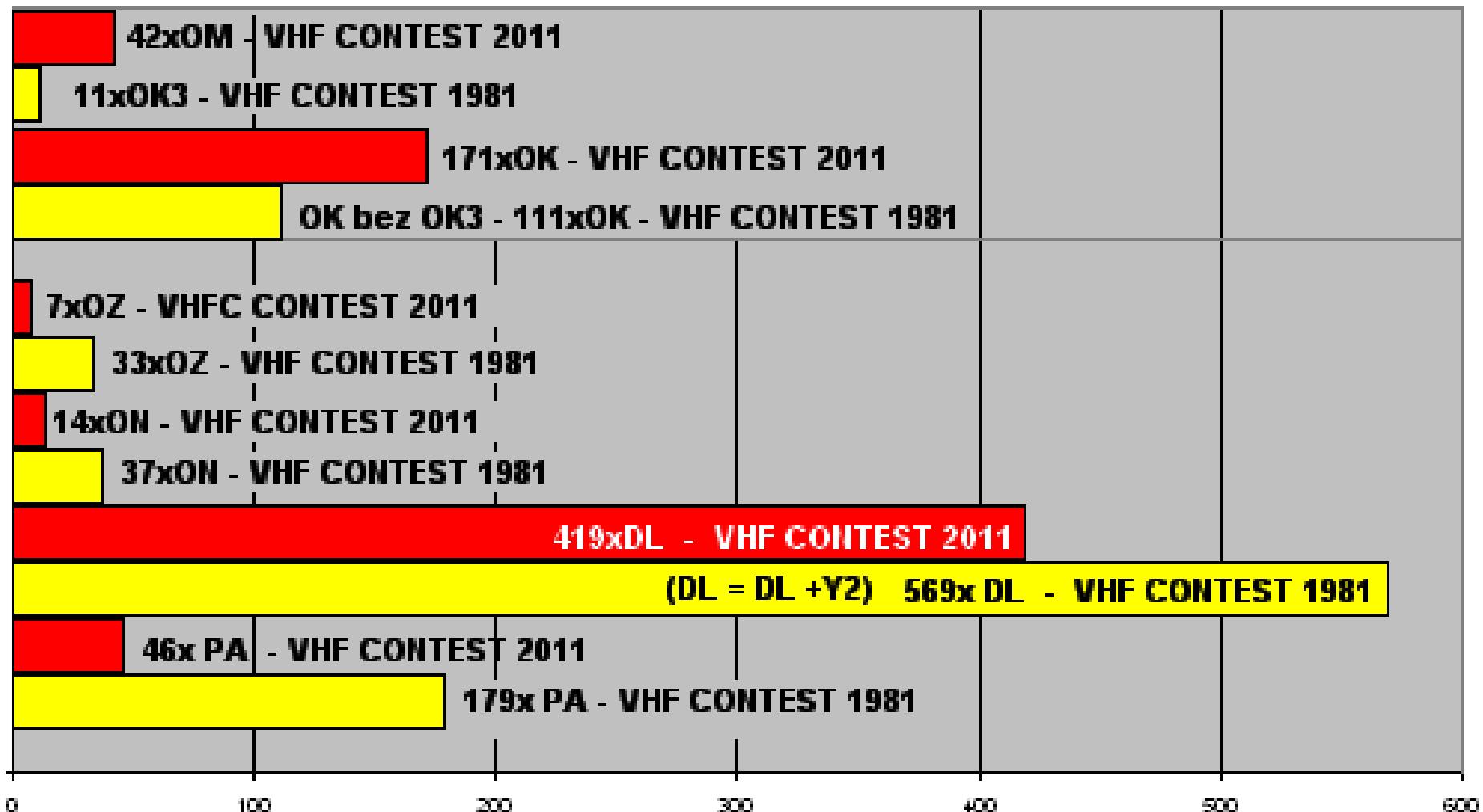
IARU VHF CONTEST 2011 OL9W



- Direction to PA/DL/G covered by fixed 8x6el stack on the edge of the cliff
- AVG QRB to 558km

IARU VHF CONTEST 2011 OL9W

Comparison between VHF Contest 1981 and 2011



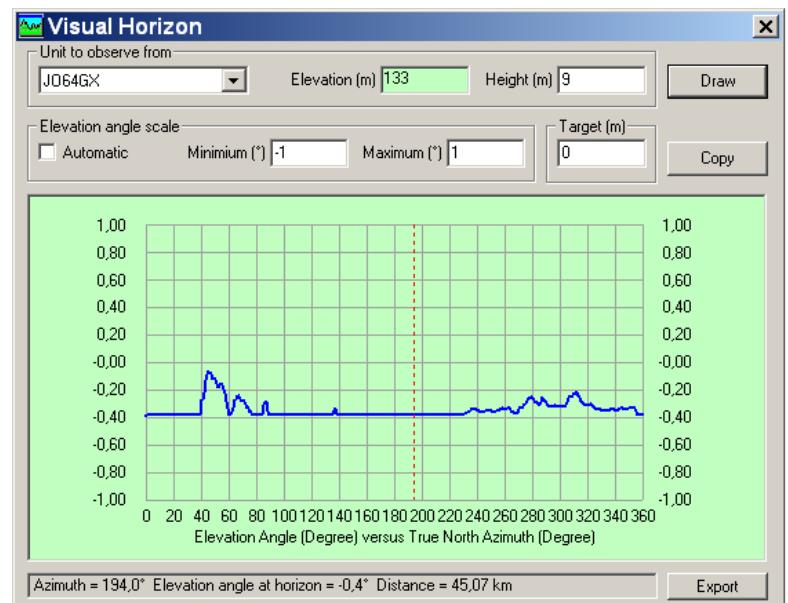
IARU VHF CONTEST 2013 5P5T

1st place with 831 QSO 472 547 points



5P5T - QTH Kongsbjerg, Moen JO64gx

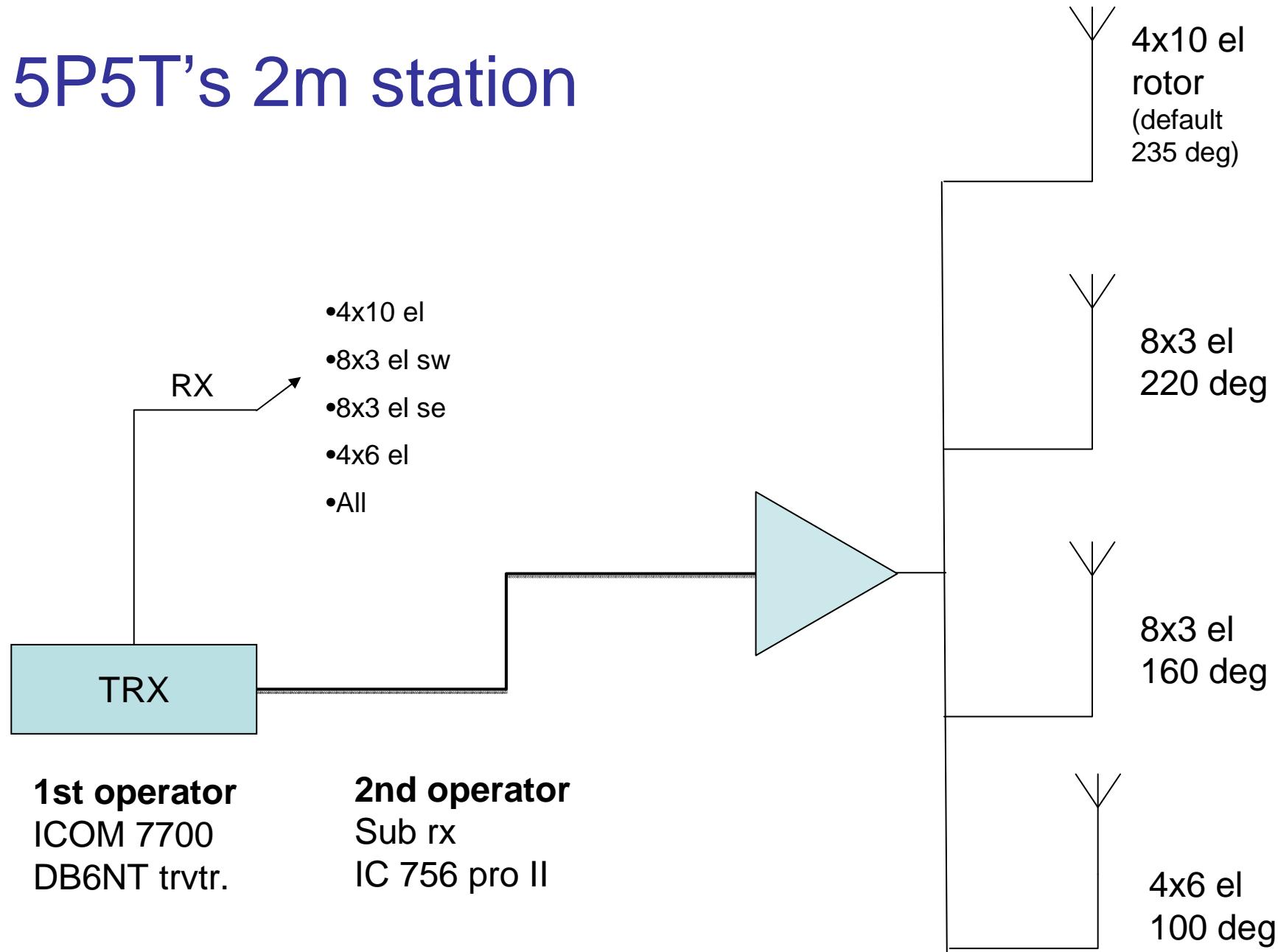
- Reasonable accessibility
- Free take off over water
- NO trees
- Reasonable ASL 134 m
- Good take off 360 degrees



