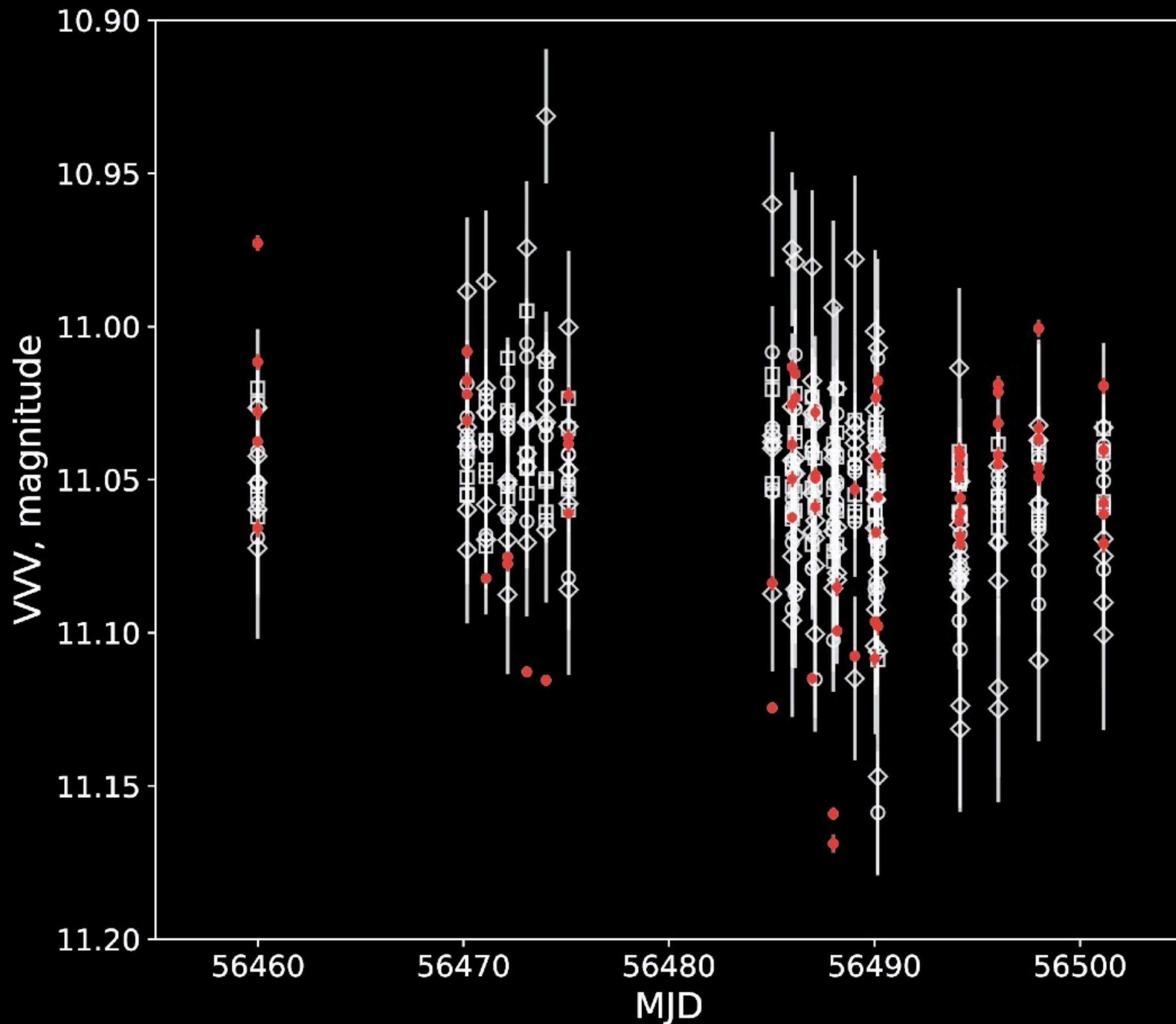


Rapid IR variability



- Changes in brightness for 0.1-0.2 magnitudes over several days
 - Atypical for blue supergiants.
- Usual variability in range 0.02-0.04
(Buysschaert et al. 2015; Aerts et al. 2017)

IGR J16195-4945 in Ks filter (red dots) according to the VVV survey.
White markers show magnitudes of comparison stars normalized to the average magnitude of IGR J16195-4945

3A 1954+319

- Discovered by the *Uhuru* (Forman et al. 1978)
- Slowly rotating NS (spin period ~5 hours; Corbert et al. 2008)
with spin-ups and spin-downs (Marcu et al. 2011)
- SyXB with M4-5 III optical companion at a distance of 1.7 kpc (Masetti et al. 2006)