

SDSS_J1004+3646_MJD55616

Rest Wavelength (Å)

1500

2000

2500

3000

z = 2.409

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

60

50

40

30

20

10

0

4000

5000

6000

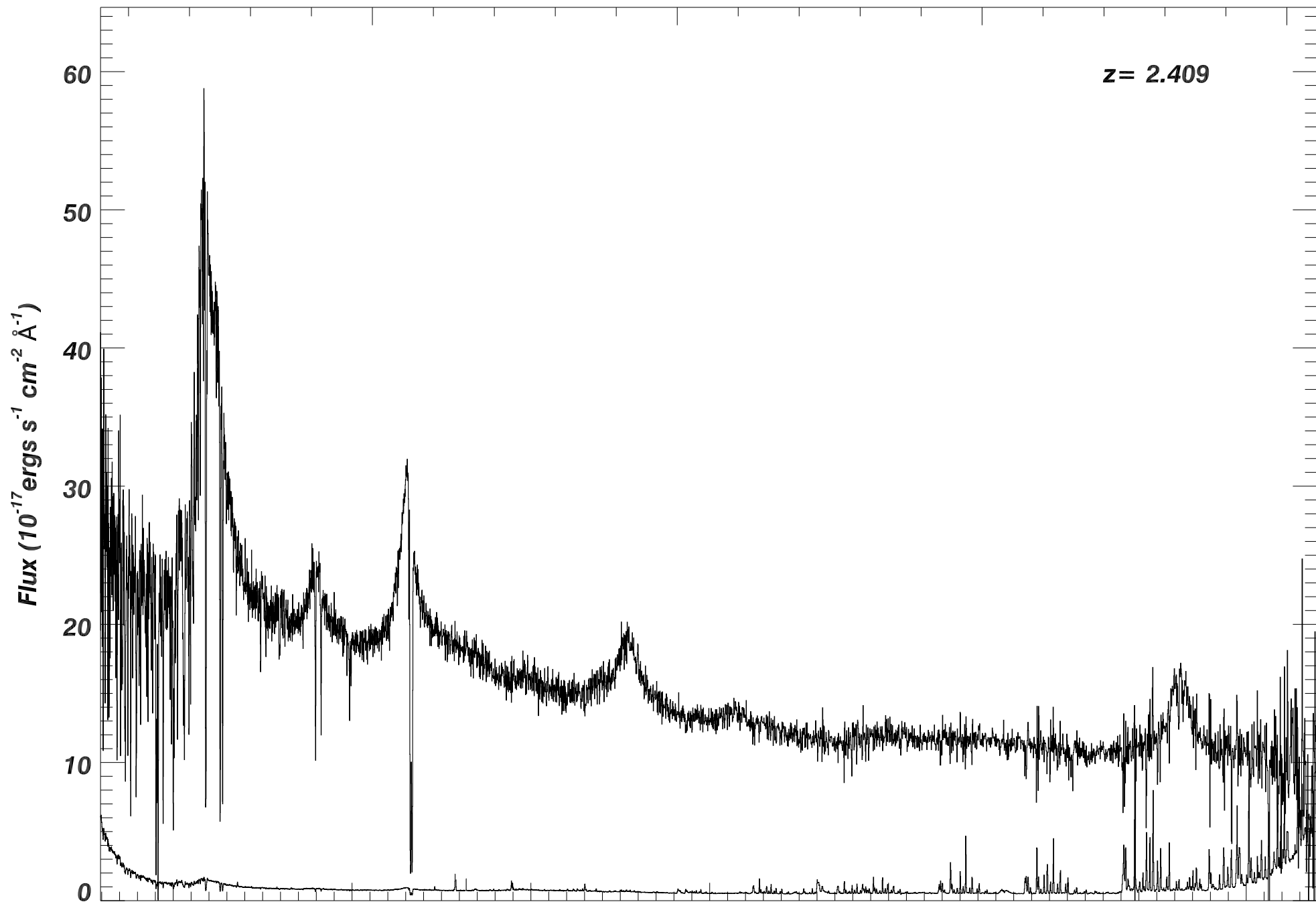
