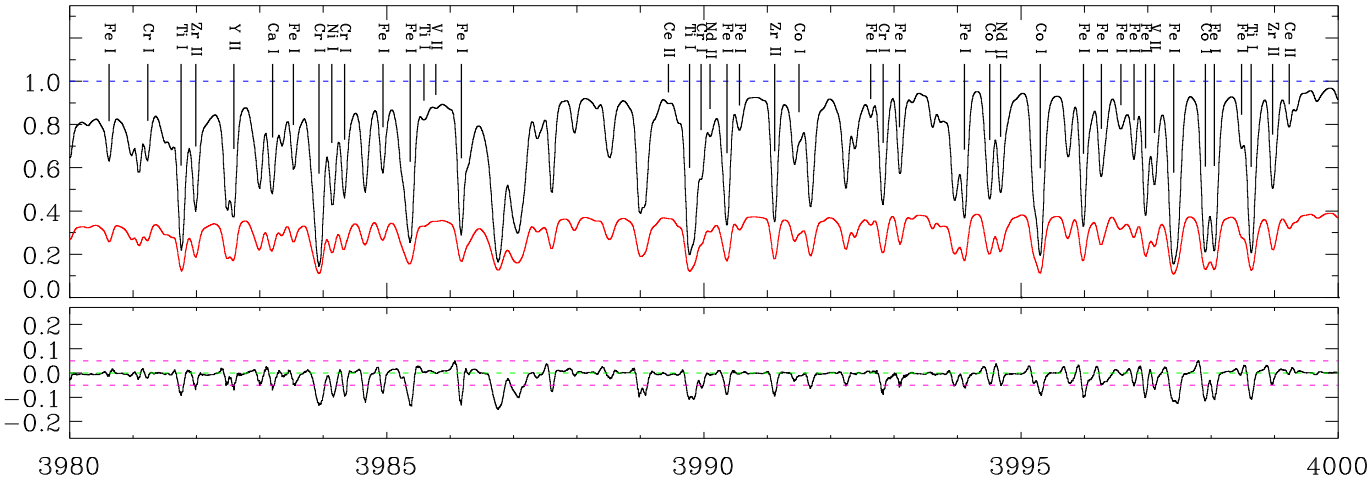
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Cr I
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Cr I
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Ti I
Fe I
Fe I
Ce II
Ce II
Ti I
Nd II
Cr I
Fe I
Fe I
Zr II
Co I
Fe I
Cr I
Fe I
Fe I
Co II
Nd II
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Co I
Fe I
Ti I
Ce II
Zr II
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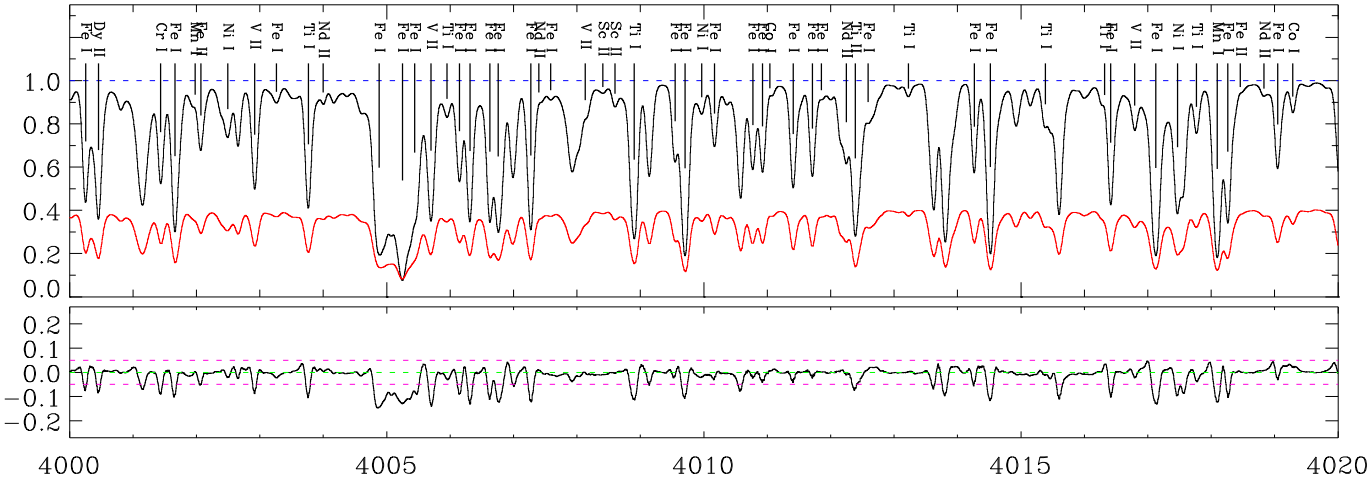
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Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
Nd II
V II
Sc II
Sc II
Ti I
Ti I
Fe I
Fe I
Ni I
Fe I
Fe I
Co I
Fe I
Fe I
Fe I
Fe I
Fe I
Nd II
Ti I
Fe I
Fe I
Ti I
Fe I
V II
Fe I
Ni I
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Fe I
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Co I
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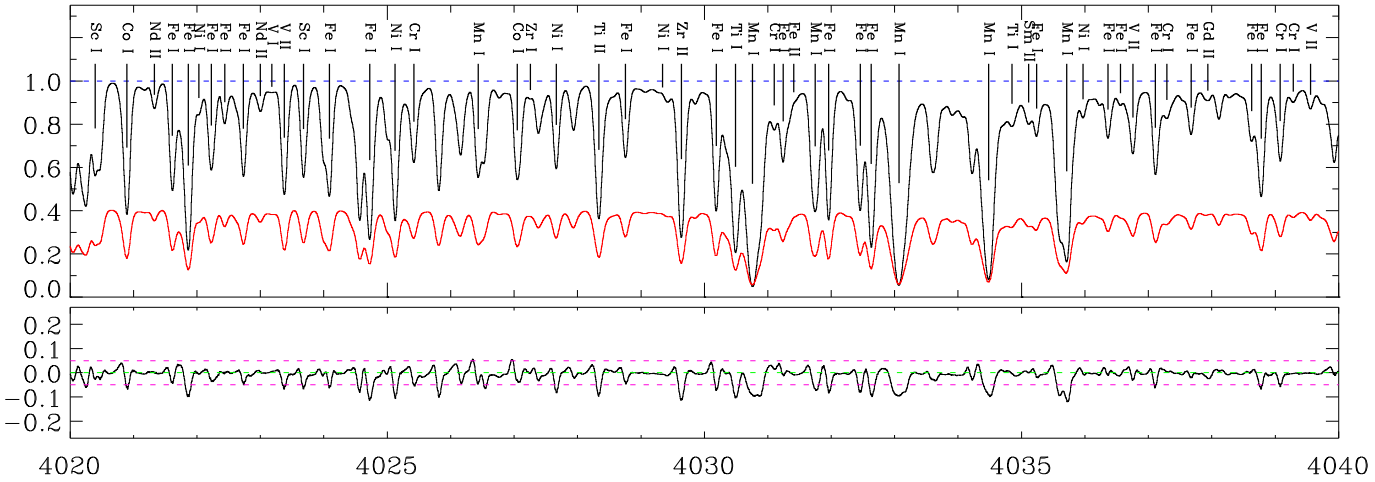
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Co I
Ni I
Ti II
Fe I
Zr II
Ni I
Fe I
Mn I
Ti I
Fe I
Cr I
Fe I
Mn I
Fe I
Fe I
Mn I
Mn I
Ti I
Sm II
Fe I
Ni I
Mn I
Ni I
Fe I
Fe I
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Cr I
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Cr I
Cr I
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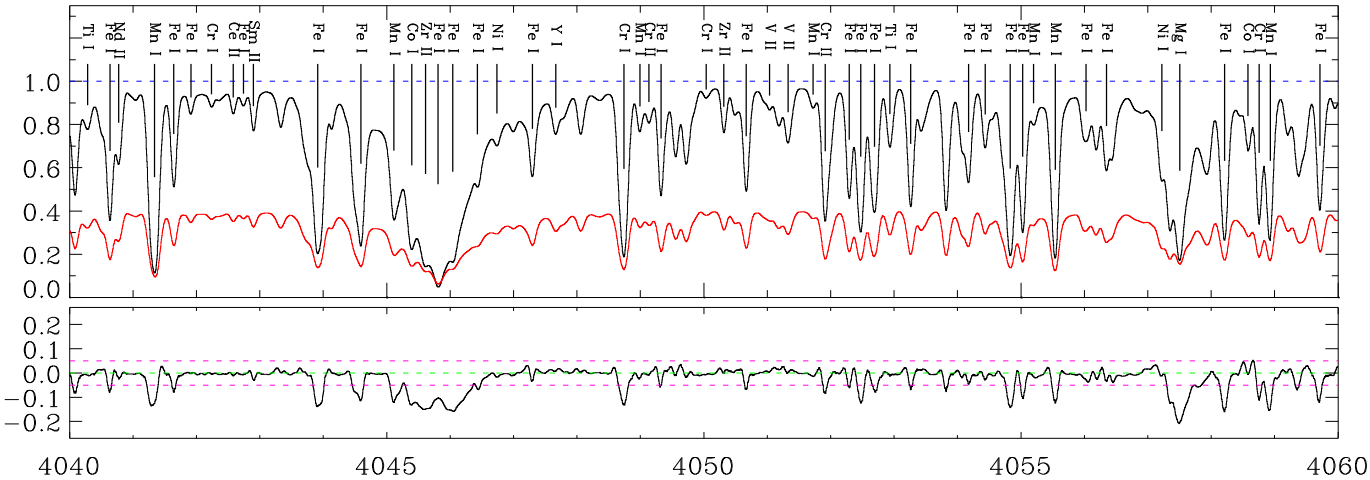
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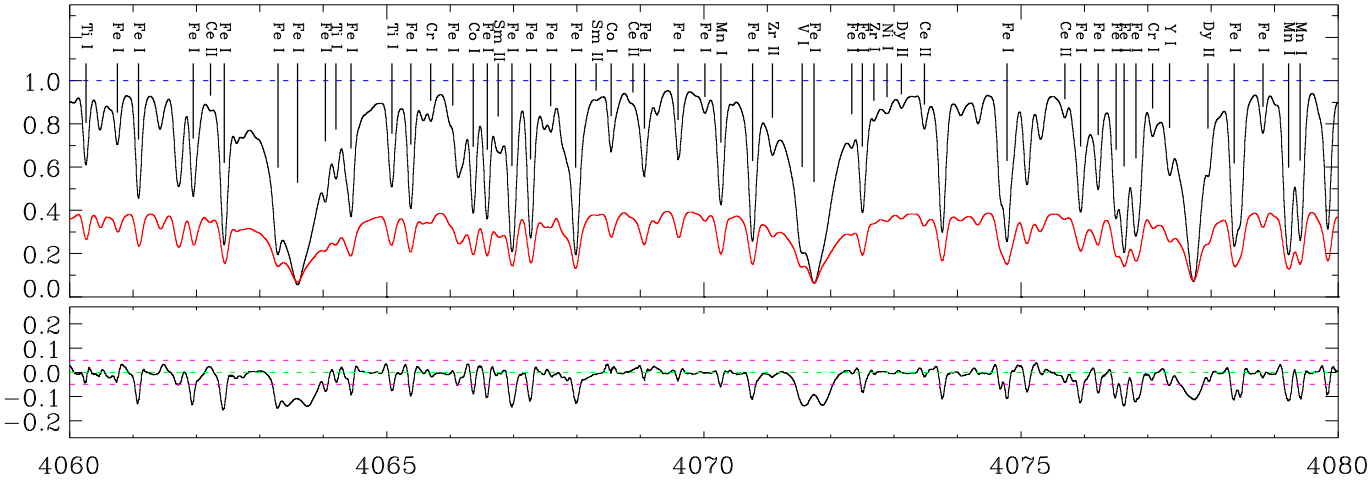
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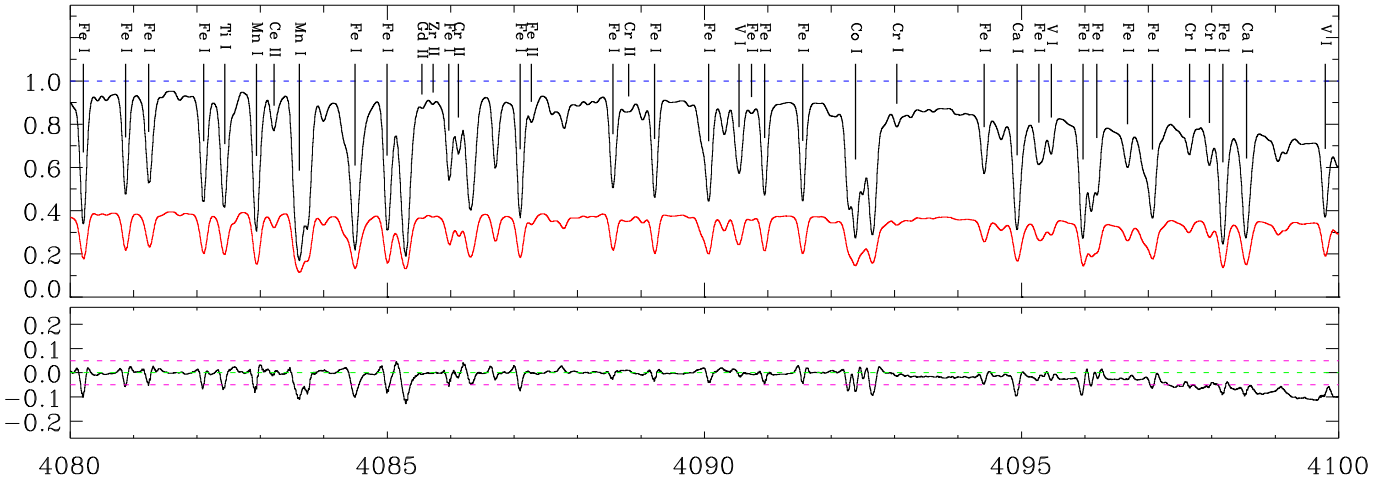
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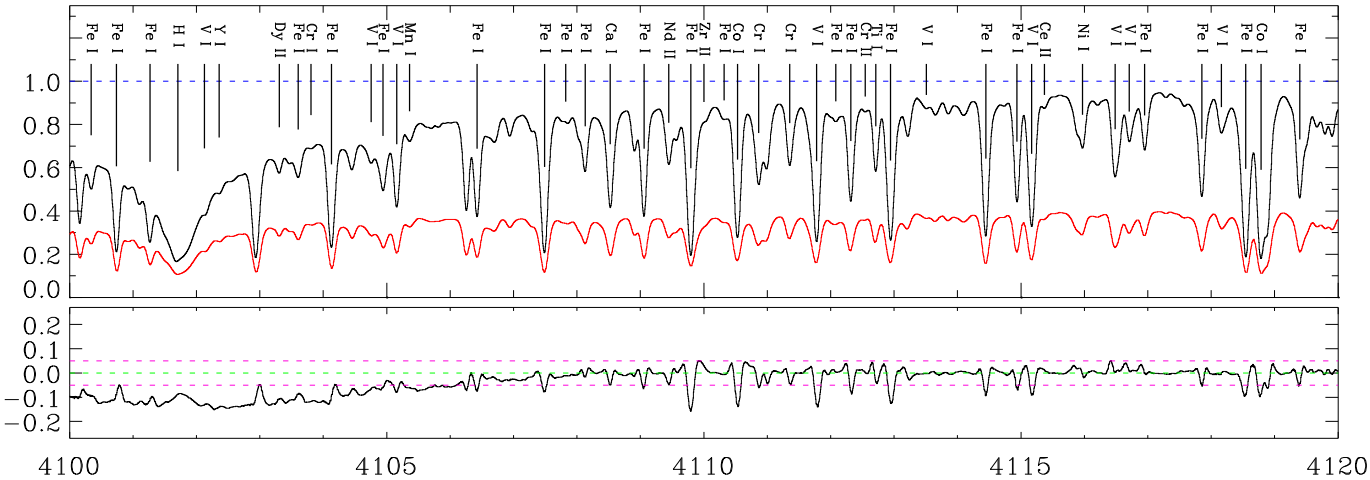
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Fe I
Fe I
Fe I
Fe I
Ca I
Fe I
Nd II
Fe I
Zr II
Fe I
Co I
Fe I
Cr I
Cr I
V I
Fe I
Fe I
Fe I
Ti I
Cr I
Fe I
V I
Fe I
Fe I
Ce II
V I
Fe I
Ni I
V I
V I
Fe I
Fe I
V I
Co I
Fe I
Fe I
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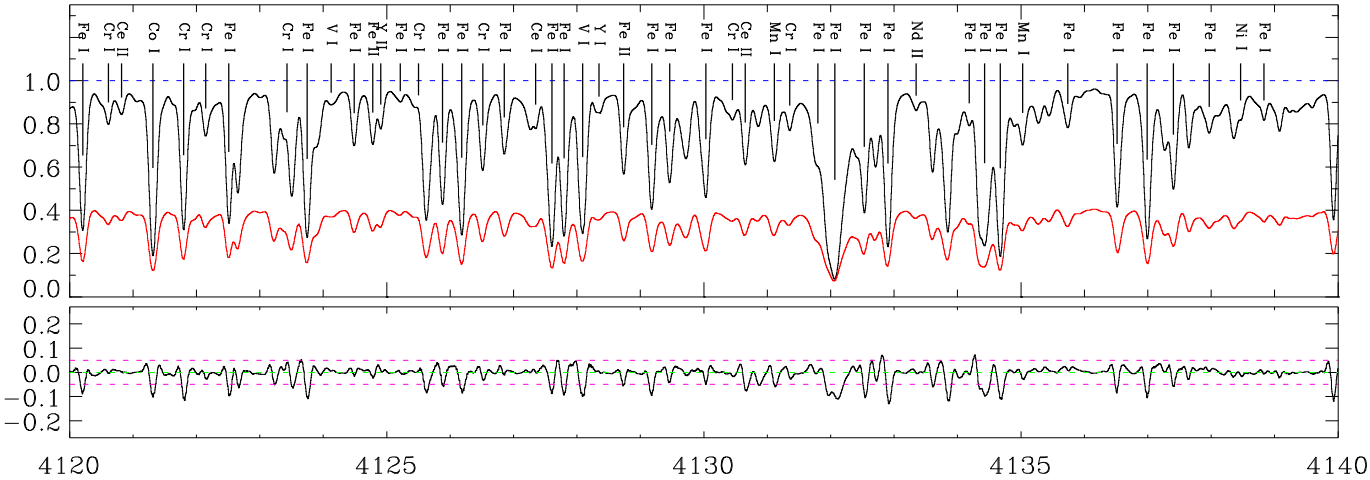
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Fe I
Ni I
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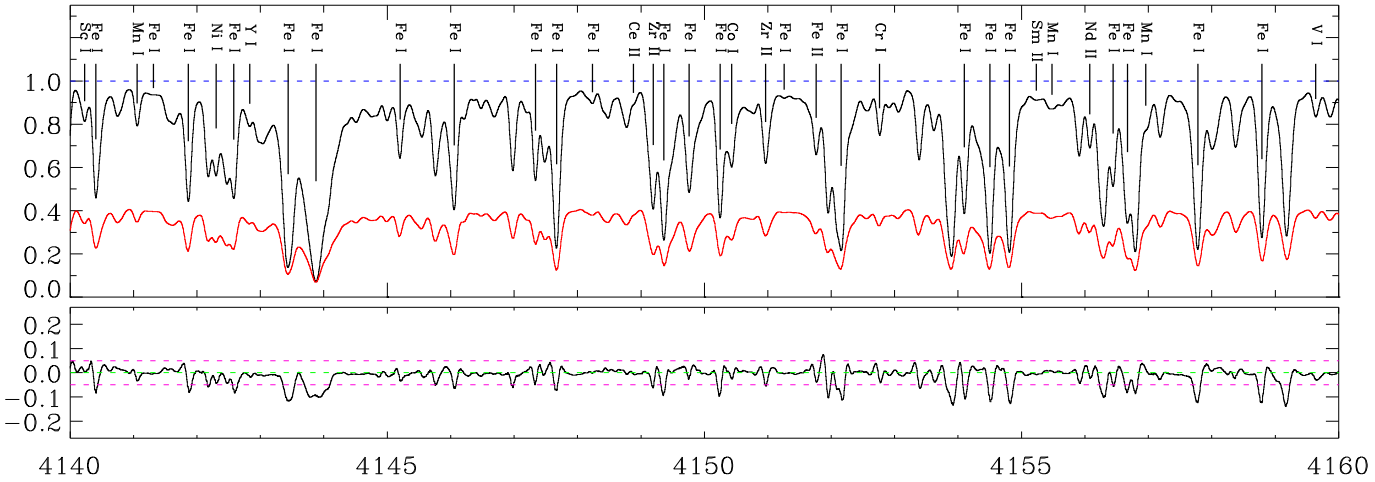
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Fe II
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Cr I
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Nd II
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Mn I
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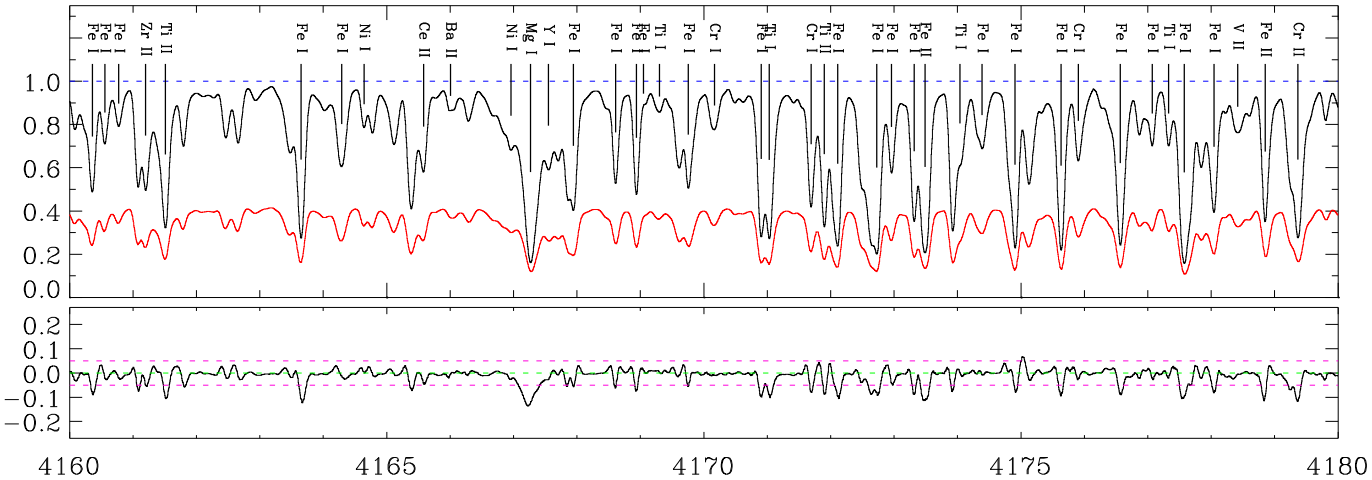
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Ti I
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Cr I
Ti I
Fe I
Cr I
Ti II
Fe I
Fe I
Fe I
Fe I
Fe II
Ti I
Fe I
Fe I
Fe I
Cr I
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Fe I
Fe I
V II
Fe II
Cr II
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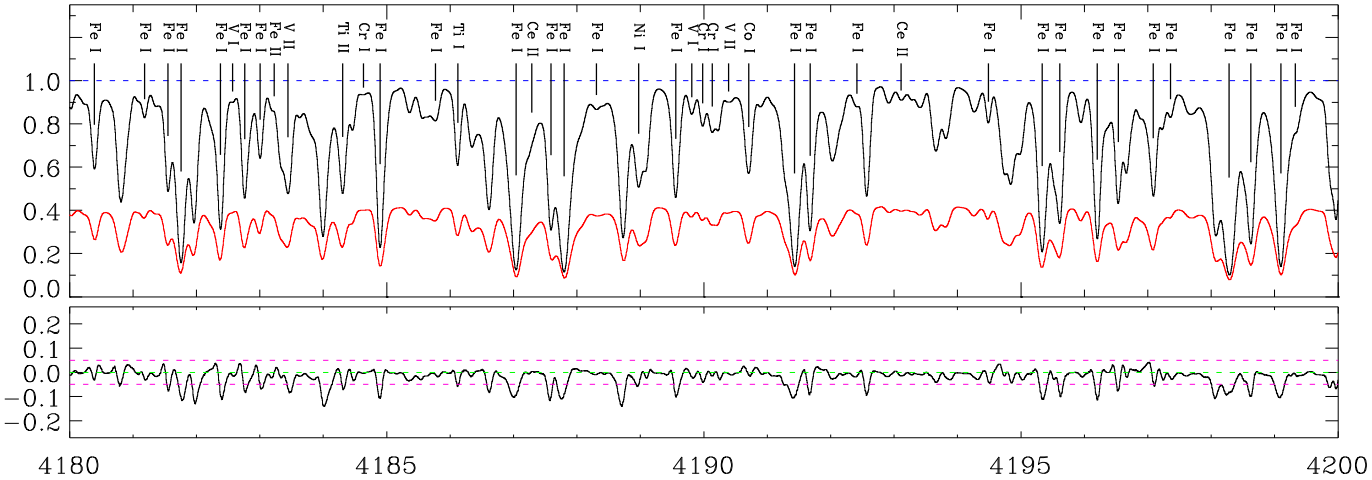
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Fe I
Fe I
Fe I
Ni I
Fe I
Cr I
V I
Co I
V II
Fe I
Fe I
Fe I
Ce II
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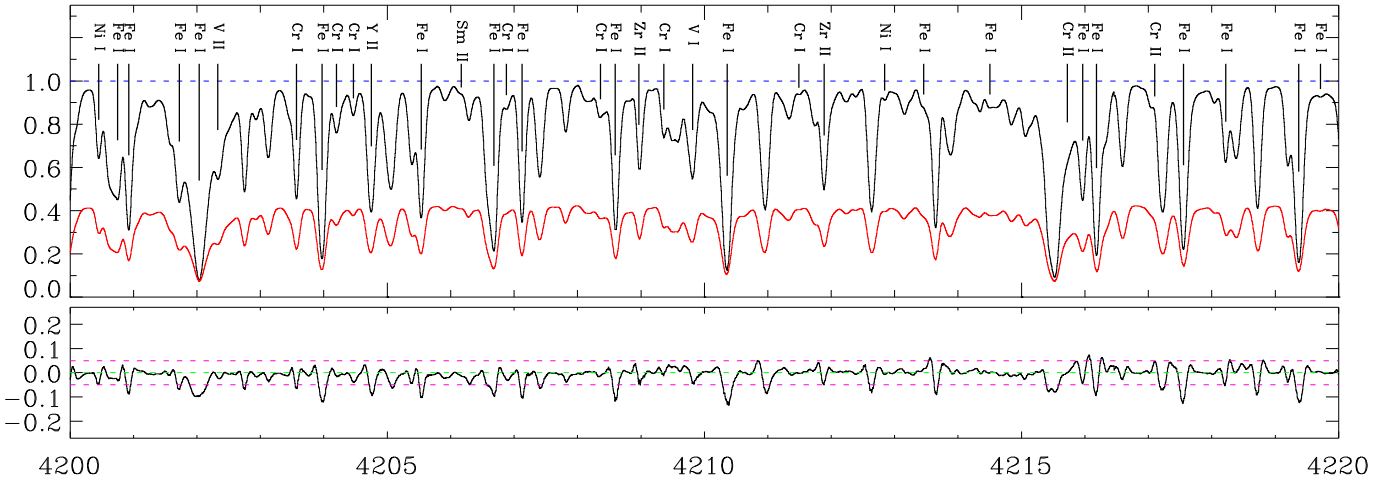
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Sm II
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Fe I
Cr I
Fe I
Cr I
Zr II
Cr I
V I
Fe I
Cr I
Zr II
Ni I
Fe I
Fe I
Fe I
Fe I
Cr II
Cr II
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Fe I
Fe I
Fe I
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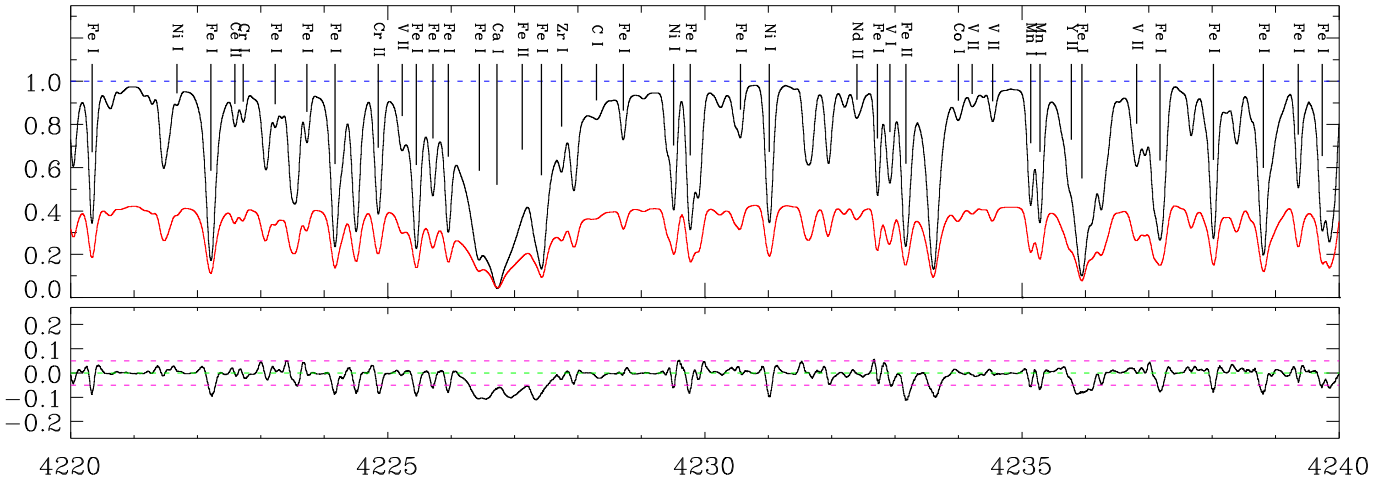
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Fe II
Fe I
Zr I
C I
Fe I
Ni I
Fe I
Fe I
Ni I
Nd II
Fe I
V I
Fe II
Co I
V II
V II
Mn I
Mn I
Y II
Fe I
V II
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Fe I
Fe I
Fe I
Fe I
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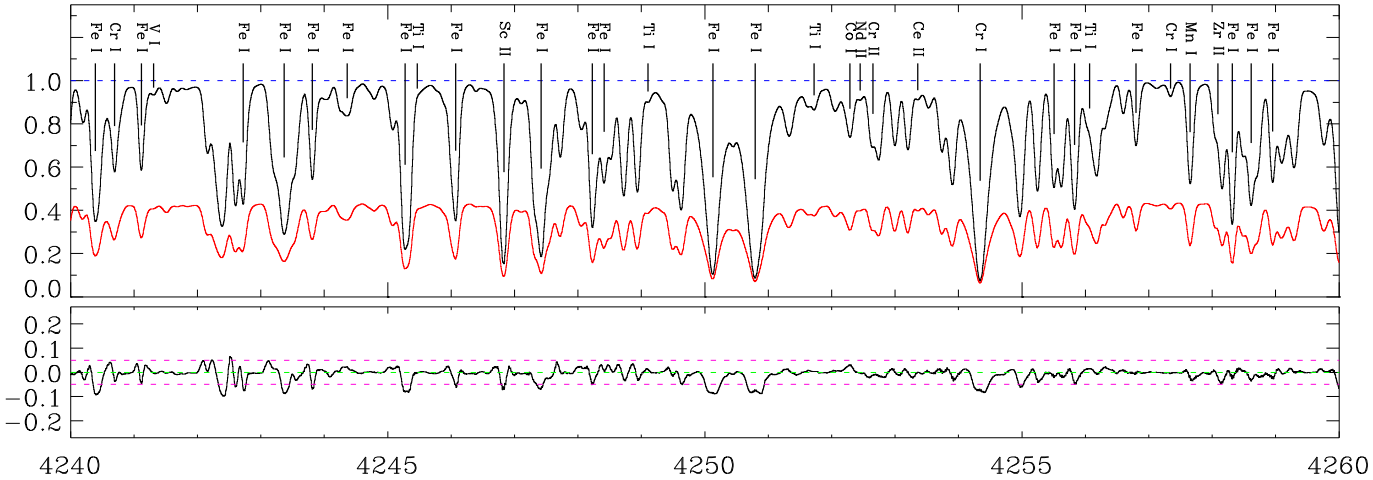
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V I
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Fe I
Ti I
Fe I
Fe I
Ti I
Cr II
Nd II
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Ce II
Cr I
Fe I
Ti I
Fe I
Fe I
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Mn I
Zr II
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Fe I
Fe I
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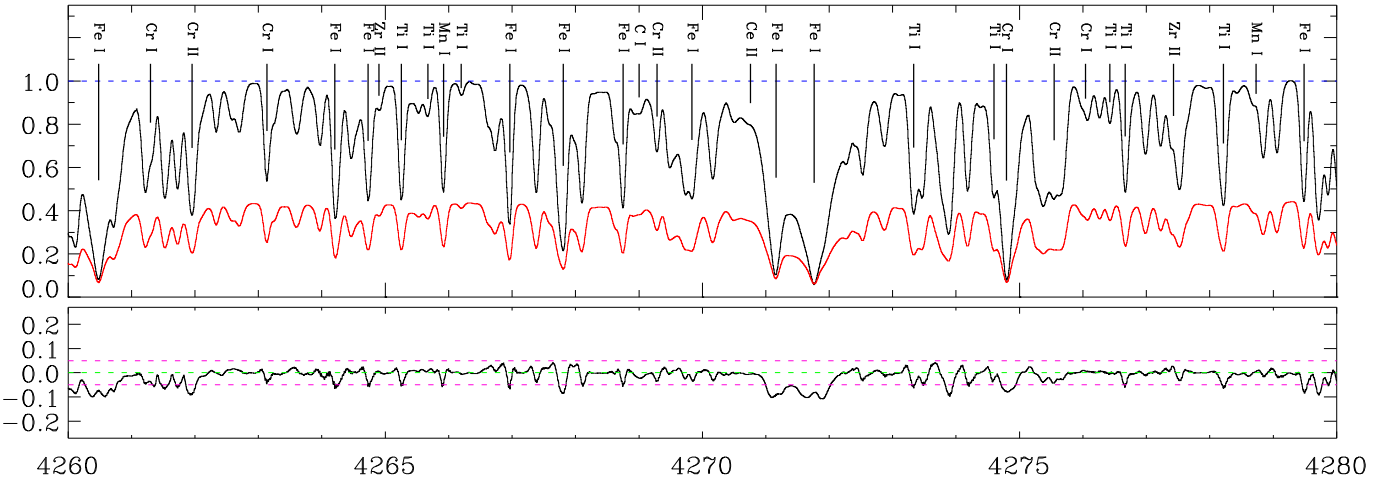
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Fe I
Fe I
Fe I
C I
Cr II
Fe I
Ce II
Fe I
Fe I
Ti I
Cr I
Ti I
Cr II
Cr I
Ti I
Ti I
Zr II
Ti I
Mn I
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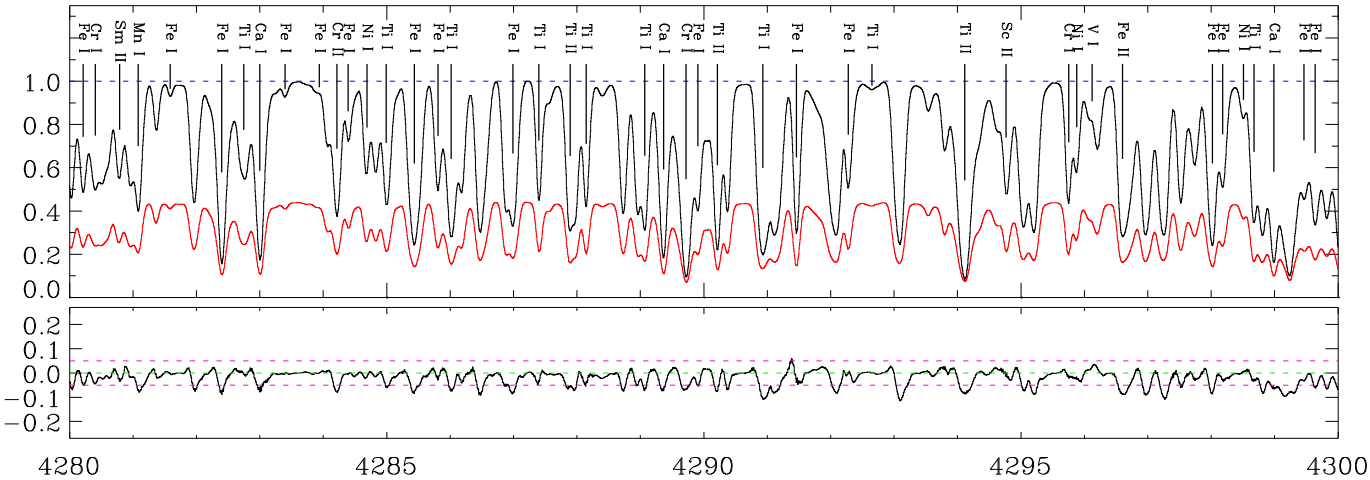
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Ti I
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Fe I
Ti I
Fe I
Ti I
Ti I
Ti II
Ti I
Ca I
Fe I
Cr I
Ti II
Ti I
Fe I
Fe I
Ti I
Ti II
Sc II
Ni I
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V I
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Fe I
Fe I
Ni I
Ti I
Ca I
Fe I
Fe I
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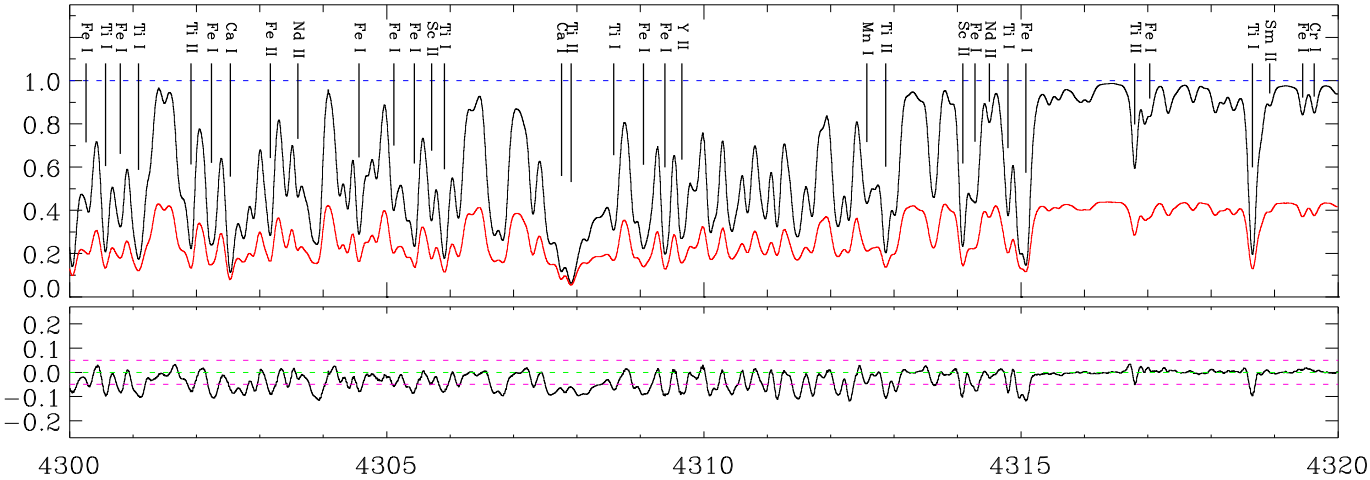
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Ti I
Fe I
Fe I
Y II
Mn I
Ti II
Sc II
Fe I
Nd II
Ti I
Fe I
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Fe I
Ti I
Sm II
Cr I
Fe I
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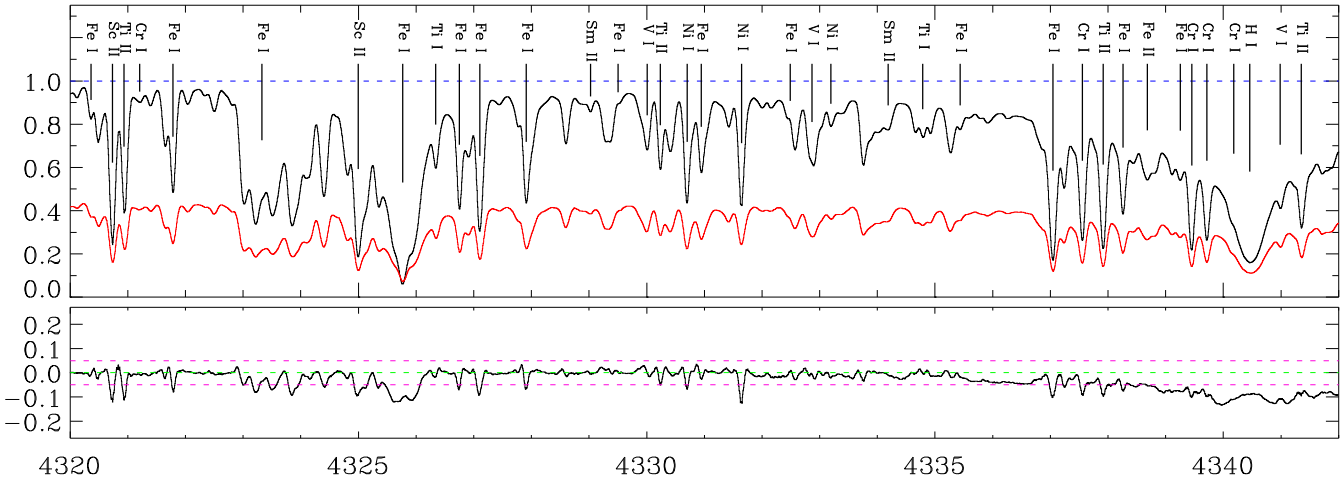
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Ni I
Ni I
Fe I
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Ni I
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Cr I
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Fe II
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Cr I
Cr I
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V I
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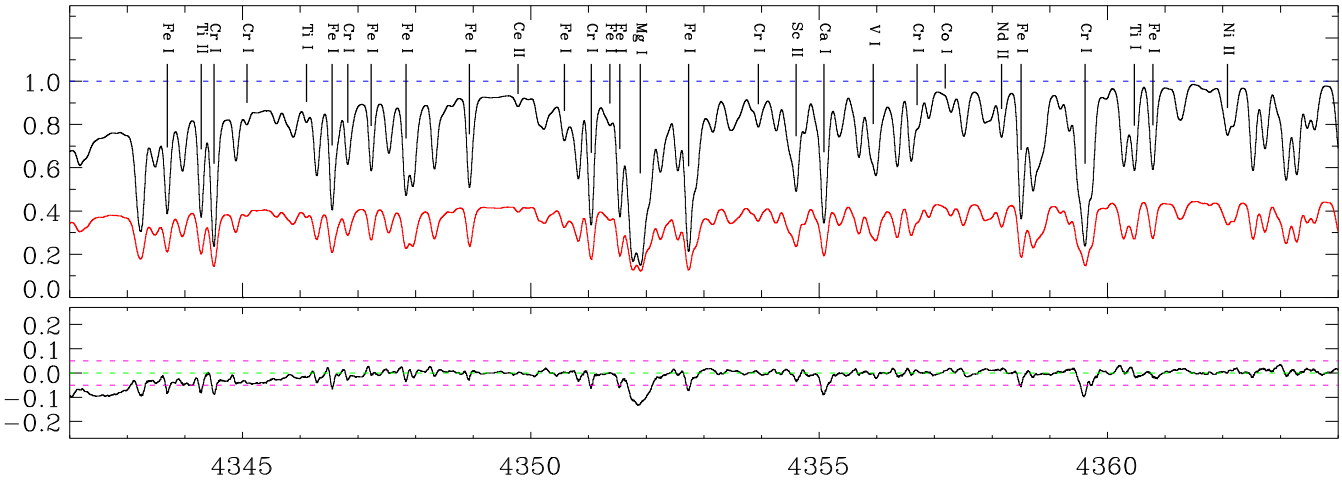
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Cr I
Ti I
Fe I
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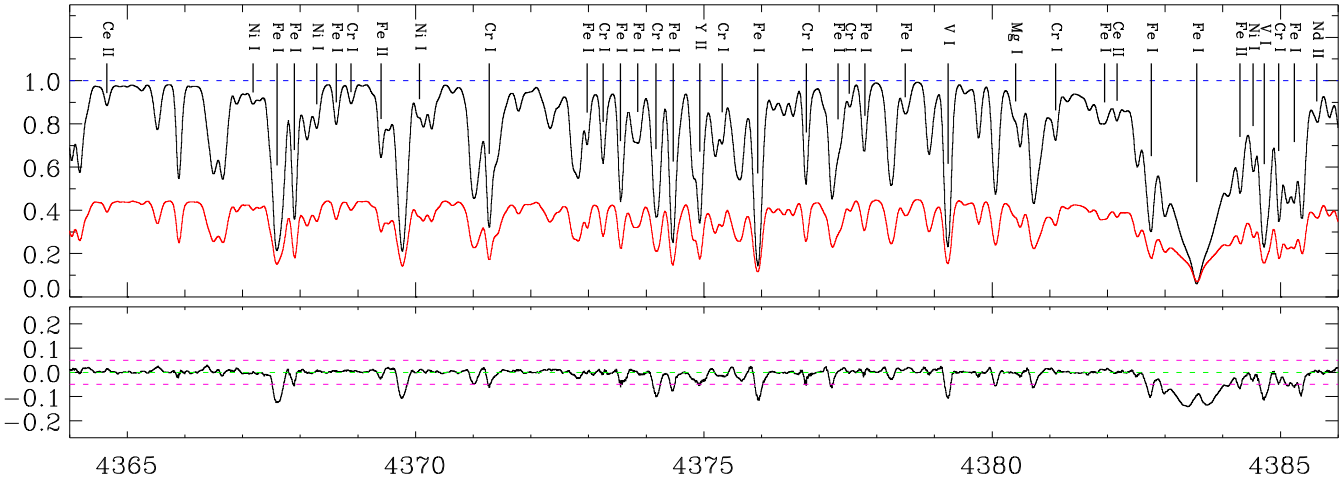
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Ni I
V I
Cr I
Fe I
Nd II
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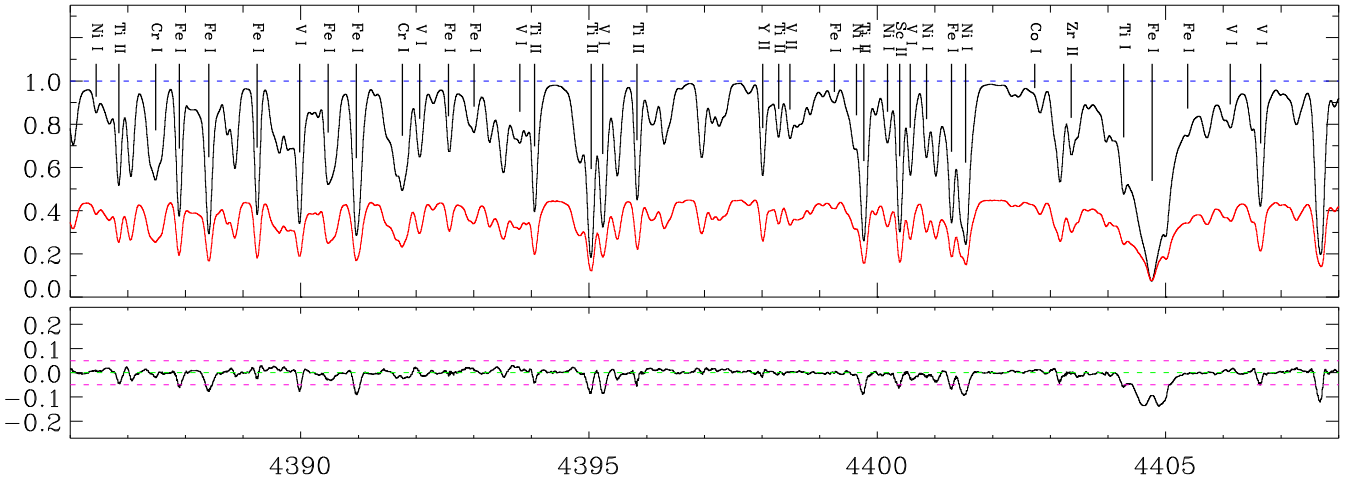
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Ti II
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Ti II
Ti II
Y II
Y II
Ti II
Fe I
Ti II
Sc II
Ni I
V I
Ni I
Fe I
Ni I
Co I
Zr II
Ti I
Fe I
Fe I
V I
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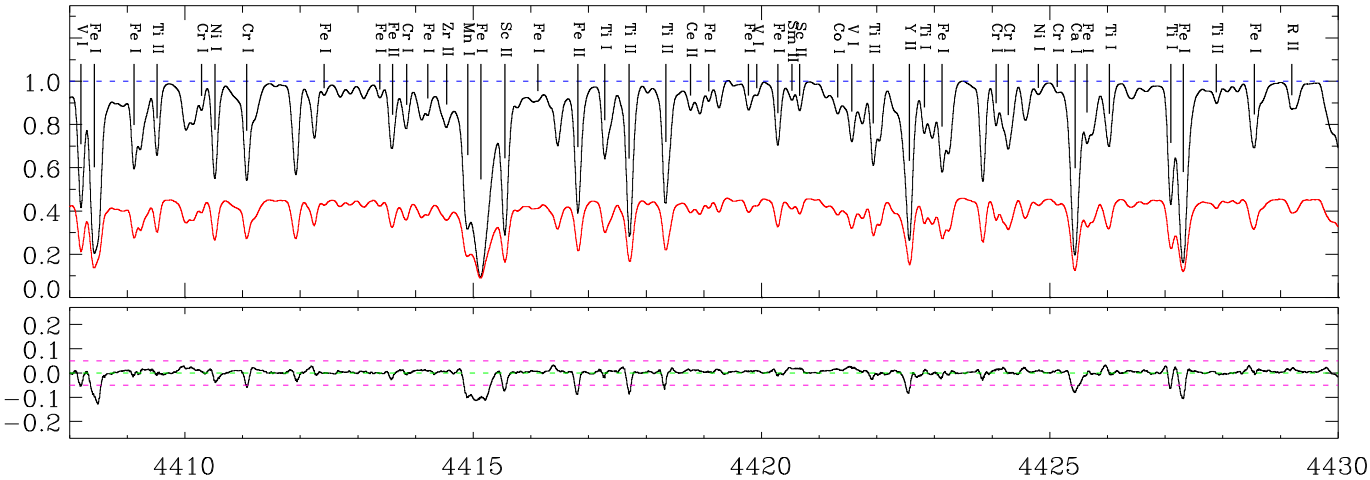
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Sc II
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Ti I
Ti II
Ti II
Fe I
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Fe I
V I
Sm II
Fe I
Co I
V I
Ti II
Y II
Ti I
Fe I
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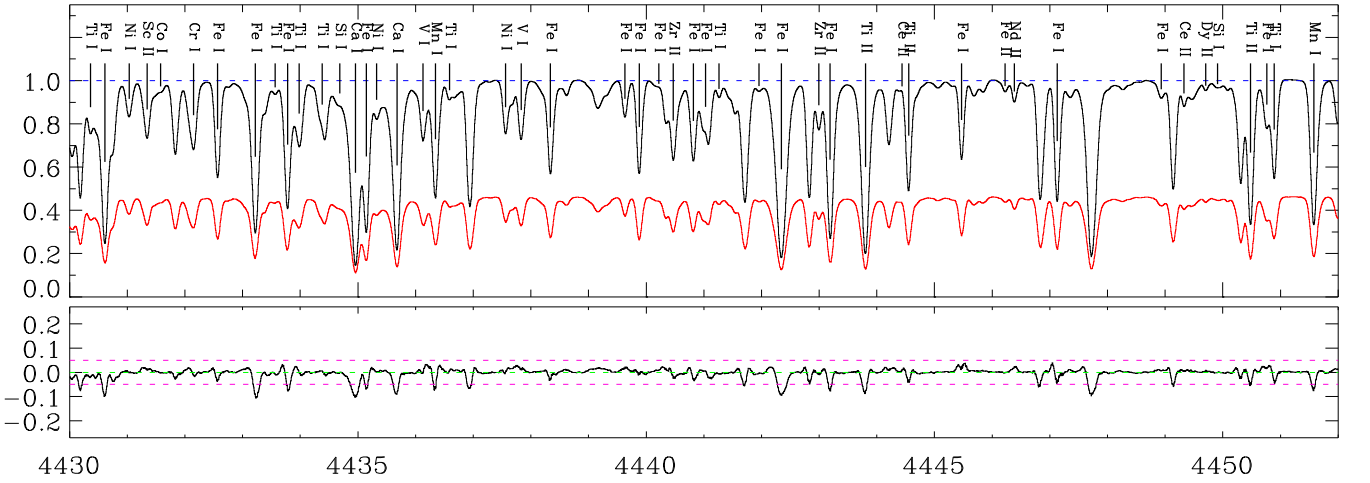
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Mn I
V I
Ti I
Ni I
V I
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Fe I
Fe I
Zr II
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Ti I
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Ti II
Ce II
Fe I
Nd II
Fe I
Fe I
Fe I
Ce II
Dy II
Si I
Ti II
Fe I
Mn I
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0.6
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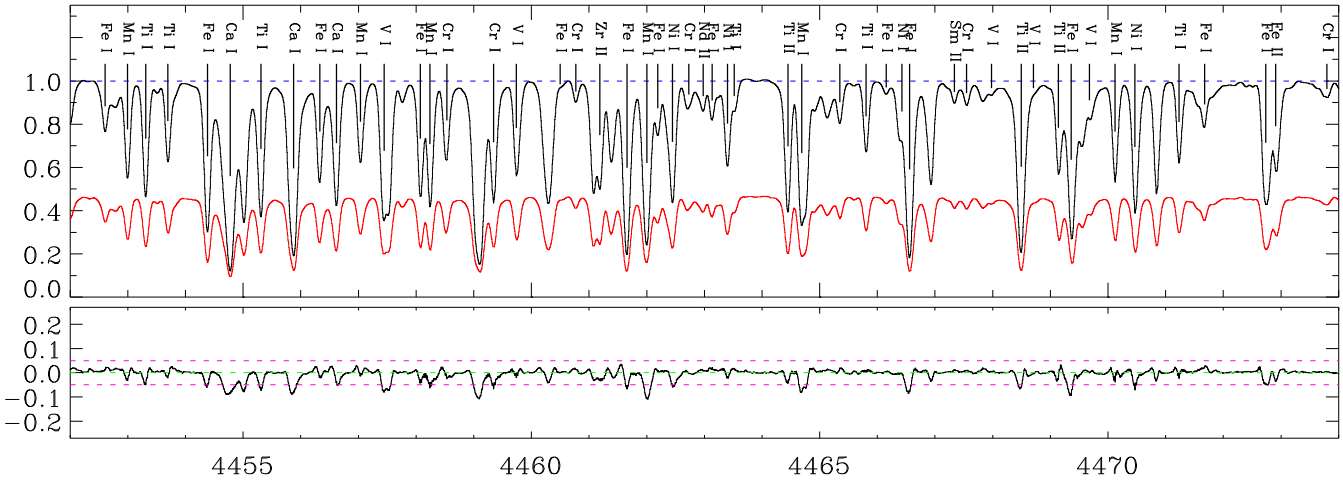
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Ti I
Ti I
Fe I
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Ti I
Ca I
Fe I
Ca I
Mn I
V I
Mn I
Fe I
Cr I
Cr I
V I
Cr I
Fe I
Zr II
Fe I
Mn I
Ni I
Fe I
Cr I
Na I
Na I
Ni I
Mn I
Ti II
Cr I
Ti I
Fe I
Fe I
Sm II
Cr I
V I
V I
Ti II
Fe I
Ti II
V I
Mn I
Ni I
Ti I
Fe I
Fe I
Fe II
Cr I
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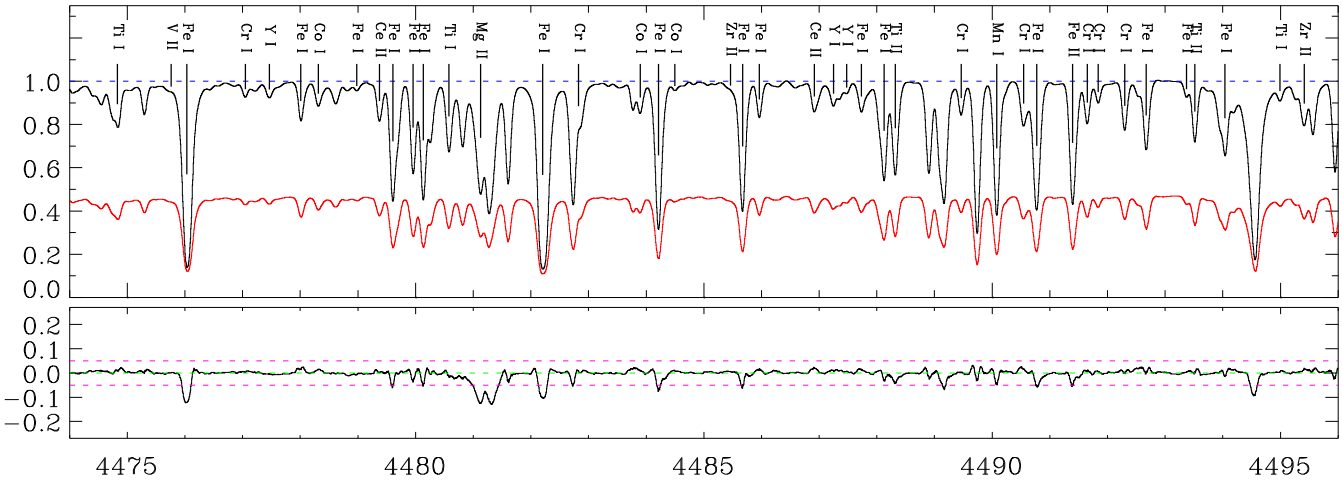
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Fe I
Cr I
Y I
Fe I
Co I
Fe I
Fe I
Ce II
Fe I
Fe I
Ti I
Mg II
Fe I
Cr I
Co I
Co I
Fe I
Zr II
Fe I
Ce II
Y I
Y I
Fe I
Ti II
Fe I
Cr I
Mn I
Fe I
Cr I
Fe II
Cr I
Cr I
Cr I
Fe I
Fe I
Fe I
Ti I
Zr II
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0.6
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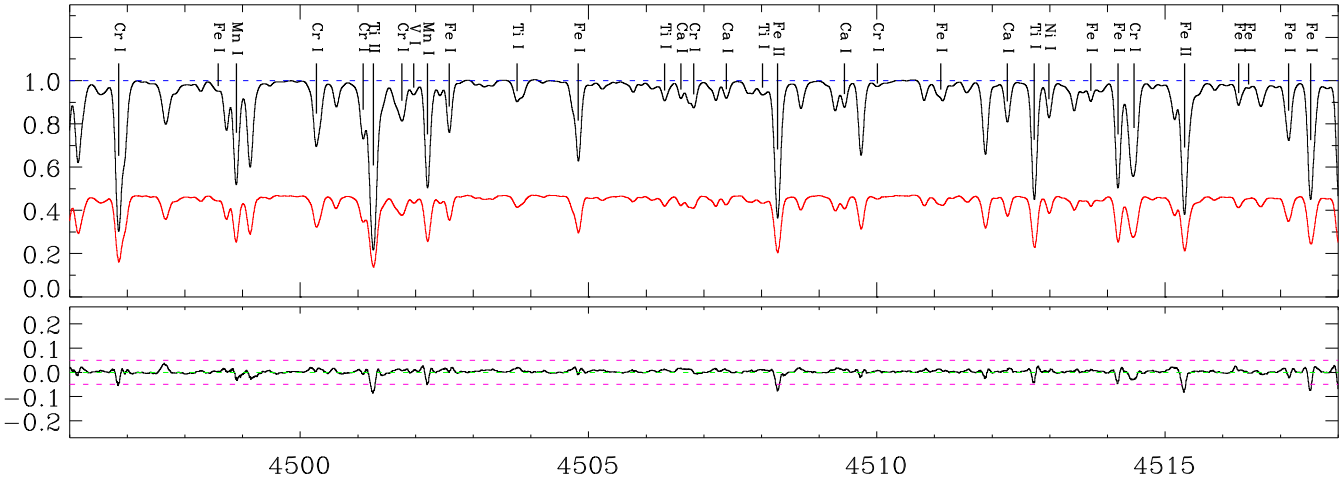
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Cr I
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Cr I
Cr I
Mn I
Fe I
Ti I
Fe I
Cr I
Ca I
Ti I
Ca I
Fe II
Ti I
Ca I
Cr I
Fe I
Ca I
Ni I
Ti I
Fe I
Cr I
Fe I
Fe II
Fe I
Fe I
Fe I
Fe I
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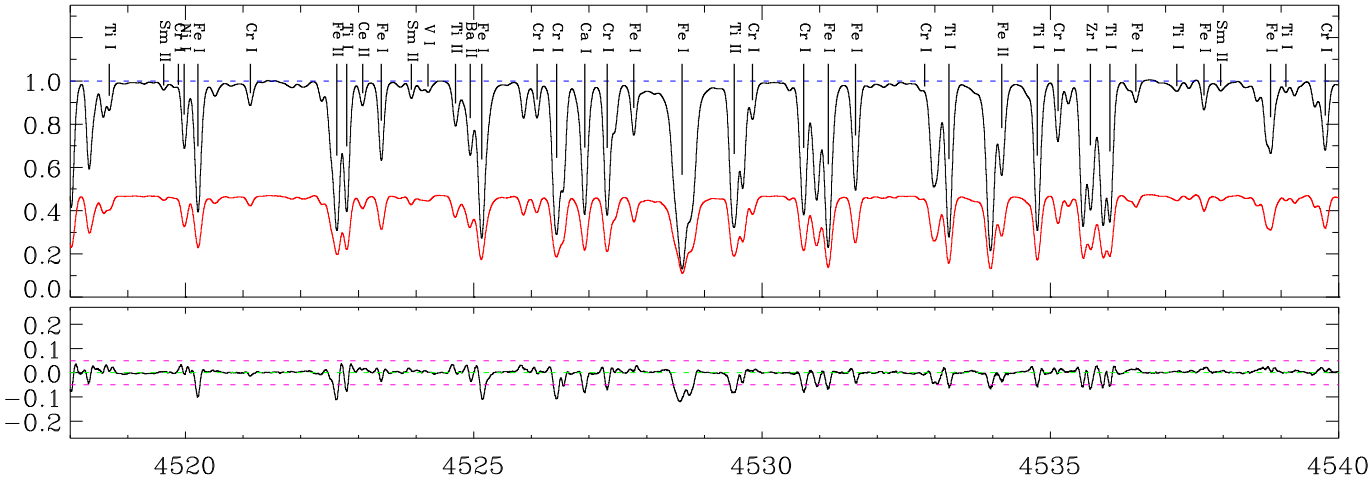
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Fe I
Ni I
Cr I
Fe II
Ce II
Fe I
Sm II
V I
Ti II
Ba II
Fe I
Cr I
Cr I
Ca I
Cr I
Fe I
Fe I
Ti II
Cr I
Cr I
Fe I
Fe I
Cr I
Ti I
Fe II
Ti I
Cr I
Zr I
Ti I
Fe I
Ti I
Fe I
Sm II
Ti I
Fe I
Cr I
1.0
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0.6
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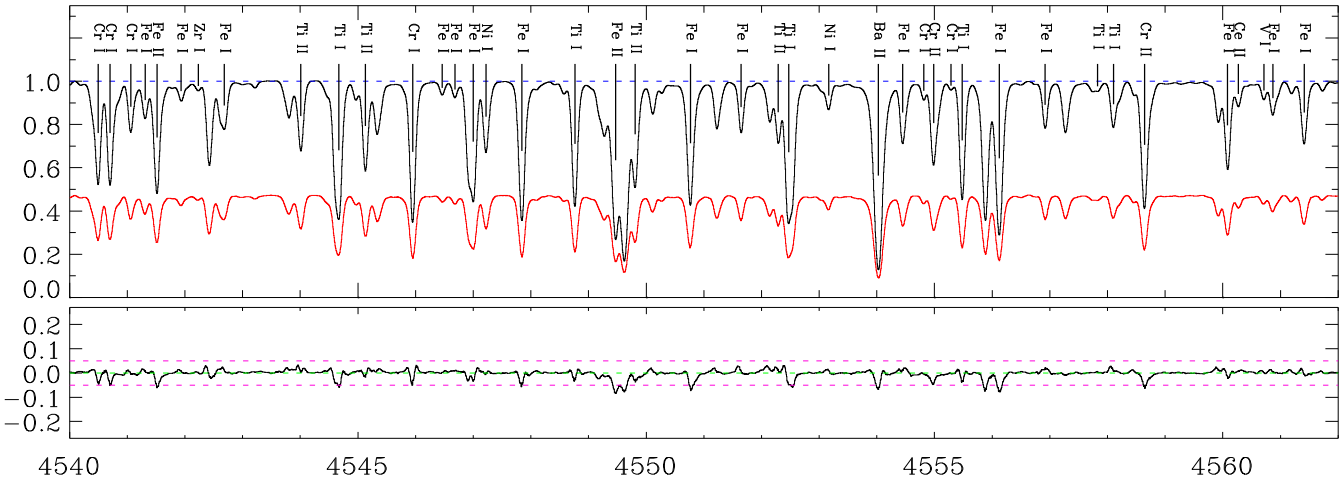
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Cr I
Cr I
Fe II
Fe I
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Fe I
Ti II
Ti I
Ti II
Cr I
Fe I
Fe I
Ni I
Fe I
Fe I
Ti I
Fe II
Ti II
Fe I
Fe I
Ti I
Ti II
Ni I
Ba II
Fe I
Cr II
Cr I
Ti I
Fe I
Fe I
Ti I
Ti I
Cr II
Fe II
Ce II
Fe I
Fe I
1.0
0.8
0.6
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0.2
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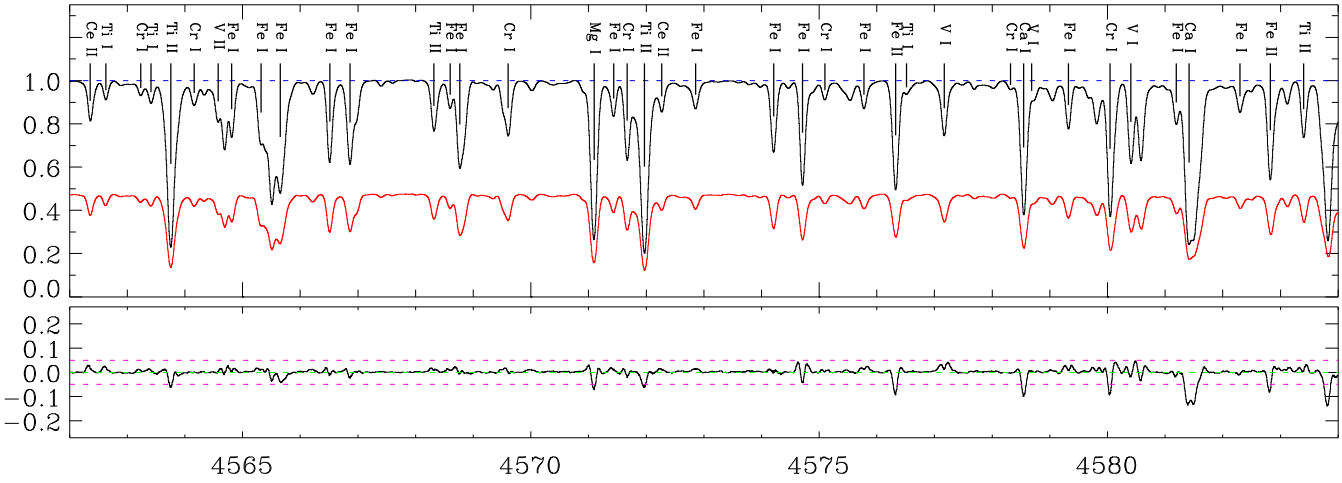
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Ti I
Ti II
Cr I
Ti I
Ti II
Cr I
V II
Fe I
Fe I
Fe I
Fe I
Fe I
Ti II
Fe I
Fe I
Cr I
Mg I
Fe I
Cr I
Ti II
Ce II
Fe I
Fe I
Fe I
Cr I
Fe I
Ti I
Fe II
V I
Ca I
Cr I
Fe I
Cr I
V I
Ca I
Fe I
Fe I
Fe II
Ti II
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0.0
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−0.2
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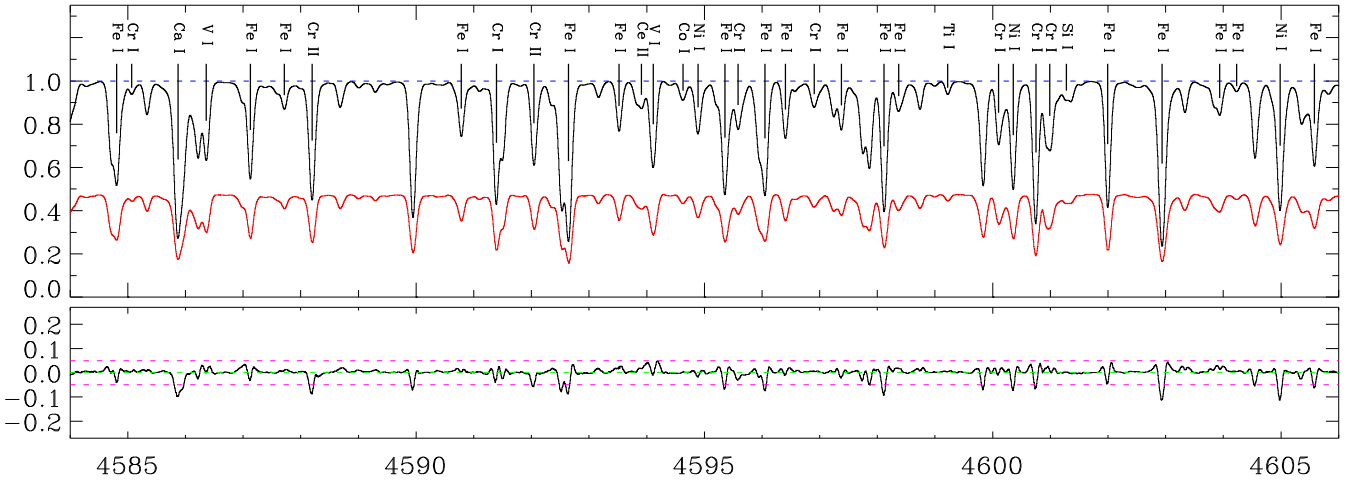
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Fe I
Ca I
V I
Fe I
Fe I
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Fe I
Cr I
Cr II
Fe I
Fe I
V I
Ce II
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Cr I
Fe I
Fe I
Fe I
Cr I
Fe I
Fe I
Fe I
Ti I
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Cr I
Cr I
Si I
Fe I
Fe I
Fe I
Fe I
Ni I
Fe I
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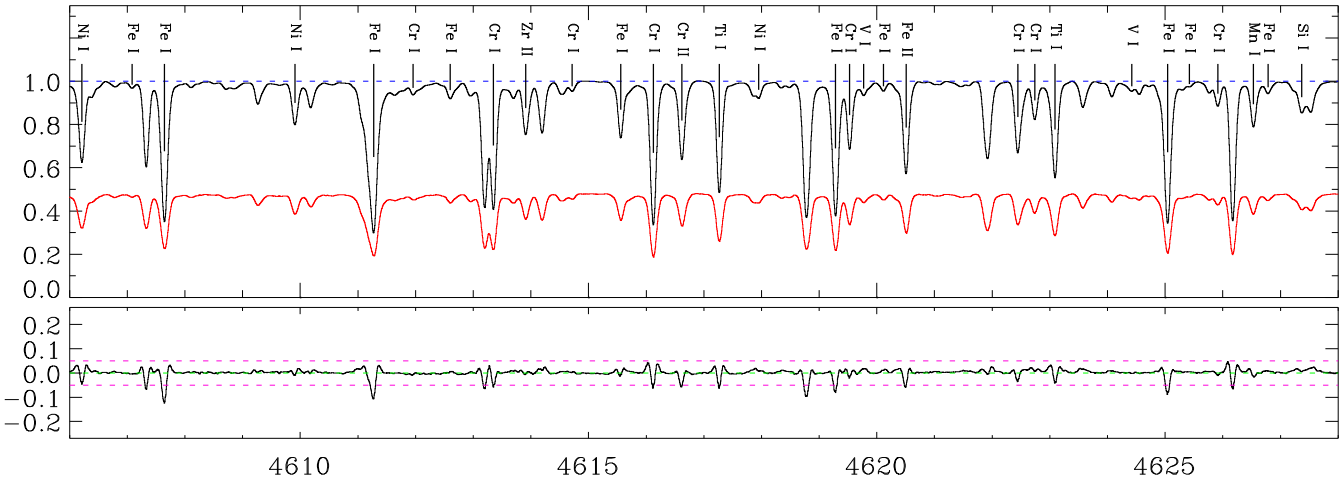
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Fe I
Ni I
Fe I
Cr I
Fe I
Cr I
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Cr I
Fe I
Cr I
Cr II
Ti I
Ni I
Fe I
Cr I
V I
Fe I
Fe II
Cr I
Cr I
Ti I
V I
Fe I
Fe I
Cr I
Mn I
Fe I
Si I
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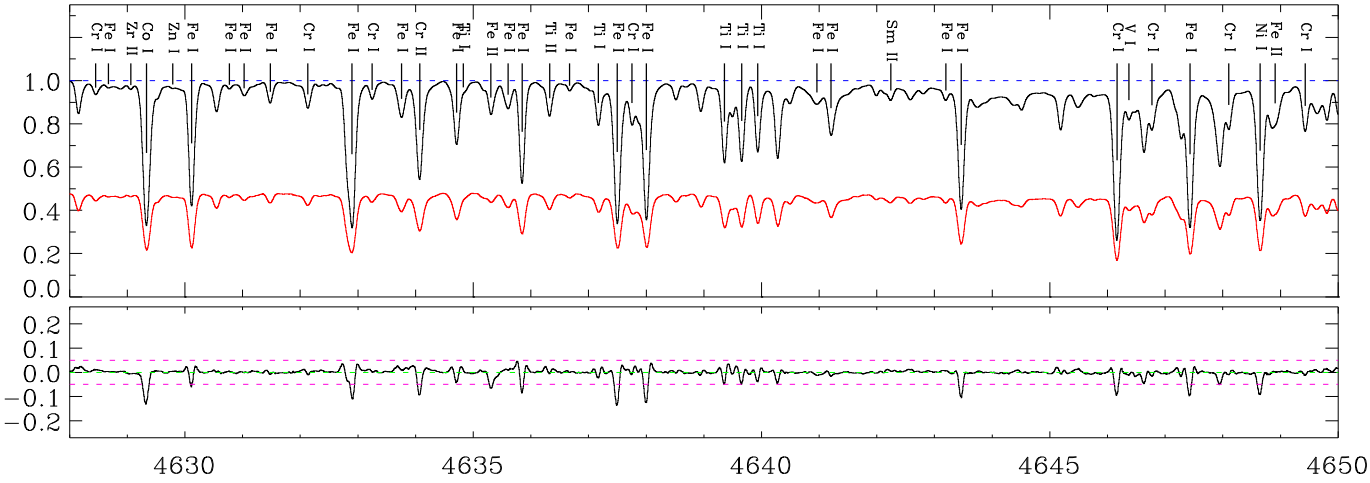
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Fe I
Fe I
Fe I
Fe I
Cr I
Fe I
Cr I
Fe I
Cr II
Fe I
Fe I
Fe II
Fe I
Fe I
Ti II
Fe I
Ti I
Fe I
Cr I
Fe I
Ti I
Ti I
Ti I
Ti I
Fe I
Fe I
Sm II
Fe I
Fe I
Cr I
V I
Cr I
Cr I
Fe I
Cr I
Fe II
Ni I
Cr I
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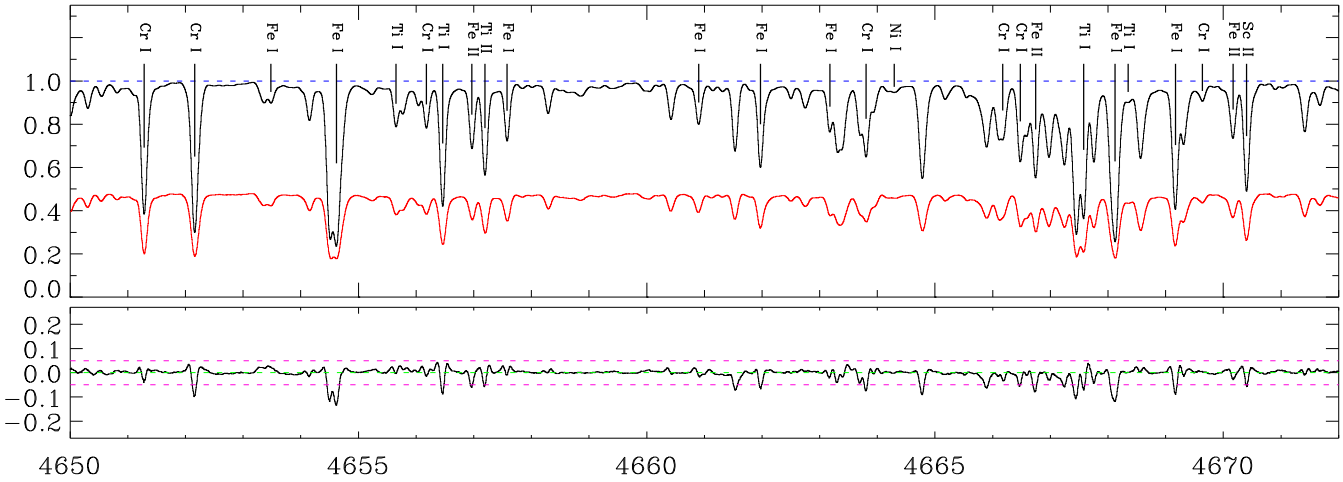
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Fe I
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Ti I
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Fe I
Fe I
Fe I
Fe I
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Fe I
Fe I
Cr I
Sc II
Fe II
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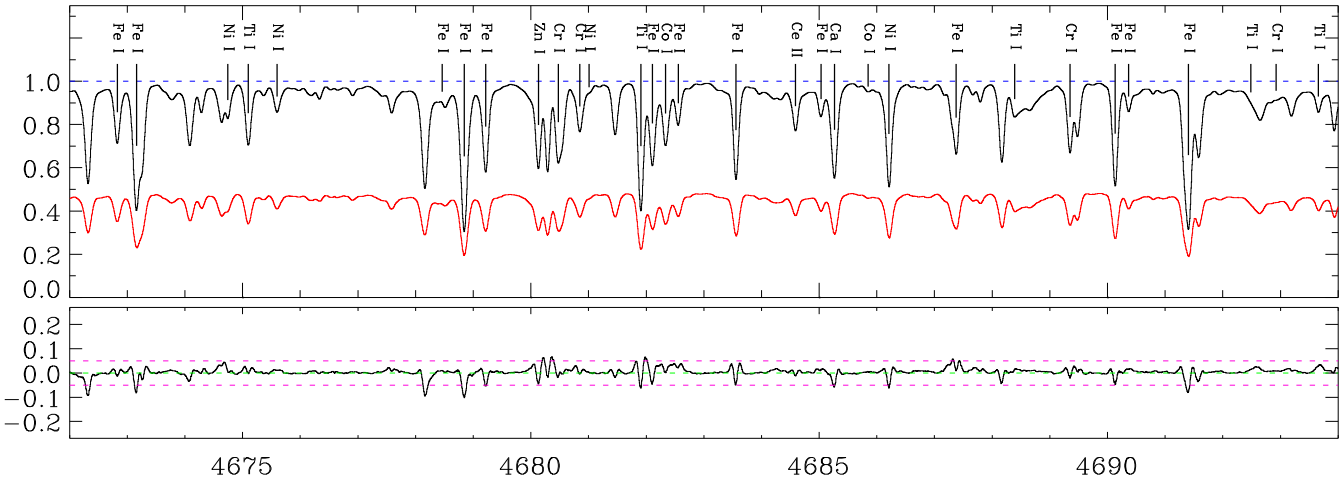
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Ni I
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Fe I
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Ni I
Cr I
Ti I
Fe I
Co I
Fe I
Fe I
Ce II
Ca I
Fe I
Co I
Ni I
Fe I
Ti I
Cr I
Fe I
Fe I
Fe I
Ti I
Cr I
Ti I
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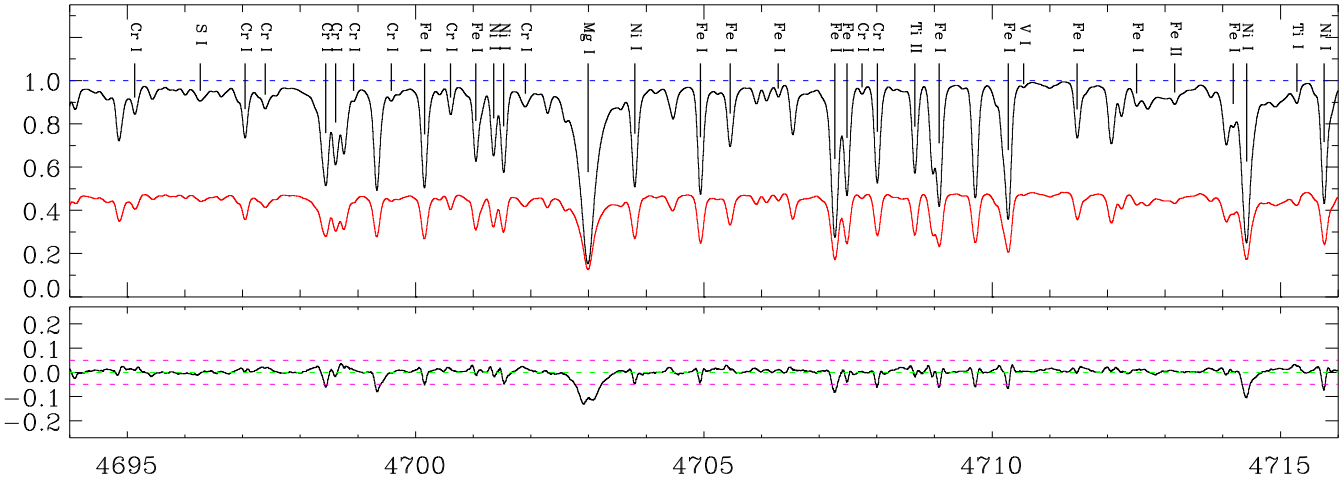
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Cr I
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Ni I
Ni I
Cr I
Mg I
Ni I
Fe I
Fe I
Fe I
Fe I
Fe I
Cr I
Cr I
Cr I
Ti II
Fe I
V I
Fe I
Fe I
Fe I
Fe II
Ni I
Fe I
Ti I
Ni I
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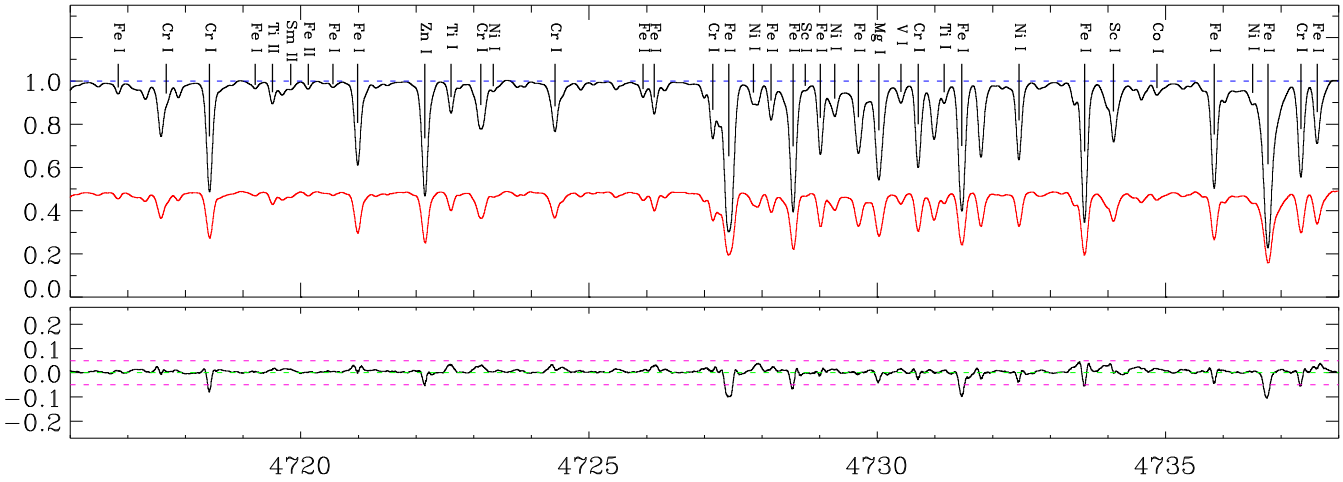
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Cr I
Fe I
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Zn I
Ti I
Ni I
Cr I
Cr I
Fe I
Fe I
Cr I
Fe I
Ni I
Fe I
Sc I
Fe I
Ni I
Fe I
Mg I
Fe I
Cr I
V I
Ti I
Fe I
Ni I
Fe I
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Fe I
Fe I
Ni I
Cr I
Fe I
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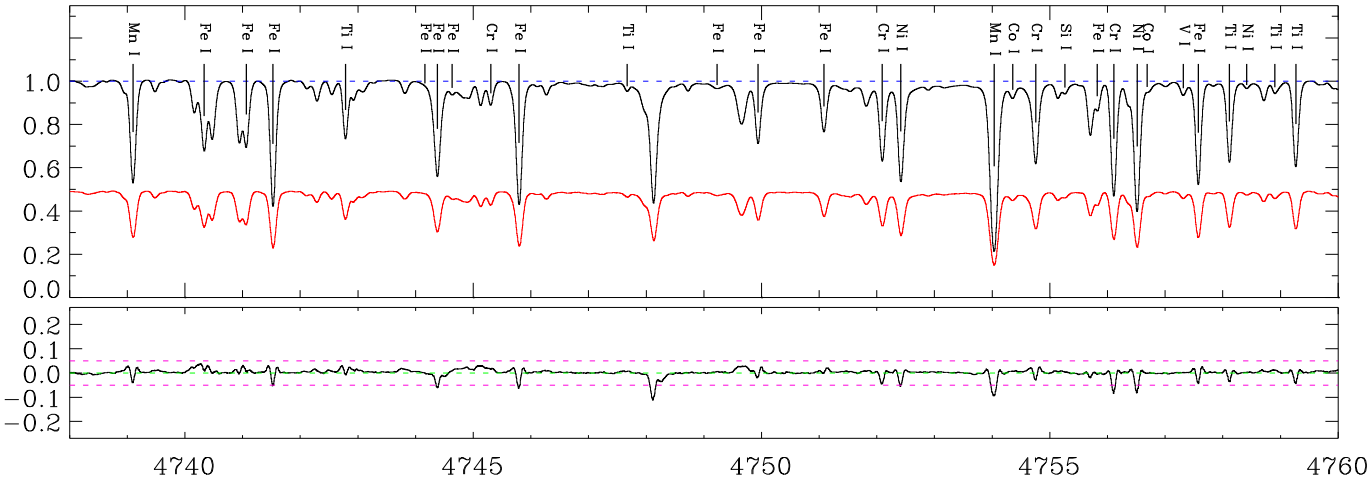
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Fe I
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Fe I
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Fe I
Ti I
Fe I
Fe I
Fe I
Cr I
Ni I
Mn I
Co I
Cr I
Si I
Fe I
Cr I
Ni I
Co I
V I
Fe I
Ti I
Ni I
Ti I
Ti I
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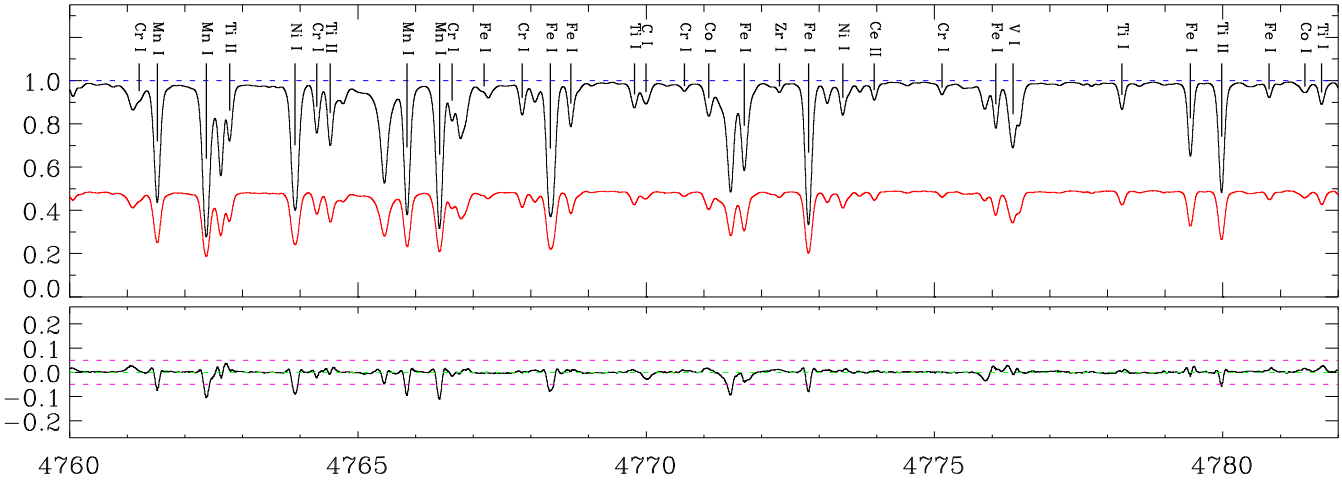
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Mn I
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Ni I
Ti II
Cr I
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Mn I
Cr I
Fe I
Cr I
Fe I
Fe I
Co I
Ti I
Cr I
Co I
Fe I
Zr I
Fe I
Ni I
Ce II
Cr I
V I
Fe I
Ti I
Fe I
Ti II
Fe I
Ti I
Co I
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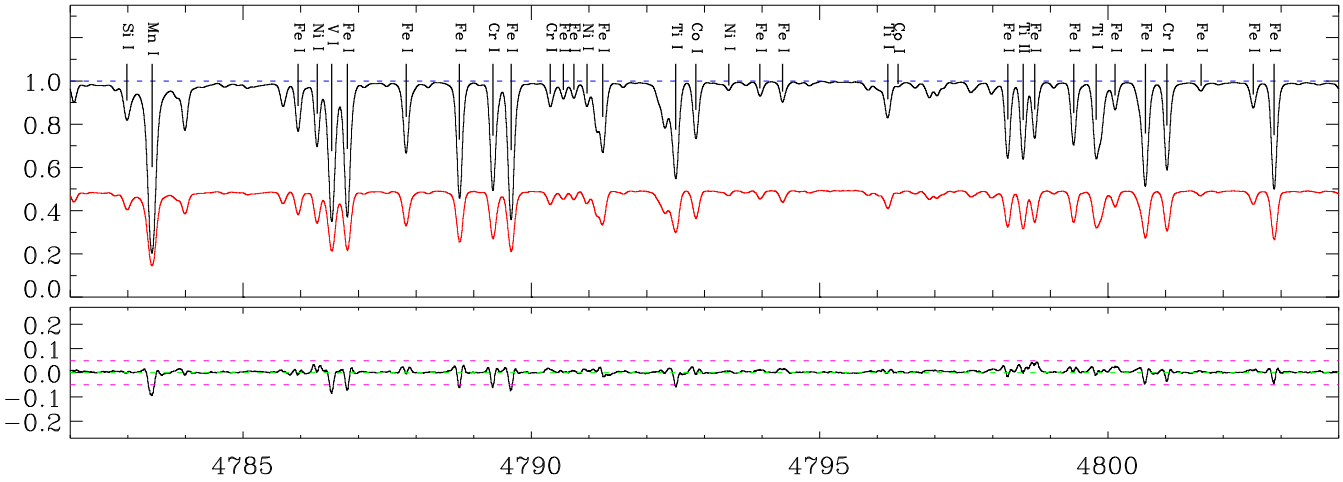
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Fe I
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V I
Fe I
Fe I
Fe I
Cr I
Fe I
Cr I
Fe I
Ni I
Fe I
Ti I
Co I
Ni I
Fe I
Fe I
Co I
Ti I
Fe I
Ti II
Ti I
Fe I
Fe I
Ti I
Fe I
Fe I
Cr I
Fe I
Fe I
Fe I
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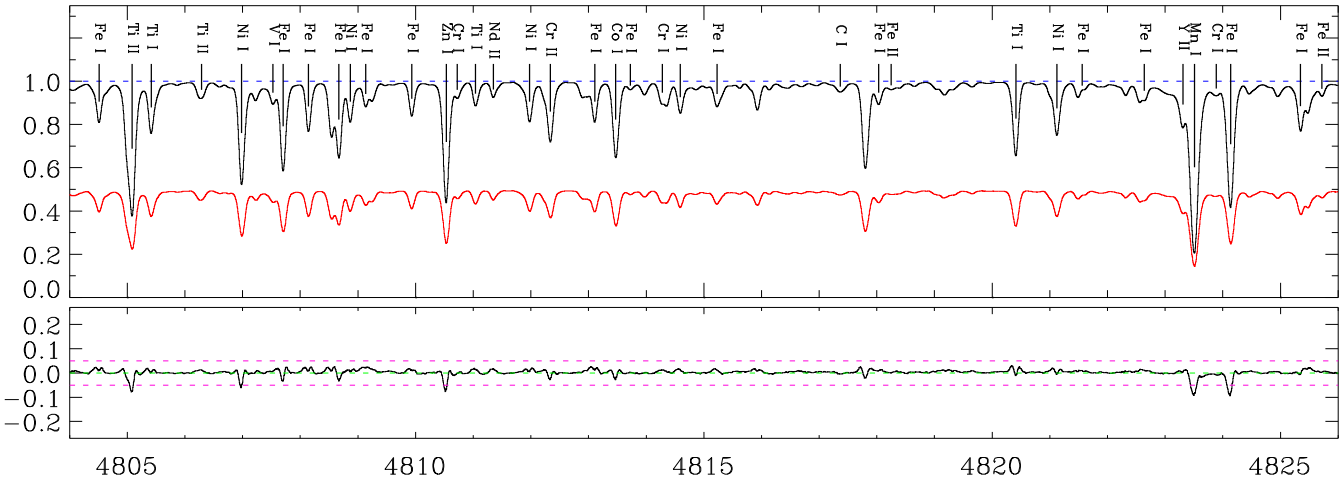
Fe I
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Ti I
Ti II
Ni I
V I
Fe I
Fe I
Ni I
Fe I
Fe I
Zn I
Cr I
Ti I
Nd II
Ni I
Cr II
Fe I
Co I
Fe I
Cr I
Ni I
Fe I
C I
Fe II
Fe I
Ti I
Ni I
Fe I
Fe I
Mn I
Y II
Fe I
Cr I
Fe I
Fe II
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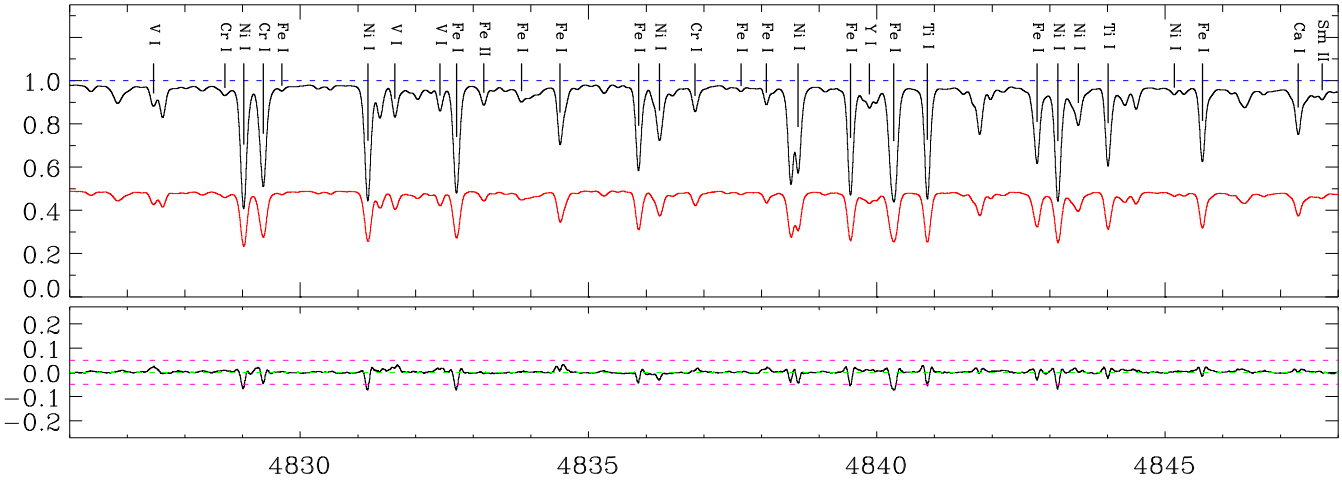
V I
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Ni I
Cr I
Fe I
Ni I
V I
V I
Fe I
Fe II
Fe I
Fe I
Fe I
Ni I
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Ni I
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Y I
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Ti I
Ni I
Fe I
Ca I
Sm II
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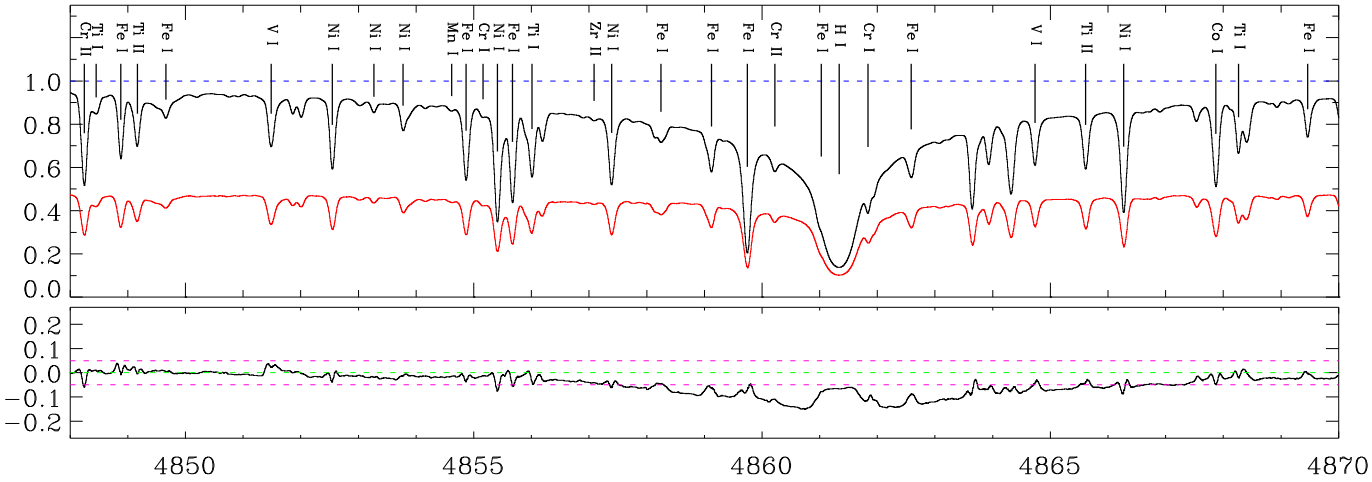
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Fe I
Ti II
Fe I
V I
Ni I
Ni I
Ni I
Mn I
Fe I
Cr I
Ni I
Fe I
Ti I
Zr II
Ni I
Fe I
Fe I
Fe I
Cr II
Fe I
H I
Cr I
Fe I
V I
Ti II
Ni I
Co I
Ti I
Fe I
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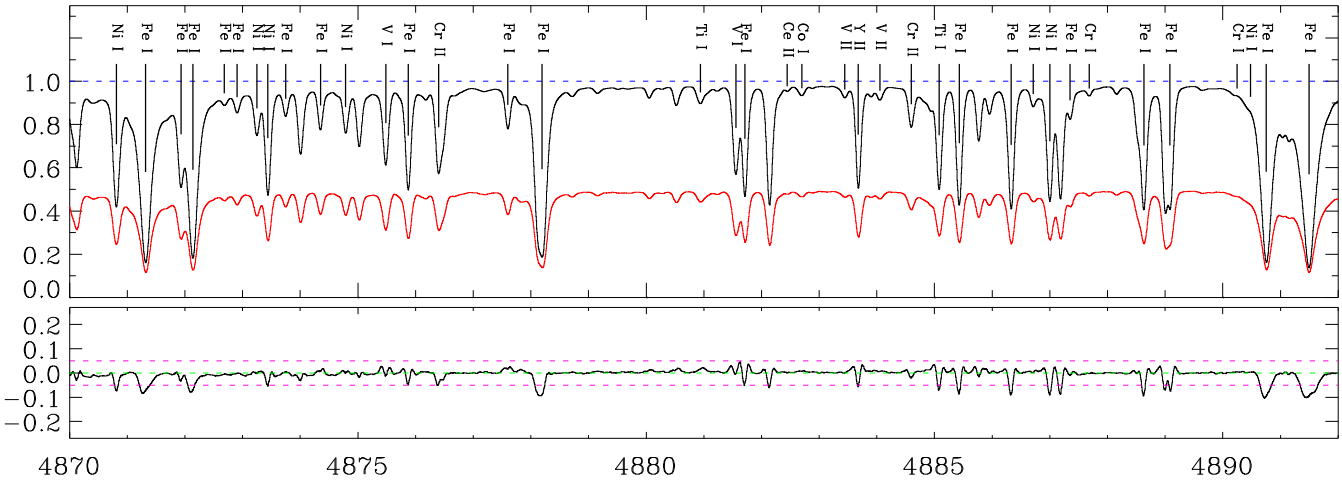
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Fe I
Fe I
Fe I
Fe I
Ni I
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Fe I
Fe I
Ni I
V I
Fe I
Cr II
Fe I
Fe I
Ti I
Fe I
Co I
Ce II
V II
Y II
V II
V II
Cr II
Ti I
Fe I
Fe I
Ni I
Ni I
Fe I
Cr I
Fe I
Fe I
Ni I
Cr I
Fe I
Fe I
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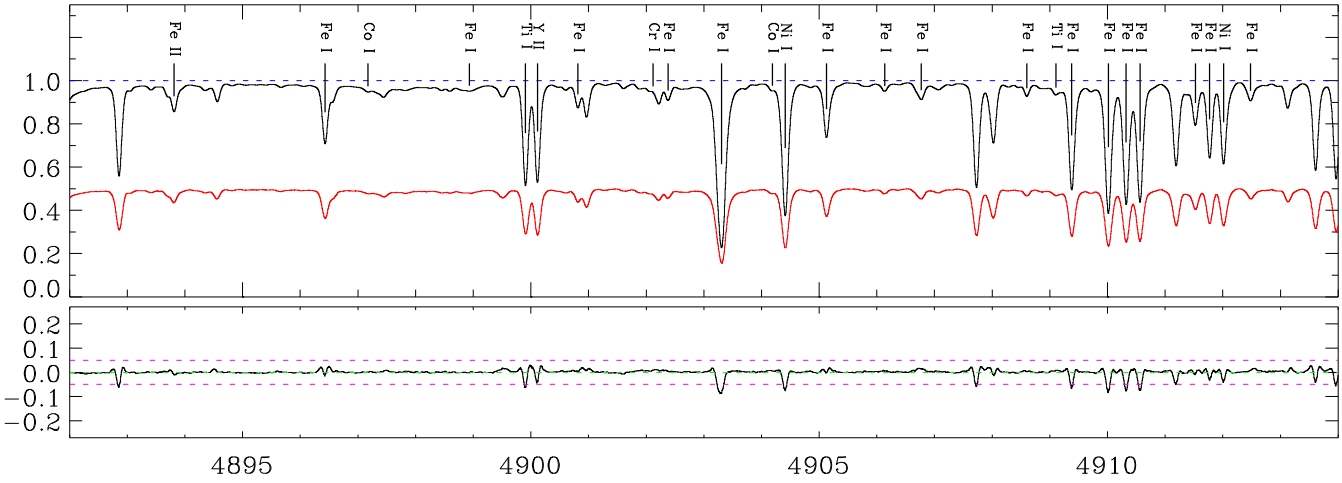
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Fe I
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Ni I
Co I
Fe I
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Fe I
Fe I
Ni I
Fe I
Fe I
Fe I
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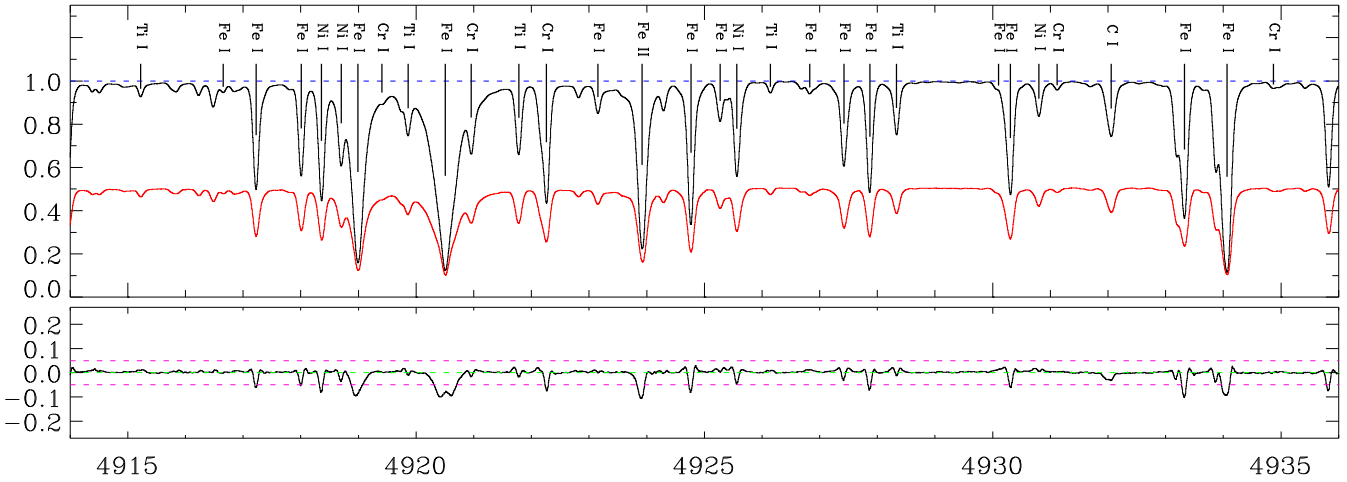
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Fe I
Fe I
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Ni I
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Ti I
Fe I
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Ti I
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Fe I
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Ni I
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Ni I
C I
Fe I
Fe I
Cr I
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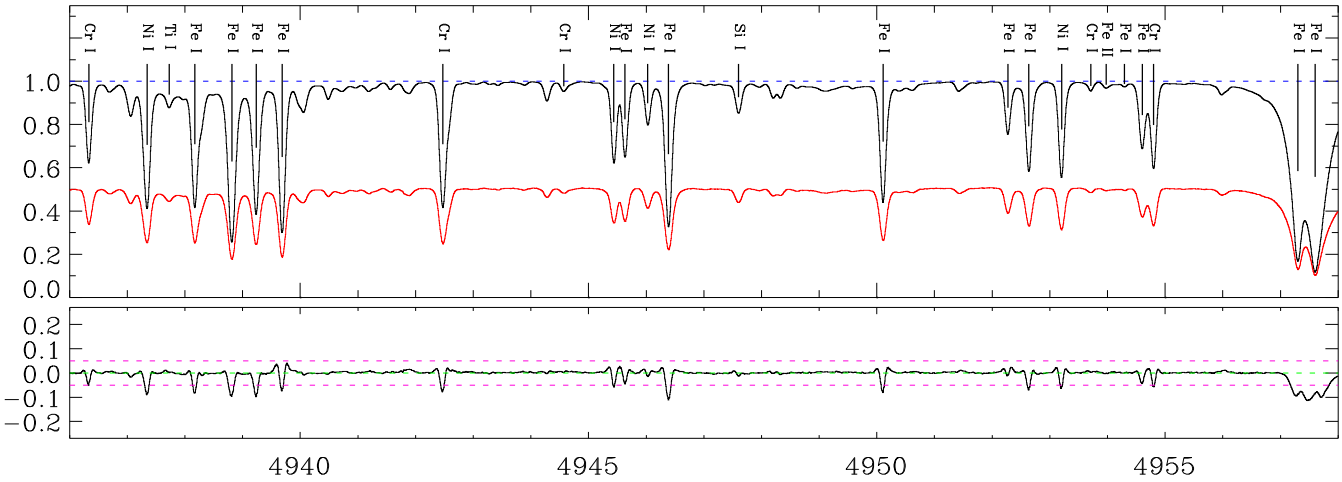
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Cr I
Fe II
Fe I
Fe I
Cr I
Fe I
Fe I
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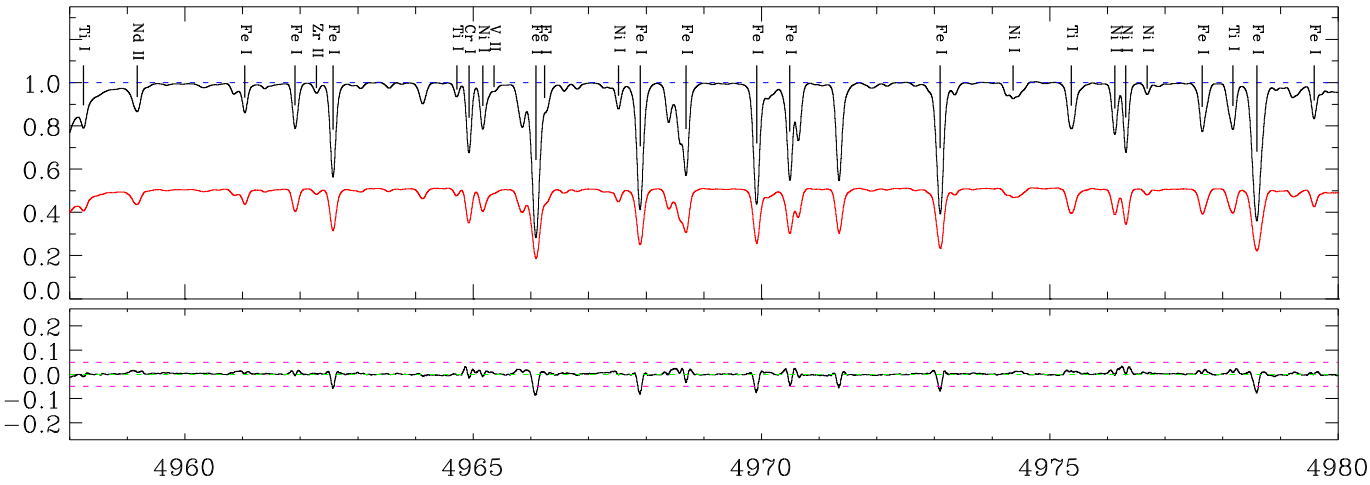
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Fe I
Fe I
Fe I
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Cr I
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Ni I
Fe I
Fe I
Ni I
Fe I
Fe I
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Fe I
Ni I
Ti I
Ni I
Ni I
Ni I
Fe I
Ti I
Fe I
Fe I
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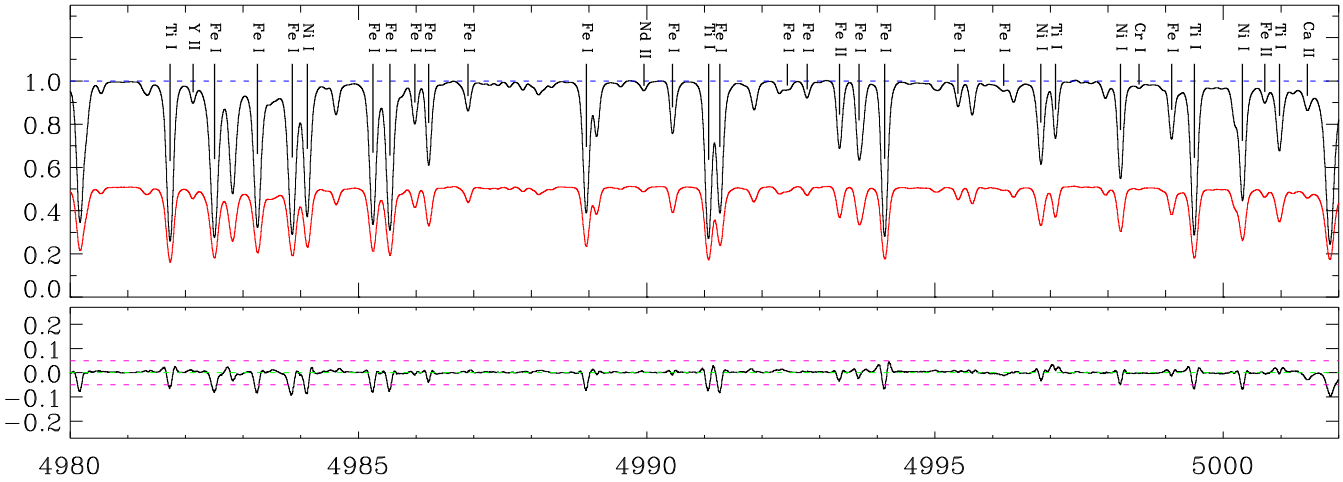
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Fe I
Fe I
Ni I
Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
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Fe I
Fe I
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Fe I
Fe I
Fe II
Fe I
Fe I
Fe I
Fe I
Ti I
Ni I
Cr I
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Fe I
Ti I
Ni I
Ti I
Fe II
Ca II
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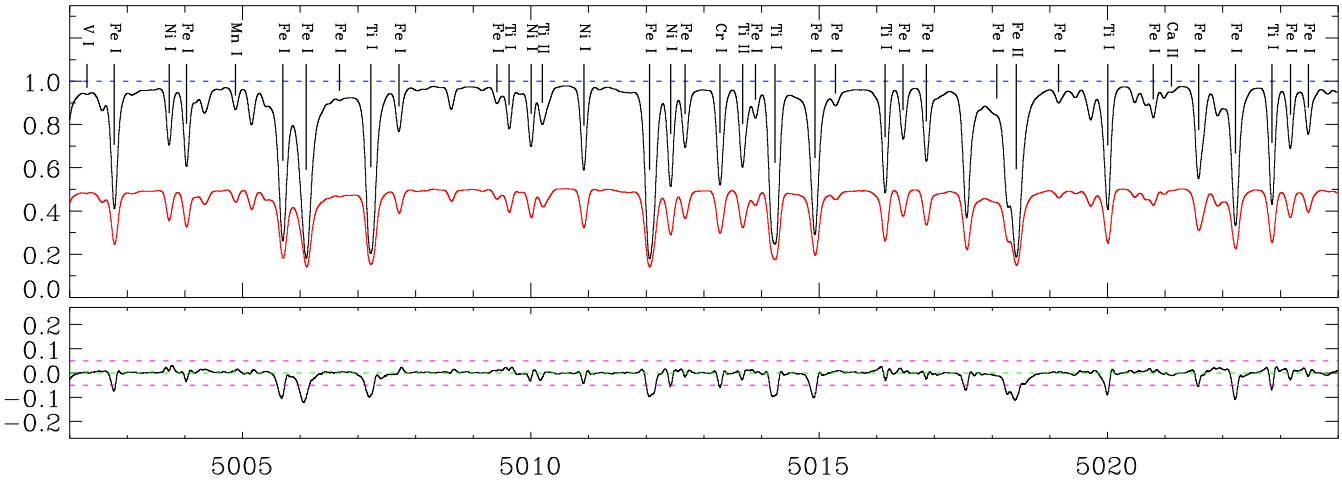
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Fe I
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Ti I
Ti II
Ni I
Fe I
Fe I
Ni I
Cr I
Fe I
Ti II
Ti I
Fe I
Fe I
Ti I
Fe I
Fe I
Fe I
Fe II
Fe I
Ti I
Ca II
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Fe I
Fe I
Ti I
Fe I
Fe I
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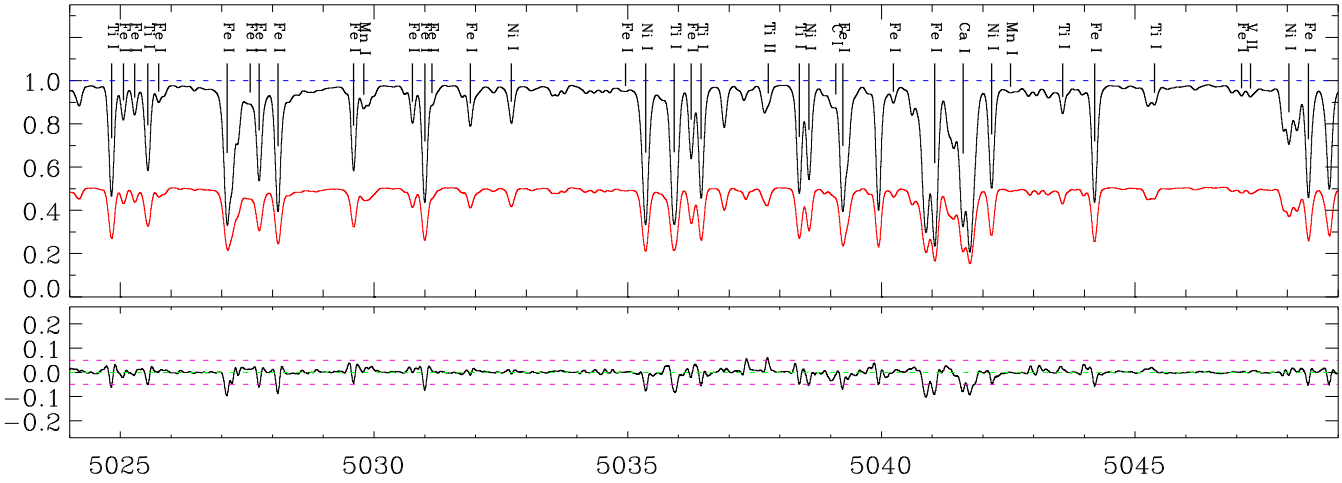
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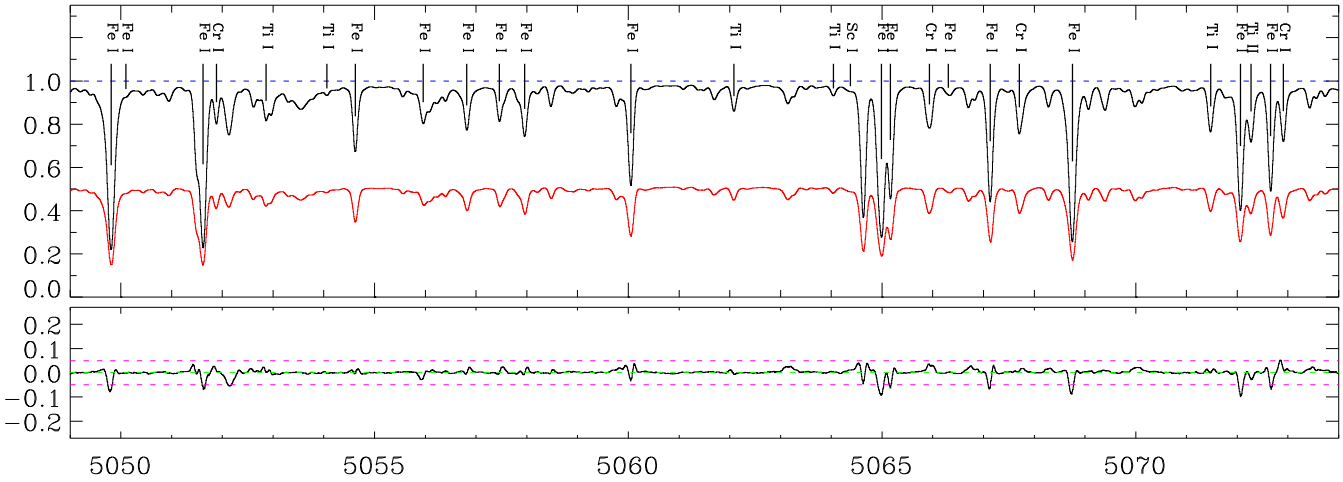
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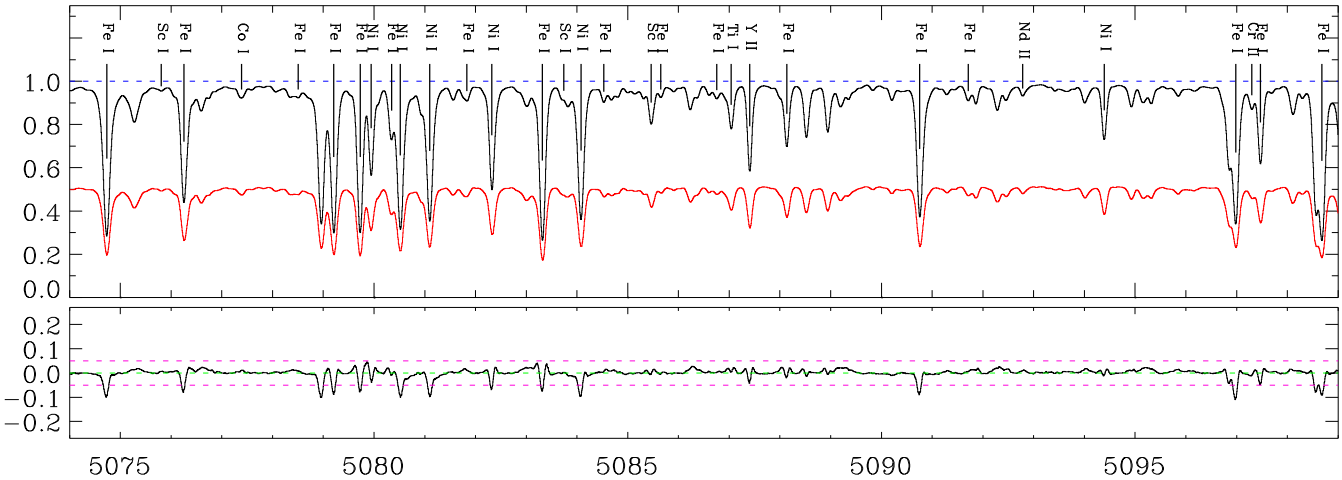
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Fe I
Co I
Fe I
Fe I
Ni I
Fe I
Ni I
Ni I
Fe I
Ni I
Fe I
Ni I
Sc I
Fe I
Sc I
Fe I
Ti I
Fe I
Y II
Fe I
Fe I
Fe I
Nd II
Ni I
Fe I
Cr II
Fe I
Fe I
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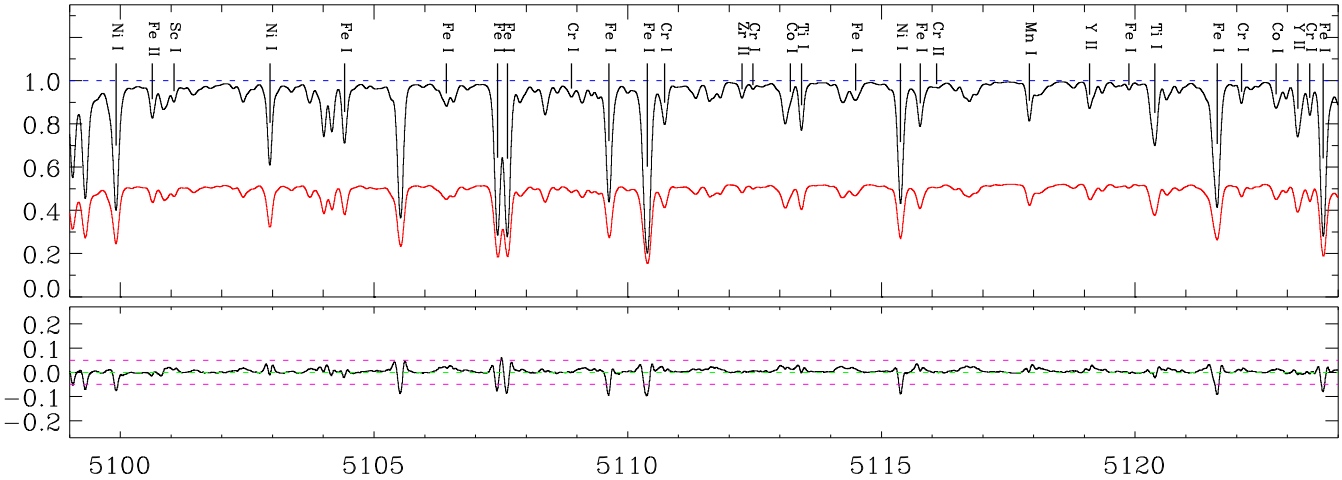
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Fe I
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Fe I
Fe I
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Fe I
Cr I
Fe I
Zr I
Zr II
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Co I
Fe I
Ni I
Fe I
Cr II
Mn I
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Fe I
Cr I
Co I
Fe I
Y II
Cr I
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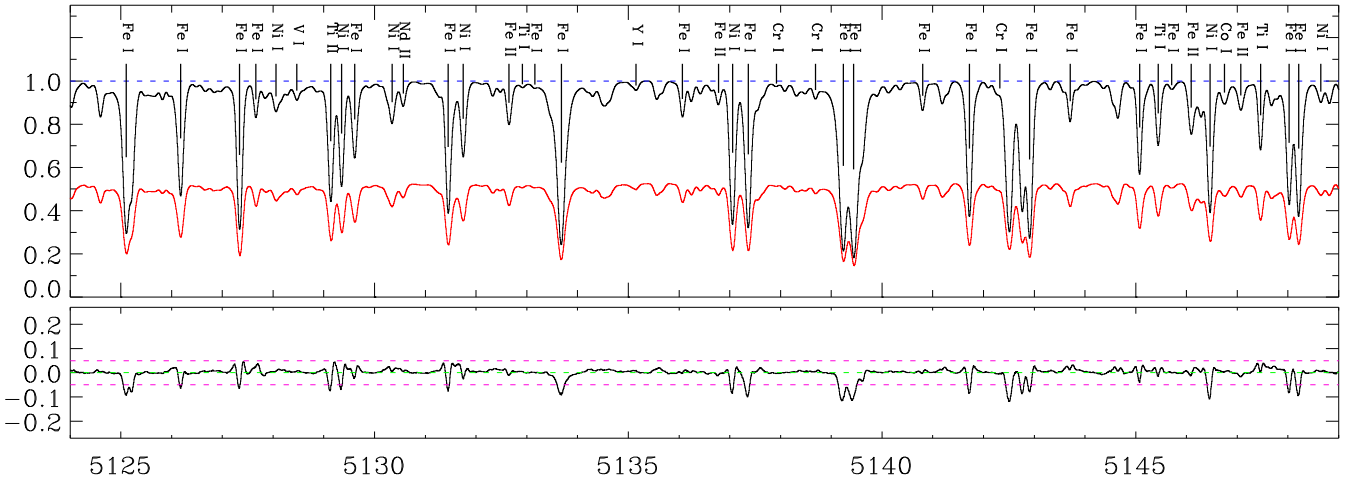
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Fe I
Ni I
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Fe I
Ni I
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Nd II
Ni I
Fe I
Ni I
Fe I
Fe I
Ti I
Fe II
Fe I
Y I
Fe I
Fe II
Fe I
Ni I
Fe I
Cr I
Cr I
Fe I
Fe I
Fe I
Fe I
Cr I
Fe I
Fe I
Fe I
Fe I
Ti I
Fe I
Ti I
Fe I
Fe II
Co I
Ni I
Fe II
Ti I
Fe I
Fe I
Ni I
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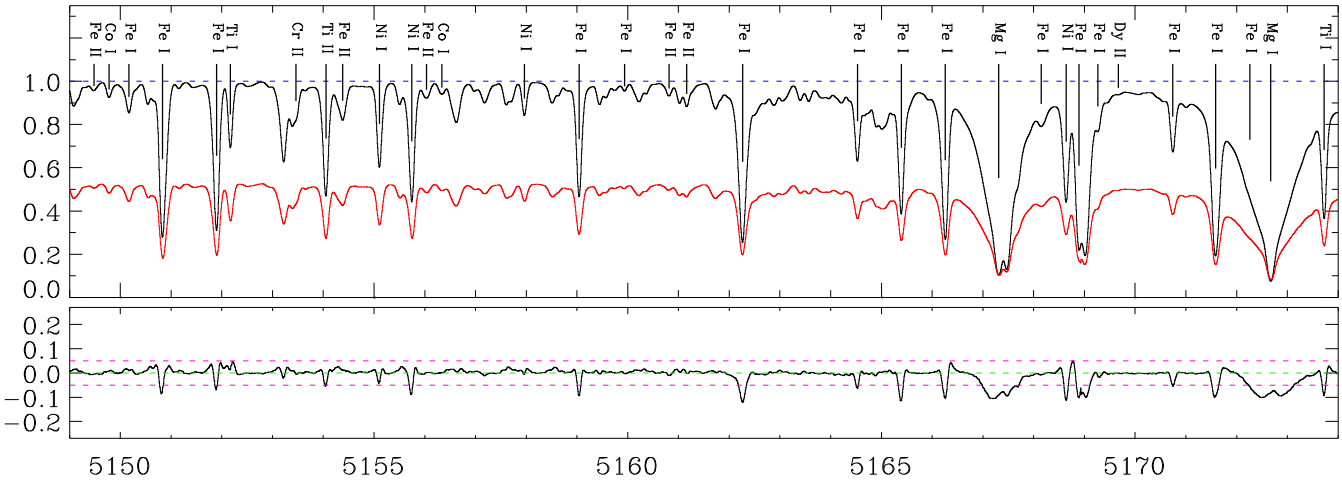
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Ni I
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Co I
Ni I
Fe I
Fe I
Fe II
Fe II
Fe I
Fe I
Fe I
Fe I
Mg I
Fe I
Ni I
Fe I
Fe I
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Fe I
Fe I
Fe I
Mg I
Ti I
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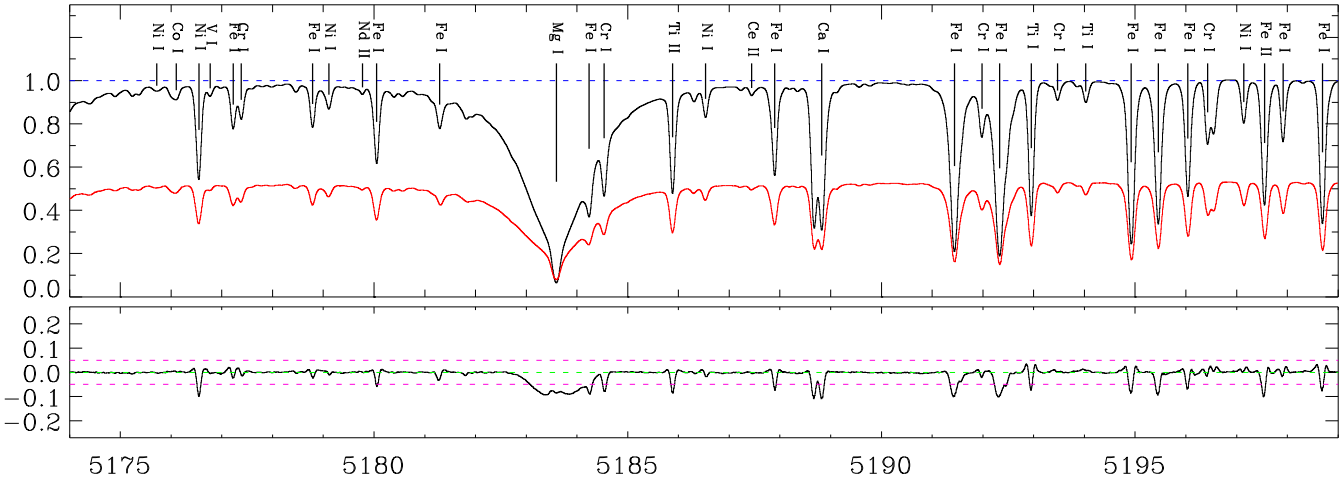
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V I
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Fe I
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Fe I
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Cr I
Ni I
Fe II
Fe I
Fe I
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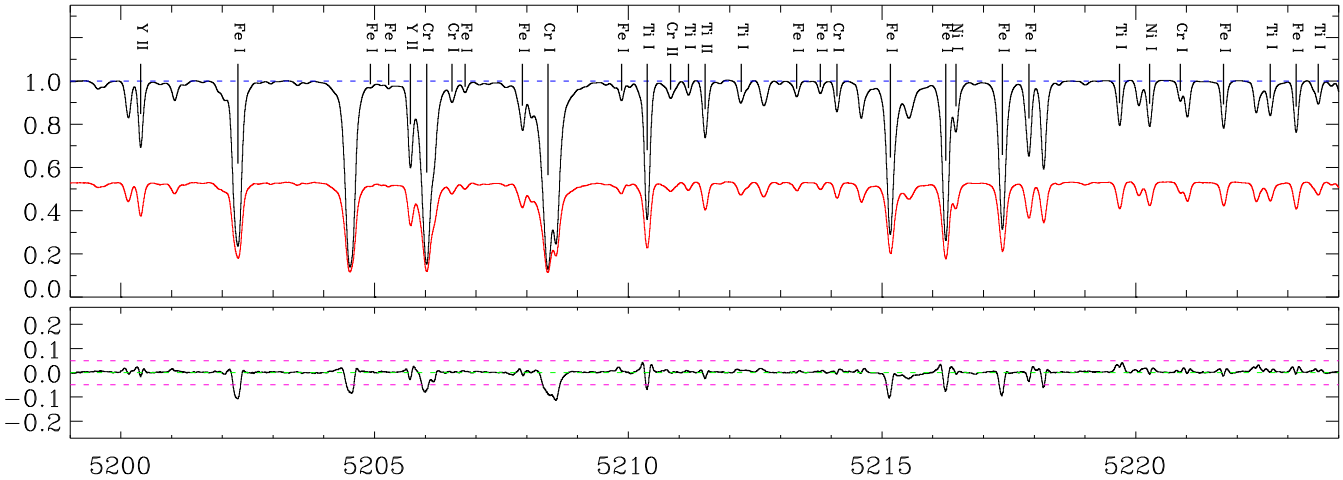
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Fe I
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Ti I
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Fe I
Cr I
Fe I
Fe I
Ni I
Fe I
Fe I
Fe I
Ti I
Ni I
Cr I
Fe I
Ti I
Fe I
Ti I
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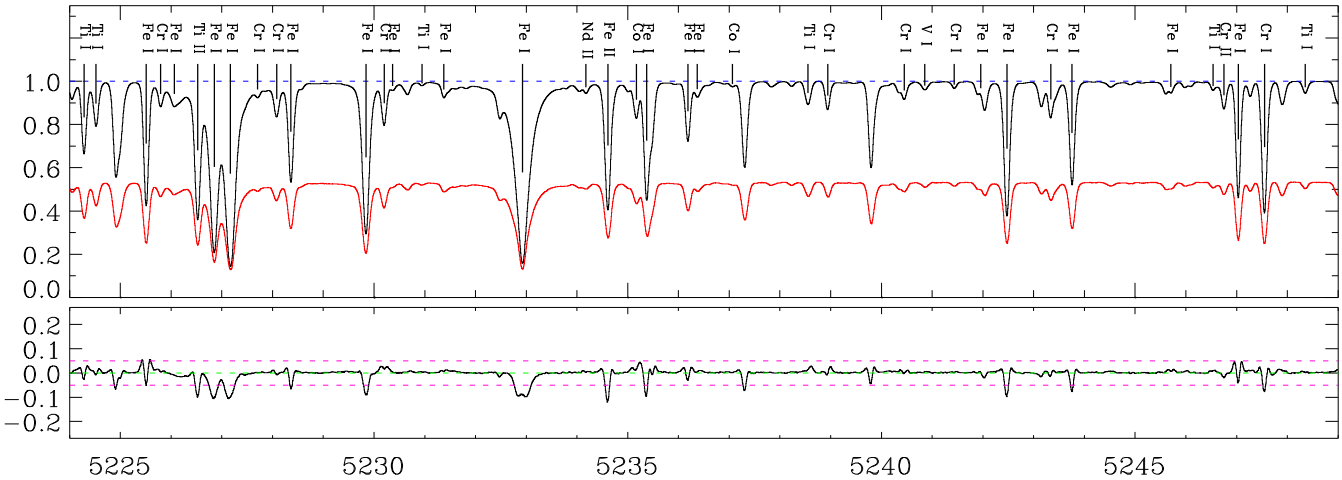
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Fe I
Cr I
Fe I
Fe I
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Fe I
Fe I
Cr I
Ti I
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Ti I
Cr I
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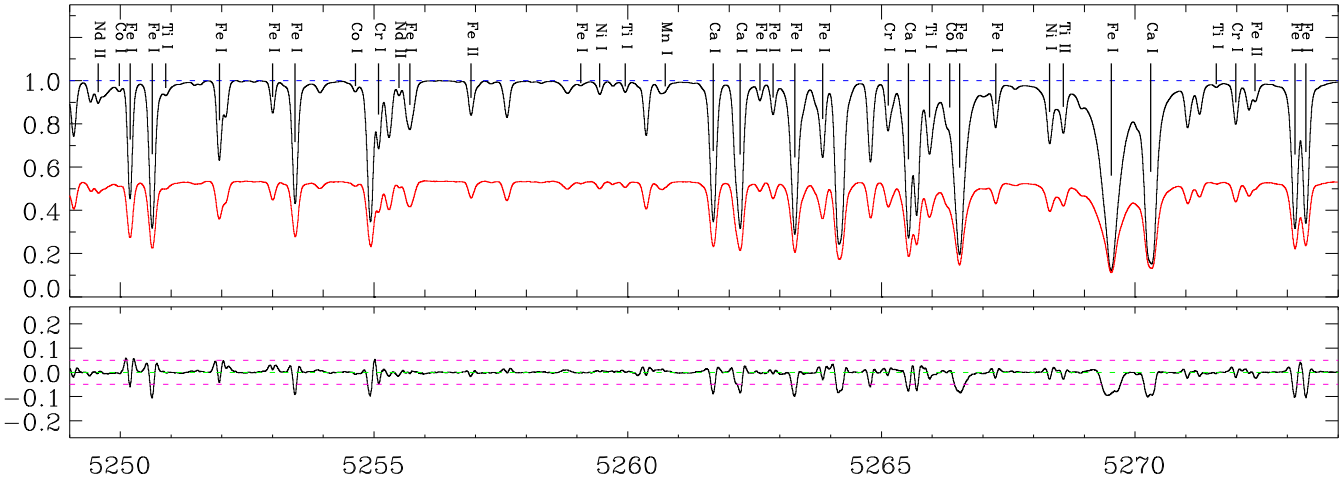
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Ni I
Ti I
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Ca I
Ca I
Fe I
Fe I
Fe I
Fe I
Cr I
Ca I
Ti I
Fe I
Co I
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Ni I
Fe I
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Ti I
Cr I
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Fe I
Fe I
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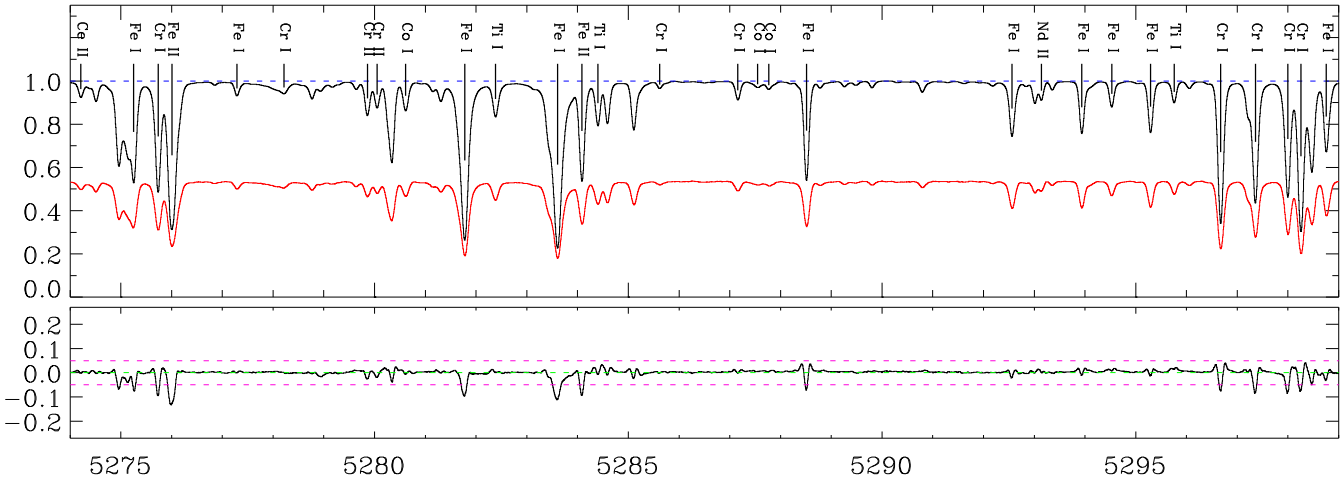
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Ti I
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Co I
Fe I
Fe I
Nd II
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Fe I
Fe I
Ti I
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Cr I
Cr I
Cr I
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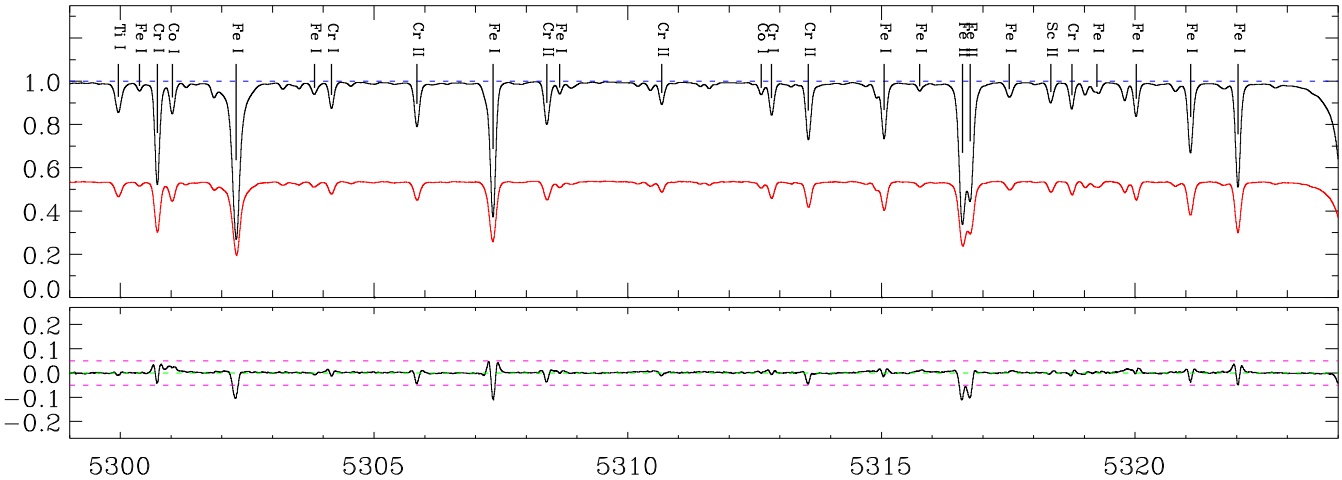
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Cr II
Cr II
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Fe I
Fe II
Fe I
Sc II
Cr I
Fe I
Fe I
Fe I
Fe I
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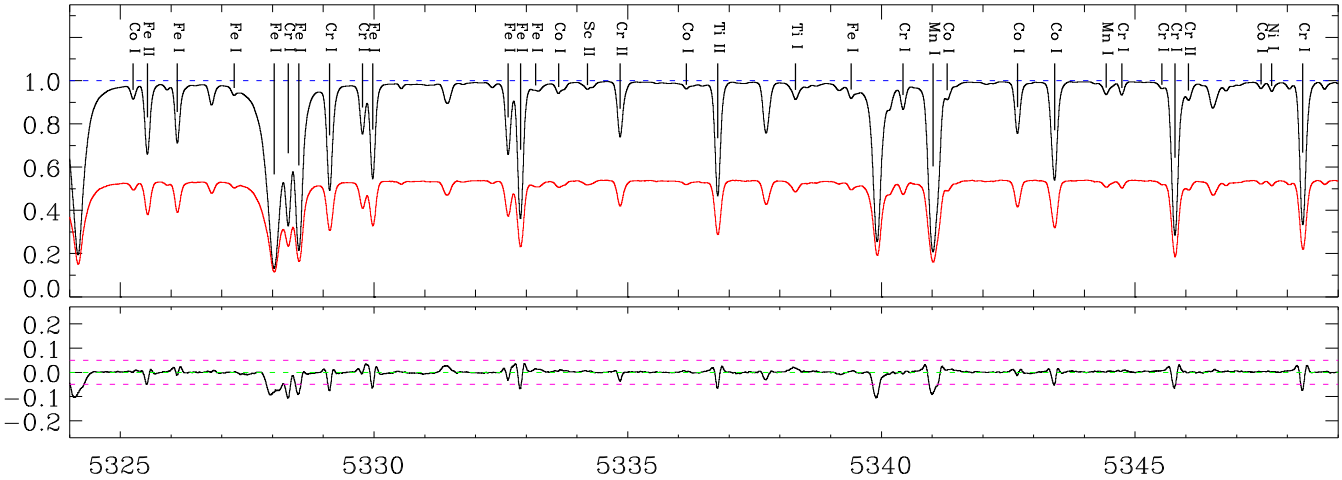
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Fe I
Fe I
Fe I
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Cr I
Fe I
Cr I
Fe I
Fe I
Fe I
Co I
Sc II
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Ti II
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Cr I
Cr II
Ni I
Co I
Cr I
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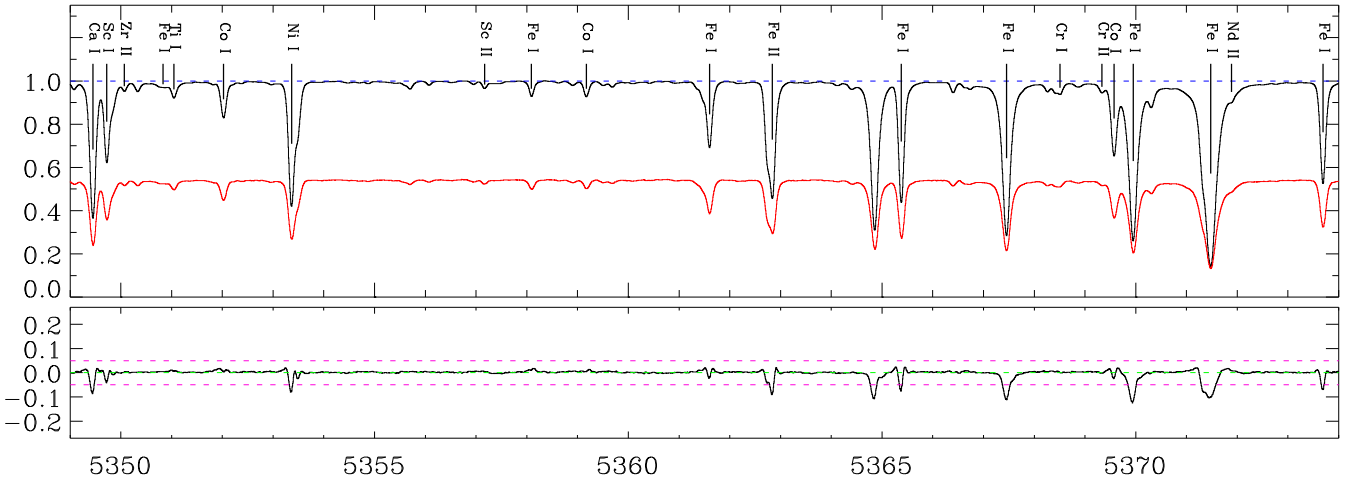
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Ti I
Fe I
Co I
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Co I
Fe I
Fe II
Fe I
Fe I
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Cr II
Fe I
Fe I
Nd II
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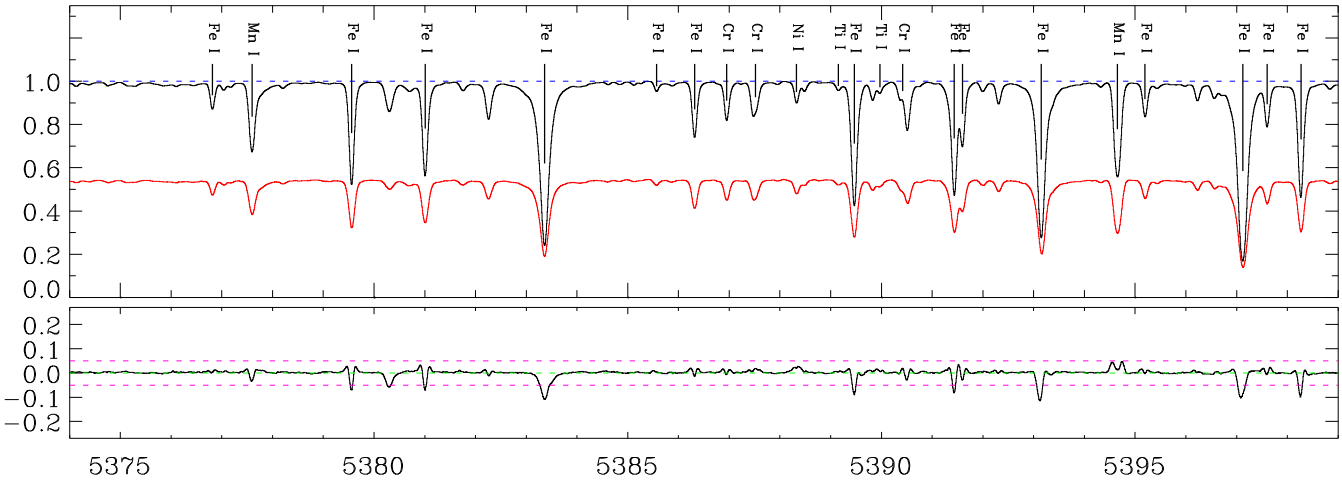
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Fe I
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Ti I
Cr I
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Fe I
Fe I
Mn I
Fe I
Fe I
Fe I
Fe I
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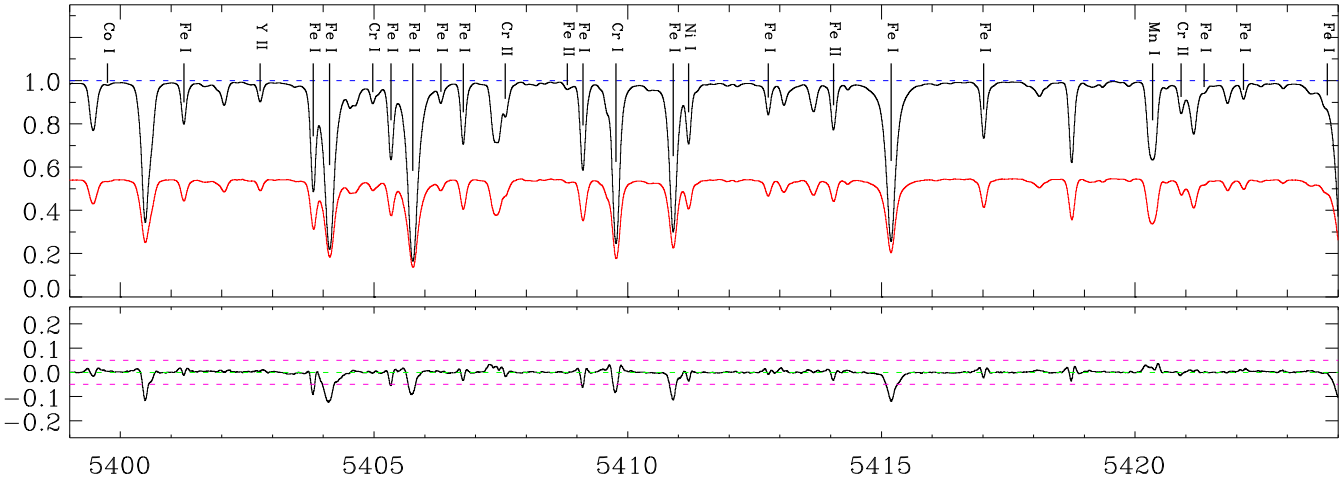
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Fe I
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Fe I
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Fe I
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Fe I
Fe II
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Ni I
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Fe II
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Fe I
Mn I
Cr II
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Fe I
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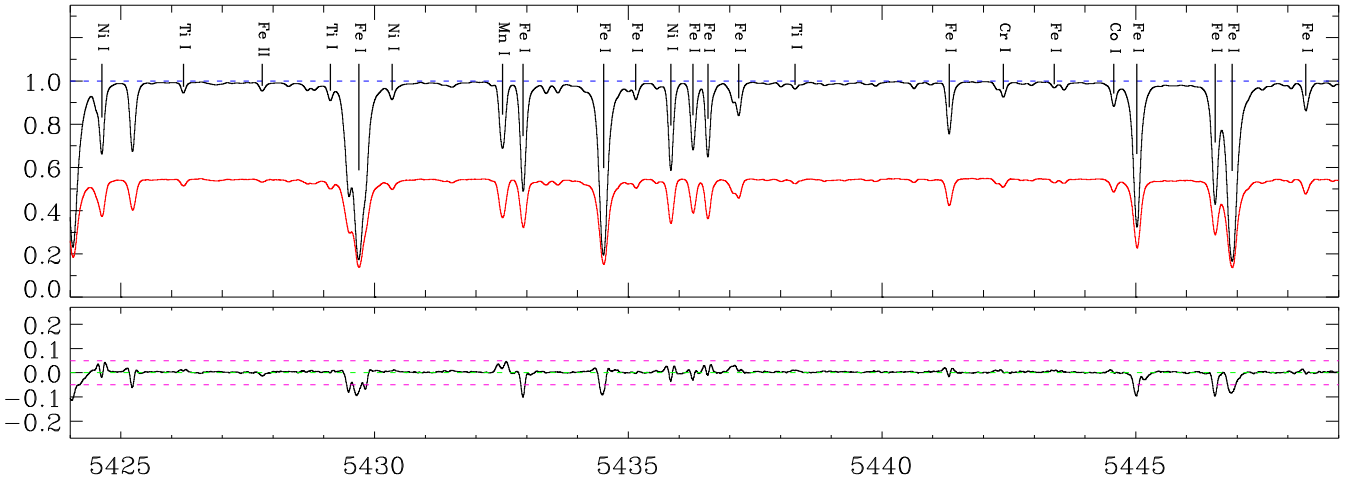
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Co I
Fe I
Fe I
Fe I
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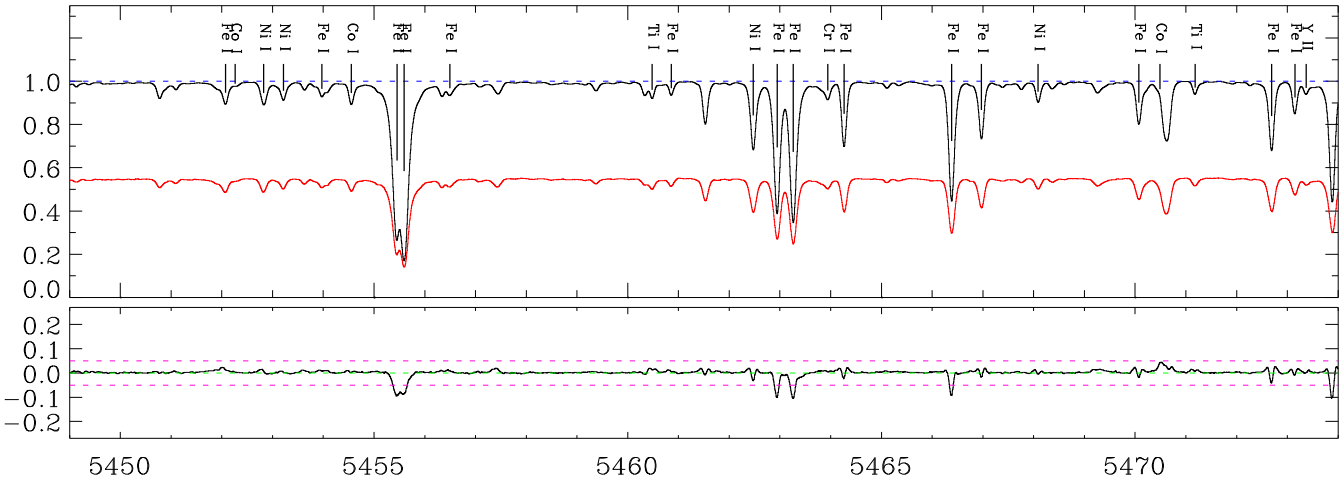
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Ni I
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Fe I
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Co I
Ti I
Fe I
Fe I
Y II
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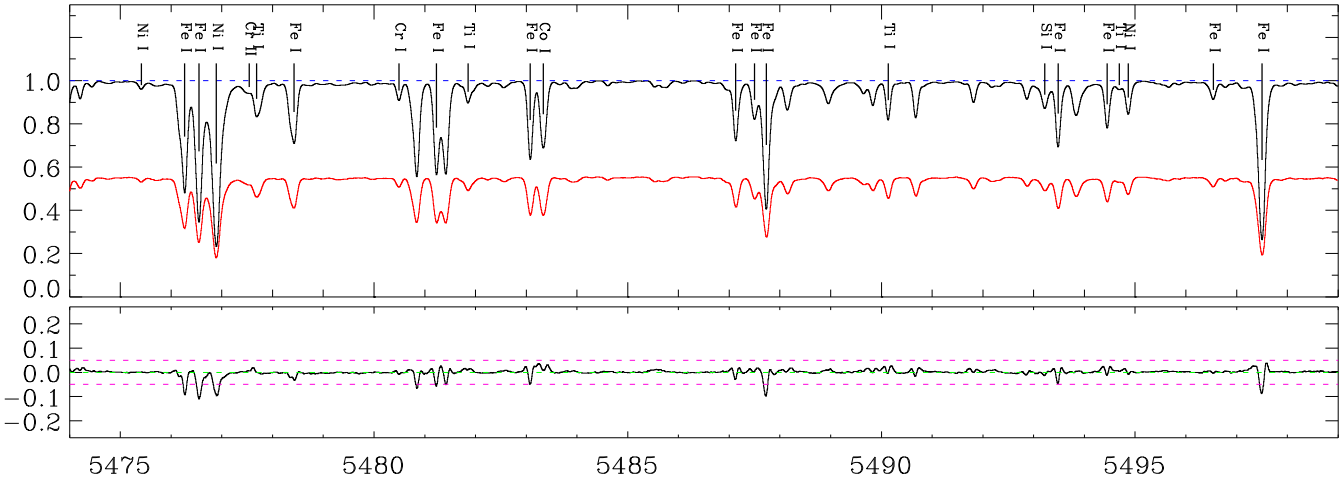
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Fe I
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Fe I
Si I
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Ni I
Fe I
Fe I
Fe I
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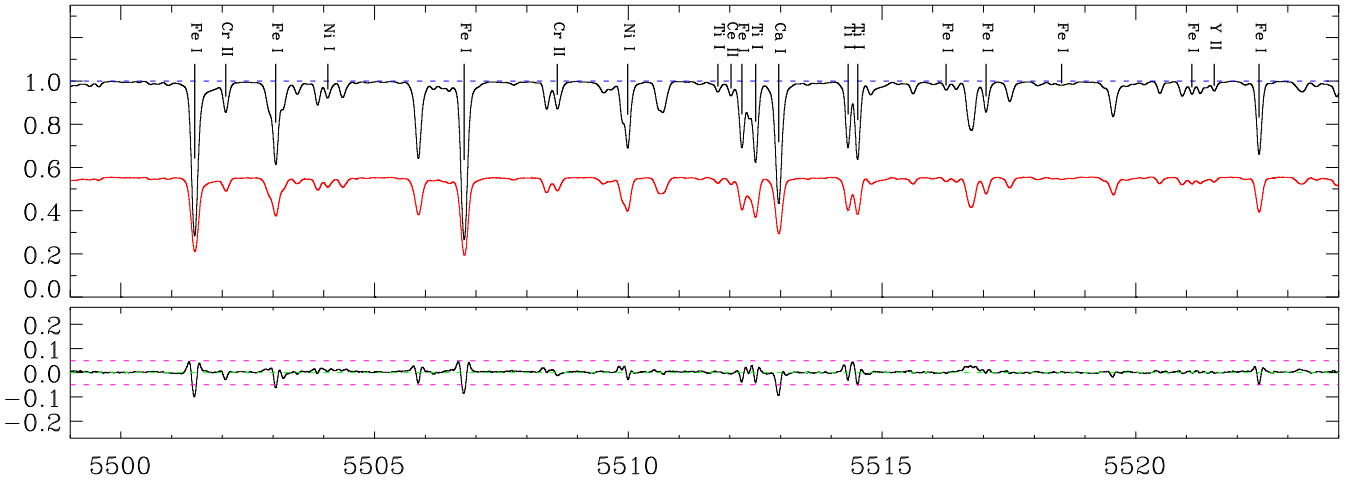
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Ti I
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Fe I
Fe I
Fe I
Y II
Fe I
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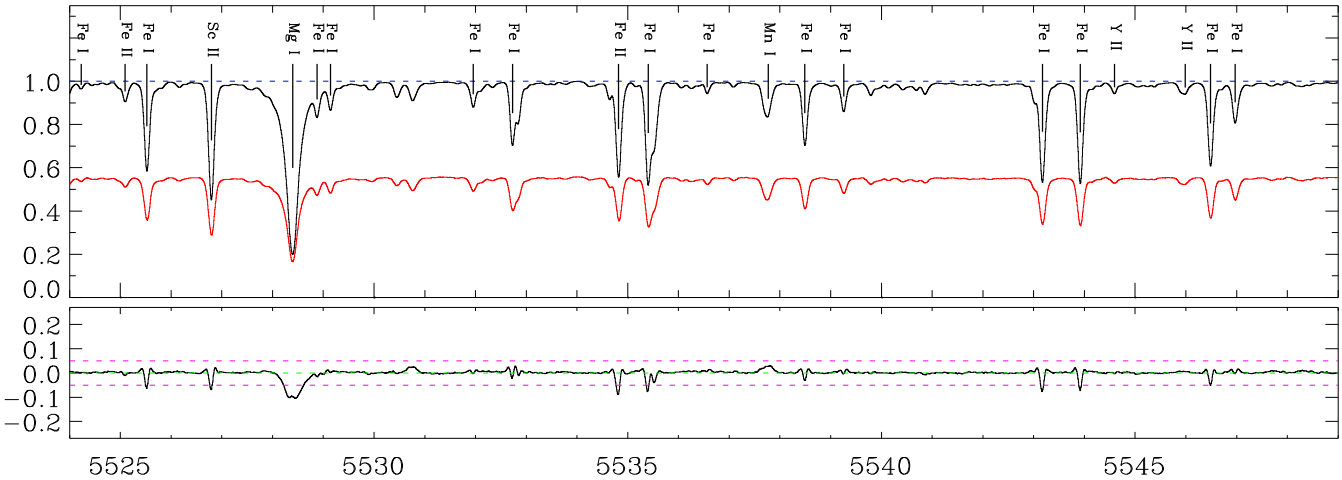
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Fe II
Fe I
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Fe I
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Fe I
Mn I
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Fe I
Y II
Y II
Fe I
Fe I
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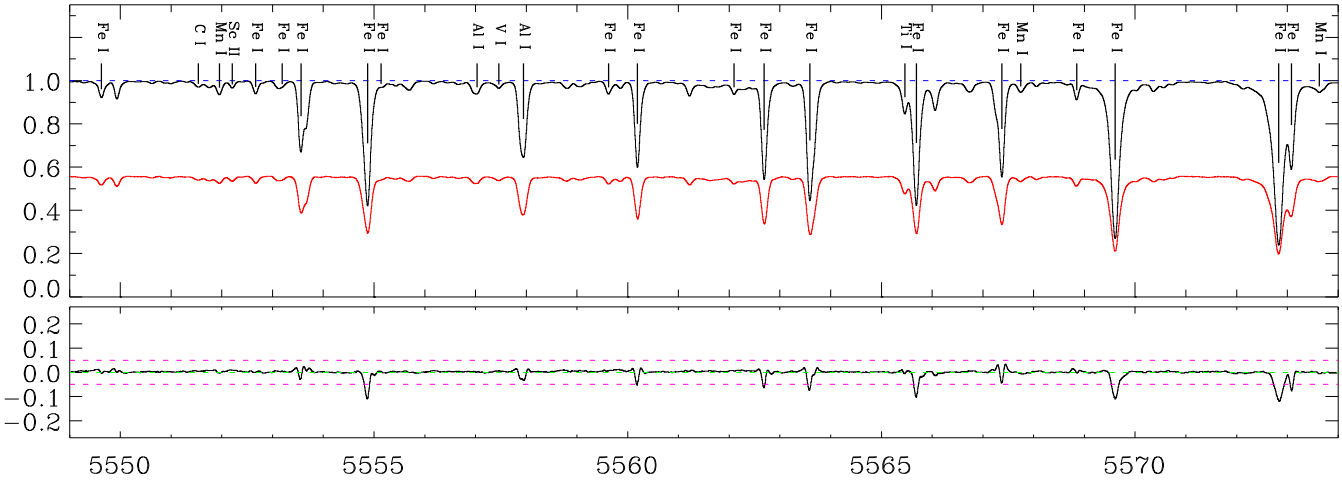
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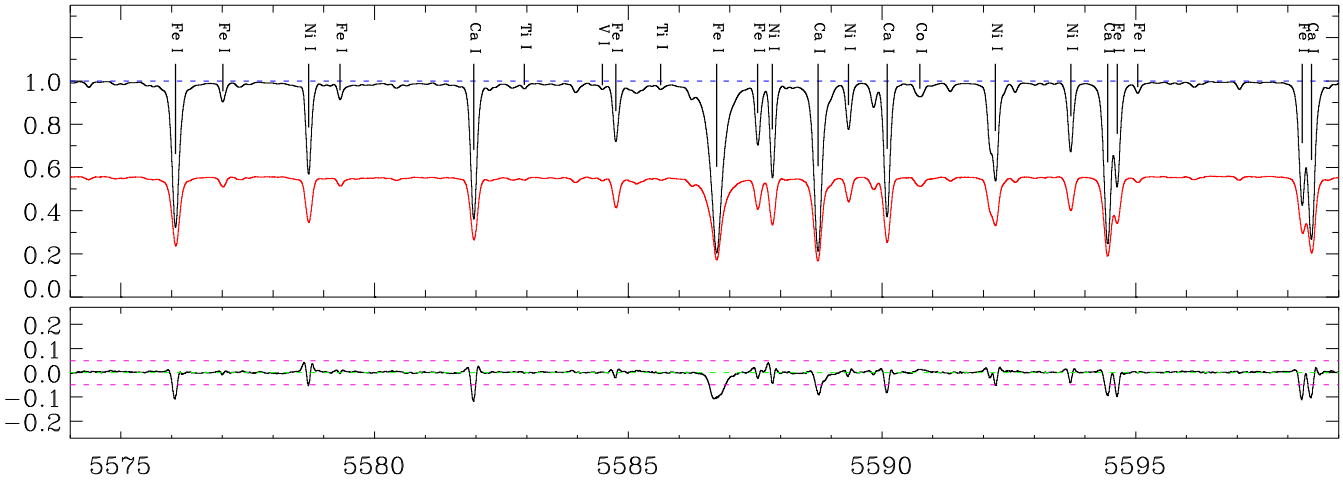
Fe I
Fe I
Ni I
Fe I
Ca I
Ti I
Fe I
V I
Ti I
Fe I
Ni I
Fe I
Ca I
Ni I
Ca I
Co I
Ni I
Ni I
Fe I
Ca I
Ca I
Fe I
Fe I
1.0
0.8
0.6
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0.2
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0.0
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−0.2
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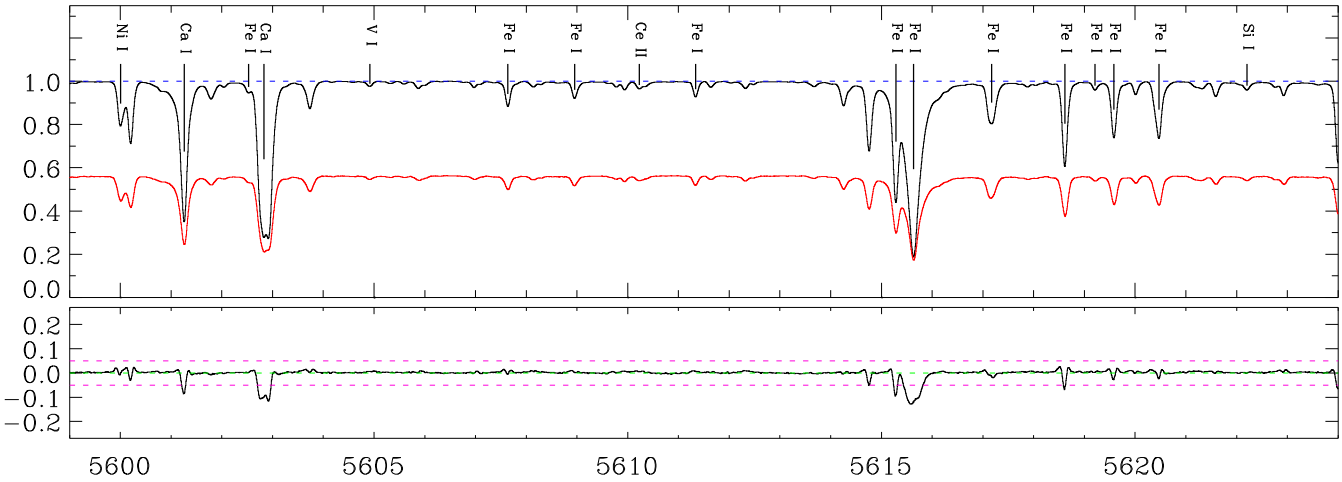
5590
5595


