

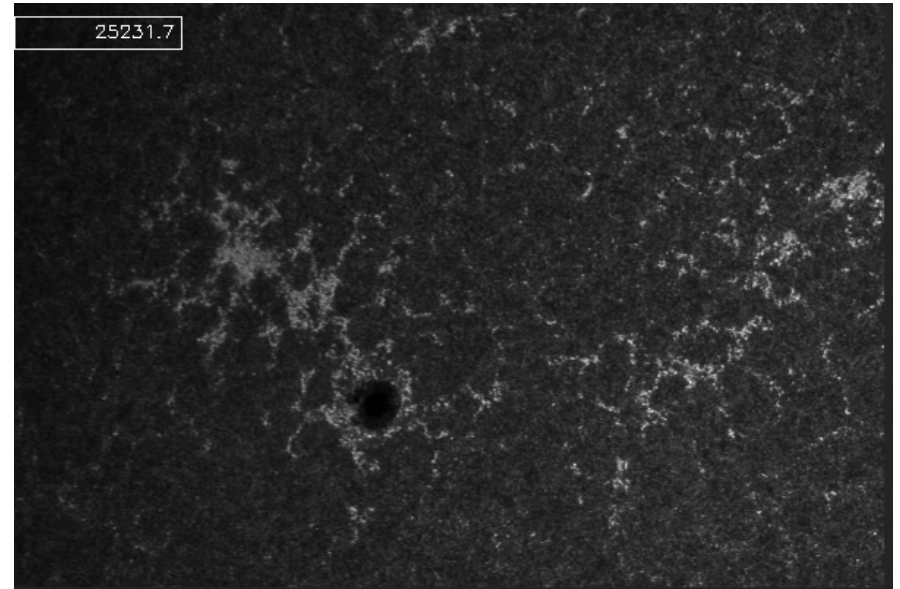
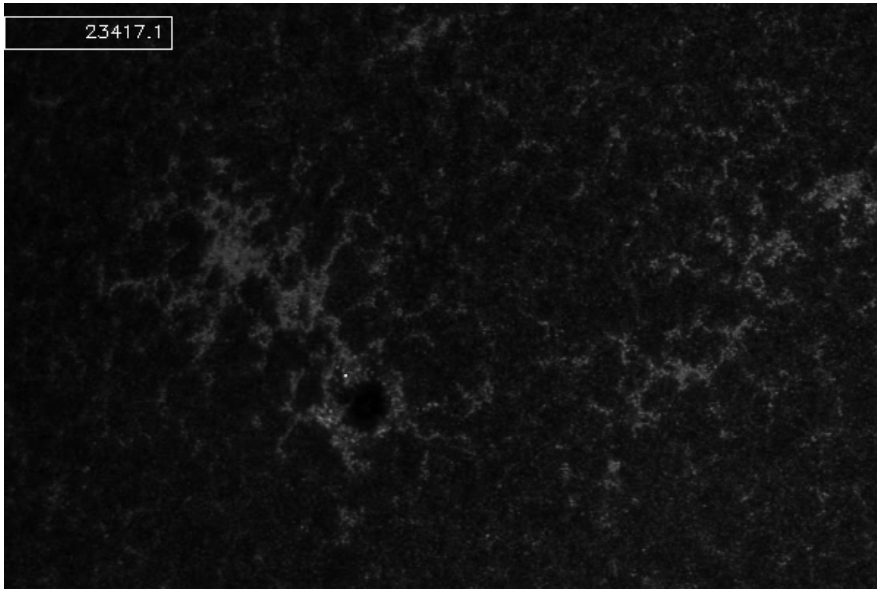


