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Laboratory Study of Wave Generation Near Dipolarization Fronts¹ ERIK TEJERO, LON ENLOE, BILL AMATUCCI, CHRIS CRABTREE, GURU GANGULI, US Naval Research Laboratory — Experiments conducted in the Space Physics Simulation Chamber at the Naval Research Laboratory (NRL) studying instabilities generated by small-scale plasma flows use plasma equilibrium that replicate those found in dipolarization fronts. It has previously been shown that these small-scale flows can generate waves in the lower hybrid range. Recent experiments at NRL have demonstrated that these flows can also generate electromagnetic waves in the whistler band. These waves are large amplitude, bursty waves that exhibit frequency chirps similar to whistler mode chorus. Recent results from these experiments will be presented.

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