Ni I
Ca I
Fe I
Ca I
V I
Fe I
Fe I
Ce II
Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
Si I
1.0
0.8
0.6
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−0.2
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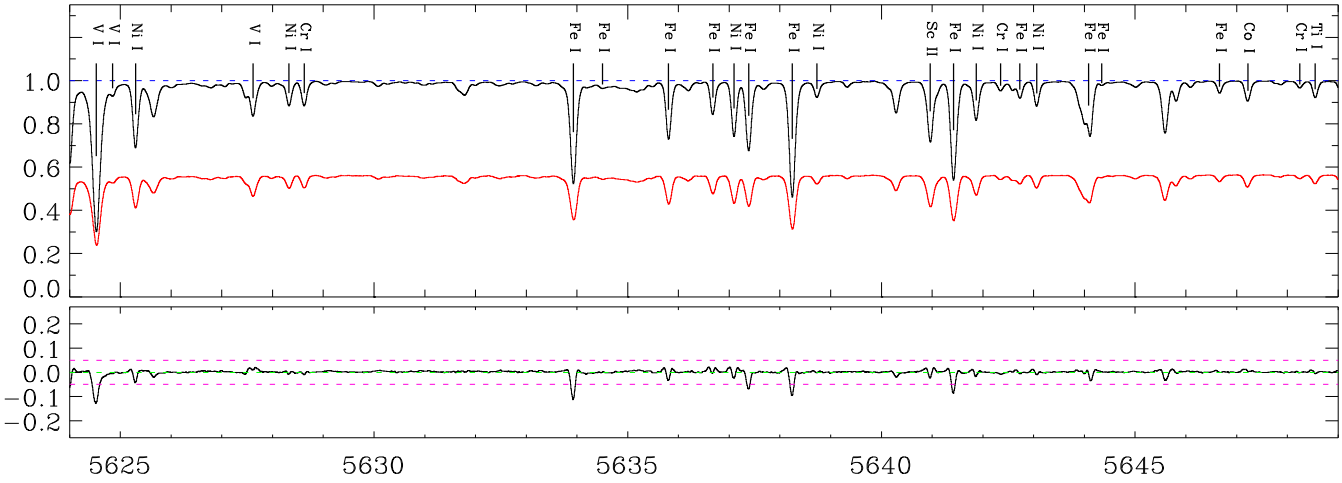
V I
V I
Ni I
V I
Cr I
Ni I
Fe I
Fe I
Fe I
Fe I
Fe I
Ni I
Fe I
Fe I
Ni I
Sc II
Fe I
Ni I
Cr I
Fe I
Ni I
Fe I
Fe I
Fe I
Co I
Ti I
Cr I
1.0
0.8
0.6
0.4
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0.2
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−0.2
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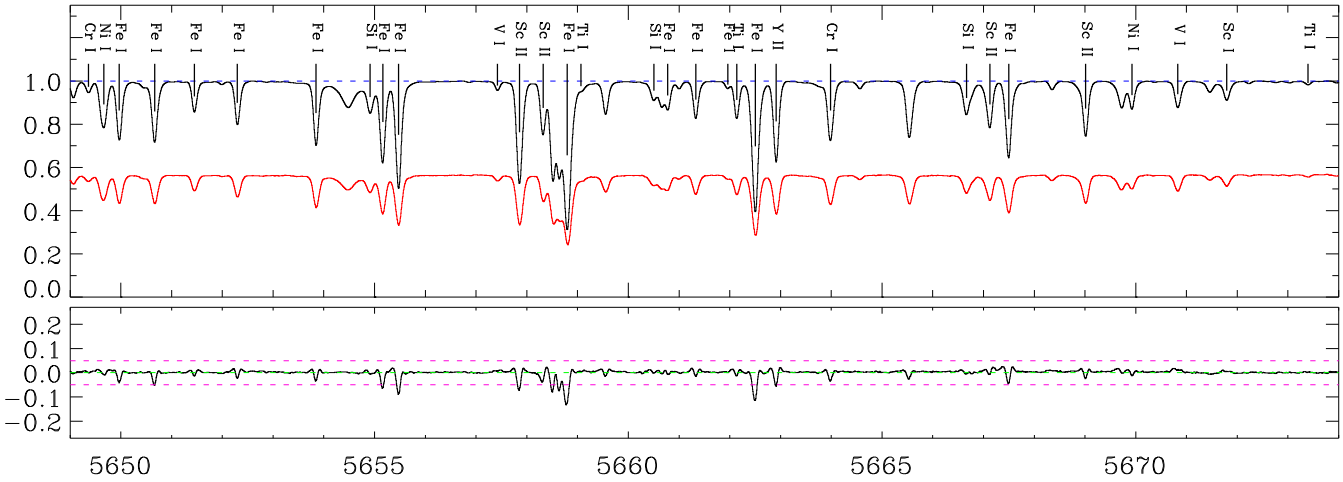
Cr I
Ni I
Fe I
Fe I
Fe I
Fe I
Fe I
Si I
Fe I
V I
Sc II
Sc II
Ti I
Fe I
Si I
Fe I
Fe I
Ti I
Fe I
Y II
Cr I
Si I
Sc II
Fe I
Sc II
Ni I
V I
Sc I
Ti I
1.0
0.8
0.6
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0.2
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−0.2
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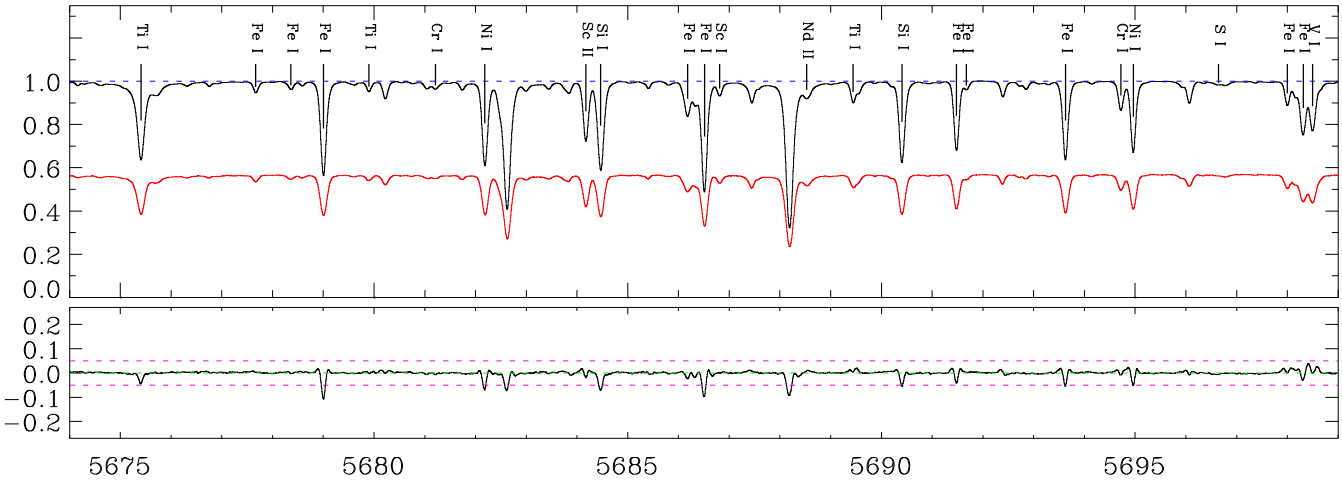
Ti I
Fe I
Fe I
Fe I
Ti I
Cr I
Ni I
Sc II
Si I
Fe I
Fe I
Sc I
Nd II
Ti I
Si I
Fe I
Fe I
Fe I
Ni I
Cr I
S I
Fe I
Y I
Fe I
1.0
0.8
0.6
0.4
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0.2
0.1
0.0
−0.1
−0.2
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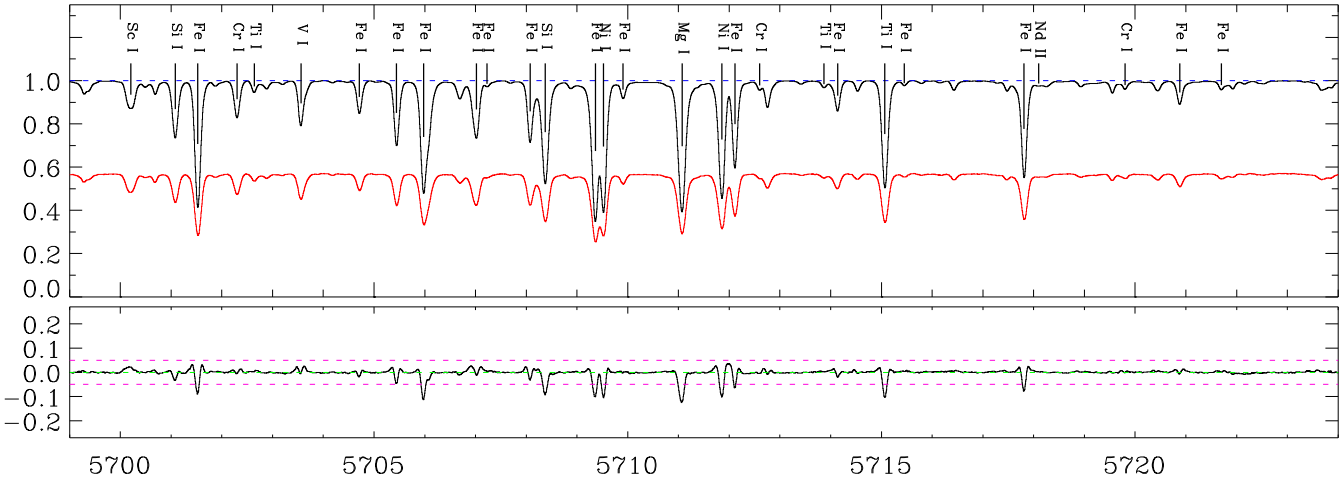
5695


