

## **SPIRou Line-by-line Radial Velocity**

Object: TOI727, Template: TOI727, Zero-point corrected: True

Number of exposures: 134, Number of epochs: 35

Diagnostic Plots

2023-05-31

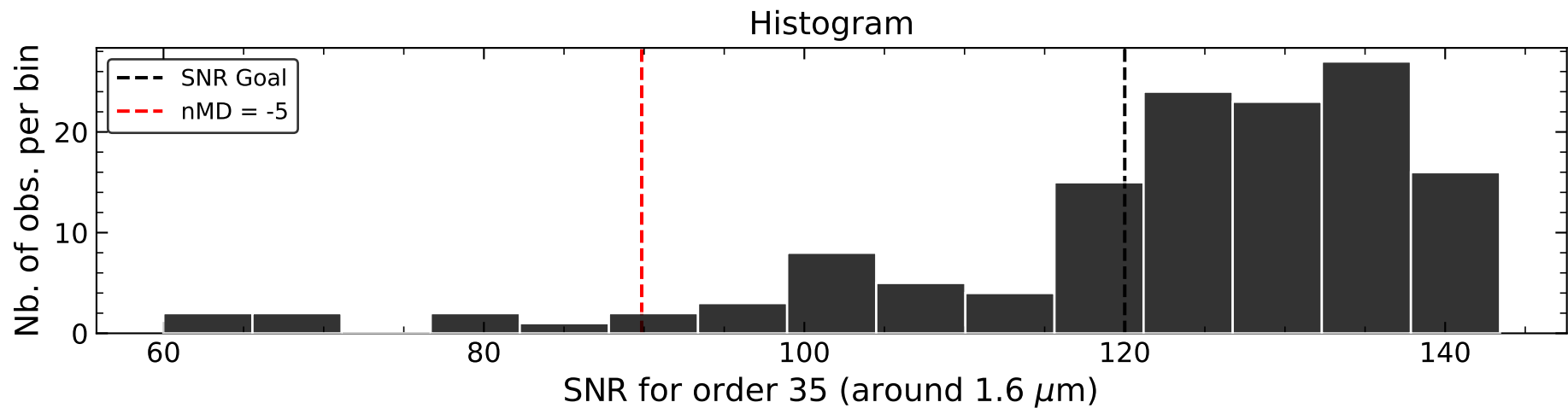
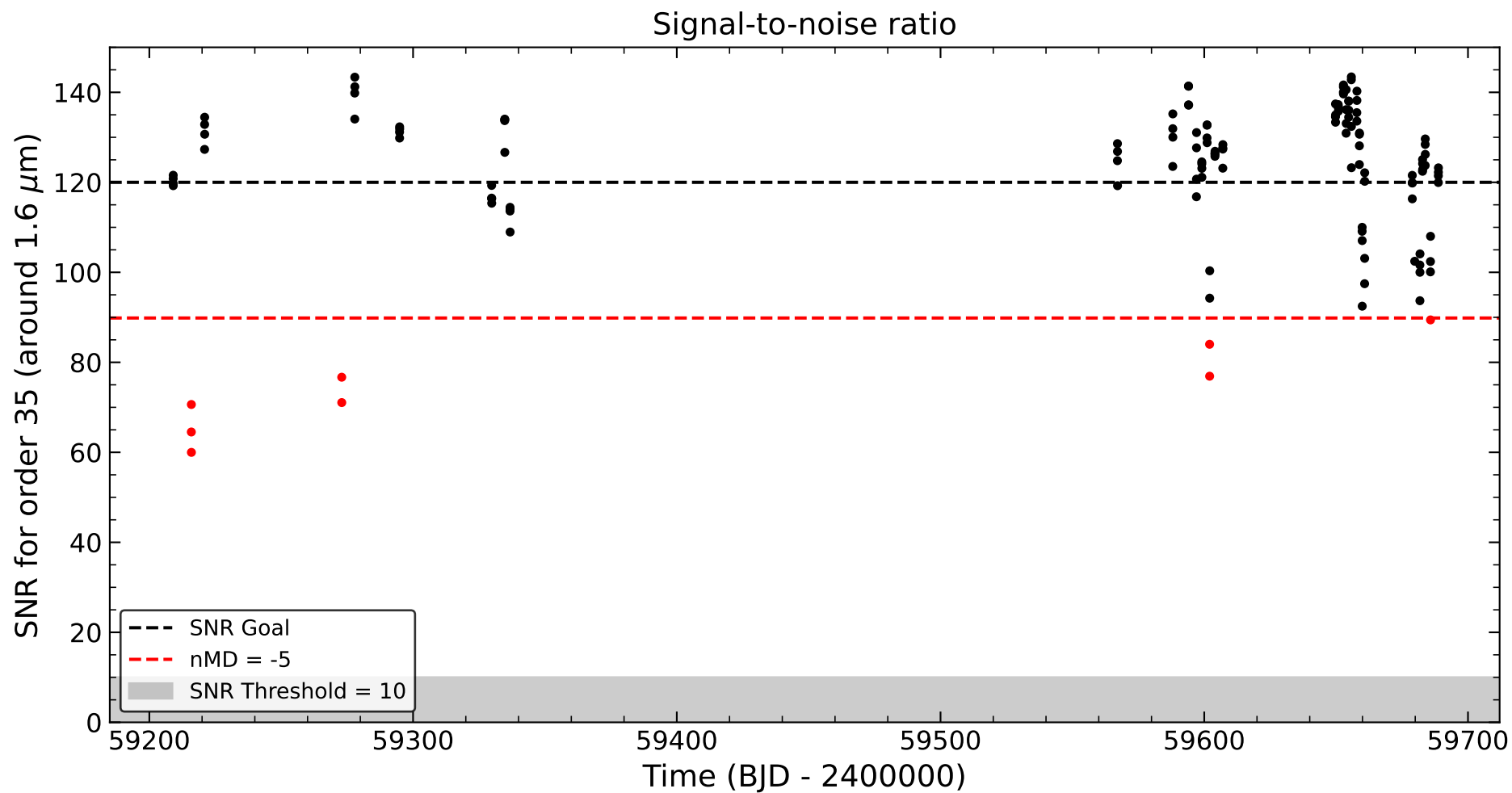
**Stellar Parameters**