View in direction 140-200 deg



5P5T's 2m station

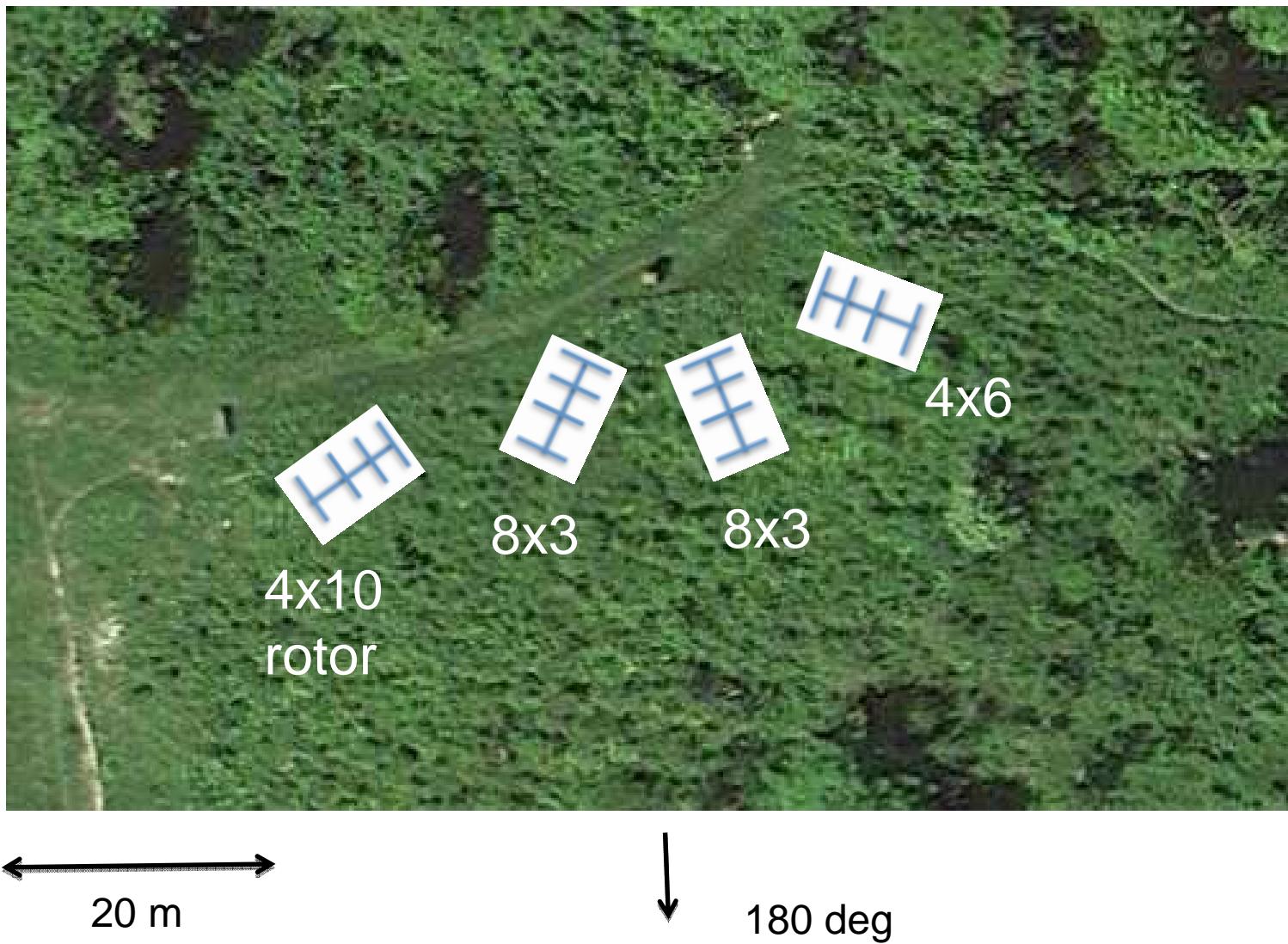


5P5T's Antennas

- 4x10 el DK7ZB, 4x6 el OZ5HF, 16x3 el DK7ZB

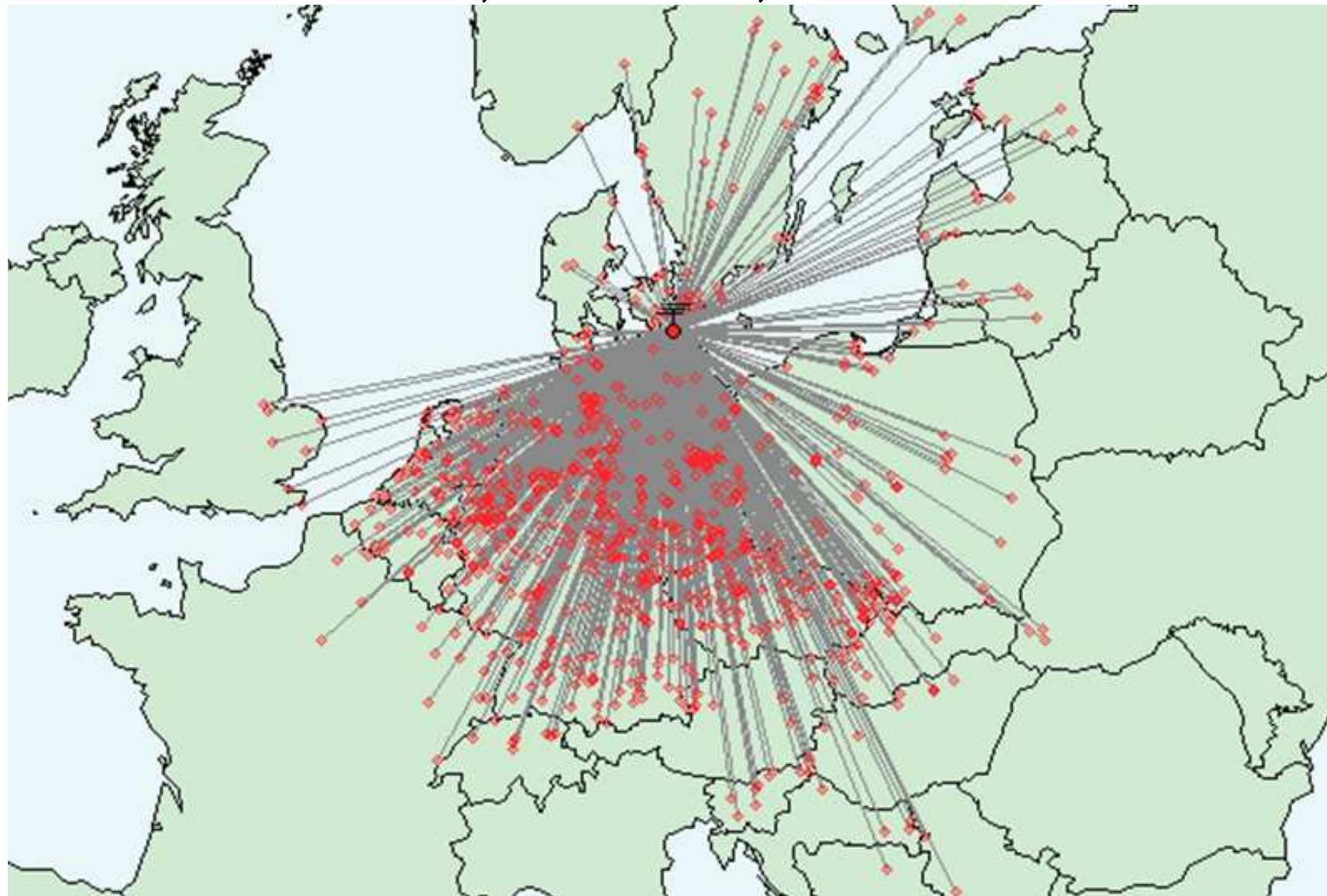


Placement of antennas



5P5T

- PA5DD, OZ1DJJ, OZ1GER & OZ1FDH
- 916 QSO 482870 points (527km/QSO)
- 123 loc, 25 DXCC, ODX YT1VP 1321 km



Operator position

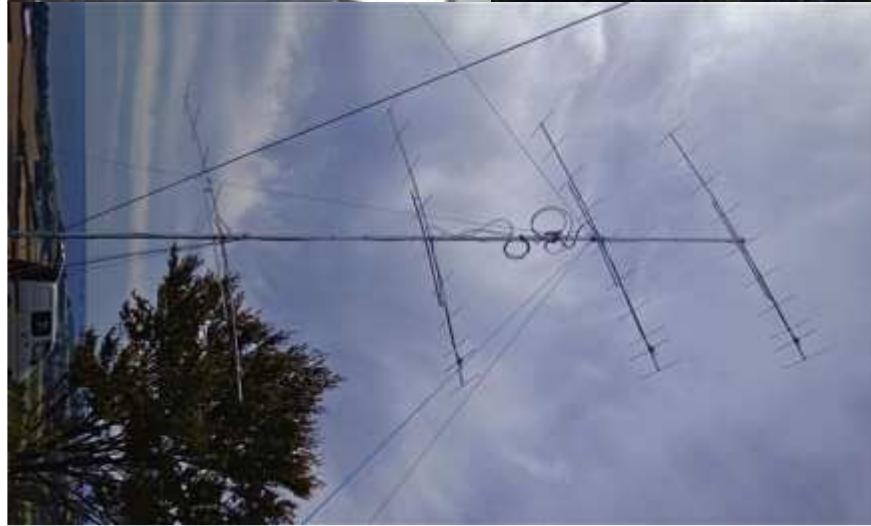


- Horsetrailer (without horse)
- Overview and simplicity
 - Only 1 turnable antenna system
 - Limit the number of buttons, cables and mess
- Rackmounted equipment
- Screens for 1st and 2nd operator

Equipment



Setup & operating



What does it take to win IARU VHF contest by the 5P5T team?