Sc I
Si I
Fe I
Cr I
Ti I
V I
Fe I
Fe I
Fe I
Fe I
Fe I
Si I
Fe I
Ni I
Fe I
Mg I
Fe I
Ni I
Cr I
Fe I
Ti I
Ti I
Fe I
Nd II
Fe I
Cr I
Fe I
Fe I
1.0
0.8
0.6
0.4
0.2
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0.2
0.1
0.0
−0.1
−0.2
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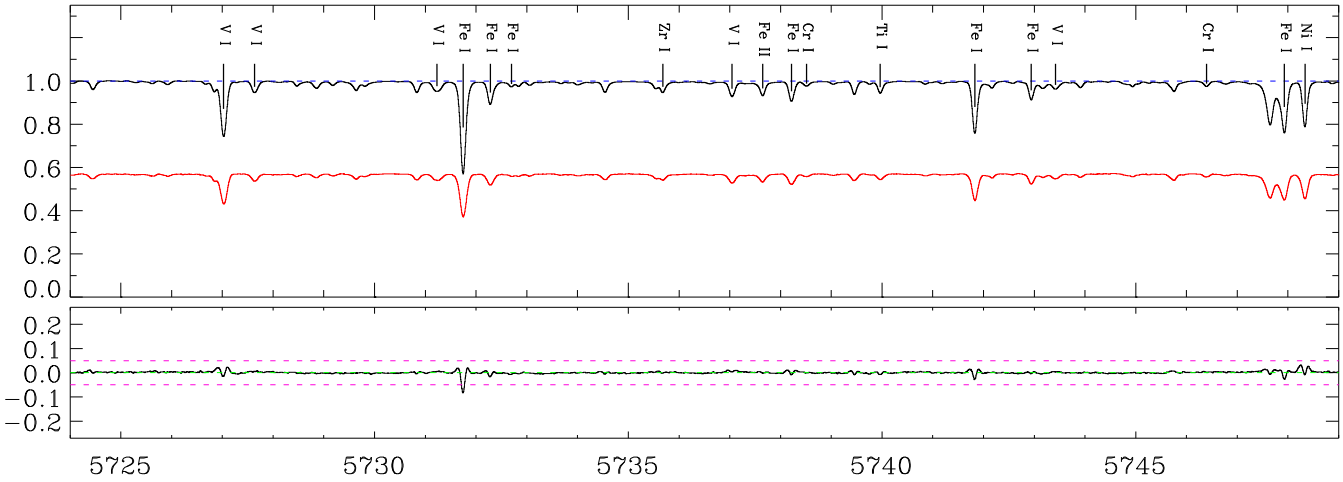
V I
V I
V I
Fe I
Fe I
Fe I
Zr I
V I
Fe II
Cr I
Fe I
Ti I
Fe I
Fe I
V I
Cr I
Fe I
Ni I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
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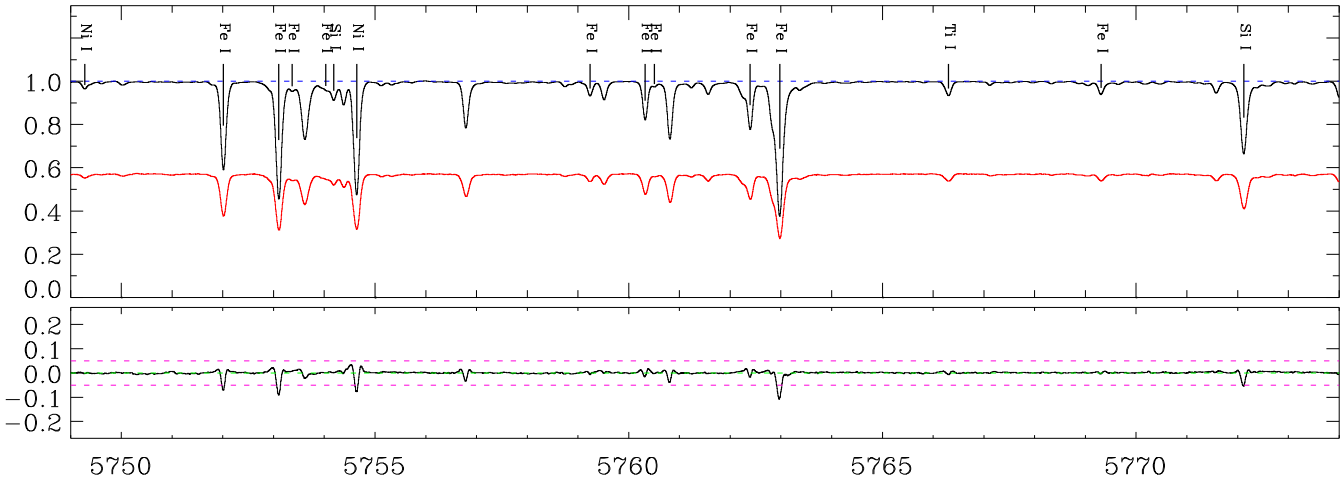
Ni I
Fe I
Fe I
Fe I
Si I
Fe I
Ni I
Fe I
Fe I
Fe I
Fe I
Fe I
Ti I
Fe I
Si I
1.0
0.8
0.6
0.4
0.2
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0.2
0.1
0.0
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−0.2
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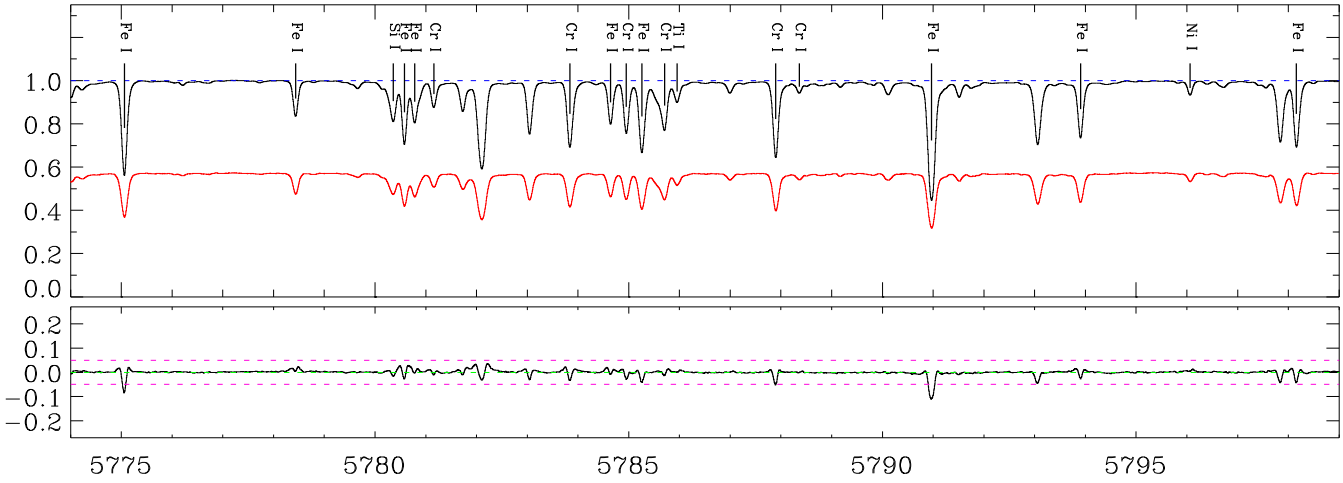
Fe I
Fe I
Si I
Fe I
Fe I
Cr I
Cr I
Fe I
Cr I
Fe I
Cr I
Ti I
Cr I
Cr I
Cr I
Fe I
Fe I
Ni I
Fe I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
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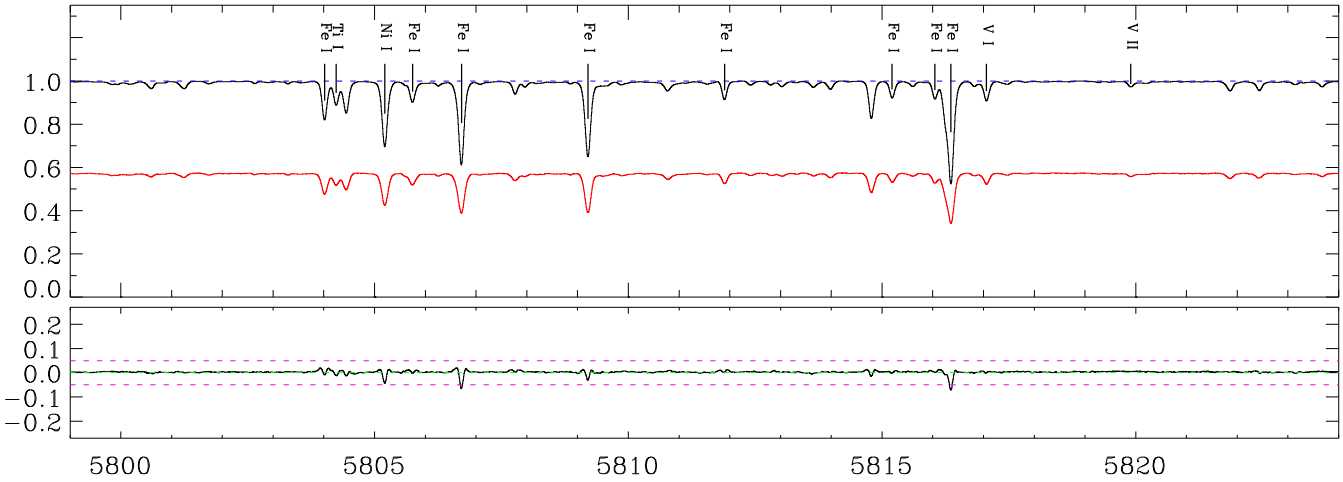
Fe I
Ti I
Ni I
Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
V I
V II
1.0
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0.6
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0.0
−0.1
−0.2
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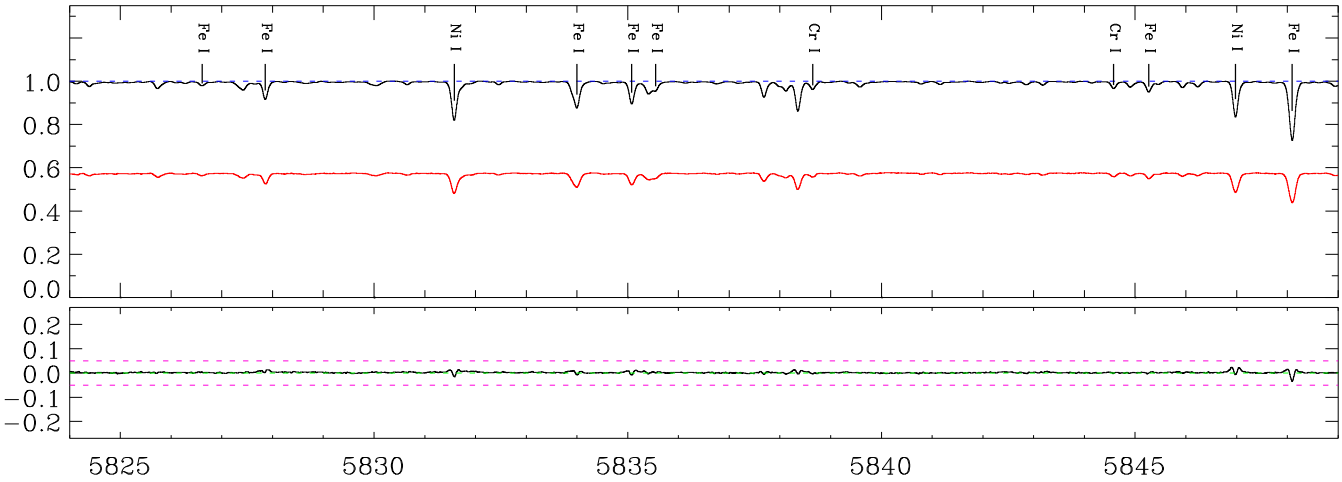
Fe I
Fe I
Ni I
Fe I
Fe I
Fe I
Cr I
Cr I
Fe I
Ni I
Fe I
1.0
0.8
0.6
0.4
0.2
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0.2
0.1
0.0
−0.1
−0.2
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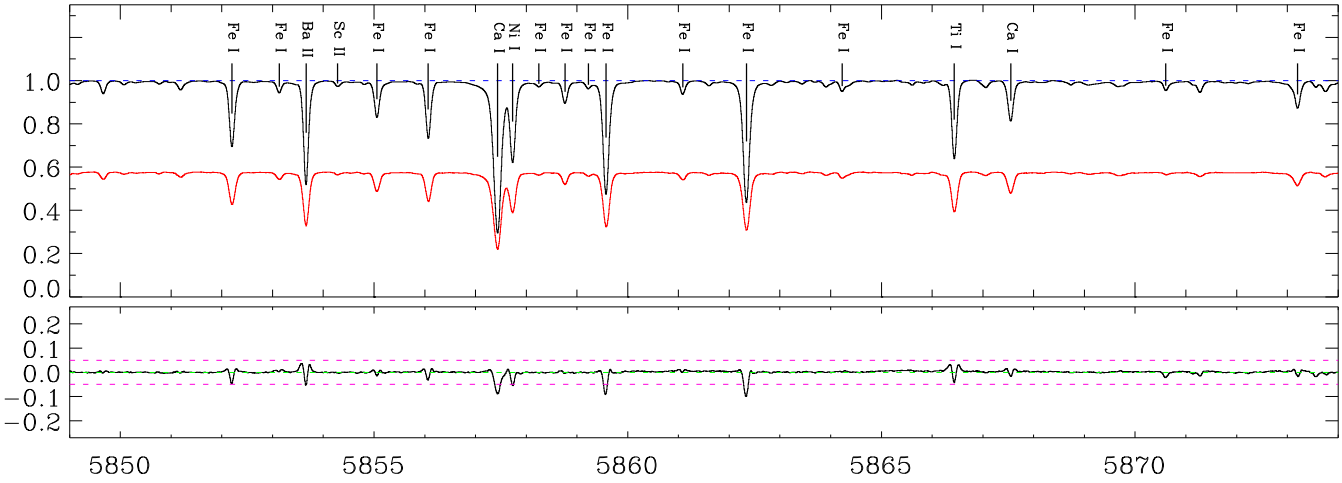
Fe I
Fe I
Ba II
Sc II
Fe I
Fe I
Ca I
Ni I
Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
Ti I
Ca I
Fe I
Fe I
1.0
0.8
0.6
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−0.2
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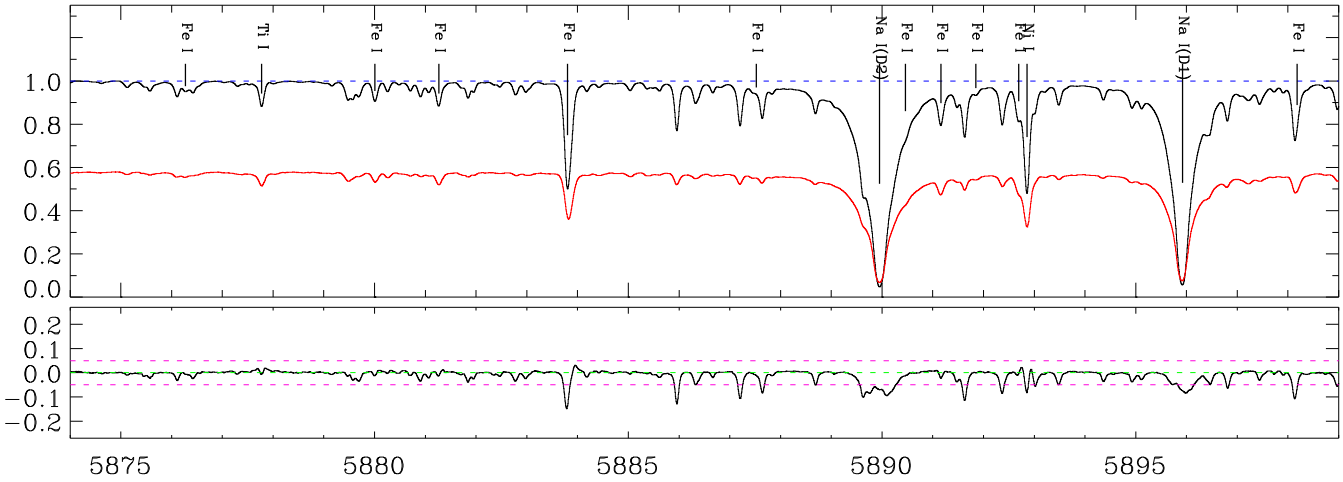
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Ti I
Fe I
Fe I
Fe I
Fe I
Na I(D2)
Fe I
Fe I
Fe I
Ni I
Fe I
Na I(D1)
Fe I
1.0
0.8
0.6
0.4
0.2
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0.2
0.1
0.0
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−0.2
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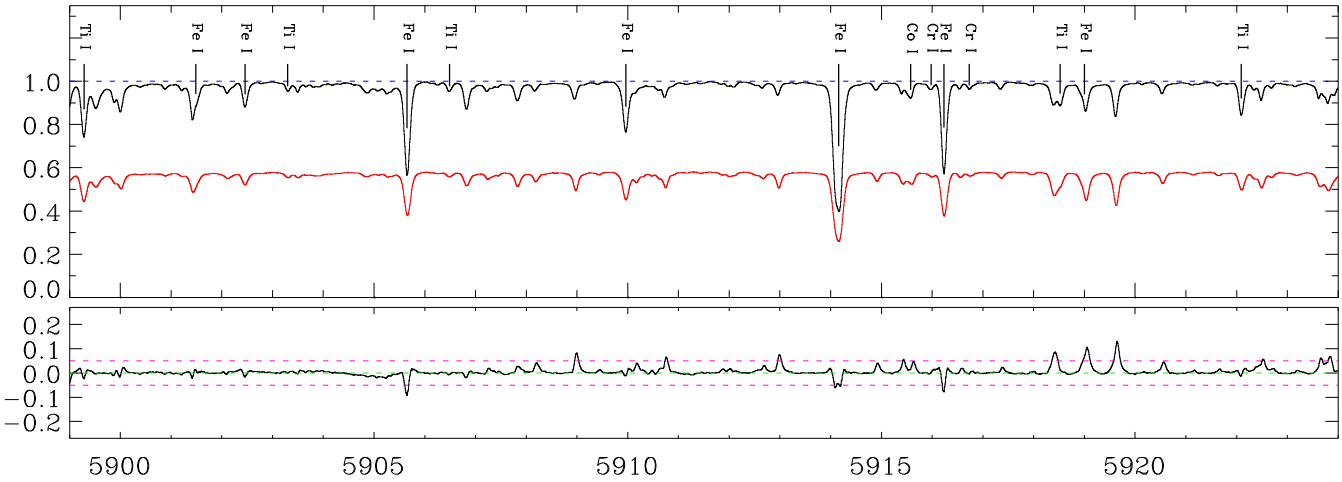
Ti I
Fe I
Fe I
Ti I
Fe I
Ti I
Fe I
Fe I
Co I
Cr I
Fe I
Cr I
Ti I
Fe I
Ti I
1.0
0.8
0.6
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0.2
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0.2
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−0.2
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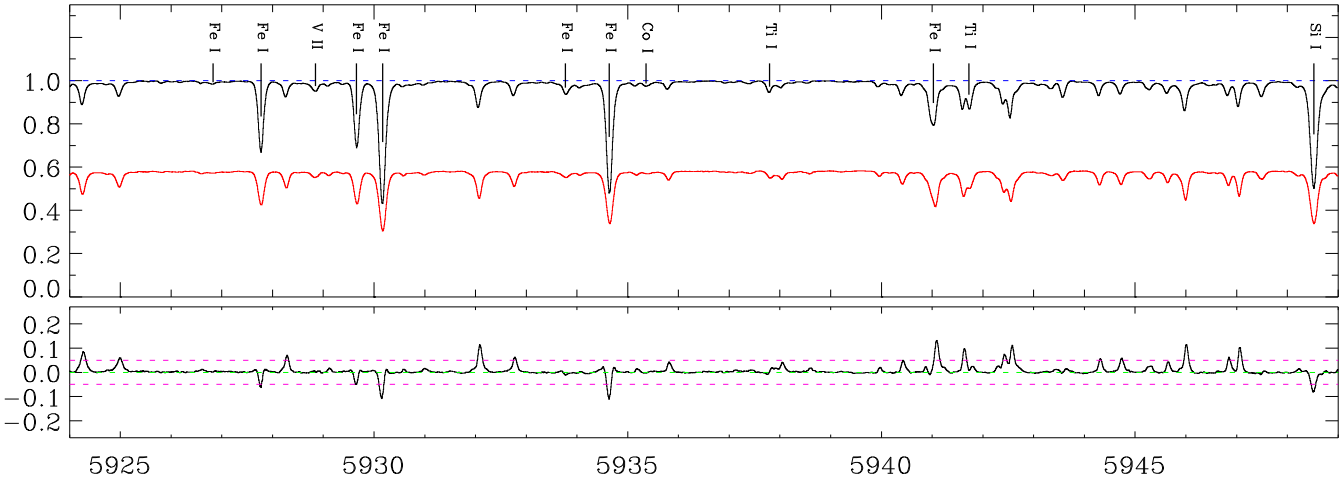
Fe I
Fe I
V II
Fe I
Fe I
Fe I
Fe I
Co I
Ti I
Fe I
Ti I
Si I
1.0
0.8
0.6
0.4
0.2
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0.2
0.1
0.0
−0.1
−0.2
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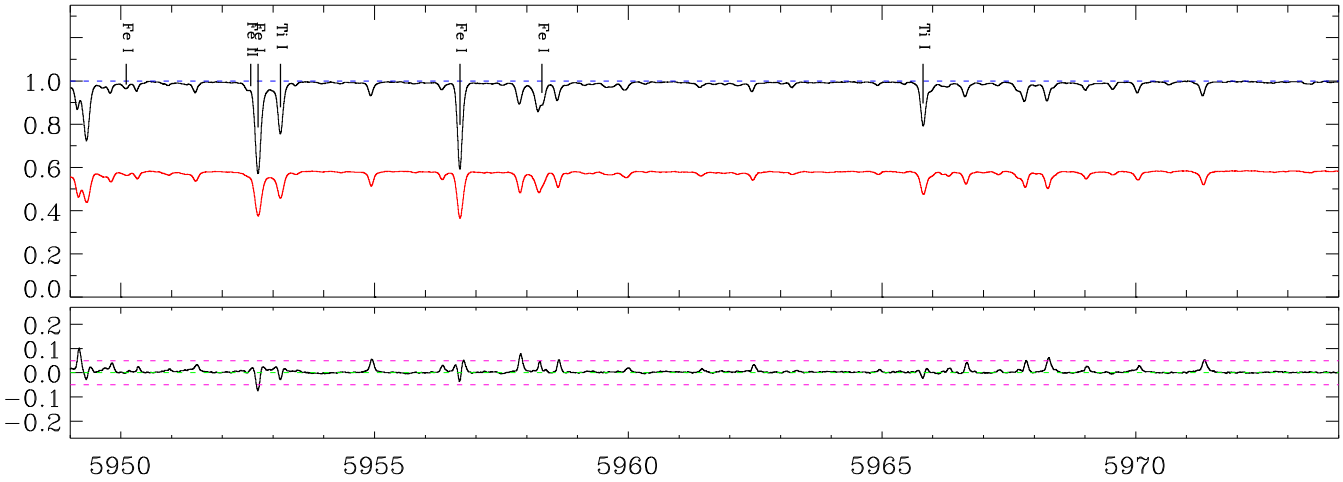
Fe I
Fe II
Ti I
Fe I
Fe I
Ti I
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0.8
0.6
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0.2
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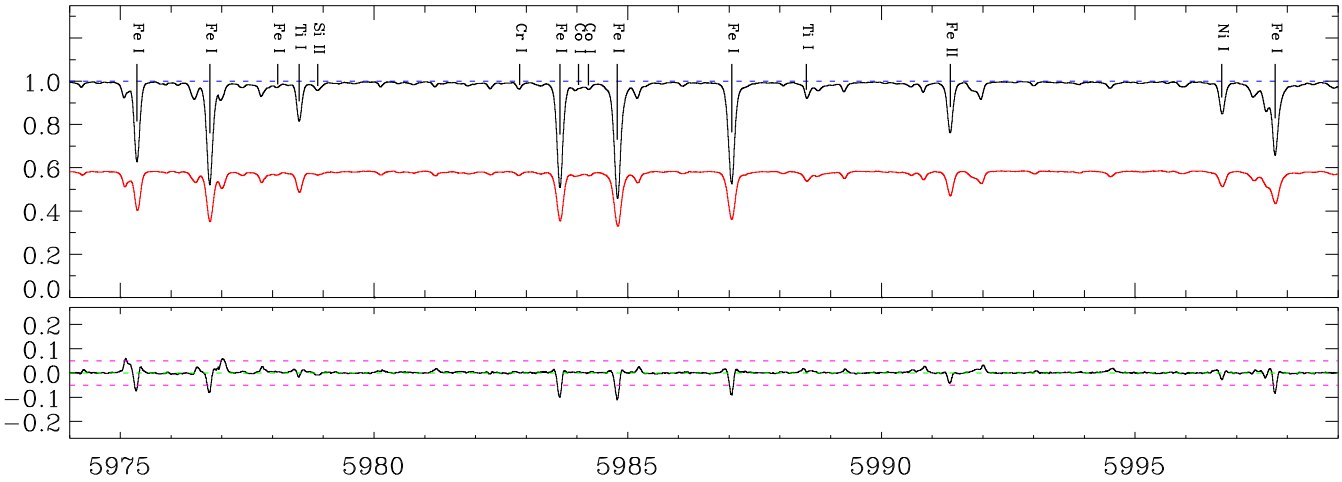
Fe I
Fe I
Fe I
Ti I
Si II
Cr I
Fe I
Co I
Co I
Fe I
Fe I
Ti I
Fe II
Ni I
Fe I
1.0
0.8
0.6
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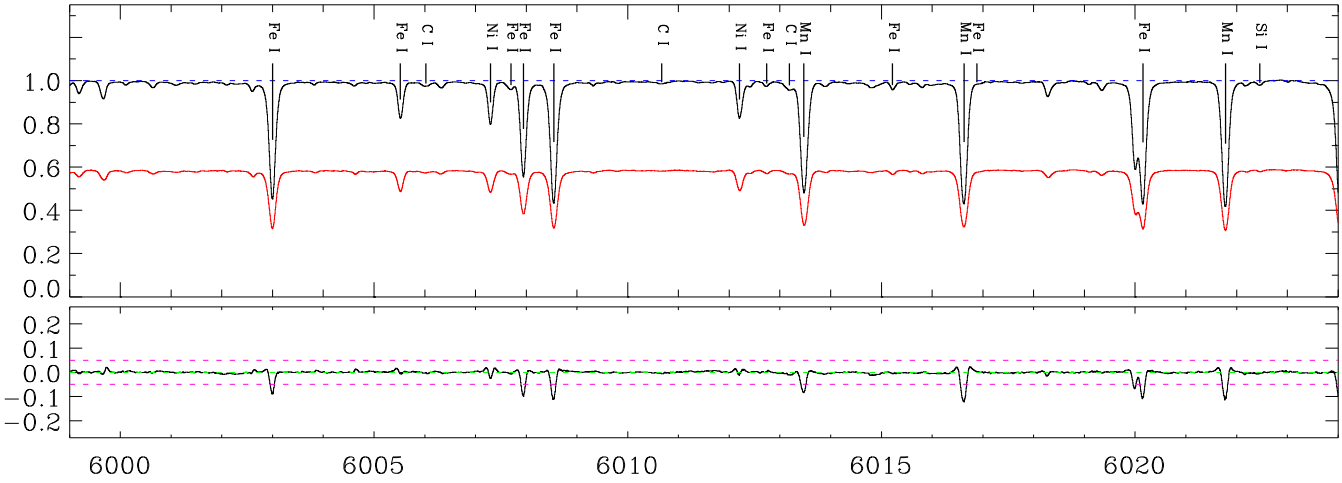
Fe I
Fe I
C I
Ni I
Fe I
Fe I
Fe I
C I
Ni I
Fe I
Mn I
C I
Fe I
Fe I
Mn I
Fe I
Mn I
Si I
1.0
0.8
0.6
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0.2
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0.0
−0.1
−0.2
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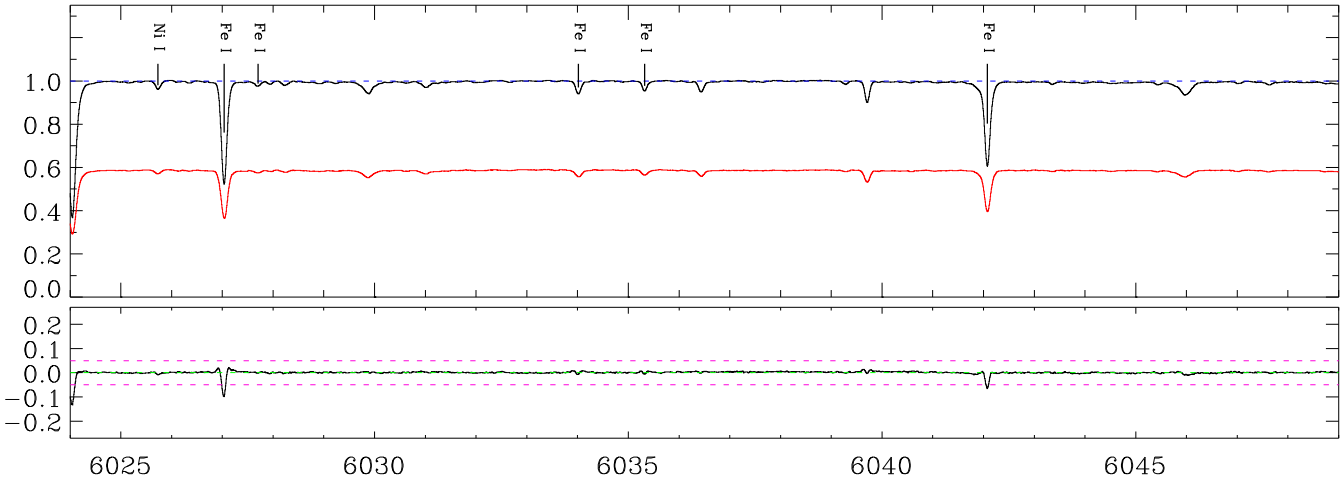
Ni I
Fe I
Fe I
Fe I
Fe I
Fe I
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0.8
0.6
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0.2
0.1
0.0
−0.1
−0.2
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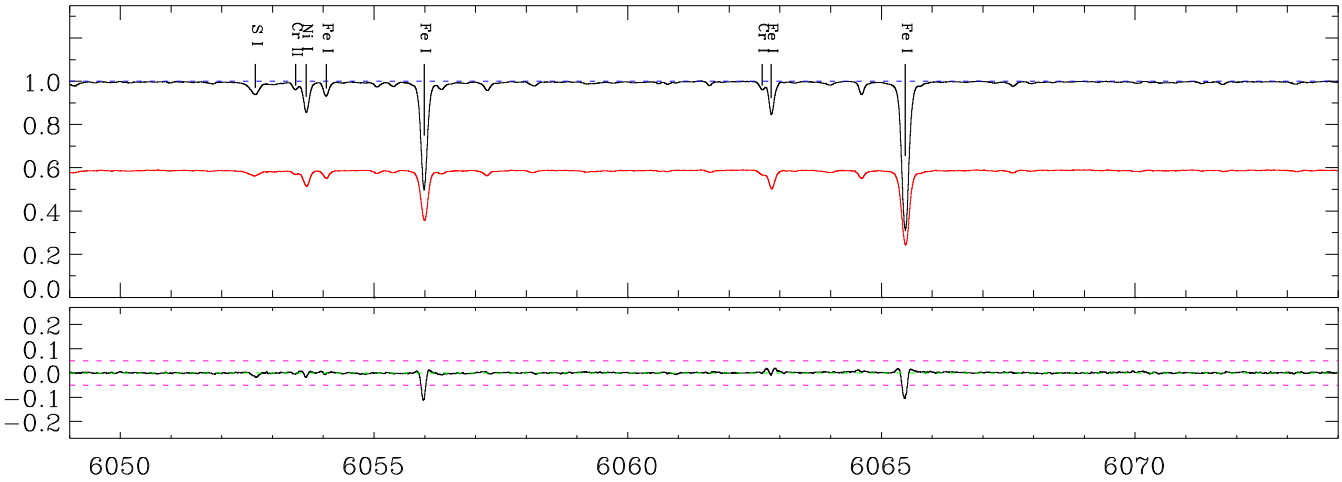
S I
Ni I
Cr I
Fe I
Fe I
Cr I
Fe I
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0.6
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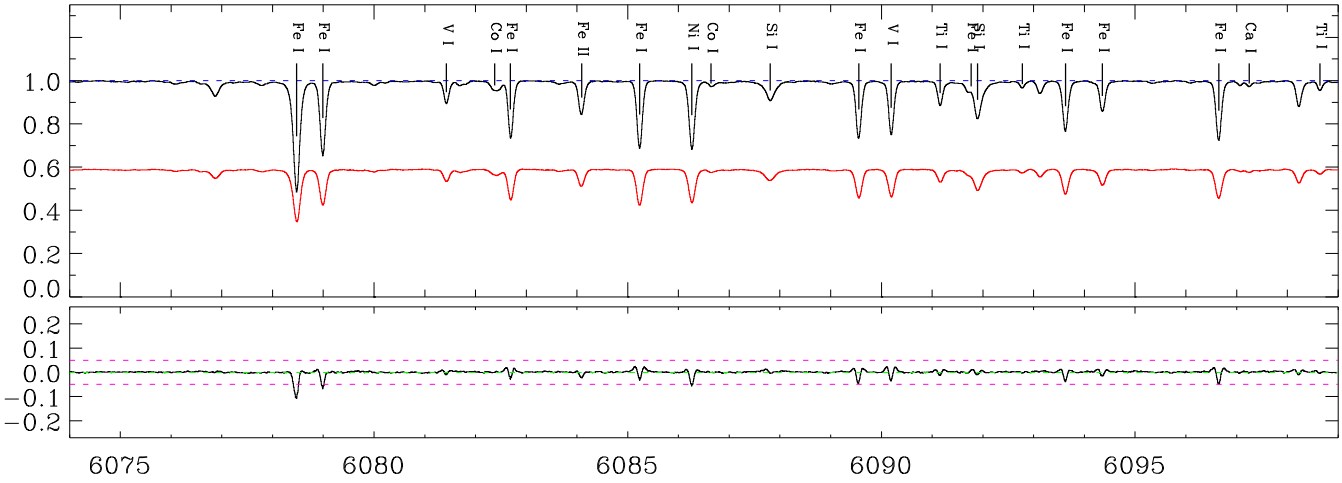
Fe I
Fe I
V I
Co I
Fe I
Fe II
Fe I
Ni I
Co I
Si I
Fe I
V I
Ti I
Si I
Fe I
Ti I
Fe I
Fe I
Fe I
Ca I
Ti I
1.0
0.8
0.6
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−0.2
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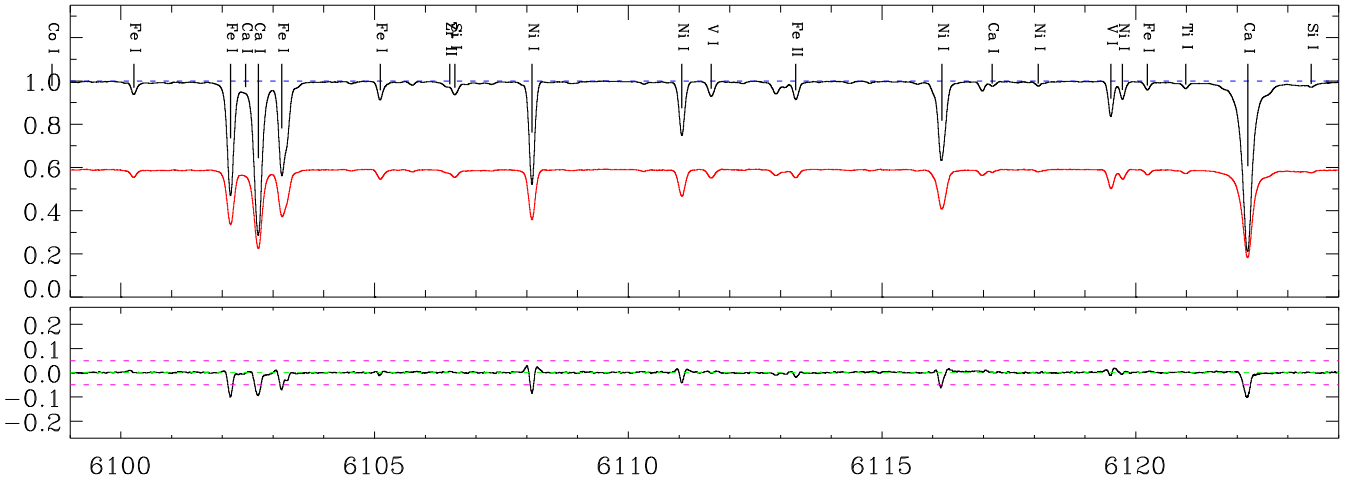
Co I
Fe I
Fe I
Ca I
Ca I
Fe I
Fe I
Si I
Ni I
Ni I
V I
Fe II
Ni I
Ca I
Ni I
Ni I
V I
Fe I
Ti I
Ca I
Si I
1.0
0.8
0.6
0.4
0.2
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0.2
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0.0
−0.1
−0.2
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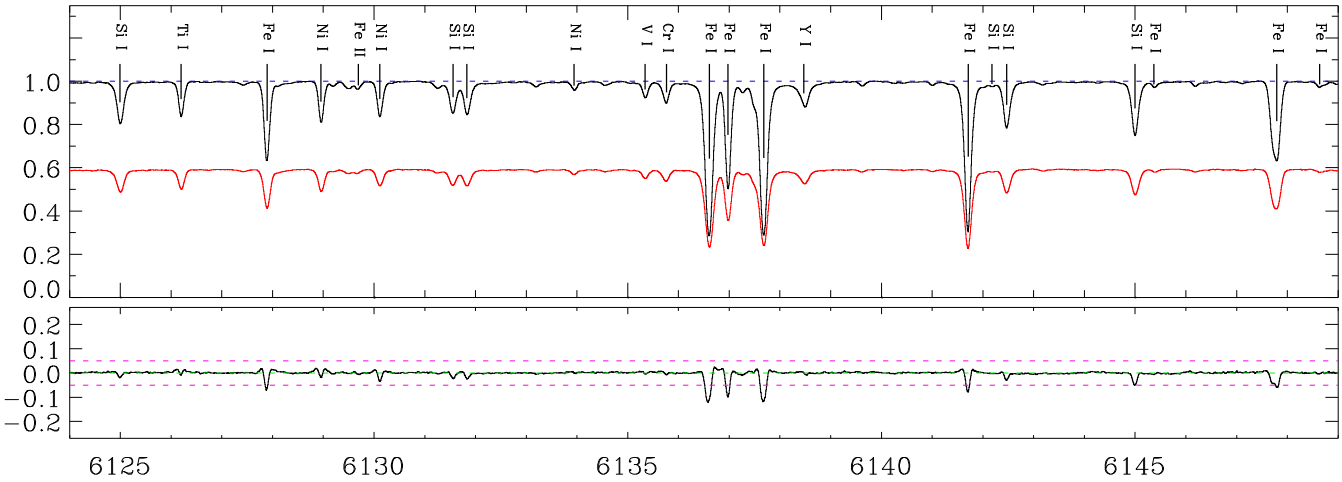
Si I
Ti I
Fe I
Ni I
Fe II
Ni I
Si I
Si I
Ni I
V I
Cr I
Fe I
Fe I
Fe I
Y I
Fe I
Si I
Si I
Fe I
Fe I
Fe I
1.0
0.8
0.6
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0.2
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−0.2
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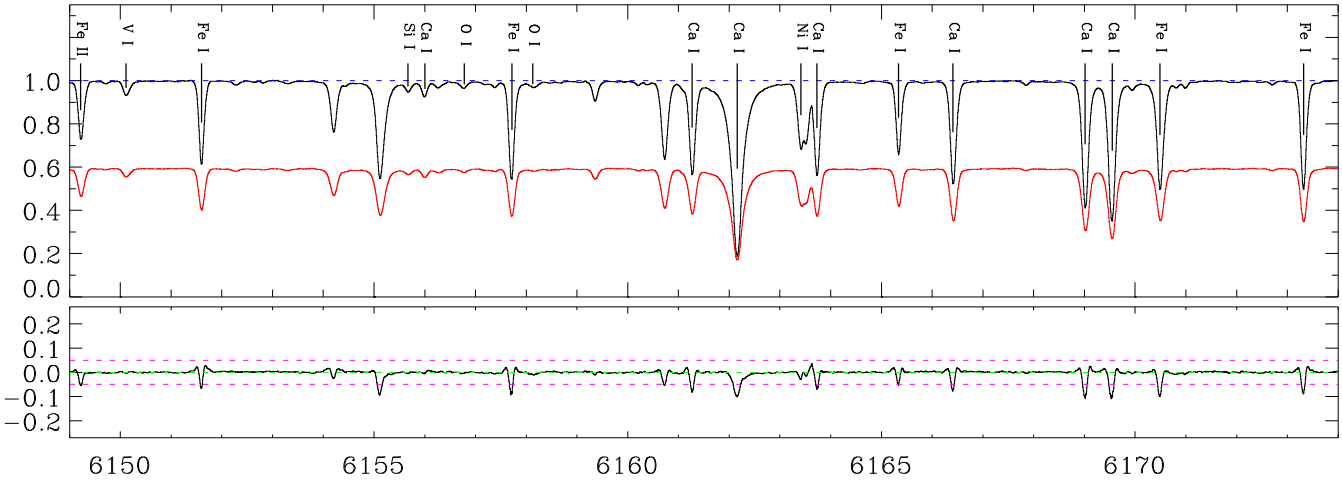
Fe II
V I
Fe I
Si I
Ca I
O I
Fe I
O I
Ca I
Ca I
Ni I
Ca I
Fe I
Ca I
Ca I
Ca I
Fe I
Fe I
1.0
0.8
0.6
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0.2
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0.2
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−0.2
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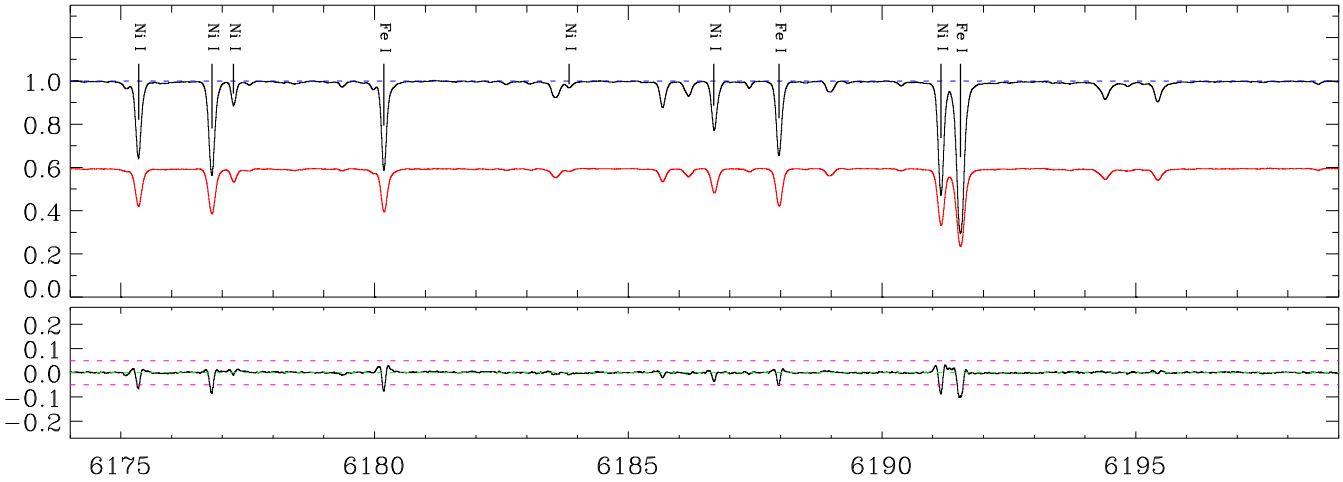
6170


