C2.2 Flare (2023-06-18) Ca II 8542 Å Contrast profile Hα Contrast profile He I D3 Contrast profile -40-20 0 20 **-75 -50 -25** 0 25 50 <del>-</del>20 20 -6060 -40 40 1e-5+1 1e-5+1 1e-5+1 - 1.0 0.5 0.0 Time -0.5 10 -1Elapsed 65<sub>63</sub> 65<sub>64</sub> 65<sub>61</sub> 65<sub>62</sub>  $854_{0.5}854_{\overline{1}.0}854_{\overline{1}.5}854_{\overline{2}.0}854_{\overline{2}.5}854_{\overline{3}.0}854_{\overline{3}.5}$ 5876.00 5876.25 5876.50 5876.75 5877.00 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 -60 -40-20 **-75** <del>-</del>50 <del>-</del>25 1e-8 1e-8 1e-8 Elapsed Time Since Flare Onset [min] 8 0 1 8 0 8 Elapsed Time Since Flare Onset [min] 8 0 1 8 9 8 0 0 0.5 0.0 -165<sub>61</sub> 65<sub>62</sub> 65<sub>63</sub> 65<sub>64</sub>  $8540.5\\8541.0\\8541.5\\8542.0\\8542.5\\8543.0\\8543.5$ Wavelength [Å] Wavelength [Å] Wavelength [Å] Hβ Contrast profile Ca II H Contrast profile <del>-</del>25 -40 20 -75 -500 25 50 75 40 1e-5+1 1.0 - 0.00006 0.9 0.00004 0.00002 8.0 δEW 0.00000 Ca II 8542 Å 0.7 Ηα -0.00002 He I D3 0.6 -0.00004Нβ Ca II H -0.00006 0.5 **GOES** 4860.50 <sup>39</sup>68.5 <sup>39</sup>69.0 <sup>39</sup>67.5 <sup>39</sup>68.0 <sup>39</sup>69.5 . 4860. 75 4861. 00 4861. 25 4861. 50 4861. 75 10 20 30 Elapsed Time Since Flare Onset [min] Wavelength [Å] Wavelength [Å] Hβ Voigt Fit with Residuals Ca II H Voigt Fit with Residuals **-40 -20** 0 20 -75 -50 -25 0 25 Hα 09:45:30 UT **-**350 -360- 2 -370 0.80 Y [arcsec] -380 **-**390 0.85 -400 -2 -410 **-**420 **-**430 4860.50 4861.75 4862.00 <sup>39</sup>67.5 <sup>39</sup>68.0 <sup>39</sup>69.0 4861.50 <sup>39</sup>68.5 <sup>39</sup>69.5 4860.75 4861.00 <sup>486</sup>1.25 ~3<sub>80</sub> ~<sub>440</sub> ~4<sub>00</sub> `4<sub>20</sub> X [arcsec] Wavelength [Å] Wavelength [Å]

- 2

- **-**2

- 1.0

- 0.5

- 0.0

**- -**0.5

-1.0