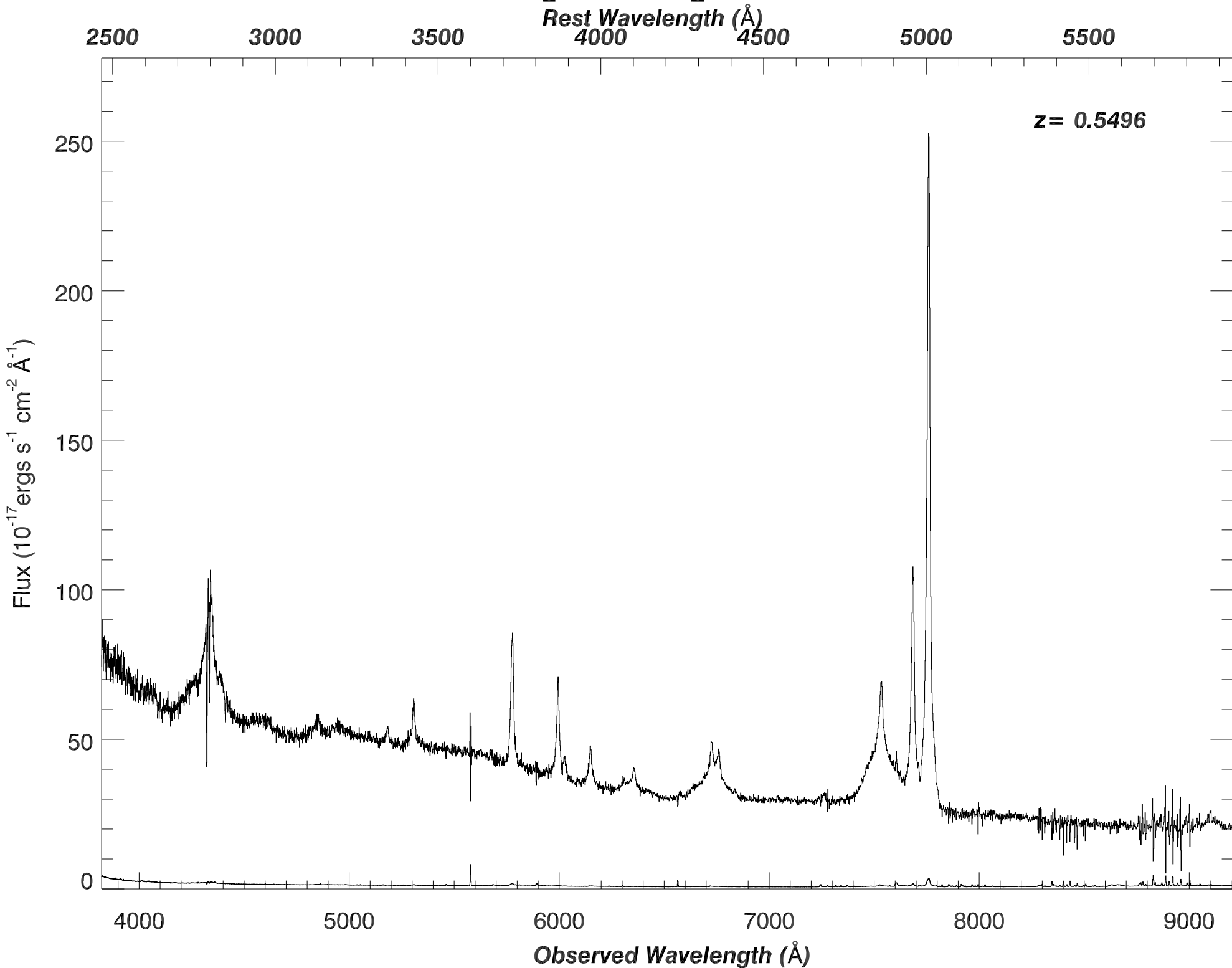


SDSS_J0412-0511_MJD51910



SDSS_J0412-0511_MJD51910

Rest Wavelength (\AA)

