

## FUSE Spectra of Sk 80, an O7 Supergiant in the Small Magellanic Cloud

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**Abstract.** We present far-UV spectra (910-1190Å) of Sk 80, an O7 supergiant in the Small Magellanic Cloud, observed by the FUSE satellite during its In-Orbit Checkout phase. The spectra reveal many interstellar absorption lines, including H<sub>2</sub>, and O VI, and several key stellar wind features.

### 1. Observations and Results

The FUSE satellite was launched in June 1999 and is described by Sonneborn et al. (this volume). Sk 80 (=AV 232, spectral type O7 Iaf) was observed by FUSE in September and October 1999. The FUSE spectra of SK 80 cover the full wavelength range of the FUSE instrument. The stellar wind lines present in the FUV spectrum of Sk 80 include S VI 933-944, C III 977, N III 990, S IV 1062-1073, and P V 1118-1128. Interstellar absorption lines are present from Milky Way gas as well as from the SMC. Species detected include HI, NI, OI, C II, CIII, Fe II, Ar I, P II, SiII, O VI, and H<sub>2</sub>. The H I Lyman series is present up to Ly-8 923.15 Å before overlapping of higher series lines obliterates discernable features. Molecular hydrogen is very strong in the spectrum of Sk 80. The FUSE spectra of Sk 80 are shown in Fig. 1

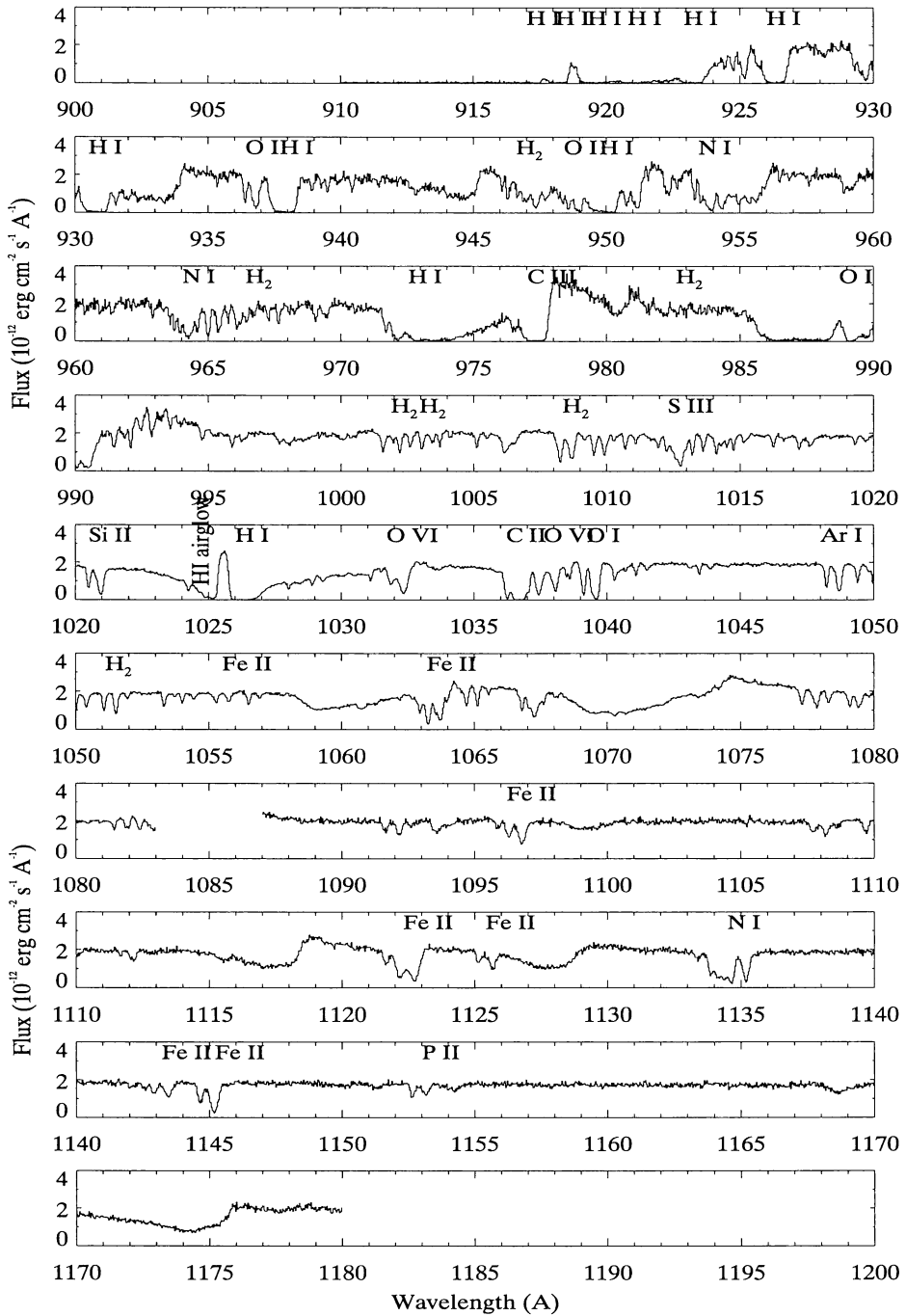


Figure 1. FUSE spectra of Sk 80. Some of the principal interstellar lines are indicated.