

OAQ/MITSuME photometry of dwarf novae

II. HV Vir and J0120

Akira Imada

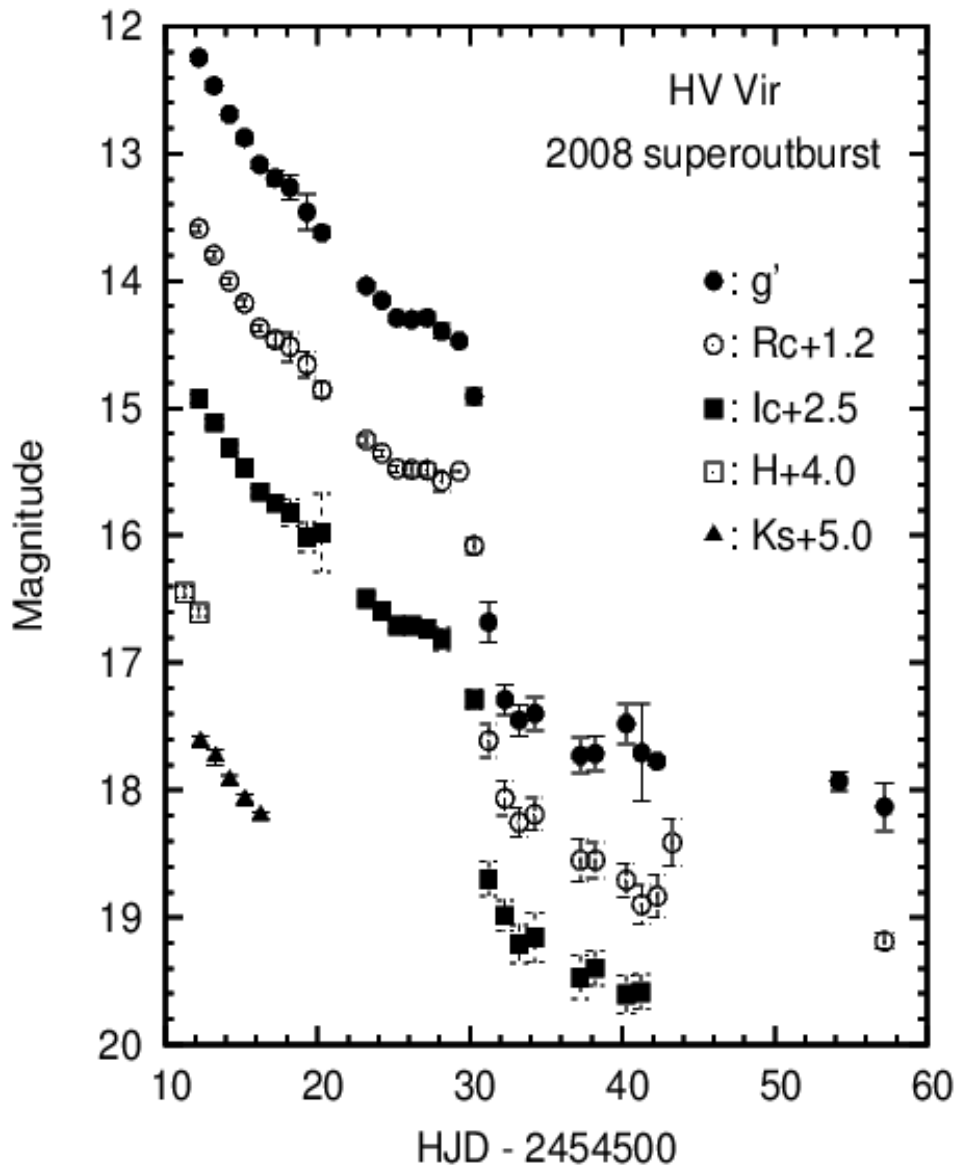
(Okayama Astrophysical Observatory/
National Astronomical Observatory of Japan)