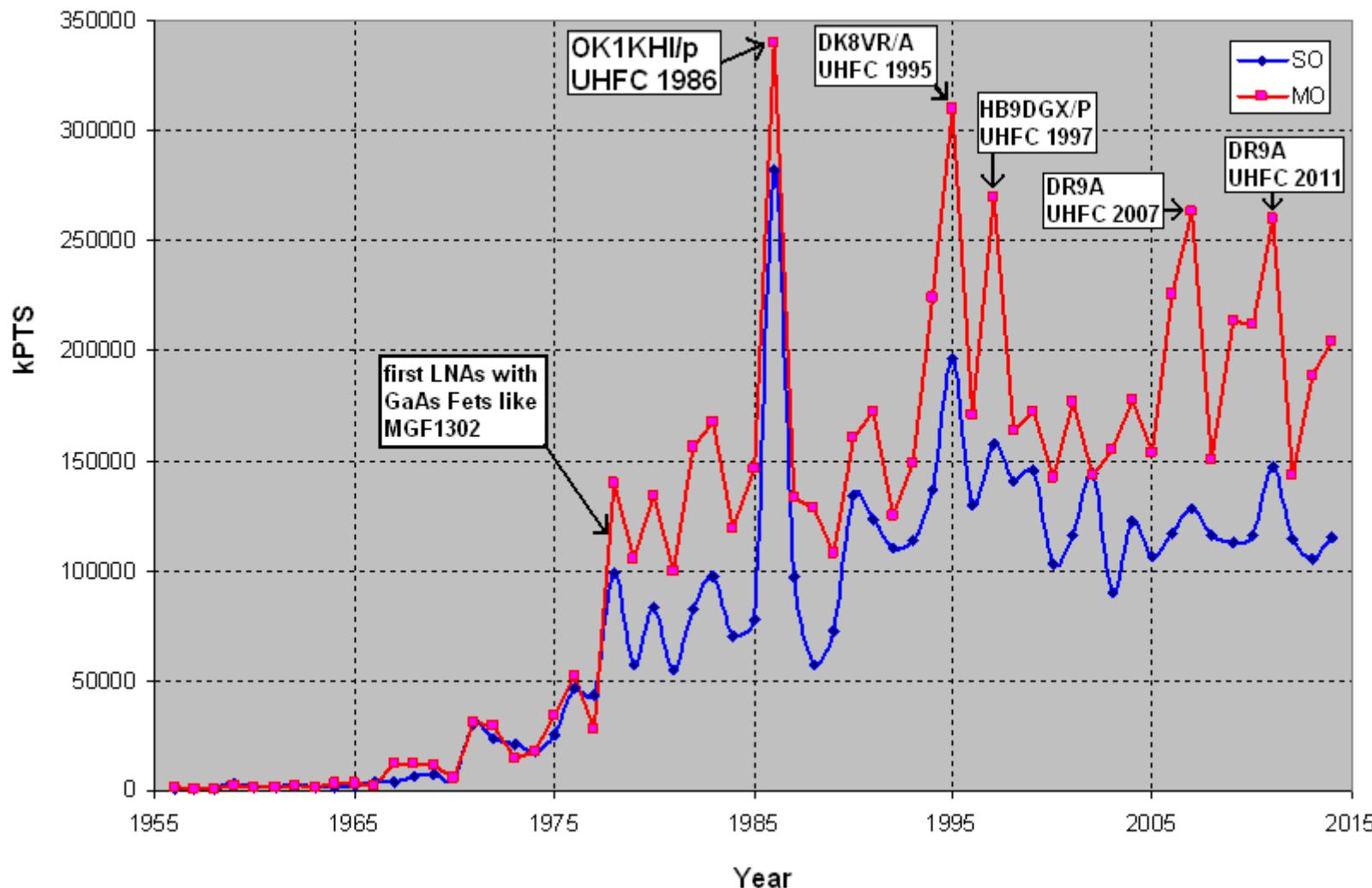
- A good QTH
- Simplicity for the operating position
- A very attentive 2nd operator
- Equipment 99,9% reliable
- At least 16 dBd ant gain, wide horizontal angle
- Hard work
- Endurance (every year!)
- Luck (condx,WX and Murphy)



IARU R.1 UHF/SHF Contest – 432 MHz

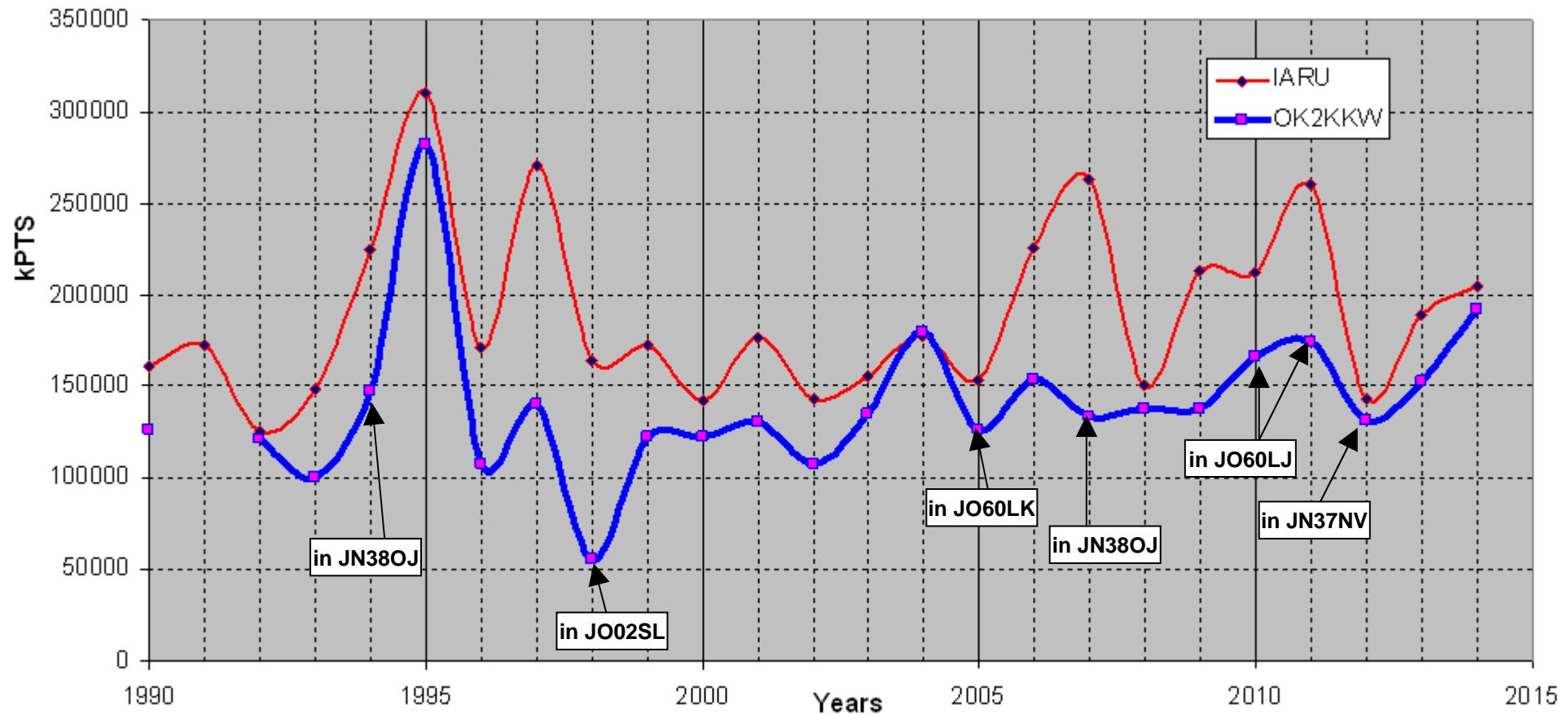
- All time record **340 069 pts** + 610 QSO was achieved by **OK1KHI/P** in year 1986 >100xPA, >100G, >40x HB (!)
- The maximal number of contacts was made by **DK8VR/P** in year 1995 - **845 QSOs**
- The maximal number of contacts in OK was made by **OK2KKW** in year 1995 - **700 QSOs**