Ni I
Ni I
Ni I
Fe I
Ni I
Ni I
Fe I
Ni I
Fe I
1.0
0.8
0.6
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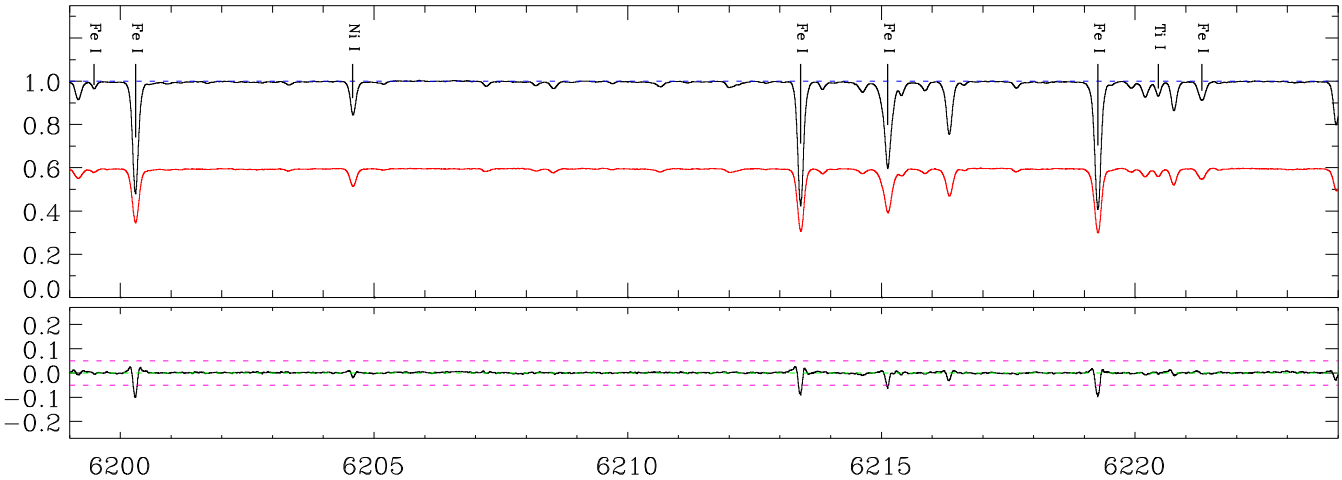
6195