Host name TIC 149788158  
RA 08:42:56.86  
Dec. -02:29:54.91  
Mass ( $M_{\odot}$ ) 0.50  
Radius ( $R_{\odot}$ ) 0.50  
Lum. ( $L_{\odot}$ ) 0.0397  
Teff (K) 3653  
Spect. type **M1V**  
Dist. (pc) 42.97  
V 12.68  
Gaia 12.07  
J 9.66  
H 9.08  
K 8.83

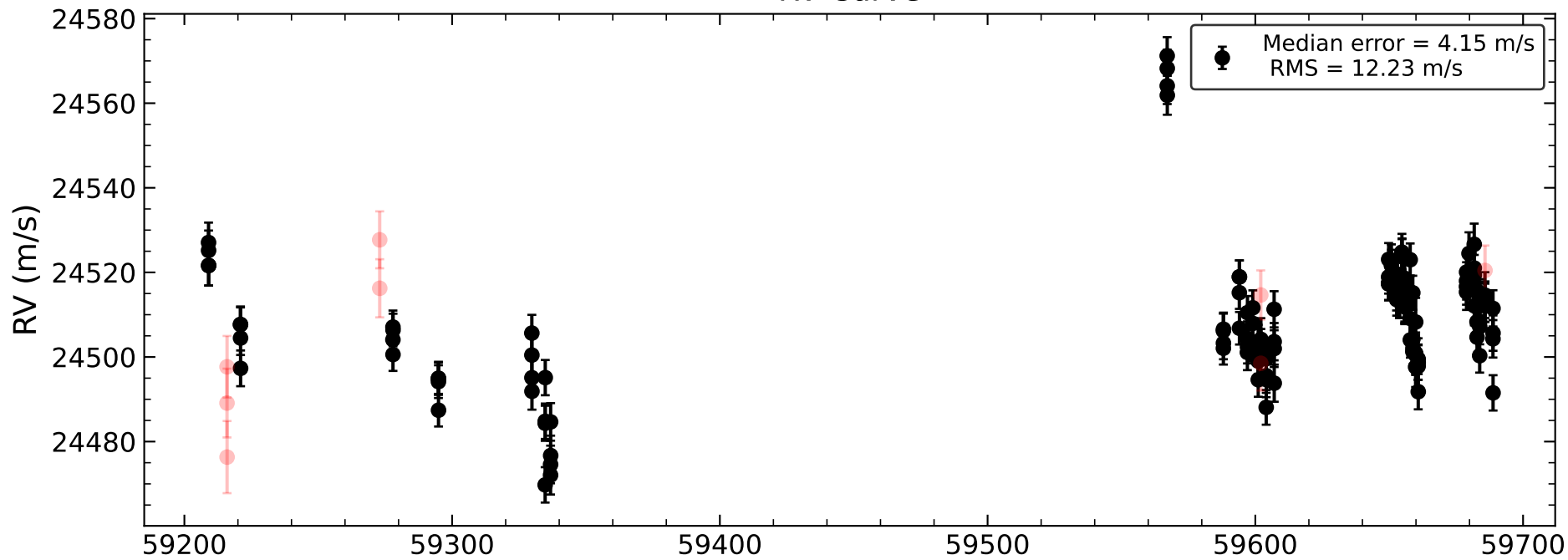
**Planet Parameters**

Name TOI 727.01  
Mass ( $M_{\oplus}$ ) **4.57**  
Radius ( $R_{\oplus}$ ) 1.98  
Density ( $\text{g/cm}^3$ ) **3.3**  
Period (days) 4.72444  
Transit depth (ppt) 1.48  
Transit dur. (hr) 1.00  
Orb. sep. (au) **0.044**  
Teq (K) 441  
Insolation ( $S_{\oplus}$ ) 6.29  
RV K (m/s) **2.78**  
Atmo. sig. (ppm) **11**  
TSM **59.3**  
ESM **3.8**