IARU R1 UHF contest
Scores vs. Time



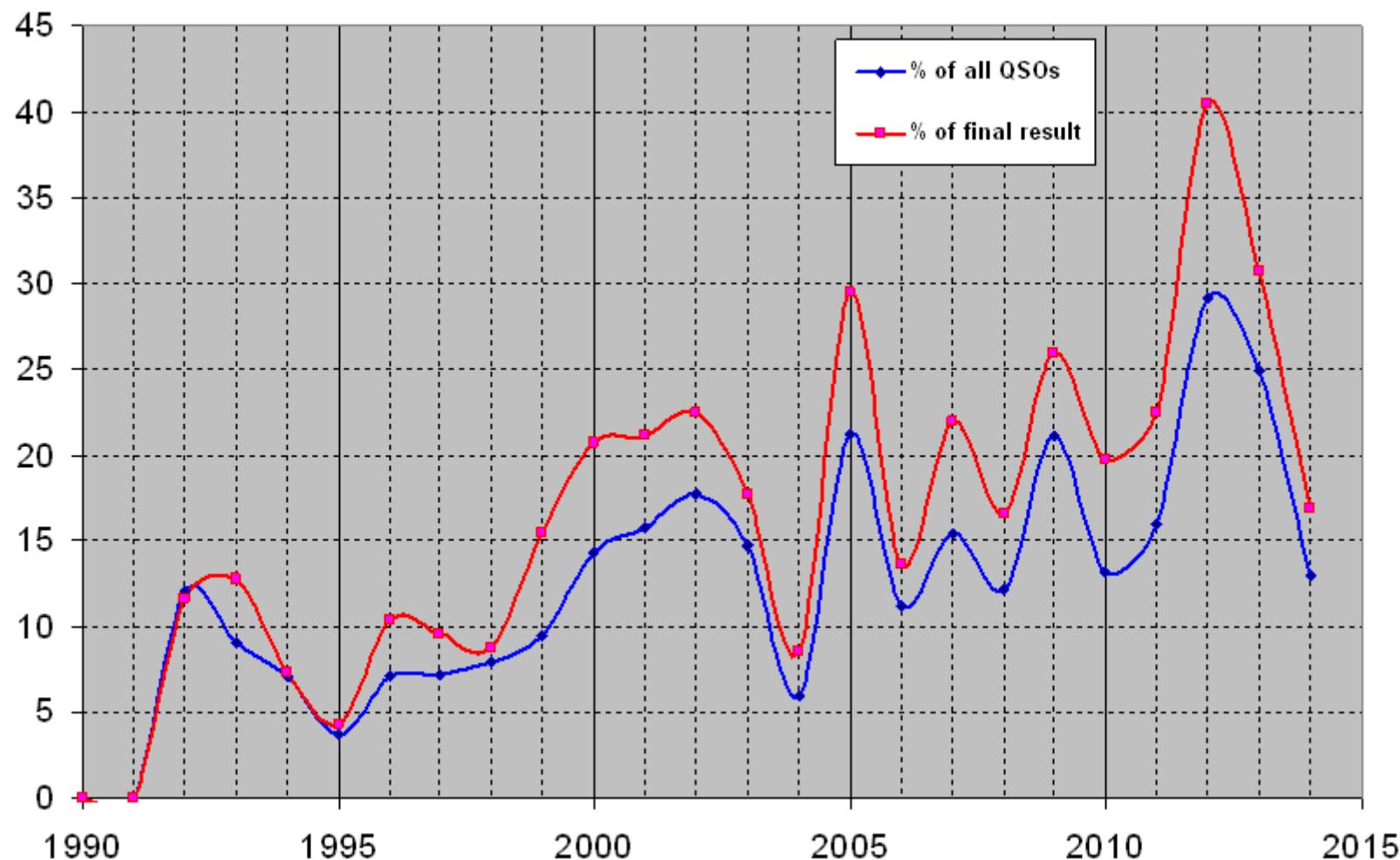
IARU R.1 UHF/SHF Contest – 432 MHz

Comparison of OK2KKW's club results on 432 MHz related to international IARU R1. results

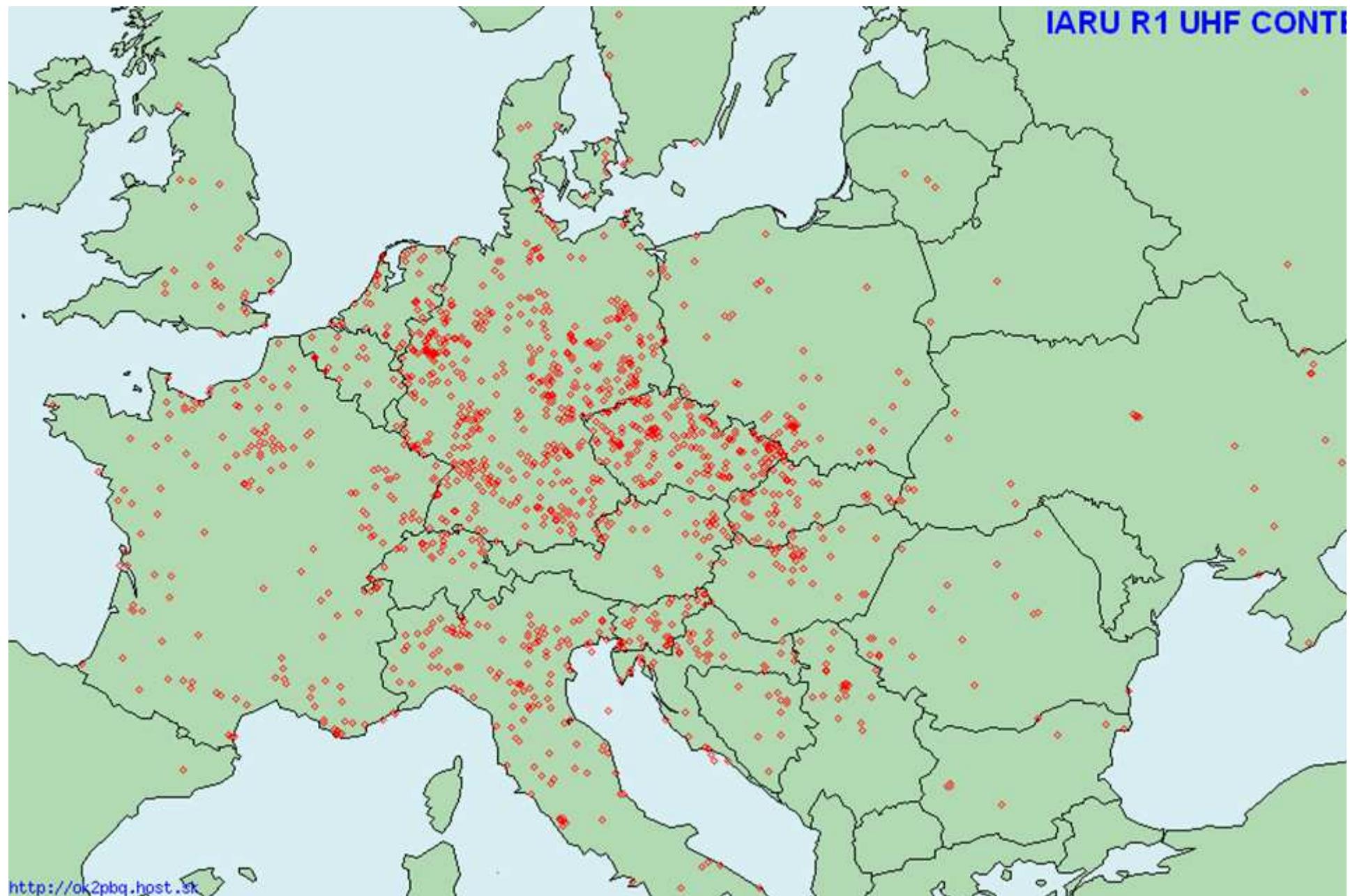


IARU R.1 UHF/SHF Contest – 432 MHz

- % of CW QSOs at OK2KKW/OK2A's LOGs during years 1990 – 2014
- less CW QSOs when good tropo condx occurred
- 0 CW QSOs in UHF Contest 1990 (!) and log from year 1991 isn't available



