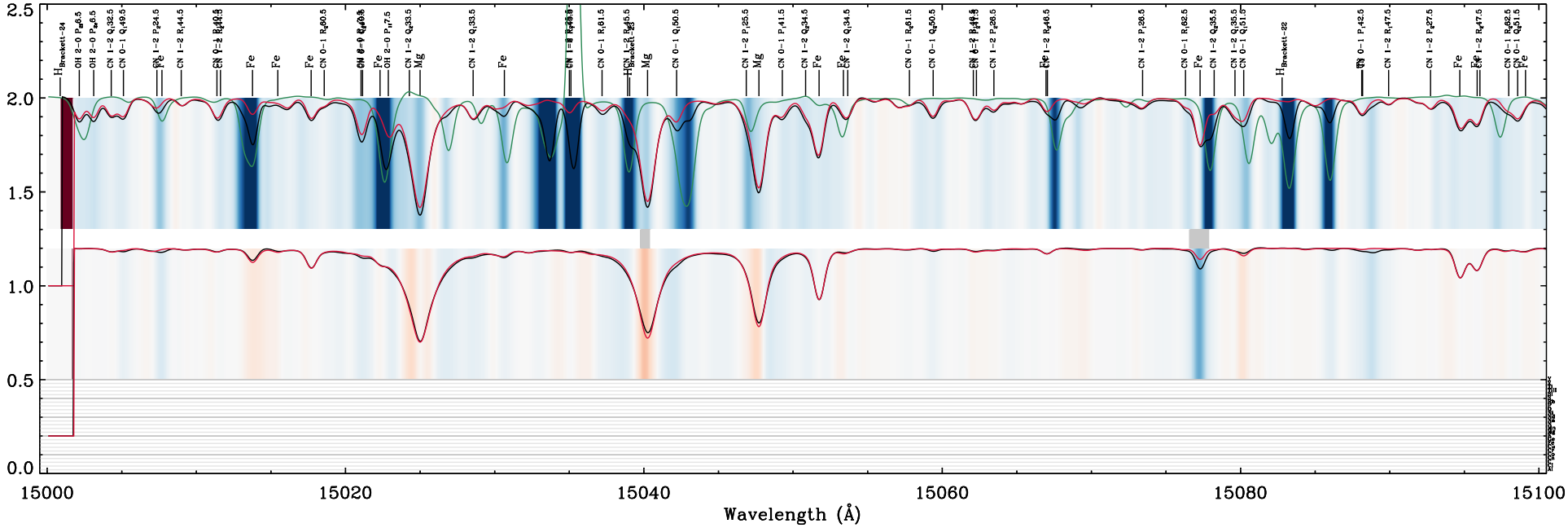
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1.5
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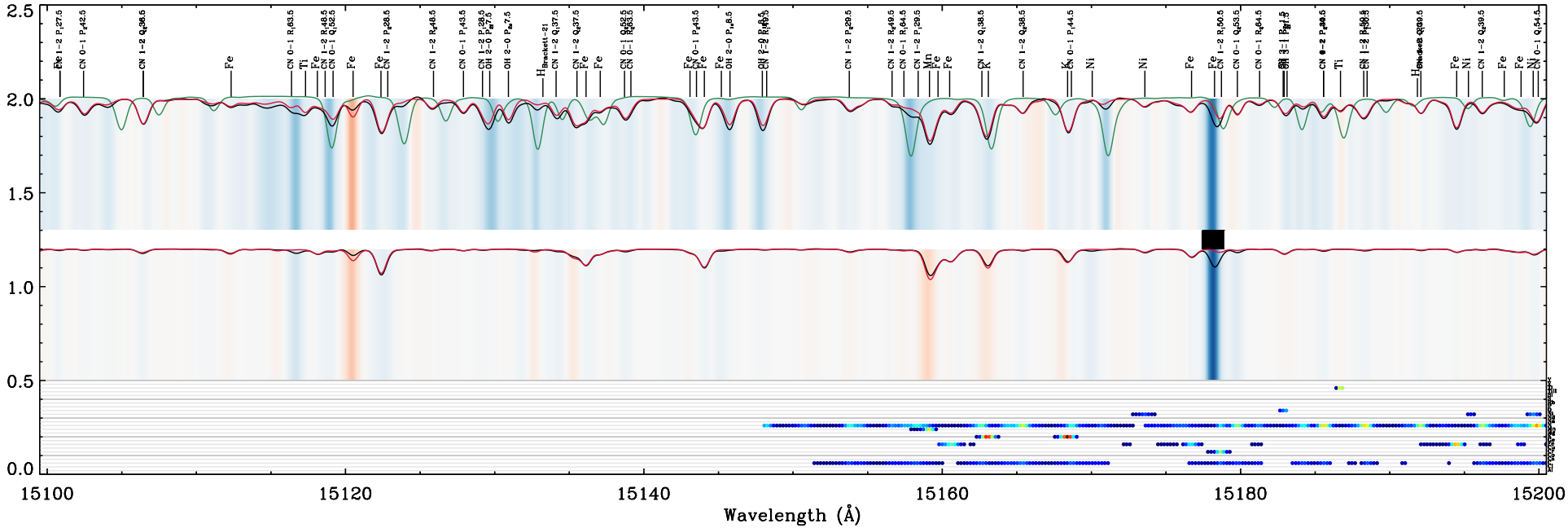
0.5
0.0
15000
15020
15040
15060
15080
15100
Wavelength (Å)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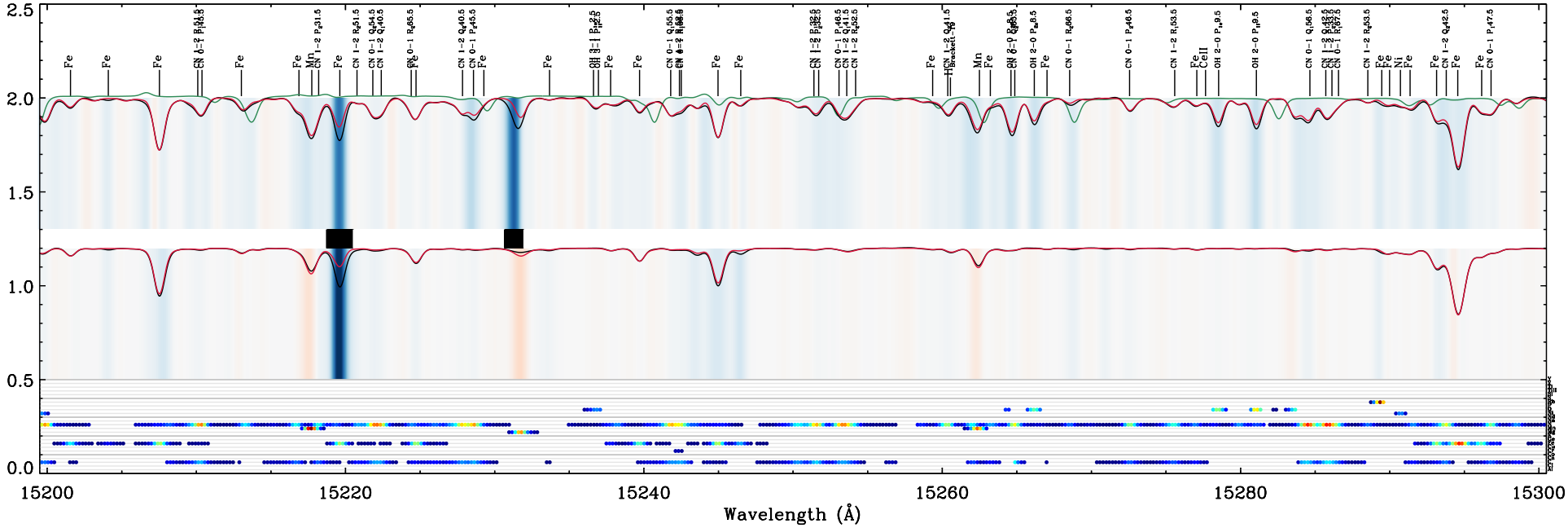
15140
