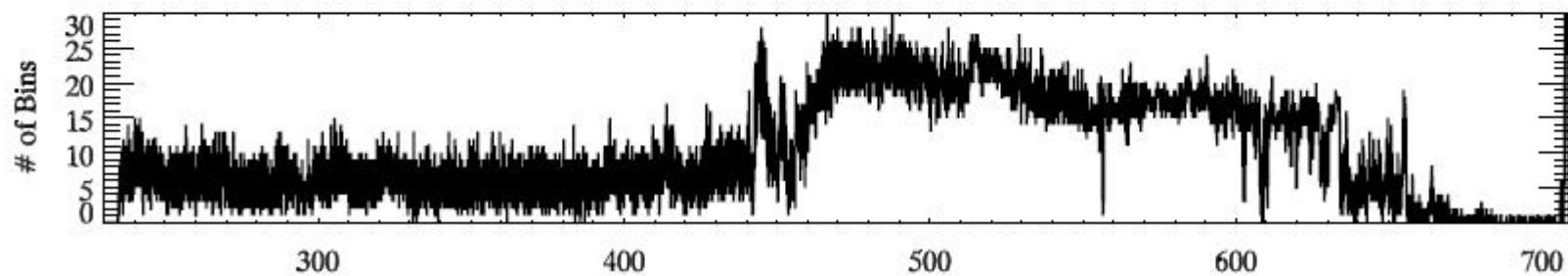
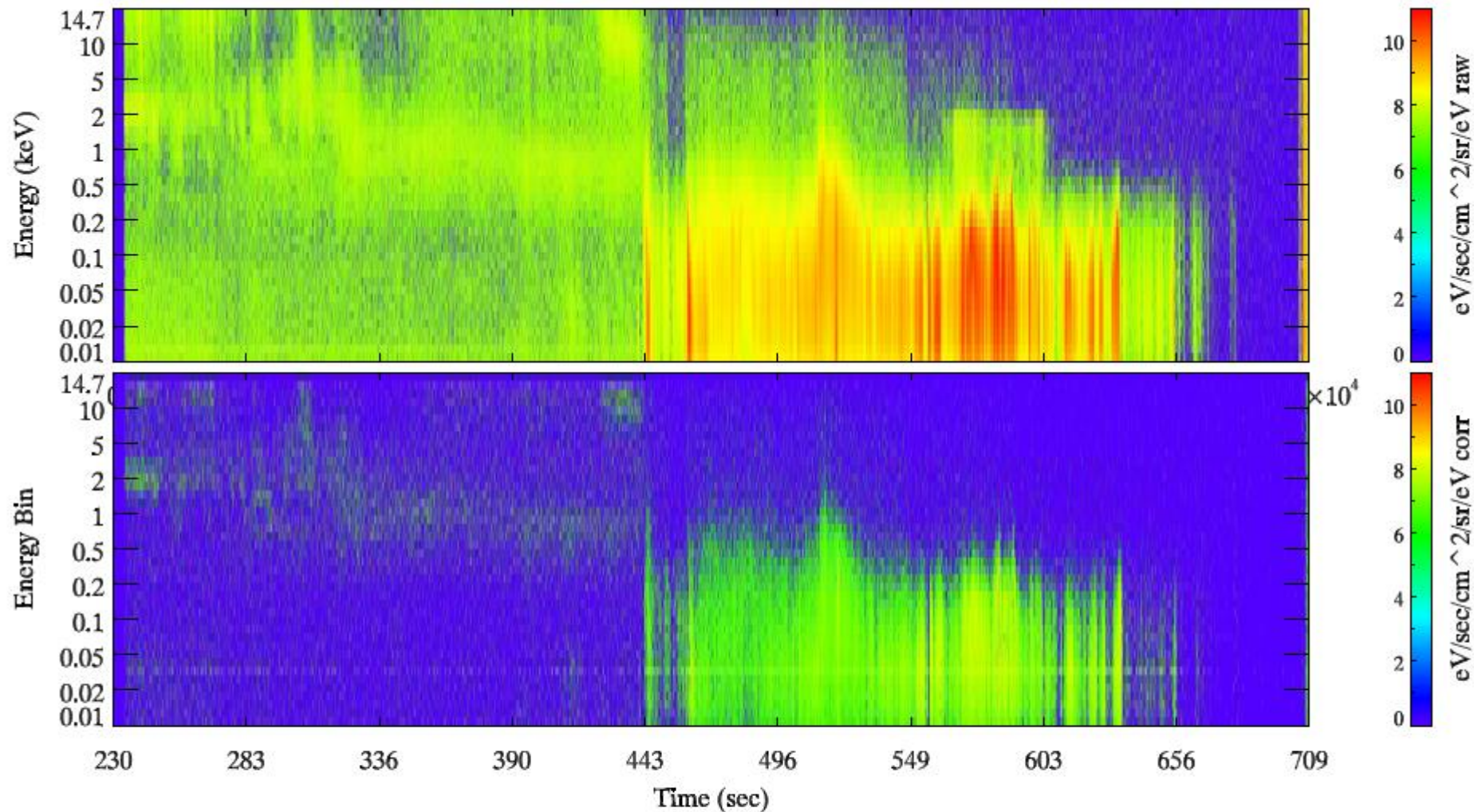