2500

2550

2600

2650

2700

$z=0.5456$ $z=0.5496$

100

80

60

40

20

0

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

-2
-1
0
1

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

Fe II 2600 0.0

Mn II 2606 0.0

Fe III* 2608 0.7

Fe III* 2613 0.4

Fe III* 2615 0.9

Fe III* 2626 0.4

Fe III* 2632 0.7

Fe III* 2629 1.0

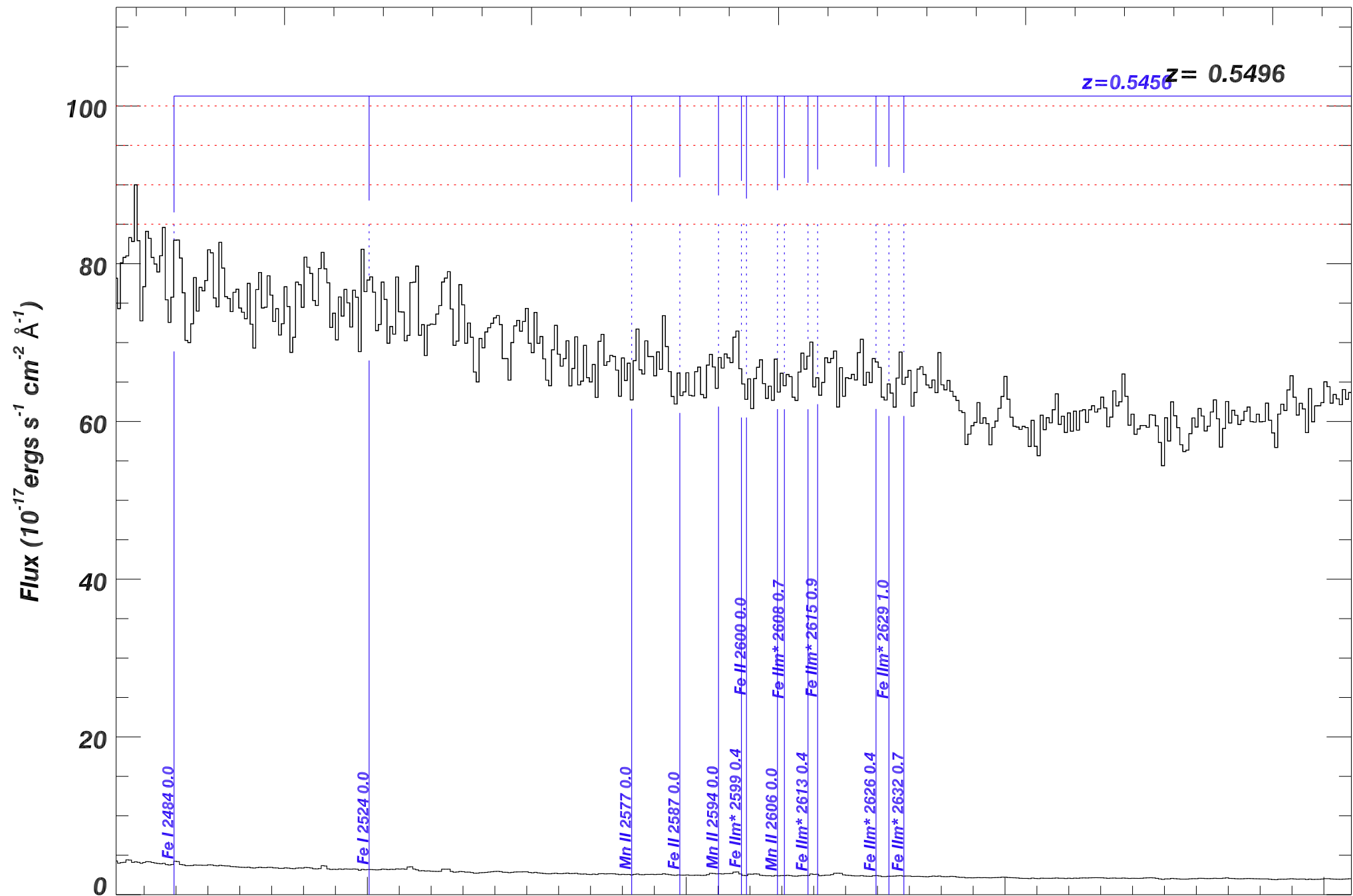
3900

4000

4100

4200

Observed Wavelength (\AA)



SDSS_J0412-0511_MJD51910

Rest Wavelength (\AA)