motivation

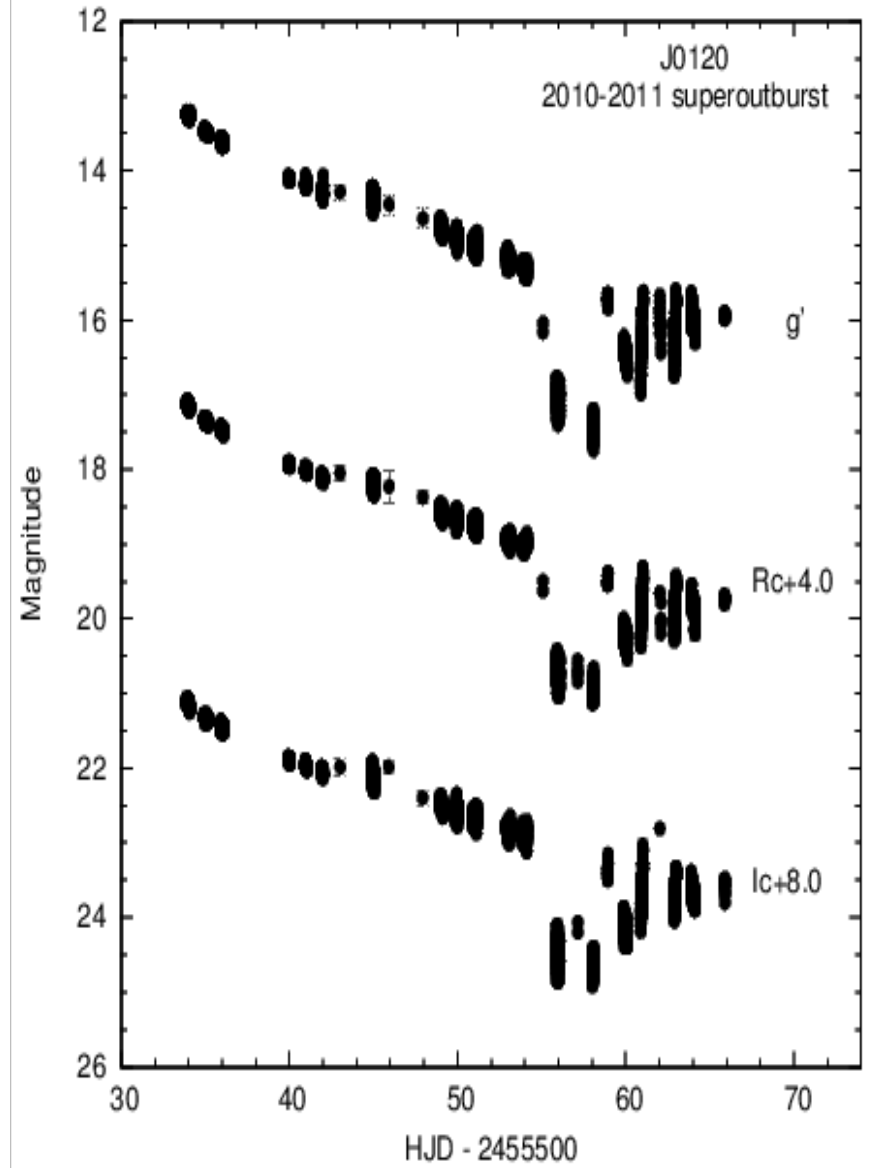
- Uemura-san succeeded in observing some WZ Sge stars using KANATA telescope (Uemura-san+ 2008 etc.).
- Kato-san made a “textbook” (Kato-san+ 2009).
- Kepler gave us great data(Kato-san+2012, Osaki-san&Kato-san2013).
- To be positive or to be negative or both, that is the question (Ohshima-san+2012).
- Where are period bouncers?(Nakata-san+2013, Kato-san+2013)

I believe multicolor photometry using MITSuME improves our understanding of dwarf novae.