RENU2 Electrons

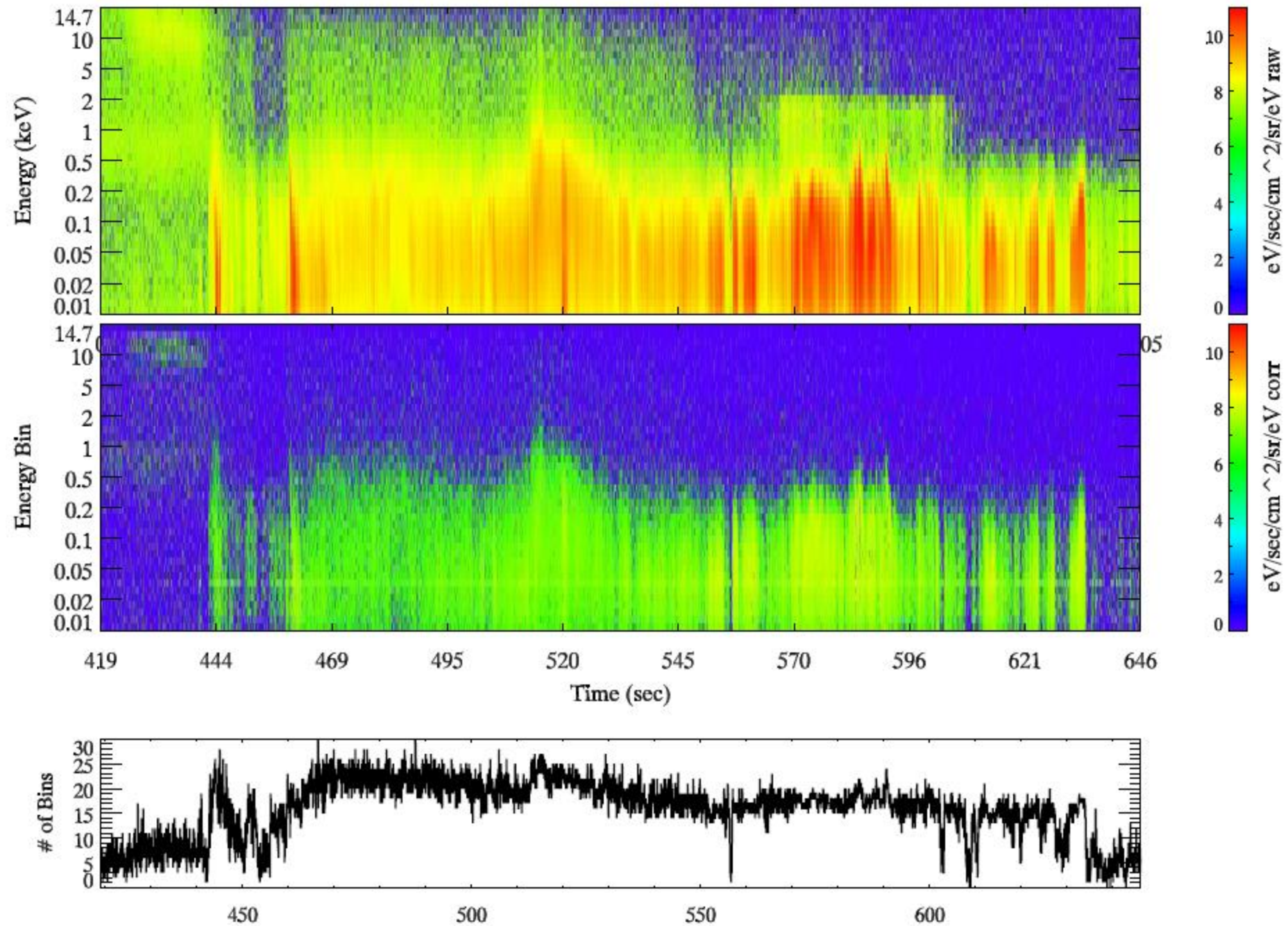
Total Counts & Geometric Factors

- Concern: geometric factor is different at different times, depending on how many of the EPLAS bins are registering counts
- Solution: First correction
 - Sum the counts over a sweep
 - Divide each bin by the total counts per sweep
 - Set a threshold (1% for plots to follow)
 - If threshold passed, counter++
 - $\text{correctedCounts} = (\text{totalCounts} * 1000) / (\text{geometricFactor} * \text{counter})$

