Short talk

WZ SGE TYPE CATACLYSMIC VARIABLE ASASSN-14CL: SUPERHUMPS AND FLICKERING IN 2014 SUPEROUTBURST

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We present simultaneous multicolour observations of the flickering of the WZ Sge type cataclysmic variable ASASSN-14cl after the superoutburst decline in August 2014. Using AAVSO data we obtain the average superhumps period Tsh = 0.059874 d (1h 26 min), the period evolution on the O-C diagram, and the range of V-band amplitude $\Delta A = 0.1$ -0.3 mag.

Short talk

VENUS IONOSPHERE ELECTRON PROPERTIES – CASSINI QUASI-THERMAL NOISE MEASUREMENTS

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Quasi-thermal noise (QTN) spectroscopy is an accurate technique for in situ measurements of electron density and temperature in space plasmas. The QTN spectrum has a characteristic noise peak just above the plasma frequency produced by electron quasi-thermal fluctuations. This fact allows very accurate measurements of the electron density, while kinetic temperature of the plasma can be evaluated from the level of a power spectrum. In this work, we were able to deduce these plasma parameters during the first CASSINI flyby of Venus, since the thermal noise peak was visible by CASSINI/RPWS instrument on the closest approach (up to 284 km above the surface – deep in the ionosphere of the planet).