



Short timescale variability in the faint sky variability survey

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Abstract. We present the V-band variability analysis of the Faint Sky Variability Survey (FSVS). The FSVS combines colour and time variability information, from timescales of 24 minutes to tens of days, down to $V = 24$. We find that $\sim 1\%$ of all point sources are variable along the main sequence reaching $\sim 3.5\%$ variability for bluer sources above the main sequence. The total number of variables is dominated by main sequence sources. We can determine the variability timescales and amplitudes for 40% of the variable sources found. Fifty per cent of these show variability timescales shorter than 6 hours. We determine lower limits for the space density of variable point sources. We find 12 RR Lyr candidates in our survey resulting in a space density that agrees with previous determinations.

Key words. Methods: data analysis - surveys - stars: general - stars: statistics - stars:variables:other