Total Flight



Good Stuff



Pitch Angle Distributions

J.H.Clemmons, AGU 2003

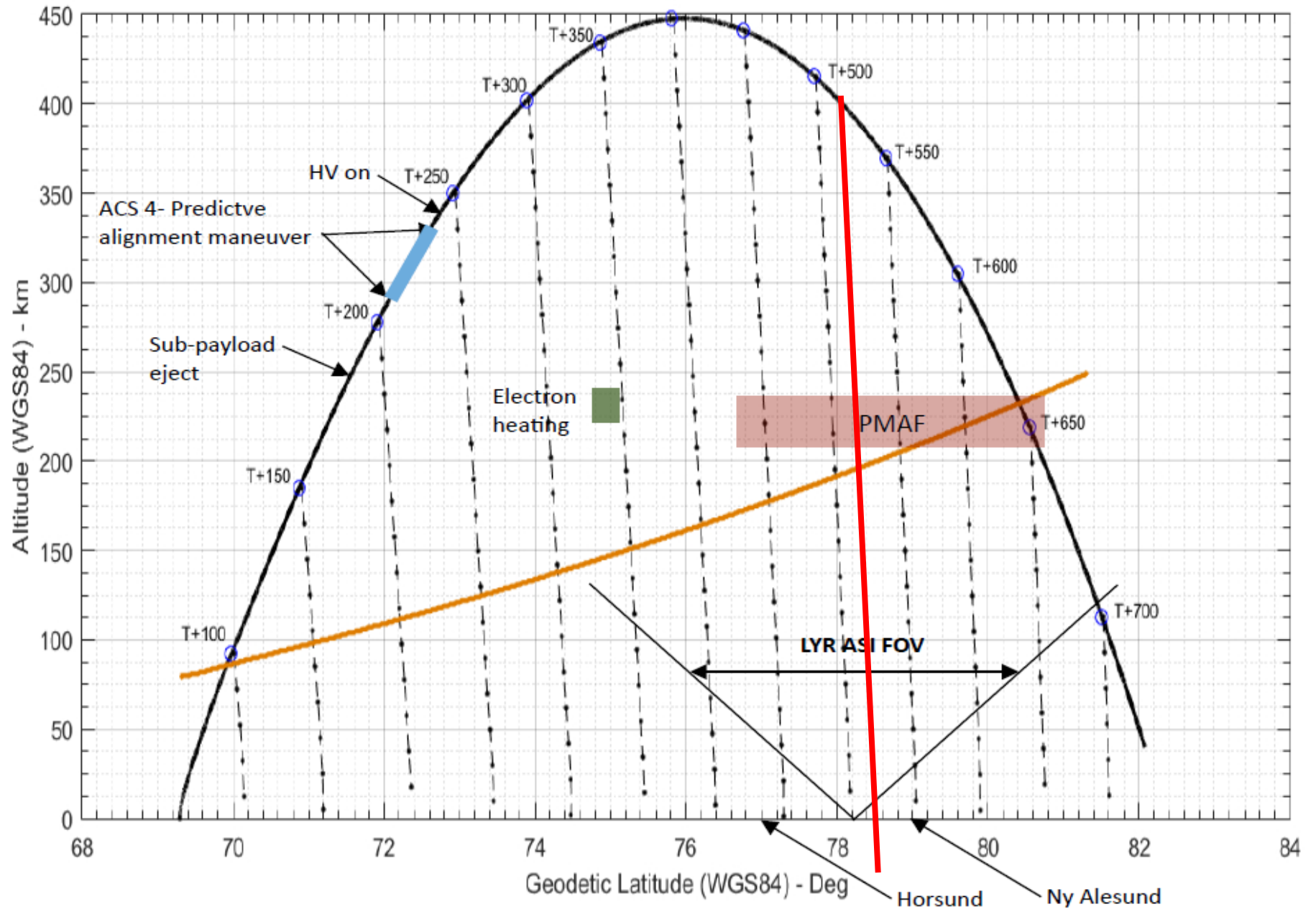
Type	Pitch Angle Structure	Energy Structure	Temporal Structure	Inferred Source Population	Indicated Topology
1	Field-Aligned	Broad, ~20 eV	Little structure	Opposite hemisphere photo-electrons	Closed
2	Highly field-Aligned	0-150 eV	Highly structured, dispersed	Accelerated local ionospheric electrons	N/A
3	Perpendicular	< 20 eV	Spin modulated	Local (from payload) photoelectrons	N/A
4	Isotropic	Broad, ~50 eV	Some structure	Sheath electrons	Open
5	Isotropic	100 eV, intense	Highly structured	Accelerated sheath electrons	Open
6	Isotropic	Broad, few 100 eV	Little structure	Magnetospheric electrons	Closed



