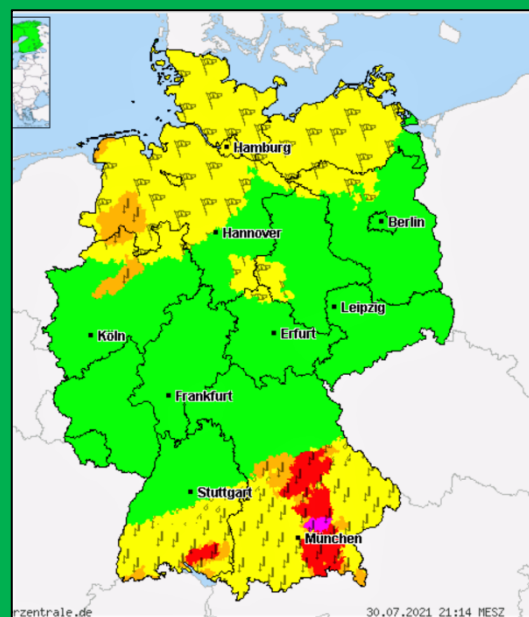


**10 GHz**

**Rainscatter**

**DL3IAS/p**

**JN49DJ**



*30. July  
2021*

After my first successful 10 GHz portable rainscatter activity on Saturday the 24th of July, the second activation take place on the following Friday. According to the weather forecast there should be thunderstorms on their way over the Alps, but with a safe distance to my location.

Best conditions for DX in southern direction. And the weather frogs were right.

The portable location was almost identical to my previous one at the wind turbines between Schifferstadt and Dannstadt-Schauerheim. I was about 700 m further to the west, and as before between vegetable fields.

My car with the station stood behind a group of bushes some meters away from the field paths, so that I wasn't exposed to the agricultural traffic (tractor gates). Luckily everything was dry otherwise I would have sunk into the mud with my car. But it was very dusty again.



The location was blocked by the bushes to the north (@ **Marco DD7PC**: Sorry, a sked was not possible). But I didn't care, because i had a perfect take off direction south to the scatter points.

The weather was almost perfect. Not too warm and dry. Only at the beginning there was a very strong wind, which suddenly died down in the evening. Fortunately, my antenna mast with the transverter remained stationary the whole time.

But the small 35 cm parabolic dish did not cause much wind load at all.

Source information for images on the cover page:

Top left: <https://www.lightningmaps.org>

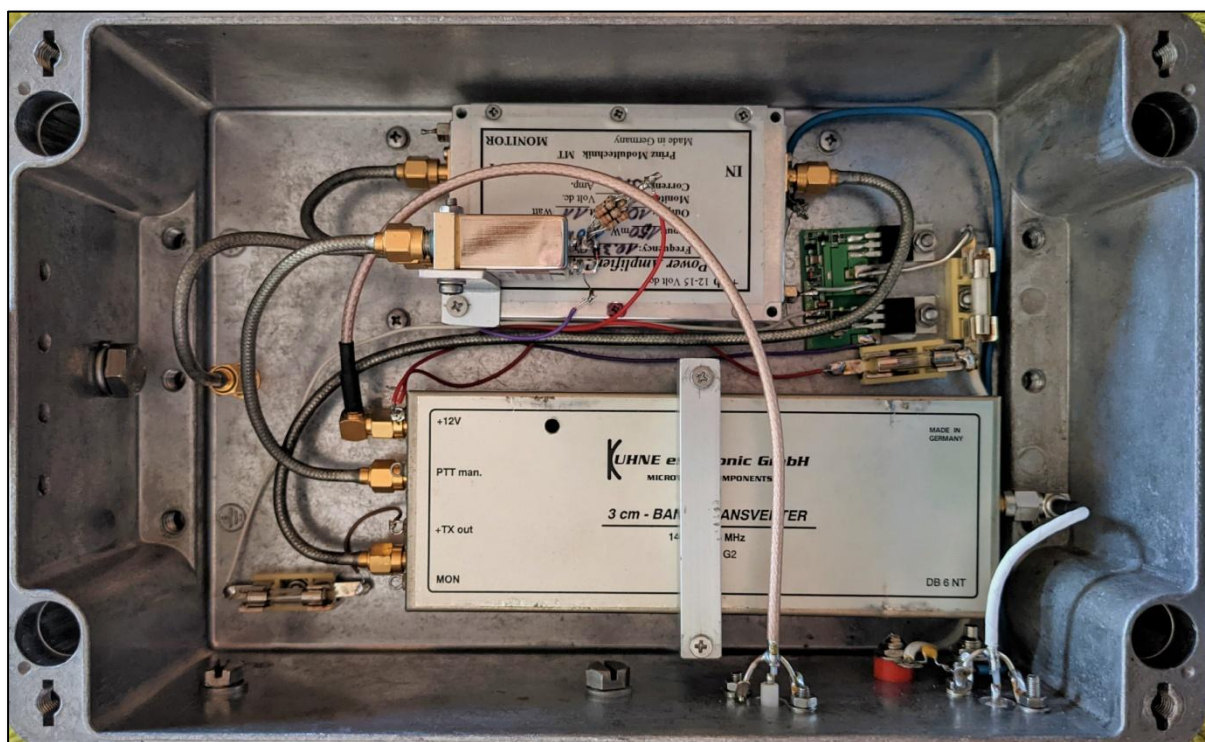
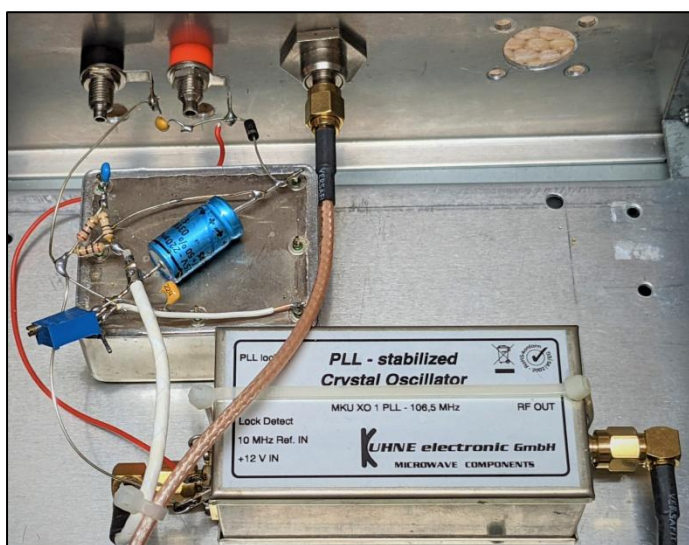
Top right: <https://home.hccnet.nl/ufte.noucha/radar4.htm>

Centre right: <http://www.unwetterzentrale.de/uwz/>



**The same equipment as the week before:**

- **DB6NT** 10 GHz Transverter MK2 with 2m IF
- 106,5 MHz PLL XO by **DB6NT**
- OCXO for 10 MHz from KVG
- 10 watt power amplifier by **DL2AM**
- 35cm Offset dish
- YAESU FT817 with original hand microphone and internal battery pack
- 18 Ah lead acid battery
- Palm Pico CW paddle
- Smartphone for mobile internet (**ON4KST** Chat, DX Cluster, Radar Maps, and Lighting Maps)