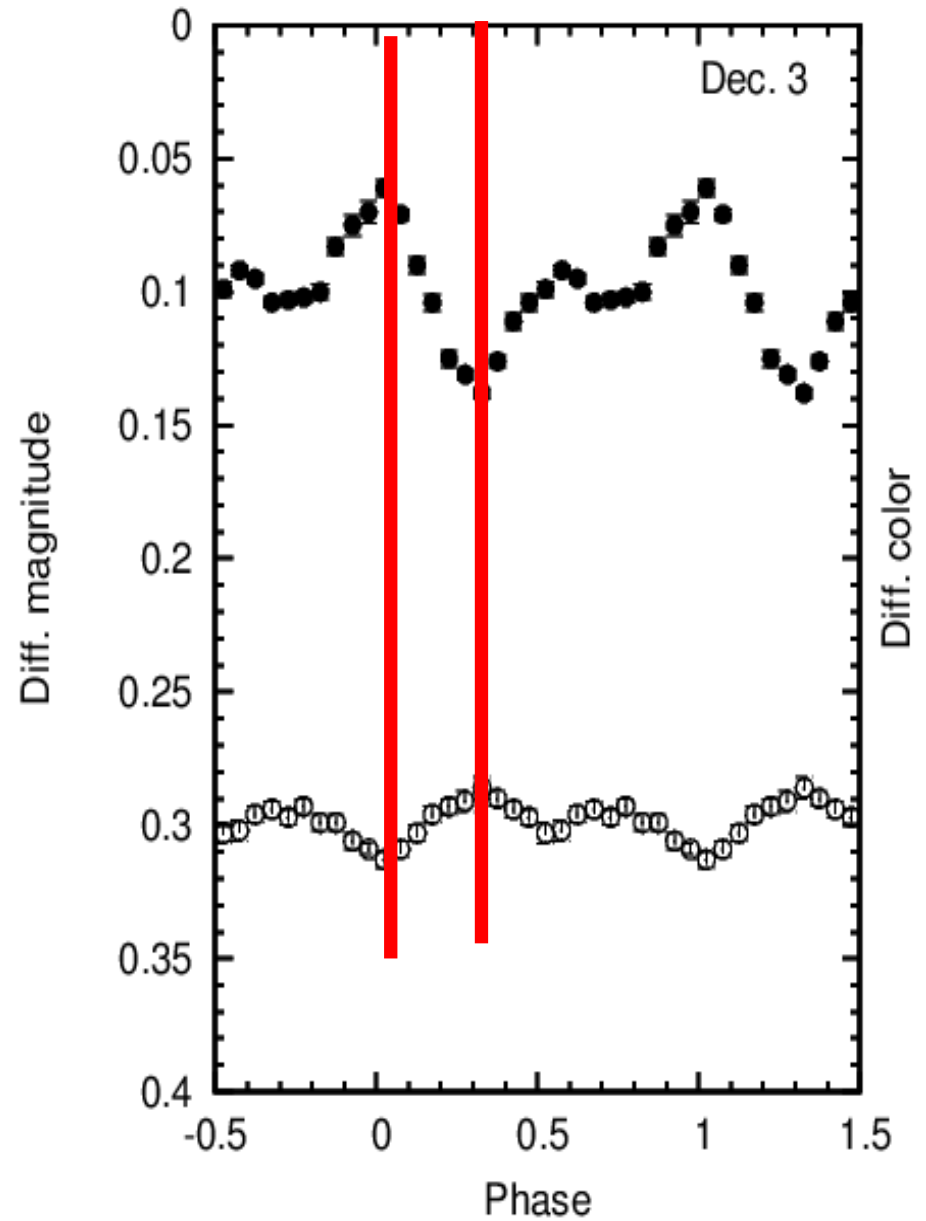
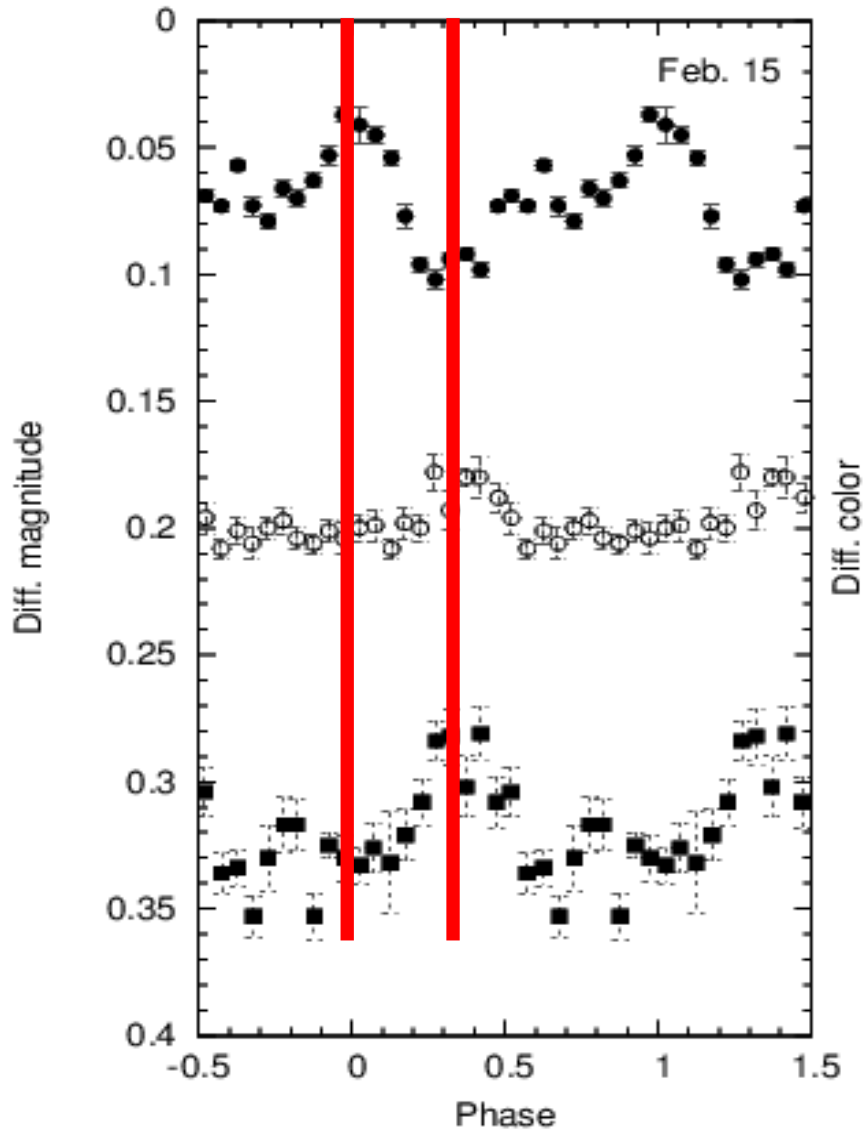
HV Vir