Plots

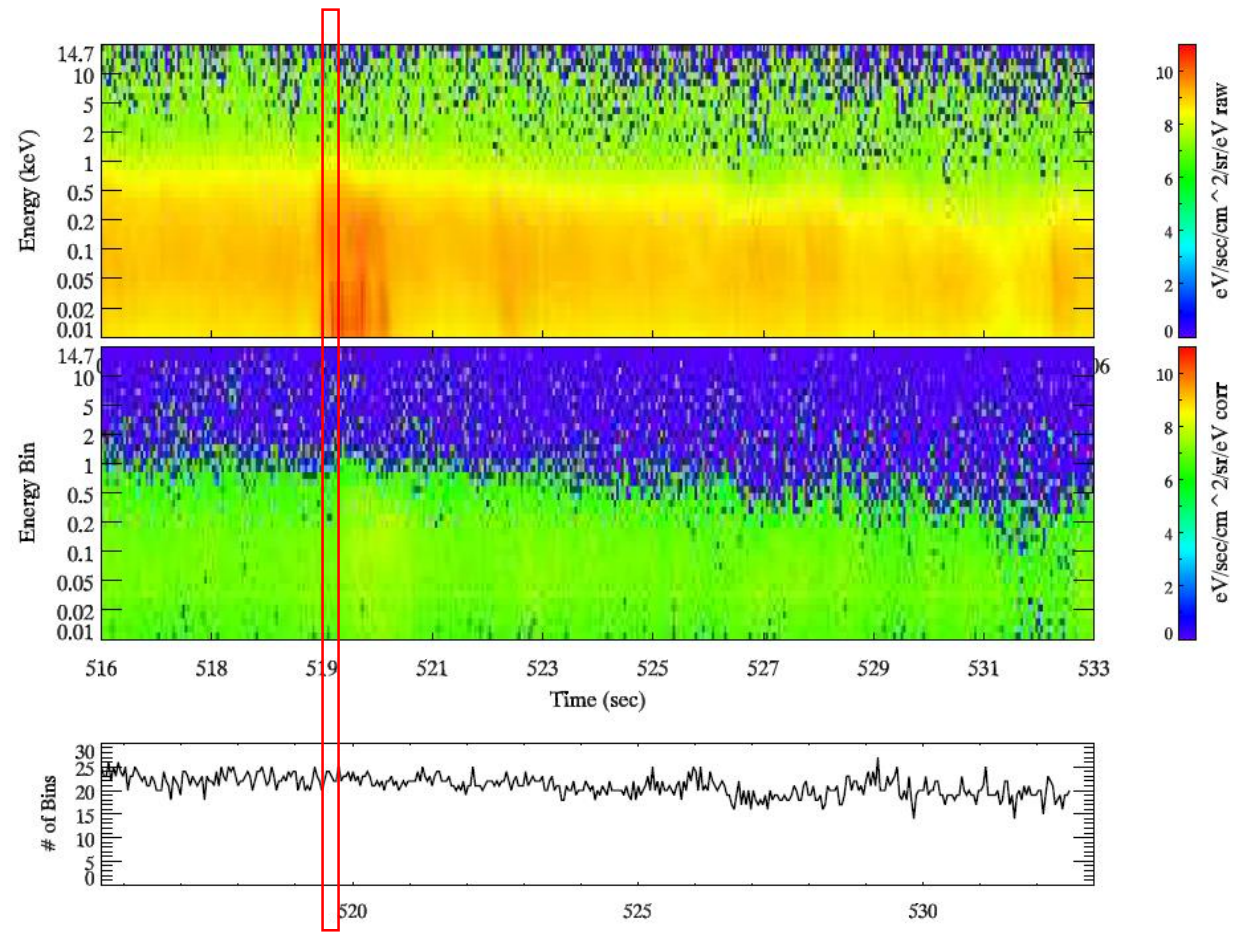
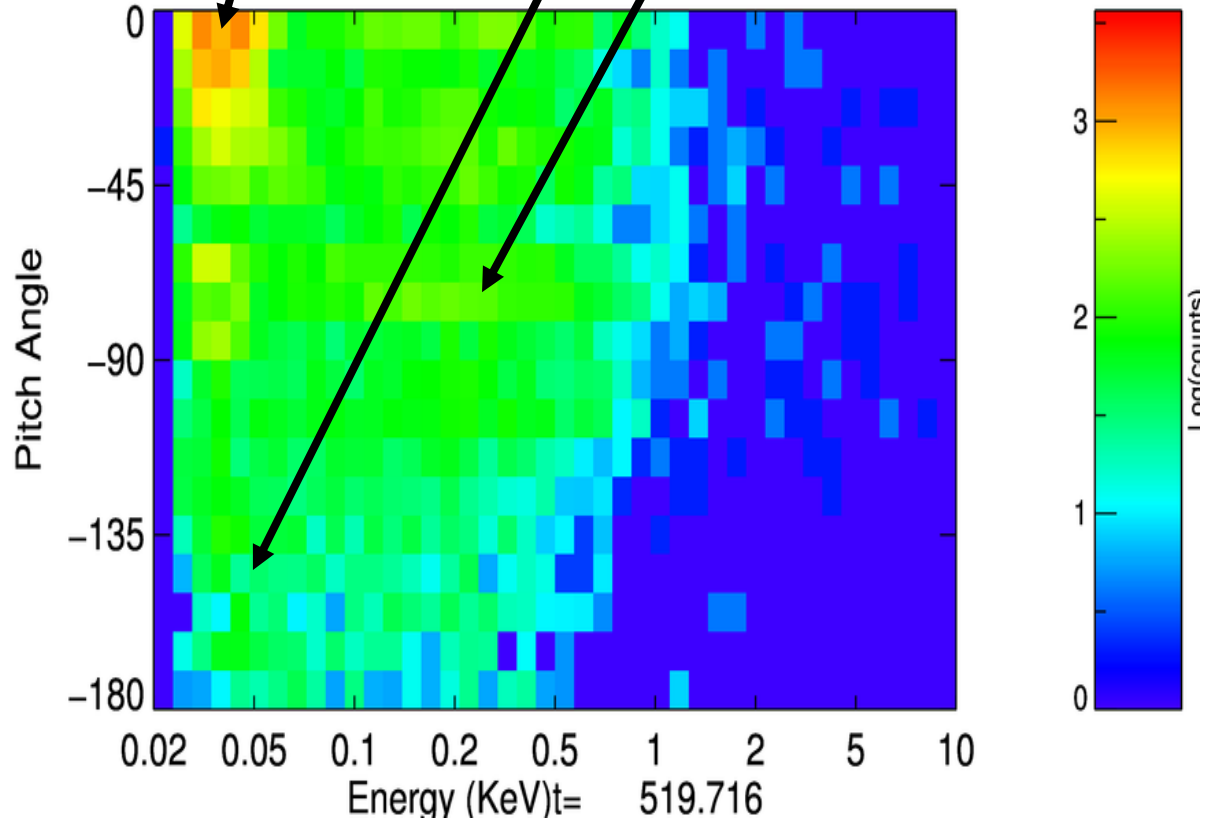
- Two data sweeps per plot
- .084s of flight per frame