7000

8000

9000

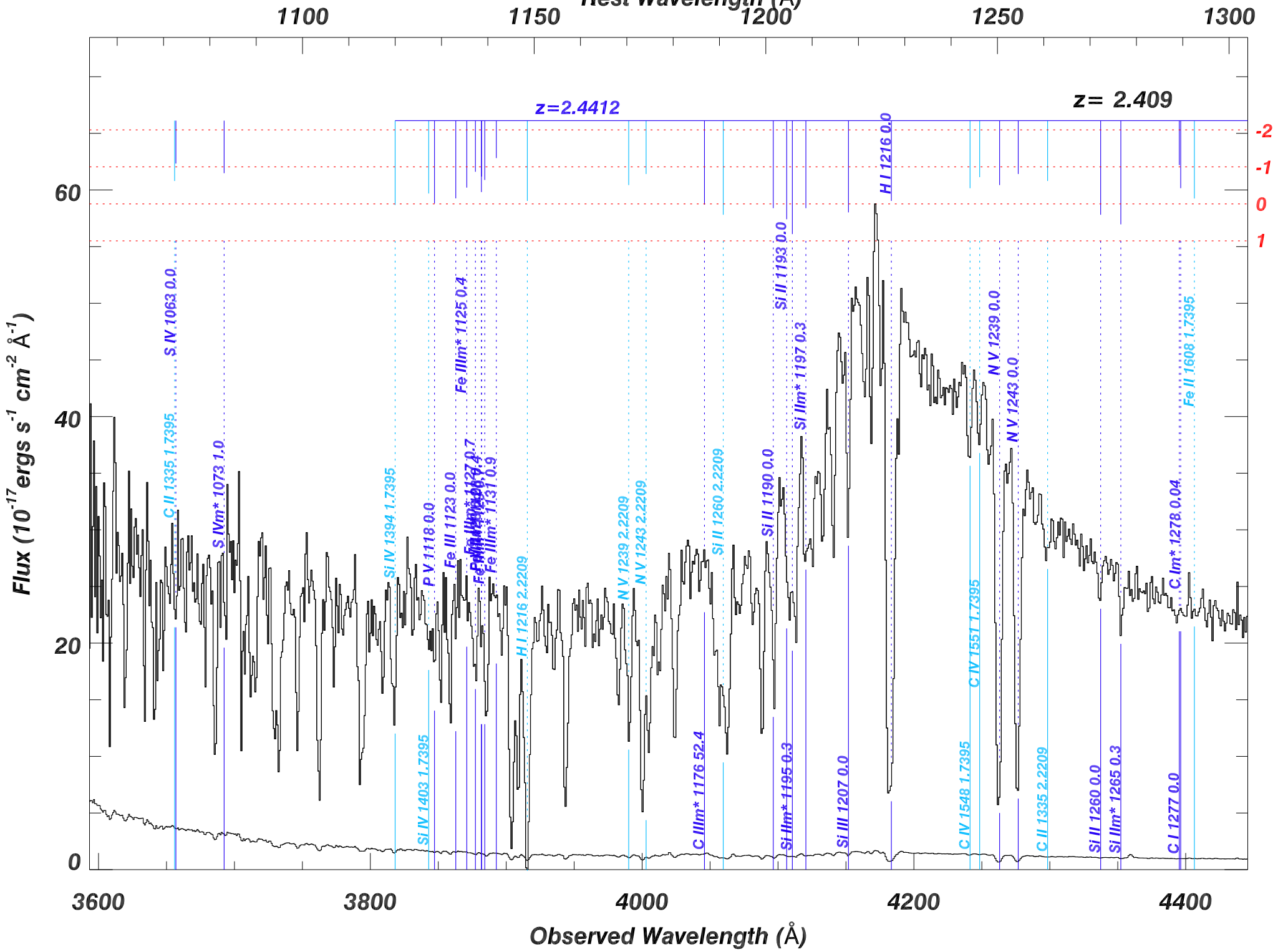
10000

Observed Wavelength (Å)



SDSS_J1004+3646_MJD55616

Rest Wavelength (Å)



SDSS_J1004+3646_MJD55616

Rest Wavelength (\AA)