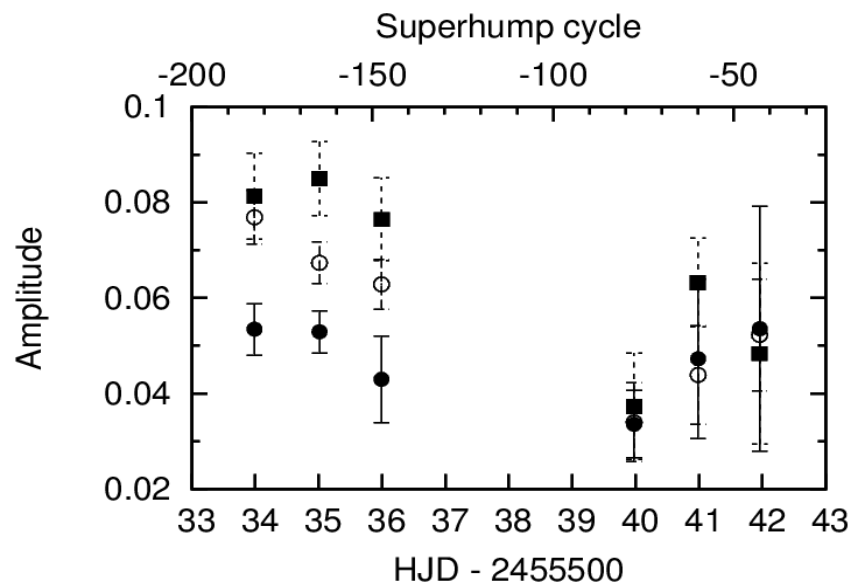
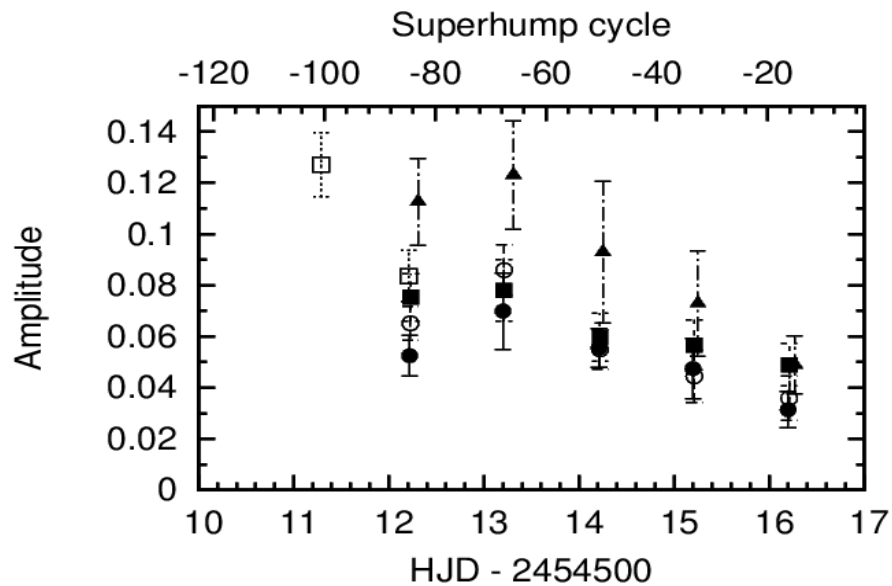
