

Light curve analysis of CC Andromeda

J. Adassuriya¹, K.P.S.C. Jayaratne², S. Ganesh³

¹*Astronomy Division, Arthur C. Clarke Institute, Sri Lanka*

²*Department of Physics, University of Colombo, Sri Lanka*

³*Astronomy and Astrophysics Division, Physical Research Laboratory,
Ahmedabad, India*

CC Andromeda (SAO 36605) is a high amplitude Delta Scuti star, located at RA 00: 43: 48 and DEC +42:16:55.8 in the Andromeda constellation. CC And is F3 IV-V spectral type and has a magnitude variation in V band of 9.19 – 9.46. The photometric observations in V band were carried out using the 50 cm CDK reflector at Mount Abu Observatory, India. The bias-corrected and flat-fielded image frames of CC And were used for photometry. The obtained high temporal resolution light curves were subjected to periodic analysis to investigate the pulsation frequencies. The investigation of Fourier transformation and periodic analysis tool, VARTOOLS, confirmed that the fundamental period, f_0 , of CC and is 0.123 ± 0.002 day. In addition, four other oscillations were also detected with higher probability and high signal-to-noise ratio

Keywords: *CC and, pulsation, short period variables*