

**SDSS\_J1045+4223\_MJD57450**

*Rest Wavelength (Å)*

1000

1500

2000

2500

**$z = 2.713$**

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

40

30

20

10

0

4000

5000

6000

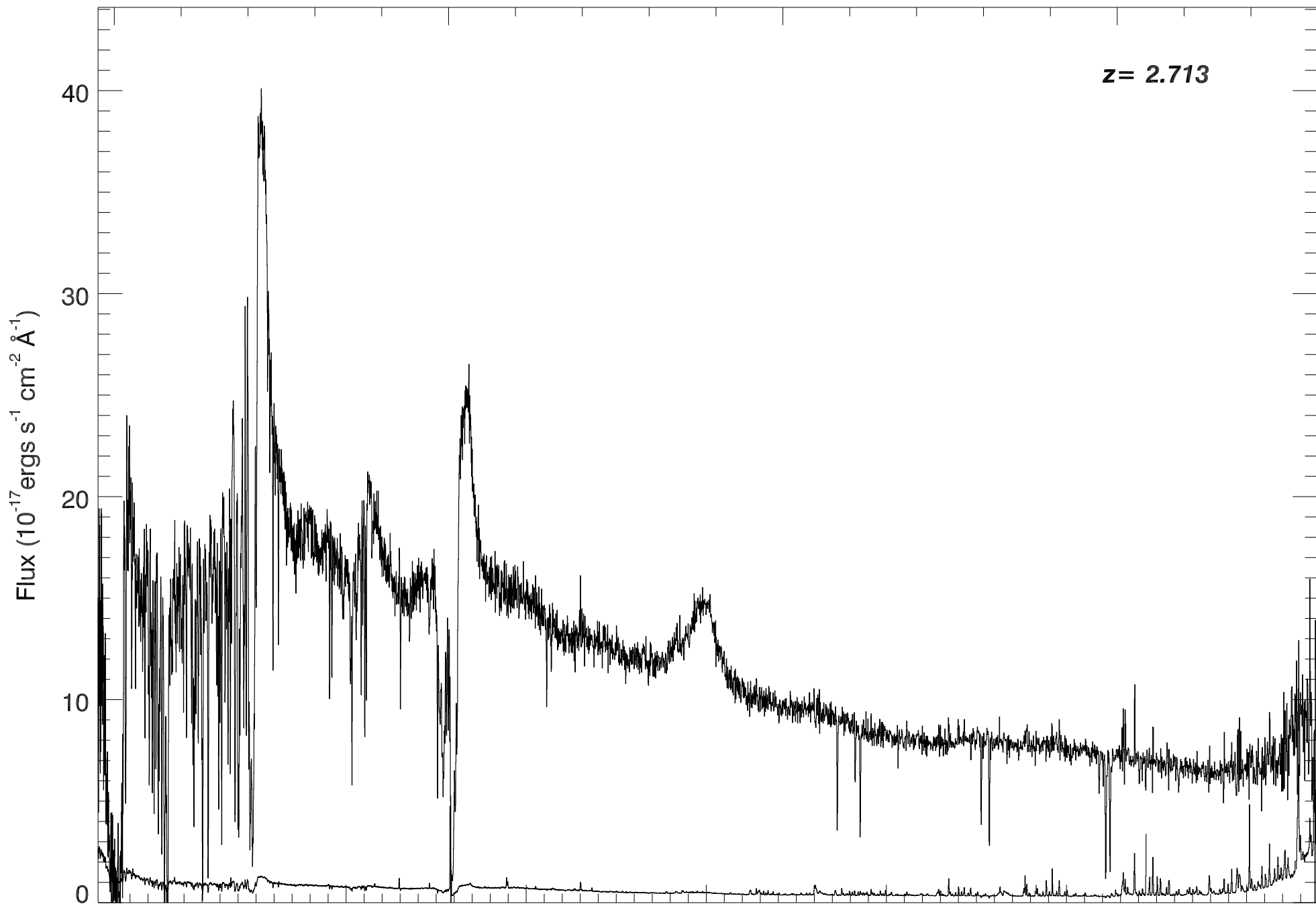
7000

8000

9000

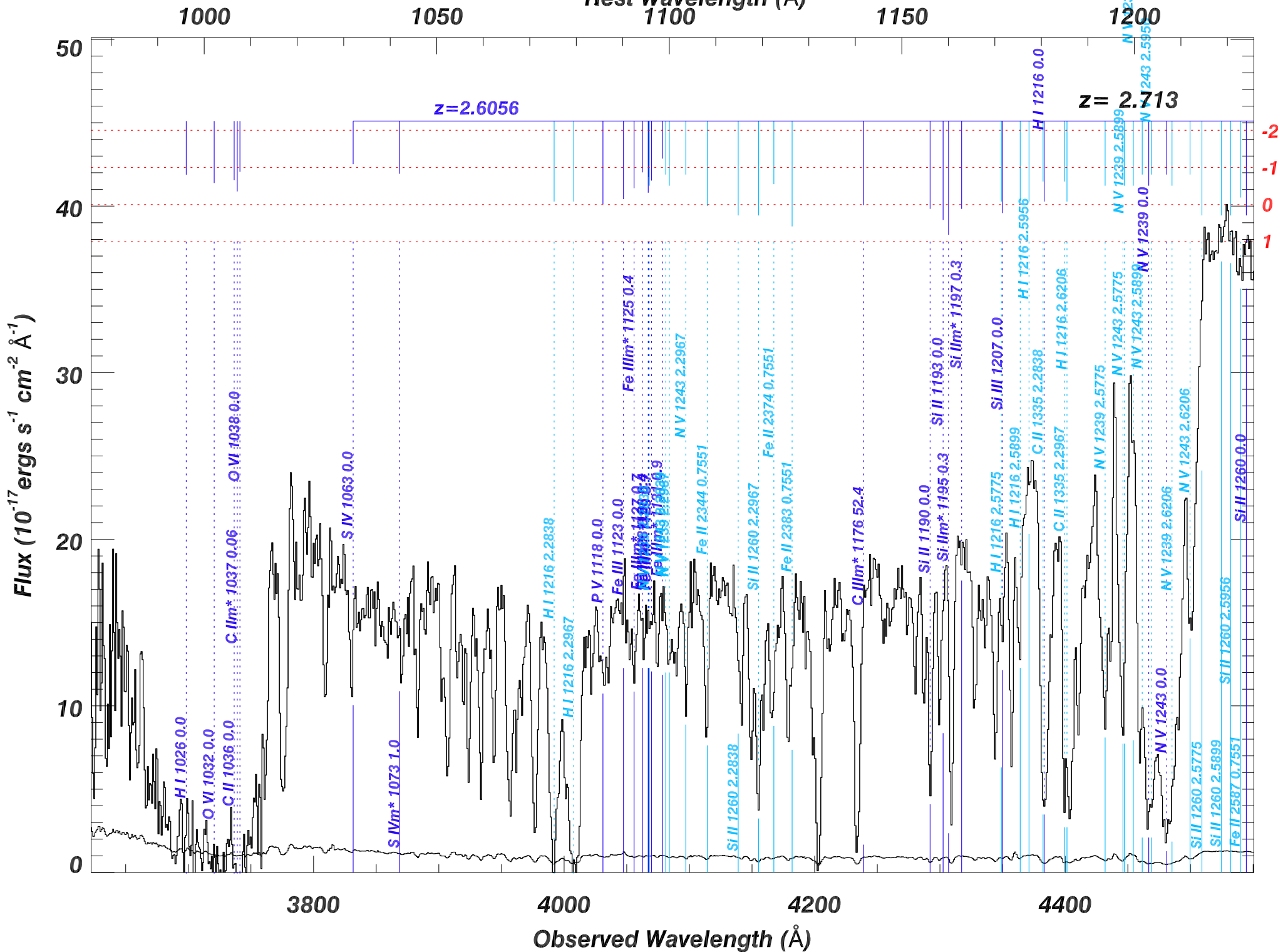
10000

***Observed Wavelength (Å)***

