

**SDSS\_J1111+1437\_MJD56017**

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

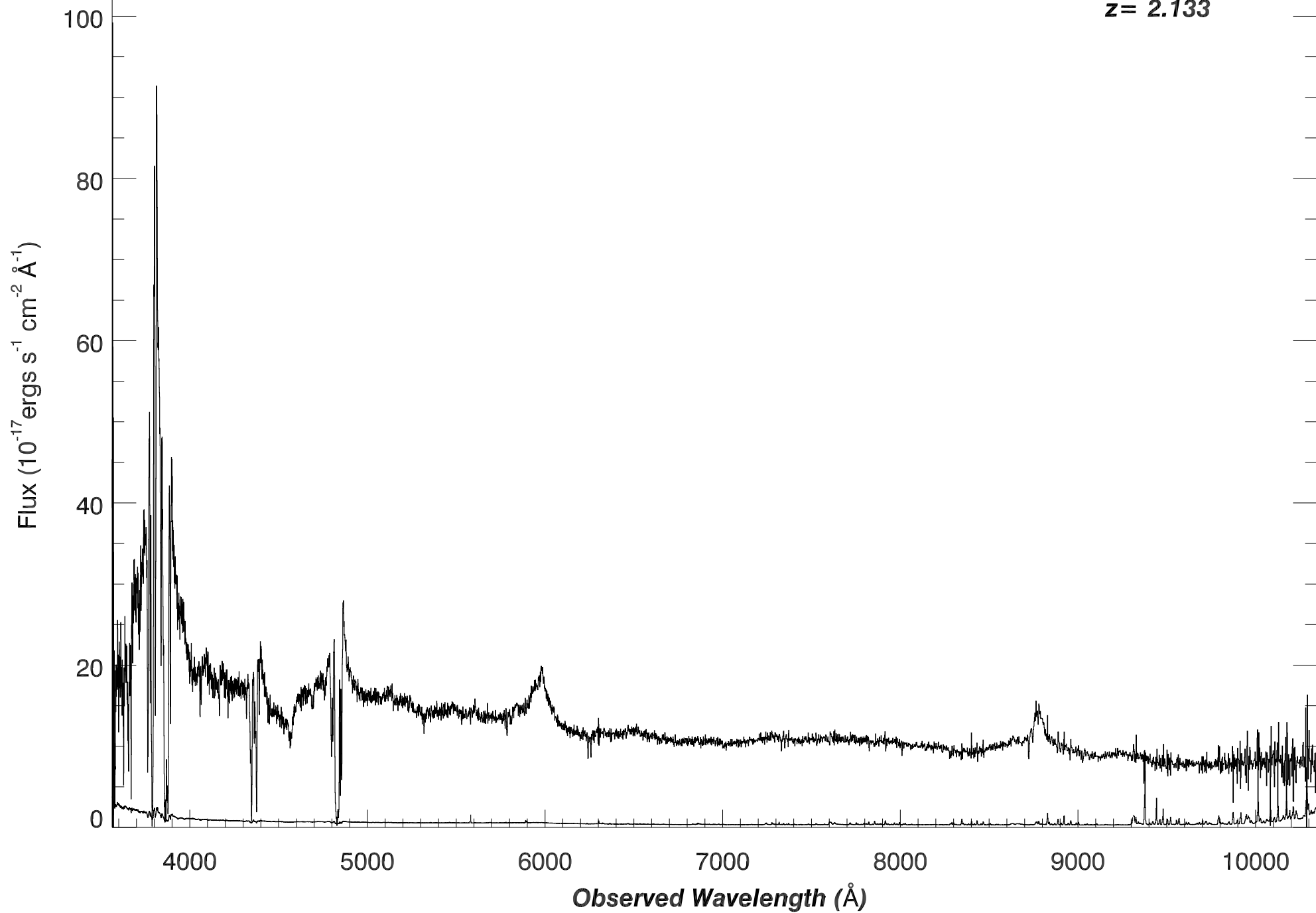
**1500**

**2000**

**2500**

**3000**

**$z = 2.133$**



## SDSS\_J1111+1437\_MJD56017

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

1150

1200

1250

1300

1350

 $z = 2.133$   
 ~~$z = 2.1197$~~ Flux ( $10^{-17} \text{ ergs s}^{-1} \text{ cm}^{-2} \text{ \AA}^{-1}$ )

