

The 144 MHz EME NewsLetter

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DX7EME QRV from Panglao Island, Philippines

After intensive planning for months this past November Udo DK5YA, Erwin DK5EW and Gerald DL8FBD with assistance from Eddie DU1EV became QRV from the Philippines. Their QTH was on the island Panglao South of Cebu in PJ19VN from where they worked EME on 2m and 70 cm.



From left: DL8FBD, DK5YA, DK5EW and DU1EV.

On 144 MHz they were QRV with a pair of 8/8 elements 10JXX xpols, a decent SSPA and an Elecraft K3 with a dual rx transverter by HA1YA, diversity adaptive RX and circular TX. The entire equipment had been shipped a month before the DXpedition to the Philippines and – believe it or not – it arrived safe and sound. So the team had some peace of mind when they left Germany for their 26 hours trip via Hongkong and Manila to Panglao. The first big challenge was getting adjusted to the tropical weather upon arrival, some 30°C and very high humidity which made every piece of work very hard. Particularly bringing the equipment to the shack and building the antenna was very

tough: It meant multiple ups and downs a staircase because the shack was on a tower some 16 m above ground. Of course there was no elevator available...and that was highly being missed.



Antennas and shack were on top of a 16 m tower (Photos DX7EME)

On November 1st at night everything was ready for operation except for the weather. Tropical thunderstorms made operating being risky, for both equipment and operators. Sitting on the top floor of a building towering the surrounding area gives a strange gut feeling. Therefore for safety reasons operations had to be suspended every now and then, equipment disconnected and operators “grounded”. Sadly, the thunderstorms became a daily companion during the course of the entire DXpedition. And so was the usual thunderstorm QRM from the lightnings. Only, this was not the only QRM source; more about this later.

With interruptions explained before still some 30 QSOs were made on 2 m until moon-set. The second day was much more successful and resulted in another 70 contacts completed. However, another QRM source was discovered adding to the t-storm QRM: Some strange kind of noise was detected in the lower part of the 2 m band, ranging from the band edge up to about 144,150 MHz and consequently spoiling the entire EME sub-band. Only beyond 144,250 MHz the band was quieter again. DX7EME changed the operating frequency from 144,114 MHz to 144,144 MHz where the noise was a little less but still very much present noise still deteriorating rx sensitivity.

After careful inspection with a spectrum analyzer (yes, they brought one!) the team found out that this QRM resulted from a mixture of reasons: Firstly, they learned that some locals re-broadcasted the terrestrial TV on 144 MHz. Funny, isn't it? The spectrum very much looked like digital voice which was now being explained. Secondly, the local mains supply had no real ground line connected. This meant that any part of the equipment carried a particular voltage vs ground. Dangerous and unbelievable – but that's the way it was. Turning the mains plugs by 180° and putting it back in decreased the noise by some 6 dB!

Though these external influences were strong – let alone the billions of aggressive mosquitos permanently attacking the operators – the team still continued completing contacts, 30 on one and 70 the following day when the goddess of luck dropped by and QRM was less than the days before – and so on. Hence, at the end everybody was very happy having conducted a very successful DXpedition though so many obstacles were present. After changing to 70 cm for the final days before the degradation turned very bad at least there was a time to relax and do what tourists do: enjoying the warm weather, the good food and the beautiful beaches - and making plans for the next DXpedition.

Upcoming DXpeditions

For more information on current and upcoming DXpeditions please have a look at www.mmmmonvhf.de from where most of the information here was gathered.

EME from Guatemala

Chris PA2CHR and Jos PA3FPQ have now received their call signs TD9CHR and TD9FYC. They plan to be QRV from EK44SB starting February 23rd to March 4th. Setup is FT-857, 2 x 10/10 ele X-pol. (16 dBd) and SSPA. Latest news are on <http://pa2chr.nl/News.html>

PJ2T Curacao DXpedition

Gene KB7Q has already left for Curacao where he will be care-taking the PJ2T contest club's house in FK52KG. From February 20th to 22nd he will be QRV as PJ2T on 2 m EME with a single 12 elements LFA Yagi, 800 watts, K3S with internal transverter and an excellent pre-amp. His tentative schedule is February 20th: 0000z - 0200z moonset salt water for Asia/USA, 1530z Moonrise over hill for EU/USA; February 21st: 0000z - 0245z moonset over salt water for Asia/USA, 1600z moonrise over hill for EU/USA; February 22nd: 0000z - 0345z moonset and obstructed moonrise 1700z onward. Frequency is 144.135 MHz +/- QRM/birdies and PJ2T always first JT65b.