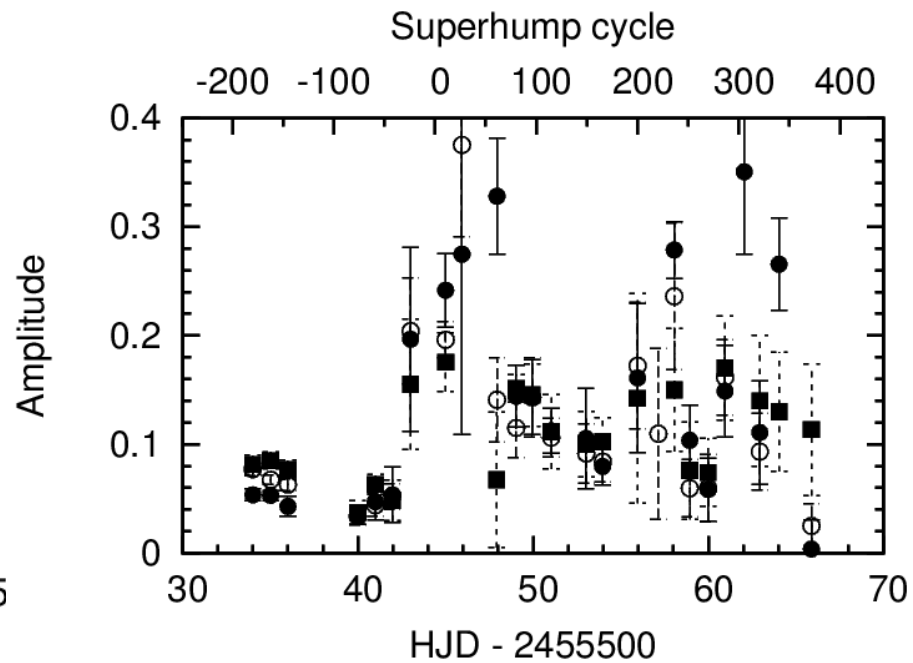
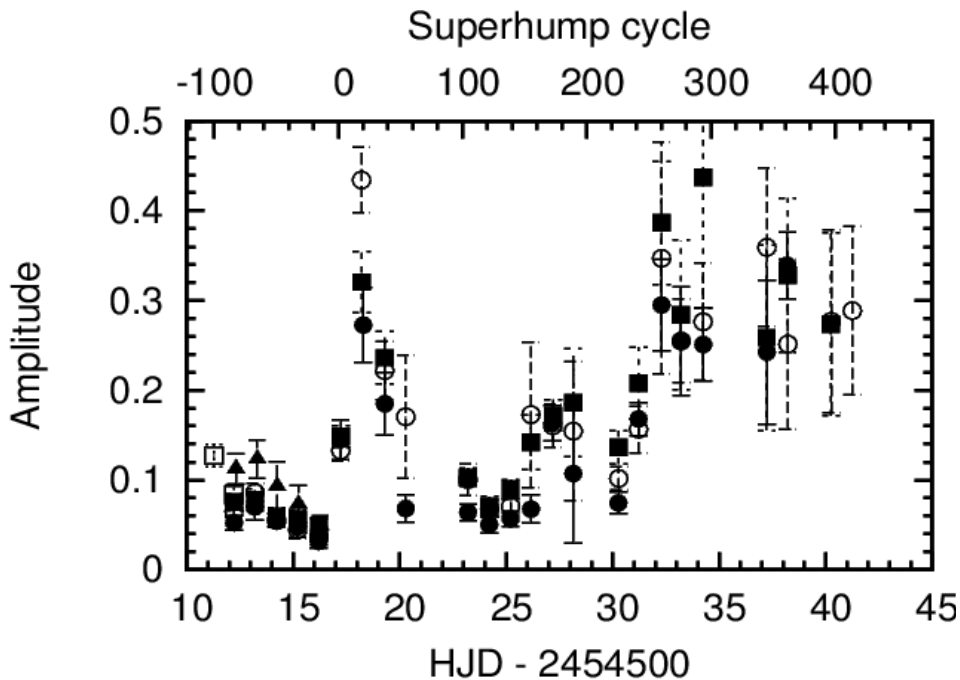
OT J0120



