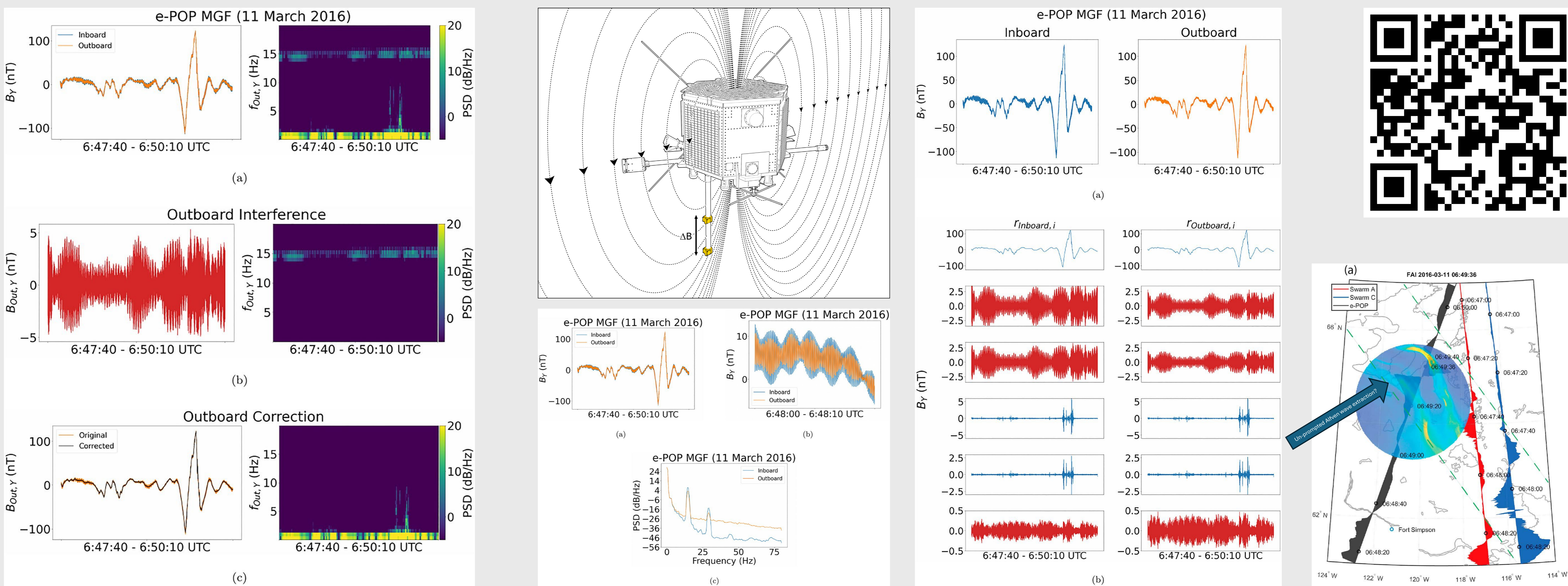




Signal processing has (finally) removed (most) of the reaction wheel noise on Swarm-Echo / e-POP

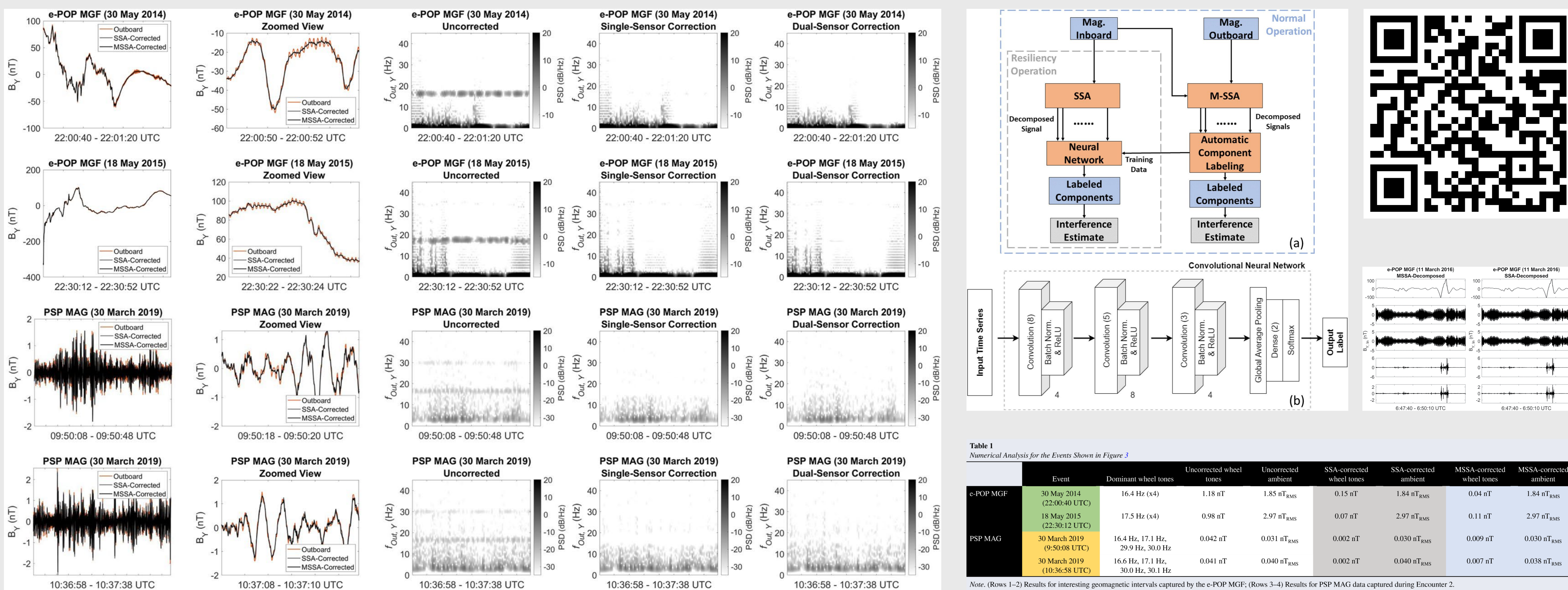
#18 - Noise removal to improve the Swarm-Echo magnetic field data

Developed for Swarm-Echo



1) Decompose via Multichannel Singular Spectrum Analysis (MSSA). 2) Classify via correlation to gradient. 3) Reconstruct without 'noise' terms.

Applicable to Parker



1) Train neural network using MSSA and gradient correlation when dual-sensor data is available. 2) Decompose via Singular Spectrum Analysis (SSA) when only one sensor is available. 3) Classify using neural network. 3) Reconstruct without 'noise' terms.



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