IARU R.1 UHF Contest 2014 – 432 MHz

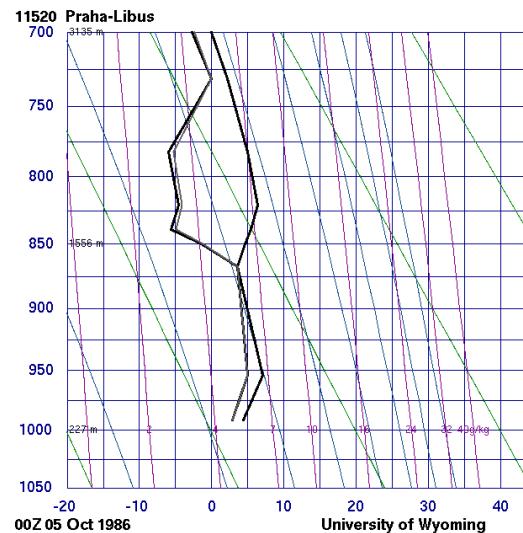


IARU R.1 UHF/SHF Contest – 432 MHz

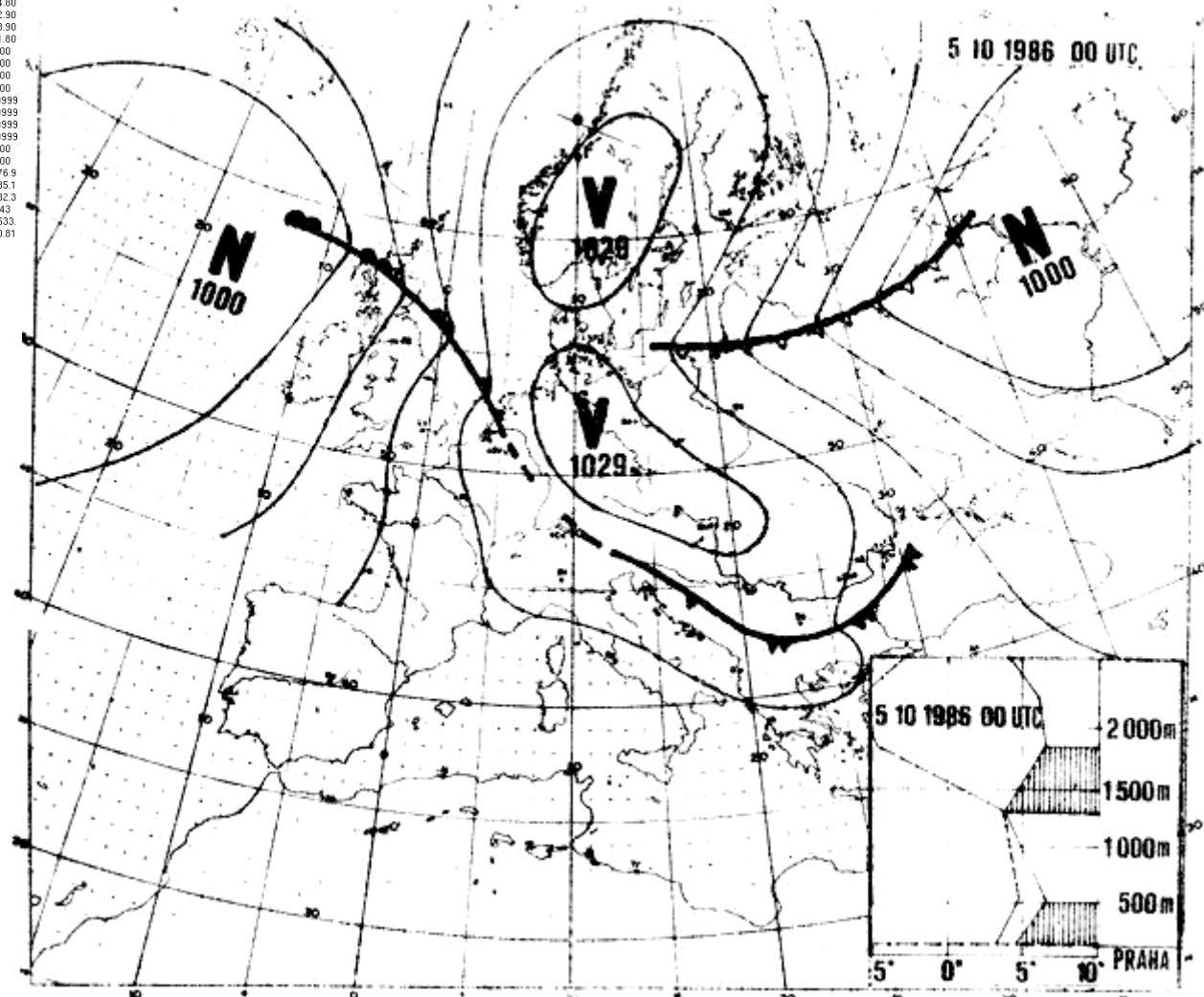
Brief review between years

1986 – 2014

IARU UHF CONTEST 1986



SLAT 50.00
SLON 14.44
SELV 303.0
SHOW 12.61
LIFT 16.43
LFTY 15.57
SWET 70.01
KINK 14.60
CTOT 12.90
VTOT 18.90
TOTL 31.80
CAPE 0.00
CAPV 0.00
CINS 0.00
CINV 0.00
EGDV -9999
EGDT -9999
LFCG -9999
LFCV -9999
BRCH 0.00
BRCV 0.00
LCLT 276.9
LCLP 935.1
MLTH 282.3
MLMR 5.43
THCK 5533.
PWAT 20.61



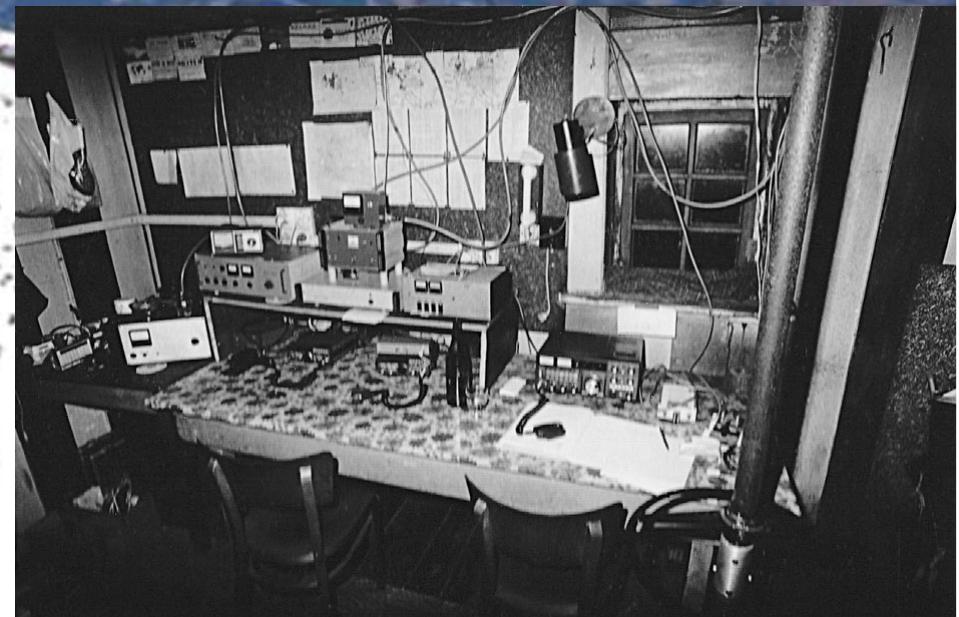
IARU UHF CONTEST 1986

432 MHz

OK1KHI/P

Snezka 1602 m ASL JO70UR (HK29b)

- 2x21el F9FT + 2xHT323 (150W) PA + FT-780
- **Worked:** ~100xPA, ~100xG, ~40xHB (!)
- Absolute all time record of
359 000 points and **610 QSO** on **432 MHz** (340 069pts after crosscheck)
- Average 588km/QSO
- I can't make any further statistic review because paper log was lost in fire...



IARU UHF CONTEST 1995

OK2KKW

Spaleniste 1042 m ASL JO60JJ

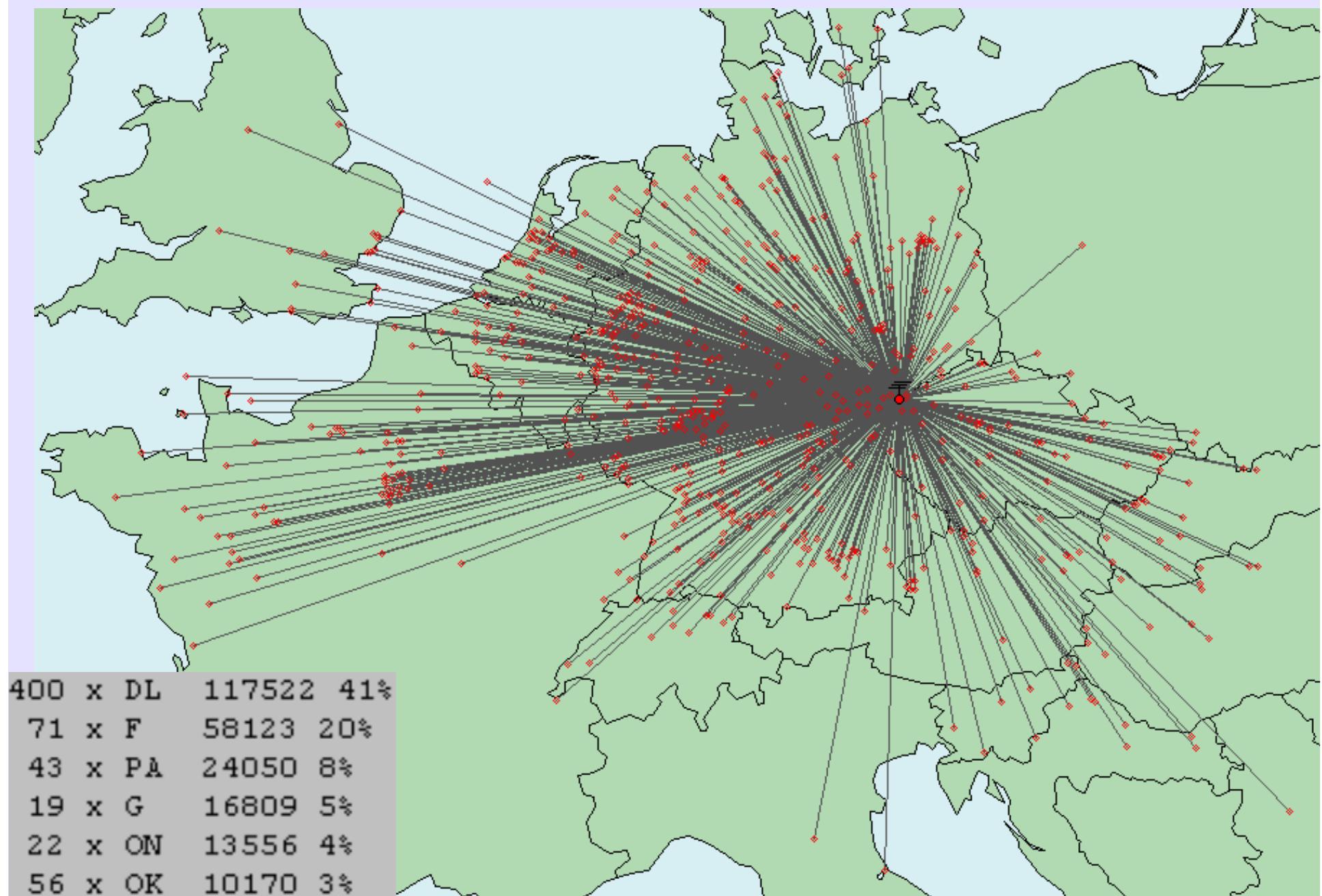


- Snezka TRX210 + transvertor Oskobrh + 0,5dB LNA + 500W GI14 PA + 33el K1FO (rig made by OK1VPZ)
- VUSC log (written by OK1DIX) under DR DOS
- OK all time record of **700 QSO** on **432 MHz** (282 187 points)



IARU UHF CONTEST 1995

OK2KKW



IARU UHF CONTEST 2011

DR9A
JN48EQ
432 MHz

- 3x 6x9el DK7ZB(19dBd) +
8x23el DK7ZB (25dBd)
40m high mobile mast
- IC7400+transverter
- enough power
- 7 operators
- **267 700 points** and
679 QSO on 432 MHz
- Average 394km/QSO



