

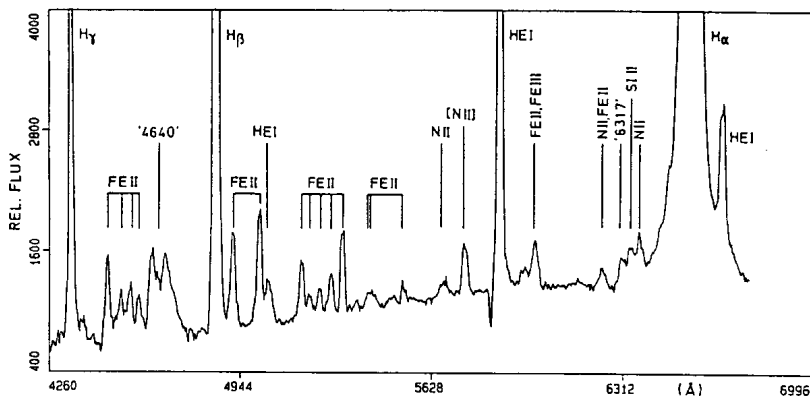
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NOVA OPHIUCHI 1988 MONITORED 2.5 MONTHS AFTER OUTBURST

During the nights of June 21 and 22, 1988 (about 2.5 months after outburst) 12 spectrograms (resolution 4\AA) of Nova Ophiuchi 1988 (V 2214 Oph) were obtained using the Boller & Chivens spectrograph and a CCD detector attached to the 1.52m telescope of the European Southern Observatory at La Silla / Chile. The dominant lines in the recorded wavelength region are Balmer emissions (H_α to H_γ) and He I $\lambda 5876$. H_α is extremely strong and is blended with He I and presumably with N II and [N II] lines. Weaker emissions are mostly due to Fe II but also N II and [N II] are present. All Balmer lines as well as He I $\lambda 5876$ exhibit asymmetric profiles with a pronounced red peak whereas the faint lines are more symmetric. The following values of heliocentric radial velocity (uncertainty about 10 km/s), FWHM, FWZI (all in km/s) and equivalent width (\AA) were derived for the prominent lines: H_α : -144, 1060, 15 000., 6500.; H_β : -71, 950, 3950, 510; H_γ : -28, 985, 3525, 150; He I $\lambda 5876$: -167, 1045, 2760, 90. The five strongest Fe II lines yield a radial velocity of -220 ± 17 km/s. The results for He I $\lambda 6678$ and [N II] $\lambda 5755$ are -247 km/s and -294 km/s respectively. The absorption feature at the blue side of He I $\lambda 5876$ has a velocity of -1840 km/s.



Average spectrum of Nova Ophiuchi 1988 based on observations obtained on June 21 and 22, 1988. It has been truncated to show the weak emission lines.

A few photoelectric measurements obtained on June 23.029 UT using the single-channel standard photometer at the ESO 50cm telescope gave $V=10.915$, $U-B=-0.335$, $B-V=+0.664$, $V-R=+1.822$, $V-I=+1.115$ (uncertainty 0.045 mag in $V-I$, otherwise less than 0.02 mag).

This note may complement spectroscopic and photometric measurements performed by Jablonski et al. (1988) about one week prior to these observations.

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Reference:

Jablonski, F.J., Kirhakos, S.D., Diaz, M.P., Baptista, R.: IAU Circular No. 4619, 1988