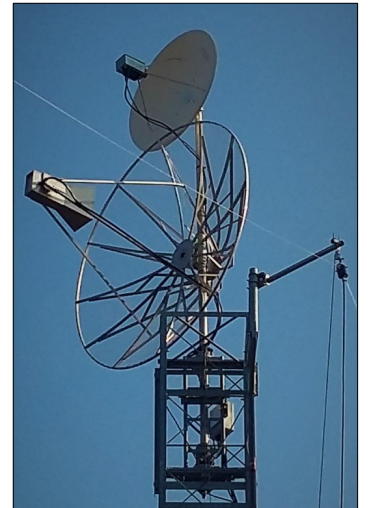




**DL3IAS/p**



**JN49DJ**



**10 GHz Rainscatter Activity 13. Aug. 2023**



# Dear amateur radio friends

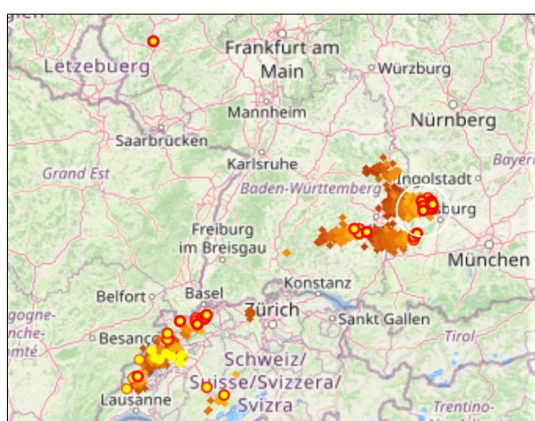
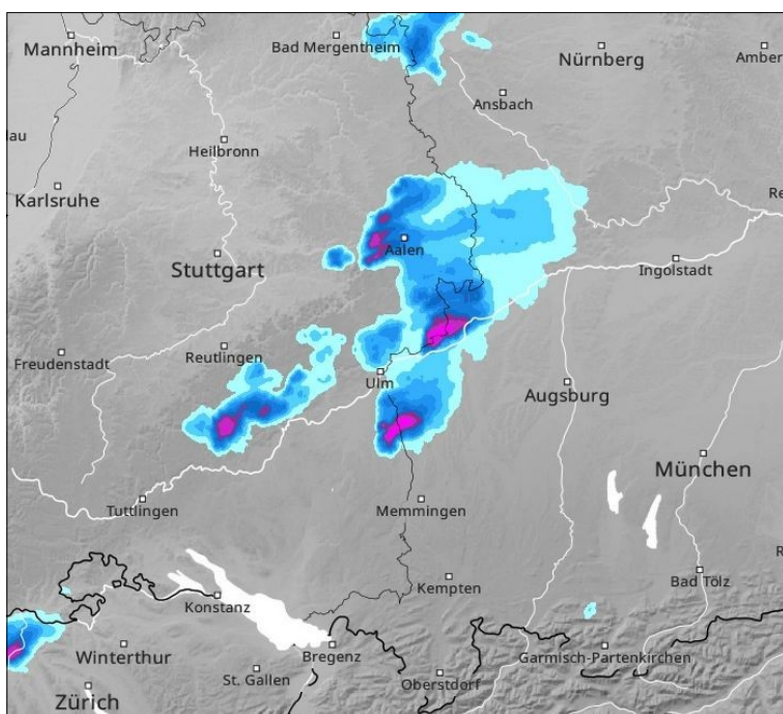
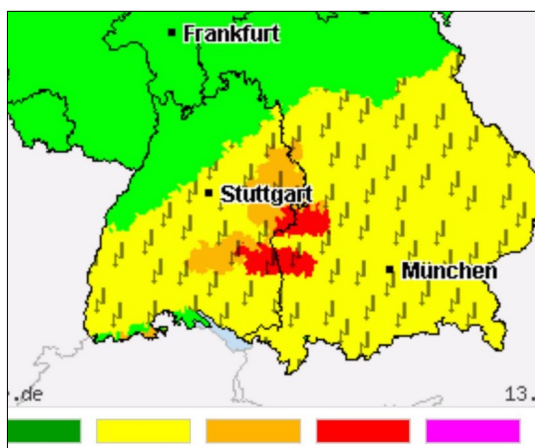
On the following pages I want to report briefly about my portable 10 GHz activity last Sunday. I was QRV from the established location between Dannstadt and Böhl in JN49DJ. This was already the fourth activation from this QTH during the annual rainscatter season.