15160
15180
15200
Wavelength (Å)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15200
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15240
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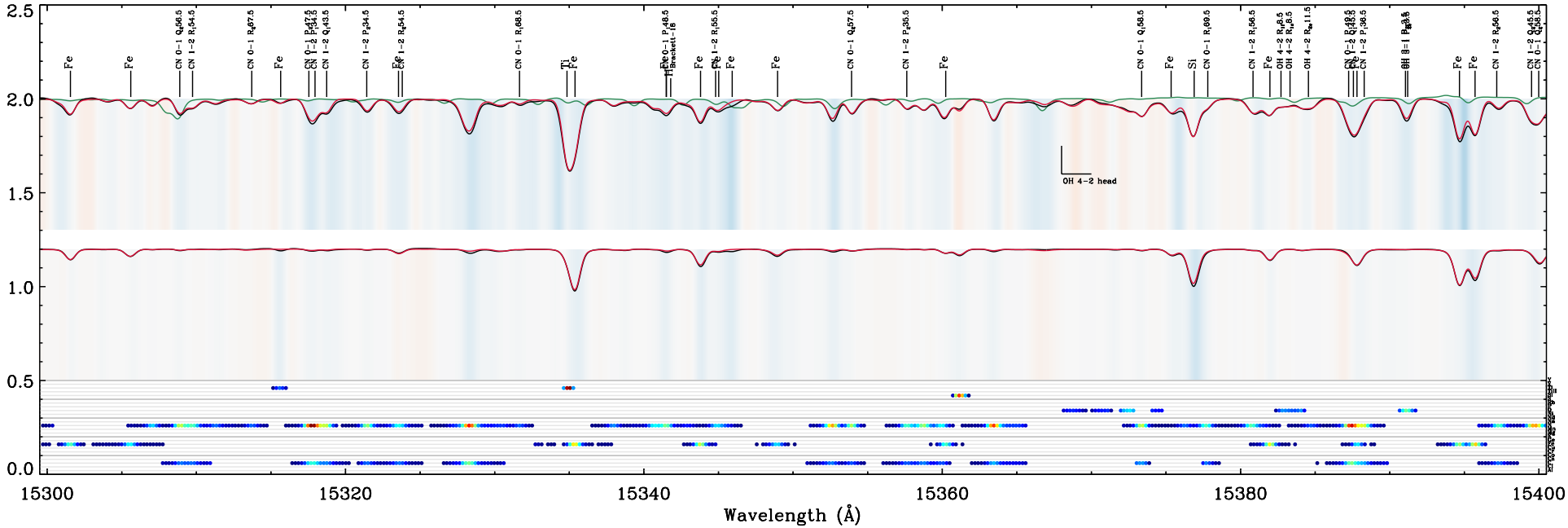
15280
15300
Wavelength (Å)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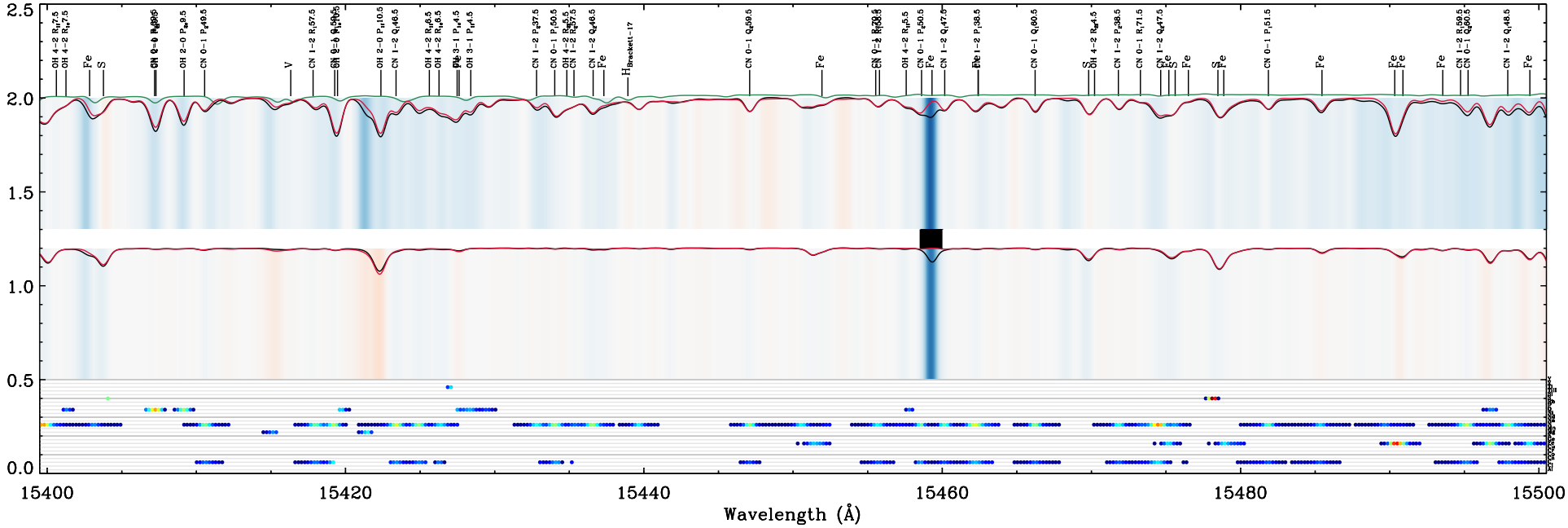