Fe I
Fe I
Ni I
Fe I
Fe I
Fe I
Ti I
Fe I
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0.8
0.6
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−0.2
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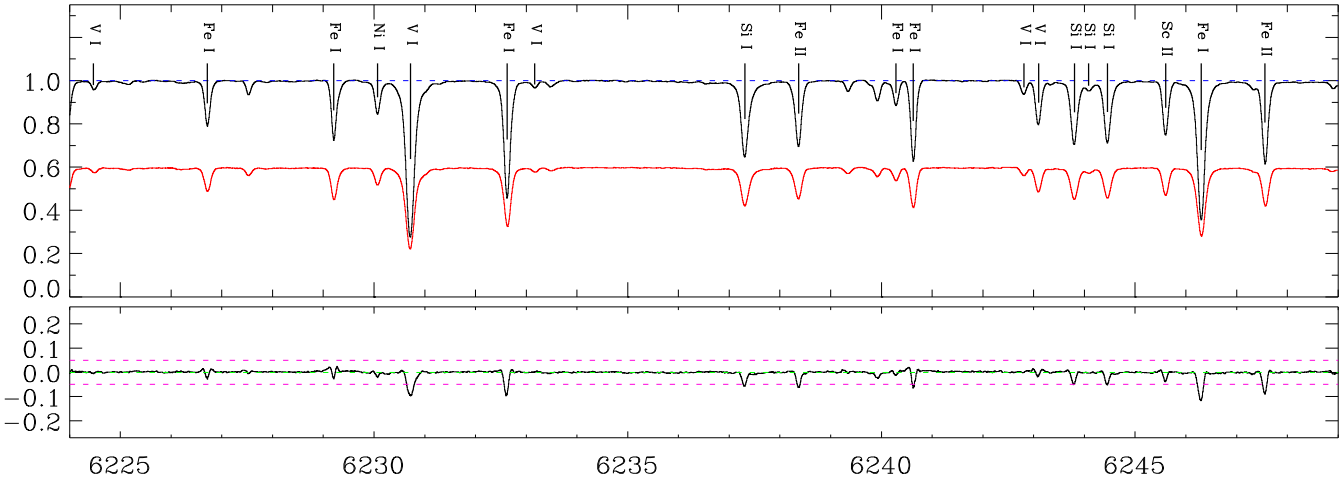
V I
Fe I
Fe I
Ni I
V I
Fe I
V I
Si I
Fe II
Fe I
Fe I
V I
V I
Si I
Si I
Si I
Sc II
Fe I
Fe II
1.0
0.8
0.6
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−0.2
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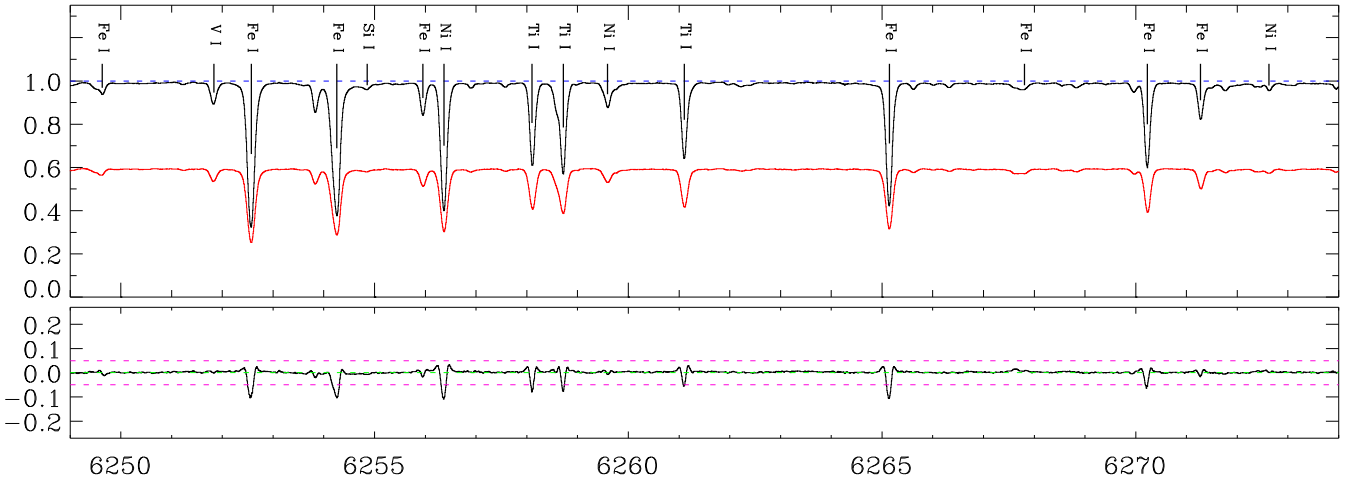
Fe I
V I
Fe I
Fe I
Si I
Fe I
Ni I
Ti I
Ti I
Ni I
Ti I
Fe I
Fe I
Fe I
Fe I
Ni I
1.0
0.8
0.6
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0.2
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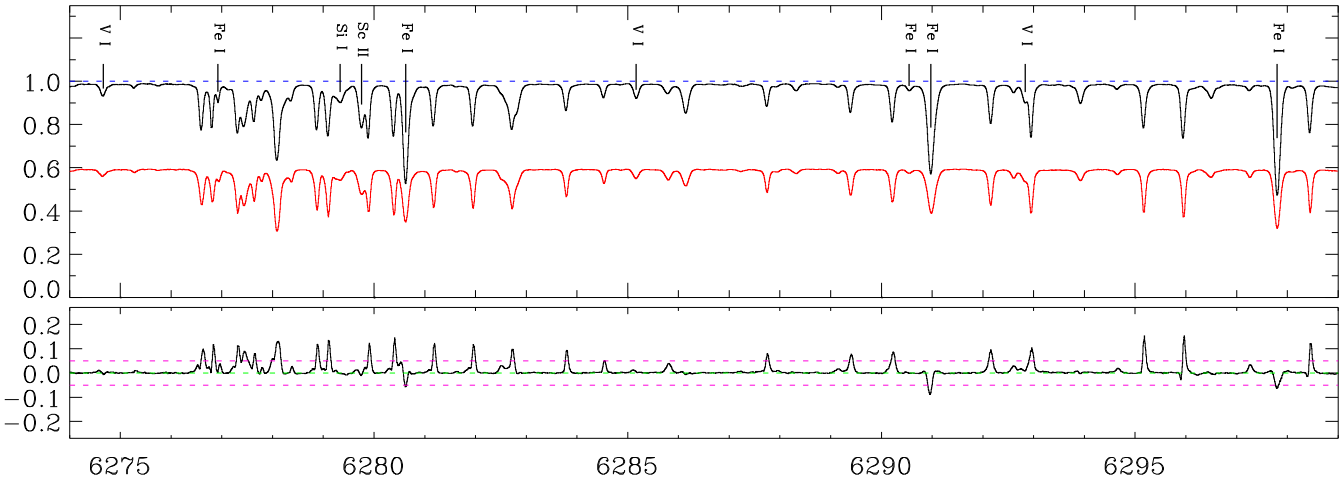
6270