2700

2750

2800

2850

2900

$z=0.5456$

$z=0.5496$

-2
-1
0
1

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

120
100
80
60
40
20
0

4200

4300

4400

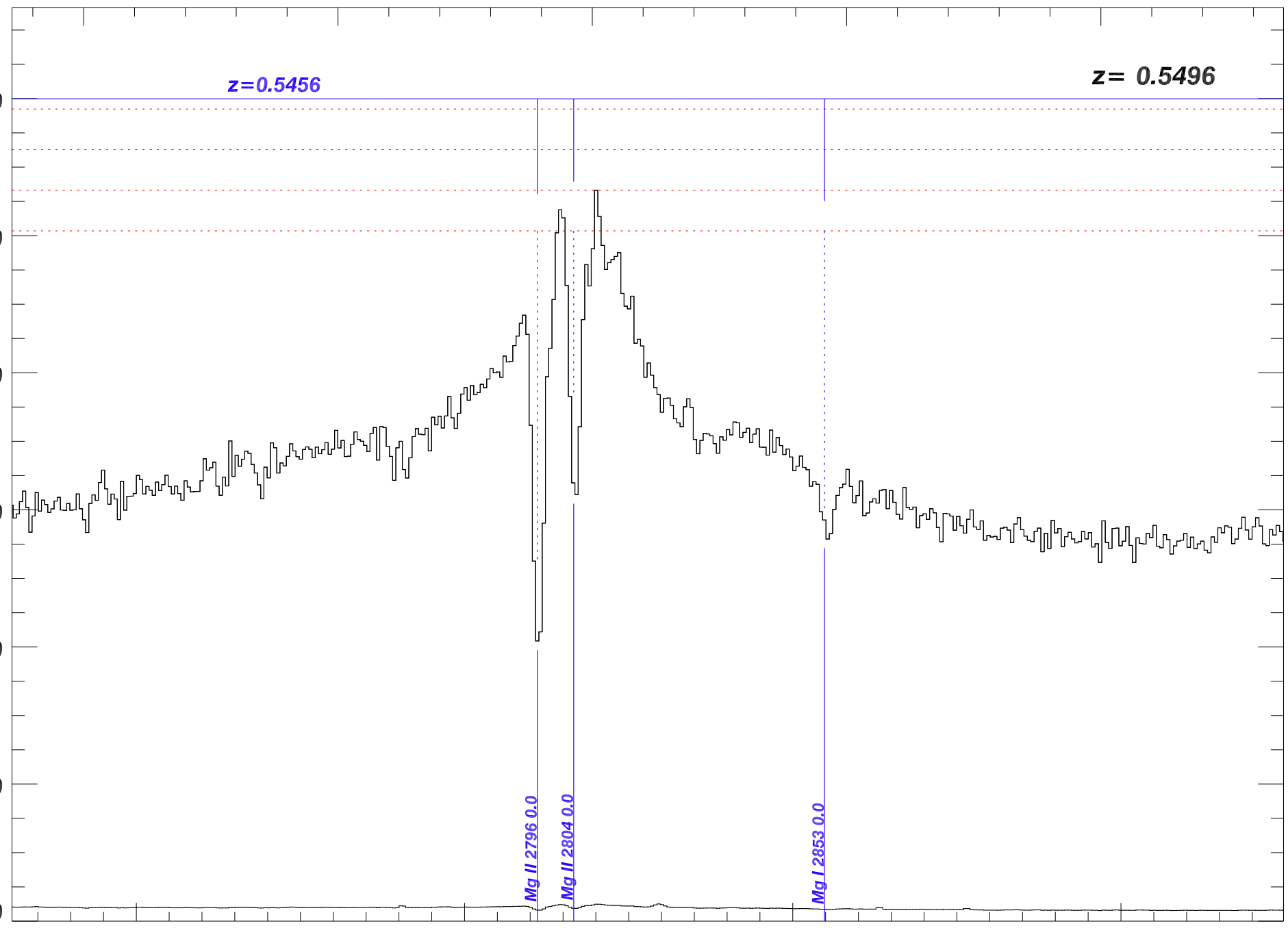
4500

Observed Wavelength (\AA)

Mg II 2796 0.0

Mg II 2804 0.0

Mg I 2853 0.0



SDSS_J0412-0511_MJD51910

Rest Wavelength (\AA)

