Multi-wavelength observation of a failed helical prominence eruption

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We use H\textalpha image observed at Huairou Solar Observing Station of National Astronomical Observatories of China and multi-wavelength images observed by Atmospheric Imaging Assembly (AIA) onboard the Solar Dynamics Observatory (SDO) to analyze a prominence eruption on 14 October 2012. The main feature of the eruption is accompanied by a magnetic flux rope unwrapping process. The twist of the flux rope is estimated at least two turns ($4\pi$) which reaches up to the threshold of the kink instability. From time-distance slice image (AIA 171Å, 193Å and 304Å), we find that there is an intensity oscillation in the two legs of prominence and the period is almost the same.