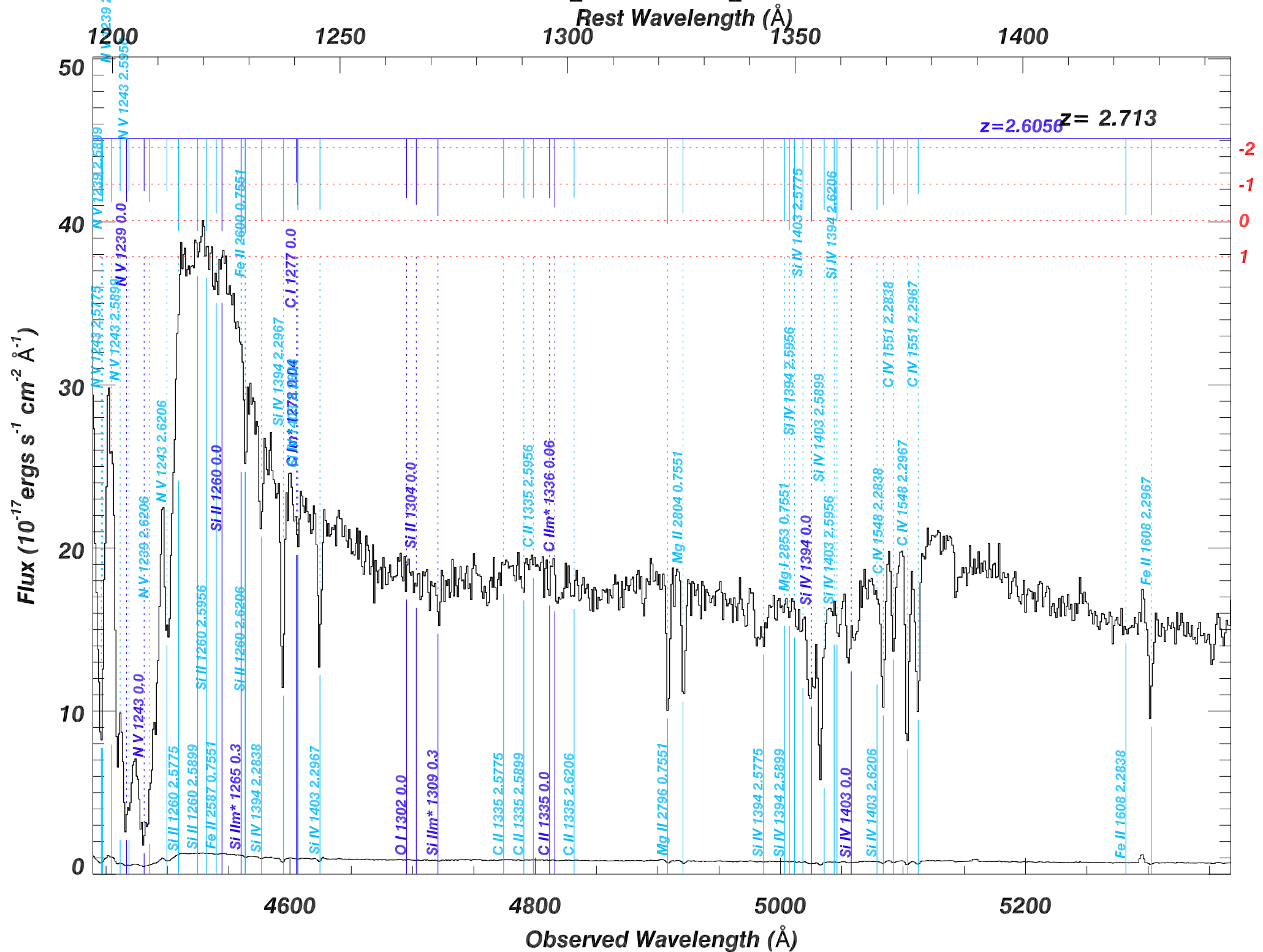


# SDSS\_J1045+4223\_MJD57450

Rest Wavelength (Å)



# SDSS\_J1045+4223\_MJD57450



# SDSS\_J1045+4223\_MJD57450

Rest Wavelength (Å)

