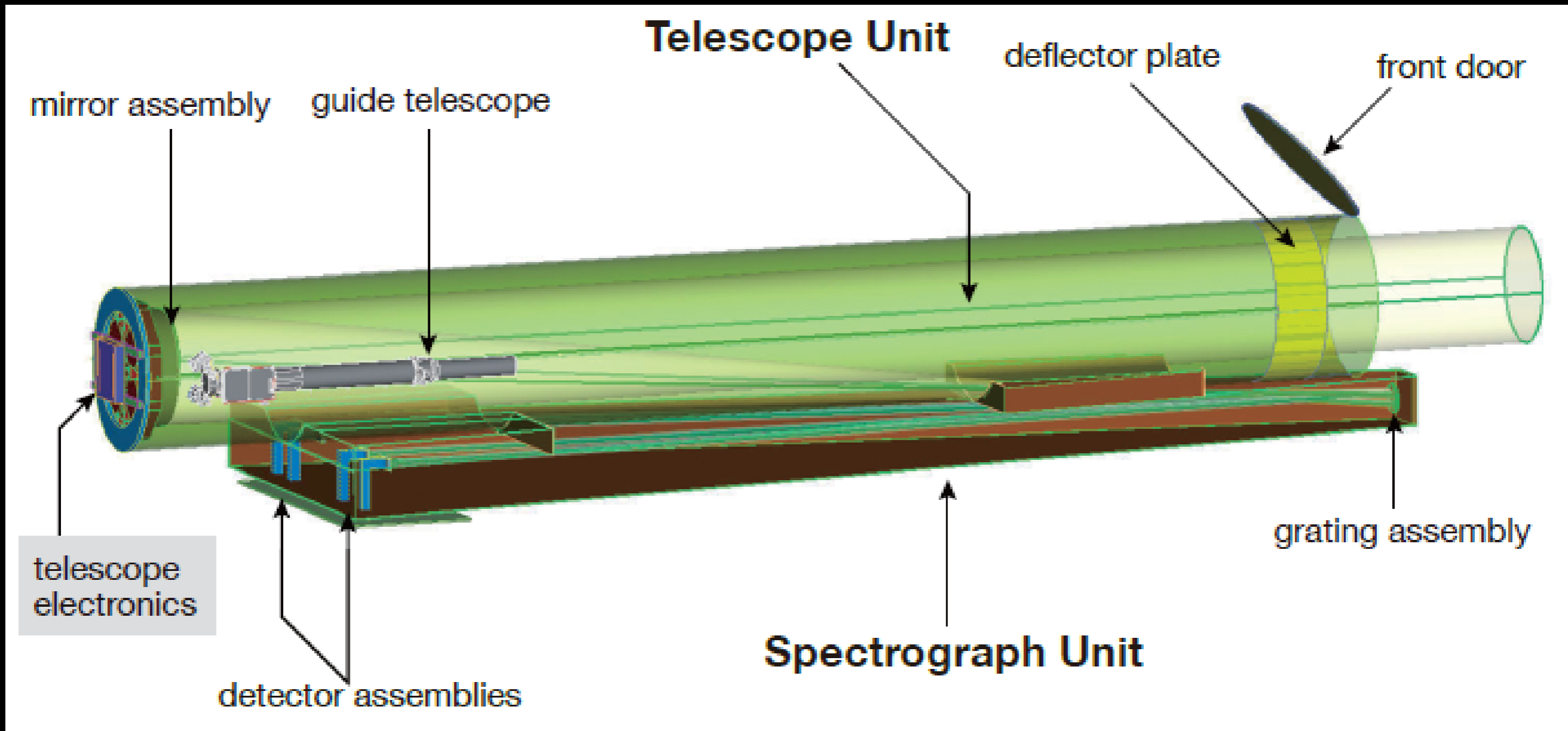


NeVII: Be-like Neon Ion

Tetsuya Watanabe (NAOJ)