IARU UHF CONTEST 2011 432 MHz

DR9A

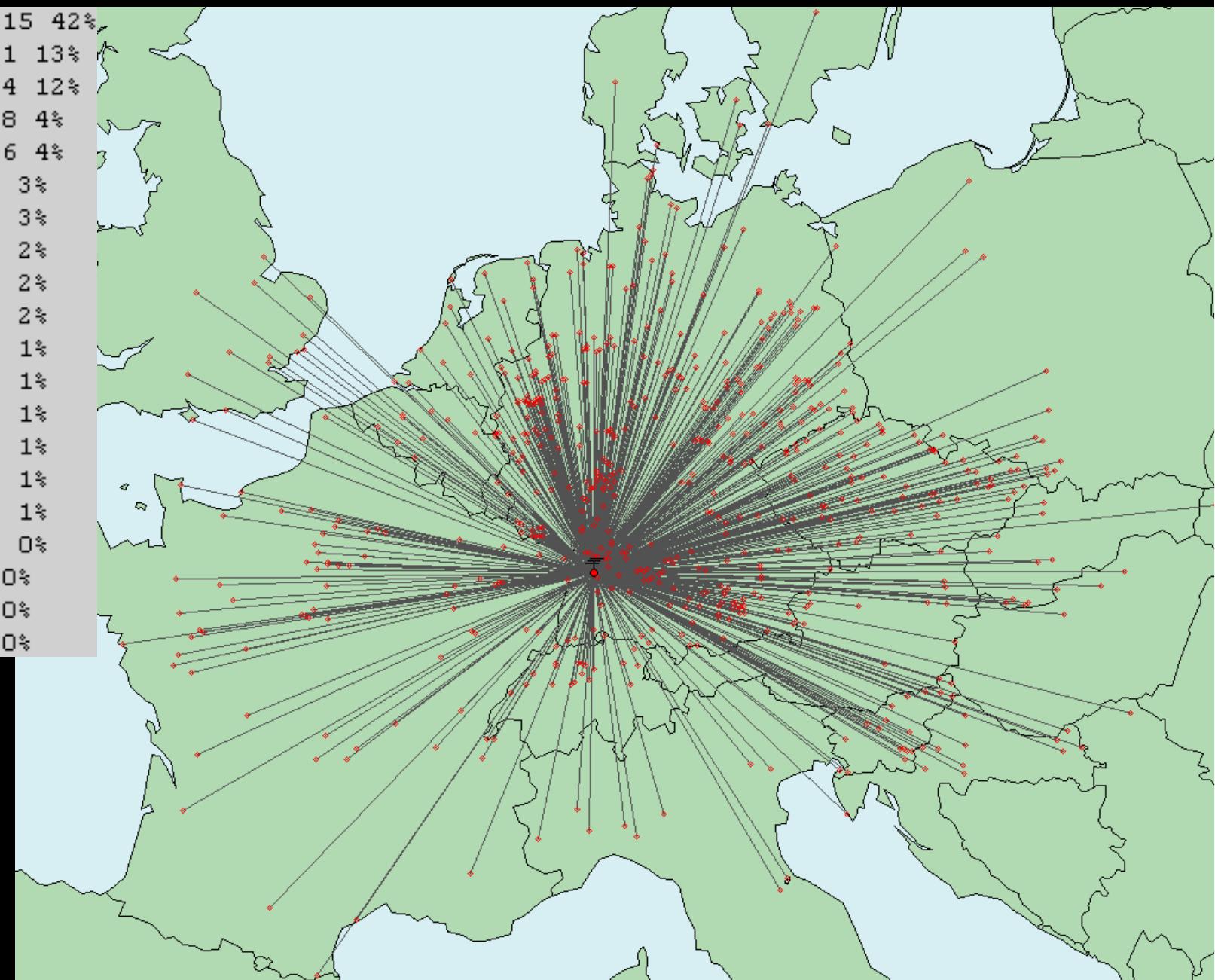
386 x DL	112715	42%
65 x OK	34911	13%
71 x F	32184	12%
15 x SP	11668	4%
19 x S5	10996	4%
13 x 9A	9336	3%
13 x G	9056	3%
11 x OM	8008	2%
16 x PA	7558	2%
11 x OE	5368	2%
10 x I	4696	1%
22 x HB	4025	1%
5 x HG	3947	1%
4 x SM	3448	1%
9 x ON	3439	1%
4 x OZ	3177	1%
1 x UR	1056	0%
1 x YU	937	0%
1 x EA	823	0%
2 x LX	416	0%

267 700pts

679 QSO

Average

394km/QSO



IARU UHF CONTEST 2011 432 MHz DR9A



IARU UHF CONTEST 2011 432 MHz DR9A



IARU UHF CONTEST 2011 432 MHz

DR9A



IARU UHF CONTEST 2011 432 MHz

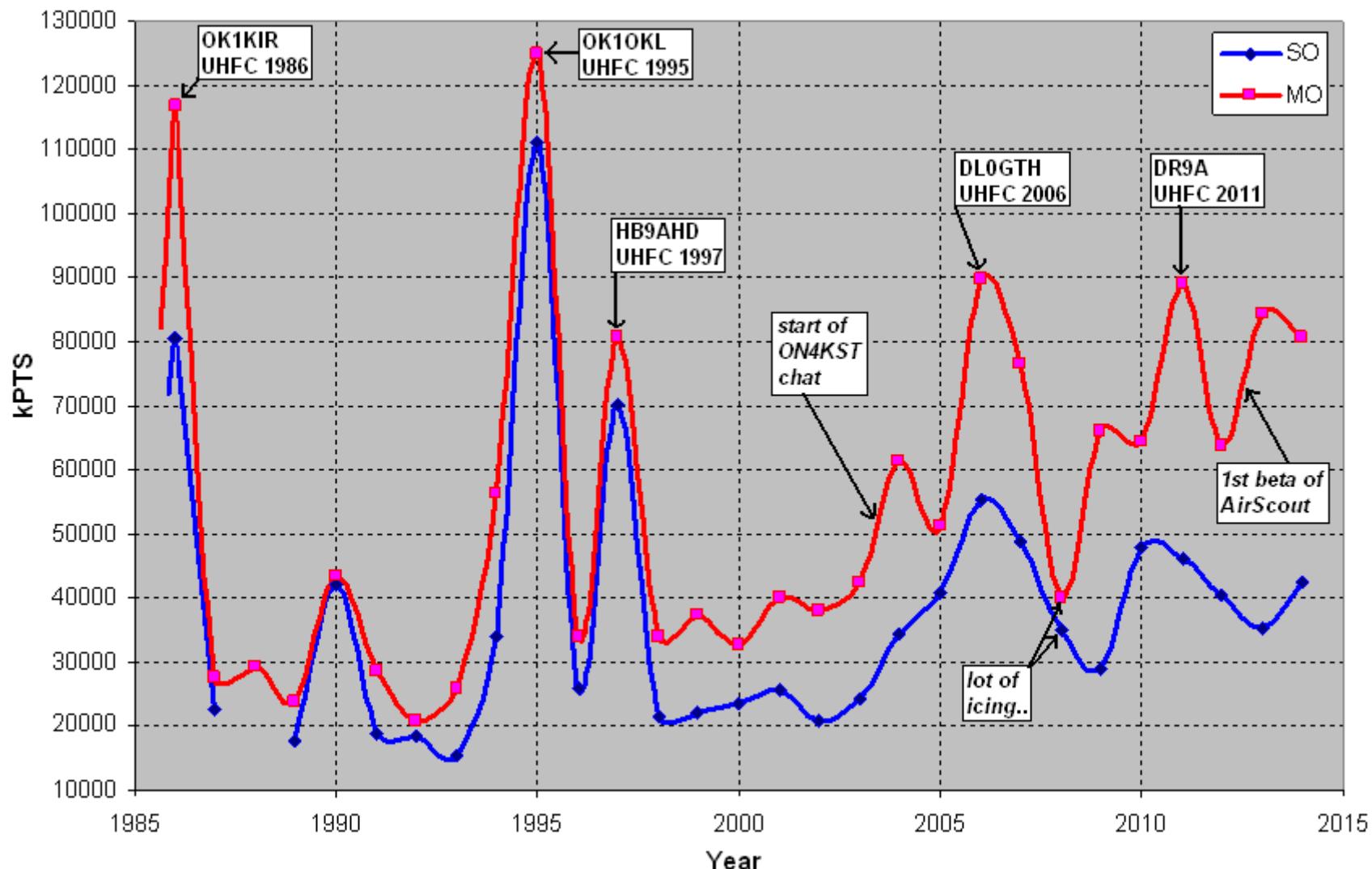
DR9A



IARU Region 1 UHF Contest – 1296 MHz

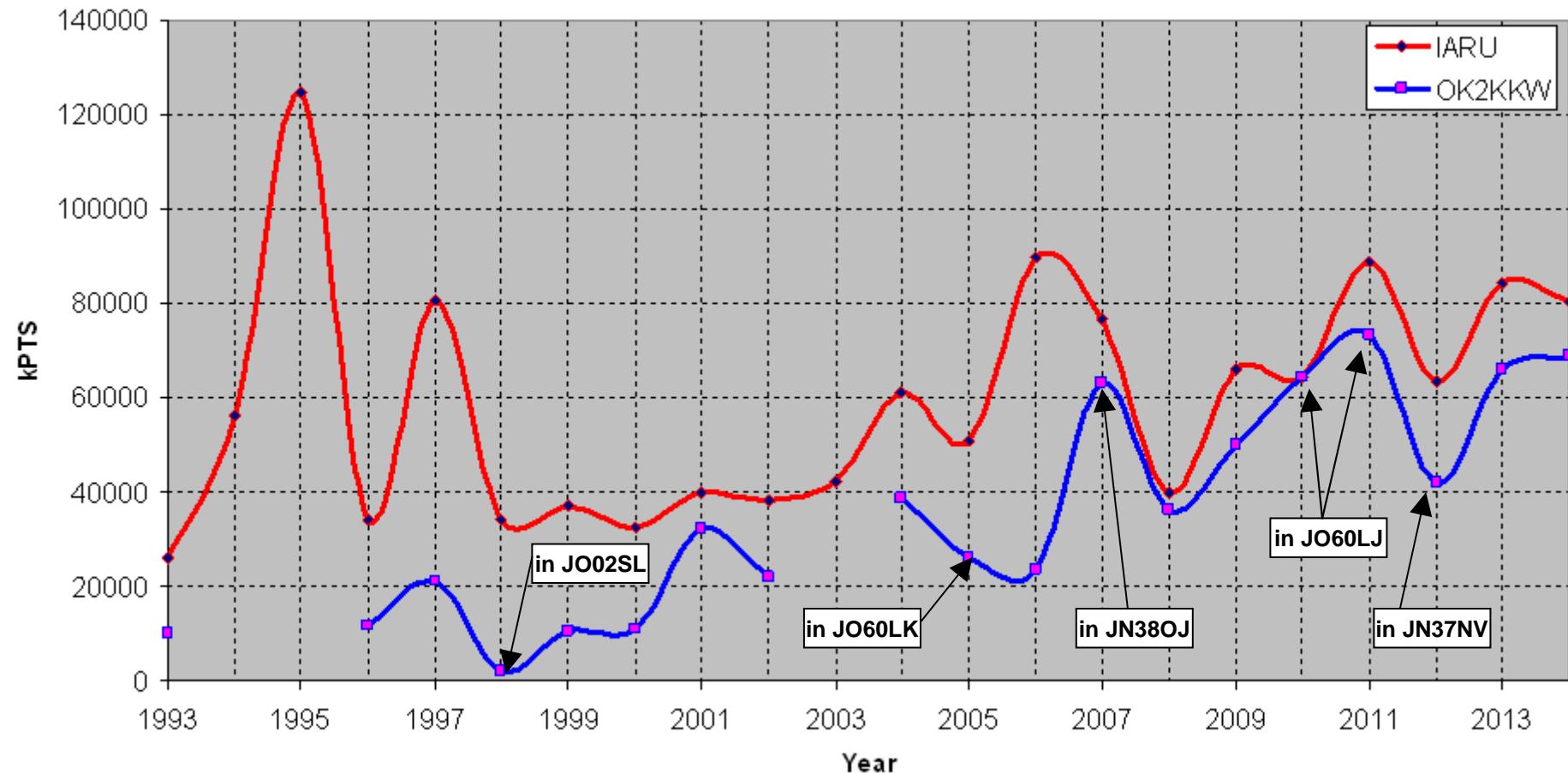
- All time record **125 093 pts + 311 QSO** was achieved by **OK1OKL** in year 1995
- CW? At OK2A usually about **29%** of all worked QSO's (UHFC 2014 – **41% of final result**)