1450

1500

1550

1600

1650

$z=2.6056$

$z= 2.713$

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

30  
25  
20  
15  
10  
5  
0

-2  
-1  
0  
1

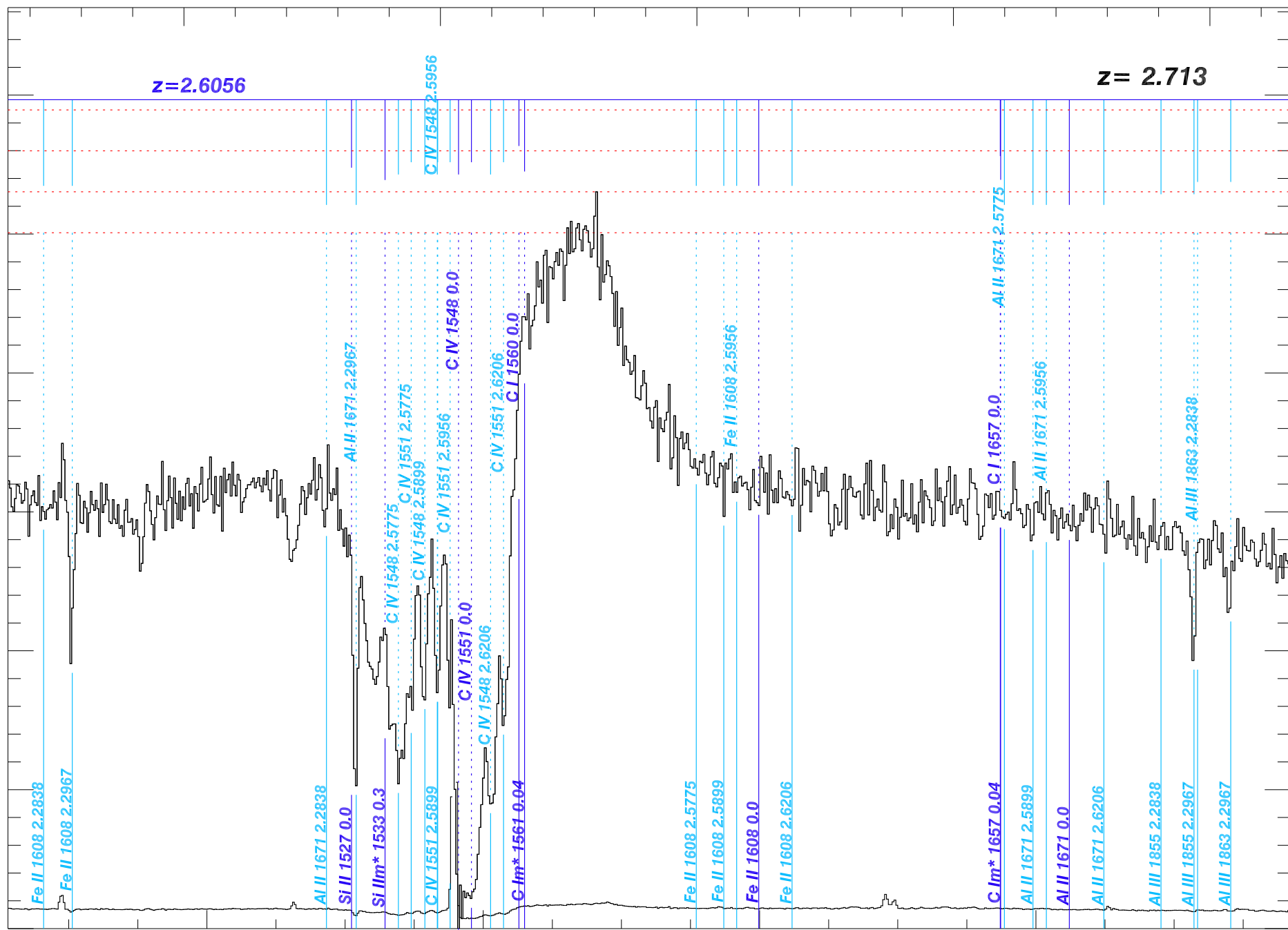
5400

5600

5800

6000

Observed Wavelength (Å)