EUVST

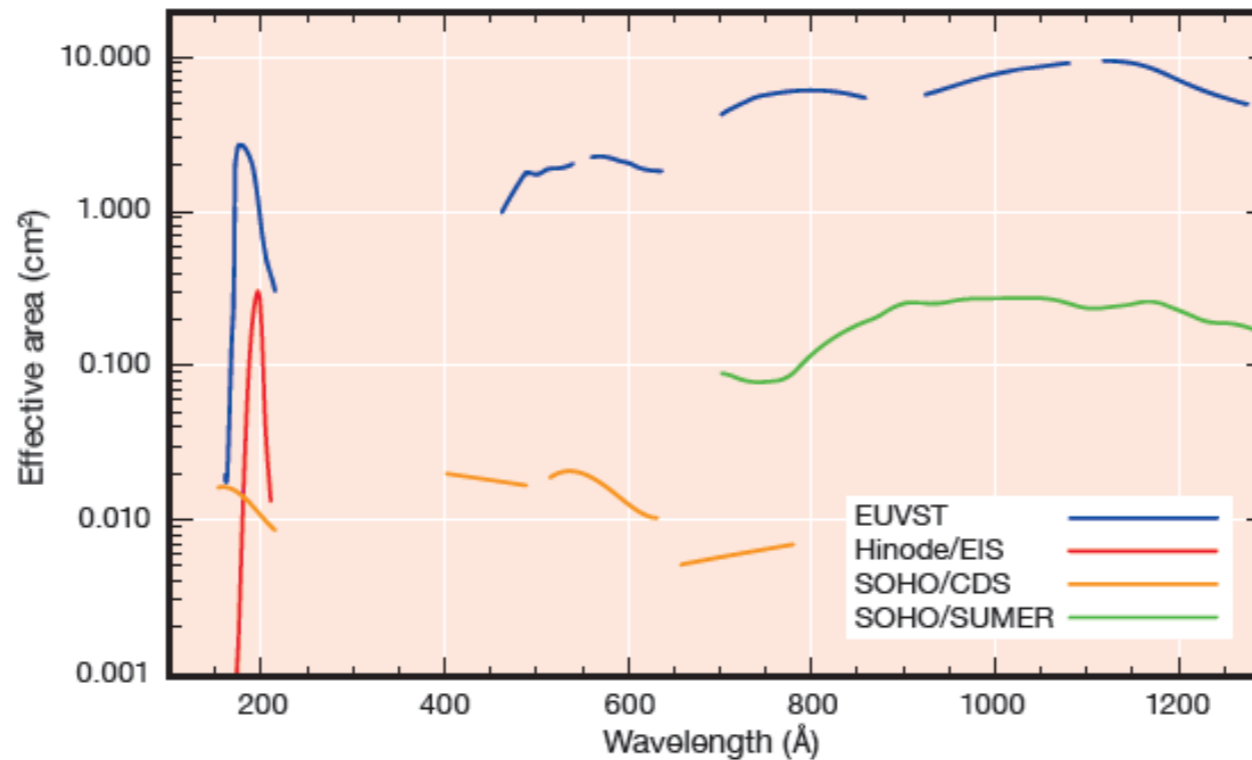


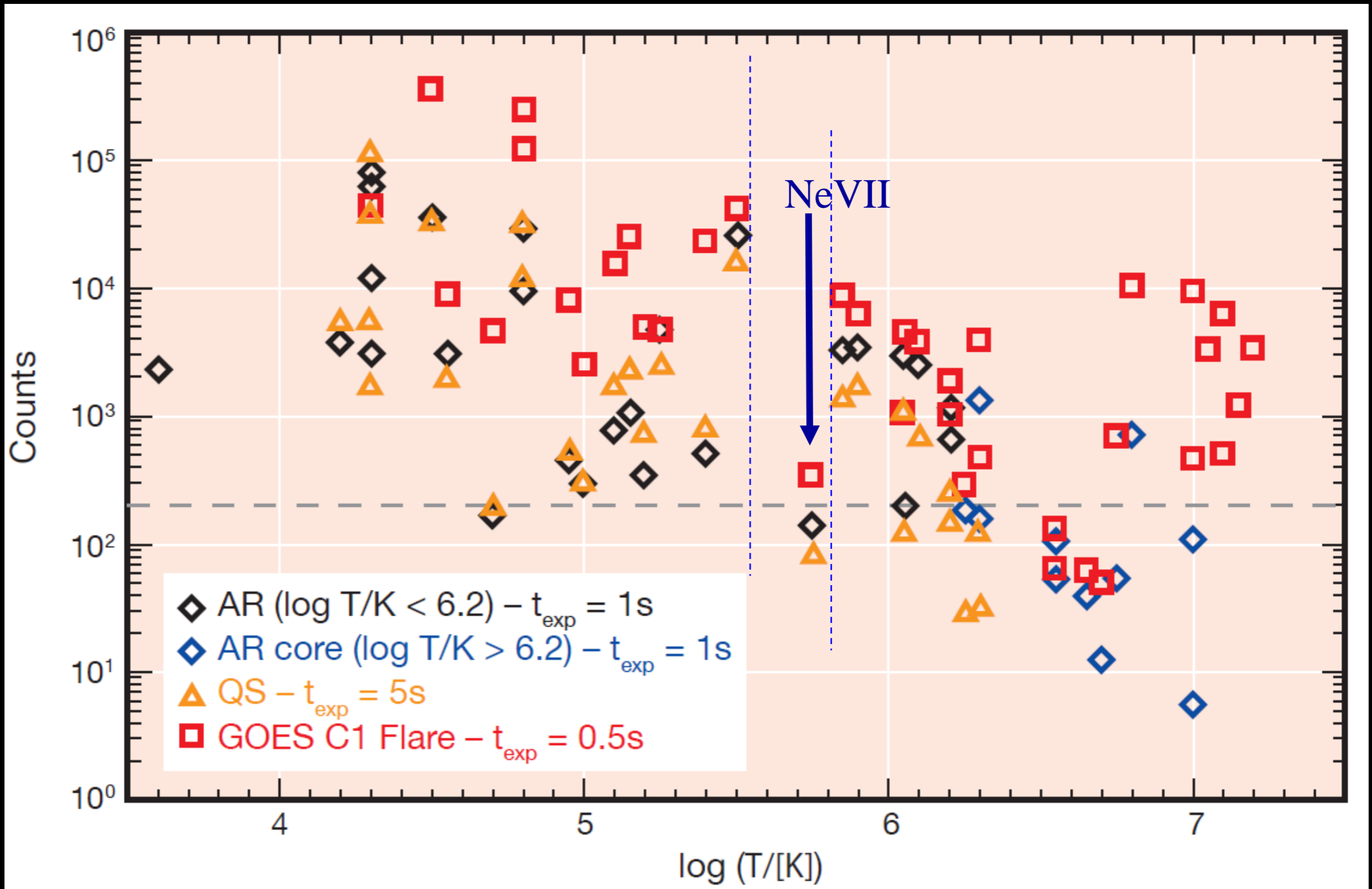
EUVST

Table 3: Model specification of EUVST

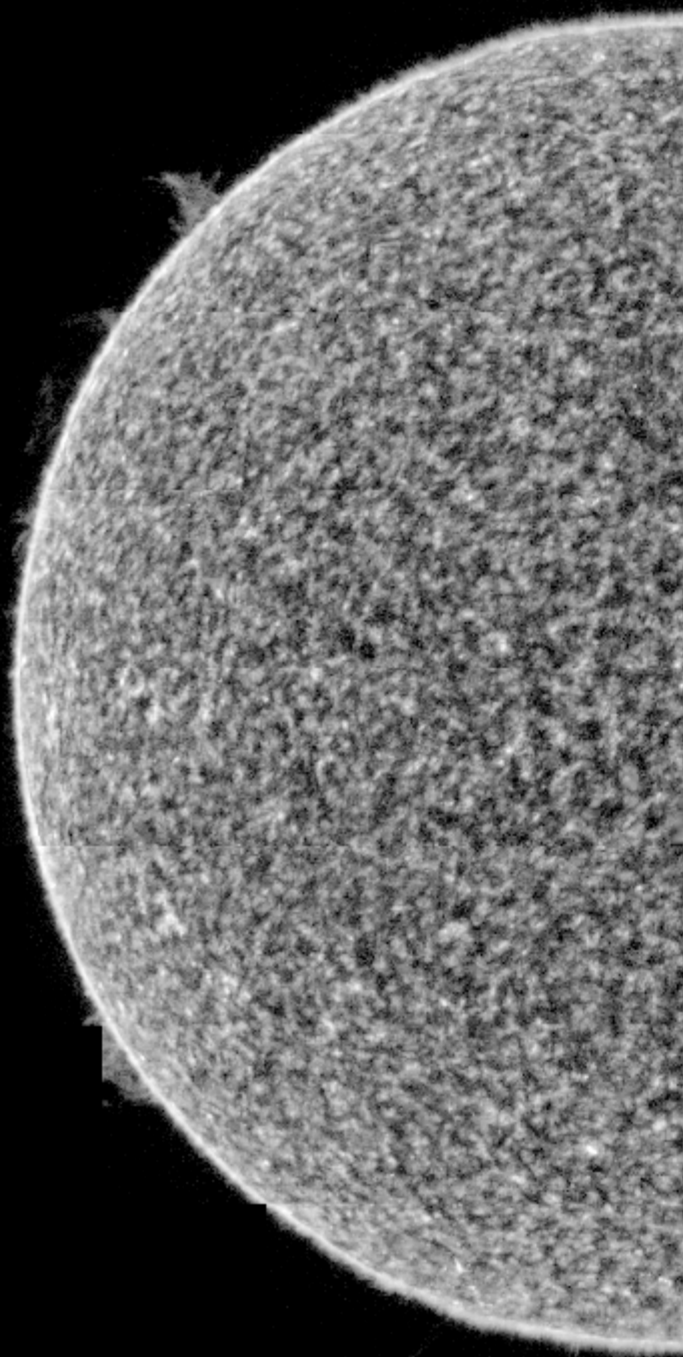
Telescope	Off-axis single mirror telescope		
Primary mirror	diameter 30 cm		
Mirror micro-roughness	<5 Å rms		
Focal Plane Instruments	Spectrographs, Slit imaging camera for co-alignment		
Wavelength coverage	Spectrographs:	First order:	17.0 – 21.5nm, 69.0 – 85.0nm, 92.5 – 108.5nm, 111.5 – 127.5nm
		Second order:	46.3 – 54.2nm, 55.7 – 63.7nm
	Slit imaging camera:	baseline T_{\min} (160 nm)	
Temperature coverage	0.01 – 20 MK		
Imaging performance	$\leq 0.28''$ in 67% encircled energy over nominal field-of-viewa		
Spatial sampling	0.14" per detector pixel		
Slit	0.14" - 2.8"		
Spectral resolution	16,000 – 30,000		
Exposure time	0.1 – 20s nominal		
Field-of-view	280 arcsec (along slit) x 300 arcsec (scanning direction) w/o repointing; coarse pointing to 1.5 solar radii		

Figure 18: EUVST effective area, compared to EIS, SUMER, and CDS. EUVST will have about an order of magnitude larger effective area than previous Hinode and SOHO instruments.