Flare Foot-point UV Signatures

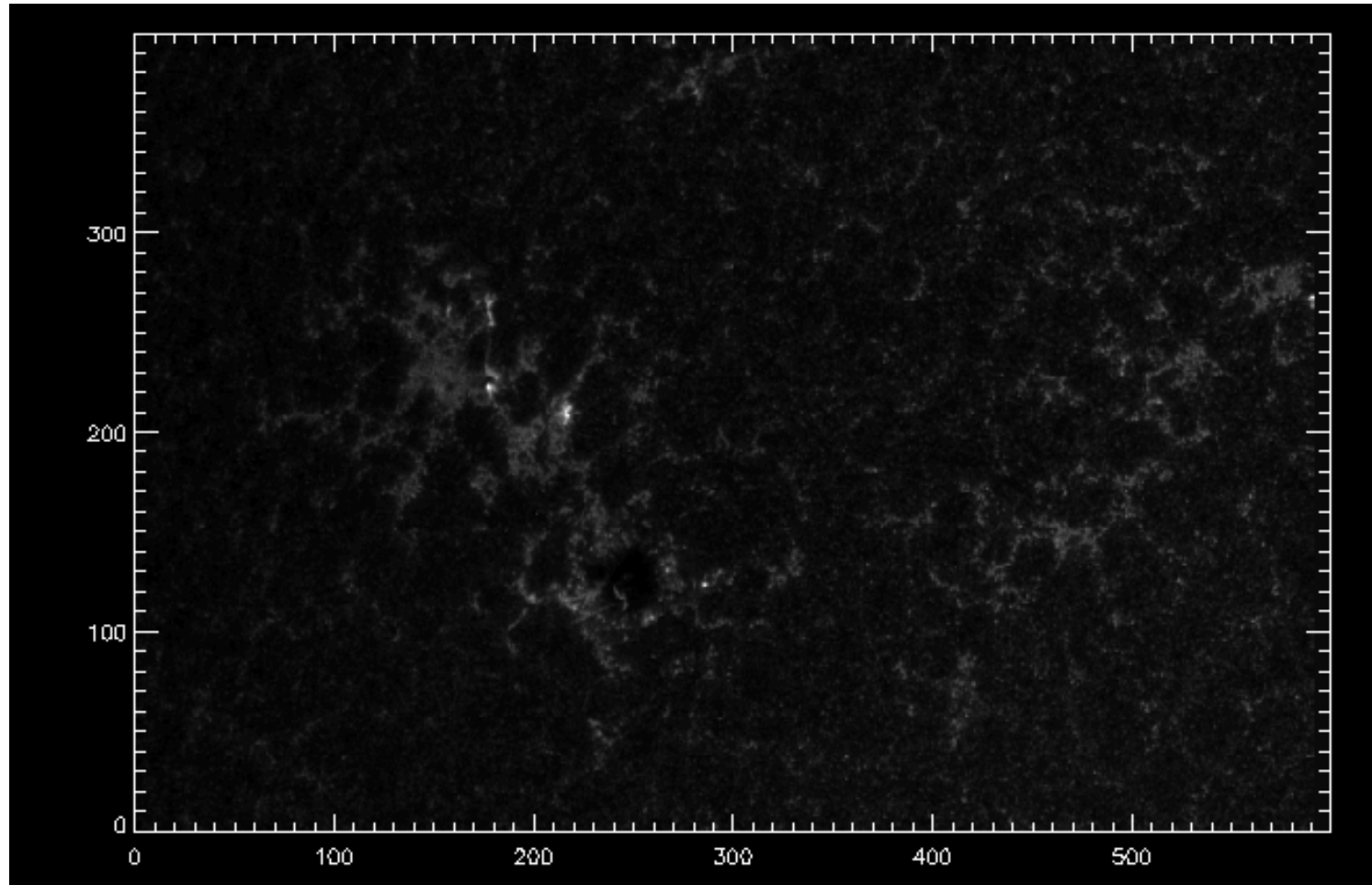
Paul Schale – Advisor Jiong Qiu



The Data

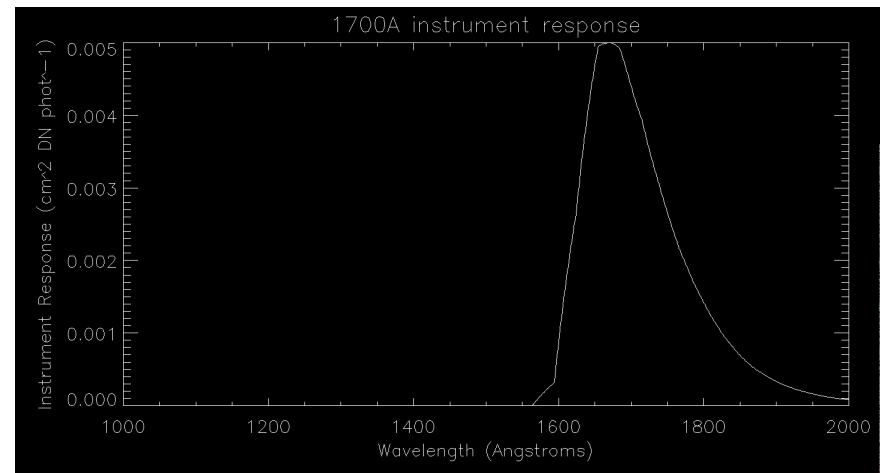
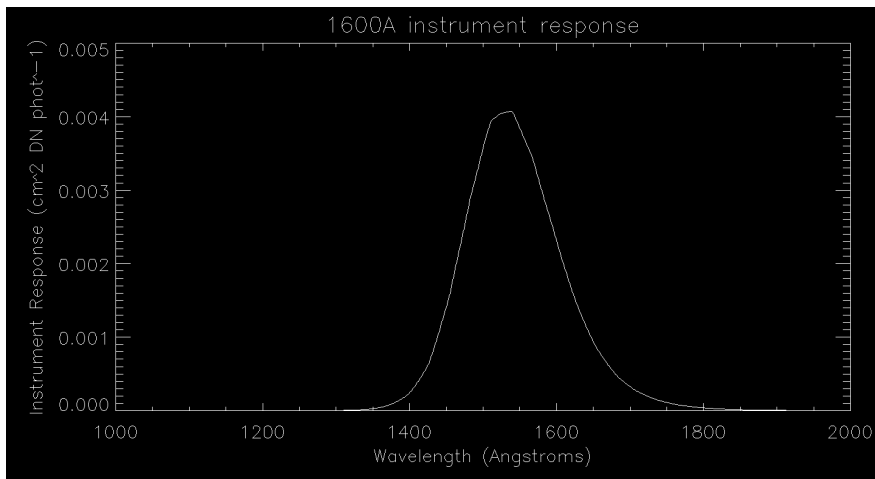