The first activation on 06. June was actually just to test my new tripod. But it was surprisingly successful with 8 QSOs. I had already reported about this: <https://c.web.de/@337150638448182491/Mxjo8JlkRSud-ZyxgGKU7w>

The 11. July could have been the highlight of the year, but I totally messed it up myself. On this day, Daniel DL3IAE succeeded in making the first terrestrial QSO on 10 GHz between Spain and Germany! On the other hand, things went totally chaotic for me: I was QRV much too late, had chose the wrong QTH (too far north), and had forgotten my reading glasses and headphones. In addition, it was unbearably hot and humid. I could not reach the extremely high and large scatter point about 20 km west of Mâcon in JN26GH. In addition, a hasty dismantling in record time because of a local thunderstorm. It remained with meagre two QSOs (HB9BBD & DL3IAE), as well as the first reception of the beacon F1ZAU from JN26WX.

Activation number 3 on 15. July went much better again. Although I wasn't again QRV for long due to an approaching thunderstorm, I made a total of 5 QSOs (DL3IAE, F6DKW, DH3NAN, HB9DKW and HB9COP). And both HB9 stations produced loud signals in FM!

After that, a long thirsty stretch in the figurative sense, because it rained frequently very often. Mother Nature really needed it. But the weather was like autumn. Too wet for portable activities. And low rainclouds instead of high thunderstorms for rainscatter DX. But now summer has returned again. And with it high scatterpoints needed for long distance QSOs. Activation number four on Sunday 13. August was the highlight for me so far: The big thunderstorms were at a safe distance, and at the same time I had pleasant environmental conditions on site. Best conditions for a long and successful 10 GHz activity!



