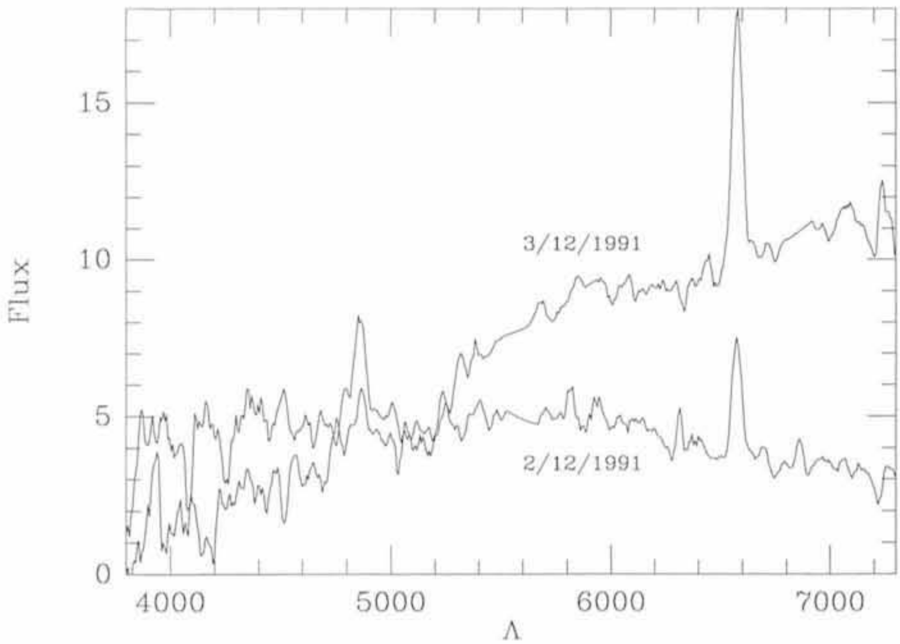

Figure 1: *Two spectra of V616 Mon (A0620-00) taken in December 1991. Fluxes in 10^{-14}erg cm^{-2} sec^{-1} $Å^{-1}$.*

resemble a classical or recurrent nova: the only feature was the late appearance of emission lines quite like those of dwarf novae (Duerbeck 1977). Modelling the physical mechanism powering the outburst of A620-00 and its associate sources has always appeared a challenge because there are problems both with mass overflow instability models implying X-ray heating of the secondary by the compact object (Hameury et al., 1986, 1990), and with disk instability models (Mineshige and Wheeler, 1989, Huang and Wheeler, 1989, Mineshige et al., 1991) that need a higher mass transfer rate to work than the one inferred by Fu and Taam (1989). For a detailed discussion see Haswell, 1992.

Two spectra were obtained on February 18 and 19, 1991, three on December 2, 3 and 4, 1991, and two more at an interval of a few hours on December 5, 1991. Although the two spectra of February are alike and their slope and characteristics appear to match those of Haswell of November 1987 (see Haswell, 1992), the spectrum of December 2 shows that the flux in the red can decrease significantly and re-increase on a time scale of one day (see Fig. 1, where the two spectra were taken at the same orbital phase). On December 5, the decrease of the red flux occurred again, but a second spectrum reappeared "normal" again after a few hours. The luminosity fluctuations in the red region of the spectrum were up to 1 mag (larger amplitude at longer wavelengths?) and the slope of the continuum totally changed (see Fig. 1). Such sudden, irregular variations in the flux and in the slope of the continuum were never noticed before and they were not correlated with the orbital phase. An explanation for the phenomenon could be a sudden variation in the mass transfer rate, causing a shrinking of the disk that appears bluer, but less luminous. However, the contribution of the disk to the total flux does not seem to exceed 15% in any band (Haswell, 1992). These results appear therefore very puzzling and they should be connected also with the secondary star, which must have undergone some kind of instability. For better understanding it is undoubtedly necessary to study possible new spectral variations, monitoring the object regularly. This could offer a key to understanding the complex phenomena that are happening and the mechanism that powers the outbursts, because it is crucial for any model to know if and how there is variability of the mass transfer rate and what is the nature of the disk.

Such serendipitous discoveries of variability, already known not to be infrequent for certain symbiotics and X-ray binaries, can be detected also for classical novae during a survey of this kind and certainly be meaningful to understand the nature of the systems.

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STAFF MOVEMENTS

Arrivals

Europe

BEDDING, Timothy (AUS/GB), Fellow
CONZELMANN, Ralf (D), Designer-Draughtsman (Mechanics)
HAINAUT, Olivier (B), Student
KJELDSEN, Hans (DK), Fellow
RASMUSSEN, Bo (DK), Technician (Software)
RODRIGUEZ ULLOA, Jesus (E), Operation Technician (Remote Control Equipment)

Transfers

ALLAERT, Eric (B), Engineer (Software) (from La Silla to Garching)

Departures

Europe

LIU, Xiaowei (RC), Associate
MAZZALI, Paolo (I), Fellow
PRAT, Serge (F), Mechanical-Project Engineer
STEFL, Stanislav (CS), Associate
VAN MOORSEL, Gustaaf (NL), Scientific Programmer/Analyst
WARREN, Stephen (GB), Fellow
ZEILINGER, Werner (A), Fellow

Erratum (*Messenger* **68,** p. 2, June 1992)

The 6.5-m MMT mentioned in the list of large telescope projects is of course located on Mt. Hopkins, not on Mt. Graham.