The Data



The Data

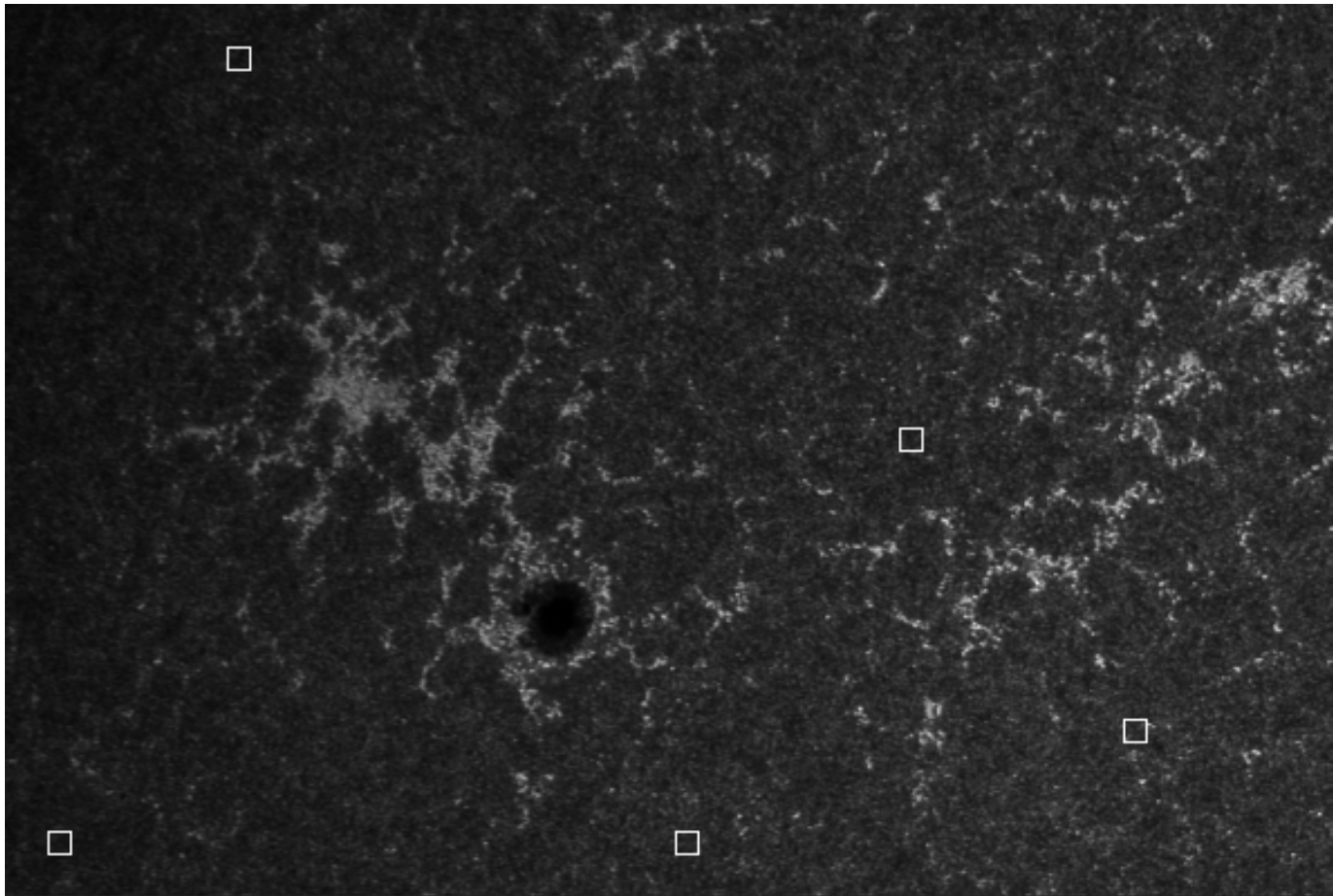
- Units: DN
- Interpreting:
 - Response Functions