# SDSS\_J1045+4223\_MJD57450

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

1650

1700

1750

1800

1850

$z=2.6056$

$z=2.713$

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

20

15

10

5

0

-2

-1

0

1

6200

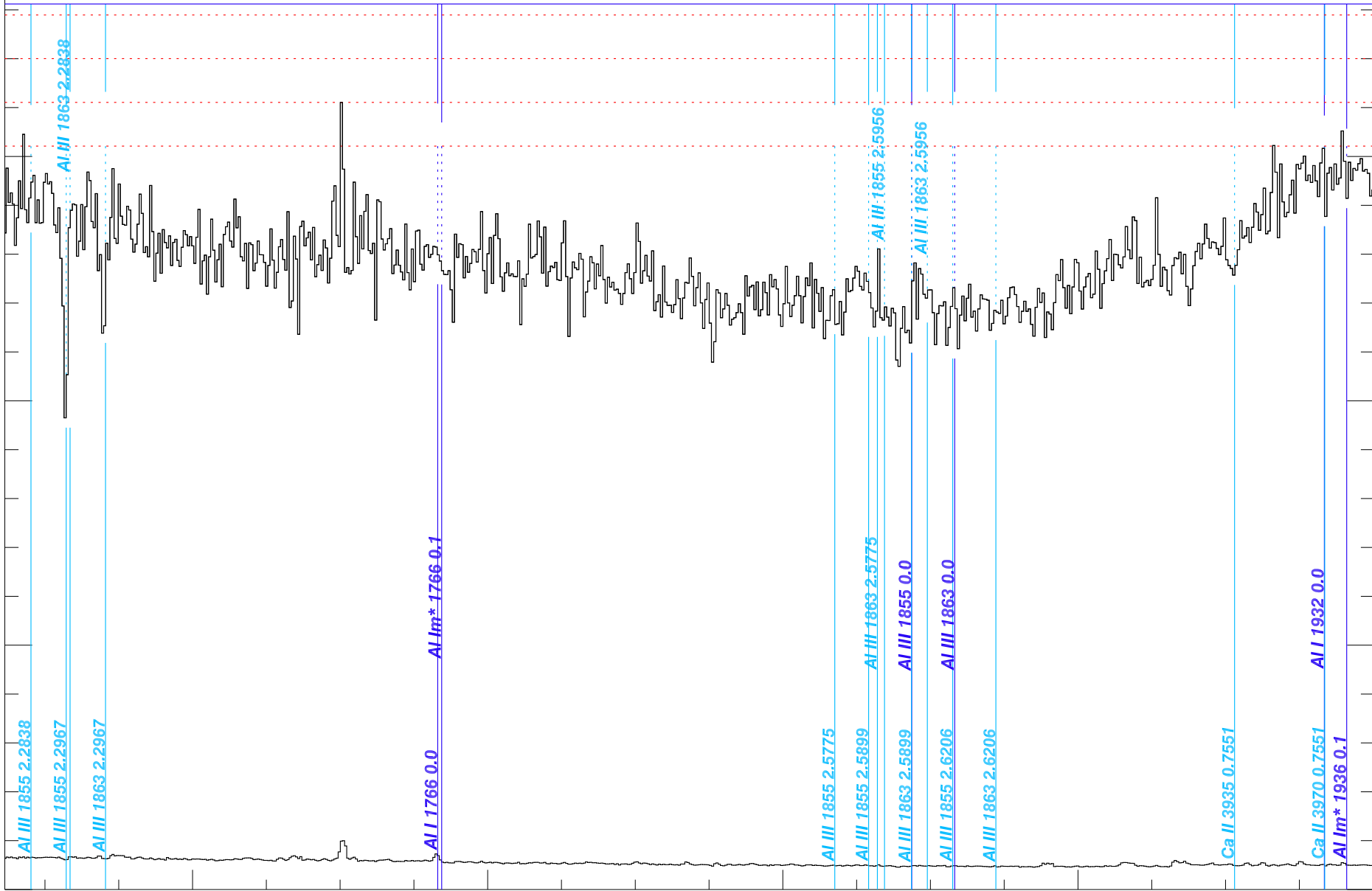
6400

6600

6800

7000

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



# SDSS\_J1045+4223\_MJD57450

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

