



Cumulative Man-Made Noise: an observation

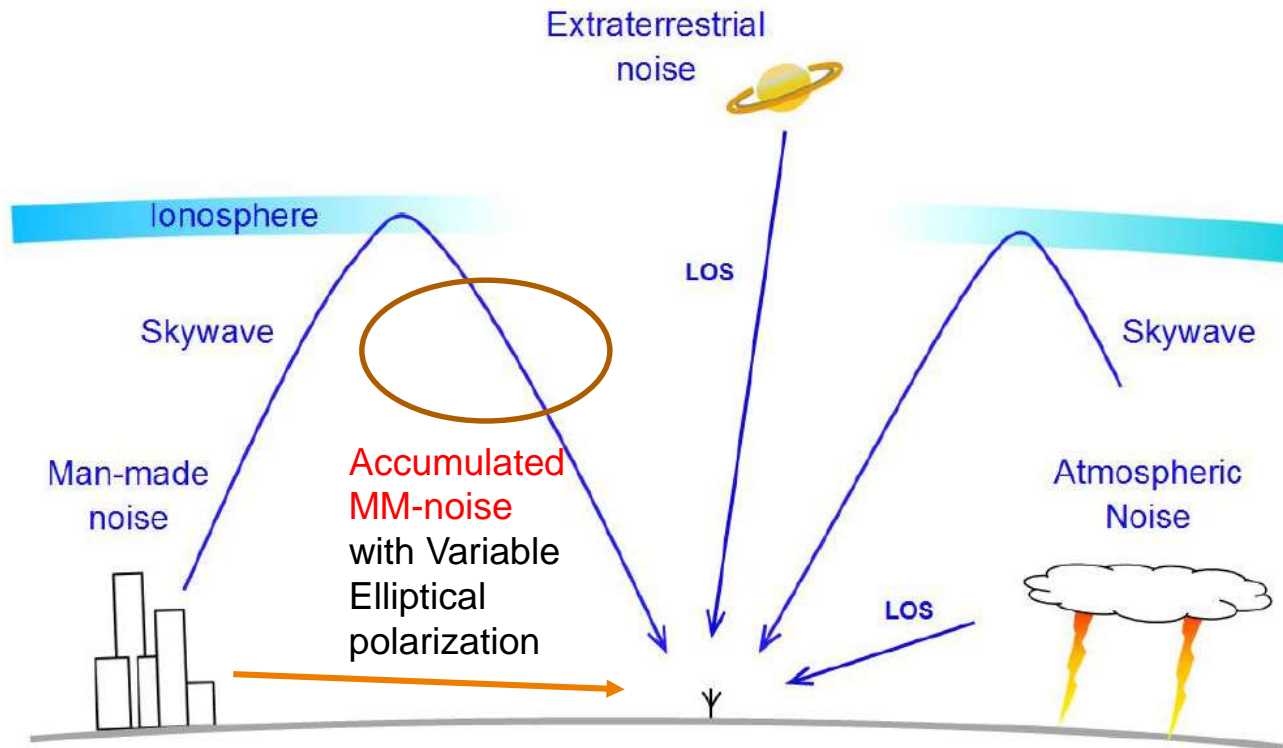
February 2015 Spectrum Availability WS meeting, San Diego, USA