IARU R1 UHF contest
Scores vs. Time

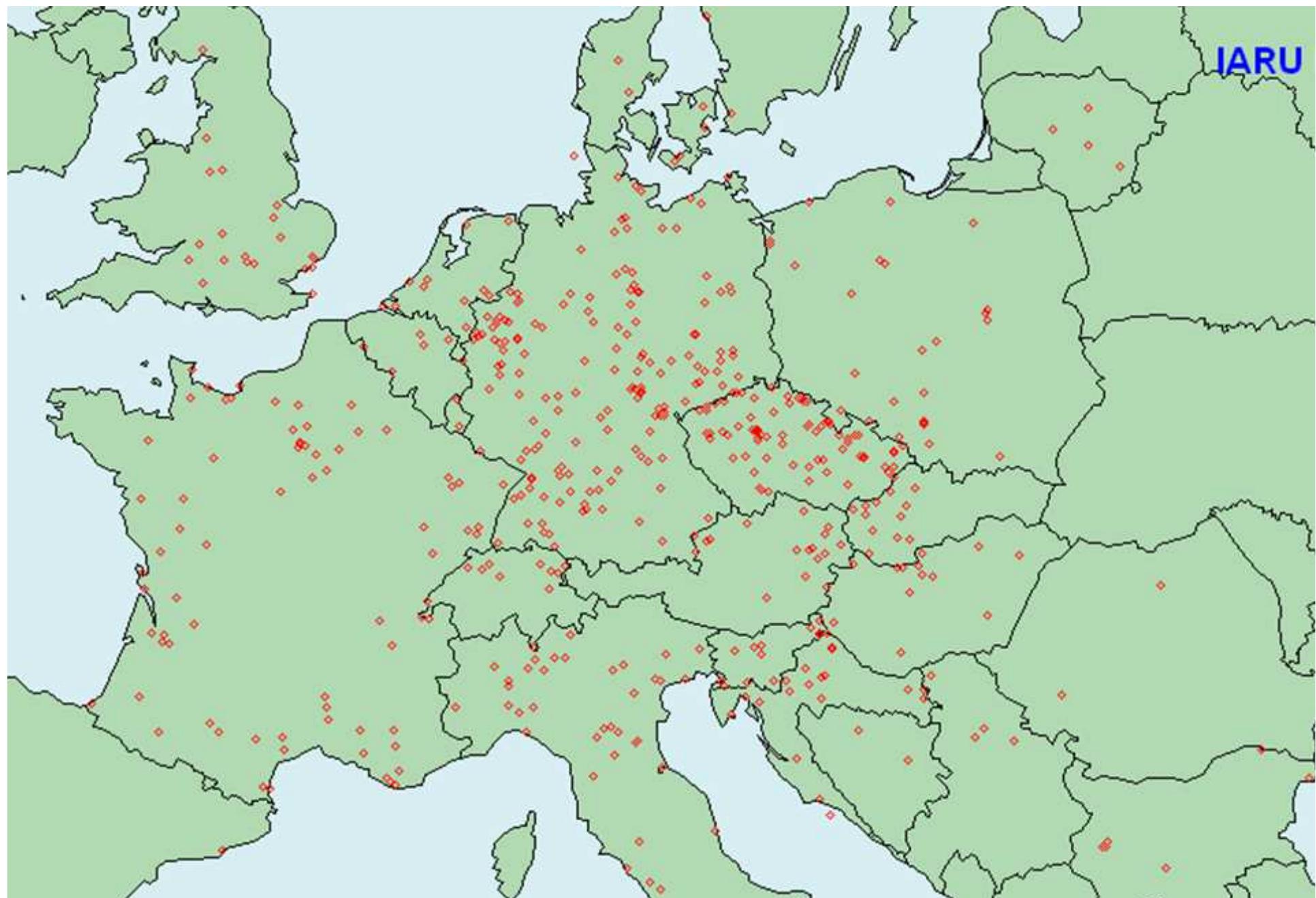


IARU R.1 UHF/SHF Contest – 1296 MHz

Comparision of OK2KKW's club results on 1296 MHz related to international IARU R1. results



IARU R.1 UHF Contest 2014 – 1296 MHz



IARU UHF CONTEST 1995 OK1OKL

- 180cm dish and 4xSBF
- 300 W PA GI7b +150 W PA (?)
- Absolute all time record of
125 093 points and **311 QSO**
on 1296 MHz
- Average 402km/QSO
- ODX F5JKK IN87PR 1177km

Source: <http://www.ok1dfc.com/About/ok1oklweb.htm>



IARU UHF CONTEST 2011

OK2A

Klinovec 1244 m ASL JO60LJ

- 2x150cm DISH + 500W (400+100W)
- 3rd best result in OK history with **75 012 points** and **250 QSO** on **1296 MHz**
- AVG 300km/QSO
- Average tropo condx



IARU UHF CONTEST 2011

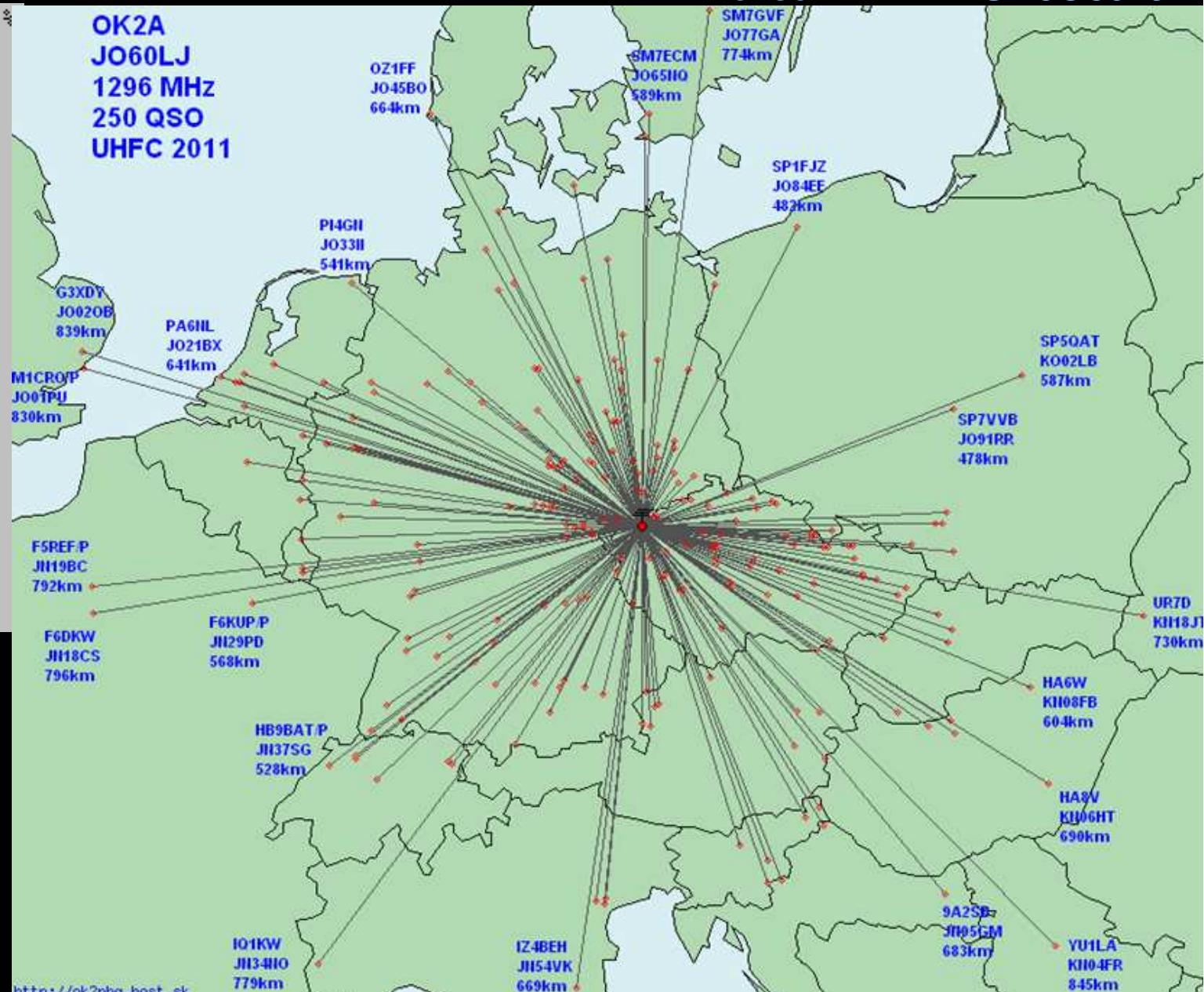
OK2A

Klinovec 1244 m ASL JO60LJ

116	x	DL	25577	34%
58	x	OK	9970	13%
9	x	PA	5194	6%
11	x	SP	4697	6%
6	x	HG	3285	4%
5	x	I	3071	4%
6	x	HB	3014	4%
9	x	OE	2692	3%
5	x	S5	2489	3%
5	x	OM	2220	2%
3	x	F	2156	2%
3	x	SM	1890	2%
3	x	9A	1732	2%
2	x	G	1669	2%
3	x	LX	1470	1%
2	x	OZ	1161	1%
2	x	ON	1063	1%
1	x	YU	845	1%
1	x	UR	730	0%