120

100

80

60

40

20

0

-2

-1

0

1

3600

3800

4000

4200

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

H I 1216 1.9483

Fe II 1608 1.2321

Si II 1260 1.8680

N V 1239 1.9483

Si IV 1394 1.6211

N V 1243 1.9483

C III m\* 1176.52.4

Si IV 1403 1.6211

H I 1216 2.0288

Si II 1190 0.0

Si II 1260 1.9483

Al II 1571 1.2321

Si III m\* 1197 0.3

N V 1239 2.0288

Si III 1207 0.0

N V 1243 2.0994

H I 1216 2.0994

H I 1216 0.0

H I 1216 2.1310

Si II 1260 2.0288

C II 1335 1.8680

N V 1239 0.0

N V 1239 2.1310

N V 1243 2.0994

Si II 1260 2.1310

N V 1243 0.0

N V 1239 2.1310

N V 1243 2.1310

Si II 1260 2.0994

Si II 1260 0.0

C II 1335 1.9483

Si III m\* 1265 0.3

Si II 1260 2.1310

C I 1277 0.0

C I m\* 1278 0.04

Si IV 1394 1.8680

Si IV 1403 1.8680

C II 1335 2.0288

C IV 1548 1.6211

Si II 1304 0.0

O I 1302 0.0

Si III m\* 1309 0.3

Si IV 1394 1.9483

C II 1335 2.0994

Si IV 1403 1.9483

Al III 1863 1.2321

Al III 1855 1.2321

C II 1335 0.0

C III m\* 1336 0.06

C II 1335 2.1310

Fe II 1608 1.6211

Si IV 1394 2.0288

Si IV 1403 2.0288

Si IV 1394 2.0994

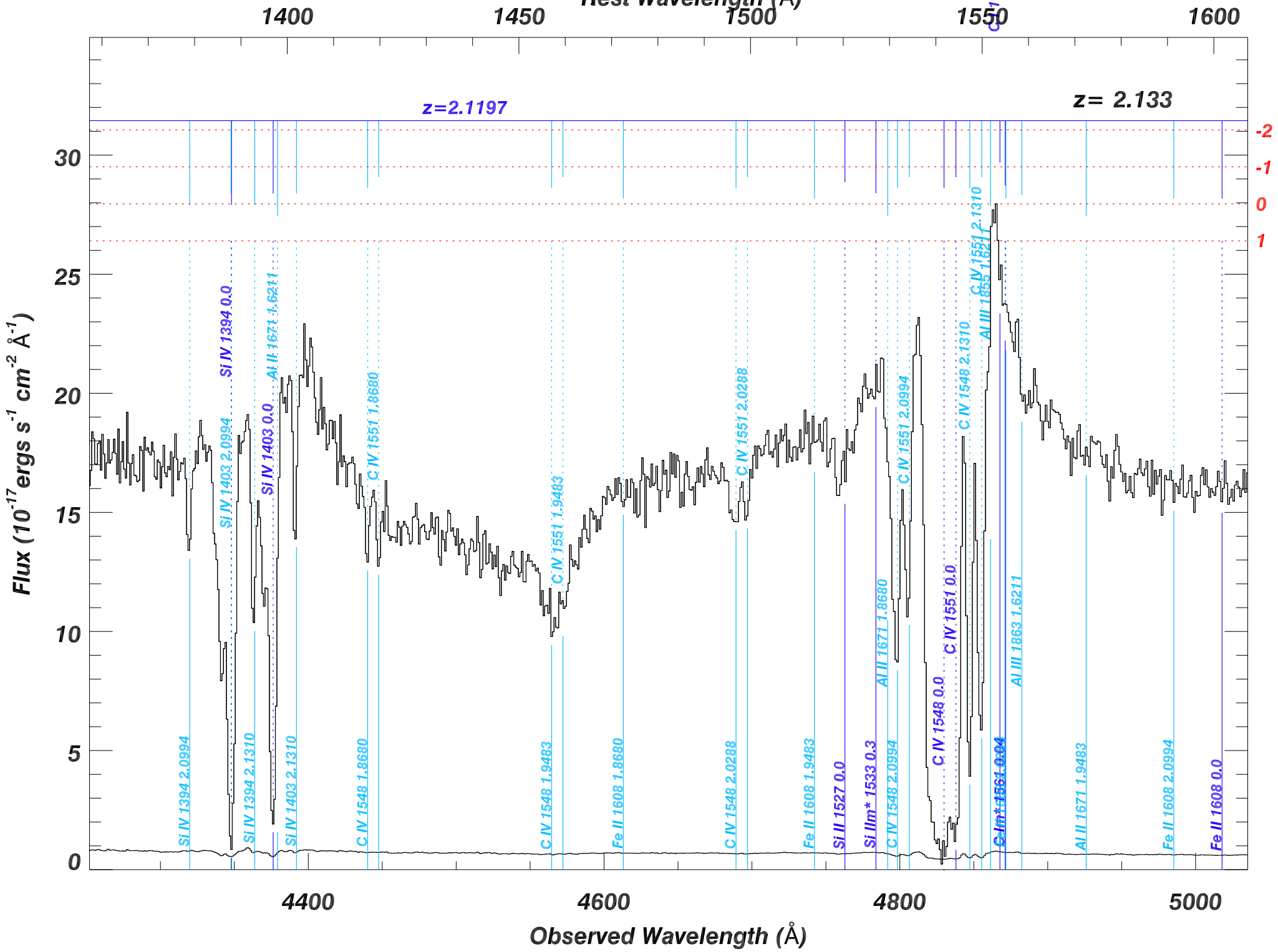
Si IV 1394 2.0994

Si IV 1394 2.0994

Si IV 1394 2.0994

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Rest Wavelength (Å)