Regions of Interest

- Quiet Sun
- Active Regions (plages)
- Flaring pixels

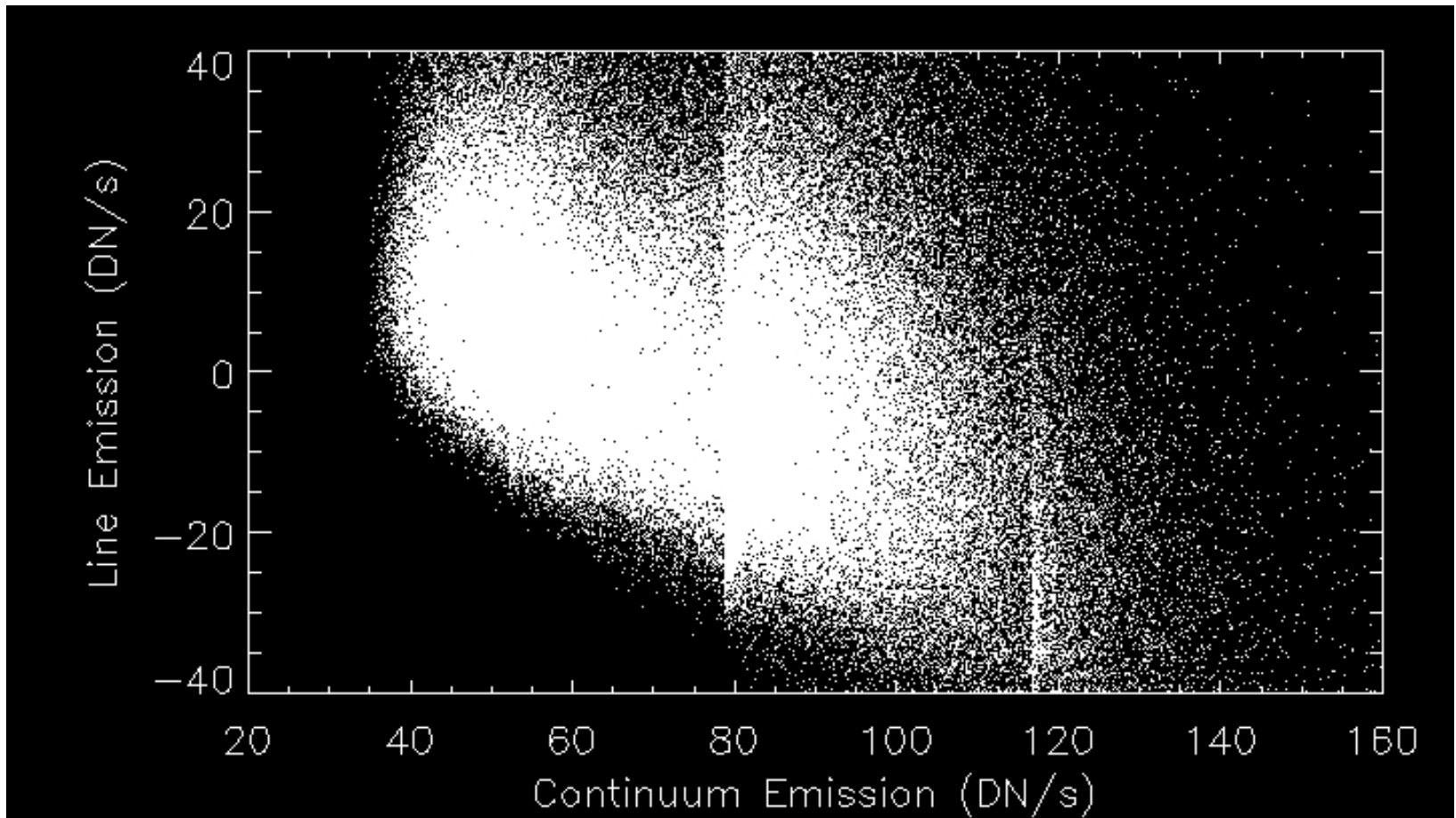
Quiet Regions



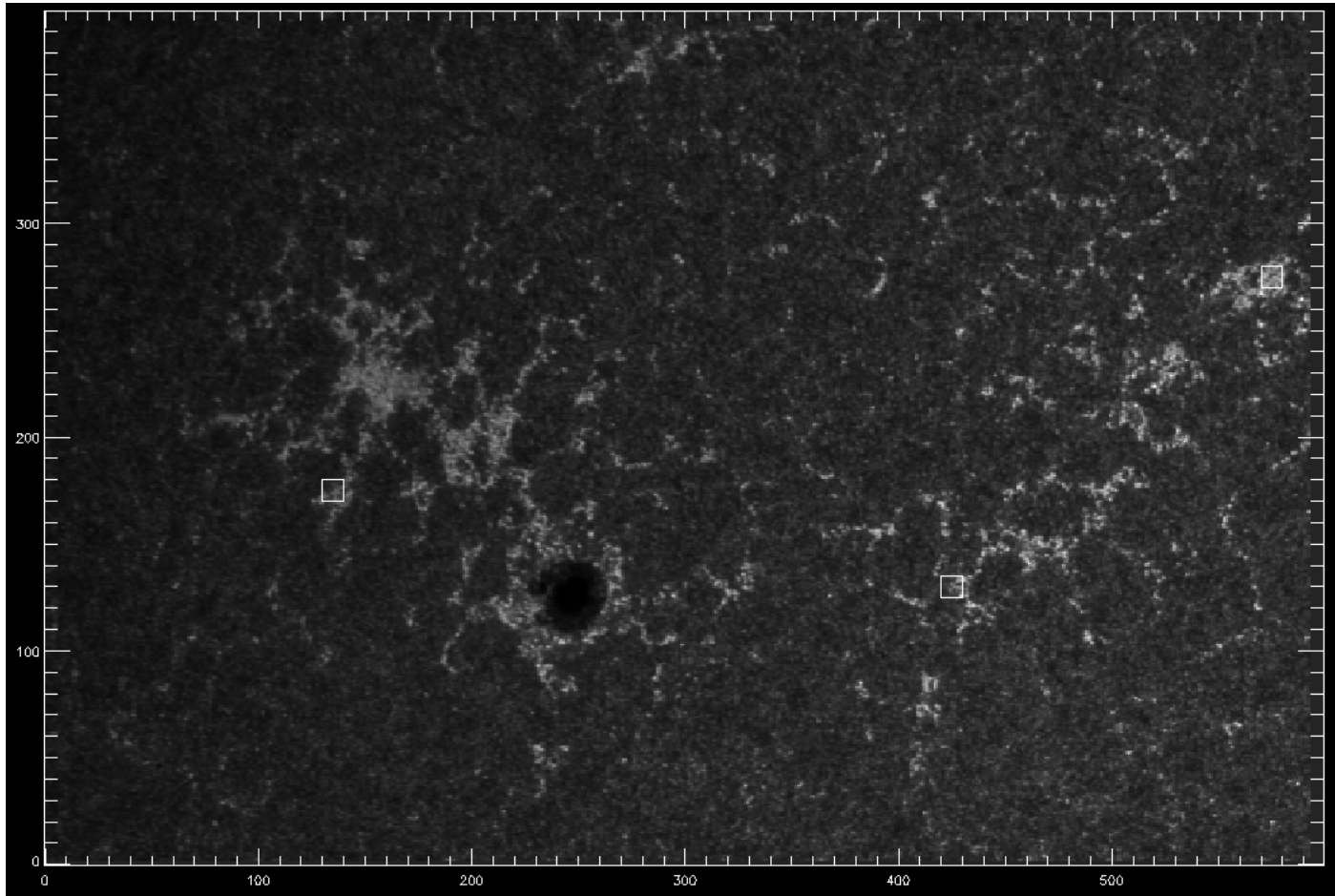
Quiet Regions

- Temperature: 4550K
- Pure blackbody?
- CHIANTI database
 - Small correction (<1 DN/s)
 - Average signal: > 1000 DN/s