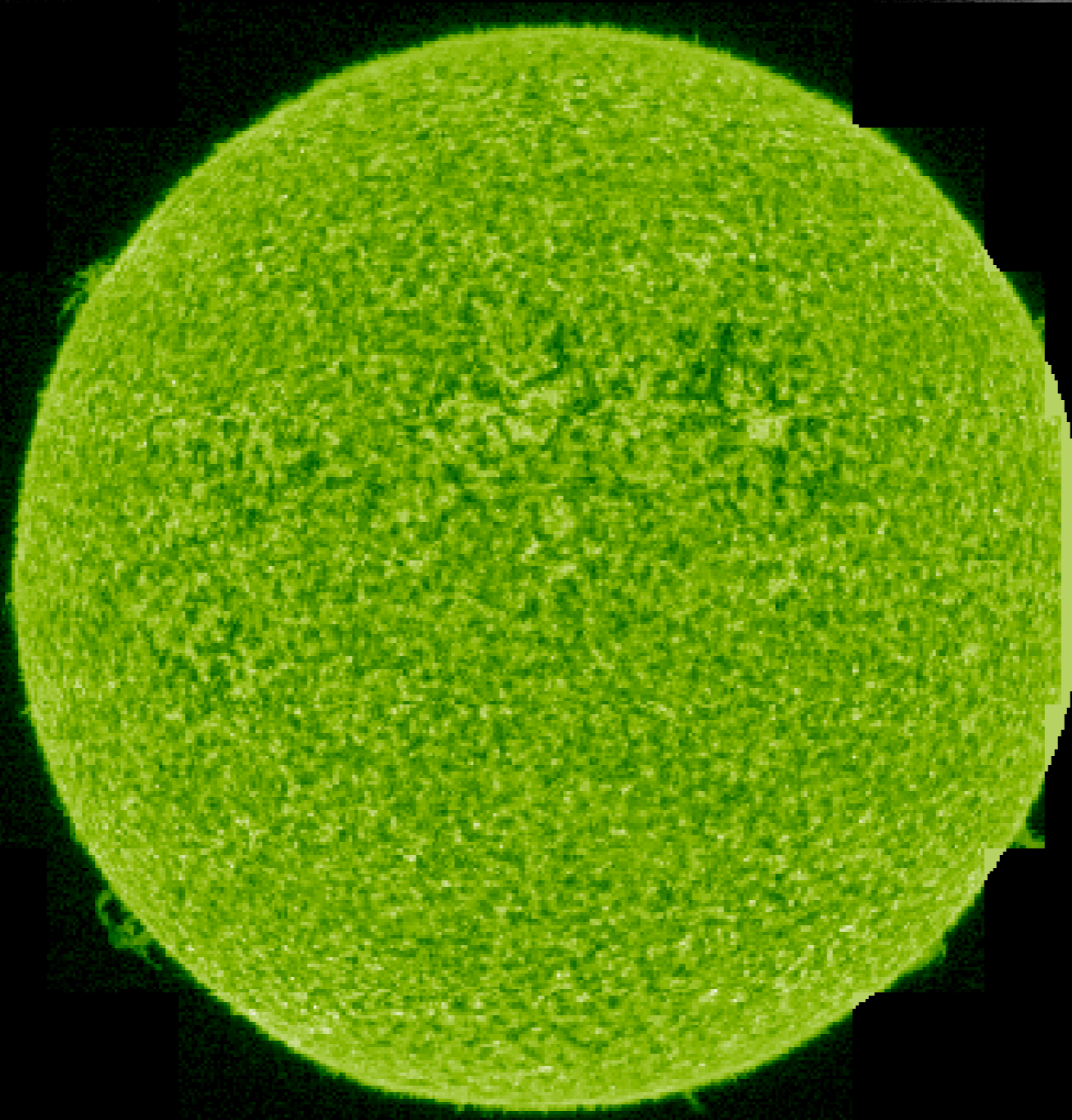




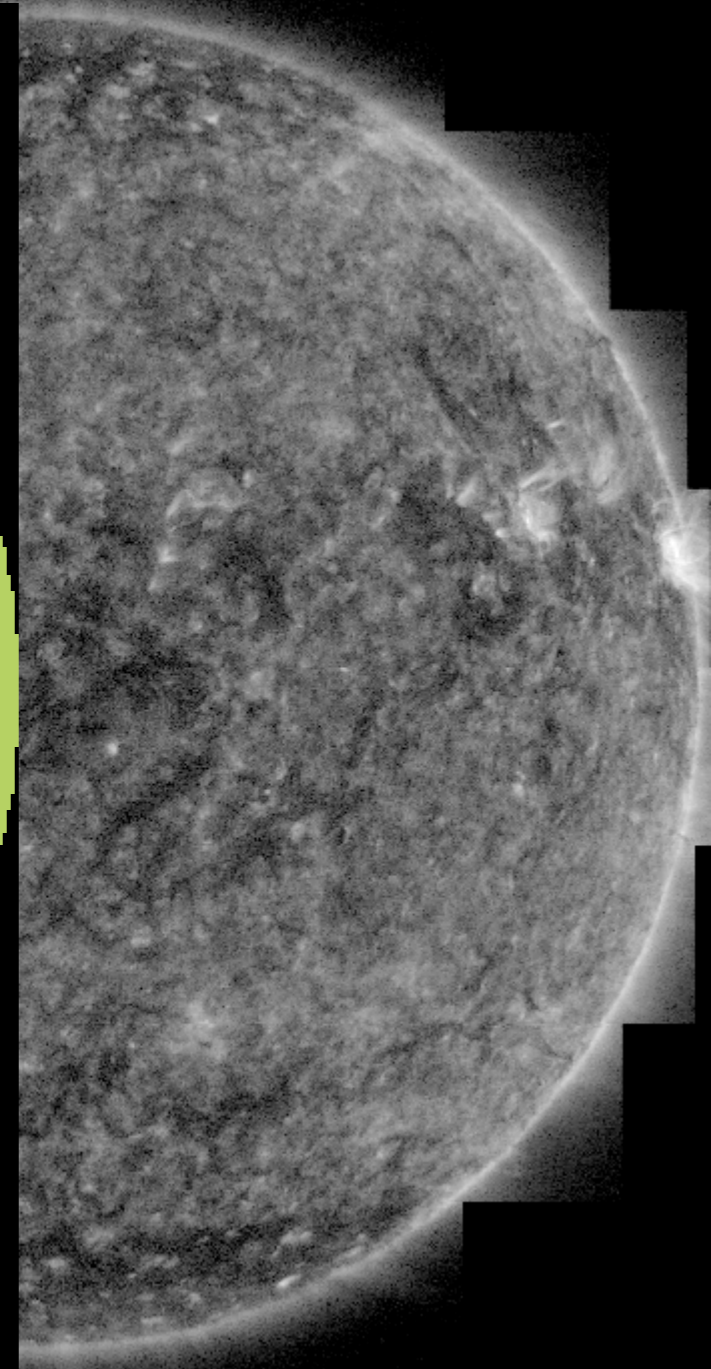
SUMER: CIV — OVI — NeVIII



CIV

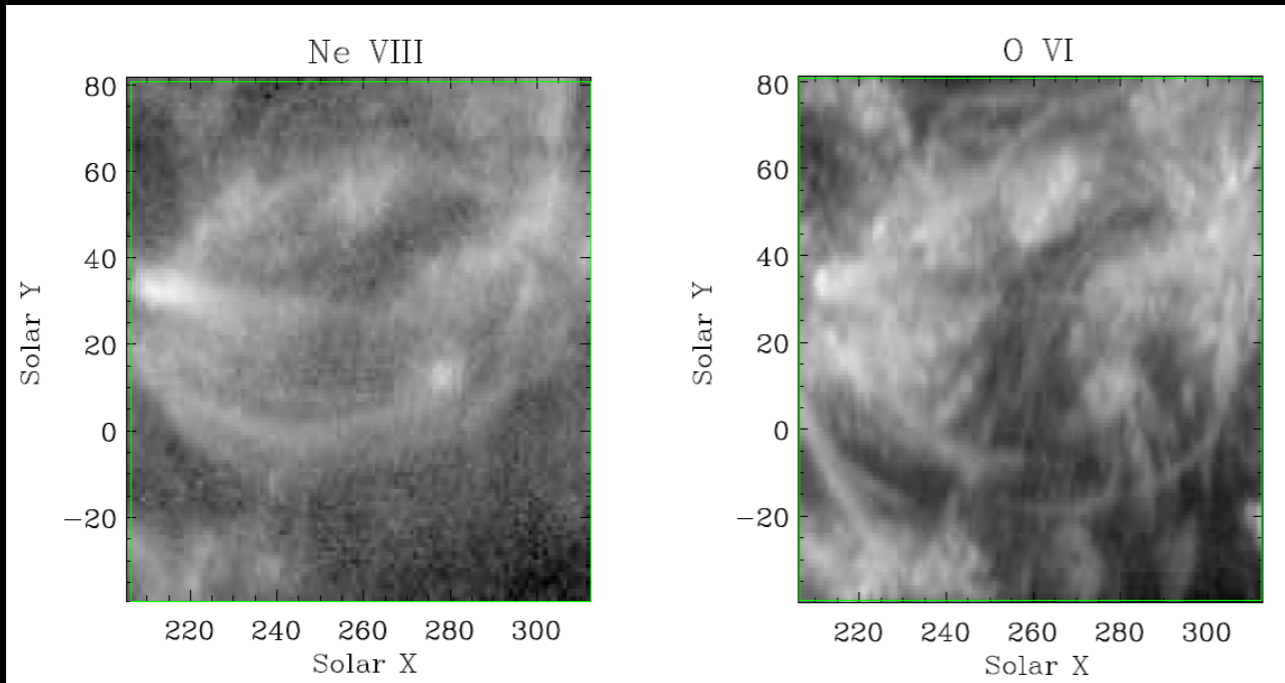