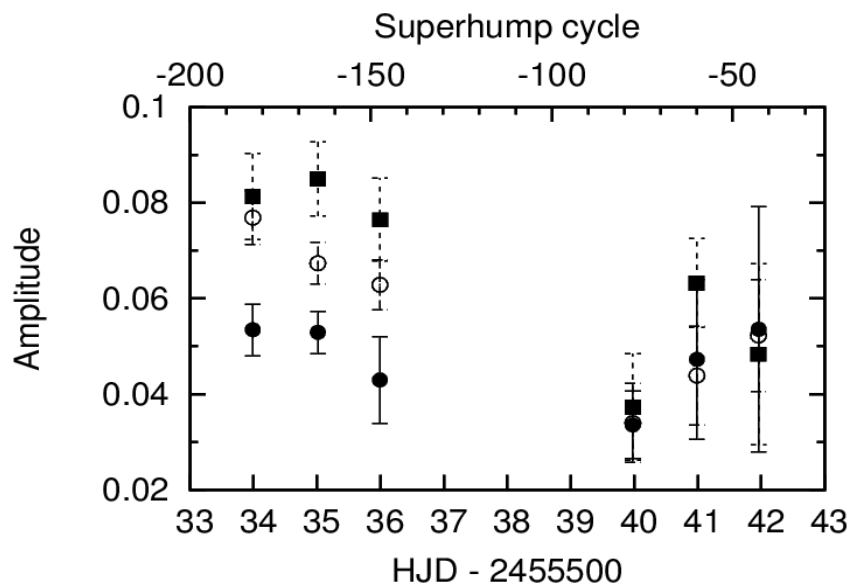
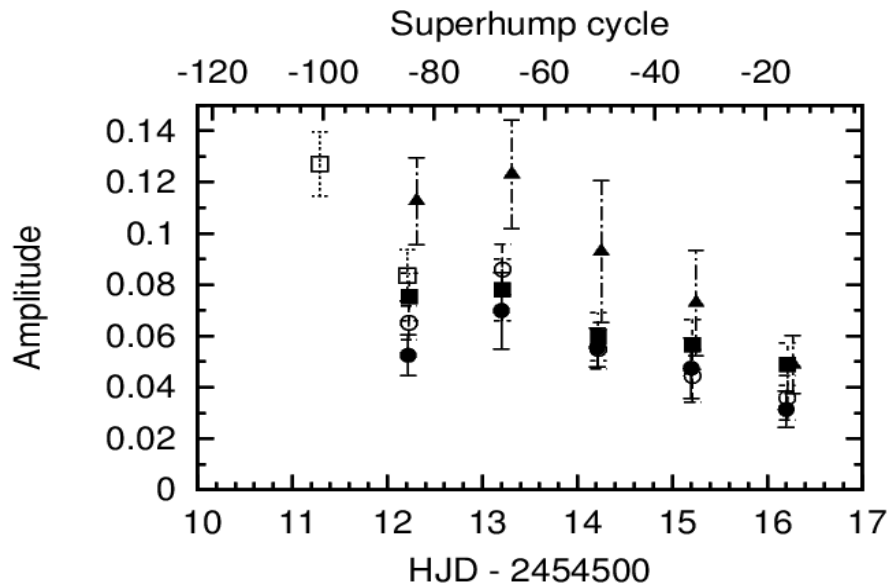
Early superhumps