Quiet Regions



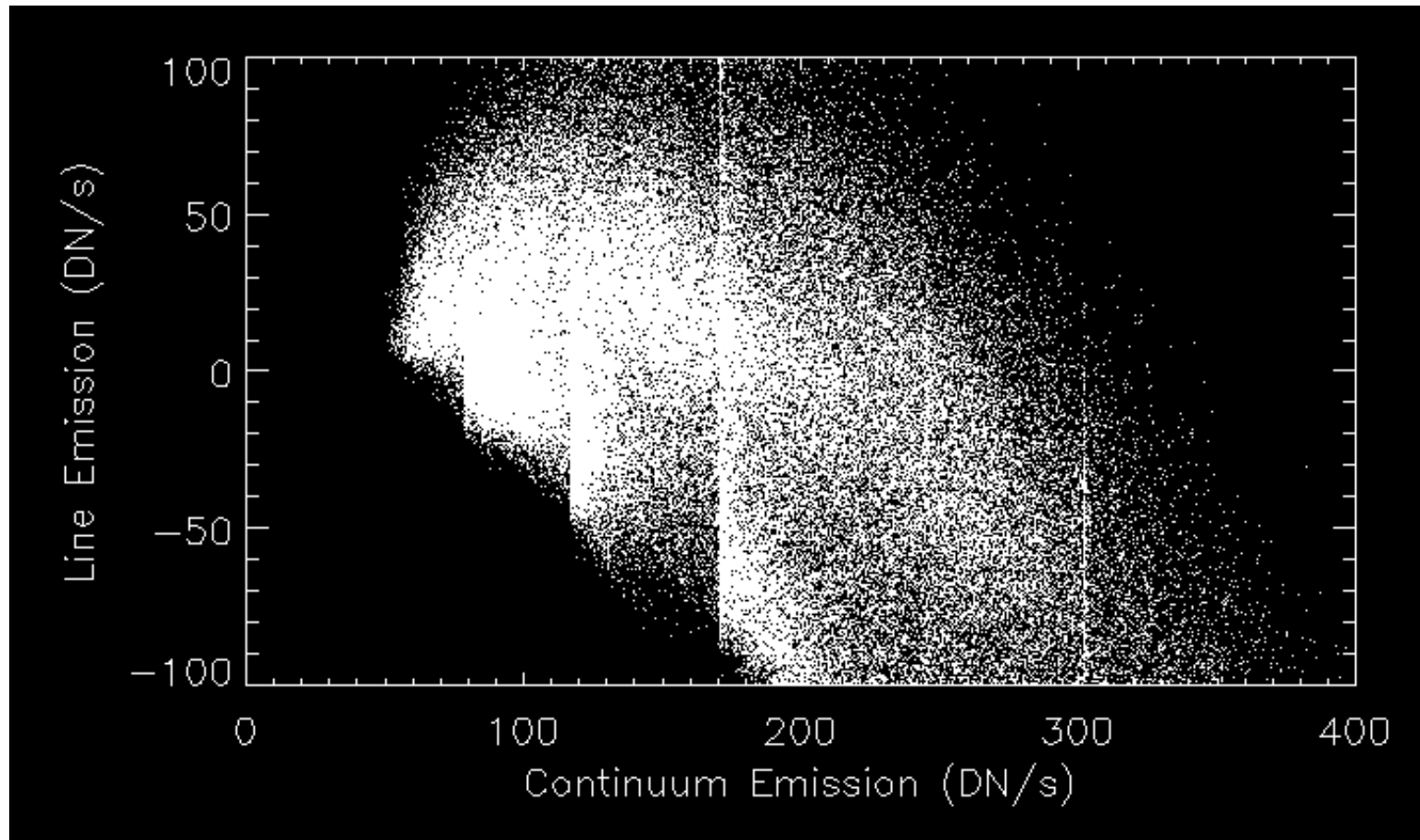
The Plage



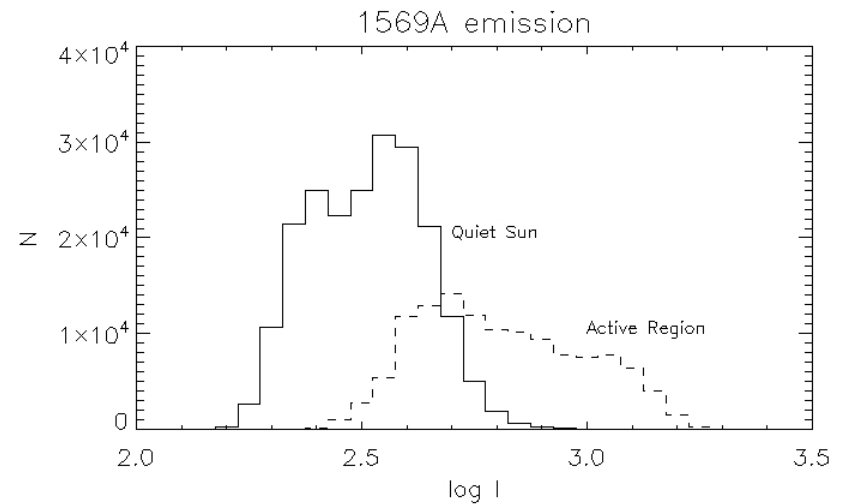