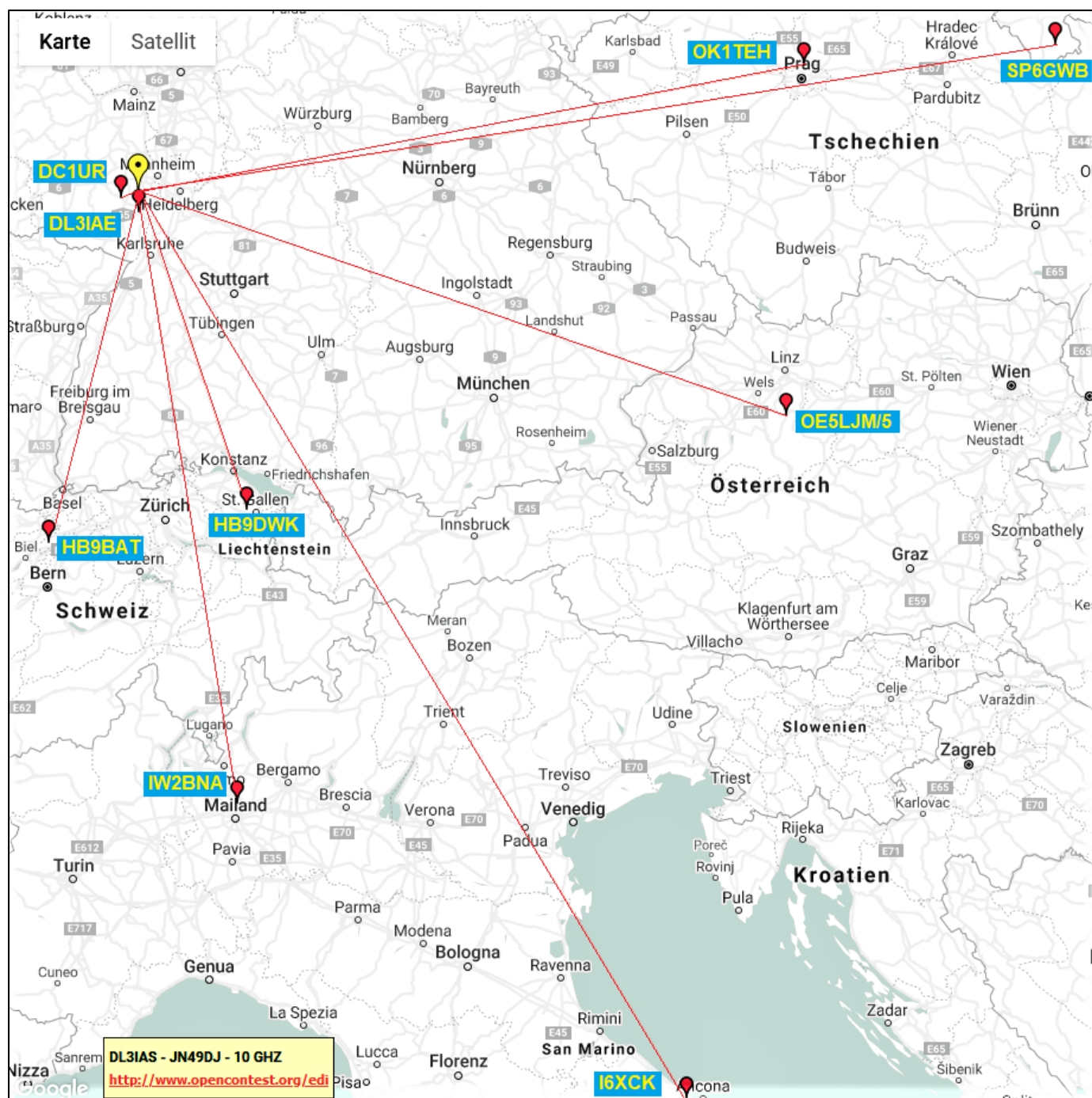








At the end there were QSOs with nine (9) different stations in my log.



Again, I will go into more detail about the individual QSOs.

In addition, I have made some audio recordings for download.

**Walter IW2BNA (JN45ON, 432 km)**

After setting up the station, and pointing the antenna to a strong scatter signal from the HB9BBD beacon, immediately Walters clear SSB signal was copied on the 100. He was in a QSO with **Daniel DL3IAE**.