Amplitudes of humps



Amplitudes of early superhumps

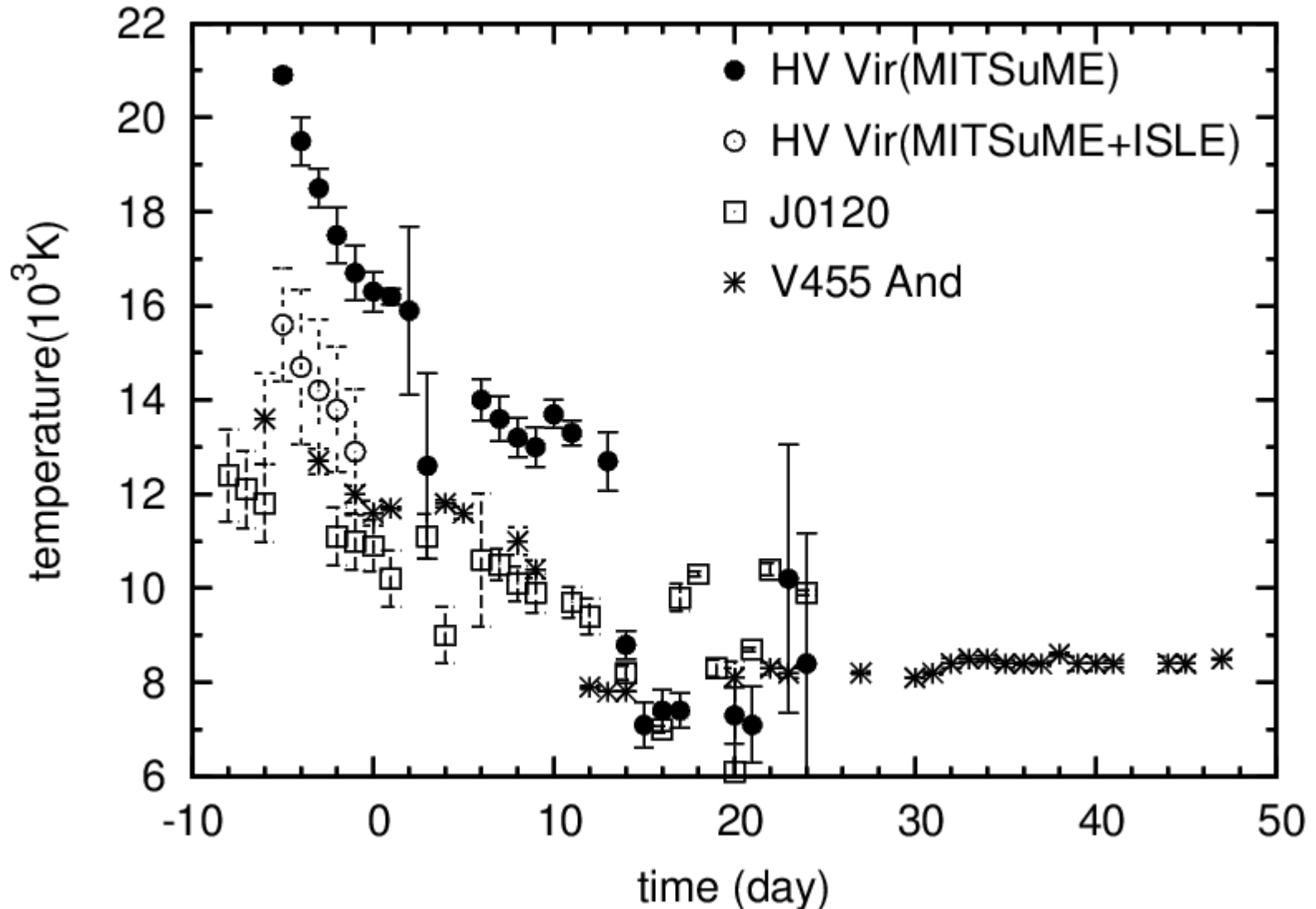


- In good agreement with Kato-san.
- Strong dependence on color during early superhump stage

Supporting the idea that early superhumps are generated in the outer region of the disk

Temperature variations

- An increase in temperature around the stage B-C transition.



HV Vir and OT J0120 --- summary

- when the magnitude is at the minimum, the color is at the bluest.
- Amplitudes of early superhumps show strong dependence on wavelength.
- A hint of an increase in temperature around the stage B-C transition.