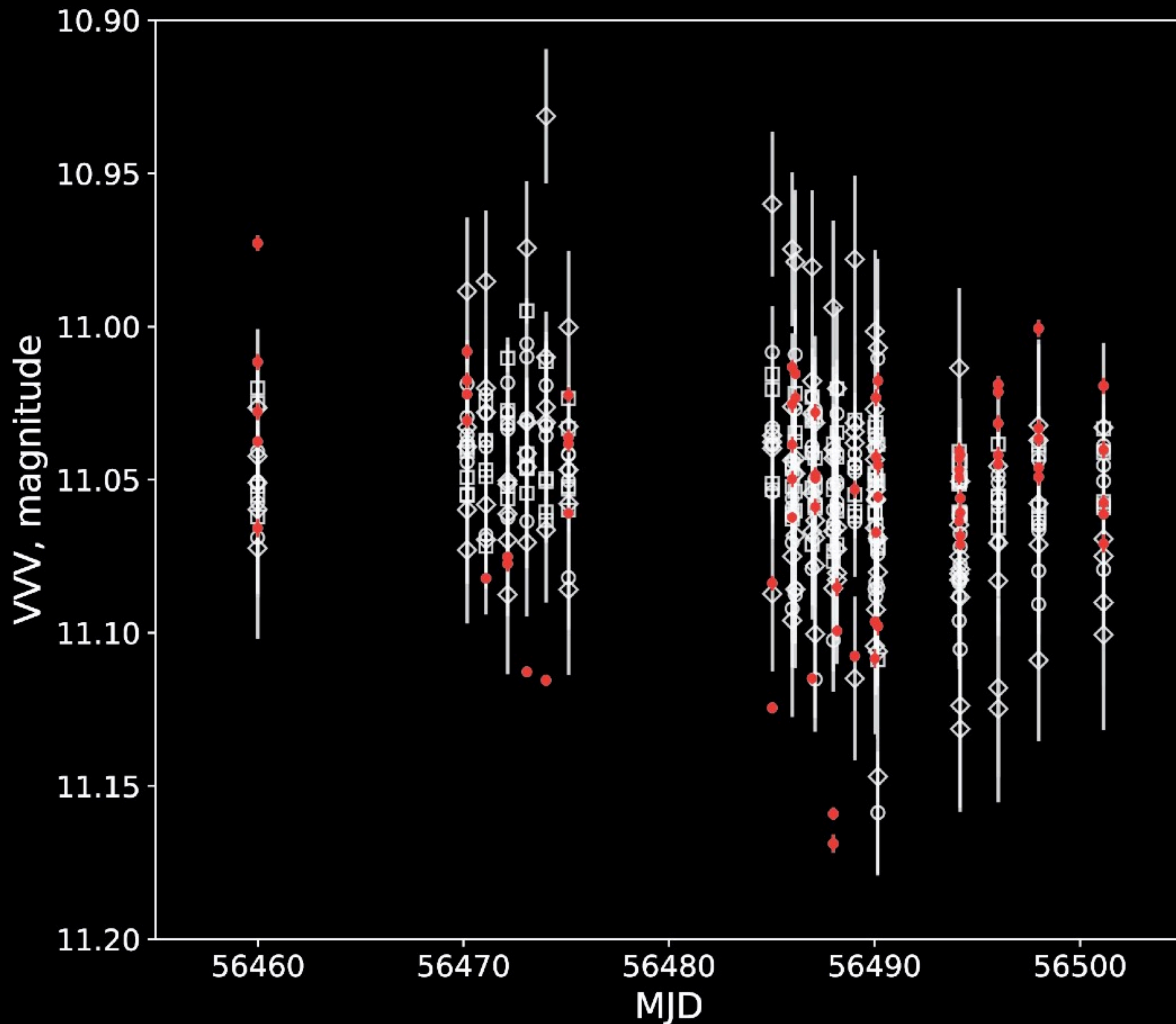


$v_w \approx 500 \text{ km s}^{-1}$   
 typical for HMXBs  
 (Martinez-Nunez et al. 2017)

# 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