1900

1950

2000

2050

2100

$z=2.6056$

$z=2.713$

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

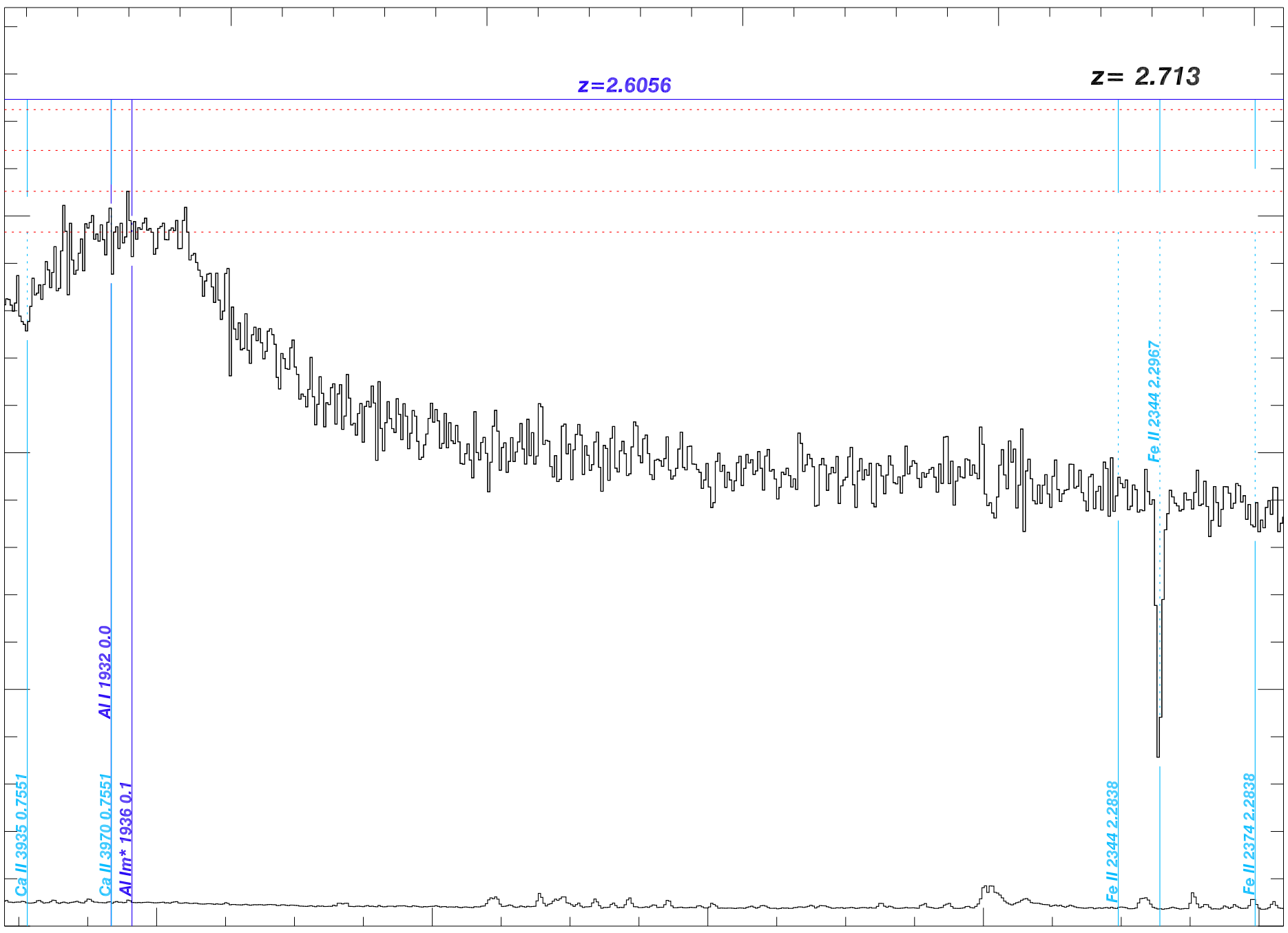
15

10

5

0

-2  
-1  
0  
1



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

7000

7200

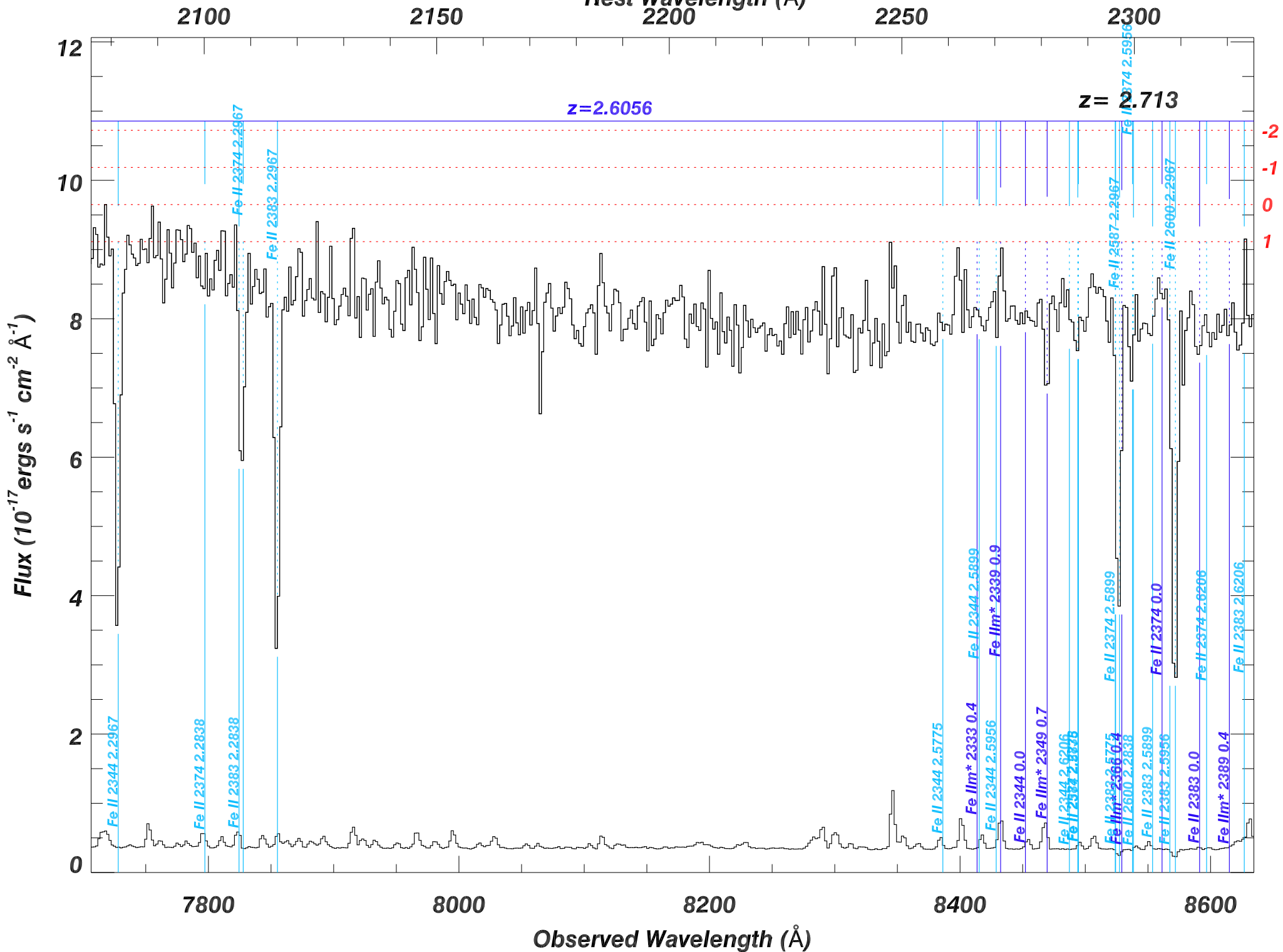
7400

7600

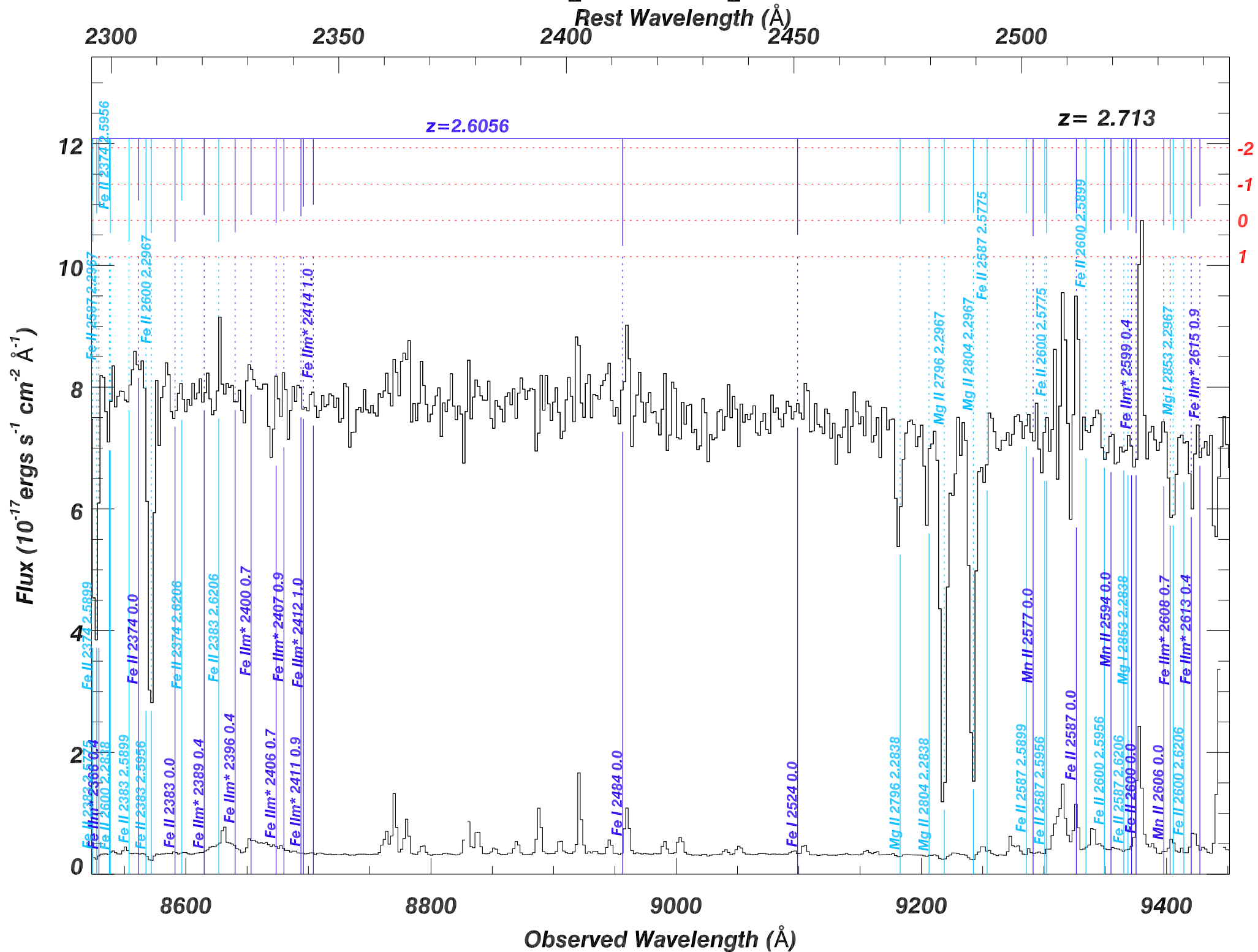
7800

# SDSS\_J1045+4223\_MJD57450

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



