

EAVN observations along with EHT for M87 in 2017

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The radio galaxy M87 offers a privileged opportunity to probe the jet launching and formation scales thanks to the proximity and large mass of the central black hole. This makes M87 a prime target for the Event Horizon Telescope (EHT) along with SgrA*. In April 2017, M87 was for the first time observed by EHT+ALMA. This may allow the first imaging of the black hole shadow and jet-launching regions at scales of a few Schwarzschild radii. However, due to the sparse uv-coverage of the EHT, a proper interpretation of the EHT image (emission features surrounding the shadow) may require contemporaneous complementary observations at the lower frequencies that provides the higher fidelity jet images. Here we report results from detailed EAVN 22/43GHz monitoring observations of M87 that were performed from January to May 2017 (so-called the "EAVN campaign 2017"), covering well the EHT-2017 observing window. We obtained data for a total of >15 epochs, and for each session 7-15 telescopes joined from East Asia, boosting the sensitivity and imaging capability compared to KaVA. These data will uniquely monitor the detailed structural evolution of the jet, velocity fields and possible component ejections near in time to the EHT period.