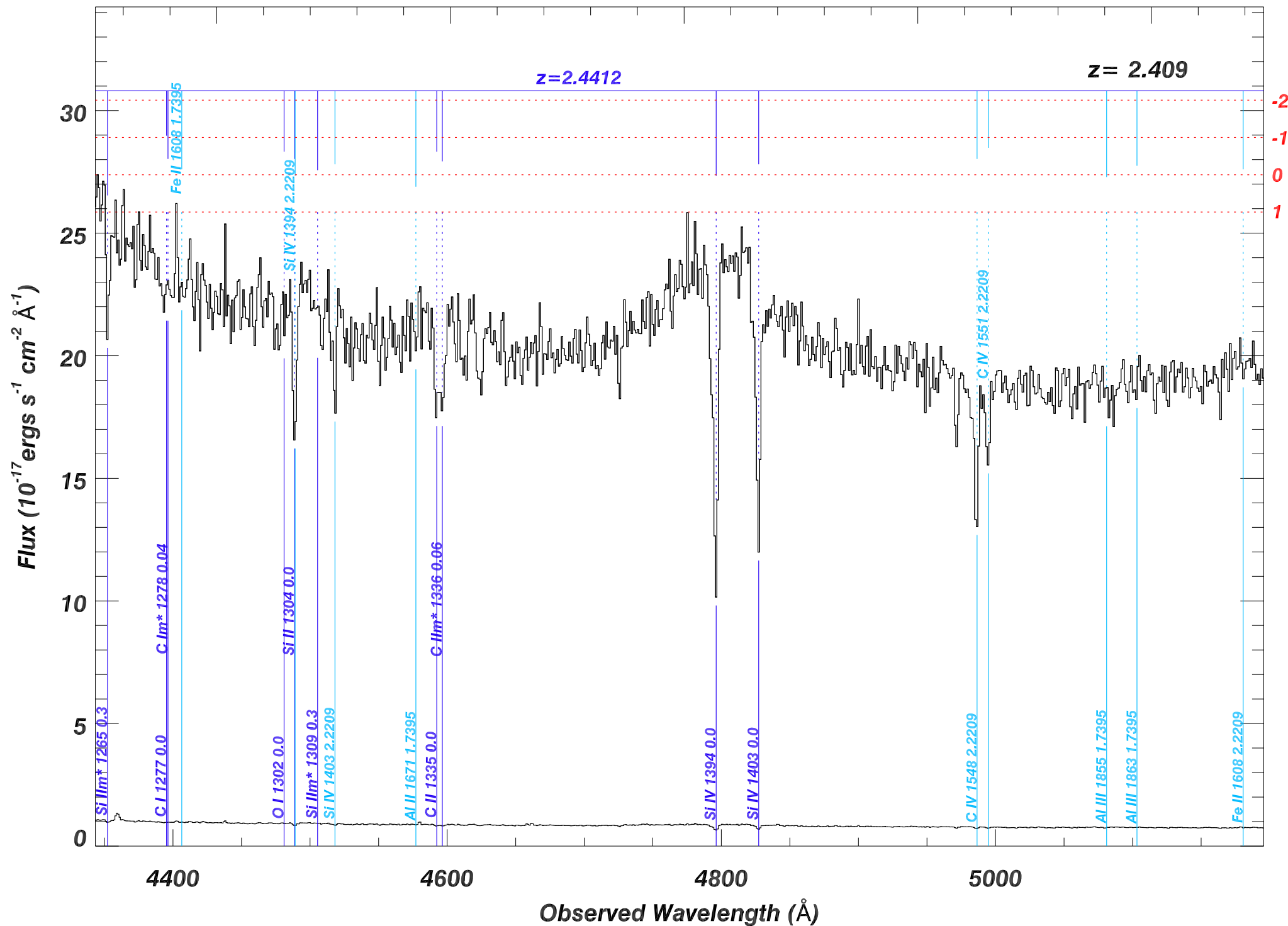
1300

1350

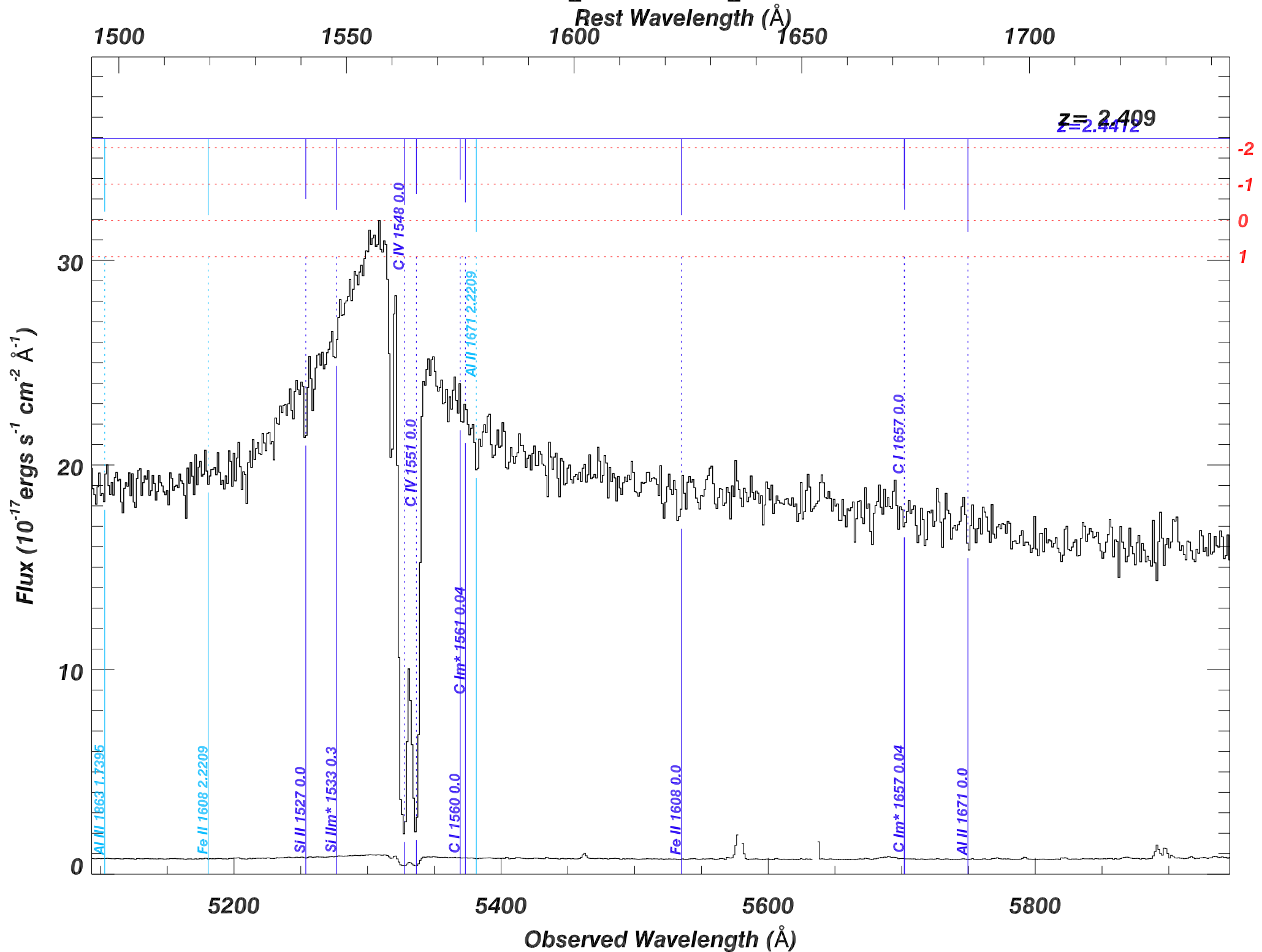
1400

1450

1500



SDSS_J1004+3646_MJD55616



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Rest Wavelength (\AA)