2950

3000

3050

3100

3150

$z=0.5456$

$z=0.5496$

-2

-1

0

1

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

60

40

20

0

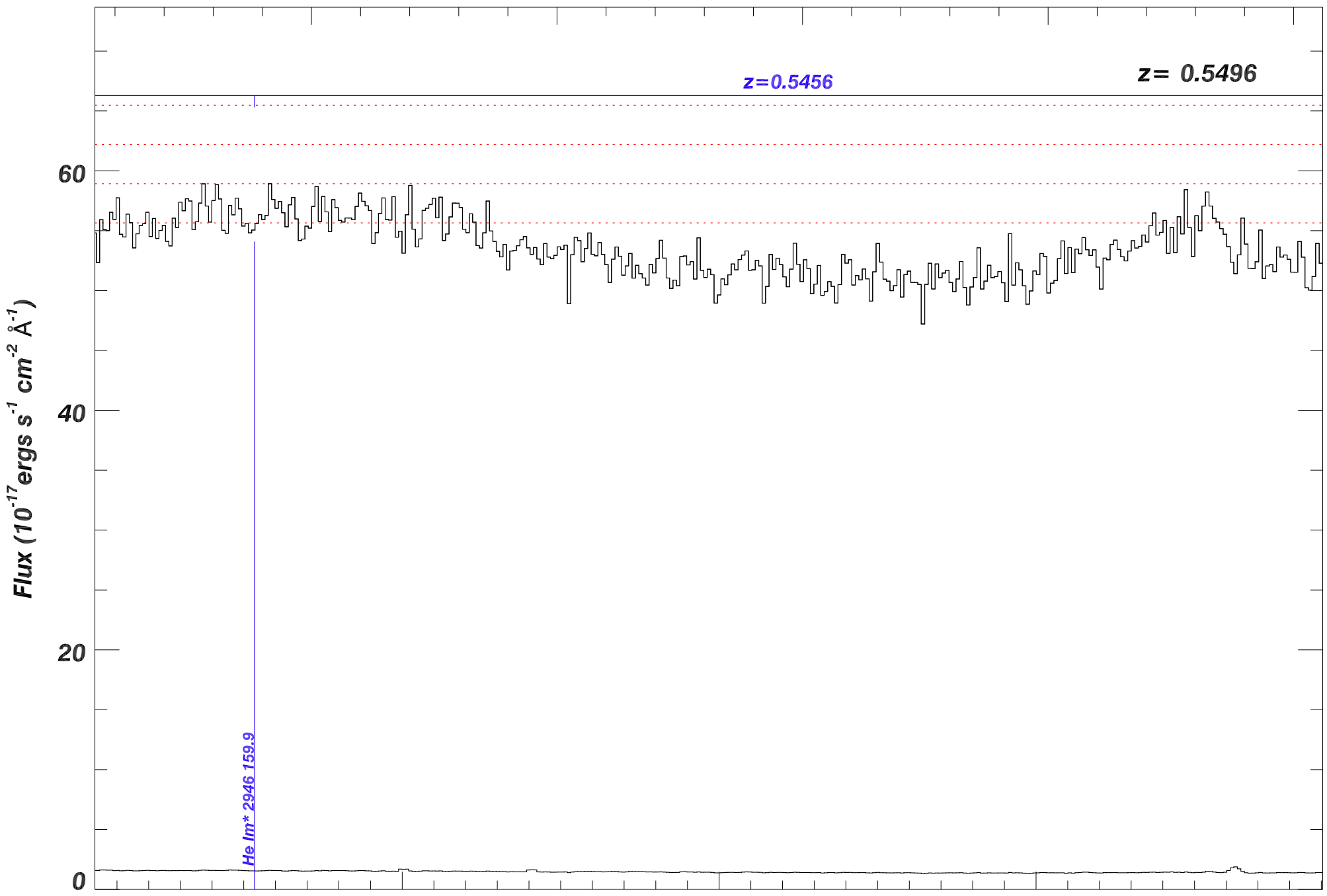
He I m* 2946 159.9

4600

4700

4800

Observed Wavelength (\AA)



SDSS_J0412-0511_MJD51910

Rest Wavelength (\AA)