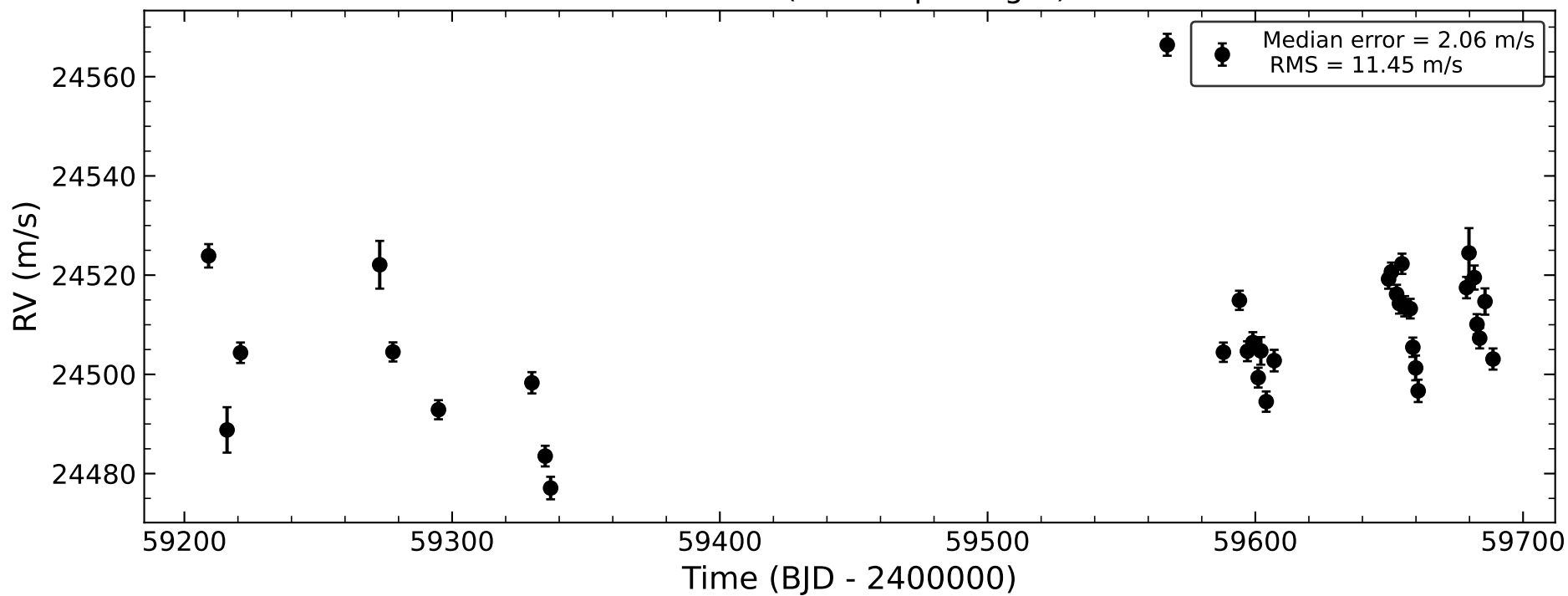
[Link to ExoFOP](#)

