

LONG TERM SPECTROPOLARIMETRY OF CHANGING LOOK ACTIVE GALACTIC NUCLEI NGC 3516

Đ. Savić^{1,2} 

¹*Astronomical Observatory, Volgina 7, 11060 Belgrade, Serbia*

²*Institut d'Astrophysique et de Géophysique, Université de Liège,
Allée du six août 19c, B-4000 Liège (Sart-Tilman), Belgium*

E-mail: djsavic@aob.rs

The Seyfert galaxy NGC 3516 has undergone major spectral changes in the past years. Here, we present long term spectropolarimetric variability in optical band. Archival polarimetric data that are publicly available cover 6 epochs from 1975-1996. Two decades later, we have obtained high-quality spectropolarimetric data using NOT ALFOSC and SAO BTA instruments over 6 epochs from 2017-2021 when the system was in a quiet state, until a flare-burst occurred in early 2021. We find that the degree of polarization rotates by $\sim 90^\circ$ with the onset of the change in 1993. Simultaneously, polarization degree drops from $\sim 0.5\text{-}0.7\%$ to $\sim 0.3\%$ we obtained recently.