3200

3300

3400

3500

$z=0.5456$

$z=0.5496$

-2

-1

0

1

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

60

40

20

0

4900

5000

5100

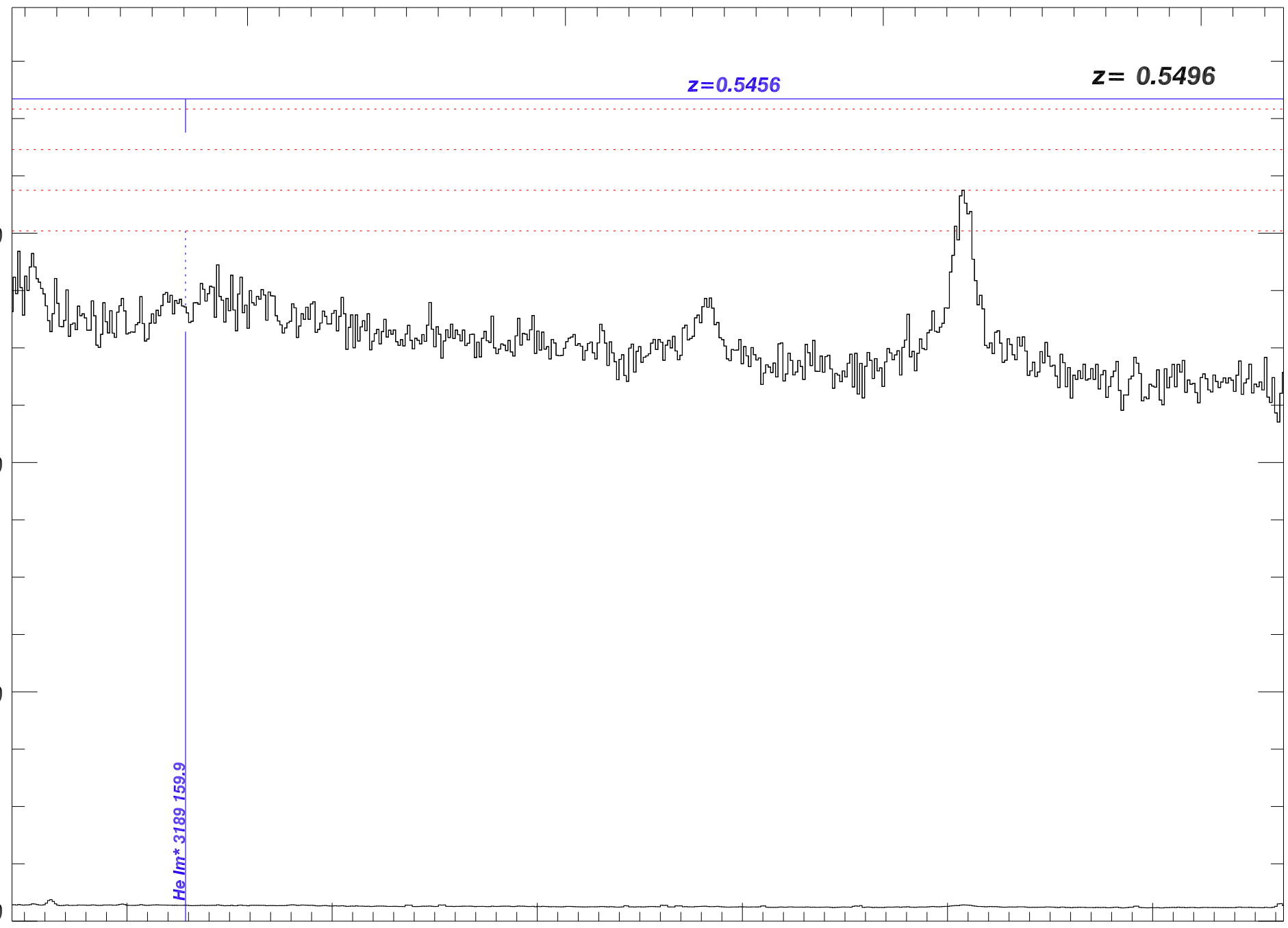
5200

5300

5400

Observed Wavelength (\AA)

He I m^* 3189.159.9



SDSS_J0412-0511_MJD51910

Rest Wavelength (\AA)