0.0
15300
15320
15340
15360
15380
15400
Wavelength (Å)
OH 4−2 head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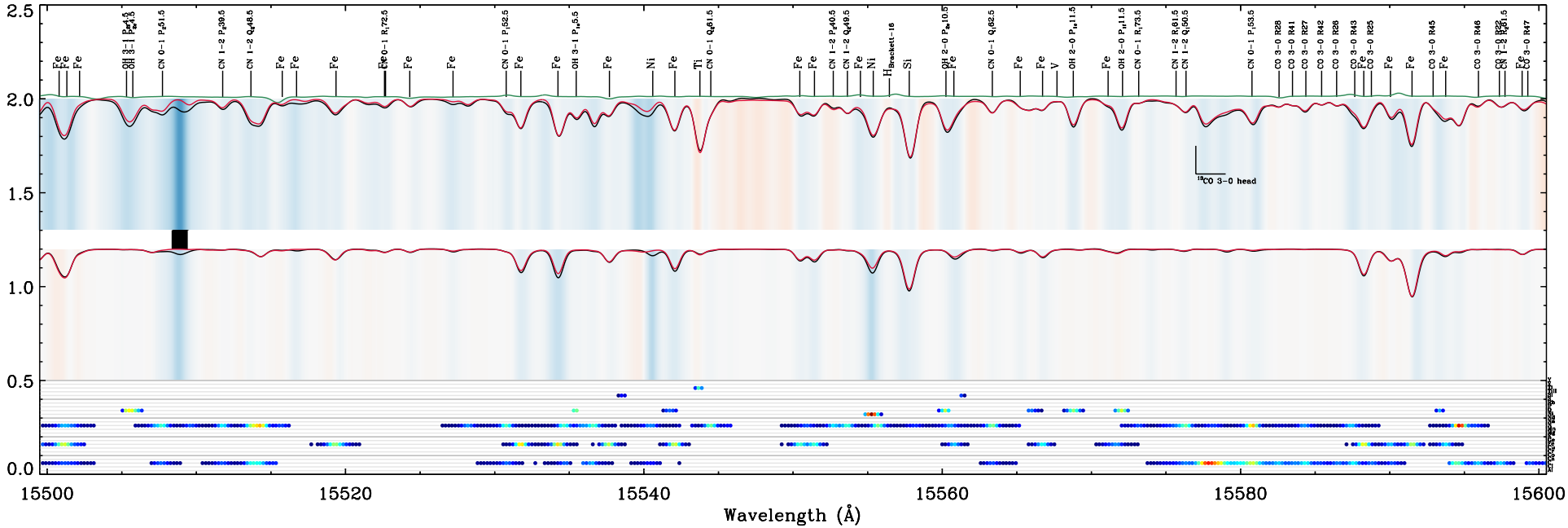
15400
15420
15440
15460
15480
15500
Wavelength (Å)


2.5
2.0
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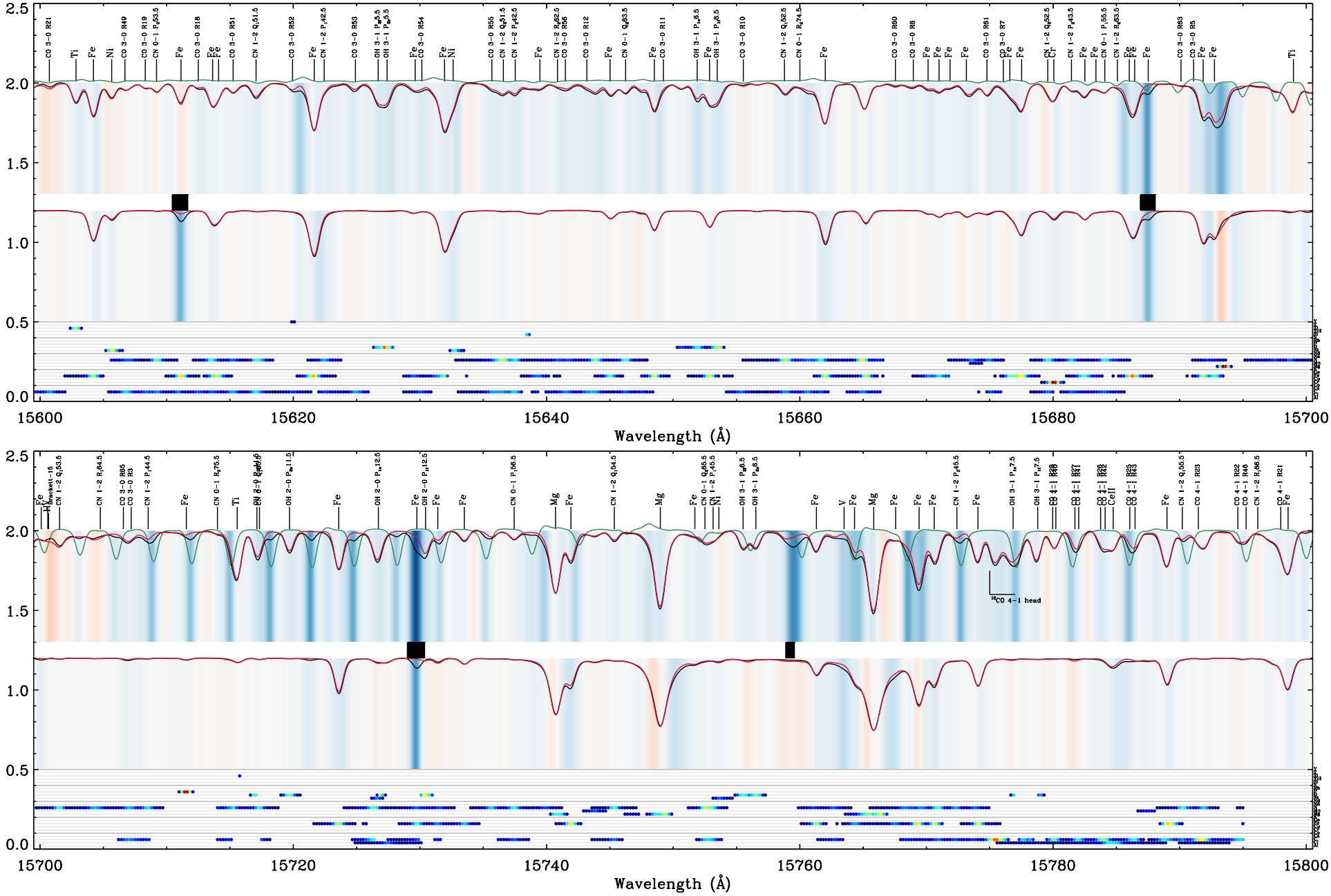
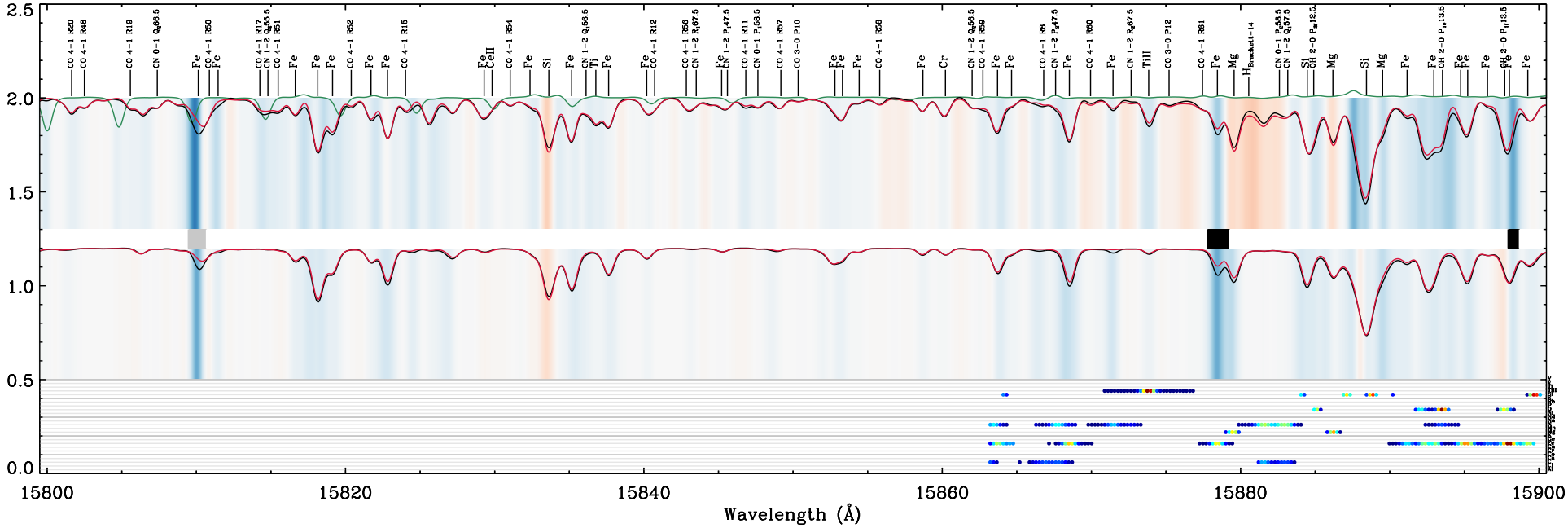