519sec

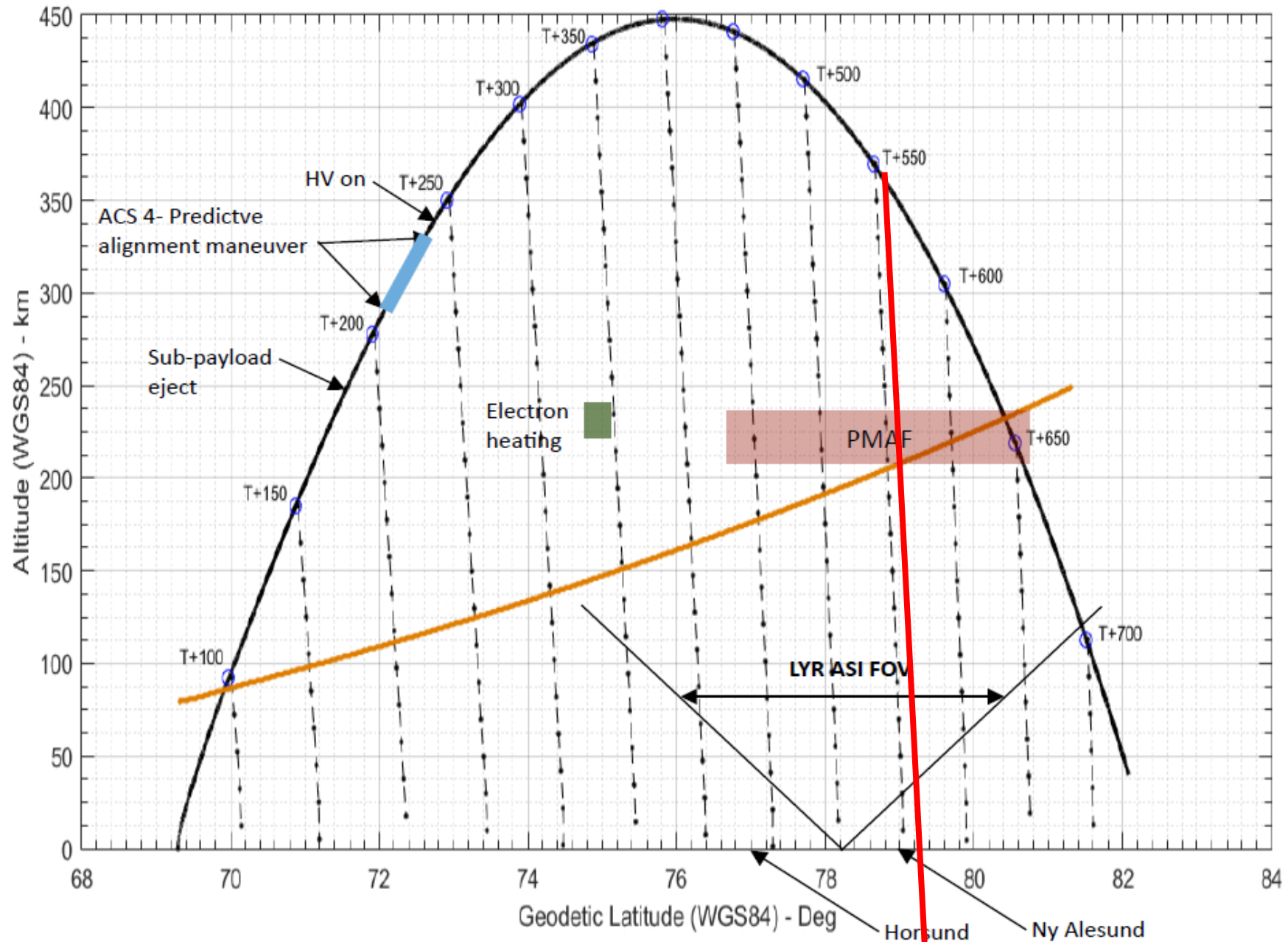


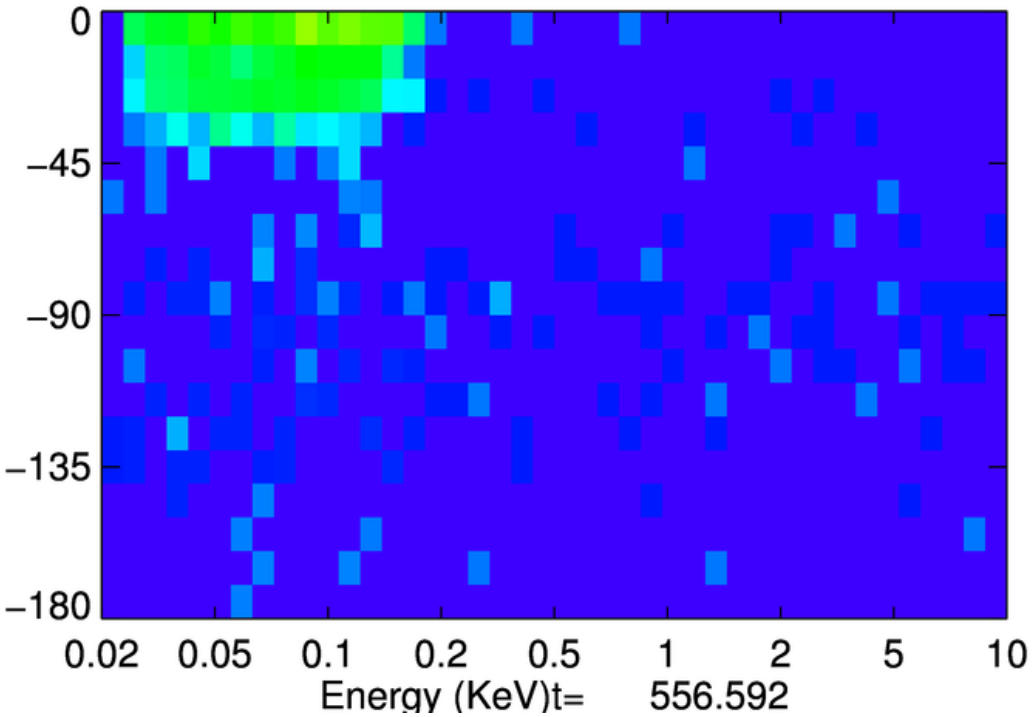
Type 1: around 20eV, FA

