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## Low-Frequency Array Verification with Unmanned Aerial Vehicles - 15'

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New-generation radio telescopes such as the SKA's aperture array require advanced techniques to confirm the desired performance and calibrate the instrument. At low frequencies, the strong mutual coupling between the array elements and the interaction of the antennas with the environment can drastically alter the expected response of the elements and compromise the calibration process.

In this context, an antenna measurement system consisting of a radio-frequency signal source mounted on an Unmanned Aerial Vehicle (UAV) has been developed in Italy in order to perform tests at both subassembly and end-to-end level. Measurement campaigns have been successfully carried out on two prototypes of the SKA low-frequency instrument placed in United Kingdom and on a station of the LOFAR radio telescope in The Netherlands. Recently, near-field verification strategies have also been proposed.

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