OVI

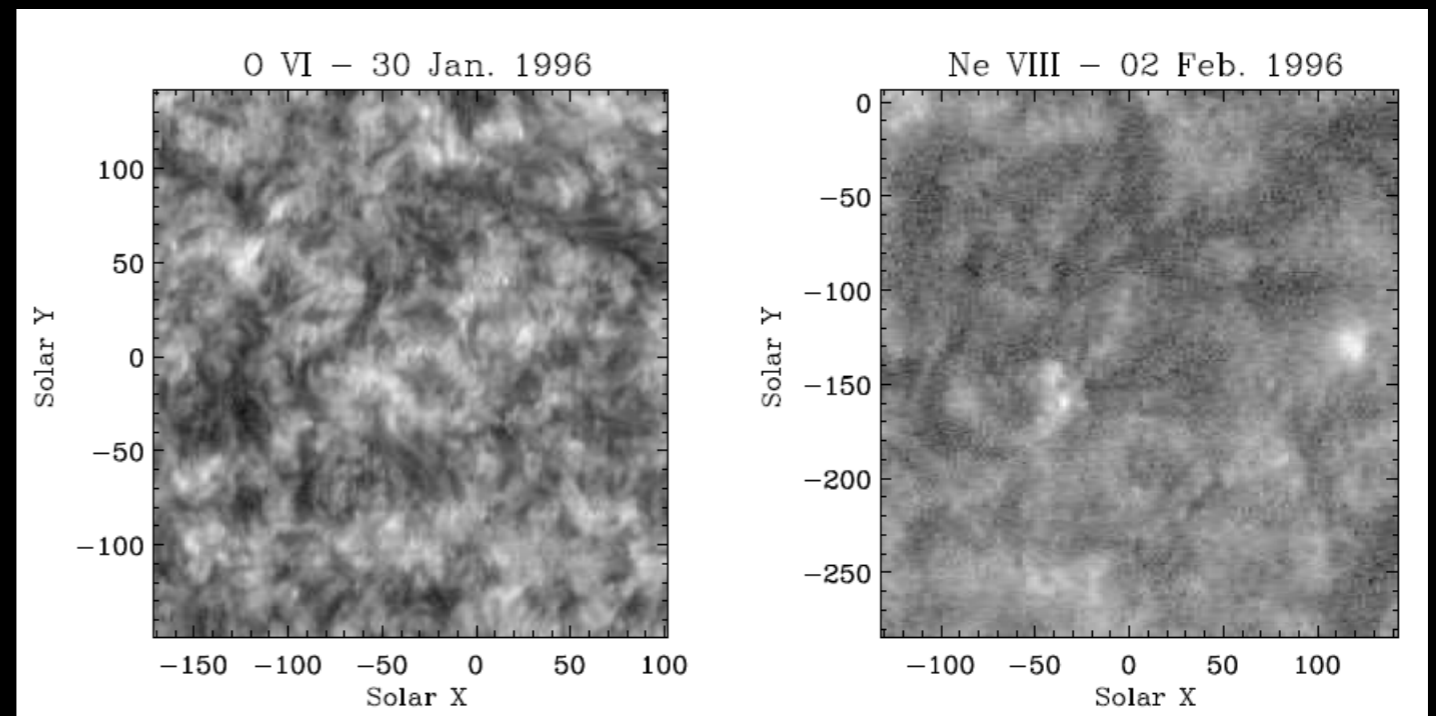


NeVIII

- Gap between OVI – NeVIII by SUMER/SoHO



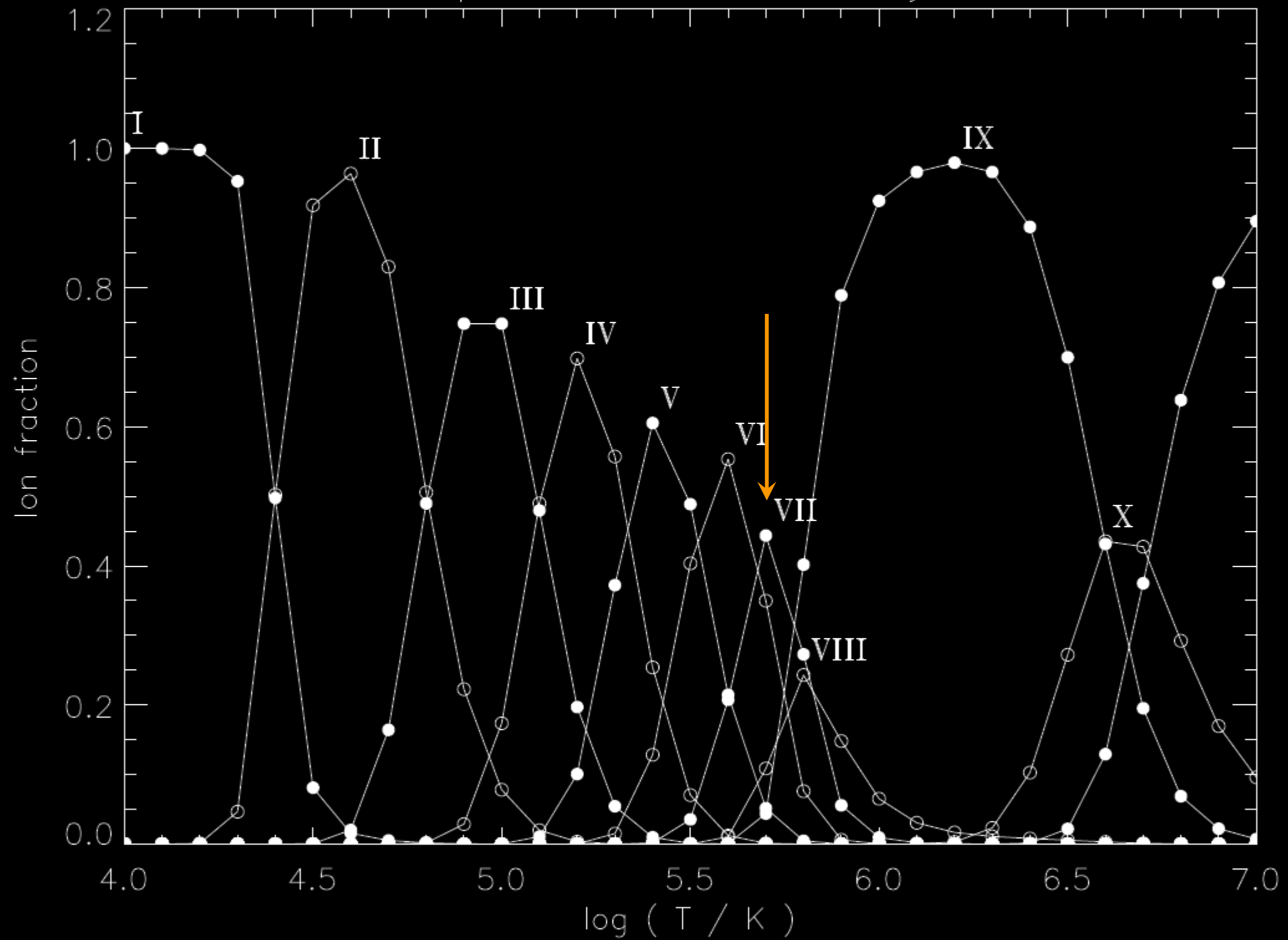
AR