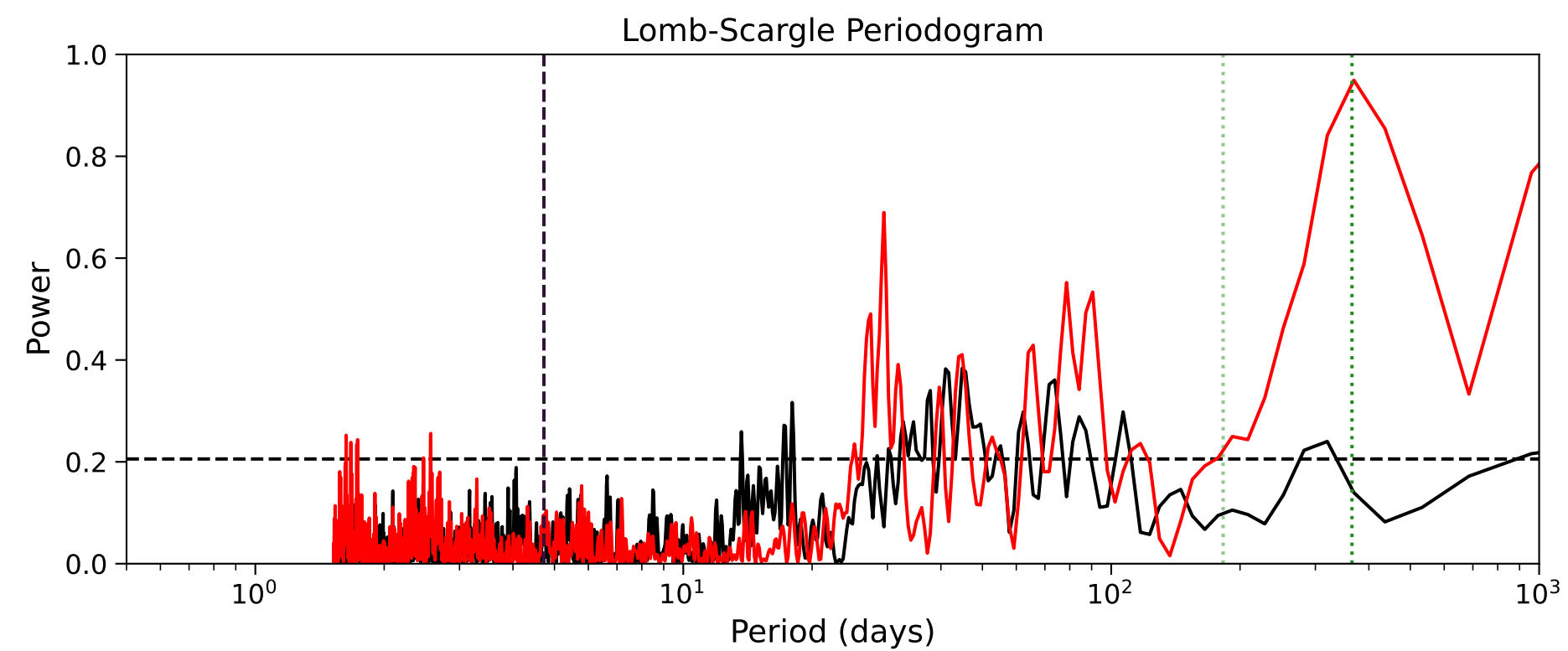
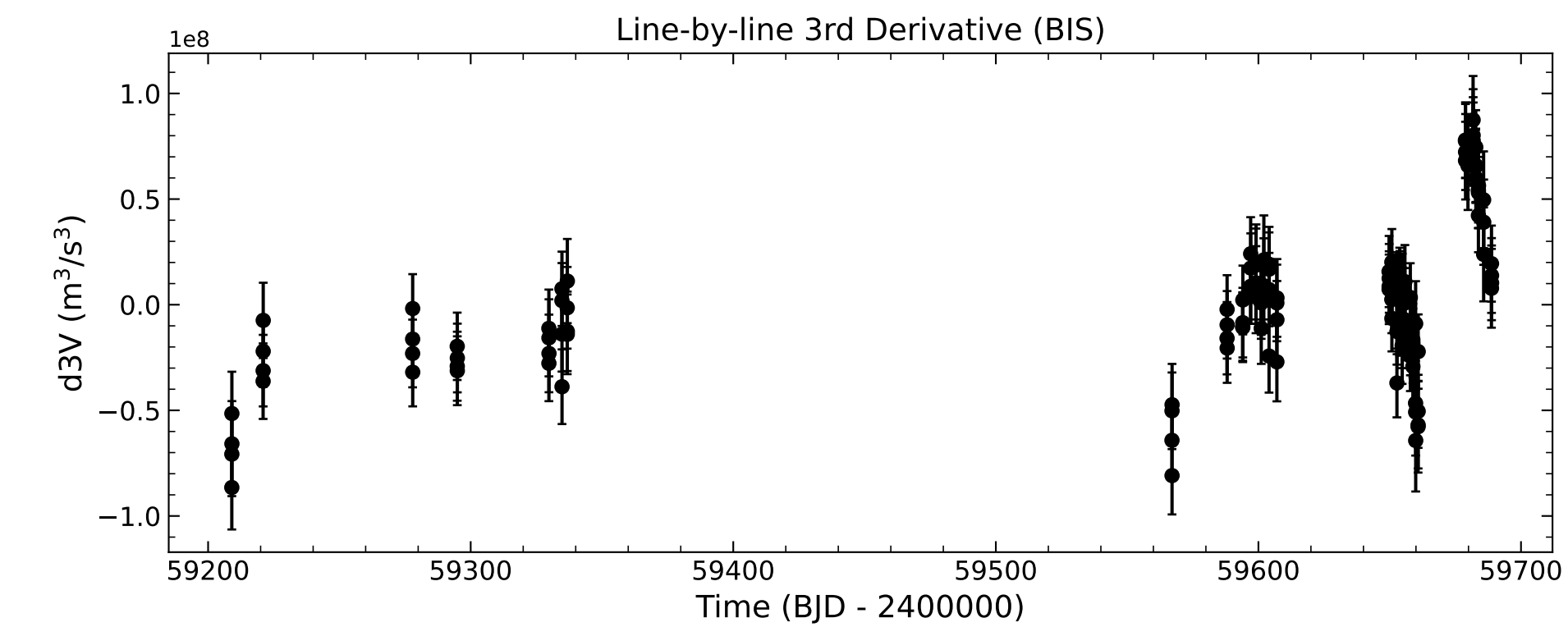