A good start for this activity! No problem to work Walter. He was happy to work me on 10 GHz after a longer time.

<https://c.web.de/@337150638448182491/IJaXkquMQQqDq-wheEkVKg>

**Daniel DL3IAE (JN49DG, 14 km)**

A brief contact after the QSO to Italy. Daniel informed me that my backscatter was loud, and even louder than the signal from Walter.

**Cesare I6XCK (JN63QO, 752 km)**

Finally we have got it! **My 10 GHz ODX for this evening and year so far.** After Daniel informed me that Cesare can be heard in Weingarten, it didn't take long I could copy the CW signals from Ancone too. There was a CW QSO in progress with Reinhold DL6NAA\*, who produced a fine backscatter signal. Cesare was not as loud as Reinhold.

<https://c.web.de/@337150638448182491/UWgnlByET7Wf1d8TIZzZtw>

But we were able to complete the QSO in CW without any problems. Later I heard Cesare calling again CQ again. Emil HB9BAT called him, but was not heard.

[https://c.web.de/@337150638448182491/jch4PlpKToKYF5kwUzRD\\_Q](https://c.web.de/@337150638448182491/jch4PlpKToKYF5kwUzRD_Q)

So I achieved my goal for the rainscatter season this year: A QSO to Ancona. From my home QTH blocked by forest to the south this would be impossible.

**Fiorello HB9DWK (JN47PK, 230 km)**

An extremely loud SSB signal from the canton of St. Gallen. Fiorello had to hurry, because a heavy thunderstorm should arrive shortly in Waldkirch.

<https://c.web.de/@337150638448182491/9NIMzTZgRCmtq4q9iIXSLw>

**Helmut DC1UR (JN49BI, 13 km)**

Right after my first QSO to HB9, Helmut took the chance for a rain scatter QSO to Fiorello in SSB. Helmut's backscatter signal was not loud, but well receivable.

<https://c.web.de/@337150638448182491/Ef97M2IVTTGeBkTJIGydUQ>

After this QSO I turned my antenna in the direction of Neustadt for a short contact. Later the evening we stay in contact by phone (see below).

\* I already knew that Reinhold does SSB when it is absolutely necessary. But the fact that he can even do QRS in CW was a completely new experience for me.

### **Emil HB9BAT (JN37RF, 249 km)**

Although it looked like what no QSO to Ancone was possible for him, Emil was able to make a QSO with the Palatinate that evening. The signal from the Jura was not very loud, but no problem in CW.

[https://c.web.de/@337150638448182491/bopfaNVcTGqyYP2Q4m4\\_bA](https://c.web.de/@337150638448182491/bopfaNVcTGqyYP2Q4m4_bA)

### **Matej OK1TEH (JO70FD, 451 km)**

With some delay Matej from Prague appeared at ON4KST Chat. The thunderstorm front had moved further east in the meantime. I ask for a sked. Matej was initially not convinced (still too far away), but we tried it. And indeed: Weak signals were copied from both sides. Not loud, but it was enough for CW.

As the scatterpoints moved direction east, the signals from the Golden City gets better.

<https://c.web.de/@337150638448182491/mYaCkLq7T26-gaZQ9X3hRw>

And so after some time it was possible to repeat the QSO in SSB. Eventually it was so loud that we even made QSY on 200 for FM, which actually worked!

My first 10 GHz QSO to OK in frequency modulation.

We both made audio recordings of the FM QSO. You can hear that 3 dB more TX power output in Prague produced a FM signal with less noise.

<https://c.web.de/@337150638448182491/cKaKx4QQSDuQyXrv2JX-zg>

[https://c.web.de/@337150638448182491/2Y9jrjYPTVmq\\_oaV8XKZfQ](https://c.web.de/@337150638448182491/2Y9jrjYPTVmq_oaV8XKZfQ)

From my home QTH in Schifferstadt it was always possible to work Matej on 10 GHz. But every time it was a drama (short and weak). But now rally big signals for a long time. This was only possible with the free take off from the portable QTH.

