TWISTING FLUX TUBES AS A CAUSE OF MICRO-FLARE ACTIVITY

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High-cadence optical observations of an H-α blue-wing bright point near solar active region NOAA 10794 are presented. The data were obtained with the Dunn Solar Telescope at the National Solar Observatory/Sacramento Peak using a newly developed camera system, the RAPID DUAL IMAGER. Wavelet analysis is undertaken to search for intensity-related oscillatory signatures, and periodicities ranging from 15 to 370 s are found with significance levels exceeding 95%. During two separate microflaring events, oscillation sites surrounding the bright point are observed to twist. We relate the twisting of the oscillation sites to the twisting of physical flux tubes, thus giving rise to reconnection phenomena. We derive an average twist velocity of 7.7 km/s and detect a peak in the emitted flux between twist angles of 180° and 230°.