

Erratum

Discovery of a coherent 87.65-minute oscillation of the suspected cataclysmic variable NSV 2872 (Aur 2)

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We reported detection of the coherent 87.65 min oscillation of the suspected cataclysmic variable NSV 2872. But, conducting additional observations, we found out that this oscillation is a feature of the comparison star with $\alpha = 06^{\text{h}}14^{\text{m}}07^{\text{s}}.51$ and $\delta = +45^{\circ}25'19''.0$ (J2000), hereafter comp. star 1. From differential photometry it was difficult to decide which of the two stars undergoes this oscillation. In 2001 during one of the observational nights the light-curves filtered at the oscillation frequency had similar phases and showed that the oscillation amplitude of NSV 2872 was appreciably greater. This fact was interpreted as the variability of NSV 2872. However, later we understood that this was not a rigorous proof of the variability of NSV 2872. The real oscillation might be in antiphase to the atmospheric oscillation at this frequency, and therefore the oscillation amplitude of the really variable star might be less. That is why we conducted additional observations using three more comparison stars. The longest differential light-curves obtained by us are presented in Fig. 1. They show that the 87.65 min oscillation belongs to comp. star 1. In November 2006 we obtained observations of comp. star 1 during seven nights. The 87.65 min oscillation revealed the same characteristics. The oscillation period was found equal to (87.61 ± 0.18) min. As before, the oscillation revealed the variable amplitude and distortion of the pulse shape. The power spectrum revealed an increased noise level in the frequency range 0.2–0.4 mHz as well. In the case of NSV 2872, which is a red star, we interpreted this power excess as a sign

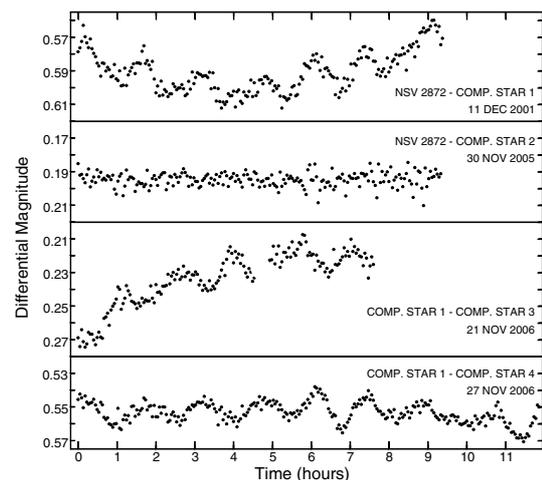


Fig. 1. Light-curves of NSV 2872 and four comparison stars. Smooth changes visible in some light-curves are caused by differential extinction.

of flickering. However, it may also be a sign of unresolved additional oscillation modes because the color of comp. star 1 is typical of δ Sct variables. Further spectroscopic observations may help to resolve this question.