

Accretion and ejection at work in the gamma-ray emitting jetted Narrow-Line Seyfert 1 galaxy 1H 0323+342

Monday 2 September 2024 09:42 (1 minute)

We present a comprehensive investigation into the optical-to-X-rays properties of the gamma-ray emitting jetted Narrow-Line Seyfert 1 galaxy 1H 0323+342 ($z = 0.063$). Our study spans across the years 2006 to 2023, incorporating a rich dataset with 170 *Swift* observations in the optical, UV, and X-ray bands, integrated with *Fermi* LAT observations from 2008 to 2023. Our key findings include the delineation of three distinct zones on the photon index-flux plot. Zone 1 suggests robust jet activity, while zone 2 suggests a phase either preceding or succeeding jet emission. Notably, zone 3 hints at a potential quiescent state of jet activity, particularly evident in recent observations. Stability is observed in UV and optical flux values, exhibiting only a low to moderate correlation with X-ray fluxes. Changes in UV and optical spectral indices allude to fluctuations within the accretion disk, with softer spectra evident in zone 3. Furthermore, gamma-ray data from *Fermi* LAT confirm *Swift* XRT observations, revealing a decreasing trend in agreement with X-ray data. The temporal evolution of the object suggests a depletion in jet emission power over time, with potential explanations encompassing the Blandford-Znajek theory and scenarios involving disk instabilities.

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Session Classification: Poster hang