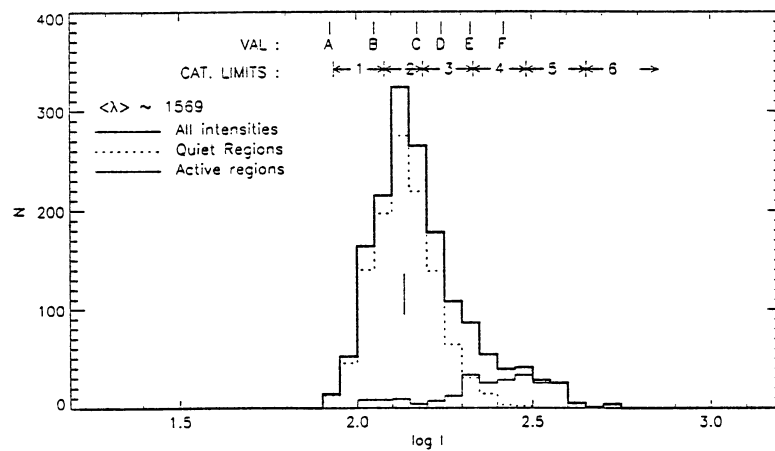
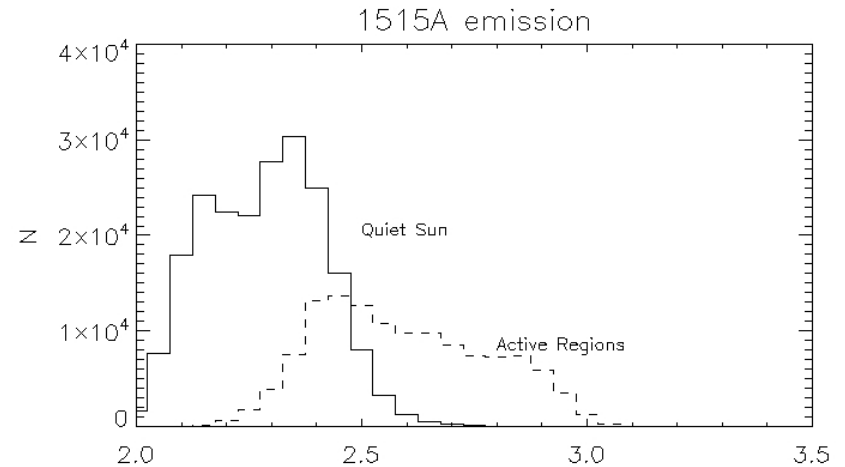
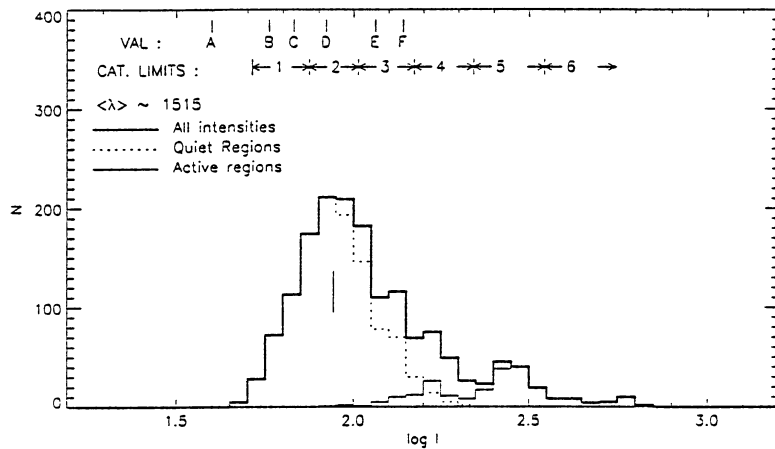
The Plage