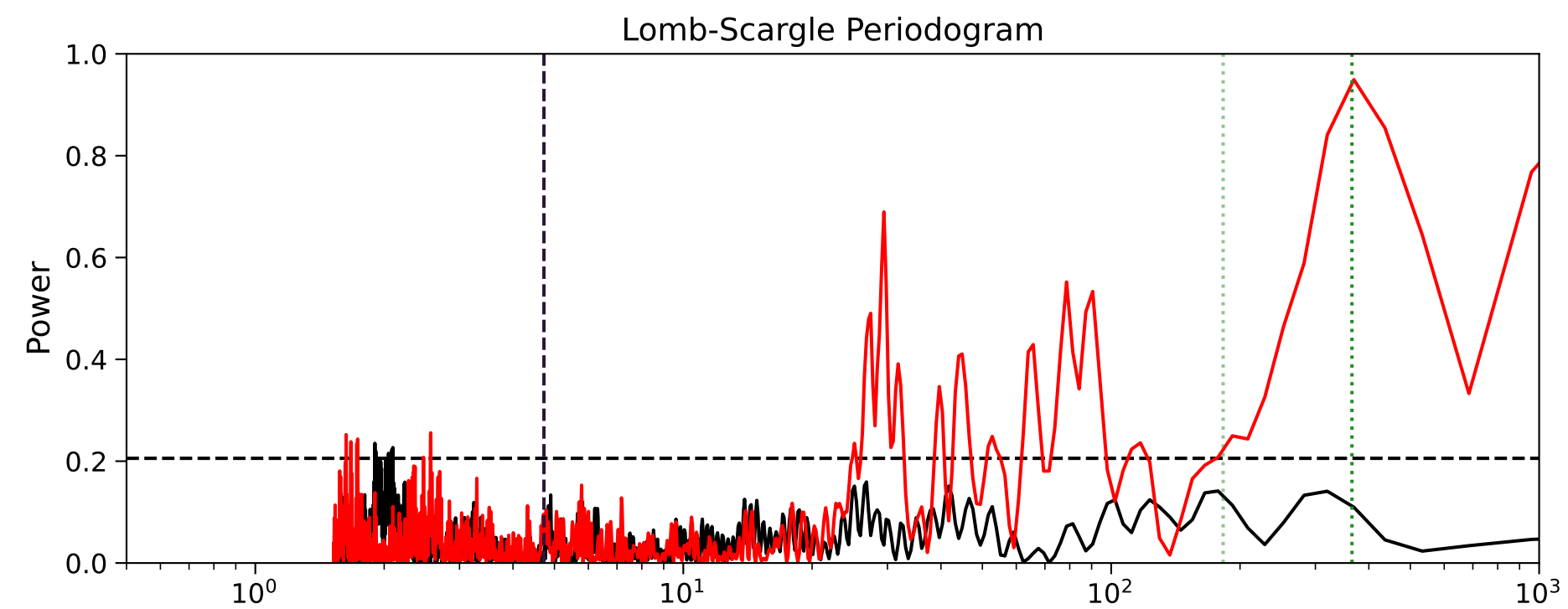