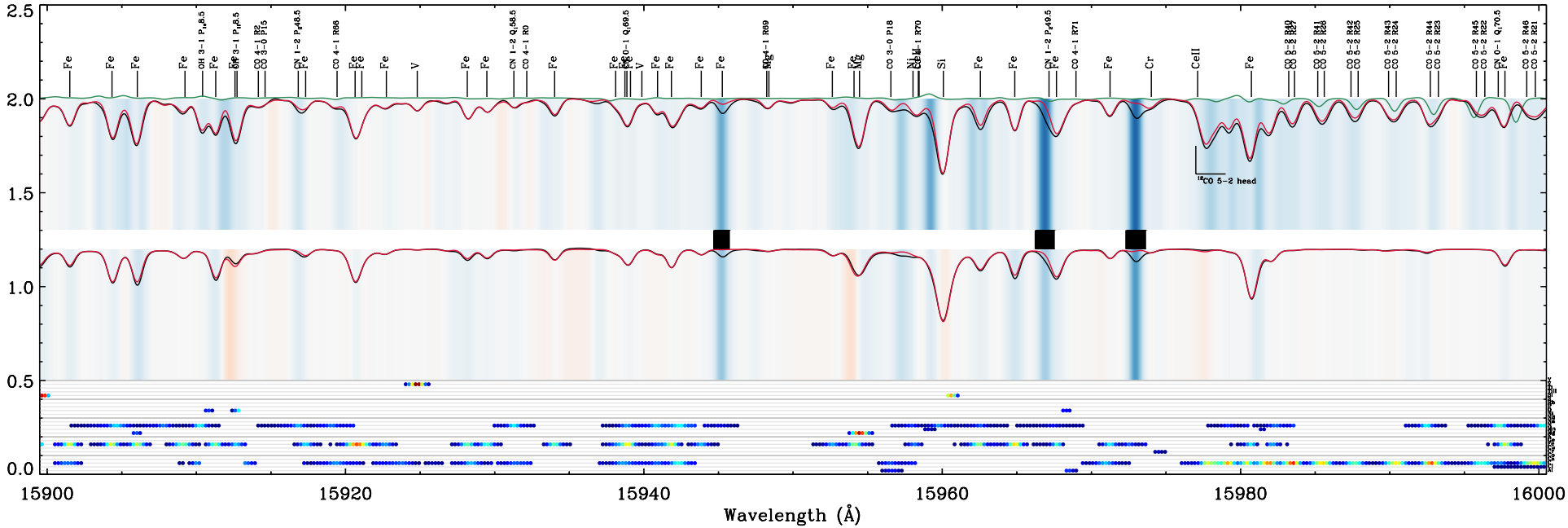
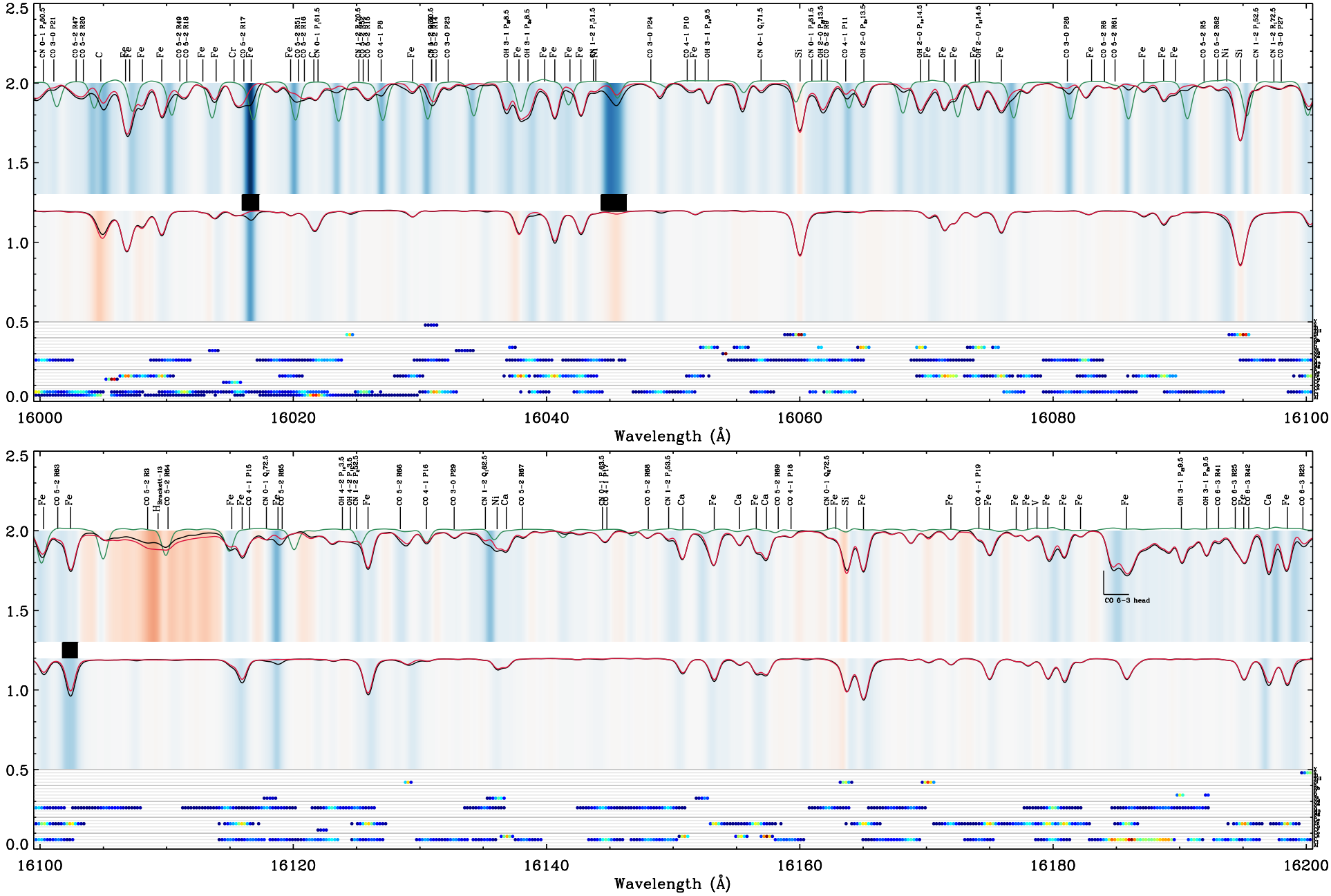
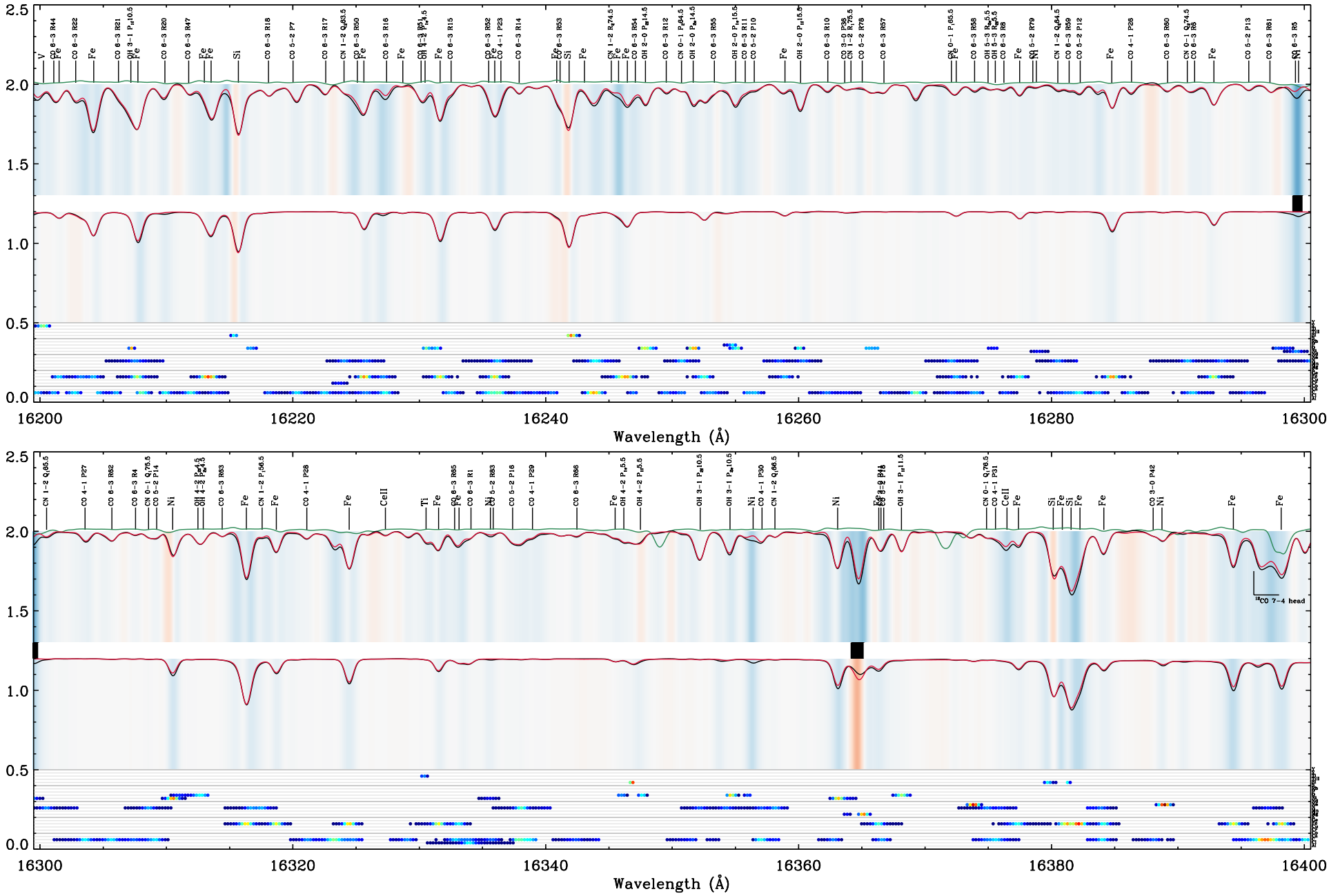
15500
15520
15540
15560
15580
15600
Wavelength (Å)
^{13}CO 3−0 head

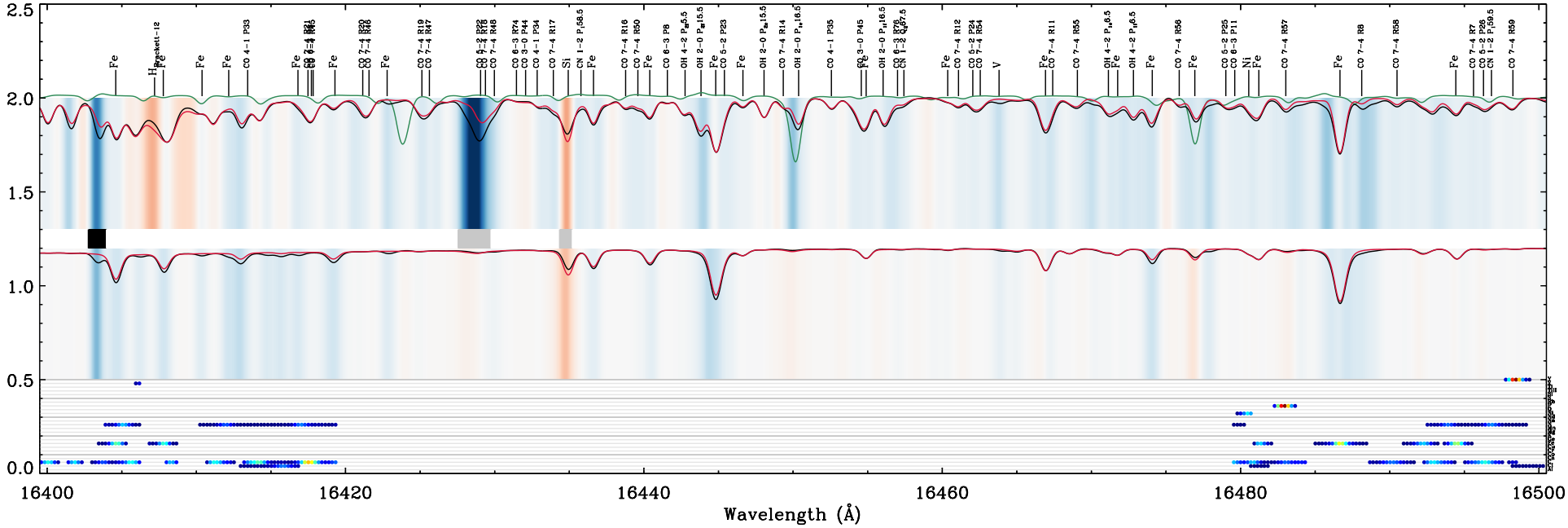

Wavelength (Å)
Wavelength (Å)
^{13}CO 4 − 1 head


Wavelength (Å)


Wavelength (Å)


Wavelength (Å)
16000