3500

3600

3700

3800

100

$z=0.5456$

$z = 0.5496$

-2

-1

0

1

80

60

40

20

0

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

5500

5600

5700

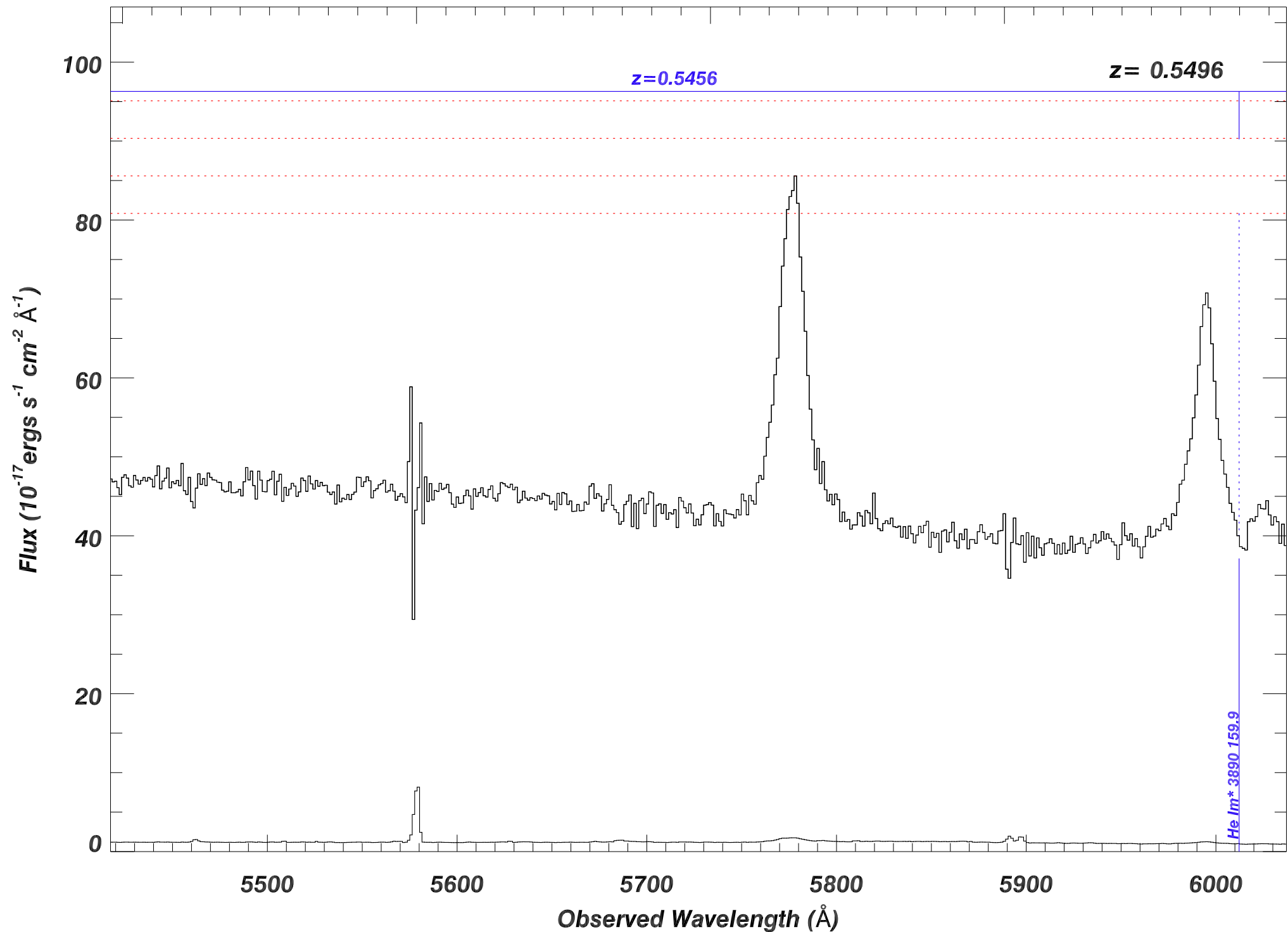
5800

5900

6000

Observed Wavelength (\AA)

He I m* 3890.159.9



SDSS_J0412-0511_MJD51910

Rest Wavelength (\AA)