V I
Fe I
Si I
Sc II
Fe I
V I
Fe I
Fe I
V I
Fe I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
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6280
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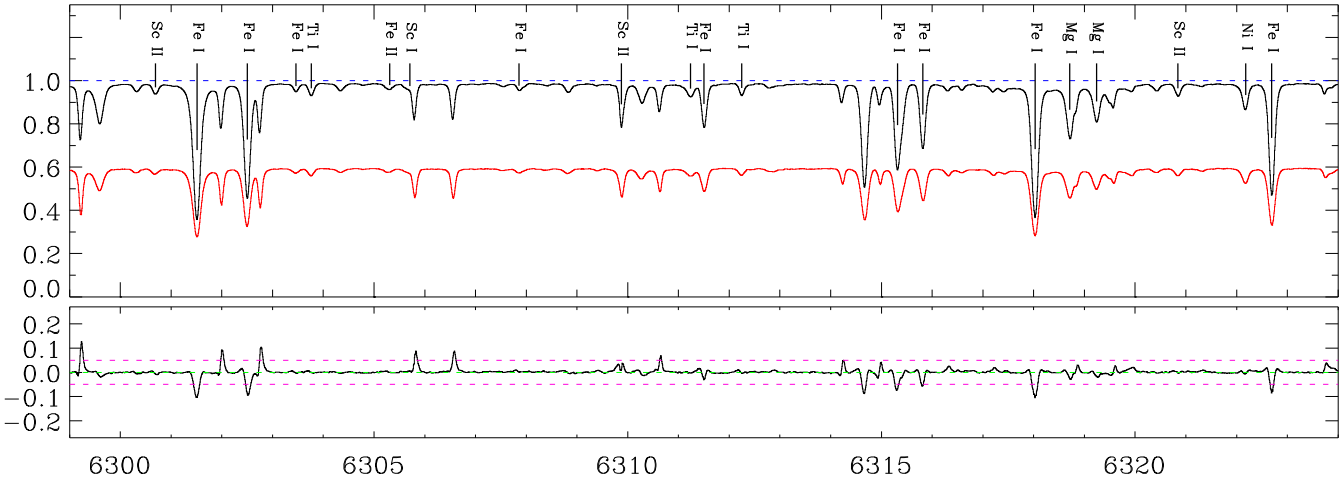
6290
6295