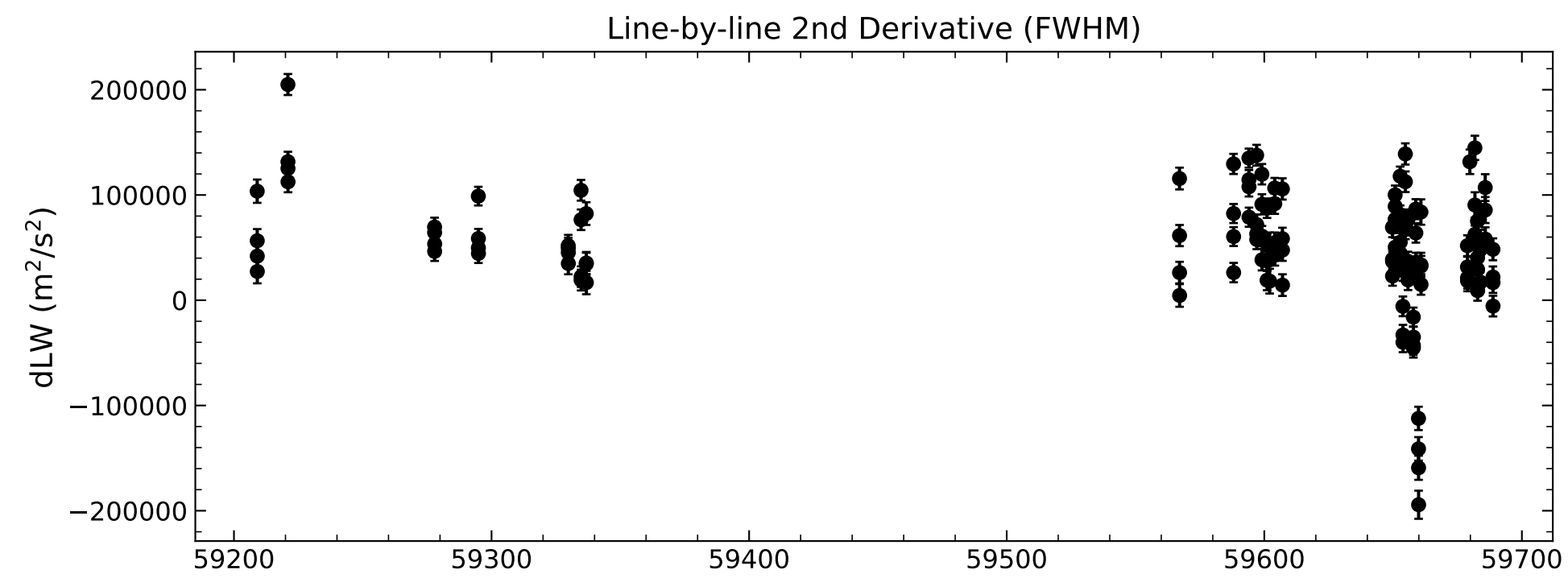
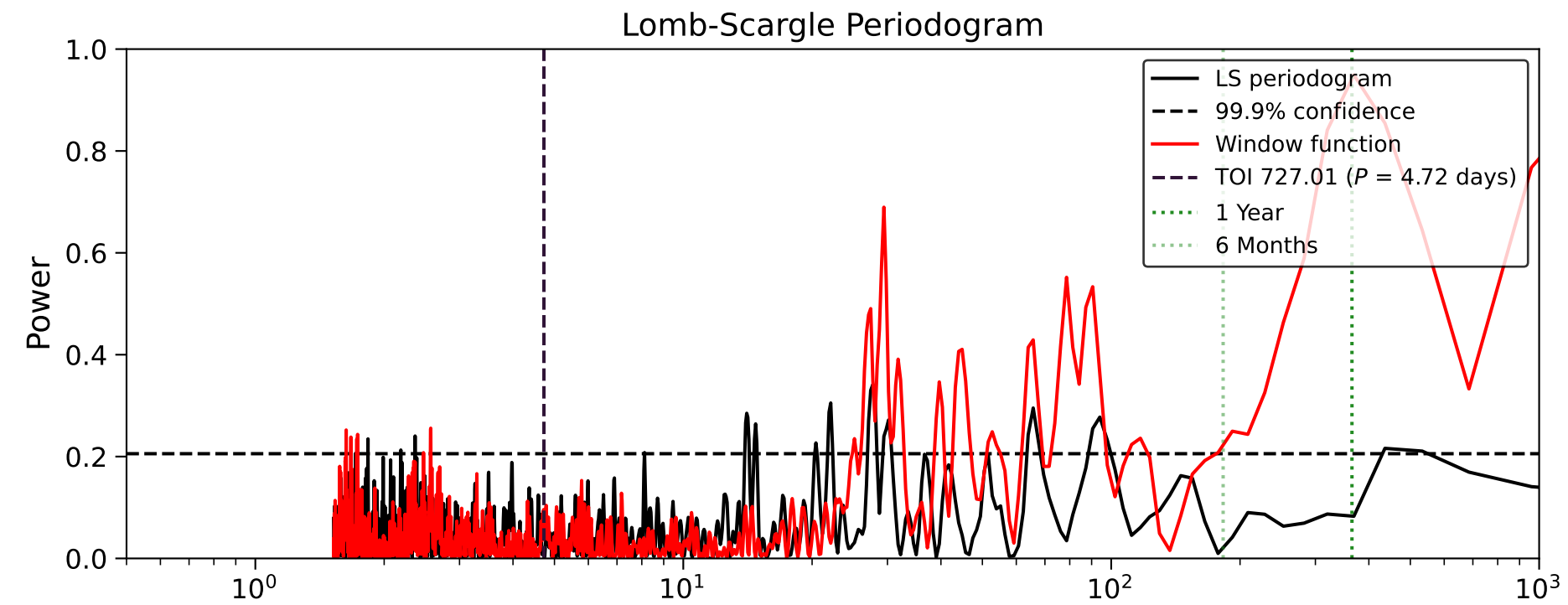
