

1500

**SDSS J1453+0401**  
2000

2500

*Rest Wavelength (Å)*

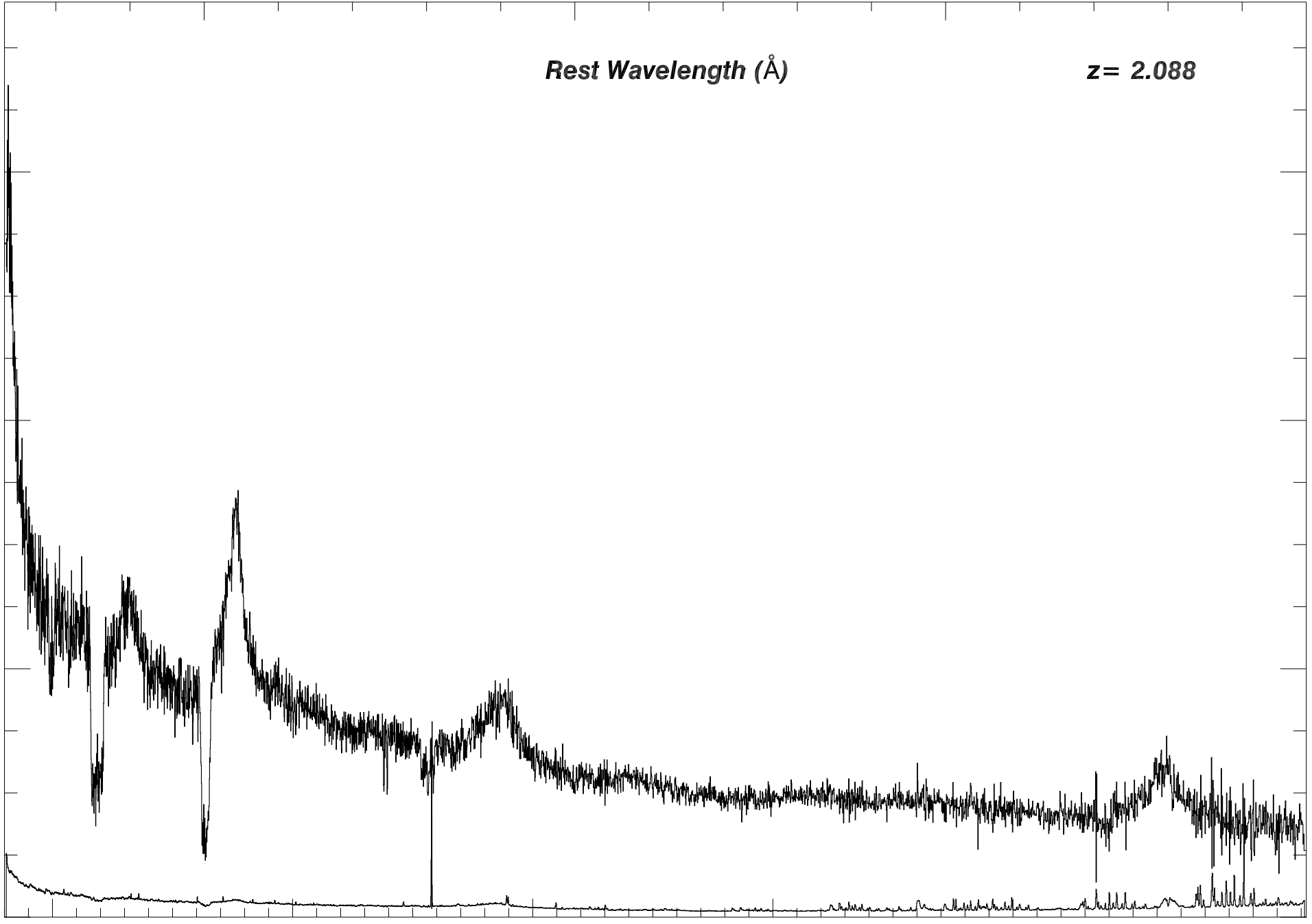