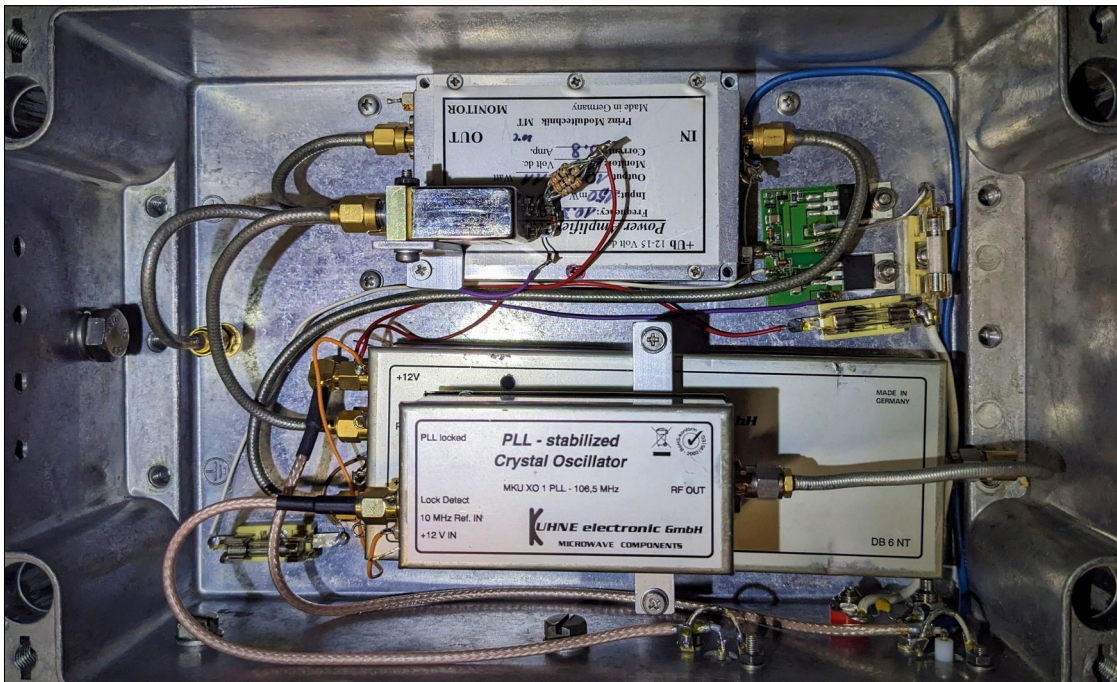
## Image sources

- Top left: <https://www.unwetterzentrale.de>
- Bottom left: <https://www.lightningmaps.org/>
- Right: <https://www.wetteronline.de/>



## THE EQUIPMENT

- Yaesu FT817 as IF-transceiver (144 MHz, 500 mW output)
- **DB6NT** 10 GHz transverter MK2 with external 106,5 MHz PLL XO (also by **DB6NT**)
- 10 watt power amplifier (2 stage) by **DL2AM**
- 10 MHz reference with **MORION MV83-D4 OXCX**, powered by 12V car battery
- 35 cm offset dish antenna by Schweiger with SQG feed by **OZ8AFC**
- Hand microphone Yaesu MH-31A8J
- Sennheiser PC151 headset (microphone not used)
- CW paddle Palm Pico
- Simple paper log (later VQ Log at home)
- Google Pixel 4a smartphone for pictures, videos and the **ON4KST** chat
- LiFePO4 batteries 12V / 18Ah (for transverter/PA) & 12V / 6Ah (for FT817) by Eremit
- Professional survey tripod





Here are my comments on the individual QSOs, as well as information about the distance and equipment (power output and antenna size). Some videos were recorded and are available on my online storage.

<b>Fiorello</b>	<b>HB9DWK</b>	<b>JN47PK</b>	<b>230 km</b>	<b>11 W output</b>	<b>70 cm dish</b>
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After **Fiorello** found the right scatter point, he was very loud, so that we could switch to FM. This was already our fourth 10 GHz QSO this year.

<b>Daniel</b>	<b>DL3IAE</b>	<b>JN49DG</b>	<b>14 km</b>	<b>20 W output</b>	<b>65 cm dish</b>
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**Daniel** says „Hello“ to me in FM right after the QSO with **Fiorello**. Of course, we were to hear each other many times that day.

I couldn't hear his QSO partners from Toulouse later. But this strange signal from him must surely have something to do with the energy transition, right? **Daniel** and I called it "Green Electricity Scatter" h.i.

<https://c.web.de/@337150638448182491/4TJjZwVXRzOlg1UHS-L1MA>

<b>Bernd</b>	<b>DL4DBX</b>	<b>JN59NK</b>	<b>205 km</b>	<b>2,5 W output</b>	<b>60 cm dish</b>
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The second QSO this year to Nuremberg. The signal from **Bernd** was not loud and very scattery. But as **Reinhold DL6NAA** would say: "CW is the king!"

<b>Carlo</b>	<b>IU4MES</b>	<b>JN54QH</b>	<b>612 km</b>	<b>15 W output</b>	<b>180 cm dish</b>
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This QSO was exceptional: The scatterpoint was south of Ulm (see weather radar map on page 2), and thus 460 km away from **Carlo**! It must have been extremely high. Normally, it gets difficult with a distance of more than 390 km. Also his signal was extremely loud, so we were able to make FM. Ironically, **Carlo** became also a victim of the notorious "IAE/IAS mix up" this evening. But at least I was immediately addressed by my correct first name, which is not a matter of course.