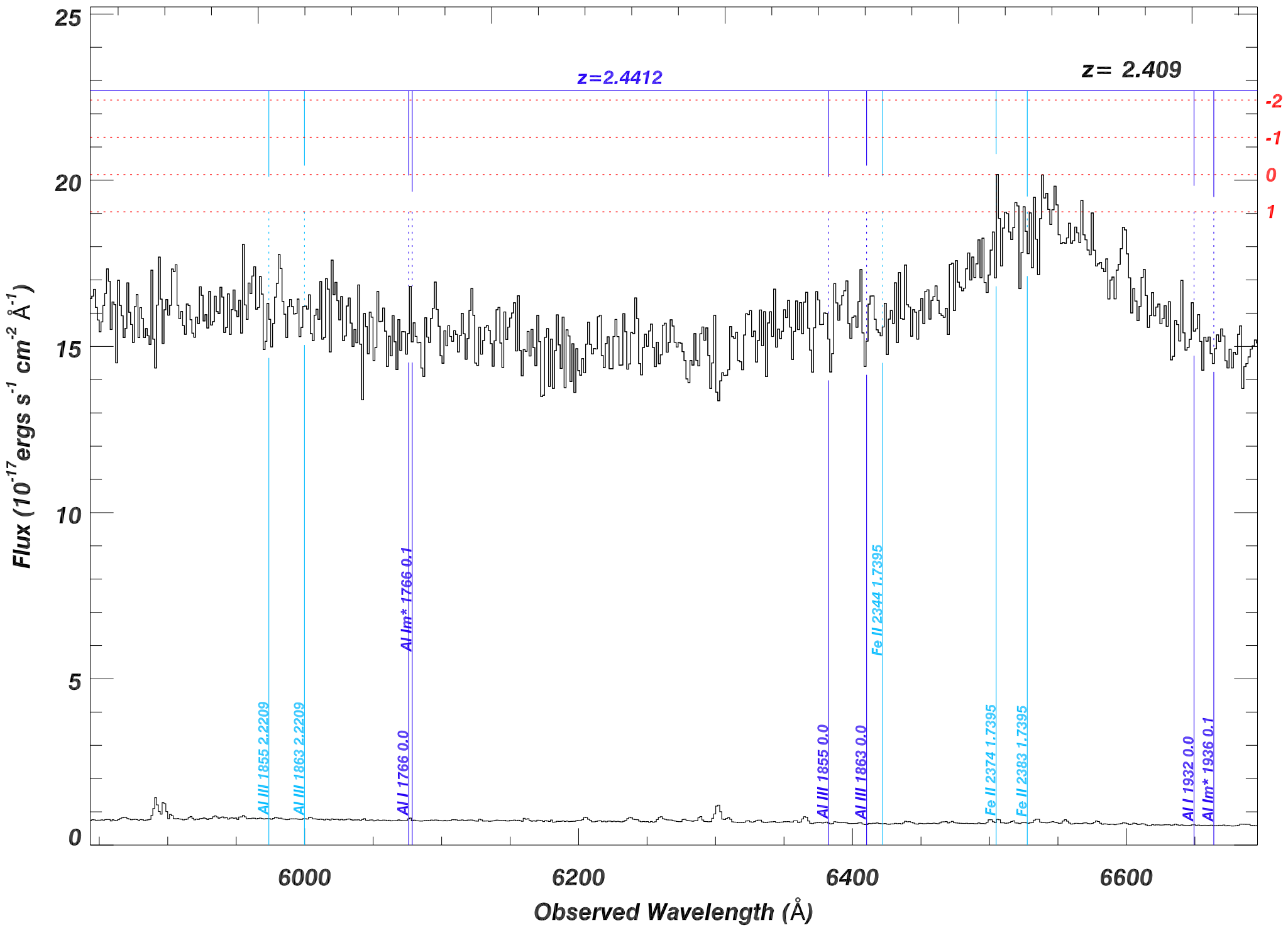
1750

1800

1850

1900

1950



SDSS_J1004+3646_MJD55616

Rest Wavelength (\AA)