16020
16040
16060
16080
16100
16120
16140
16160
16180
16200
CO 6−3 head


Wavelength (Å)
Wavelength (Å)
^{13}CO 7–4 head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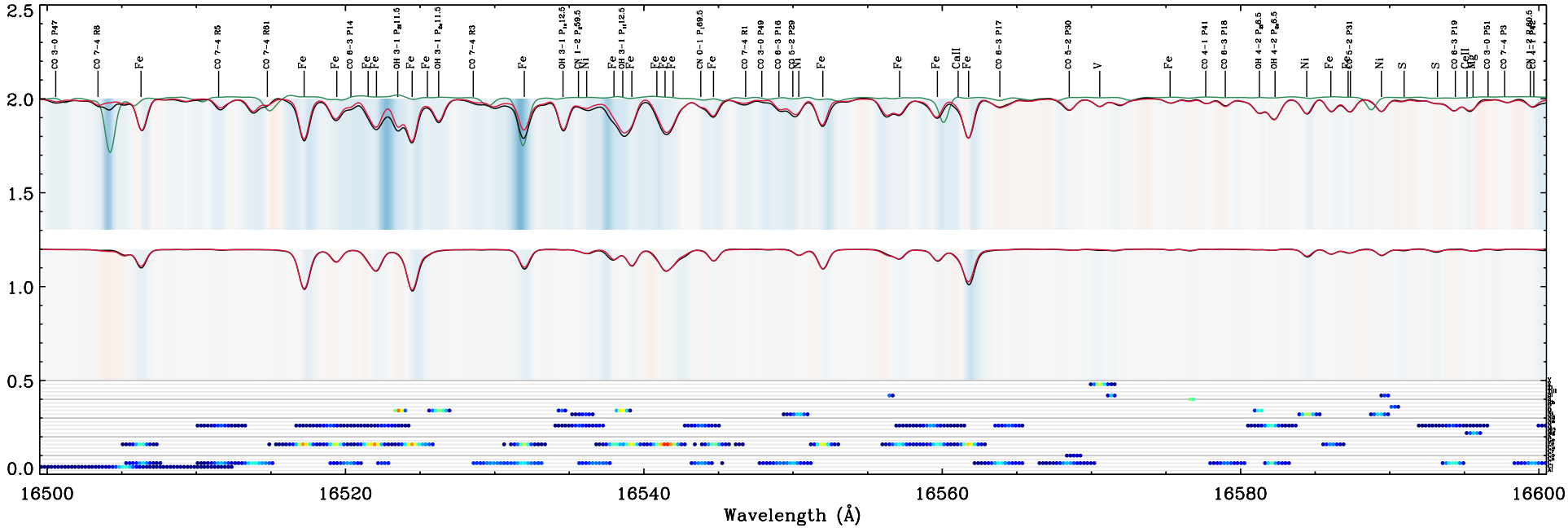
0.0
16400
16420
16440
16460
16480
16500
Wavelength (Å)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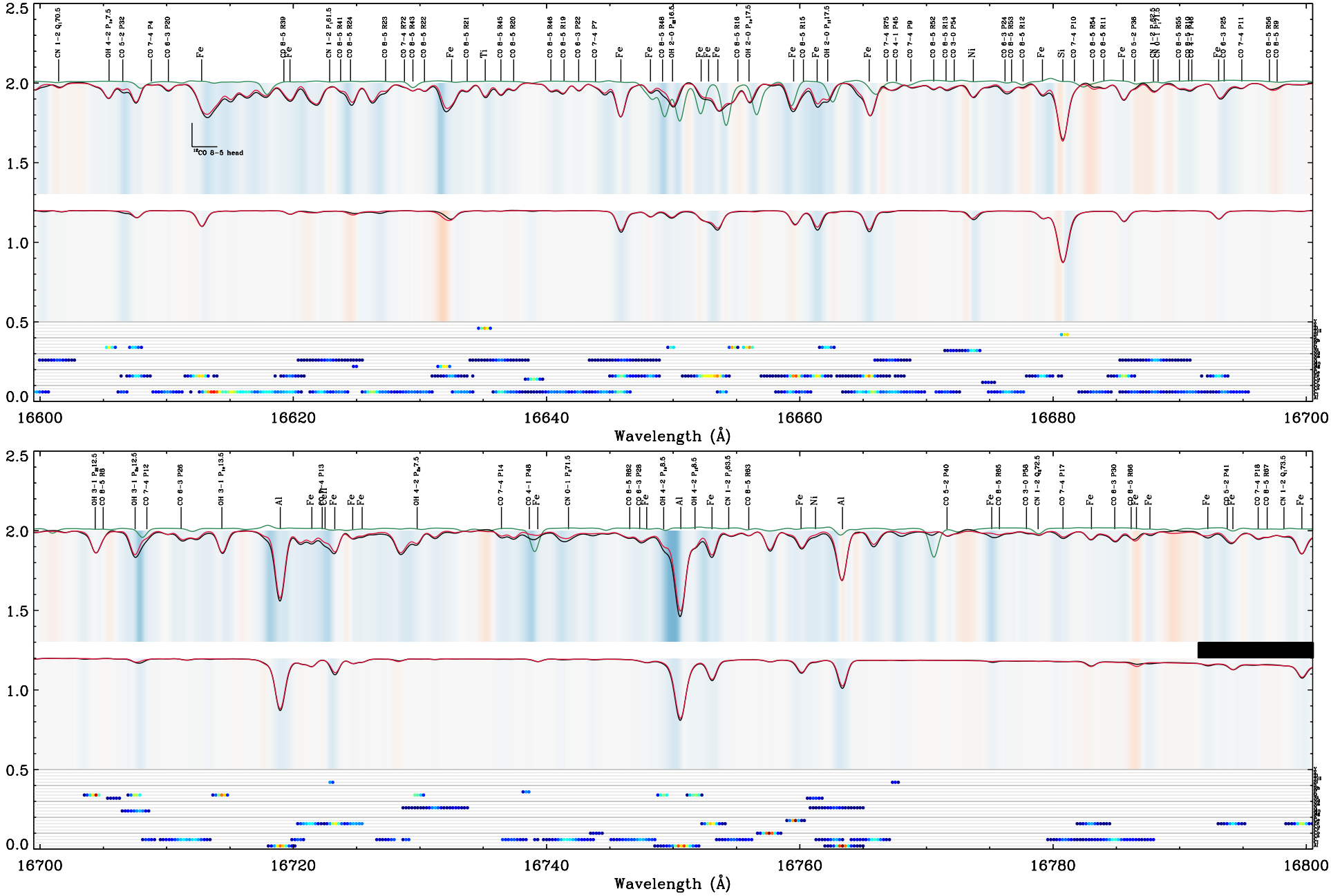