## SDSS\_J1111+1437\_MJD56017

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

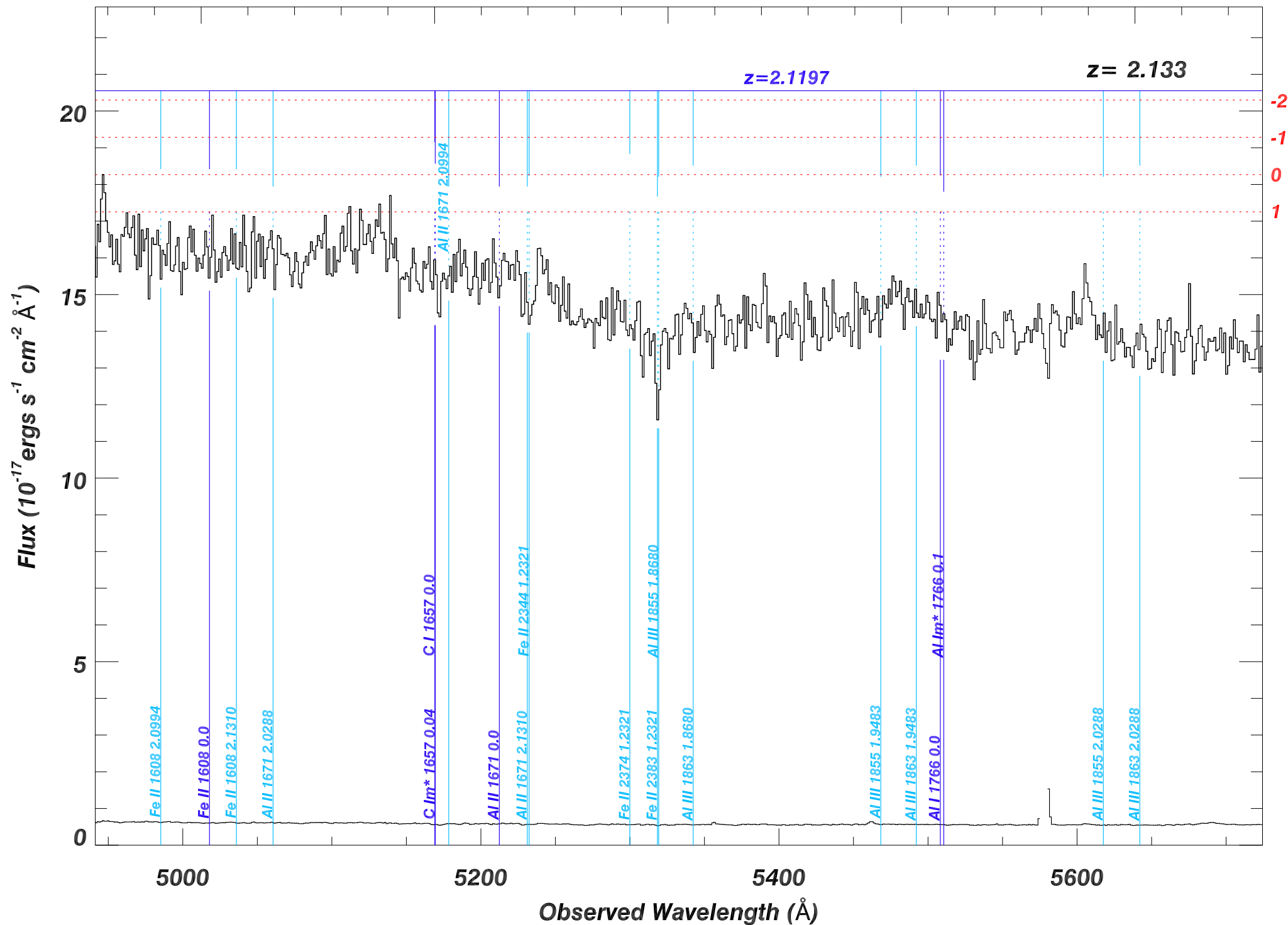
1600

1650

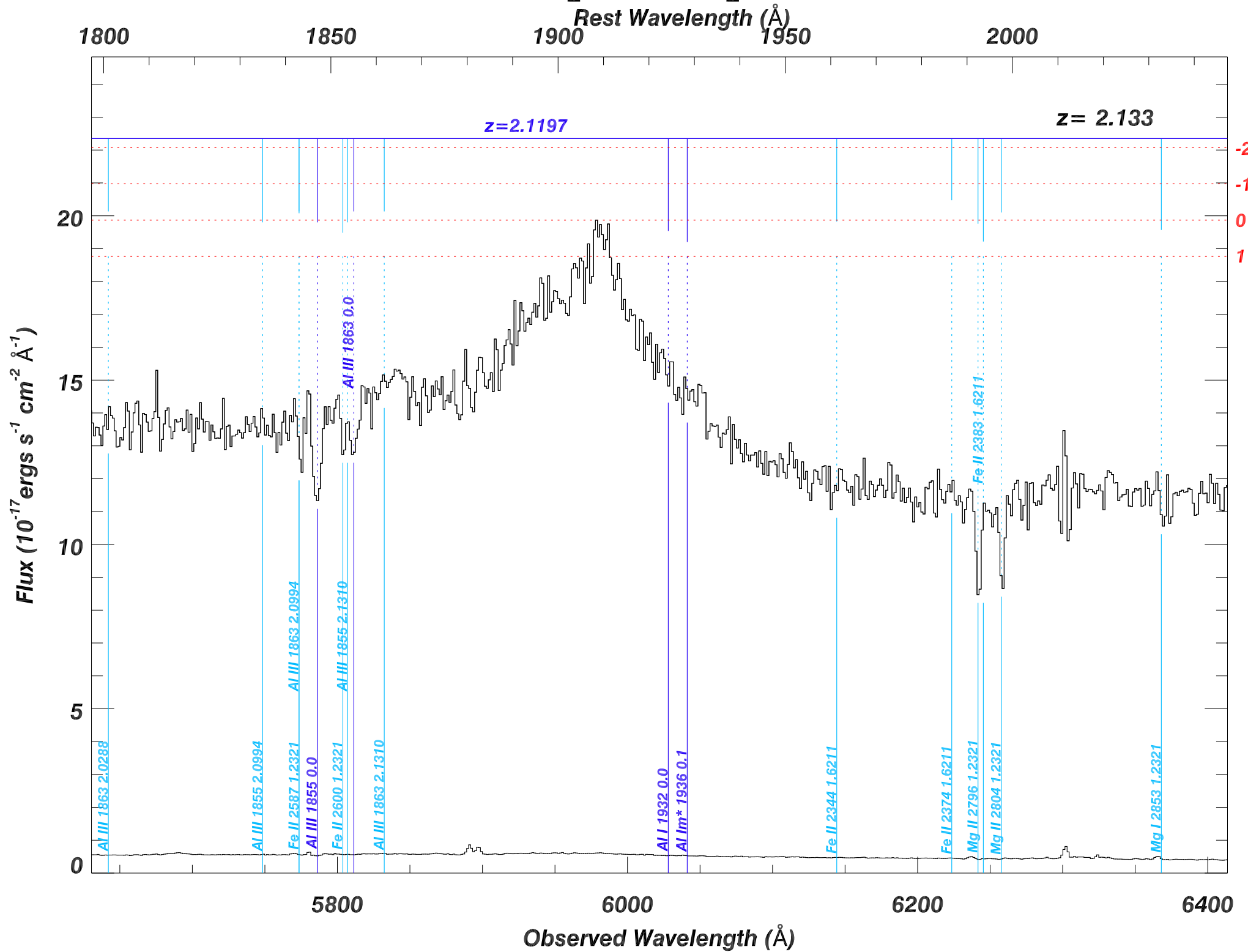
1700

1750

1800