Types 4,6: Broad spectrum, isotropic.
50eV type 4, few
100eV type 6

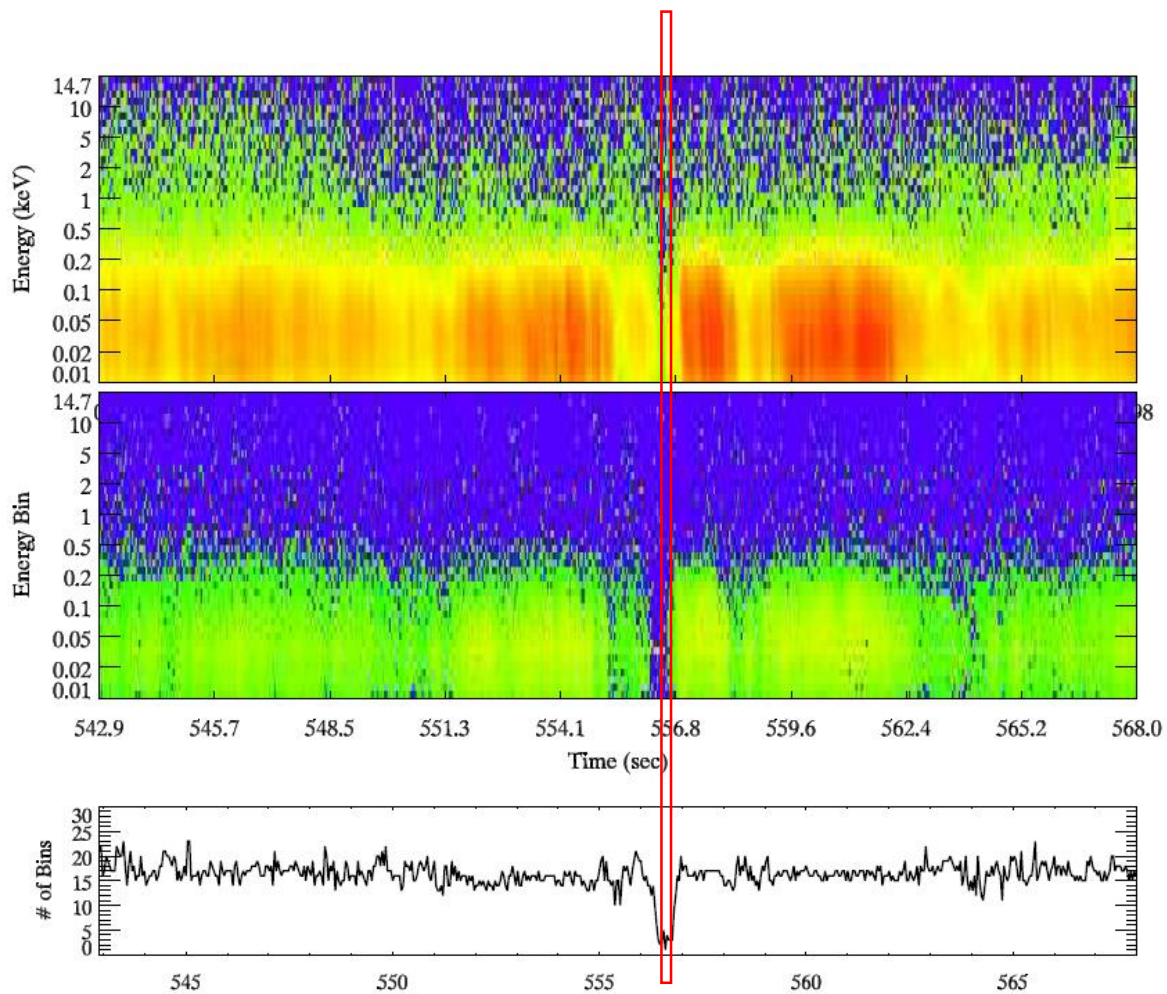


556sec