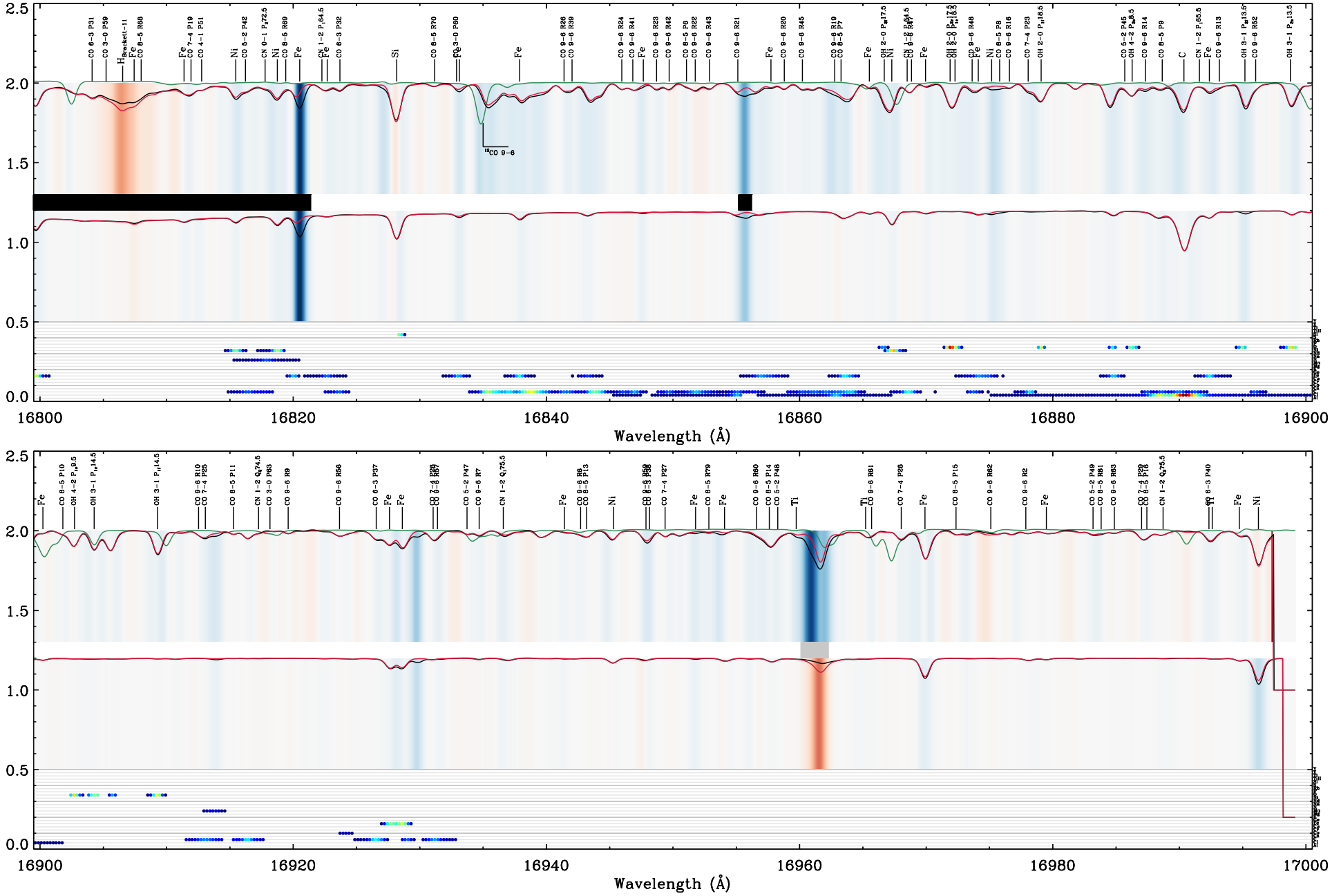
1.5
1.0
0.5
0.0
16500
16520
16540
16560
16580
16600
Wavelength (Å)


CN 1-2 Q,70.5
OH 4-2 P14,7.5
CO 5-2 P32
CO 7-4 P4
CO 6-3 P20
Fe
CO 8-5 R39
CN 1-2 P,61.5
CO 8-5 R41
CO 8-5 R24
CO 8-5 R23
CO 7-4 R72
CO 8-5 R43
CO 8-5 R22
CO 8-5 R21
Ti
CO 8-5 R45
CO 8-5 R20
CO 8-5 R46
CO 8-5 R19
CO 6-3 P22
CO 7-4 P7