3900

4000

4100

4200

$z=0.5456$

$z=0.5496$

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

80

60

40

20

0

-2

-1

0

1

He I m* 3890 159.9

Ca II 3935 0.0

Ca II 3970 0.0

6000

6100

6200

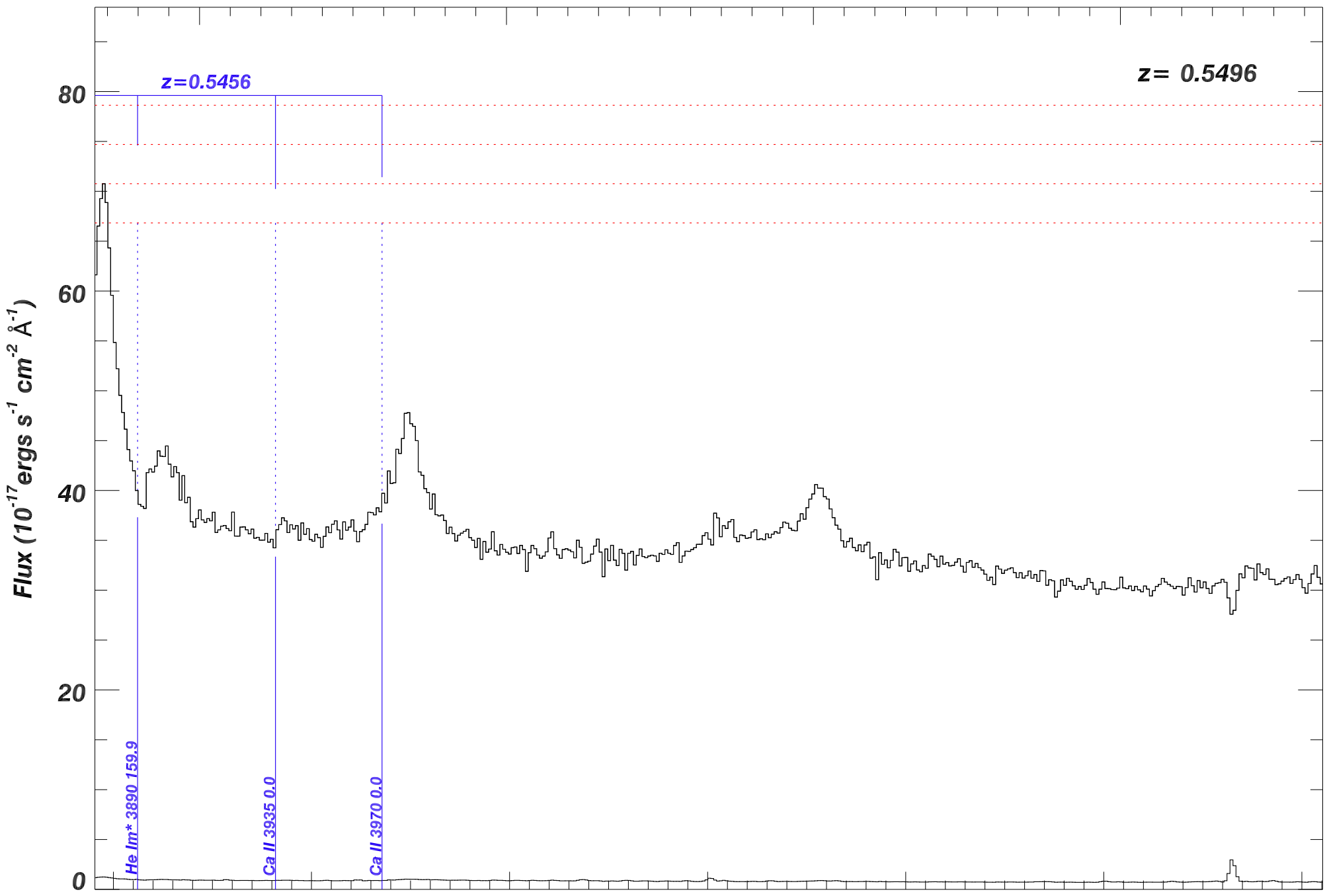
6300

6400

6500

6600

Observed Wavelength (\AA)



SDSS_J0412-0511_MJD51910

Rest Wavelength (\AA)

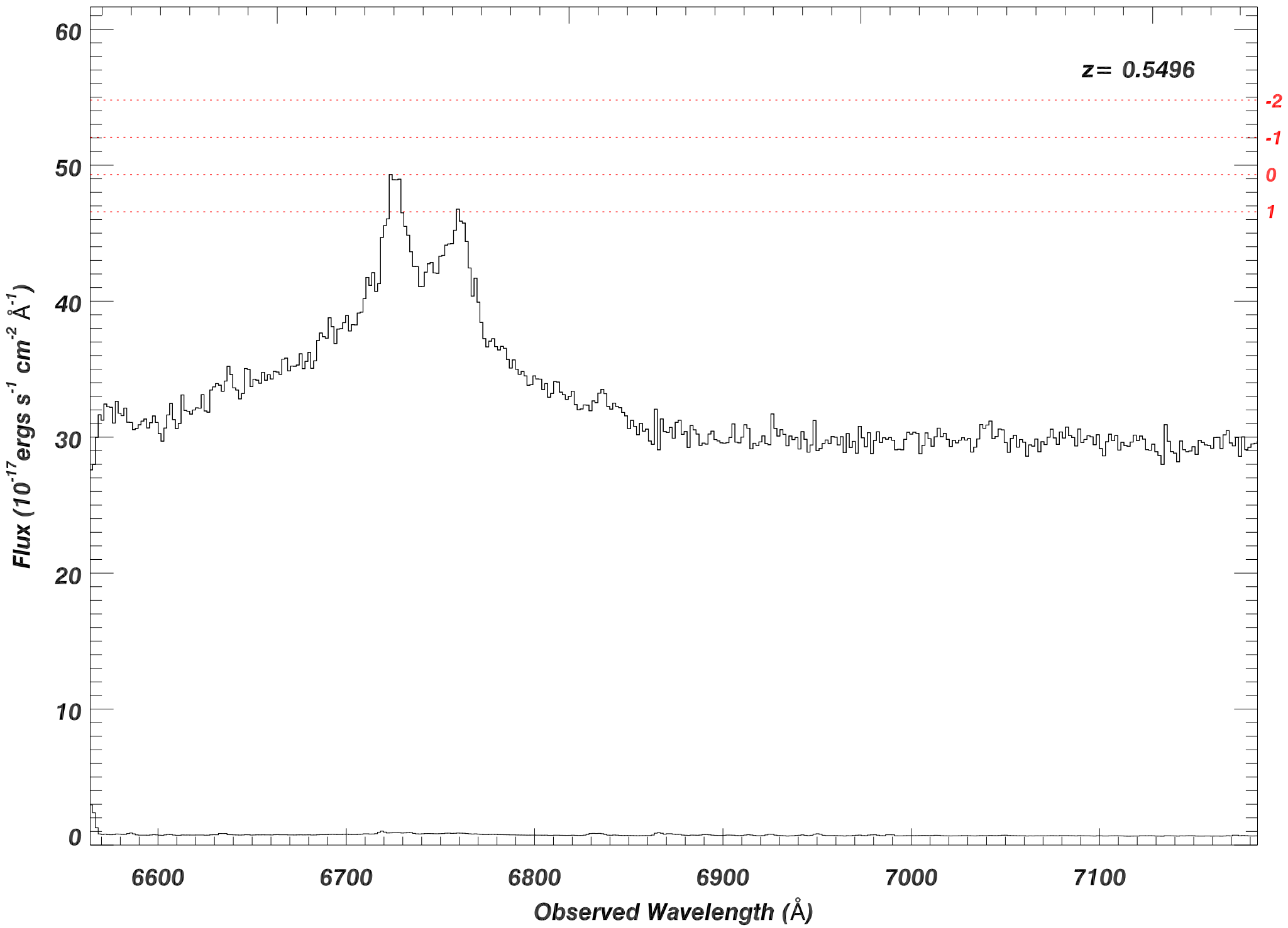
4300

4400

4500

4600

$z = 0.5496$



SDSS_J0412-0511_MJD51910

Rest Wavelength (\AA)