### **SP6GWB (JO80JG, 617 km)**

Stanislaw was in the background on **ON4KST** waiting for a chance. At the beginning the distance to the scatter point in Bavaria was too far for him (500 km). But time worked for us. After signal from Matej getting louder and louder, I suddenly heard a second weaker CW signal. Was there a "GWB"? My suspicion was confirmed by him on the chat.

So at the end it was possible for a CW QSO.

[https://c.web.de/@337150638448182491/4i\\_MPTmgSemZMFcdXQT9Q](https://c.web.de/@337150638448182491/4i_MPTmgSemZMFcdXQT9Q)

By the way: Poland was a new DXCC for me on 10 GHz! It really took a very long time (QRV on 10 GHz since 27 years) to do this.

Later the evening we even could repeat the QSO in SSB after Stanislaw solved a problem with his microphone.

<https://c.web.de/@337150638448182491/H4-jSSoEQb6cA2hdEvbBYw>

### **Hans OE5LJM/5 (JN78DA, 466 km)**

When you talking about microwave activities from the JN78 square, then the first operator you may thinking about is **Rudi OE5VRL**. And occasionally **Adolf OE5KE** from Linz. But other OE5 stations are also QRV. So it was a pleasure for me to work **Hans OE5LJM/5** as a new station from OE5.

Unfortunately, the internal battery of my FT817 was empty before exchanging final 73s. I had to change the DC source used to the big lead gel battery for the transverter. But in the meantime Hans already disappeared from the frequency.

<https://c.web.de/@337150638448182491/gJbj-cdWQmGe7qgxtC1SzA>

However, we met us a second time this evening. Hans noticed my FM QSO to Prague, and called me after the QSO with Matej was completed. I was greeted as "Daniel" by Hans. The usual IAE/IAS mix up has once again struck fully h.i.

This was also my first 10 GHz QSO to Austria in FM.

### **The 10 GHz beacons I heard during the activity**

- DB0UX        JN48FX
- DB0MOT      JO40FF
- LX1DB        JN39CO
- DB0GG        JN48NR
- HB9BBD      JN47GA
- HB9G         JN36BK
- DB0ANU      JN59GG
- DB0UL        JN48XK
- DB0DON      JN58JR
- DB0ECA      JN58XD
- DB0FGB      JN50WB
- DB0RDH      JN68KW
- DL0WY        JN67AQ
- OE5XBM      JN78DJ

I was a little bit worried about not hearing any signals from HB9TA (JN46KC) at all. The weekend before, I copied the beacon from Ticino quite well via rainscatter.

According to the excellent database:

<http://beaconspot.uk>

there was unfortunately a lightning strike in the meantime!



### What else did not work (this time)

- Once again: No QSO possibility to **Jean-Paul F5AYE** located near Lake Geneva? Just like the weekend before. A little bit strange.....
- **Carlo IU4MES**, south of Bologna, appeared later on the ON4KST chat. Unfortunately Carlo is only QRV on 23 cm at the moment.
- **Sergio I1KFH** also not QRV on 10 GHz now, as he wrote me some days ago.
- For **Massimo IV3NDC** near Trieste, the scatter points were unfortunately not visible from his balcony.
- **Giorgio IK3GHY** was also not QRV that evening.

→ So for this time JN65 remains as a white spot on the map of my worked squares.

- As Matej produced a loud signal in SSB, I tried for some QSP via Chat and Telephone so **Helmut DC1UR** can work him. Not easy because his antenna rotator display still doesn't work. Finally he could find the scatterpoint by ear. But sadly the signals received in Prague weren't loud enough for completing the QSO.



*And Again:  
Thanks for the nice QSOs  
with or without the help  
of rainscatter.*



Hope to hear you again, best 73 and stay healthy

## Nino DL3IAS