**z = 2.088**

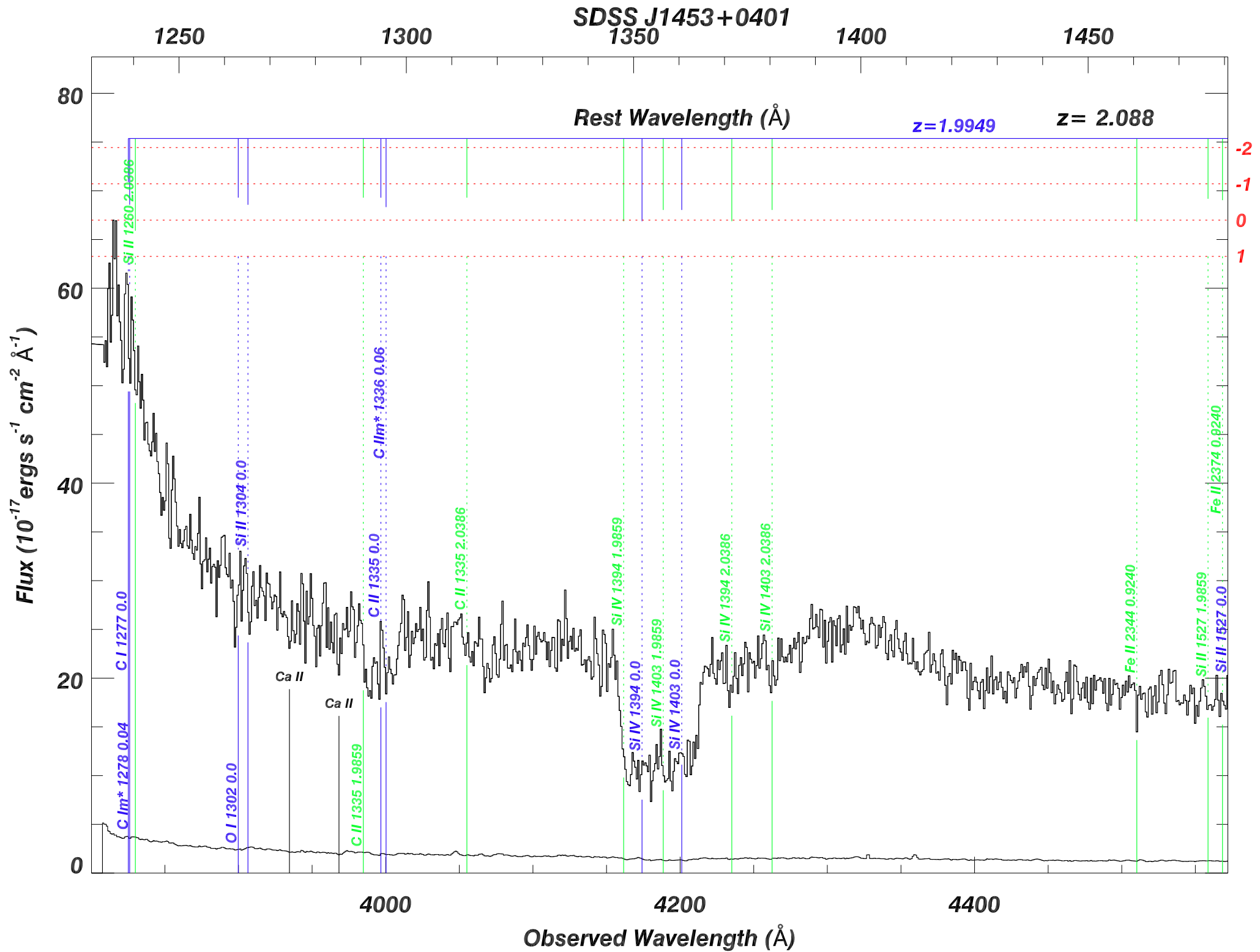
Flux ( $10^{-17}$  ergs  $s^{-1}$   $cm^{-2}$   $\text{\AA}^{-1}$ )