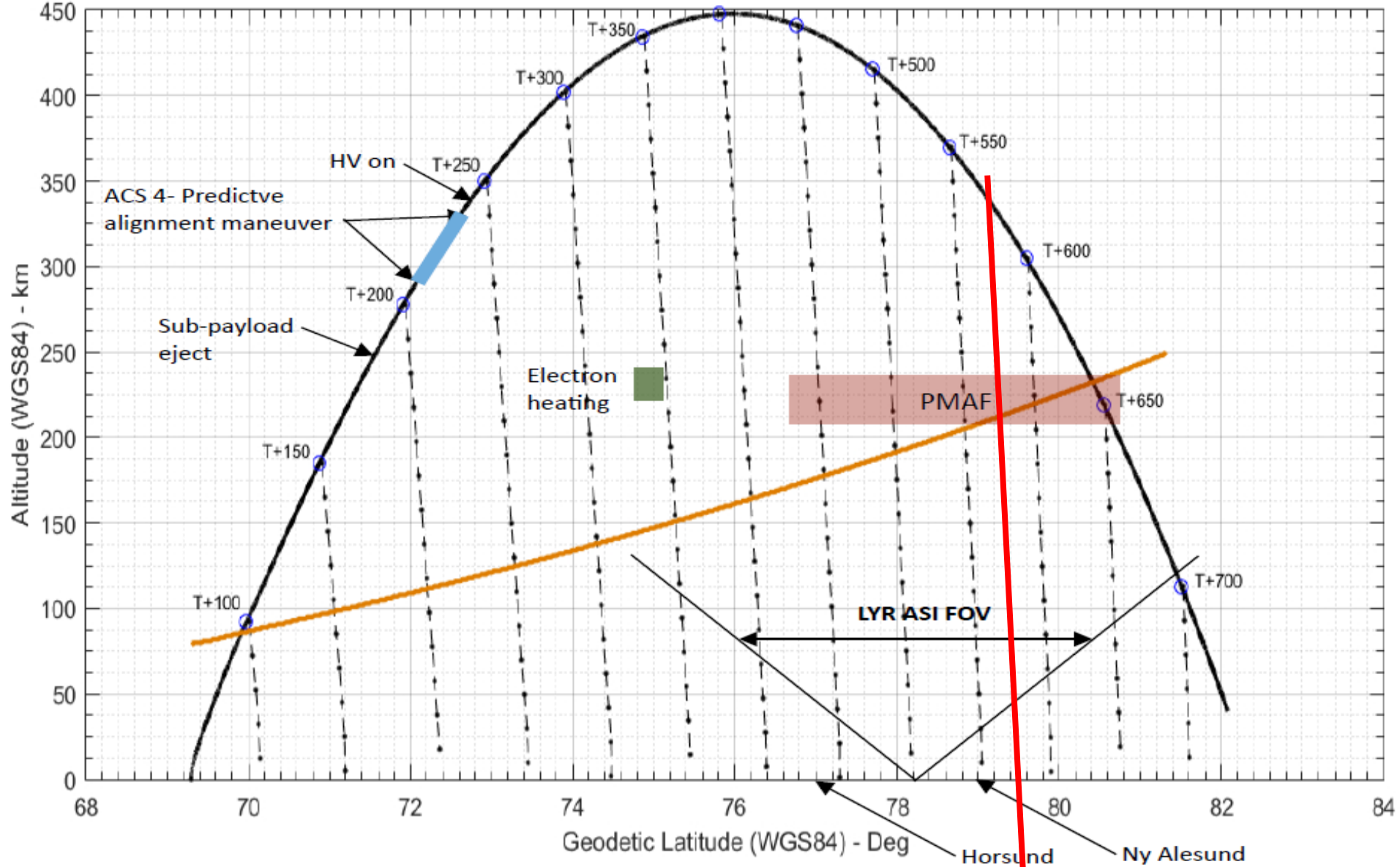


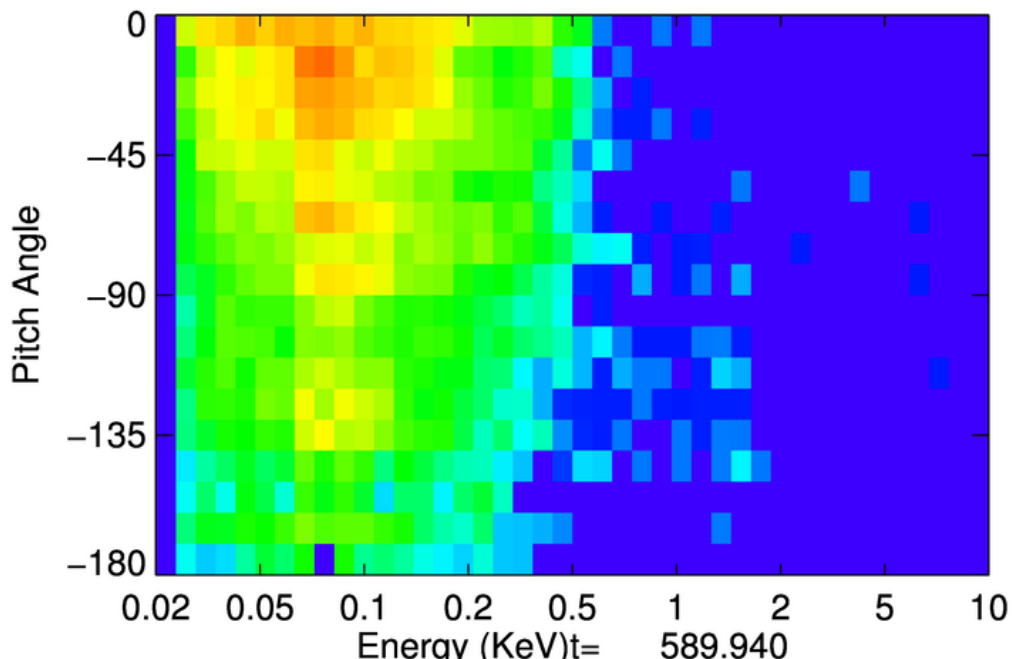
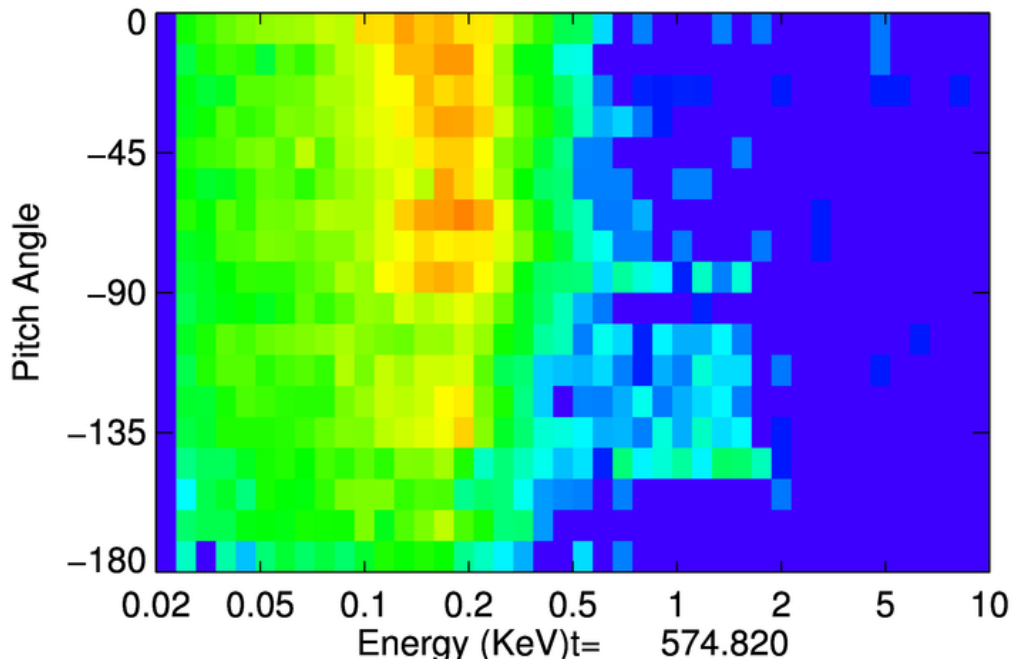