1950

2000

2050

2100

2150

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

20

15

10

5

0

-2

-1

0

1

$z=2.4412$

$z= 2.409$

Al I 1932 0.0

Al I m* 1936 0.1

Fe II 2587 1.7395

Fe II 2600 1.7395

6600

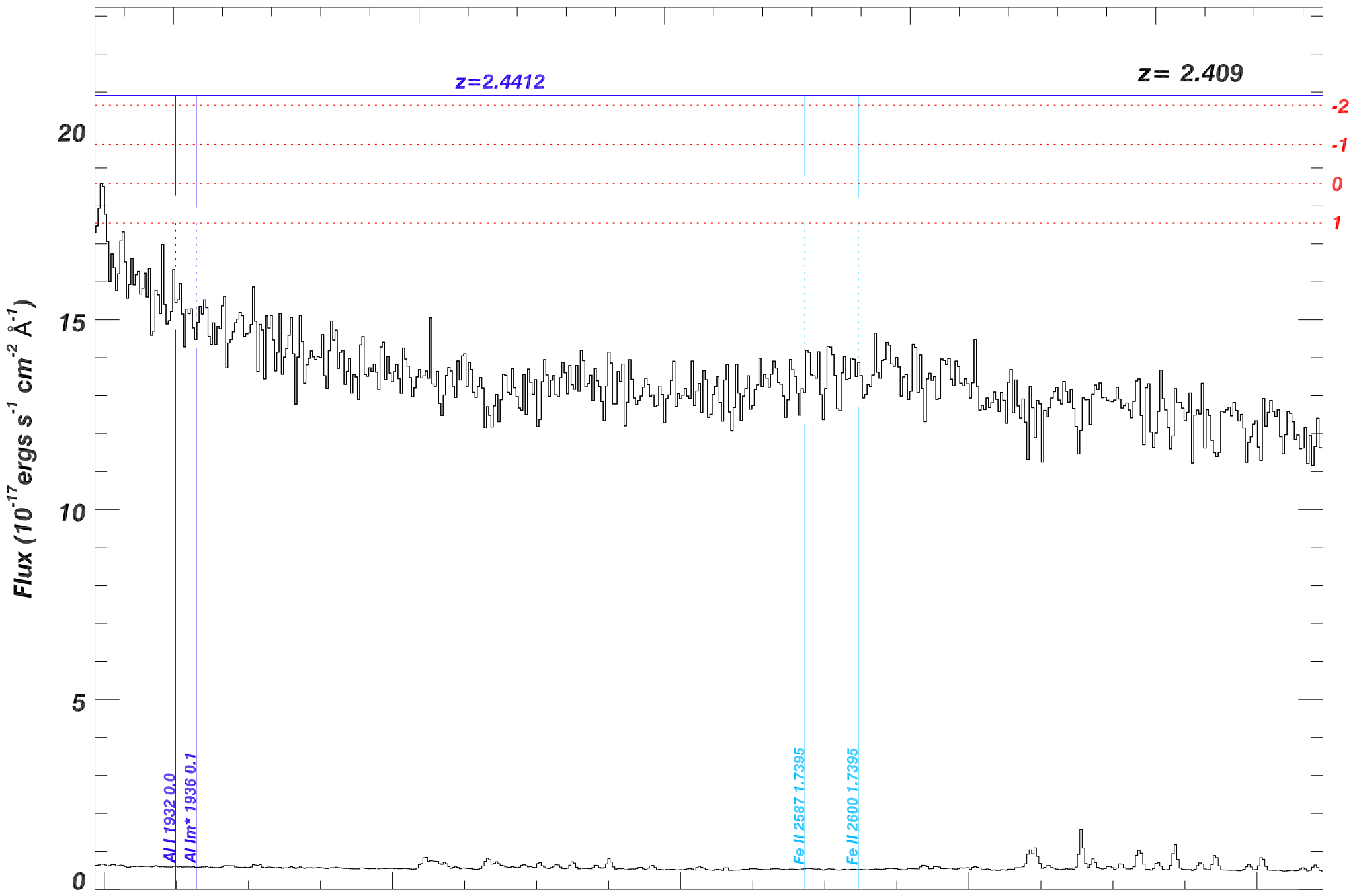
6800

7000

7200

7400

Observed Wavelength (\AA)



SDSS_J1004+3646_MJD55616

Rest Wavelength (\AA)

2200

2250

2300

2350

2400

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

15

10

5

0

$z=2.4412$

$z=2.409$

-2

-1

0

1

Fe II 2344 2.2209

Fe II 2374 2.2209

Mg II 2796 1.7395

Fe II 2383 2.2209

Mg II 2804 1.7395

Mg I 2853 1.7395

Fe III* 2333 0.4

Fe III* 2339 0.9

Fe II 2344 0.0

Fe III* 2349 0.7

Fe III* 2366 0.4

Fe II 2374 0.0

7400

7600

7800

8000

Observed Wavelength (\AA)

SDSS_J1004+3646_MJD55616

Rest Wavelength (\AA)