# SDSS\_J1045+4223\_MJD57450





# SDSS\_J1045+4223\_MJD57450

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

2550

2600

2650

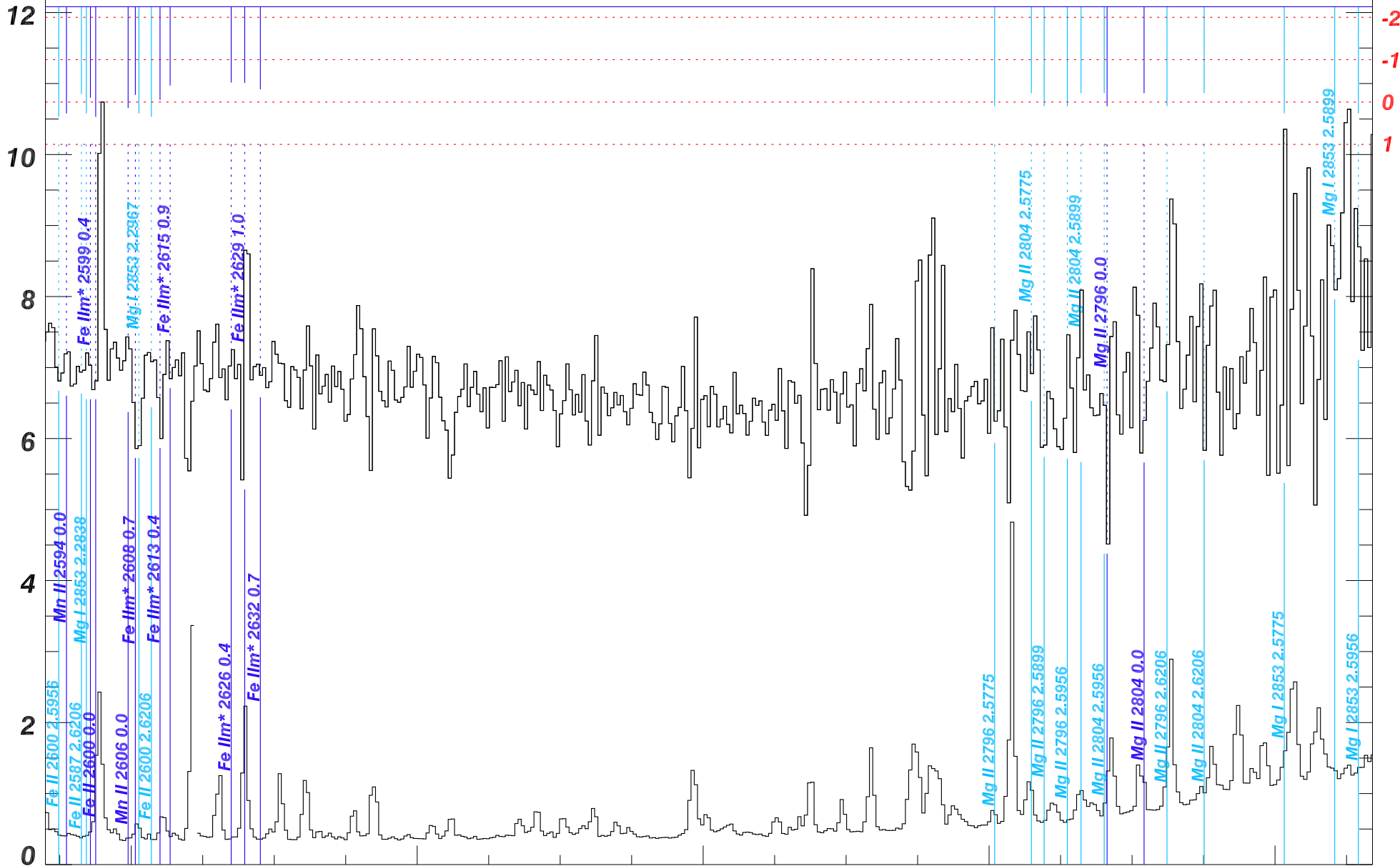
2700

2750

$z=2.6056$

$z=2.713$

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



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

$9.40 \times 10^3$

$9.60 \times 10^3$

$9.80 \times 10^3$

$1.00 \times 10^4$

$1.02 \times 10^4$

# SDSS\_J1045+4223\_MJD57450

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

2750

2800

2850

2900

2950

$z=2.6056$

$z = 2.713$

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

15

10

5

0

-2

-1

0

1

Mg I 2853 2.5775

Mg I 2853 2.5899

Mg I 2853 2.5956

Mg I 2853 0.0

Mg I 2853 2.6206

$1.02 \times 10^4$

$1.04 \times 10^4$

$1.06 \times 10^4$

$1.08 \times 10^4$

$1.10 \times 10^4$

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