- Temperature: 4800K
- CHIANTI?
 - Line emission blows up
 - Lines at $T=10^4$ K to blame
 - When removed, result is again negligible

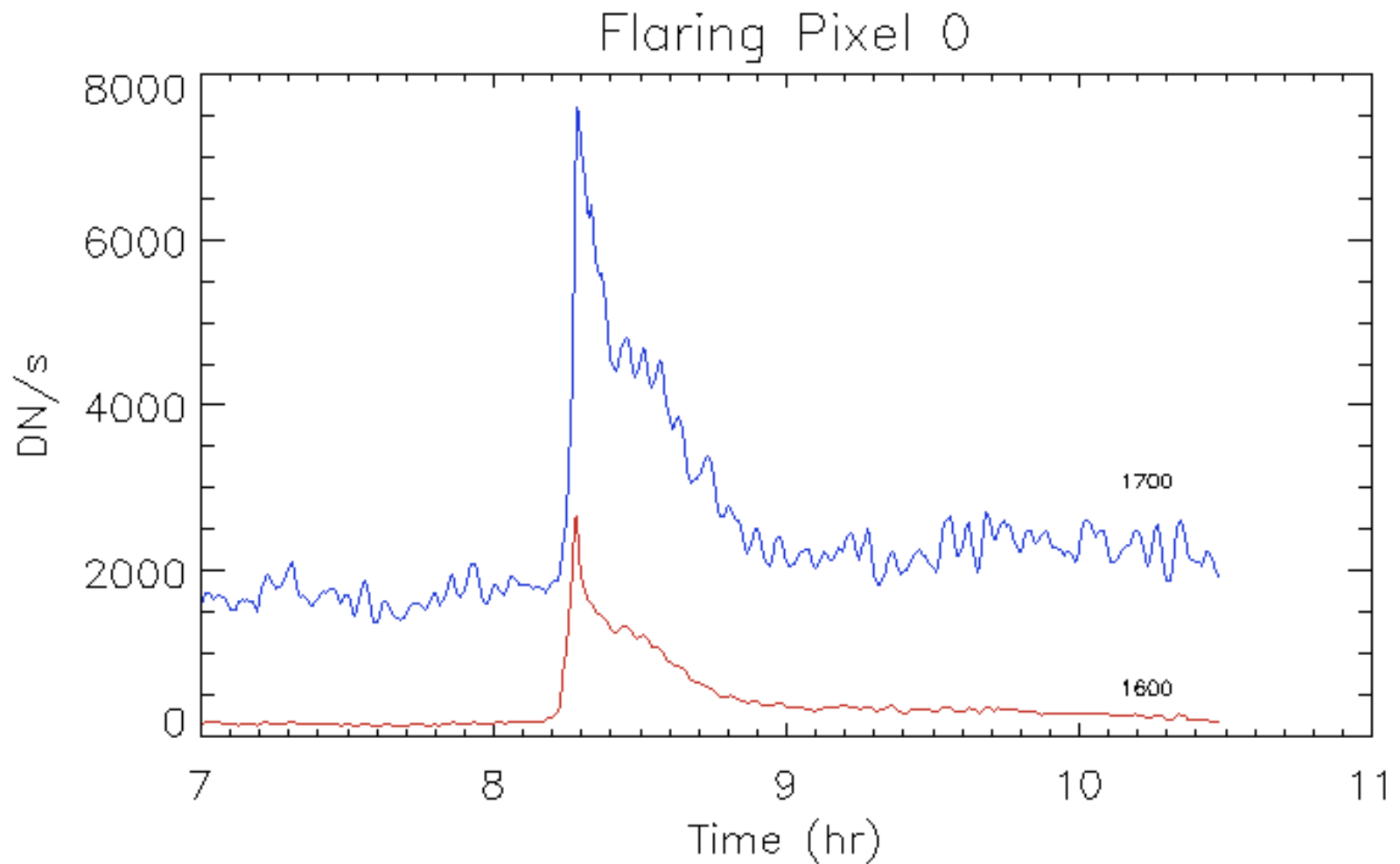
The Plage



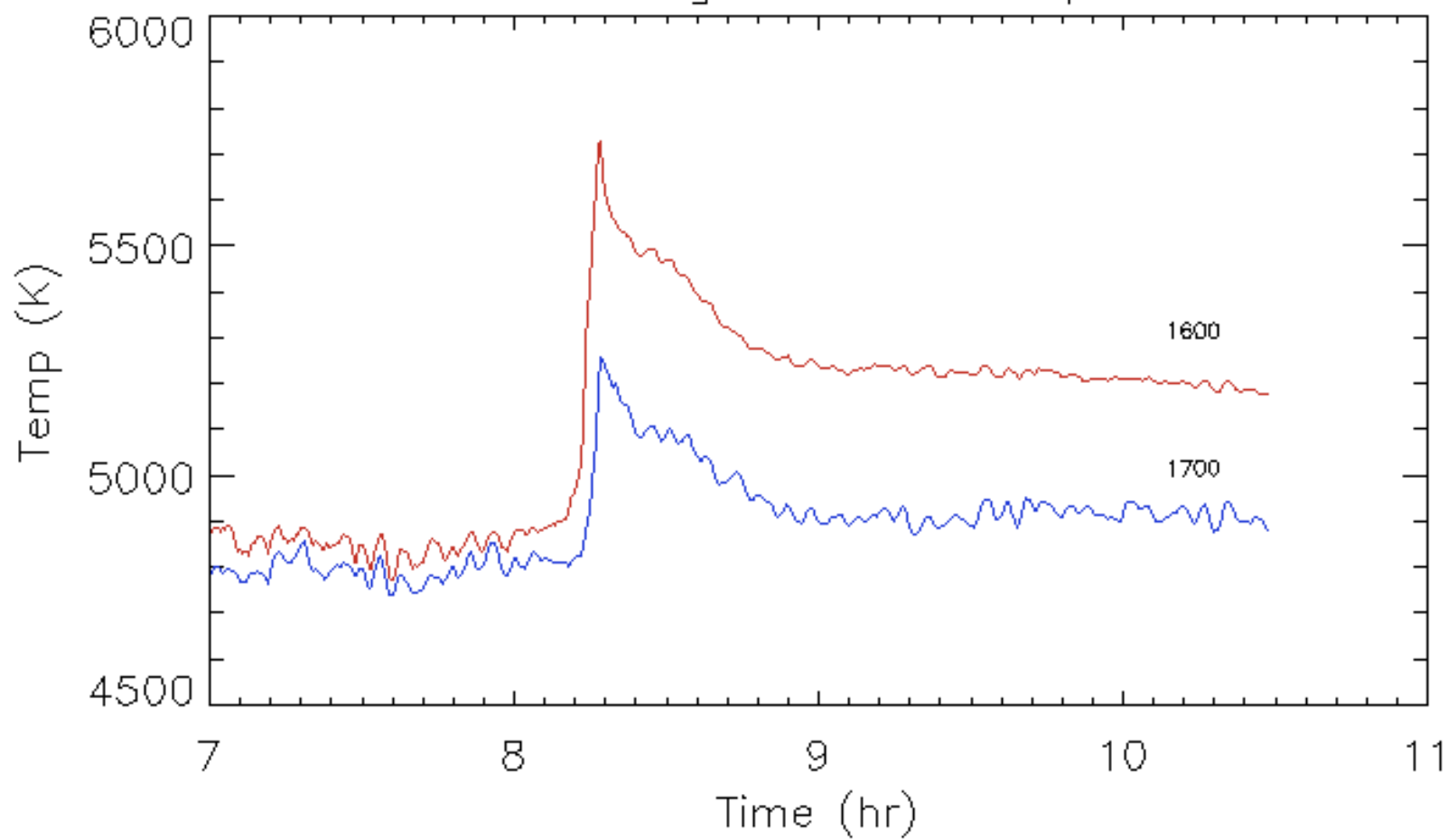
Comparison with Published Data



The Flare



Flaring Pixel 0 Temp



The Flare

- Pre-flare: 4800K, blackbody
- Rapid rise
 - C_{iv} emission
 - Both Line and added continuum
- Slow Decay

No Spectroscopic Data...

- Assumptions:
 - Only C_{IV} lines
 - Added continuum proportional to line, wavelength

Questions?