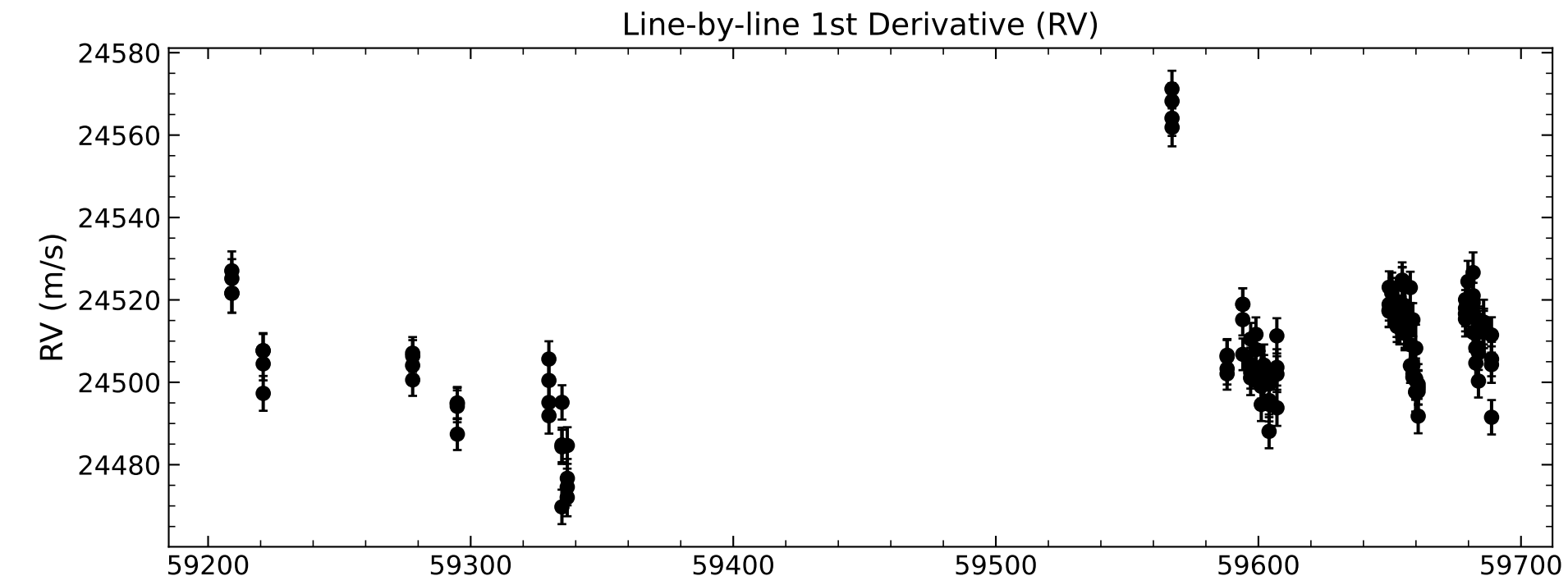