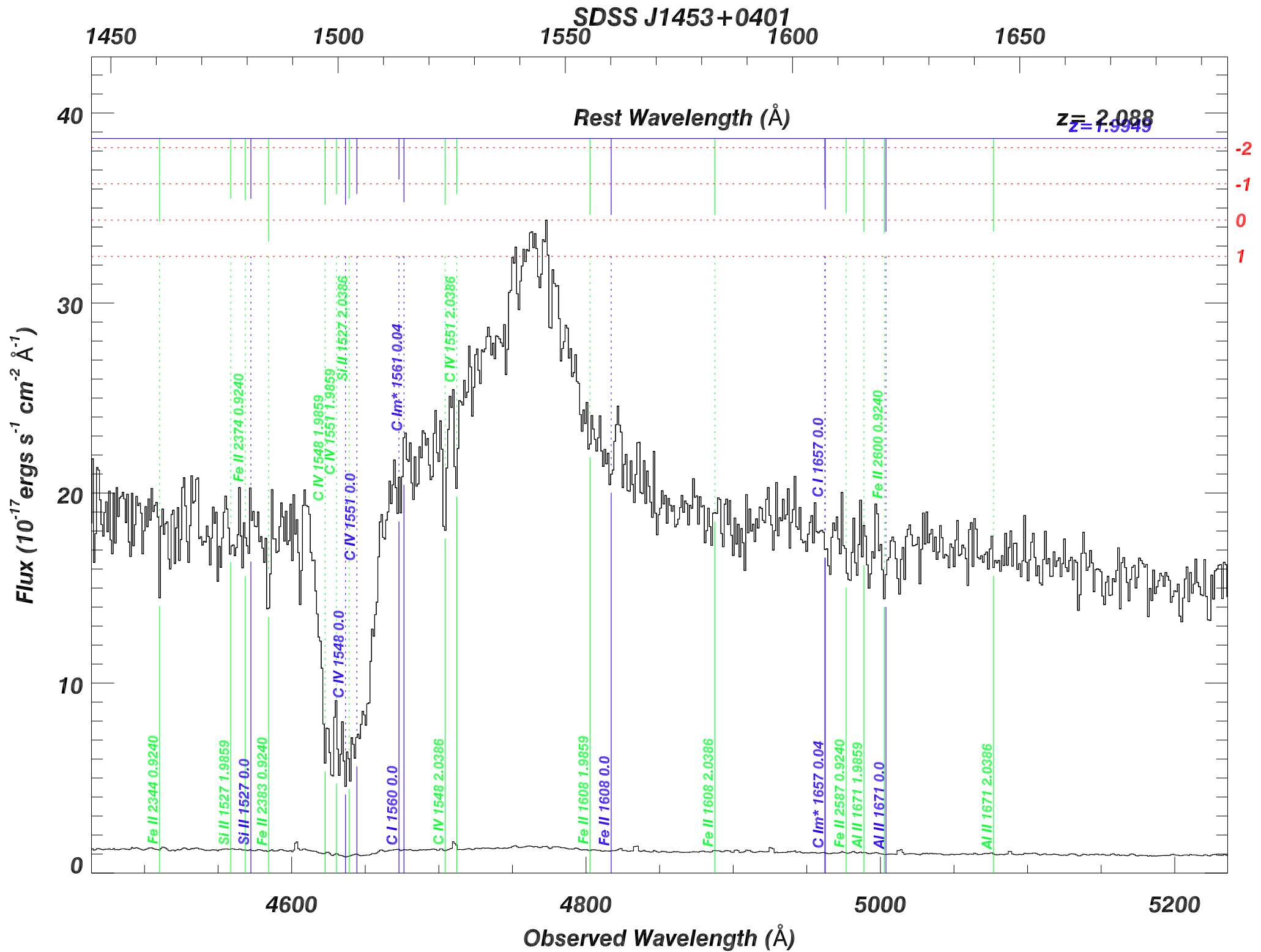
60  
40  
20  
0

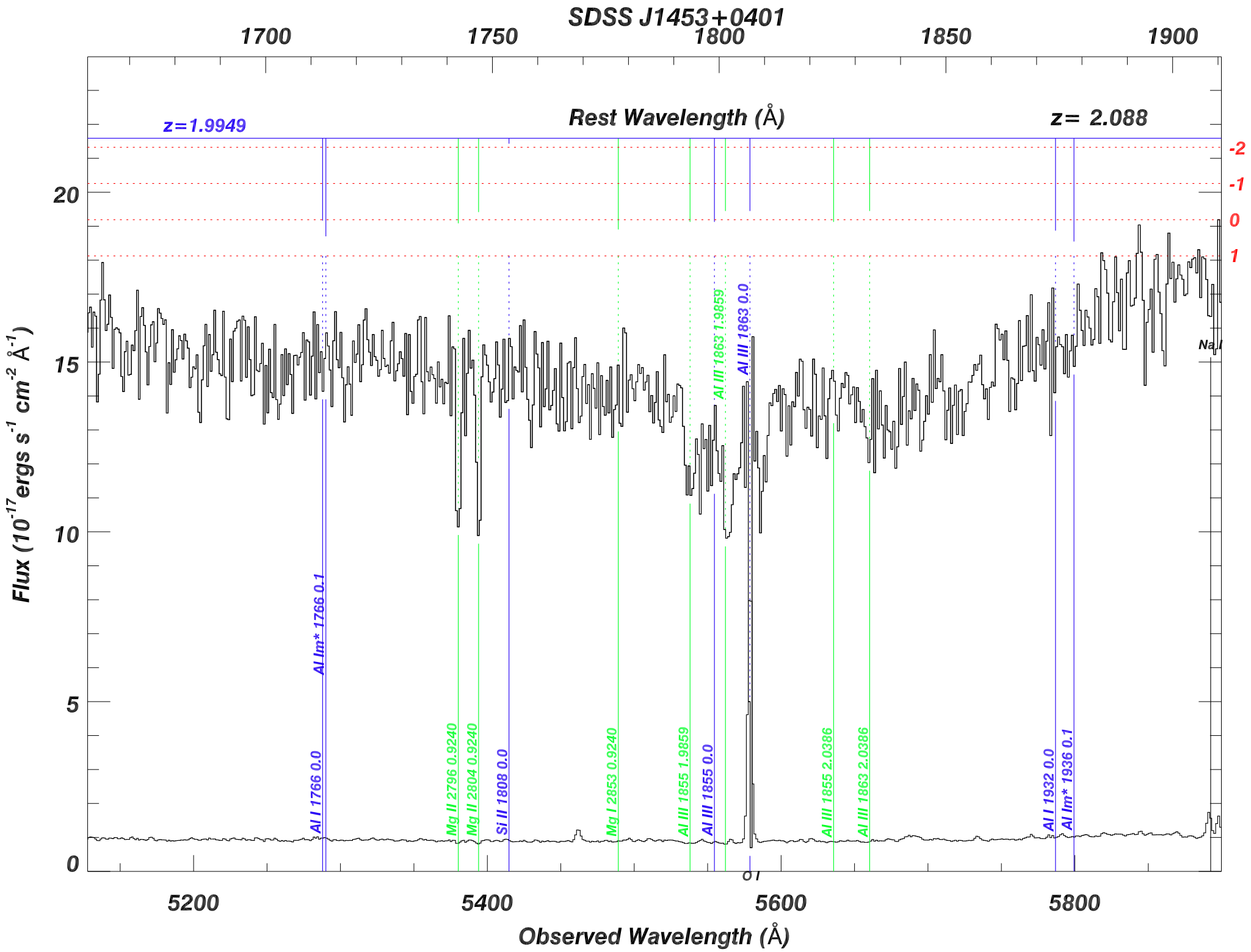
4000 5000 6000 7000 8000 9000