Sc II
Fe I
Fe I
Ti I
Fe I
Fe II
Sc I
Fe I
Sc II
Fe I
Ti I
Ti I
Fe I
Fe I
Fe I
Mg I
Mg I
Sc II
Ni I
Fe I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
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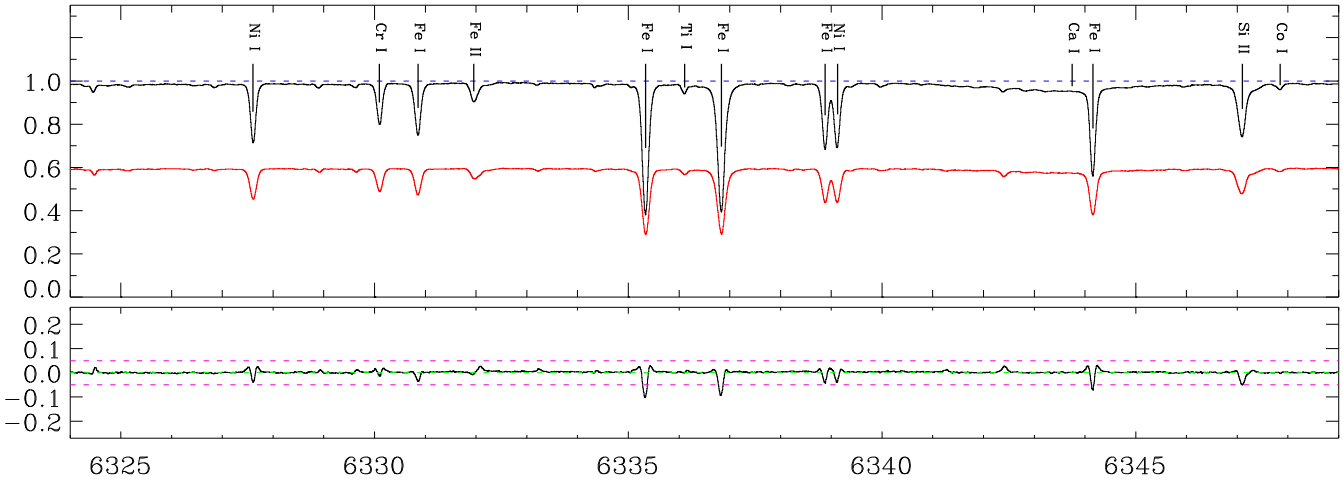
6305
6310
6315
6320


Ni I
Cr I
Fe I
Fe II
Fe I
Ti I
Fe I
Ni I
Fe I
Ca I
Fe I
Si II
Co I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
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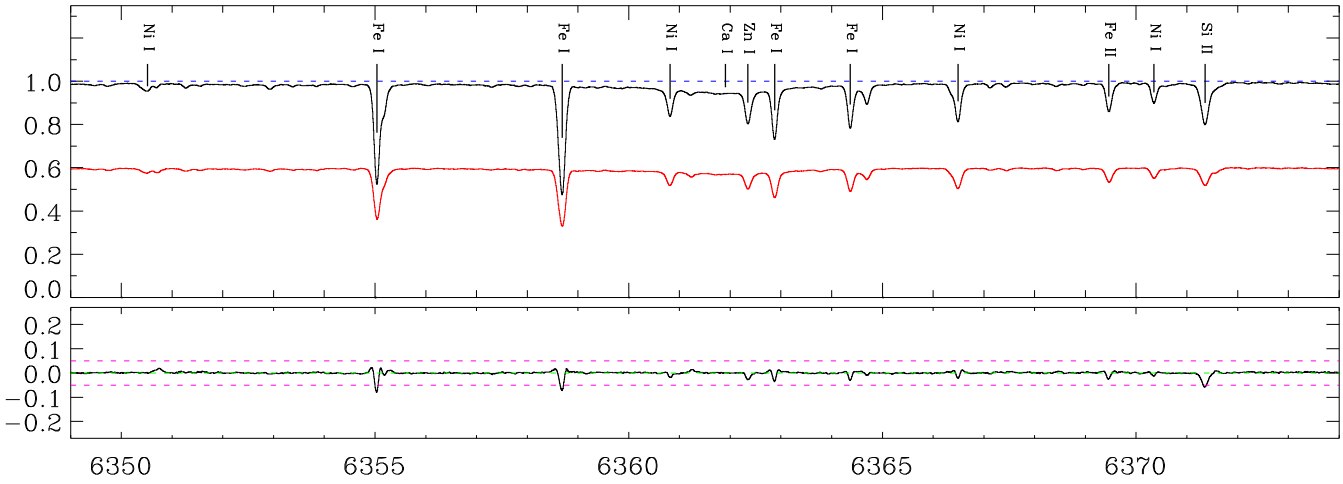
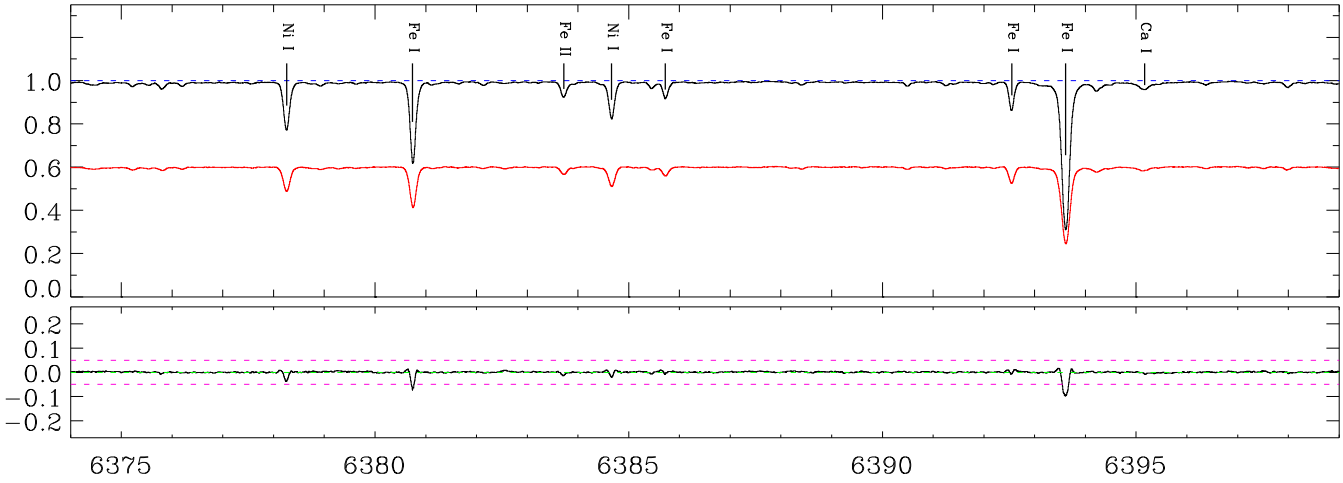
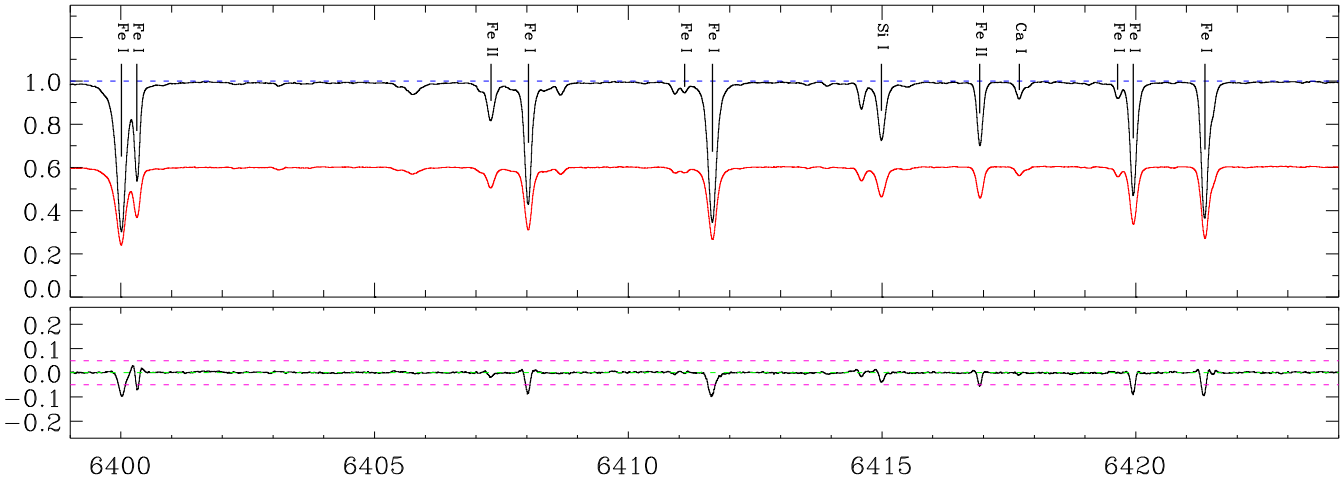
6330
6335
6340
6345


Ni I
Fe I
Fe I
Ni I
Ca I
Zn I
Fe I
Fe I
Ni I
Fe II
Ni I
Si II
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
6350
6355
6360
6365
6370


Ni I
Fe I
Fe II
Ni I
Fe I
Fe I
Fe I
Ca I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
6375
6380
6385
6390
6395


Fe I
Fe I
Fe I
Fe II
Fe I
Fe I
Fe I
Si I
Fe II
Ca I
Fe I
Fe I
Fe I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
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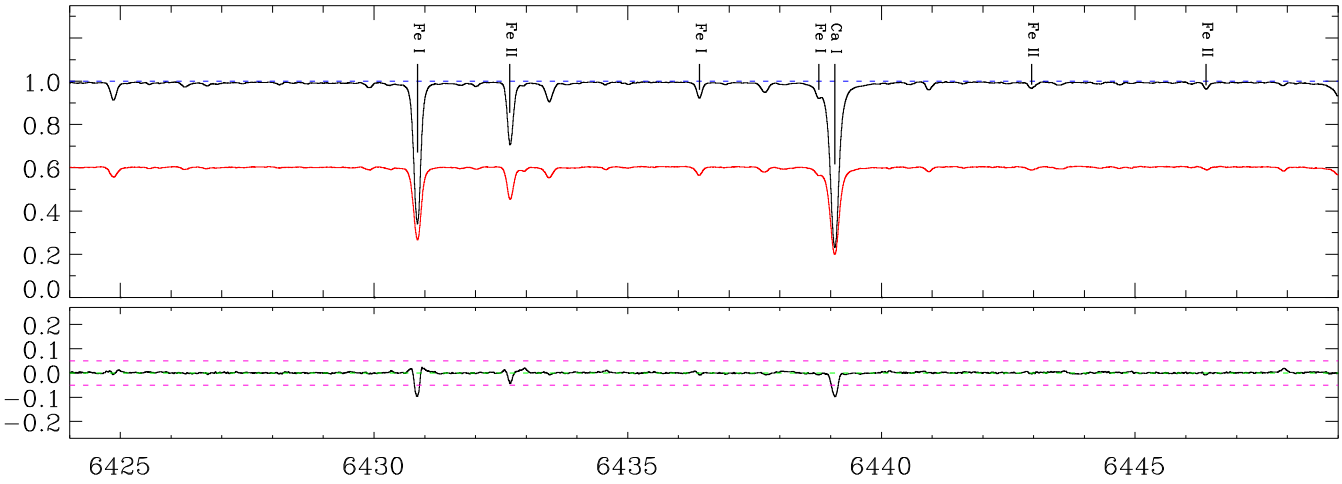
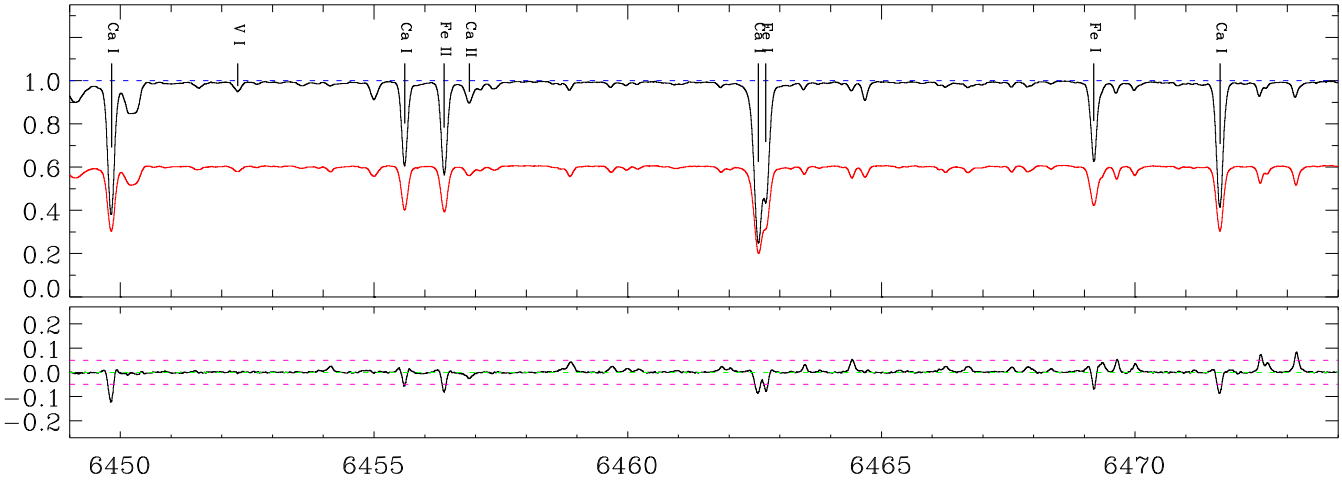
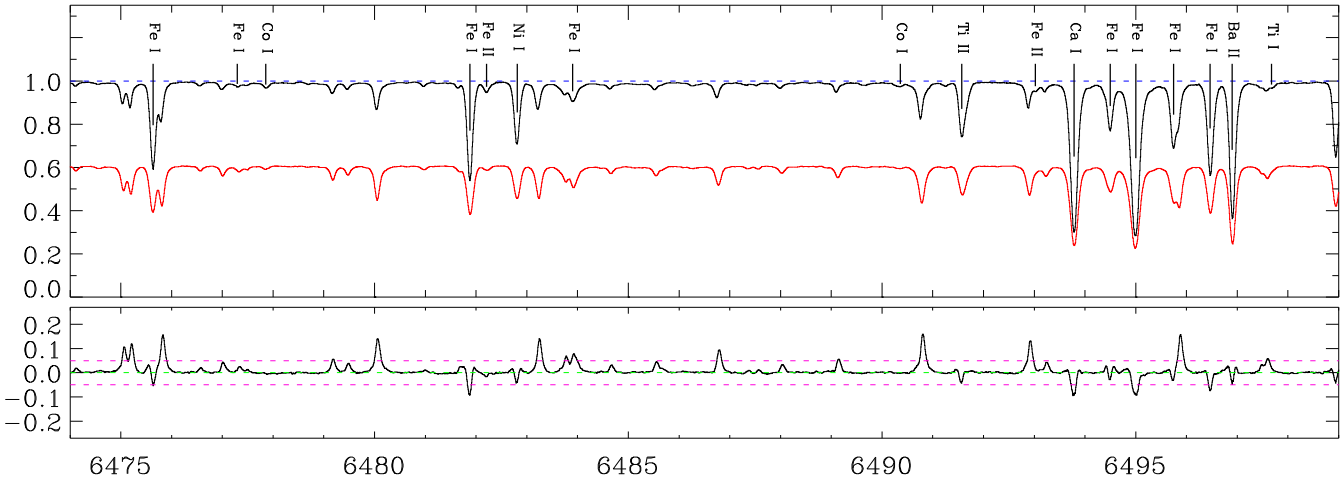
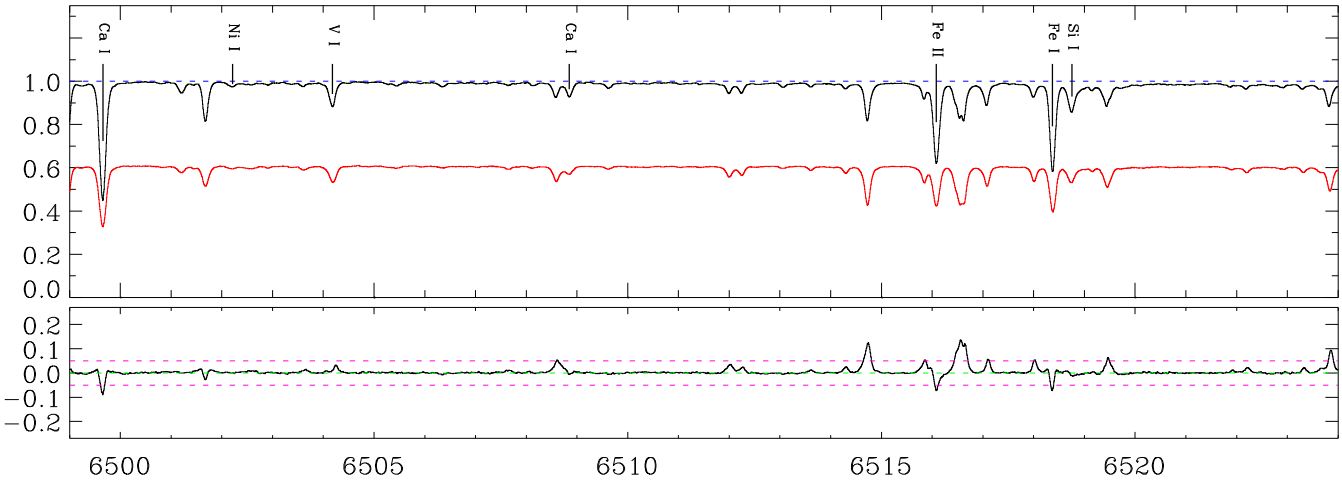
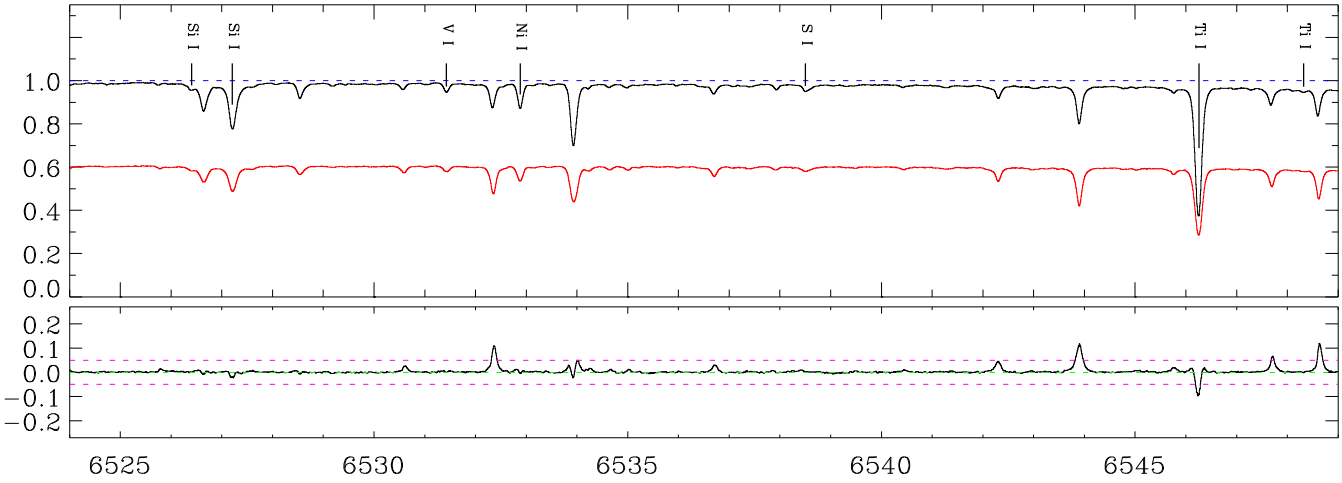
6405
6410
6415
6420


Fe I
Fe II
Fe I
Fe I
Ca I
Fe II
Fe II
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
6425
6430
6435
6440
6445


Ca I
V I
Ca I
Fe II
Ca II
Ca I
Fe I
Fe I
Ca I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
6450
6455
6460
6465
6470


Fe I
Fe I
Co I
Fe I
Fe II
Ni I
Fe I
Co I
Ti II
Fe II
Ca I
Fe I
Fe I
Fe I
Fe I
Ba II
Ti I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
6475
6480
6485
6490
6495


Ca I
Ni I
V I
Ca I
Fe II
Fe I
Si I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
6500
6505
6510
6515
6520


Si I
Si I
V I
Ni I
S I
Ti I
Ti I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
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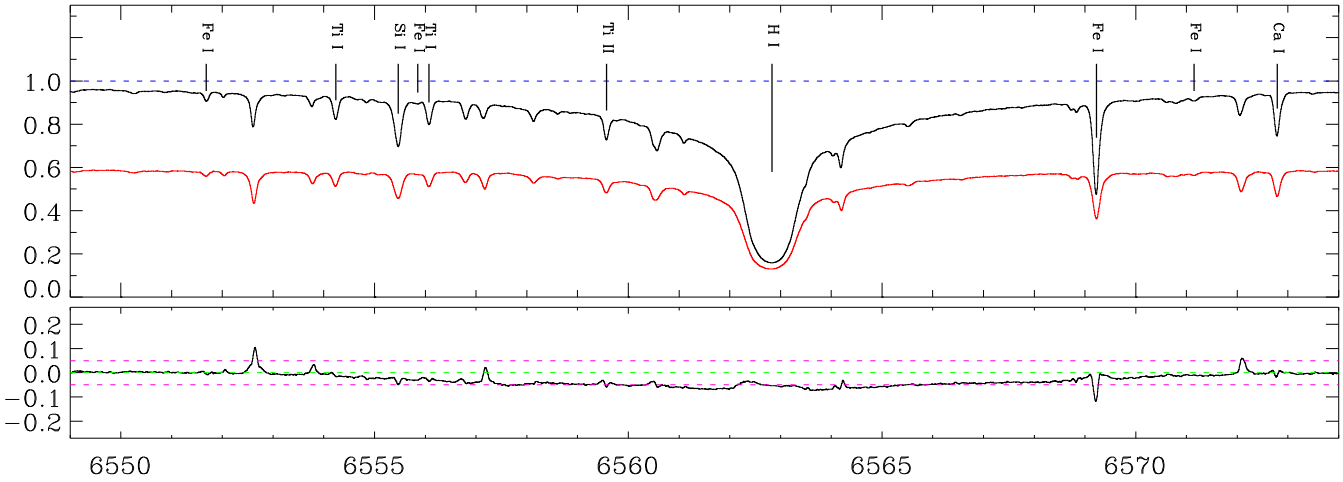
6535
6540
6545


Fe I
Ti I
Si I
Ti I
Fe I
Ti II
H I
Fe I
Fe I
Ca I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
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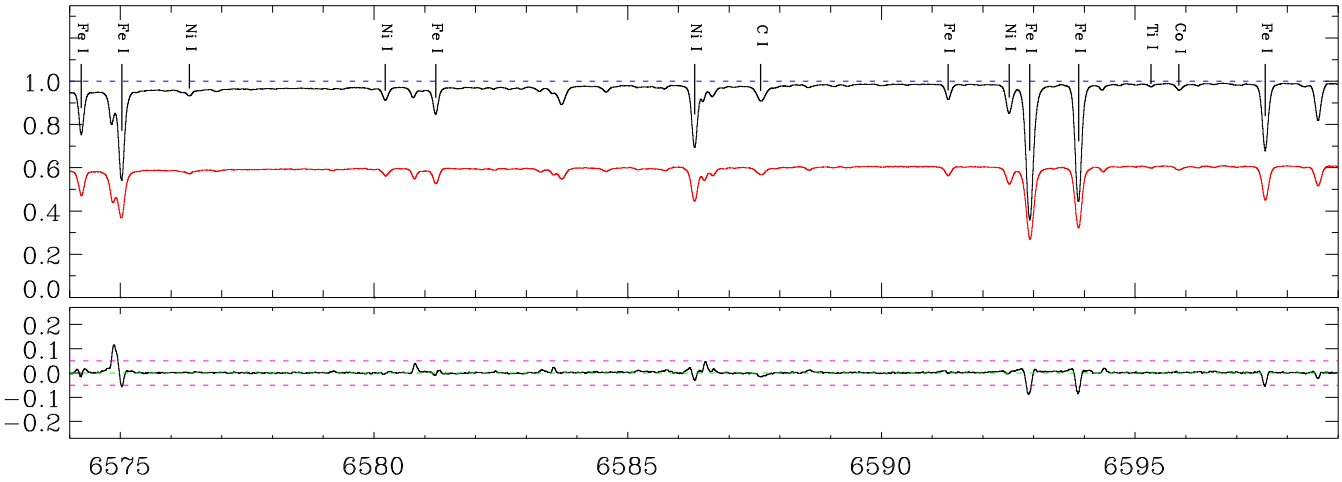
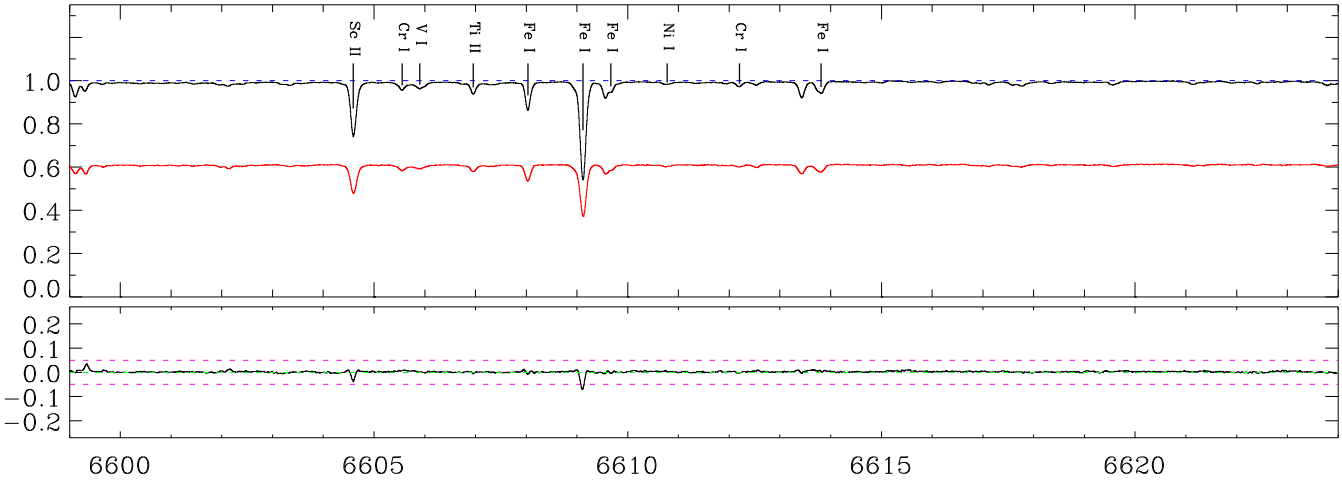
6555
6560
6565
6570


Fe I
Fe I
Ni I
Ni I
Fe I
Ni I
C I
Fe I
Ni I
Fe I
Fe I
Ti I
Co I
Fe I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
6575
6580
6585
6590
6595


Sc II
Cr I
V I
Ti II
Fe I
Fe I
Fe I
Ni I
Cr I
Fe I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
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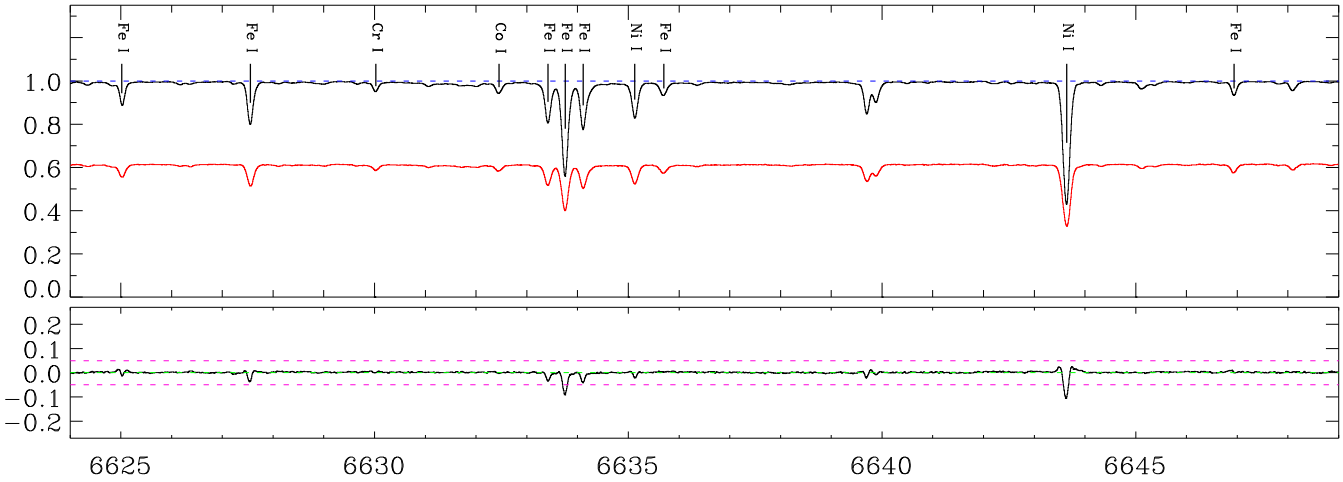
6605
6610
6615
6620


Fe I
Fe I
Cr I
Co I
Fe I
Fe I
Fe I
Fe I
Ni I
Fe I
Ni I
Fe I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
6625
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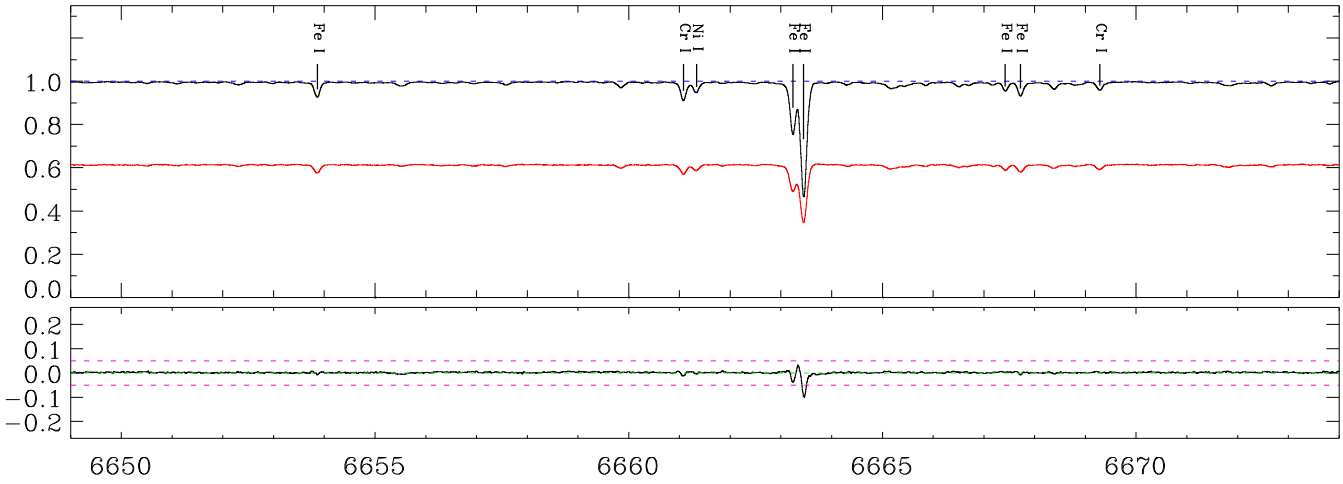
6635
6640
6645