# SDSS\_J1111+1437\_MJD56017



# SDSS\_J1111+1437\_MJD56017

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

2050

2100

2150

2200

2250

15

$z=2.1197$

$z= 2.133$

-2

-1

0

1

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

10

5

0

Mg I 2853 1.2321

Fe II 2344 1.8680

Fe II 2587 1.6211

Fe II 2374 1.8680

Fe II 2600 1.6211

Fe II 2383 1.8680

Fe II 2344 1.9483

Fe II 2374 1.9483

Fe II 2383 1.9483

Fe II 2344 2.0288

6400

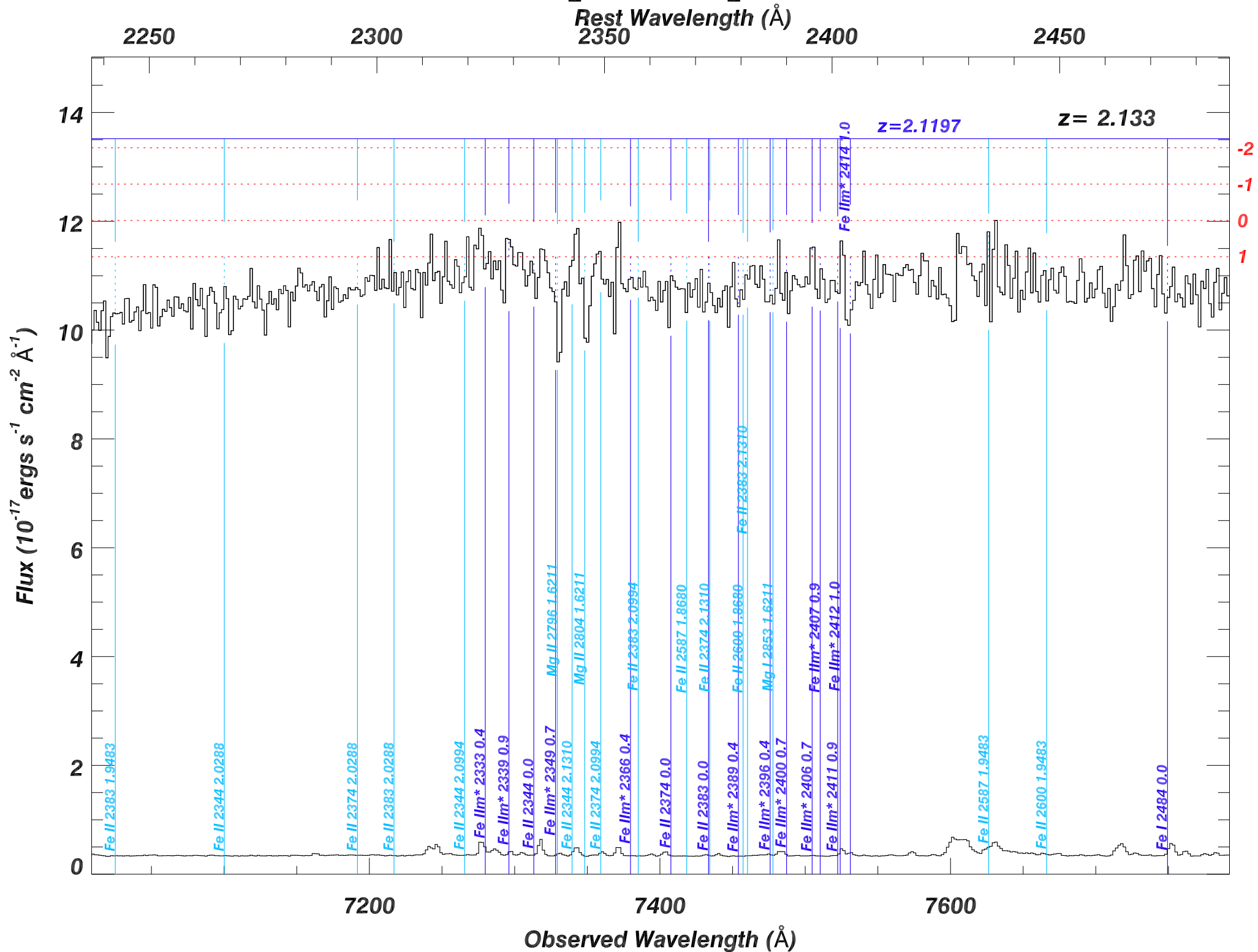
6600

6800

7000

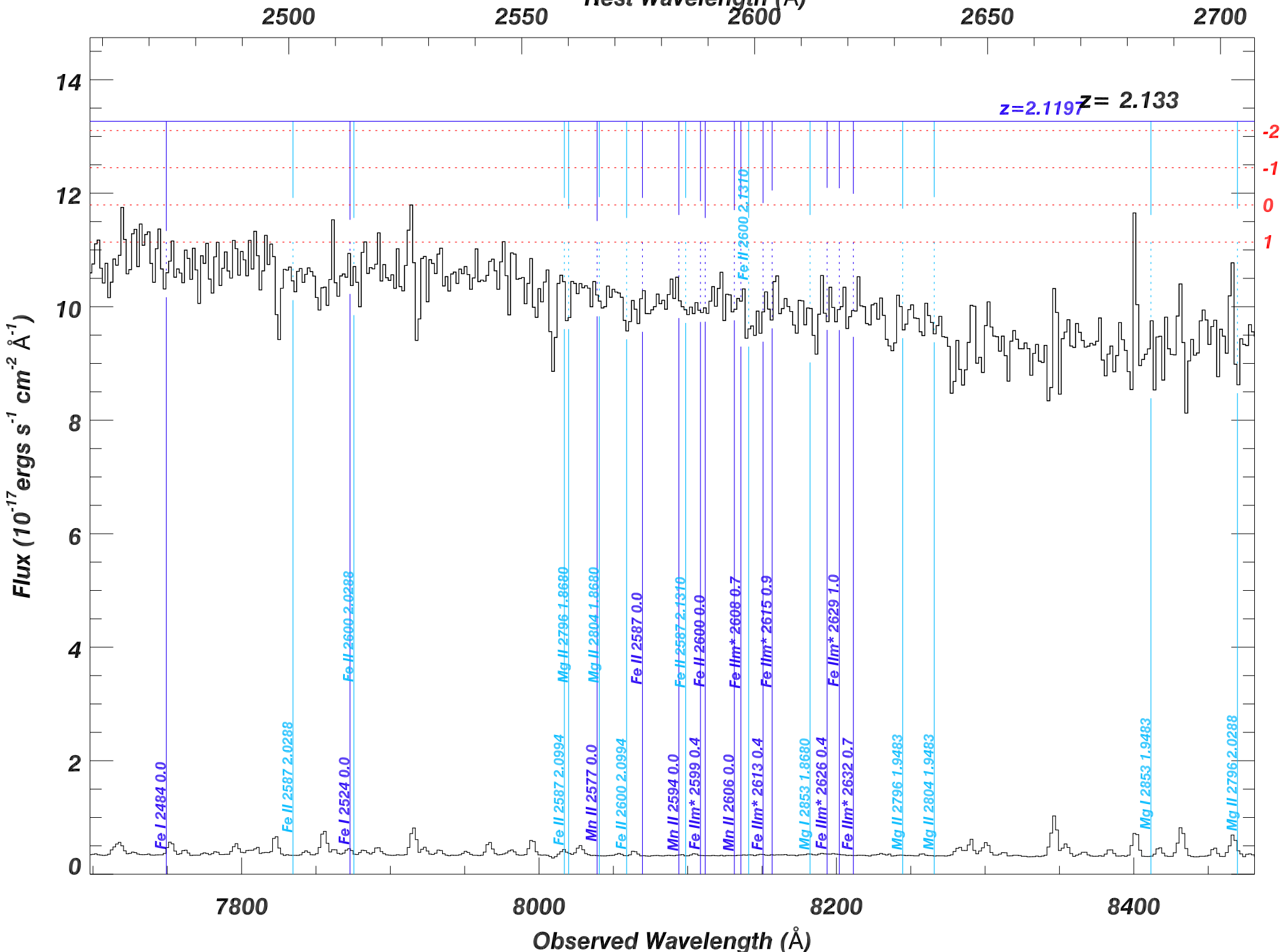
Observed Wavelength ( $\text{\AA}$ )

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# SDSS\_J1111+1437\_MJD56017