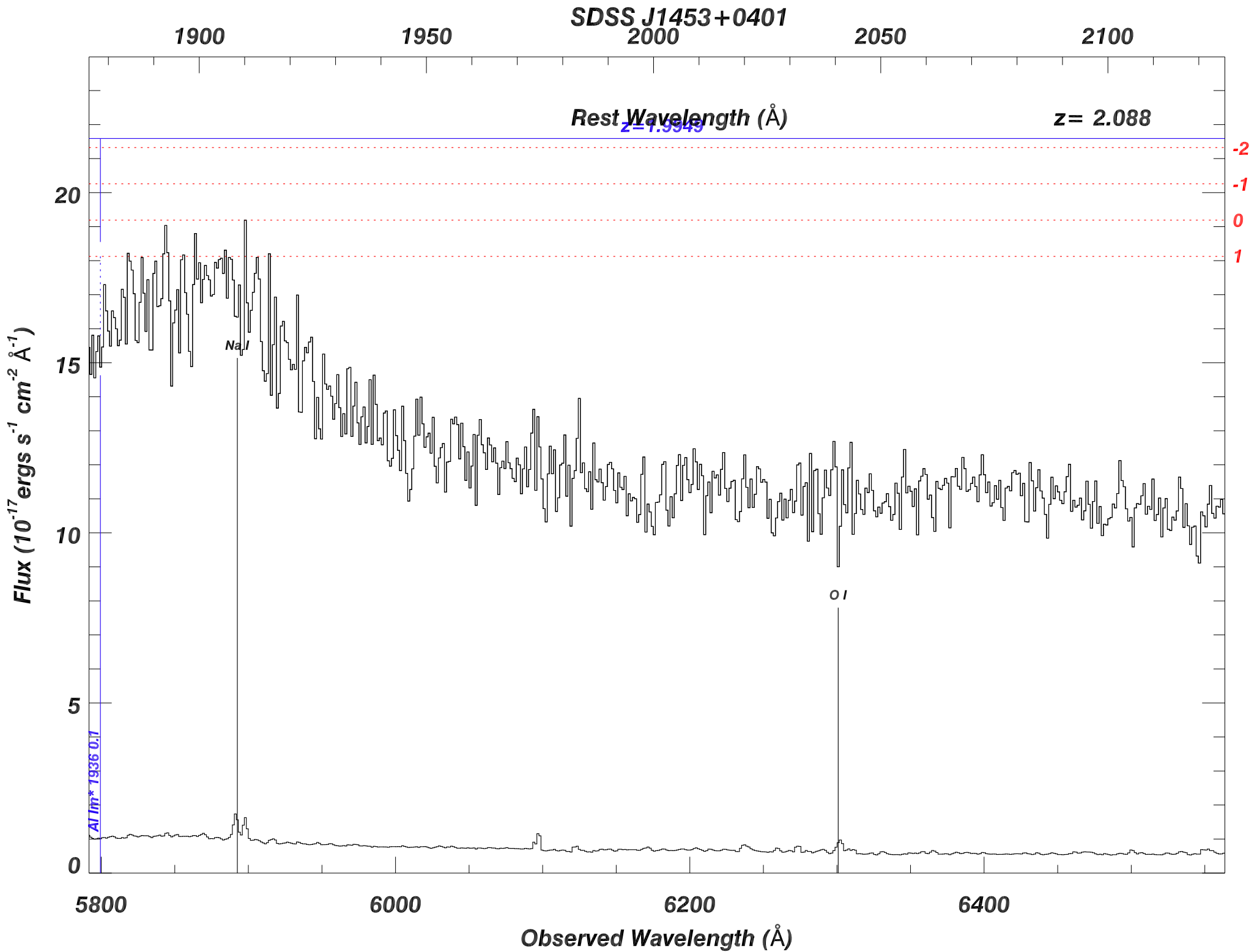
*Observed Wavelength (Å)*









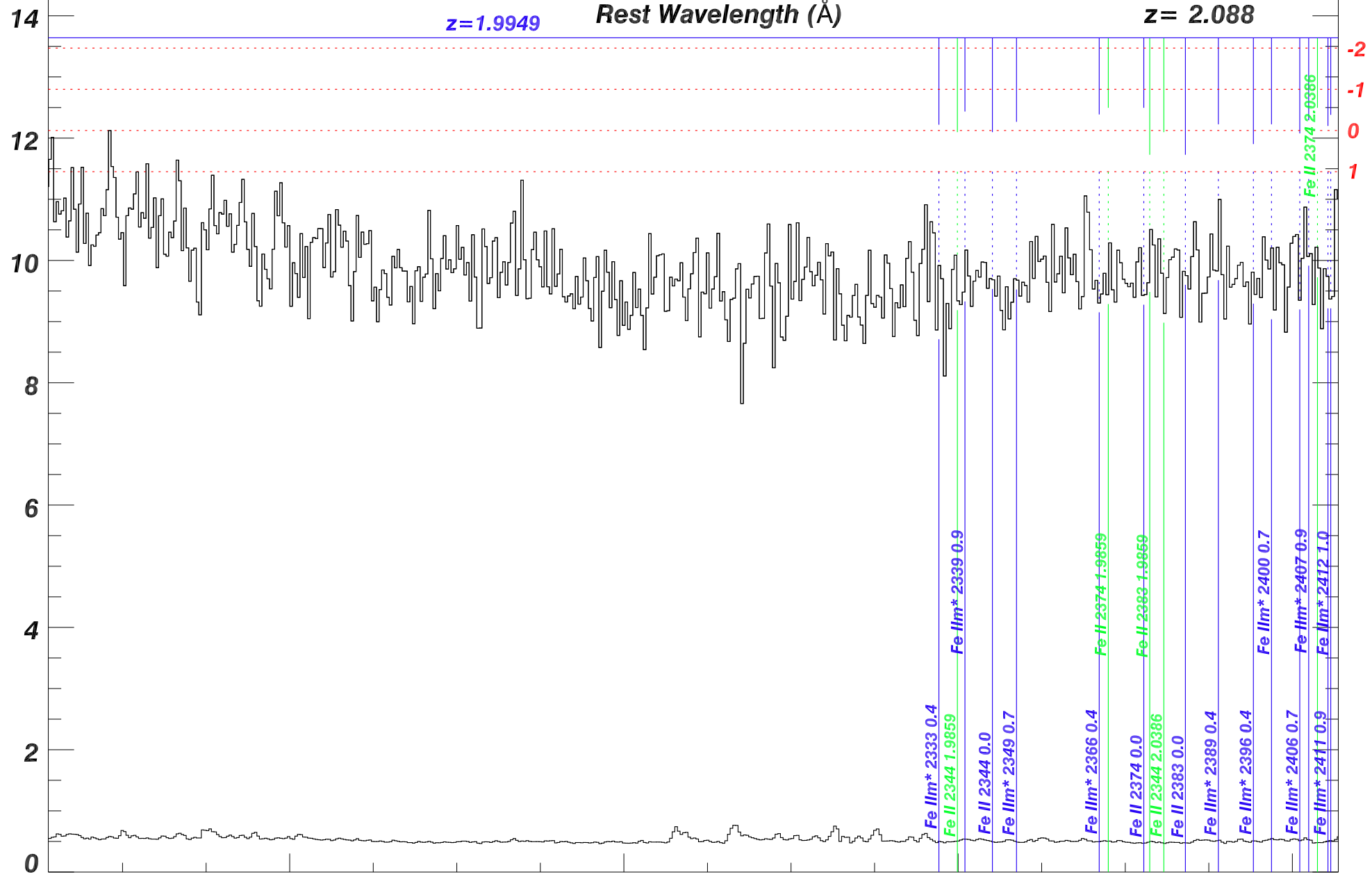


SDSS J1453+0401  
2200 2250

2100

2150

2300



Flux ( $10^{-17} \text{ ergs s}^{-1} \text{ cm}^{-2} \text{ \AA}^{-1}$ )

Observed Wavelength ( $\text{\AA}$ )

6600

6800

7000

7200

$z=1.9949$

Rest Wavelength ( $\text{\AA}$ )