CR2EME: X-Team Travelling to Azores

Frank DH7FB and Bernd DF2ZC will be QRV from Azores end of March. They will use the call sign CR2EME and stay in HM77FT at the QTH of José, CU2CE. Activity should start on March 25th and end on March 30th at latest. The 2 m setup is FT857, LDMOS-SSPA and MGF1302 preamp, antennas are 2 x 8/8 ele xpols (DK7ZB design). Latest news are on <https://xteamdxps.blogspot.de/>

Time Table

5 Mar 2018 March issue of the 144 MHz EME NewsLetter ready for download at <http://www.df2zc.de>

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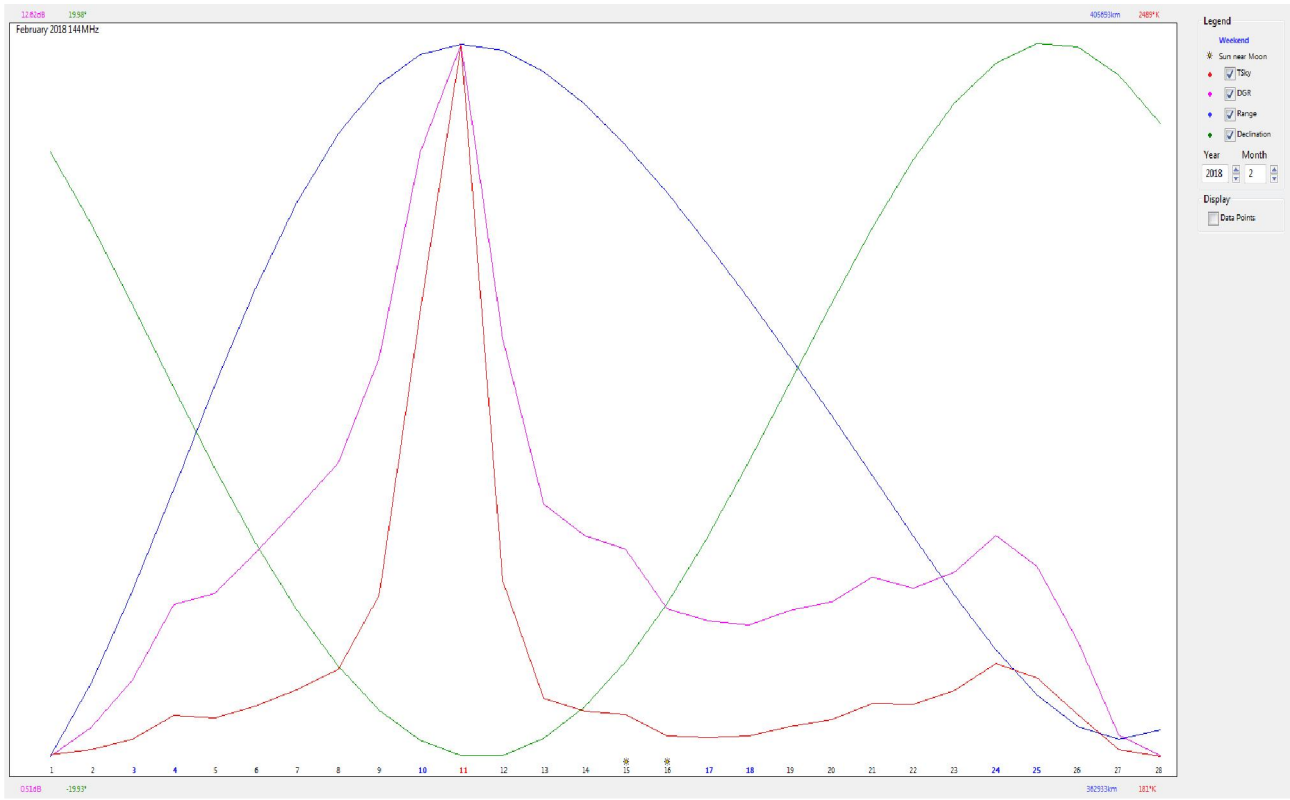
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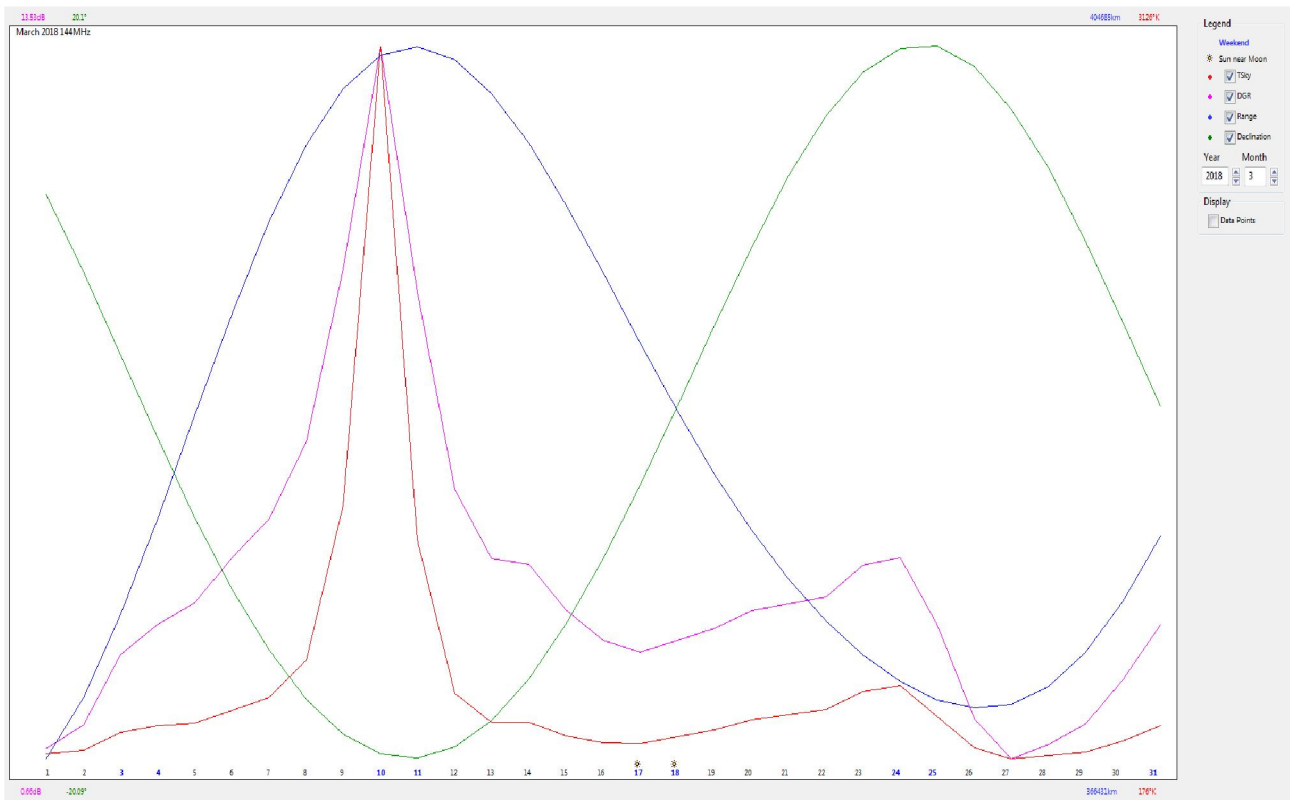
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Moon Conditions



Moon Graph February 2018



Moon Graph March 2018

(Courtesy of David GM4JJJ (www.gm4jjj.co.uk/MoonSked/moonsked.htm))