THEMIS-D | 2022-09-04 | GSM vector coordinates  $B_{x}$ 50 B [nT]  $B_y$  $B_z$ 0 |B|-50100 50  $v_i$  [km/s]  $v_y$ -50  $V_Z$ -100 $10^{6}$  $[eV/(cm^2 \ s \ sr \ eV)][eV/(cm^2 \ s \ sr \ eV)]$ (c) Energetic Electrons Energy [keV] Electron flux 10<sup>2</sup>  $10^{4}$ Low-energy Electrons Energy [keV] Electron flux  $10^{7}$  $10^{-1}$ 10-5 Magnetic Field Waves  $B_{\rm\scriptscriptstyle W}$  [Hz] 10<sup>3</sup>  $10^{-7}$ 10-7  $E_{\rm w}$  [Hz] 10-9  $10^{3}$ (g) TREx-RGB GILL & PINA keogram AACGM A [∘] 65 60 55 Time R X [Re] 03:10:00 03:20:00 03:30:00 03:40:00 03:50:00 04:00:00 04:10:00 04:20:00 04:30:00 7.0 -5.7 7.9 -6.7 6.7 7.2 7.4 7.7 8.1 8.3 8.5

-6.2

4.0

0.6

-6.5

4.0

0.7

4.0

0.7

-7.0

4.0

0.7

-7.2

4.0

0.7

-7.5

4.0

0.7

-6.0

4.0

0.6

-5.4

4.0

0.6

4.0

0.6

Y [Re]

Z [Re]