$z=2.088$

-2  
-1  
0  
1

Fe II\* 2333 0.4

Fe II 2344 1.9859

Fe II 2344 0.0

Fe II\* 2349 0.7

Fe II\* 2366 0.4

Fe II 2374 0.0

Fe II 2344 2.0386

Fe II 2383 0.0

Fe II\* 2389 0.4

Fe II\* 2396 0.4

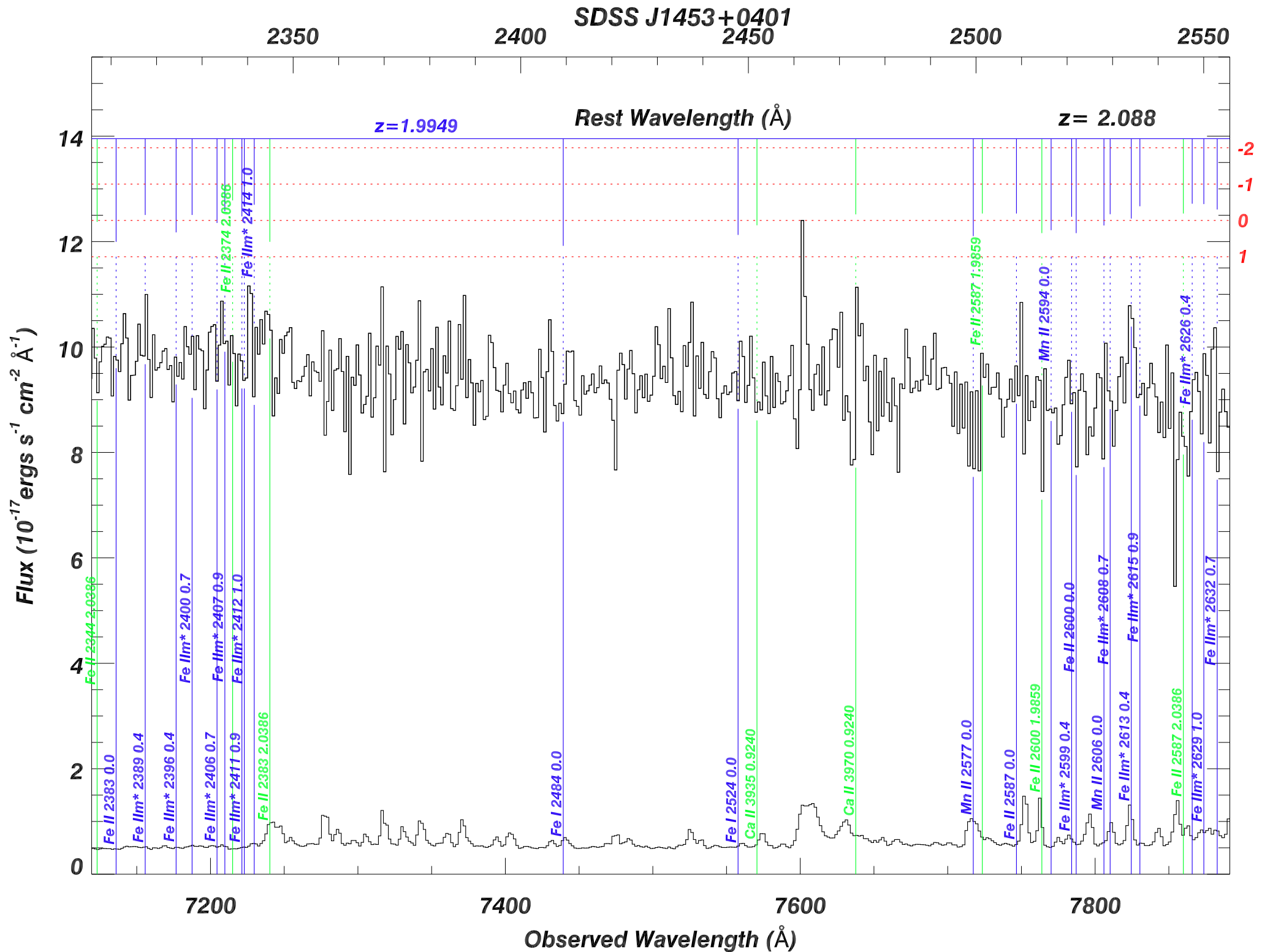
Fe II\* 2400 0.7

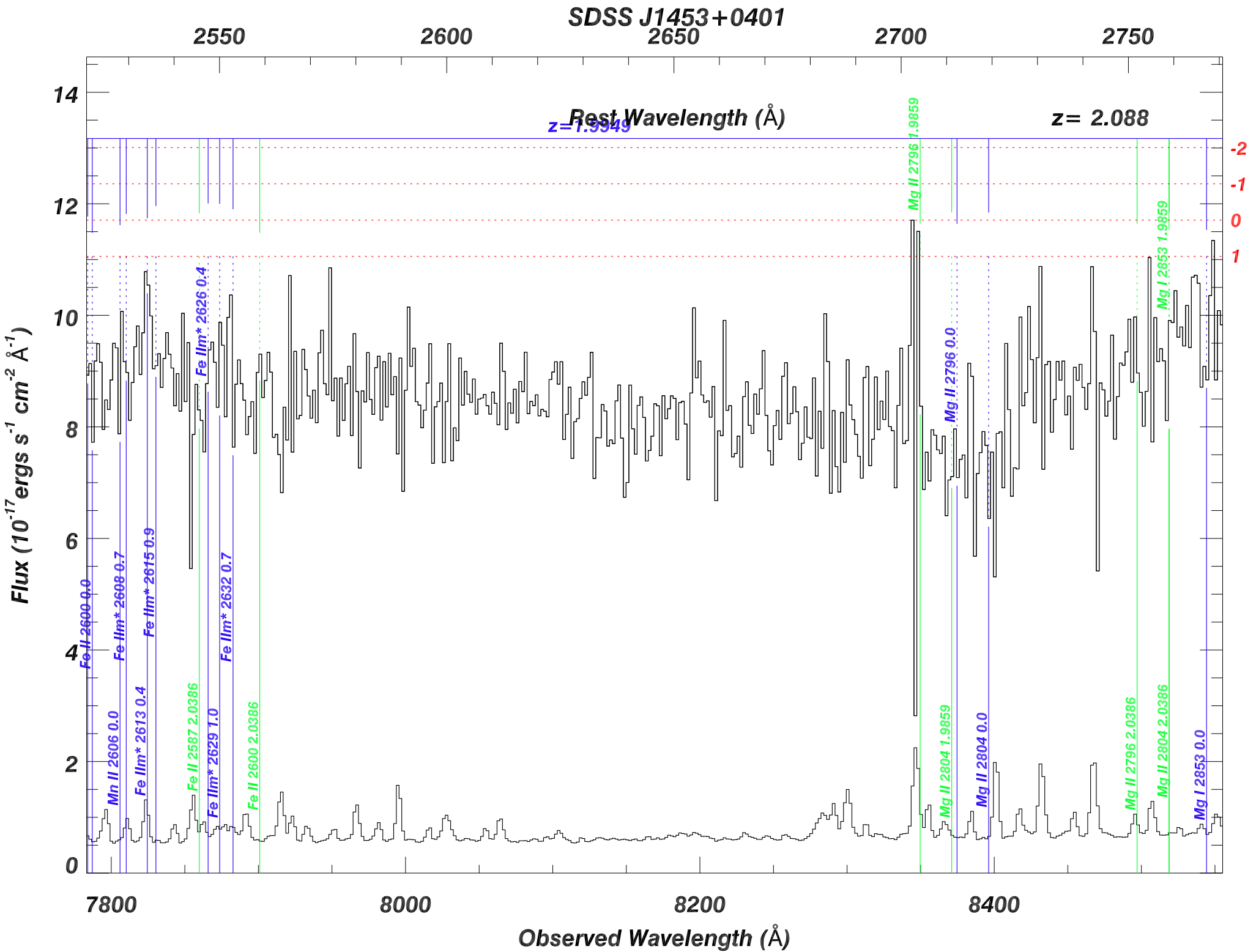
Fe II\* 2406 0.7

Fe II\* 2407 0.9

Fe II\* 2411 0.9

Fe II 2374 2.0386







SDSS J1453+0401  
2850

2750

2800

2900

2950

$z=1.9949$  Rest Wavelength ( $\text{\AA}$ )

$z=2.088$

Flux ( $10^{-17} \text{ ergs s}^{-1} \text{ cm}^{-2} \text{ \AA}^{-1}$ )

15

10

5

0

-2  
-1  
0  
1

Mg II 2796 2.0386

Mg II 2804 2.0386

Mg I 2853 0.0

Mg I 2853 2.0386

He Im\* 2946 159.9

8600

8800

9000

9200

Observed Wavelength ( $\text{\AA}$ )