<https://c.web.de/@337150638448182491/q8c-49Y9QjOweUs6vKELtA>

Later, he was well audible via a scatterpoint in Switzerland. So a bit more "in the middle".

<b>Matej</b>	<b>OK1TEH</b>	<b>JO70FD</b>	<b>450 km</b>	<b>20 W output</b>	<b>65 cm dish</b>
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Very nice to see **Matej** in the 10 GHz log again. In 2022 I was almost inactive on the rainscatter band. The signal from Prague was not very loud. But here again CW saved the day.

<https://c.web.de/@337150638448182491/r1Vj9RvVT2Ossi5Km-XFbQ>

<b>Pierre</b>	<b>F4CKV/p</b>	<b>JN16NL</b>	<b>503 km</b>	<b>0,38 W output</b>	<b>48 cm dish</b>
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Of all the stations QRV that day, it seems what **Pierre** had the lowest output power.

<https://c.web.de/@337150638448182491/DYJey61ASbKQx8tJAZUL9w>

The transceiver he is using is something very special: A "**SOLECTRA**" from Denmark. These transceivers were used during the Scandinavian microwave activity weeks in the early 90s.

Thank you **Pierre** for our first QSO on 10 GHz, and the new square JN16 (#72).

<b>Salvo</b>	<b>DK3SE</b>	<b>JN37UP</b>	<b>199 km</b>	<b>6 W output</b>	<b>180 cm dish</b>
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He is completely blocked to the north by the Black Forest. So it is often only possible to work **Salvo** via backscatter. The scatter point was over the Jura. As the signal was very loud, we were able to switch to FM without any problems.

<https://c.web.de/@337150638448182491/wzBEysz1Qg6dueKORyXrdw>

<b>Hans</b>	<b>OE5LJM/p</b>	<b>JN77DX</b>	<b>468 km</b>	<b>8 W output</b>	<b>60 cm dish</b>
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I already had a first QSO with **Hans** two years ago. This time the signal was again very loud, so that we could switch to FM.

[https://c.web.de/@337150638448182491/bHU7F\\_hIR2y\\_EWSghvI4mg](https://c.web.de/@337150638448182491/bHU7F_hIR2y_EWSghvI4mg)

Just think, **Rudi OE5VRL** with his real QRO signal would have been QRV that evening! But then maybe my transverter need a new preamp transistor.....

Thank you **Hans** for new square JN77 (#73).

<b>Jean-Paul</b>	<b>F5AYE</b>	<b>JN36DH</b>	<b>374 km</b>	<b>4 W output</b>	<b>100 cm dish</b>
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Although **Jean-Paul** actually has a nice station at home, making QSOs with him are not so easy because he lives in a valley. Hence the relatively weak signal. But since it was forward scatter, we even could make our QSO in SSB.

<b>Maurice</b>	<b>F6DKW</b>	<b>JN18CS</b>	<b>448 km</b>	<b>25 W output</b>	<b>90 cm dish</b>
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I think that was the first time I was able to work **Maurice** over such a long „detour“ (via Jura). Not a loud signal, but totally sufficient for CW.

In the KST chat I heard that he also worked **Carlo IU4MES**. As he wrote me later, it was already possible to work Bologna several times on 10 GHZ in the past. Hey, that's only 858 km! But the signal from **Carlo** was never as loud as this time.

<b>Franco</b>	<b>IK4ADE</b>	<b>JN54OE</b>	<b>620 km</b>	<b>1 W output</b>	<b>100 cm dish</b>
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My ODX for the day. Here the scatter point was in Switzerland. The lower radiated power compared to **Carlo** (minus 18 dB) could not be ignored. But thanks to forwardscatter it was possible to complete the QSO in SSB.

Thank you **Franco** for our first QSO on 10 GHz.

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..... what did not work that day for me .....