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





# SDSS\_J1111+1437\_MJD56017

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

2700

2750

2800

2850

2900

$z = 2.197$   
 $z = 2.133$

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

15

10

5

0

-2  
-1  
0  
1

8400

8600

8800

9000

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

Mg I 2853 1.9483

Mg II 2796 2.0288

Mg II 2804 2.0288

Mg I 2853 2.0288

Mg II 2796 2.0994

Mg II 2804 2.0994

Mg II 2796 0.0

Mg II 2804 0.0

Mg II 2796 2.1310

Mg II 2804 2.1310

Ca II 3935 1.2321

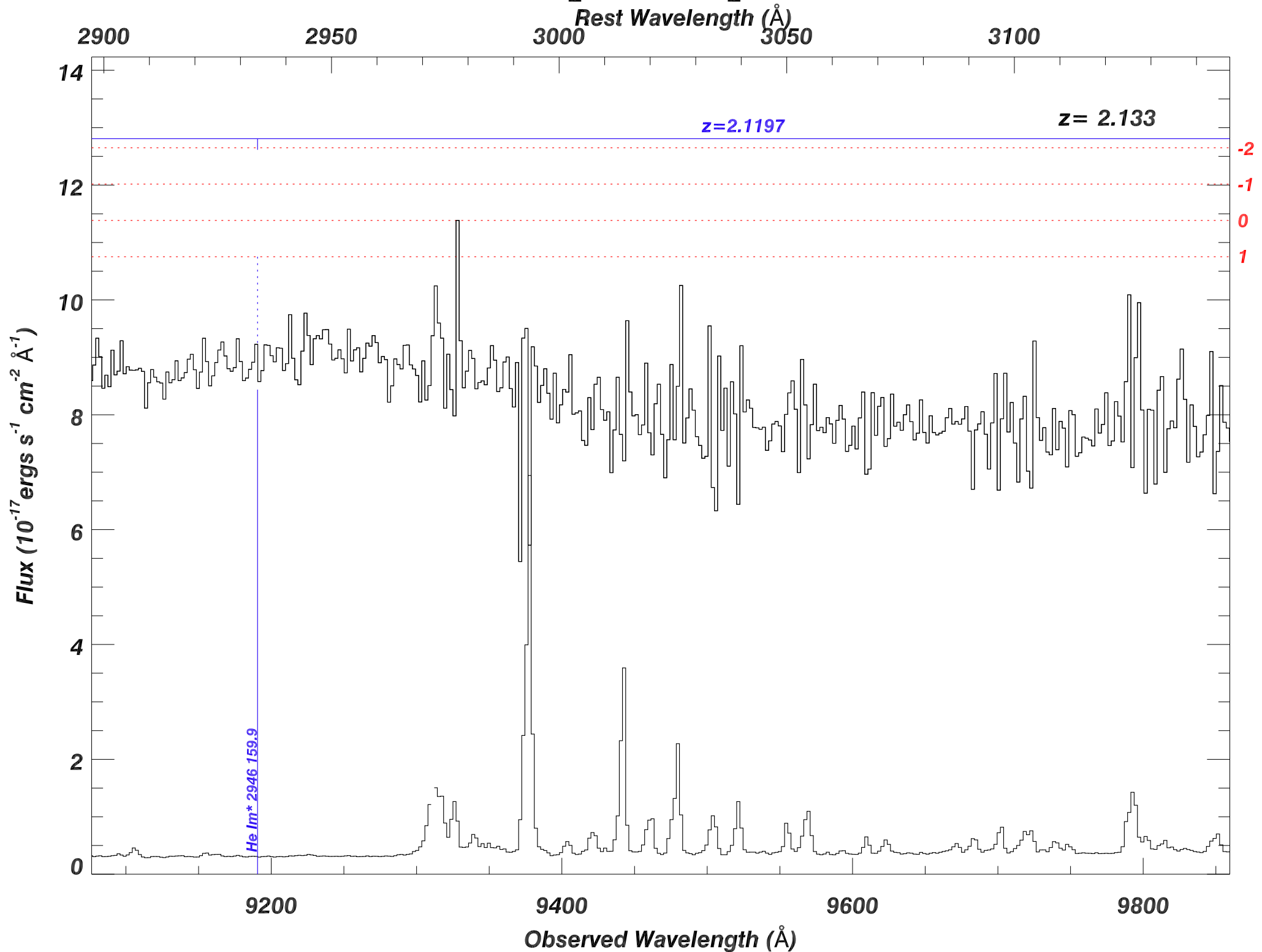
Mg I 2853 2.0994

Ca II 3970 1.2321

Mg I 2853 0.0

Mg I 2853 2.1310

# SDSS\_J1111+1437\_MJD56017



# SDSS\_J1111+1437\_MJD56017

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

3200

3300

3400

3500