Fe I
Ni I
Cr I
Fe I
Fe I
Fe I
Cr I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
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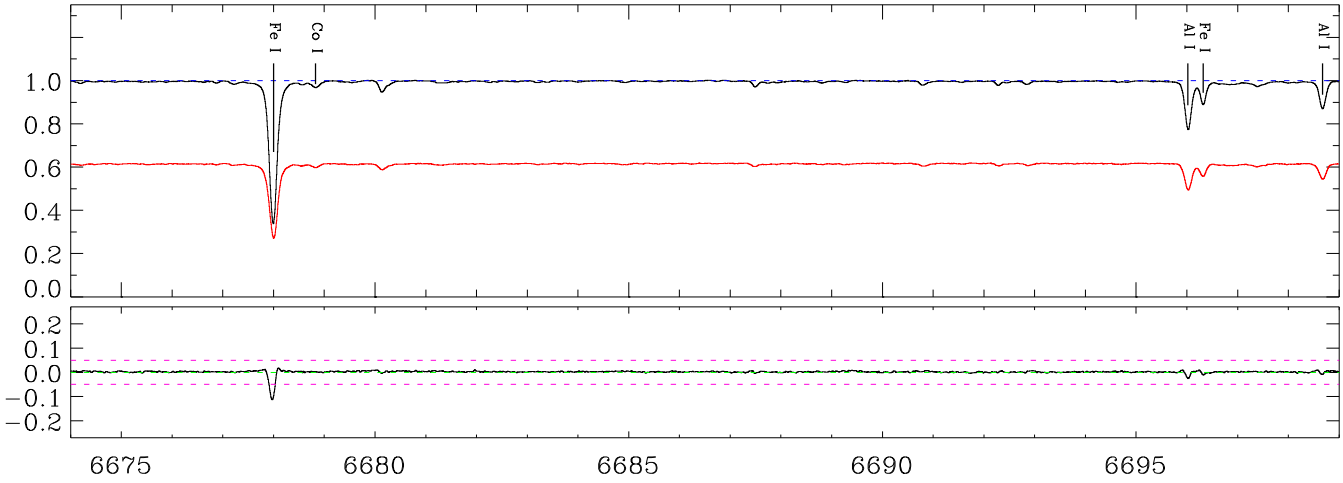
6660
6665
6670


Fe I
Co I
Fe I
Al I
Al I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
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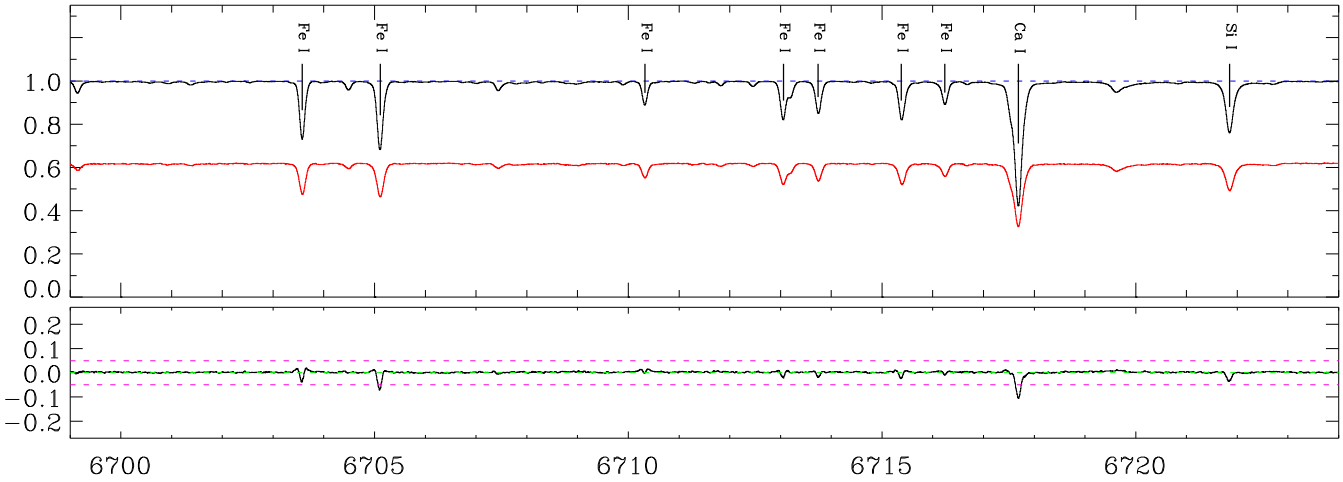
6685
6690
6695


Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
Ca I
Si I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
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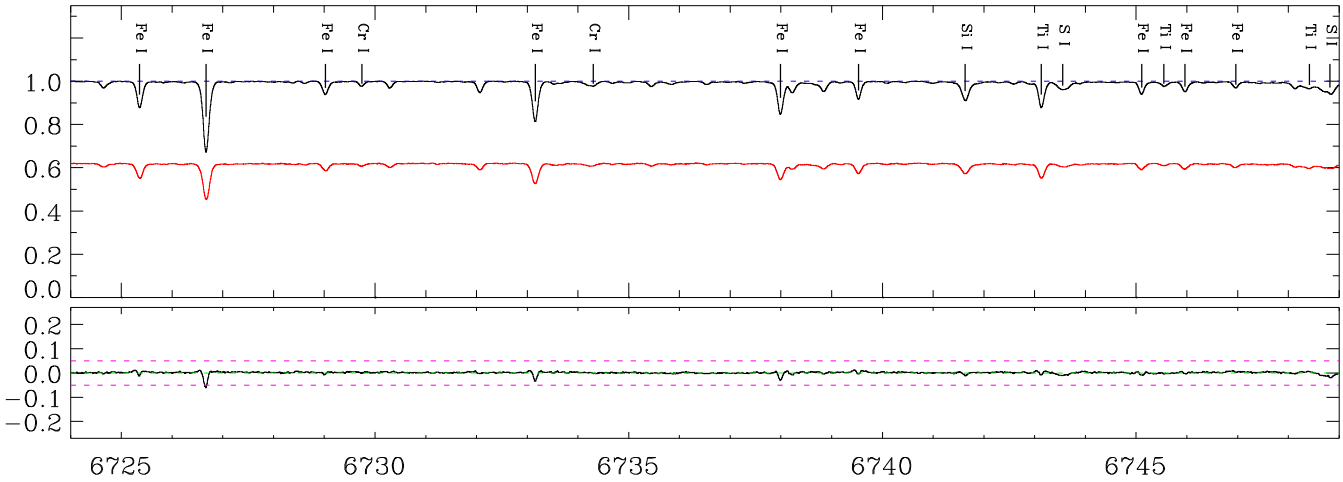
6705
6710
6715
6720


Fe I
Fe I
Fe I
Cr I
Fe I
Cr I
Fe I
Fe I
Si I
Ti I
S I
Fe I
Ti I
Fe I
Fe I
Ti I
Si I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
6725
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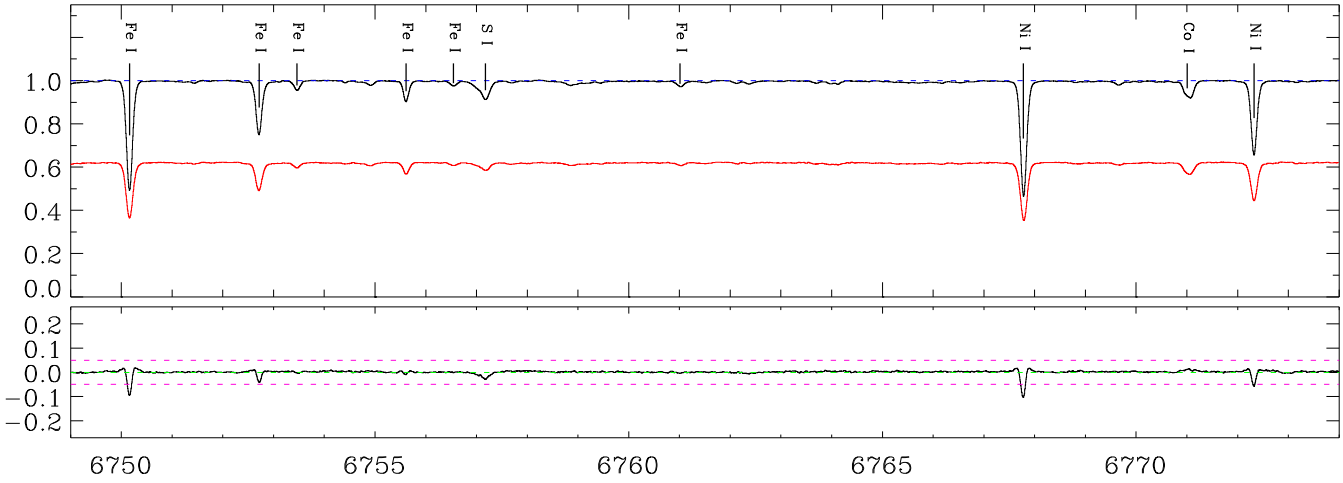
6735
6740
6745


Fe I
Fe I
Fe I
Fe I
Fe I
S I
Fe I
Ni I
Co I
Ni I
1.0
0.8
0.6
0.4
0.2
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0.2
0.1
0.0
−0.1
−0.2
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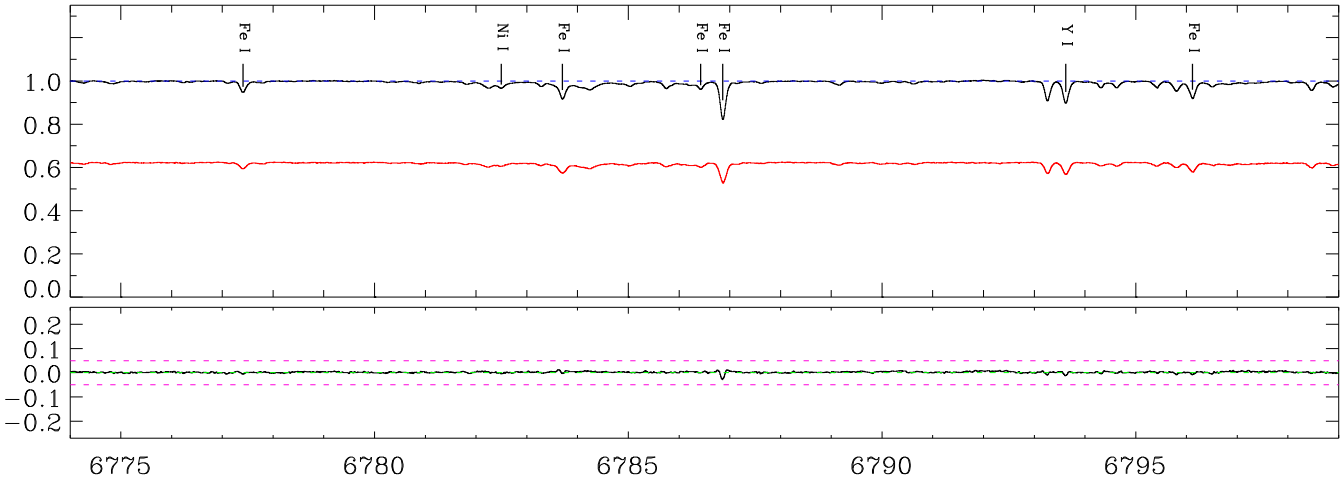
6765
6770


Fe I
Ni I
Fe I
Fe I
Fe I
Y I
Fe I
1.0
0.8
0.6
0.4
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0.2
0.1
0.0
−0.1
−0.2
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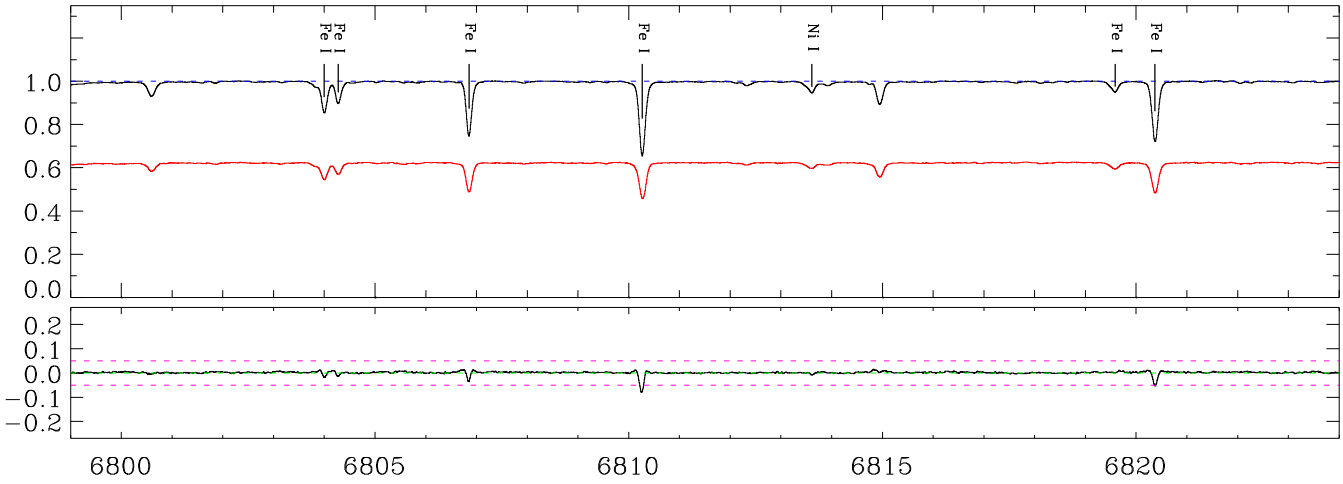
6795


Fe I
Fe I
Fe I
Fe I
Ni I
Fe I
Fe I
1.0
0.8
0.6
0.4
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0.2
0.1
0.0
−0.1
−0.2
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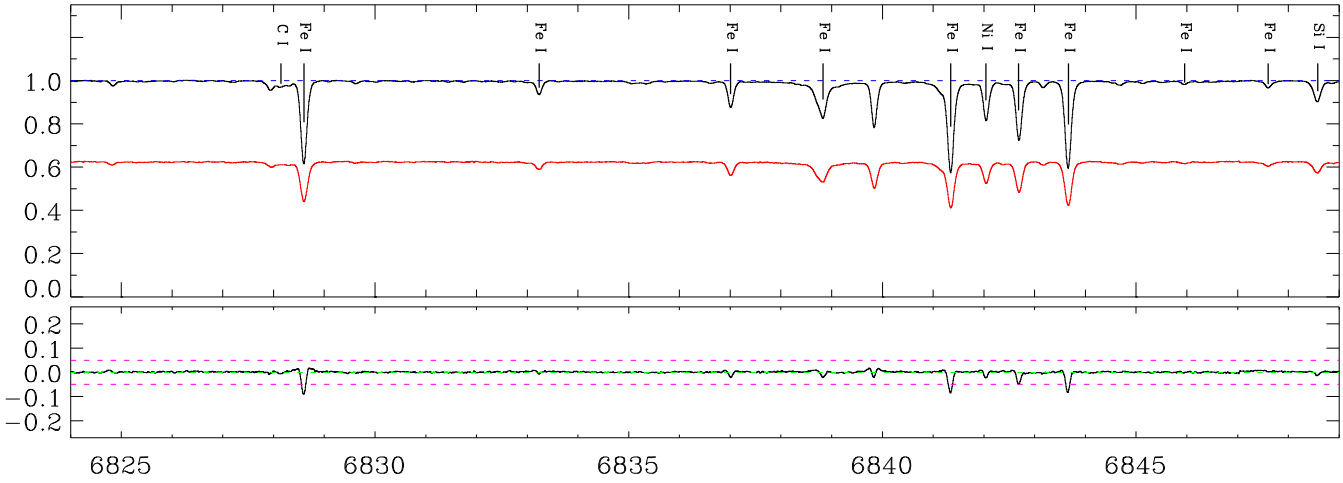
6820


C I
Fe I
Fe I
Fe I
Fe I
Fe I
Ni I
Fe I
Fe I
Fe I
Fe I
Si I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
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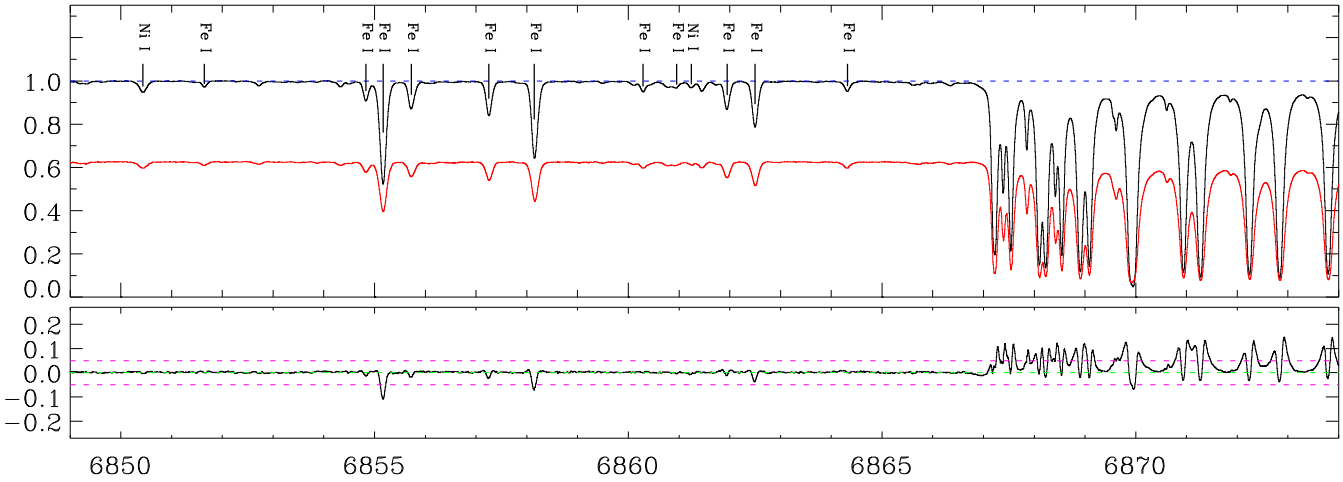
6840
6845


Ni I
Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
Ni I
Fe I
Fe I
Fe I
Fe I
Fe I
1.0
0.8
0.6
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0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
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6855
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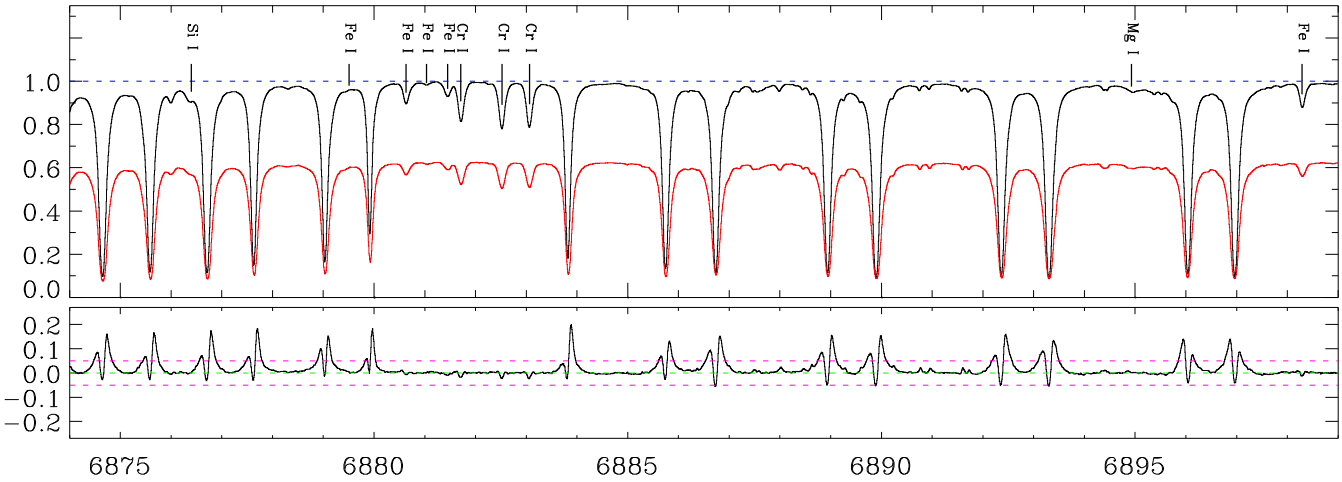
6865
6870


Si I
Fe I
Fe I
Fe I
Cr I
Fe I
Cr I
Cr I
Mg I
Fe I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
6875
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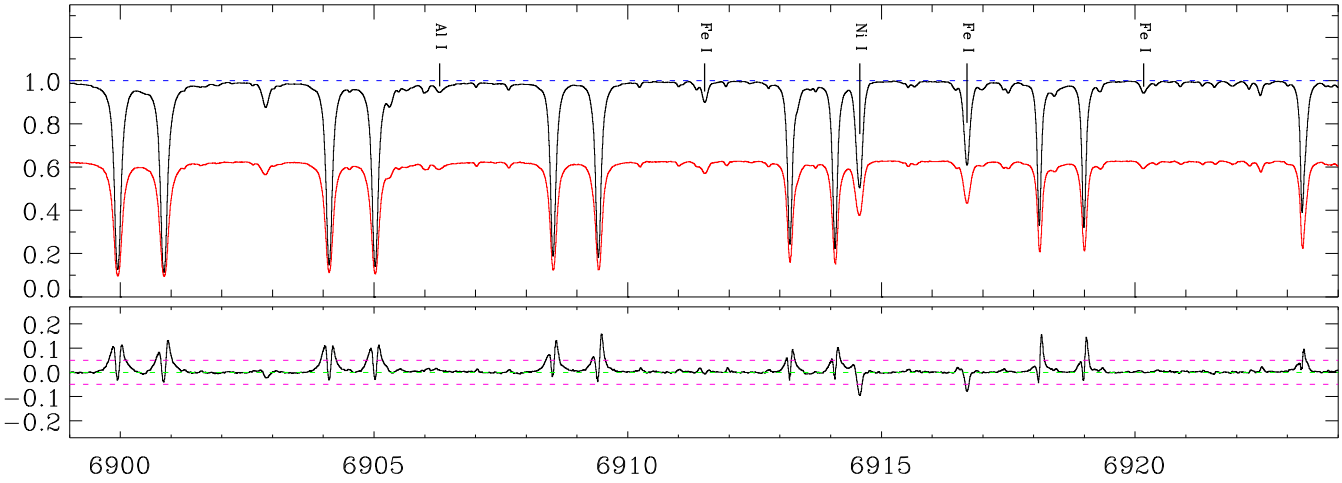
6885
6890
6895


Al I
Fe I
Ni I
Fe I
Fe I
1.0
0.8
0.6
0.4
0.2
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0.2
0.1
0.0
−0.1
−0.2
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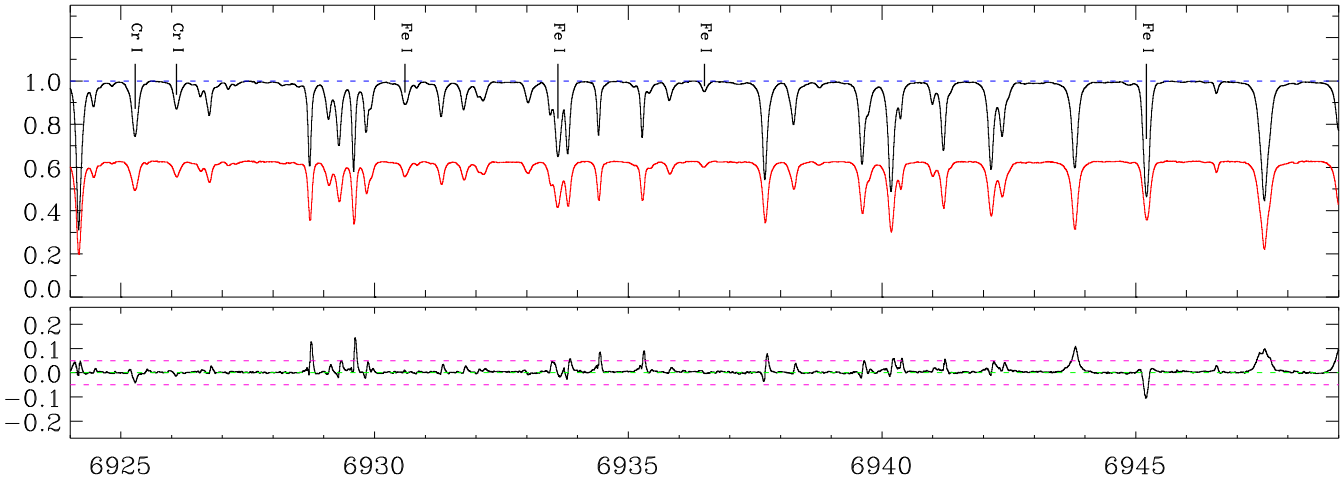
6910
6915
6920


Cr I
Cr I
Fe I
Fe I
Fe I
Fe I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
6925
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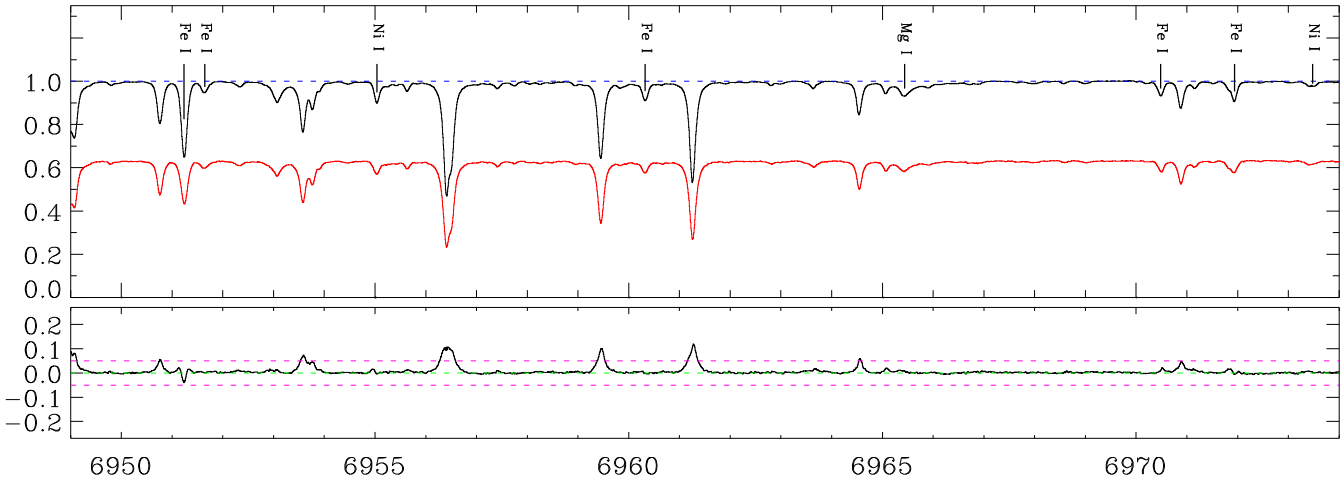
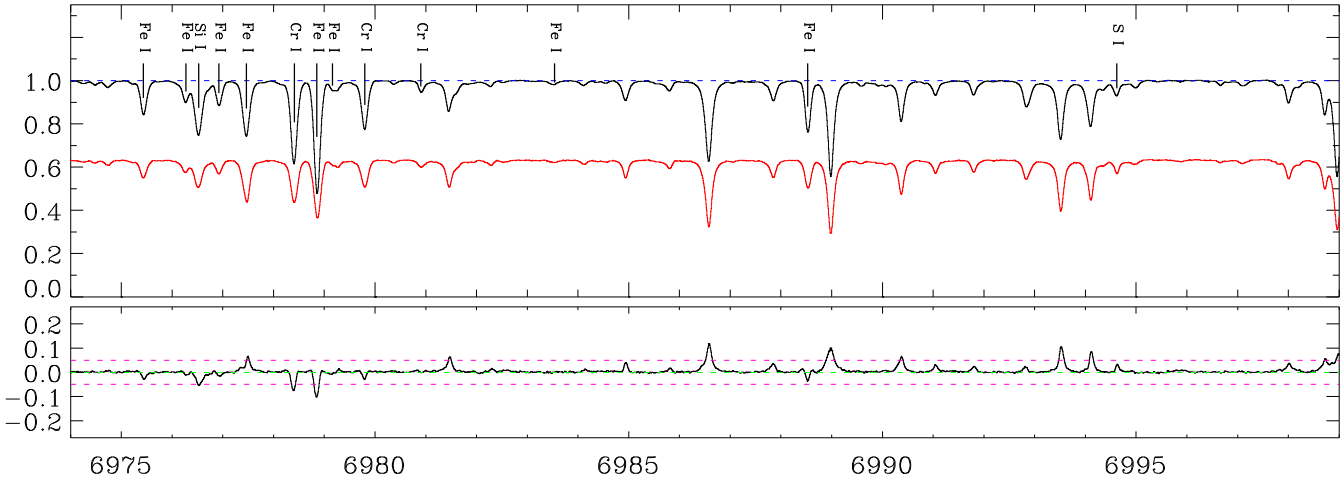
6935
6940
6945


Fe I
Fe I
Ni I
Fe I
Mg I
Fe I
Fe I
Ni I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
6950
6955
6960
6965
6970


Fe I
Fe I
Si I
Fe I
Fe I
Cr I
Fe I
Fe I
Cr I
Cr I
Fe I
Fe I
S I
1.0
0.8
0.6
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0.2
0.1
0.0
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−0.2
6975
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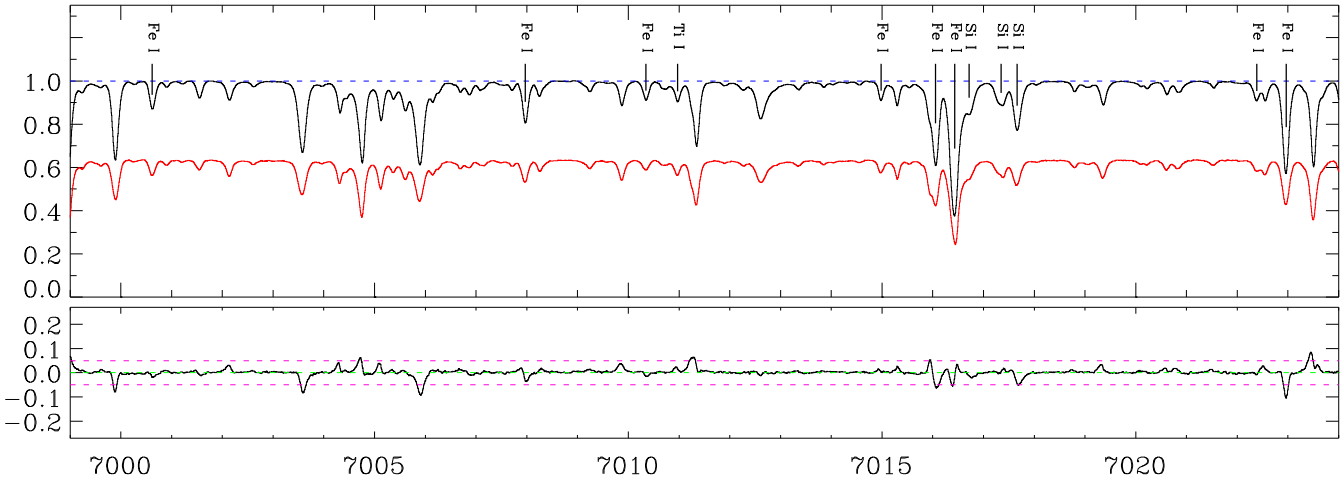
6985
6990
6995


Fe I
Fe I
Fe I
Ti I
Fe I
Fe I
Fe I
Si I
Si I
Si I
Fe I
Fe I
1.0
0.8
0.6
0.4
0.2
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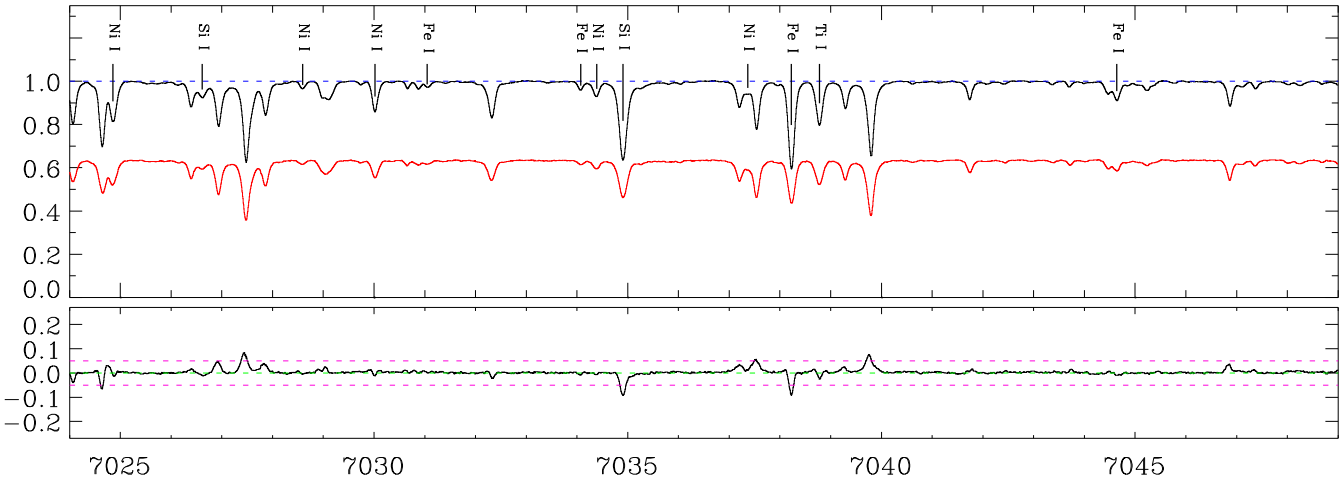
0.2
0.1
0.0
−0.1
−0.2
7000
7005
7010
7015
7020


Ni I
Si I
Ni I
Ni I
Fe I
Fe I
Ni I
Si I
Ni I
Fe I
Ti I
Fe I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
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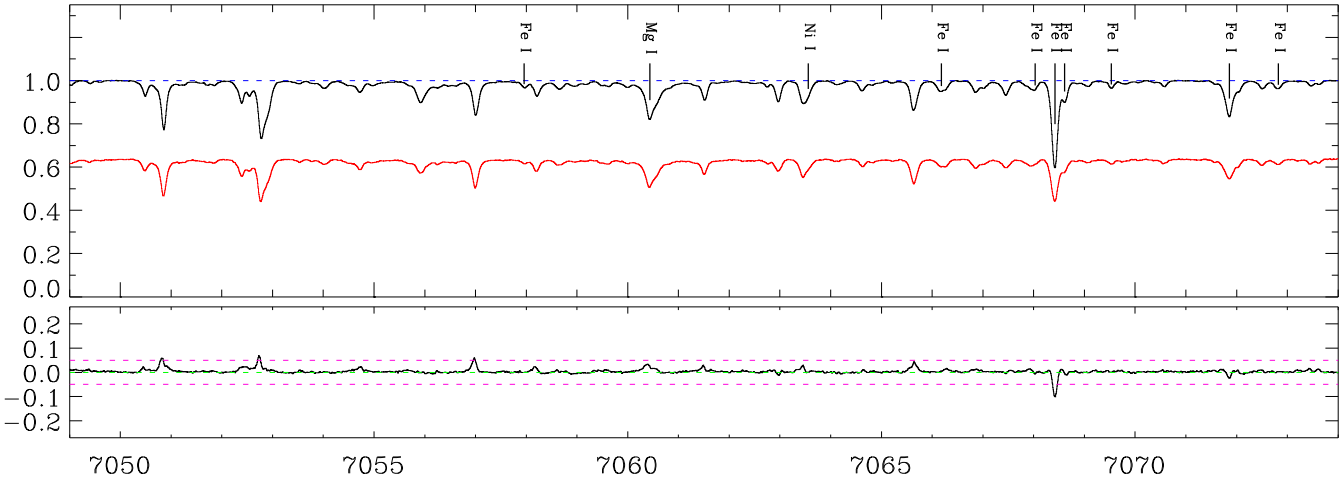
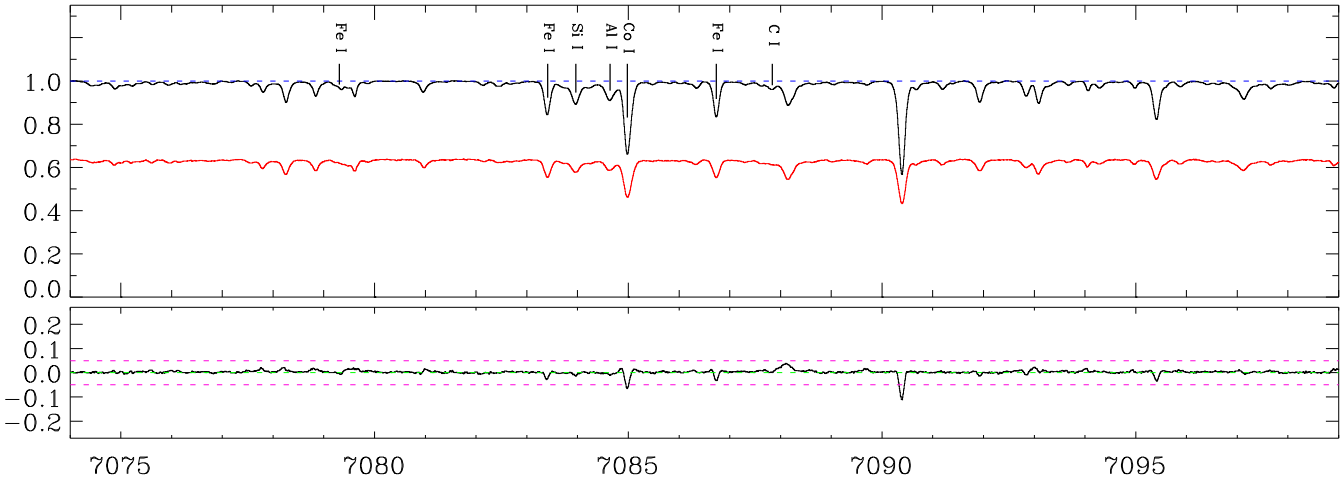
7035
7040
7045


Fe I
Mg I
Ni I
Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
Fe I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
7050
7055
7060
7065
7070


Fe I
Fe I
Si I
Al I
Co I
Fe I
C I
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.1
0.0
−0.1
−0.2
7075
7080
7085
7090
7095