2400

2450

2500

2550

2600

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

15

10

5

0

$z=2.4412$ $z=2.409$

-2
-1
0
1

*Fe III** 2366 0.4

Fe II 2374 0.0

Fe II 2383 0.0

*Fe III** 2389 0.4

*Fe III** 2396 0.4

*Fe III** 2400 0.7

*Fe III** 2406 0.7

*Fe III** 2411 0.9

*Fe III** 2412 1.0

Fe II 2587 2.2209

Fe II 2600 2.2209

Fe I 2484 0.0

Fe I 2524 0.0

Mn II 2577 0.0

Fe II 2587 0.0

Mn II 2594 0.0

*Fe III** 2599 0.4

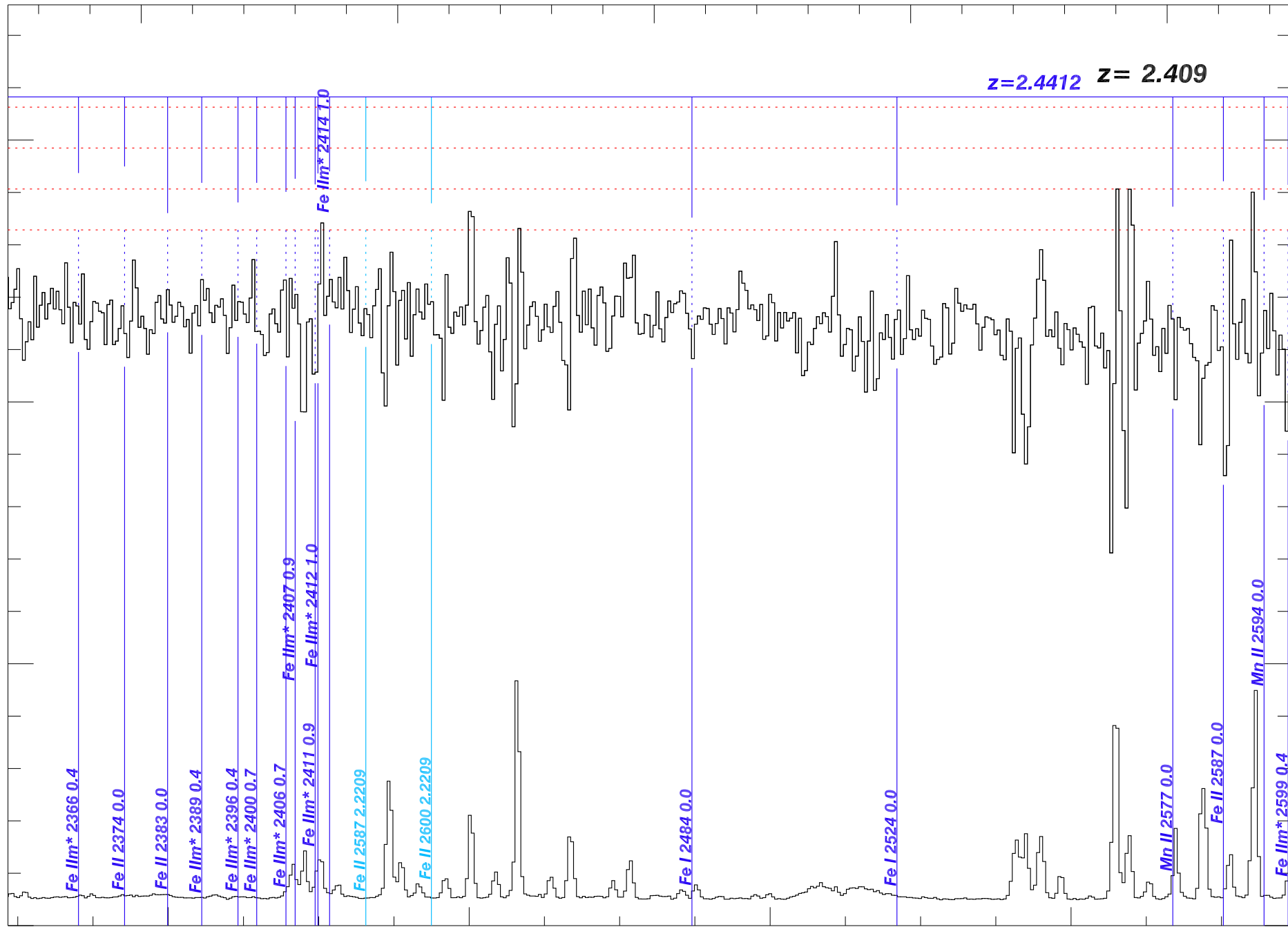