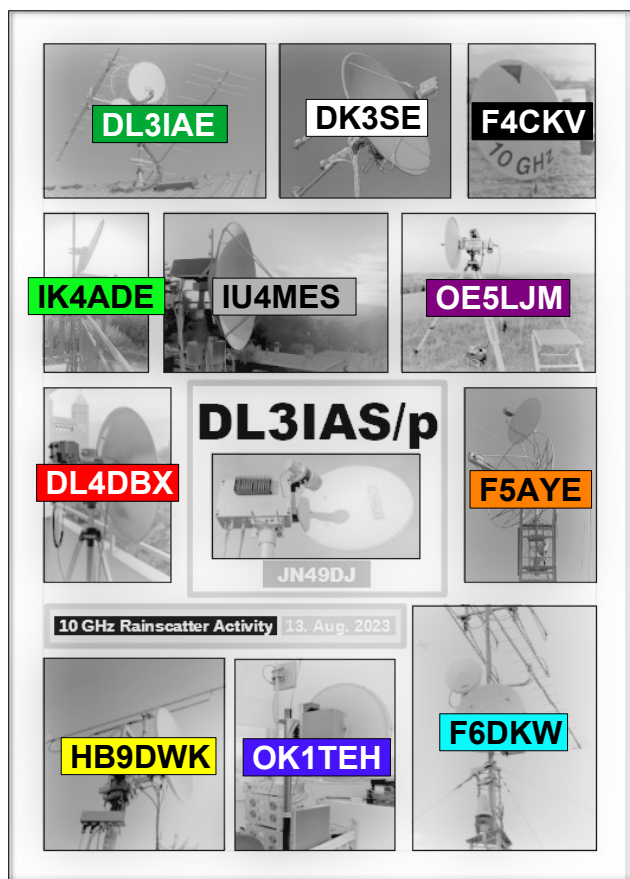
Somewhat later, a large scatter spot developed in southern Burgundy. Not far from Mâcon, and thus almost the same position as the big opening on 11. July. First, of course, **Salvo** had the opportunity to use this scatter. And some minutes later also **Daniel** whos was able to make QSOs with the „usual suspects“ from the Toulouse area (**Dom F6DRO** and **Jean-Claude F5BBU**), plus a new station (**Jean-Louis F5DYD**).

But at my site only noise again. Apart from the fact that I have at least 6 db less antenna gain compared to 65 cm dish of **Daniel**, i was probably again 15 km too far in the north.

With a little more perseverance I could have worked **Giorgio IK3GHY** and **Cesare I6XCK** after 21:00 local time. But I didn't want to dismantle the station and driving home in the dark. So i went QRT before 20:00 local time. Beside this, my smartphone would have run out of power. I didn't expect to be QRV for that long.

But that was not tragic, as I already worked **Giorgio** and **Cesare** in 2021. So we all know that it is possible in principle, isn't it?

I'm sure you've asked yourselves:  
„Who owns these antennas on the title page?“  
So here are the answers...



Thanks to all QSO partners for the pictures, and the permission to use them in this report.

#### Links for further 10 GHz reports (PDFs) from 2021

Rainscatter on 24. July 2021

<https://c.web.de/@337150638448182491/84pQw1KLRyyj7TTQ-OHdPg>

Rainscatter on 30. July 2021

<https://c.web.de/@337150638448182491/MrP005IGQkODTYMUHrTZOa>

Rainscatter on 15. August 2021

<https://c.web.de/@337150638448182491/QRjLLTe8SP--h4O-j8P2jw>

IARU UHF/SHF Contest on 03. October 2021

<https://c.web.de/@337150638448182491/16icPMYXRnylXAIM9GK-0A>

And the story why I decided to go only portable for  
10 GHz in the future (in German)

[https://c.web.de/@337150638448182491/O9W75l\\_ETYmQevHbtX\\_OLg](https://c.web.de/@337150638448182491/O9W75l_ETYmQevHbtX_OLg)

Tnx for all the nice  
Rainscatter QSOs  
and best 73

Nino DL3IAS