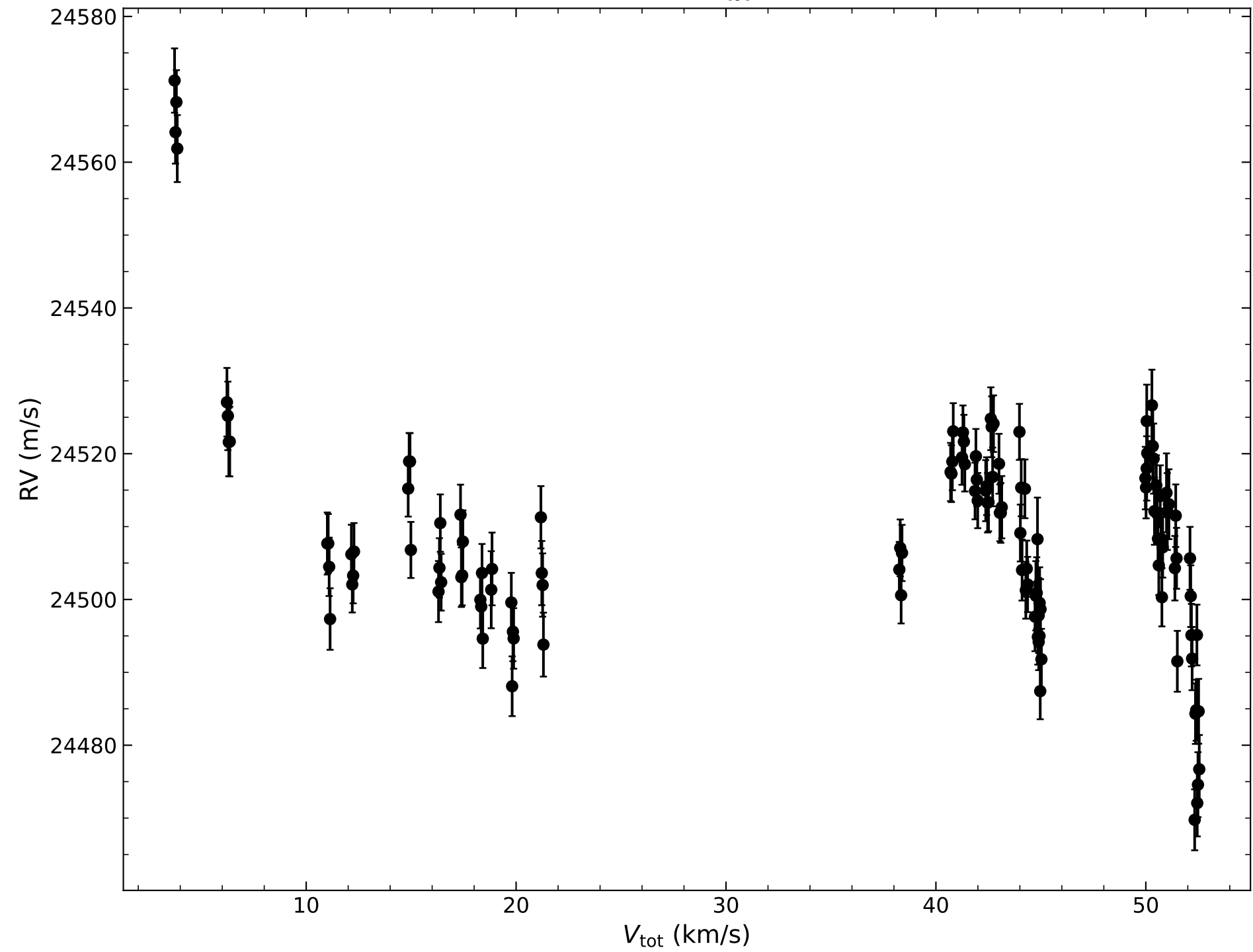
RV Curve



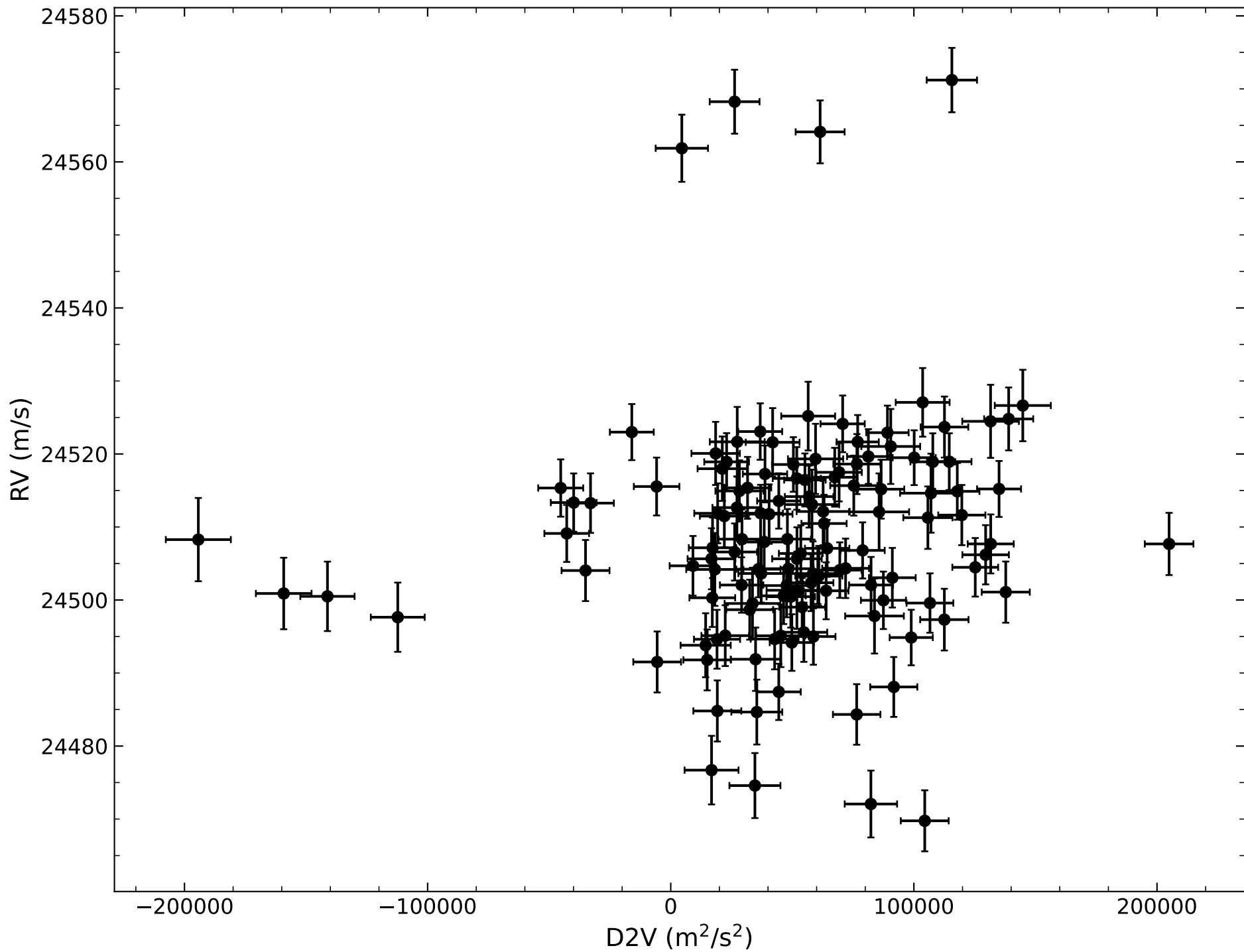
RV Curve (binned per night)





RV vs.  $V_{\text{tot}}$ 

RV vs. D2V



RV vs. D3V