4700

4800

4900

5000

$z = 0.5496$

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

250

200

150

100

50

0

-2

-1

0

1

7200

7300

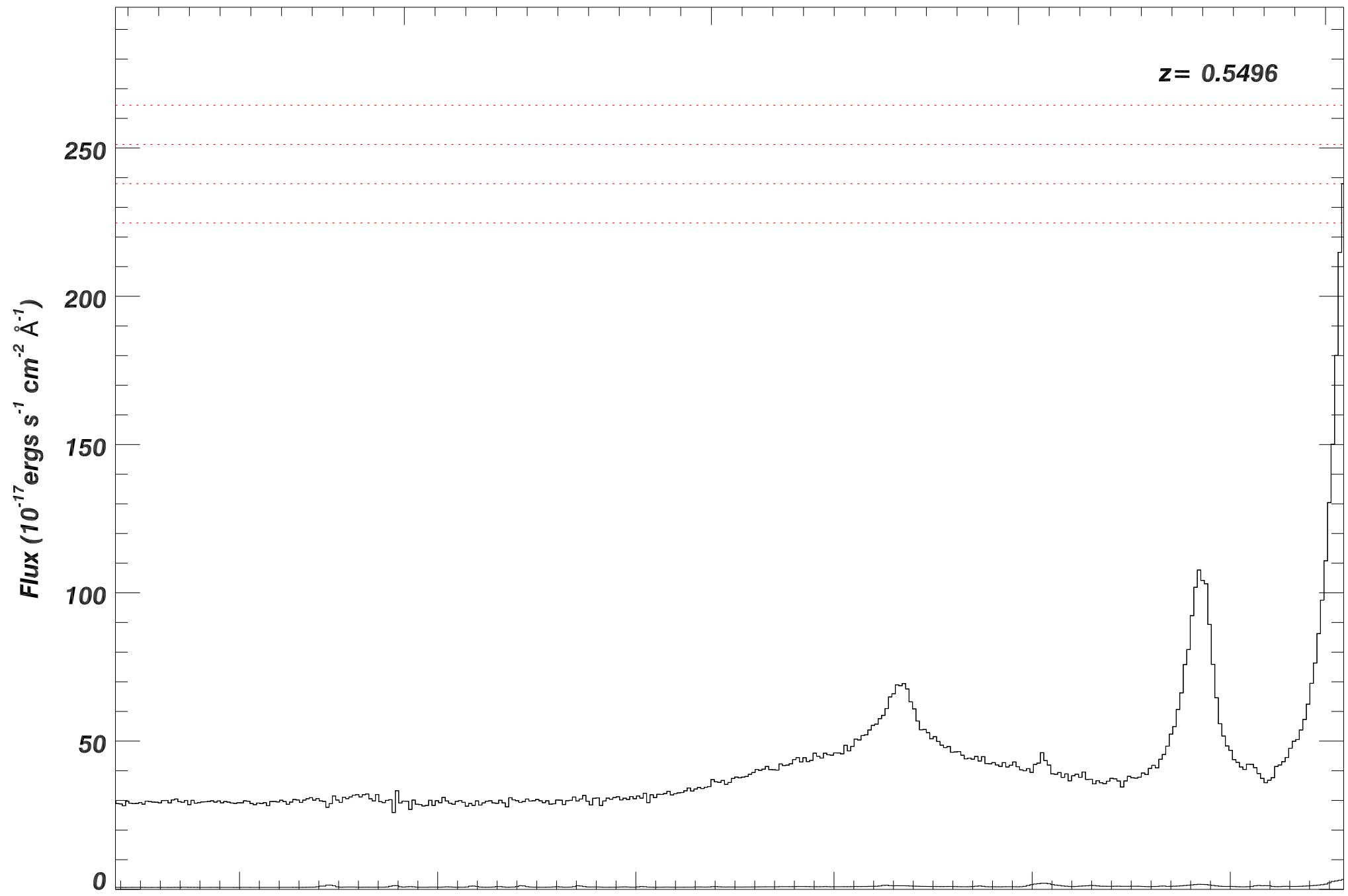
7400

7500

7600

7700

Observed Wavelength (\AA)



SDSS_J0412-0511_MJD51910

Rest Wavelength (\AA)

5000

5200

5400

5600

5800

300

$z = 0.5496$

-2

-1

0

1

250

200

150

100

50

0

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

7800

8000

8200

8400

8600

8800

9000

9200

Observed Wavelength (\AA)

