M2.5 Flare (2023-06-09) Ca II 8542 Å Contrast profile Hα Contrast profile He I D3 Contrast profile -40 Elapsed Time Since Flare Onset [min] 0 0 0 0 0 Elapsed Time Since Flare Onset [min] **-**20 20 Time Since Flare Onset [min] +11e-5+1 0.0002 60 0.0002 0.0001 50 50 40 40 0.0000 0.0000 30 30 -0.0001 -0.0002 20 0.0002 8542 8543 5_{875.5} 5876.0 5_{876.5} 8541 65₆₂ 65₆₄ 65₆₁ 65₆₃ Wavelength [Å] Wavelength [Å] Wavelength [Å] Ca II 8542 Å Voigt Fit with Residuals Hα Voigt Fit with Residuals He I D3 Voigt Fit with Residuals Elapsed Time Since Flare Onset [min] C C C O O O O O O -50 -2525 50 -50 50 -40-20 20 Elapsed Time Since Flare Onset [min] Elapsed Time Since Flare Onset [min] 1e-8 1e-8 1e-7 60 60 1.0 0.0 2 0.5 0.0 30 30 -0.5 20 -1.08541 8542 8543 65₆₃ 65₆₄ 5_{875.5} 65₆₁ 65₆₂ 5_{876.0} 5_{876.5} Wavelength [Å] Wavelength [Å] Wavelength [Å] Ca II H Contrast profile Hβ Contrast profile Elapsed Time Since Flare Onset [min] 40 -150-100-5050 Elapsed Time Since Flare Onset [min] +1Ca II 8542 Å 1.2 60 Ηα He I D3 0.0005 1.0 1.001 50 Нβ 8.0 δEW 40 0.0000 1.000 0.6 30 0.4 0.999 0.0005 0.2 20 0.0 486_{1.5} 486_{0.5} 4862.0 з₉₆₈ ³⁹69 4861.0 ³⁹67 20 60 40 Elapsed Time Since Flare Onset [min] Wavelength [Å] Wavelength [Å] Hβ Voigt Fit with Residuals Ca II H Voigt Fit with Residuals -150-10050 40 Elapsed Time Since Flare Onset [min] Hα 17:10:25 UT 1e-7 0.00 - 1.0 -320 50 50 0.5 -340 40 -40 0.0 -360 30 -30 -0.5-380 20 20 4860.5 4862.0 ³⁹69 486_{1.0} 486_{1.5} ³⁹68 ~5₈₀ `6₀₀ ³⁹6> Wavelength [Å] X [arcsec] Wavelength [Å]