

tribution from the interstellar matter. There should be noted, however, that the UVB colour excess looks surprisingly low and a certain caution would be appropriate. Furthermore, the H and K lines are slightly doubled, and the Doppler displacement for one of the components apparently coincides with that for the majority of the assumed stellar lines. In other cases of double-line appearances it is probably near at hand to interpret the phenomenon as a disturbance from a ghost rather than from a real Doppler shift.

4. Also in cases where a single line tends to show significant individual Doppler shift, one should in the first instance suspect some kind of blend effect.

When time-variation of the Doppler shift is concerned, there are certain differences between the mean values for the various nights of observation but, unfortunately, the overall accuracy is not high enough to convince us with certainty that these differences are really significant. The average radial velocities obtained were (when corrected for terrestrial motion)

May 28, 1988	+ 4.98	± 2.75
30	+ 2.03	± 2.45
31	+ 7.00	± 3.00
Feb. 1, 1991	+ 8.48	± 1.00
2	+ 8.64	± 1.52
3	+ 8.97	± 0.90
4	+ 7.85	± 0.80
5	+10.43	± 0.80

As can be seen from the scattering figures, it is hardly advisable to draw any conclusions about long-term variations in the radial velocity, but a very careful study of a few selected lines has given an indication that the relative difference between February 1 and February 5 might be significant.

Well, the present study of the two stars has not led up to any exciting result or definite answer to the question about their possible multiplicity. Epitomizing, however, one could at least vindicate that HD 62623 is probably alone and that HD 96446 is still under serious suspicion of having a baffling component. In no case, of course, we

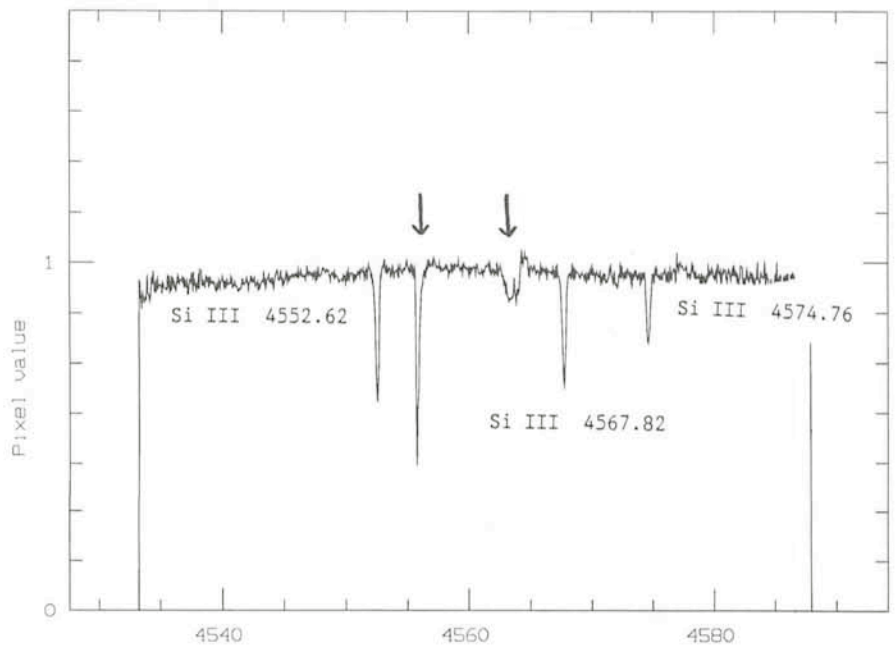


Figure 3: Another section of an ECHLEC spectrum of HD 96446. Here one can see two characteristic delusive spectral features, produced somewhere in the system (arrows).

can exclude the possibility of a malicious component moving nearly perpendicular to the line of sight.

The project itself has been very interesting to carry out and particularly the experience from the use of the ECHLEC spectrograph has been stimulating. Possibly one could object that the reduction procedure with the observational material is a little bit too complicated and time consuming, as well as computer space consuming, in consideration to the outcome, and that the occurrence of false spectral features is still unreasonably frequent.

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Table 2: List of high-temperature lines, identified in the actual investigation but missing in Wolf's list (1973)

3919.279	O II	4092.94	O II	4345.56	O II
3955.851	N II	4095.63	O II	4351.275	O II
3973.266	O II	4110.79	O II	4369.28	O II
4016.104	Si IV	4112.02	O II	4673.71	O I, II
4062.94	O II	4137.63	N I	4677.94	N II
4071.24	O II	4169.23	O II	4703.14	O II
4073.04	N II	4294.74	O II	4788.126	N II
4084.66	O II	4303.78	O II	4803.272	N II
4088.863	Si IV	4336.85	O II		