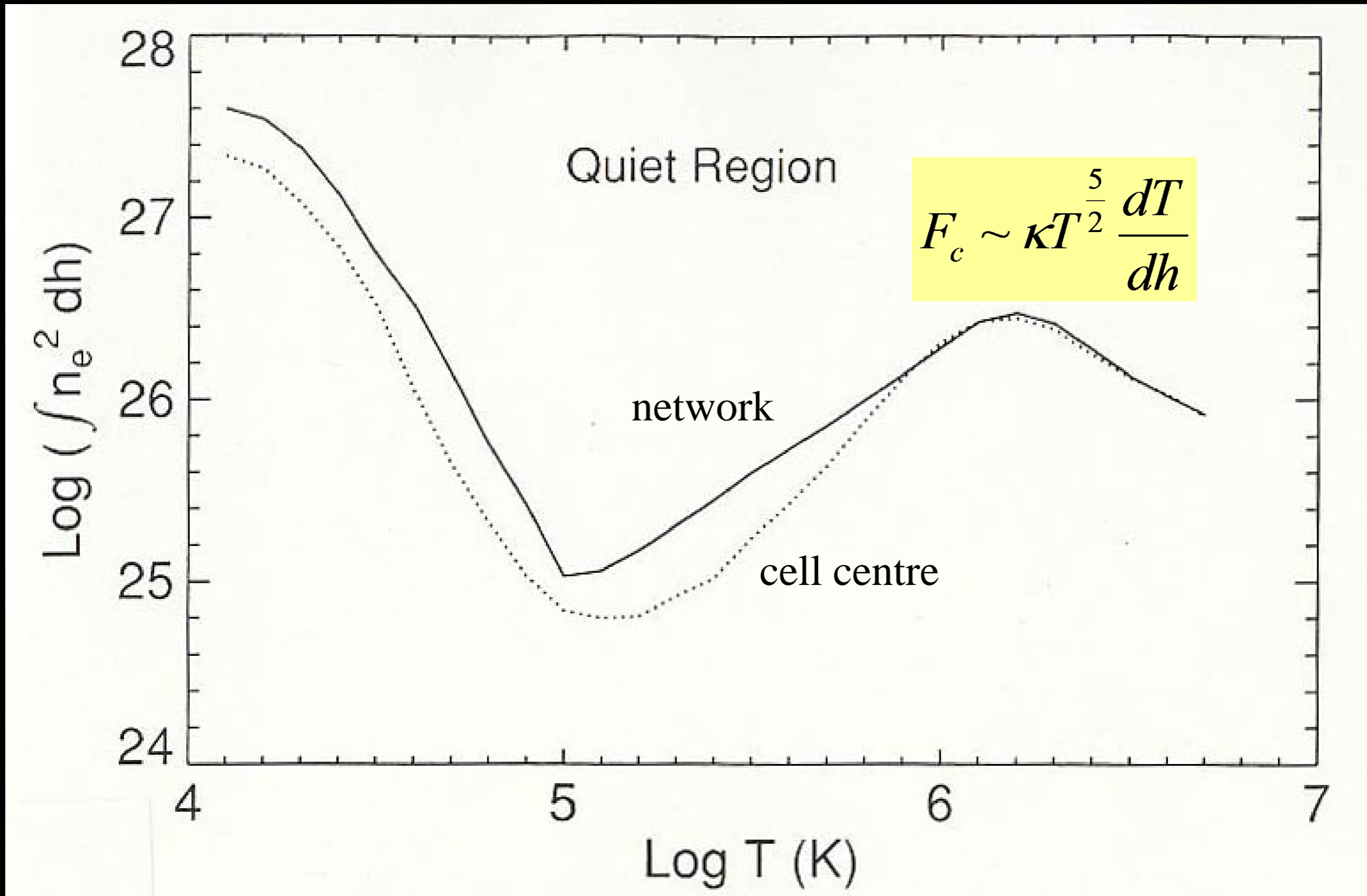
QS

Ne ionization fraction

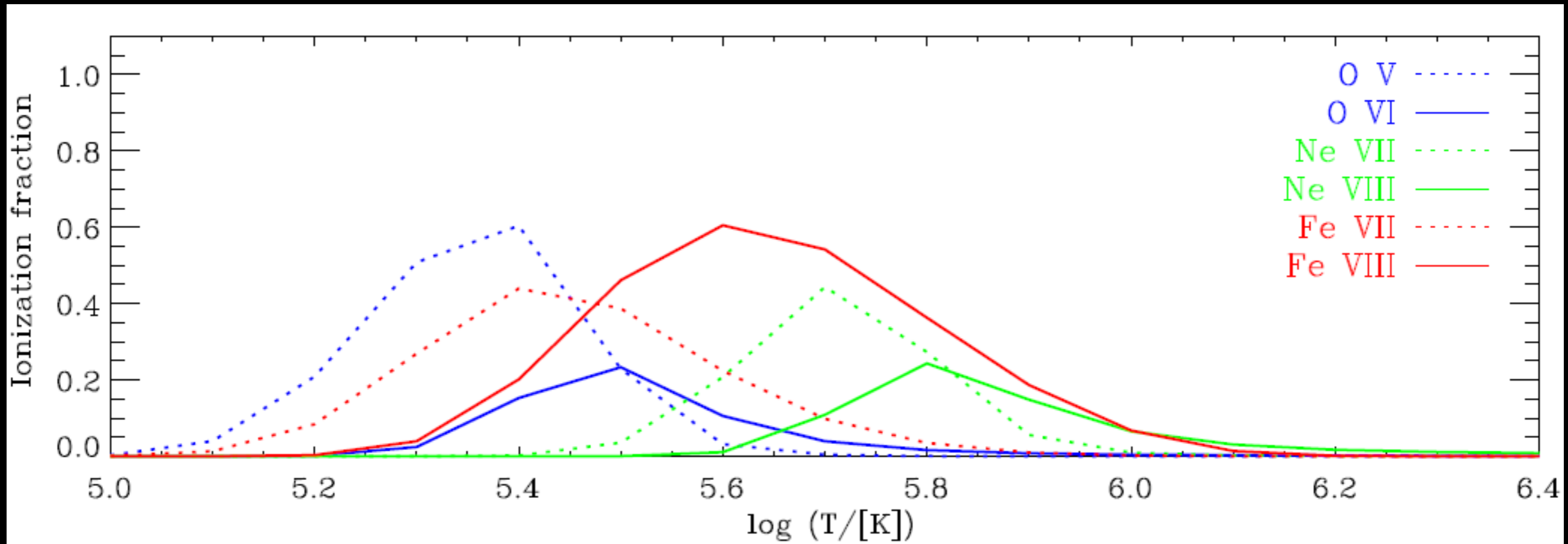
Ionization equilibrium for Ne — bryans_etal_09