CO 8-5 R48
OH 2-0 P16,6.5
CO 8-5 R16
OH 2-0 P14,17.5
CO 8-5 R15
OH 2-0 P11,17.5
CO 7-4 R75
CO 4-1 P45
CO 7-4 P9
CO 8-5 R52
CO 8-5 R13
CO 3-0 P54
Ni
CO 6-3 P24
CO 8-5 R53
CO 8-5 R12
Si
CO 7-4 P10
CO 8-5 R54
CO 8-5 R11
CO 5-2 P36
CO 6-3 P25
CO 7-4 P11
CO 8-5 R56
CO 8-5 R9
^{12}CO 8-5 head
Wavelength (Å)

OH 3-1 P9,12.5
CO 8-5 R8
OH 3-1 P8,12.5
CO 7-4 P12
CO 6-3 P26
OH 3-1 P7,13.5
Al
Fe
CO 7-4 P13
OH 4-2 P6,7.5
CO 7-4 P14
CO 4-1 P48
CN 0-1 P2,71.5
CO 8-5 R62
CO 6-3 P28
OH 4-2 P4,8.5
OH 4-2 P3,8.5
CN 1-2 P,63.5
CO 8-5 R63
Ni
CO 5-2 P40
CO 8-5 R65
CO 3-0 P58
CN 1-2 Q,72.5
CO 7-4 P17
CO 6-3 P30
CO 8-5 R66
CO 5-2 P41
CO 7-4 P18
CO 8-5 R67
CN 1-2 Q,73.5
Wavelength (Å)


Wavelength (Å)
Wavelength (Å)