Type 1, 2: Field aligned to highly field aligned, Energies ranging up to $\sim 150\text{eV}$ (lower, near 20eV for type 1)

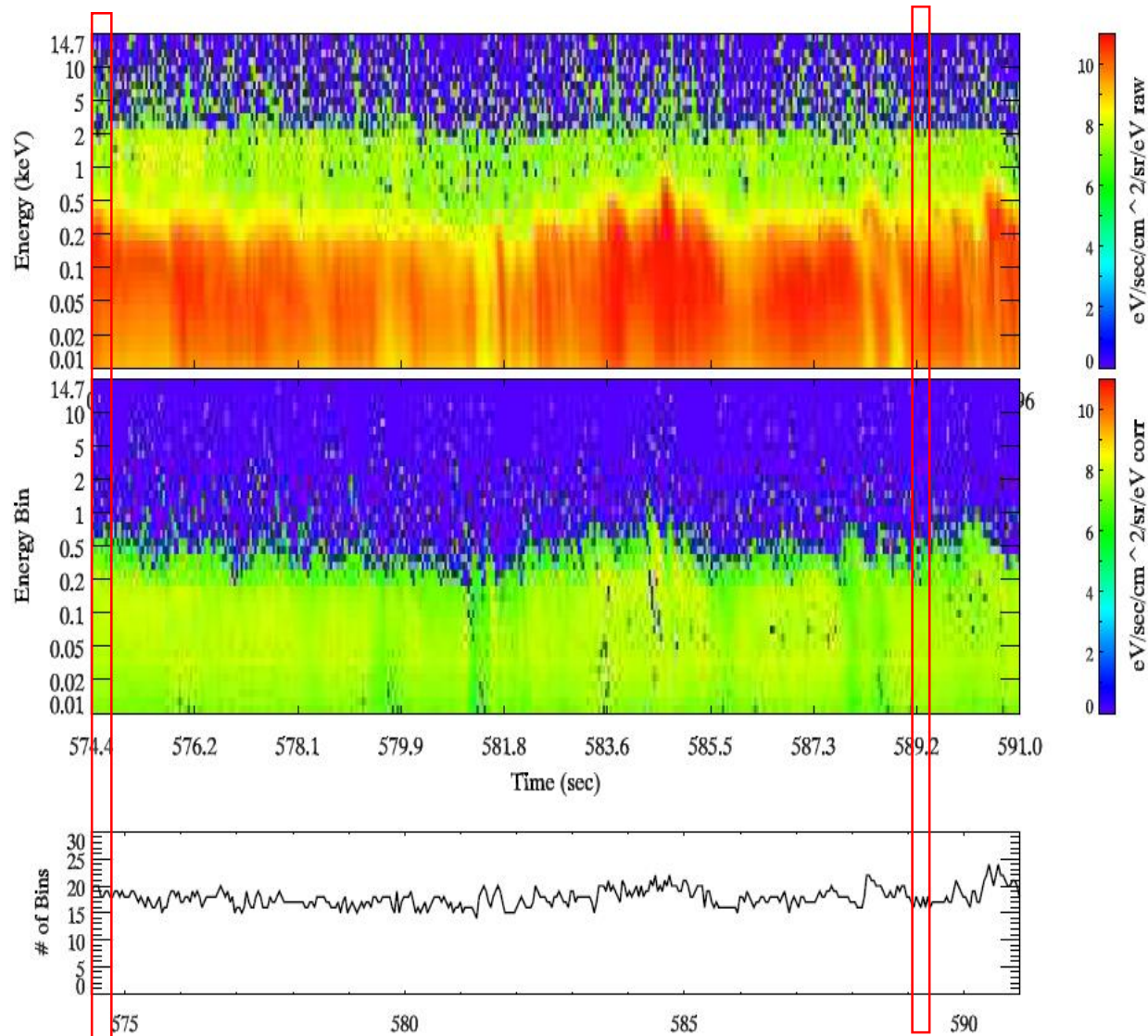


574 – 590sec





Type 5: intense, 100eV, isotropic



Questions, Comments, Concerns?