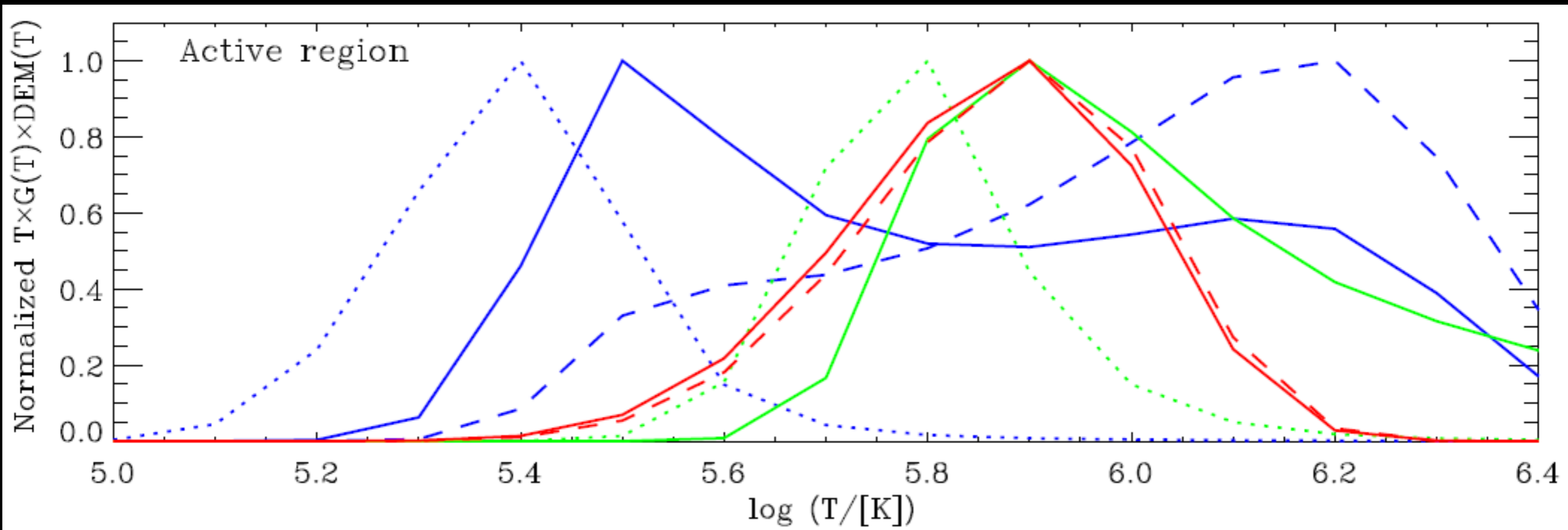
古典的な遷移層



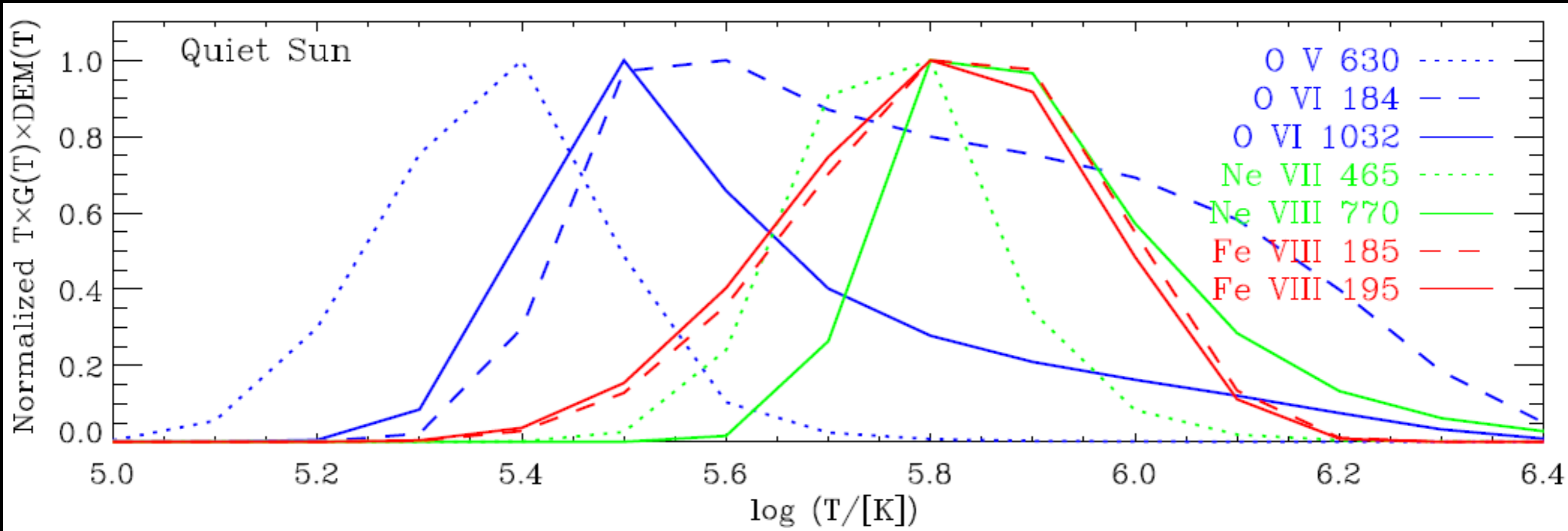
- NeVII

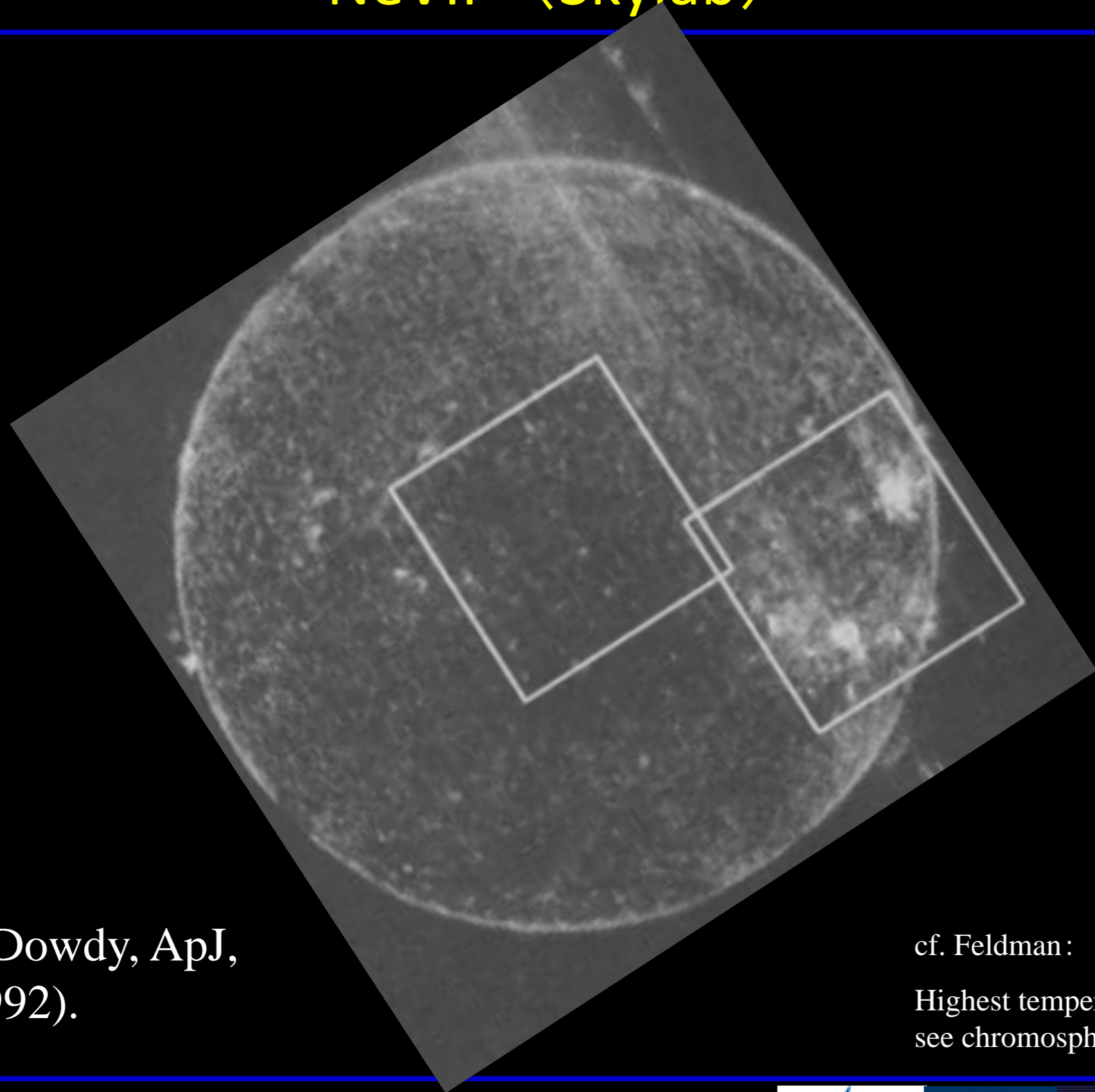


$G(T) \times DEM$ (for AR)



$G(T) \times DEM$ (for QS)



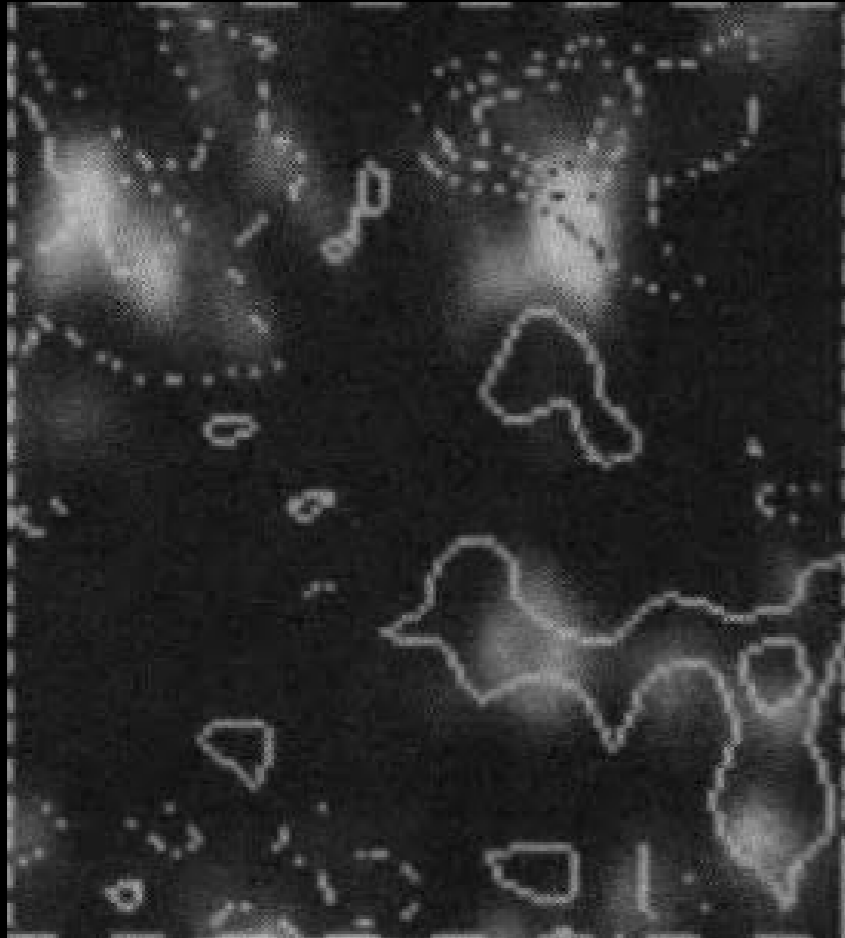
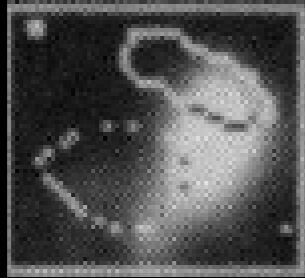