Ruud Overduin



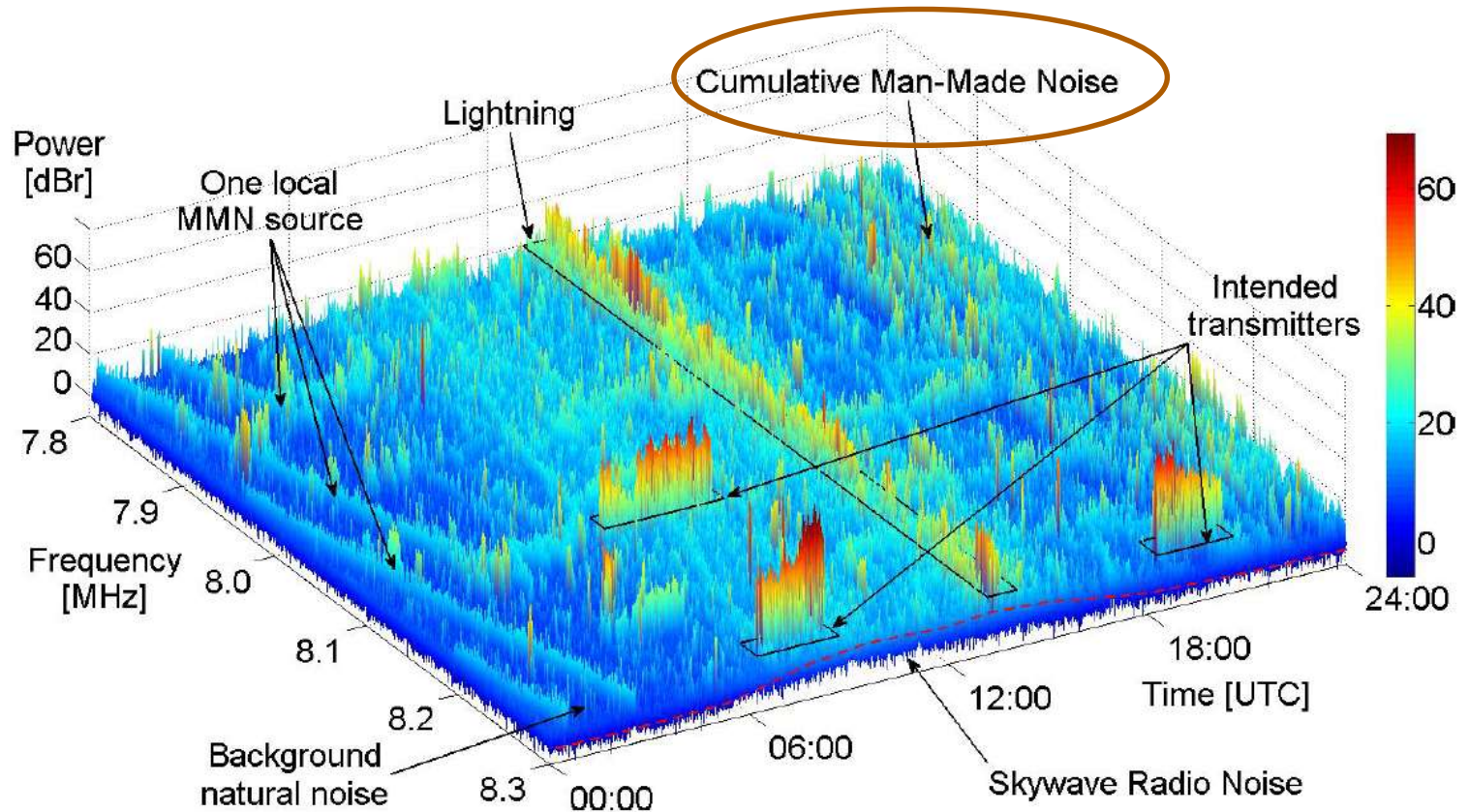


Several man-made noise components cumulate





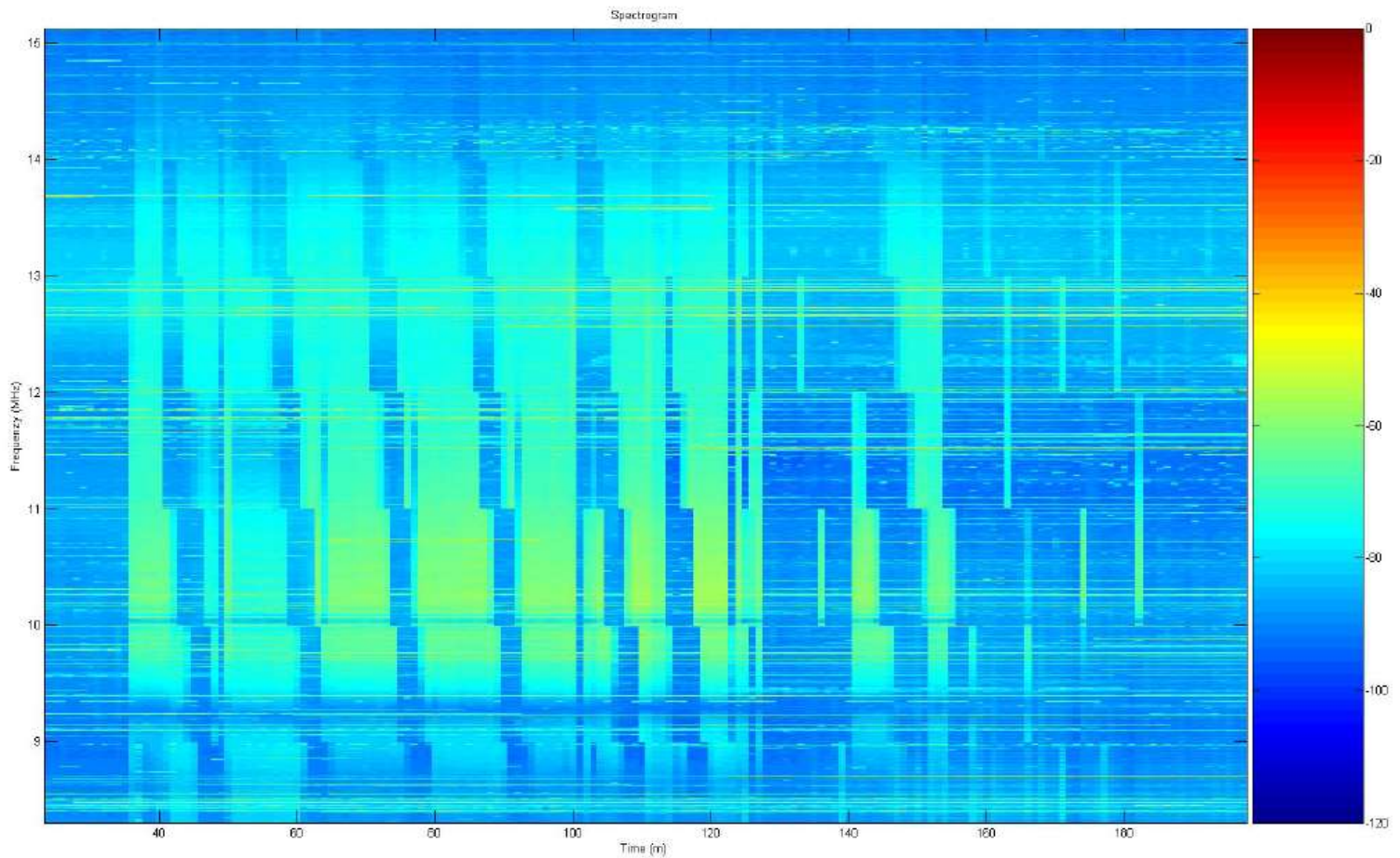
Measurements in NLD



Source: Ben A. Witvliet et al: *A novel method for the Evaluation of Polarization and Hemisphere Coverage of HF Radio Noise Measurement Antennas*, EMC 2015



Measurements for southern Norway, presented Feb. 2015 by Norwegian Defense





Considerations

- › Cumulative man-made noise shows considerable peaks (> 10 dB) over average noise level @ approx. 8 MHz
 - › Periods of 20 – 30 minutes
- › Shows similarities with measurement results presented in Feb. 2015 by Norwegian Defense for southern Norway @ 8.5 – 14 MHz
 - › Man-made NVIS or (steep) skywave cumulation from Oslo...?
 - › Attenuated by elevation antenna pattern of Clifton Lab active antenna?

- › *So: do we mask declarations of unavailable channels?*
 - › Particular NVIS or steep skywave mm-noise signals