8200

8400

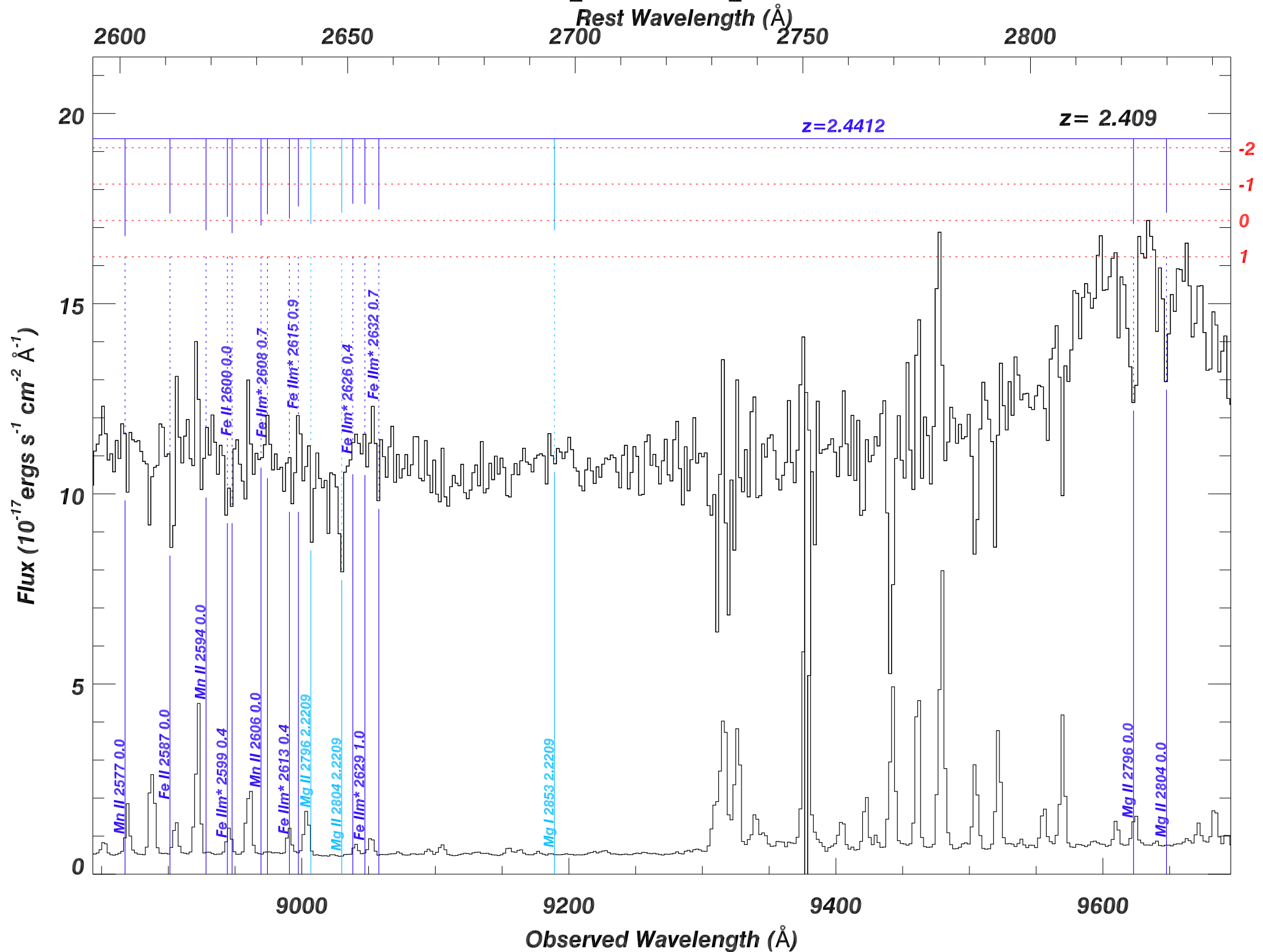
8600

8800

Observed Wavelength (\AA)



SDSS_J1004+3646_MJD55616



SDSS_J1004+3646_MJD55616

Rest Wavelength (\AA)

2850

2900

2950

3000

3050

$z=2.4412$

$z=2.409$

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

30

25

20

15

10

5

0

-2

-1

0

1

Mg II 2796 0.0

Mg II 2804 0.0

Mg I 2853 0.0

He I m* 2946 159.9

9.60×10^3

9.80×10^3

1.00×10^4

1.02×10^4

1.04×10^4

Observed Wavelength (\AA)