Mariska & Dowdy, ApJ,
401,754 (1992).

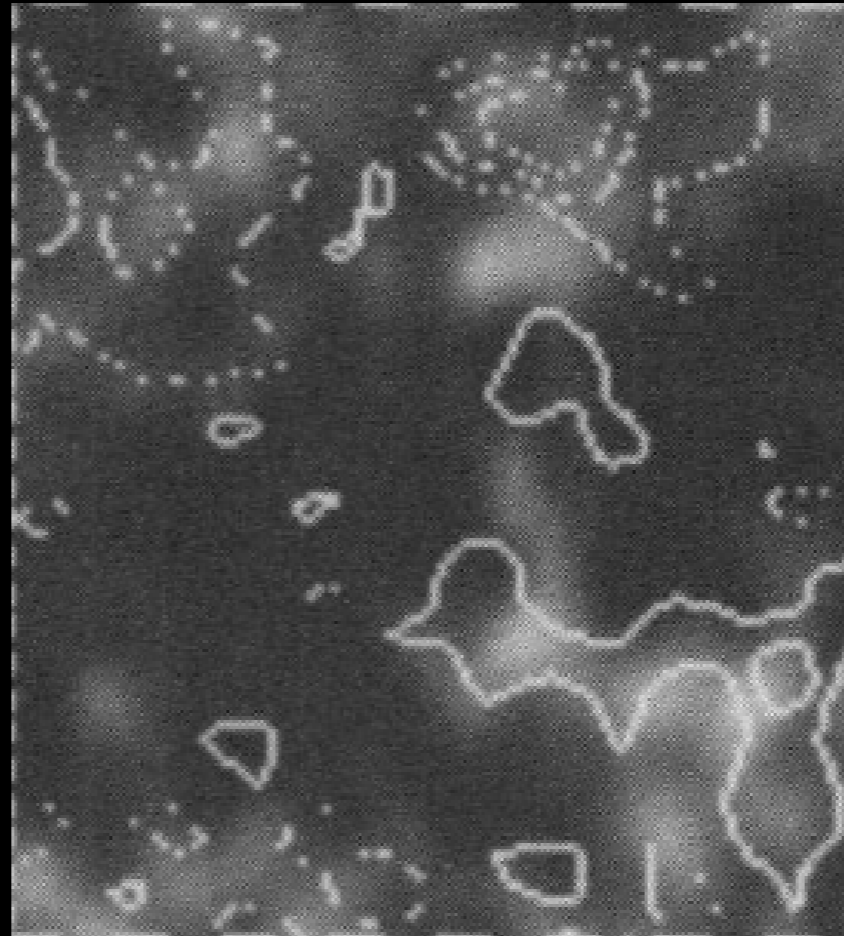
cf. Feldman :

Highest temperature line that we can
see chromospheric networks.

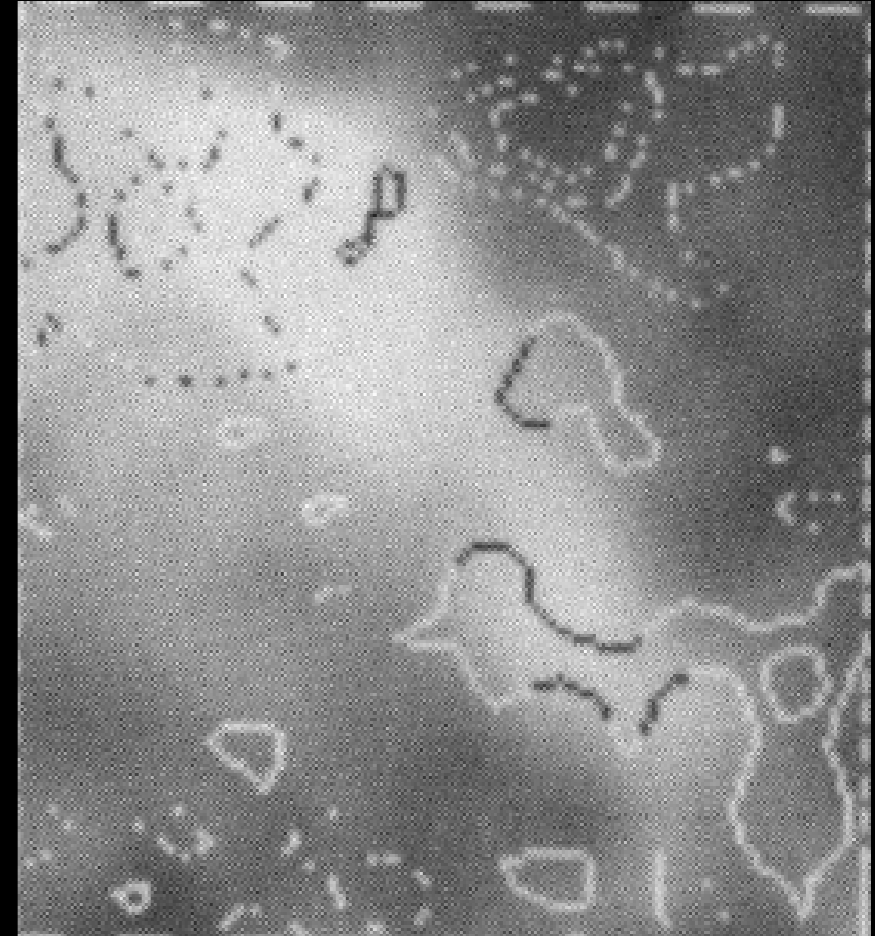
OVI-NeVII-MgX (SKYLAB)