1296 MHz

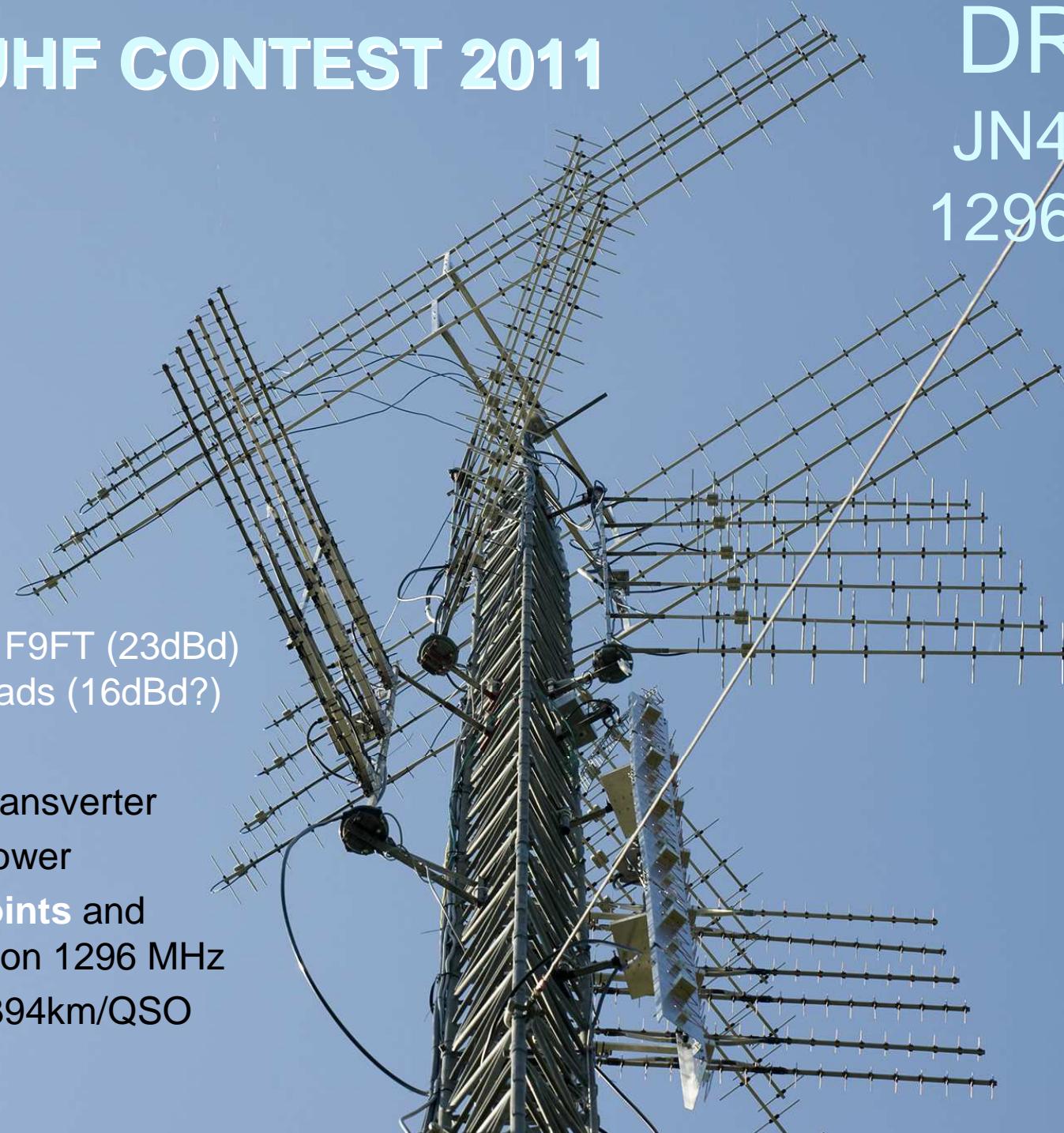
75 012 pts
250 QSO



IARU UHF CONTEST 2011

DR9A
JN48EQ
1296 MHz

- 2x 6x23el F9FT (23dBD)
+ 2x6xQuads (16dBD?)
30m AGL
- IC7400+transverter
- enough power
- **95 963 points** and
260 QSO on 1296 MHz
- Average 394km/QSO



IARU UHF CONTEST 2011 1296 MHz DR9A

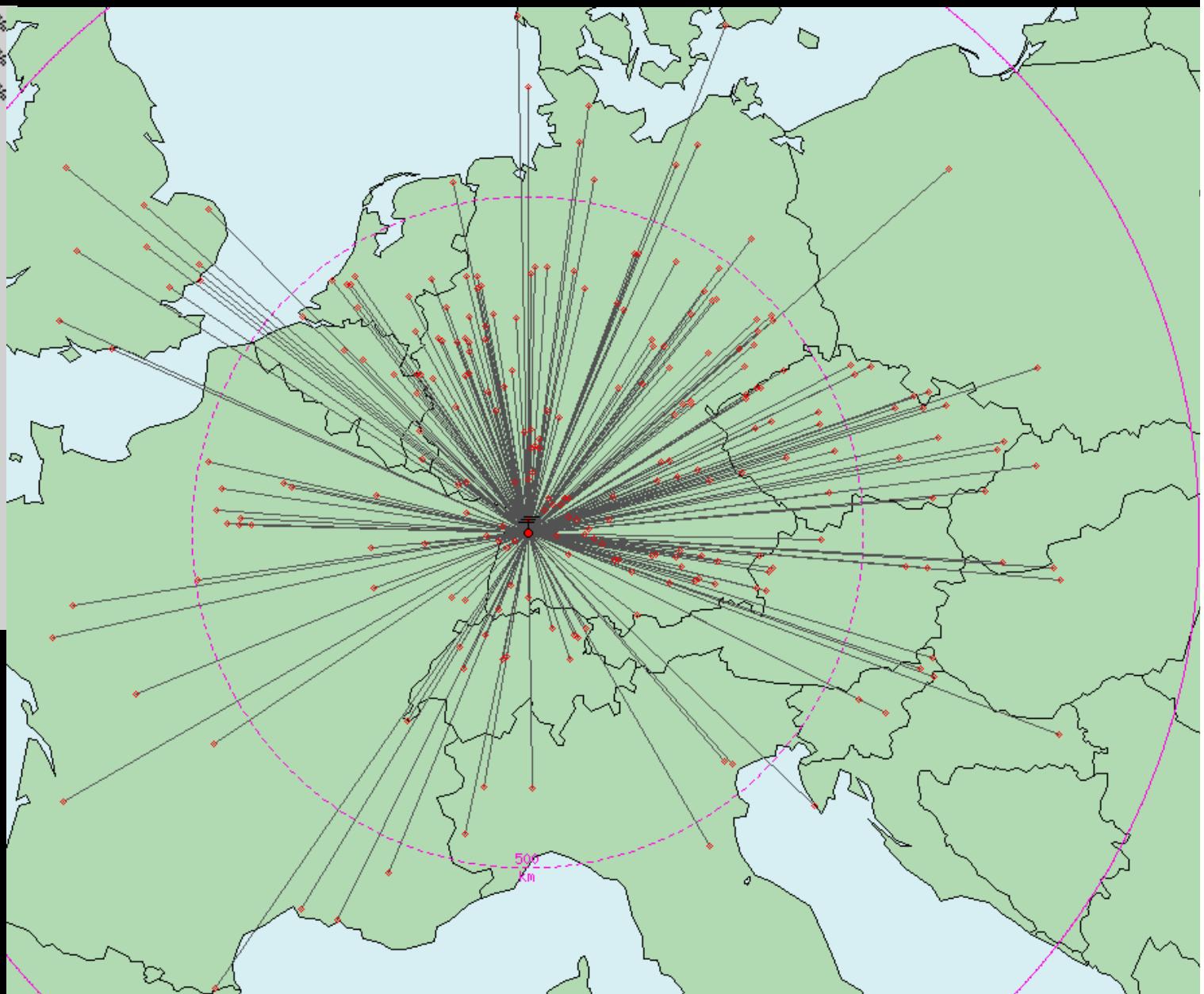
139 x	DL	38612	40%
23 x	OK	11942	12%
28 x	F	10997	11%
10 x	G	7142	7%
10 x	PA	4402	4%
7 x	OE	3048	3%
13 x	HB	2726	2%
4 x	S5	2400	2%
5 x	I	2289	2%
3 x	SP	2260	2%
3 x	OM	2157	2%
3 x	9A	2079	2%
2 x	HG	1582	1%
5 x	ON	1536	1%
1 x	EA	823	0%
1 x	SM	811	0%
1 x	OZ	770	0%
2 x	LX	412	0%

95 963 pts

260 QSO

Average

369km/QSO



IARU UHF CONTEST 2011 1296 MHz DR9A



IARU UHF CONTEST 2011 1296 MHz DR9A



DR9A



IARU UHF CONTEST 2011 1296 MHz DR9A



Any Questions?

TNX & cu on UHF bands

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

PS: special TNX for materials to 5P5T, DR9A, S51FB, S51ML, S52AA, S53WW