fig1. cdf contains 22 variables

1) time_epoch_fgm – epoch time, x axis for Fig. 1(a)
2) B_L – L component of the magnetic field, blue line in Fig. 1(a)
3) B_M – M component of the magnetic field, red line in Fig. 1(a)
4) B_N – N component of the magnetic field, green line in Fig. 1(a)
5) time_epoch_scm – epoch time, x axis for Fig. 1(b)
6) B_L_AC – L component of the AC magnetic field, blue line in Fig. 1(b)
7) B_M_AC – M component of the AC magnetic field, red line in Fig. 1(b)
8) B_N_AC – N component of the AC magnetic field, green line in Fig. 1(b)
9) time_epoch_spec – epoch time, x axis for Fig. 1(c)
10) frequency – y axis for Fig. 1(c) and (e)
11) B_sepct – magnetic field spectrogram, color contours in Fig. 1(c)
12) f_LH – lower hybrid frequency, black lines in Fig. 1 (c) and (e)
13) E_L_AC – L component of the AC electric field, blue line in Fig. 1(d)
14) E_M_AC – M component of the AC electric field, red line in Fig. 1(d)
15) E_N_AC – N component of the AC electric field, green line in Fig. 1(d)
16) time_epoch_espec – epoch time, x axis in Fig. 1(e)
17) E_spect – electric field spectrogram, color contours in Fig. 1(e)
18) time_epoch_fpe – epoch time, x axis in Fig. 1(f), (g), and (h)
19) n_e – electron density, blue line in Fig. 1(f)
20) beta_e – electron beta, blue line in Fig. 1(g)
21) v_perp – electron velocity component perpendicular to the magnetic field, blue line in Fig. 1(h)
22) v_parallel – electron velocity component parallel to the magnetic field, red line in Fig. 1(h)

fig2.cdf contains 6 variables

1) krho_e – the magnitude of the wave vector multiplied by the electron gyroradius, x axis for all panels in Fig. 2
2) theta – the angle between the wave vector and the magnetic field, y axis for all panels in Fig. 2
3) omega_A – frequency as a function of k and θ, normalized by ω_{LH}; color contours in the left panel of Fig. 2(a)
4) gamma_A – growth rate as a function of k and θ, normalized by ω_{LH}; color contours in the right panel of Fig. 2(a)
5) omega_B – frequency as a function of k and θ, normalized by ω_{LH}; color contours in the left panel of Fig. 2(b)
6) gamma_B – growth rate as a function of k and θ, normalized by ω_{LH}; color contours in the right panel of Fig. 2(b)

fig3.cdf contains 14 variables

1) krho_e – the magnitude of the wave vector multiplied by the electron gyroradius, x axis for all panels in Fig. 3(a)-(d)
2) theta – the angle between the wave vector and the magnetic field, y axis for all panels in Fig. 3(a)-(d)

3) omega_(a) – frequency as a function of k and θ, normalized by ω_{LH}; color contours in the left panel of Fig. 3(a)
4) gamma_(a) – growth rate as a function of k and θ, normalized by ω_{LH}; color contours in the right panel of Fig. 3(a)
5) omega_(b) – frequency as a function of k and θ, normalized by ω_{LH}; color contours in the left panel of Fig. 3(b)
6) gamma_(b) – growth rate as a function of k and θ, normalized by ω_{LH}; color contours in the right panel of Fig. 3(b)
7) omega_(c) – frequency as a function of k and θ, normalized by ω_{LH}; color contours in the left panel of Fig. 3(c)
8) gamma_(c) – growth rate as a function of k and θ, normalized by ω_{LH}; color contours in the right panel of Fig. 3(c)
9) omega_(d) – frequency as a function of k and θ, normalized by ω_{LH}; color contours in the left panel of Fig. 3(d)
10) gamma_(d) – growth rate as a function of k and θ, normalized by ω_{LH}; color contours in the right panel of Fig. 3(d)
11) krho_e_(e) – the magnitude of the wave vector multiplied by the electron gyroradius, x axis for all panels in Fig. 3(e)
12) theta_(e) – the angle between the wave vector and the magnetic field, y axis for all panels in Fig. 3(e)
13) omega_(e) – frequency as a function of k and θ, normalized by ω_{LH}; color contours in the left panel of Fig. 3(e)
14) gamma_(e) – growth rate as a function of k and θ, normalized by ω_{LH}; color contours in the right panel of Fig. 3(e)

fig4.cdf contains 20 variables

1) time_epoch – epoch time, x axis in Fig. 4(a) and (d)
2) Em_mms2 – M component of the electric field, measured by MMS2; blue line in Fig. 4(a)
3) Em_mms2 – M component of the electric field, measured by MMS2; red line in Fig. 4(a)
4) freq_normalized – frequency normalized by f_{LH}, x axis in Fig. (b) and (c)
5) k_rho_e – measured wave vector multiplied by the electron gyroradius, blue asterisks in Fig. 4(b)
6) k_rho_e_err – errors in the wave vector measurements in Fig. 4(b)
7) freq_theta_90 – x axis for the magenta line in Fig. 4(b)
8) k_rho_e_theta_90 – theoretically calculated wave vector with θ = 90°, magenta line in Fig. 4(b)
9) freq_theta_87_5 – x axis for the red line in Fig. 4(b)
10) k_rho_e_theta_87_5 – theoretically calculated wave vector with θ = 87.5°, red line in Fig. 4(b)
11) freq_theta_87 – x axis for the green line in Fig. 4(b)
12) k_rho_e_theta_87 – theoretically calculated wave vector with θ = 87°, green line in Fig. 4(b)
13) freq_theta_86 – x axis for the cyan line in Fig. 4(b)
14) k_rho_e_theta_86 – theoretically calculated wave vector with θ = 86°, cyan line in Fig. 4(b)

15) theta_measured – measured θ, blue asterisks in Fig. 4(c)
16) theta_measured_err – errors in the θ measurements in Fig. 4(c)
17) freq_normalized_cal_0_6 – theoretically calculated normalized frequency as a function of θ with $k\rho_e = 0.6$, red line in Fig. 4(c)
18) freq_normalized_cal_0_8 – theoretically calculated normalized frequency as a function of θ with $k\rho_e = 0.8$, green line in Fig. 4(c)
19) theta_cal – y axis in Fig. 4(c)
20) anomalous_term – anomalous resistivity term, blue line in Fig. 4(d)