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## LOFAR observations of a jet-driven piston shock in the low solar corona

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The Sun produces highly dynamic and eruptive events that can drive shocks through the corona. These shocks can accelerate electrons, which result in plasma emission in the form of a type II radio burst. Despite the large number of type II radio bursts observations, the precise origin of coronal shocks is still subject to investigation. Here we present a well observed solar eruptive event that occurred on 16 October 2015, focusing on a jet observed in the extreme ultraviolet (EUV) by the Atmospheric Imaging Assembly (SDO/AIA), a streamer observed in white-light by the Large Angle and Spectrometric Coronagraph (SOHO/LASCO), and a metric type II radio burst observed by the Low Frequency Array (LOFAR). LOFAR interferometrically imaged the fundamental and harmonic sources of a type II radio burst and revealed that the sources did not appear to be co-spatial, as would be expected from the plasma emission mechanism. We correct for the separation between the fundamental and harmonic using a model which accounts for scattering of radio waves by electron density fluctuations in a turbulent plasma. This allows us to show the type II radio sources were located  $\sim 0.5 R_{\odot}$  above the jet and propagated at a speed of  $\sim 1000 \text{ km s}^{-1}$ , which was significantly faster than the jet speed of  $\sim 200 \text{ km s}^{-1}$ . This suggests that the type II burst was generated by a piston shock driven by the jet in the low corona.

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