OVI



NeVII



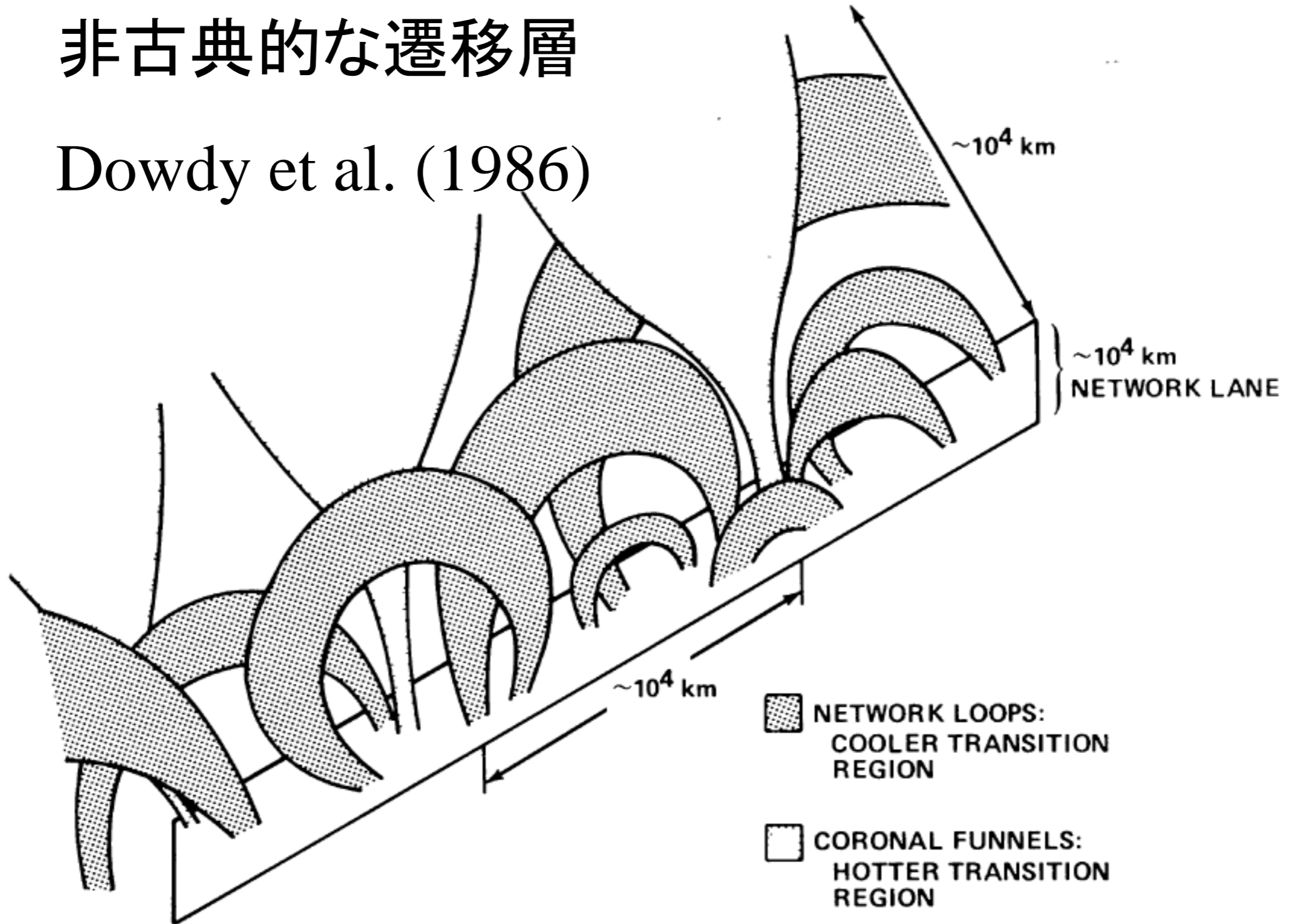
MgX

——— positive polarity
- - - - - negative polarity

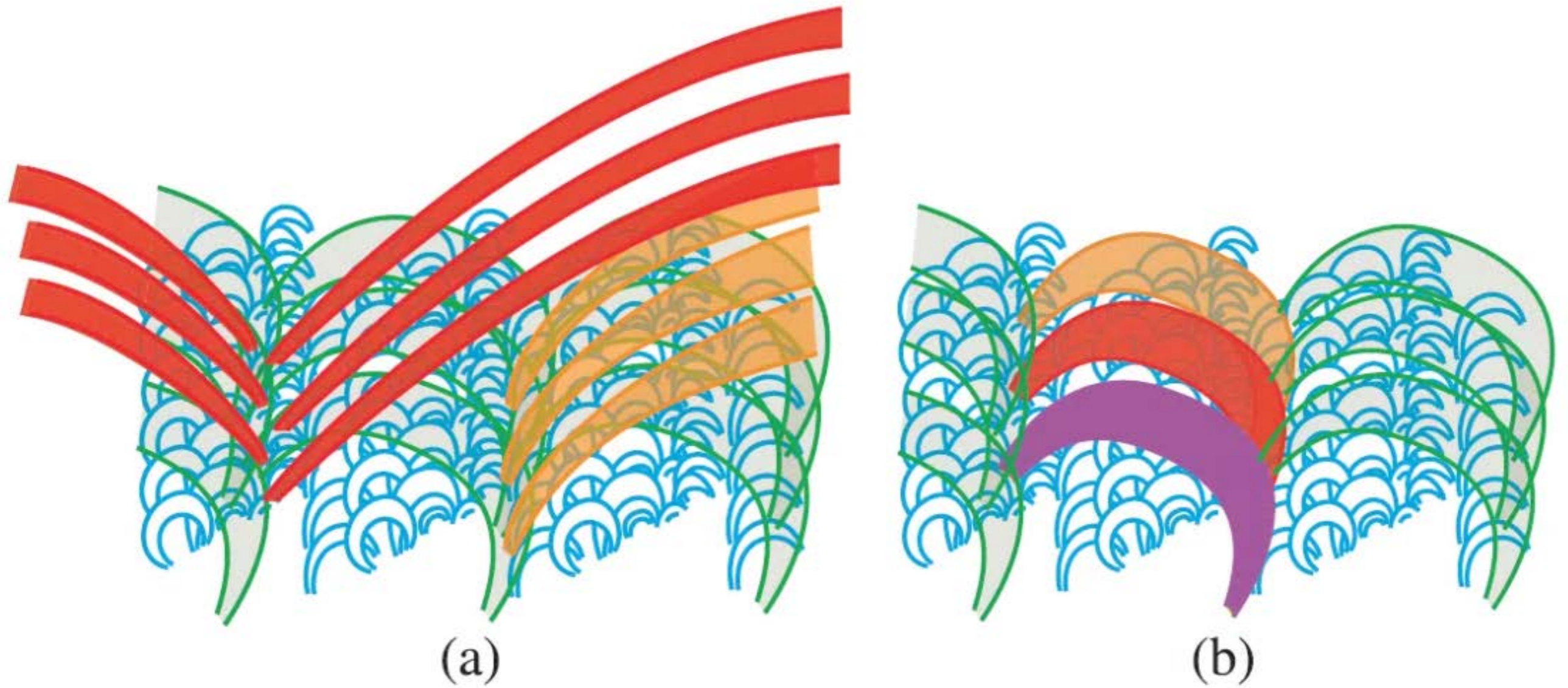
Dowdy (1993; ApJ, 411, 406)

非古典的な遷移層

Dowdy et al. (1986)

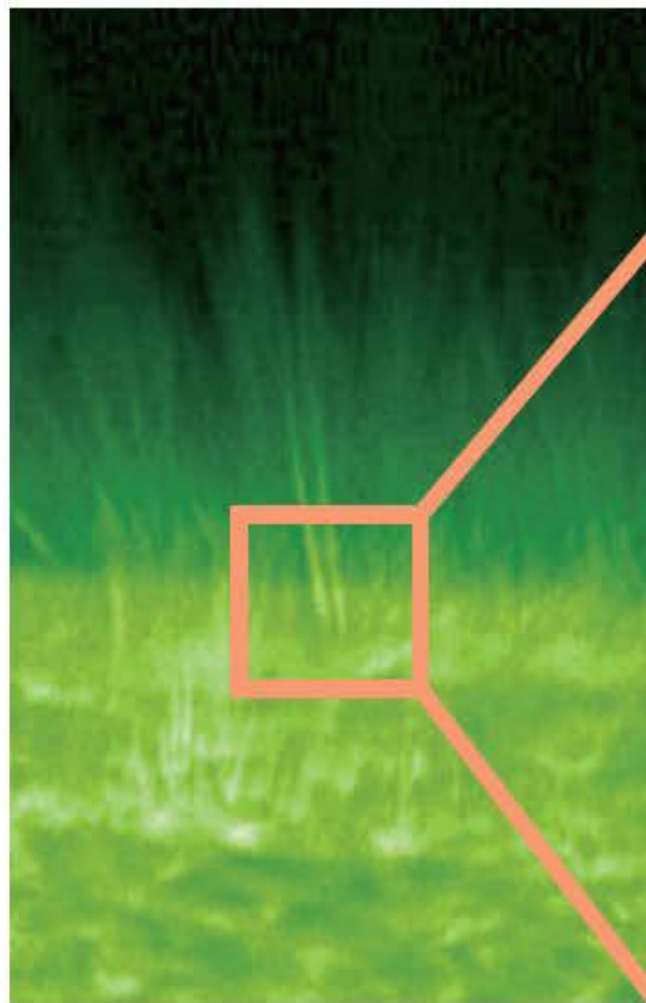


EISの上部遷移層観測



Matsuzaki et al.: 2007, PASJ, 59, S683.

Identifying of Mechanism for spicule formation



By SOT/Hinode

