

# High speed photometry of faint Cataclysmic Variables: A progress report

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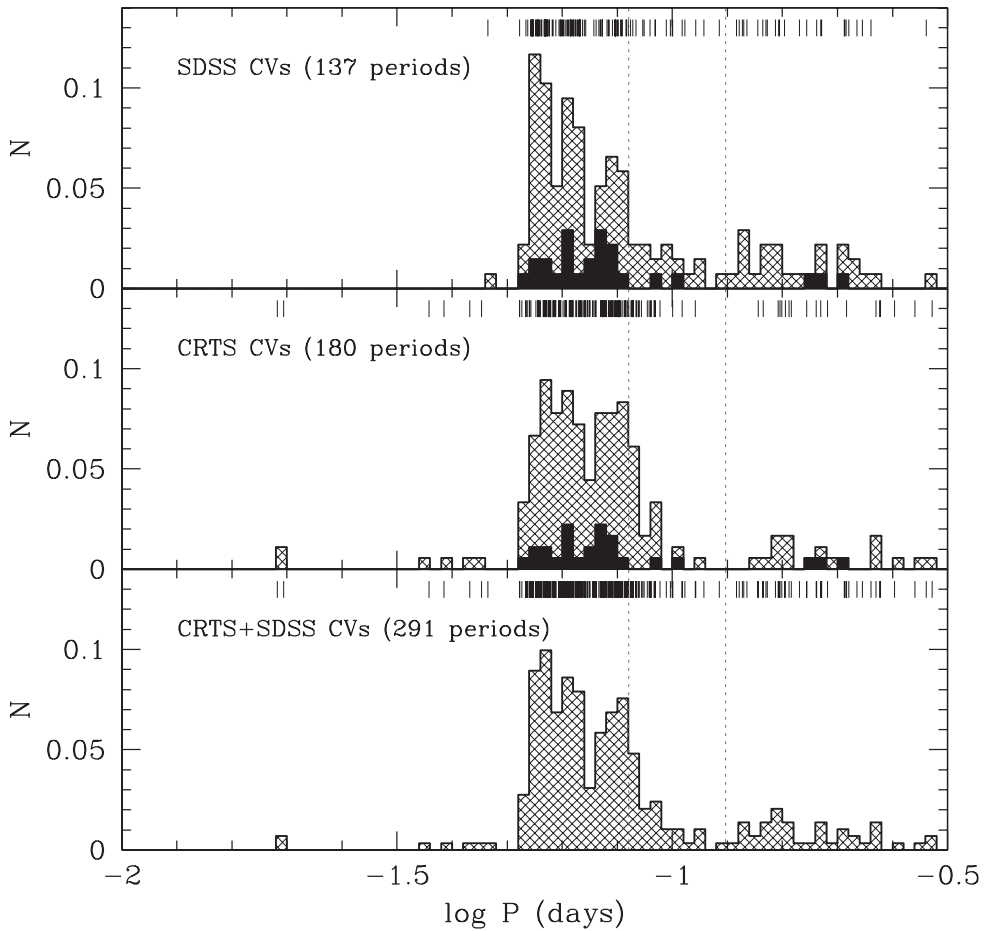
**Abstract.** We summarise the results of observing faint cataclysmic variables from the Catalina Real-Time Transient Survey, resulting in confirming the theoretically predicted maximum in the orbital period histogram near a period of 80 minutes.

**Keywords.** Techniques: photometric – binaries: close – binaries: eclipsing – stars: dwarf novae

**Table 1.** CVs from the Catalina Real-Time Transient Survey with periods determined from our high speed photometric survey.

Object	Type	Period (hours)	r (mag)	Ampl (mag)	n.o.*	Remarks
CSS0116+09	DN	1.580	19.0	2.8	3	Cea12, eclipsing
SSS0221-26	DN	1.692	19.5	4.7	2	Wea12a
CSS0332+02	DNSU	1.469	20.0	3.6	4	Wea12a
CSS0345-01	DN	1.684	19.0	3.4	8	Wea12a
CSS0411-09	DNSU	1.56	19.4	3.6	5	Cea12
CSS0438+00	DN	1.5718	19.4	2.6	2	Cea12, eclipsing
CSS0449-18	DN	3.7337	17.7	2.8	8	Cea12, eclipsing
SSS0617-36	CV	3.4404	18.0	3.9	>10	Wea12a
CSS0810+00	Polar	1.9358	18.7	1.5	–	Wea12a, high/low
CSS0814-00	DNSU	1.796	19.0	4.5	2	WW10
CSS0826-00	DNSU	1.4342	19.5	3.1	2	Wea12a, eclipsing
CSS1028-08	DNHE	0.868	18.2	3.6	10	Wea12a
CSS1126-10	DN	1.8581	18.6	2.6	1	WW10, eclipsing
SSS1128-34	DN	2.402	19.0	4.3	8	Cea12
CSS1221-10	DN	3.5078	19.7	3.9	5	Cea12, eclipsing
SSS1224-41	DN	6.085	19.1	2.2	5	Cea12, eclipsing
CSS1300+11	DNSU	1.5041	19.8	5.8	1	Wea12a
CSS1404-10	DNSU	1.42990	19.9	4.9	5	Wea12a, eclipsing
CSS1417-18	DN	1.870	20.3	5.3	3	Cea12
CSS1443-17	DNSU	1.685	19.5	6.1	1	Wea12a
CSS1503-22	Polar	2.2229	19.6	2.6	–	Wea12a, high/low
CSS1626-12	DN	1.811	20.4	3.6	5	Wea12a, eclipsing
SSS1944-42	Polar	1.534	19.5	3.2	–	Cea12, high/low
SSS2003-28	DN	1.409	18.8	3.6	1	Cea12, eclipsing
CSS2108-03	DN	3.7666	18.0	3.1	6	Cea12, eclipsing
SSS2315-30	DNSU	1.383	16.8	3.0	1	Wea12b, IP
CSS2325-08	DNSU	1.823	18.9	6.1	3	Wea12a
CSS2333-15	DNHE	1.028	20.3	3.0	2	WW11, eclipsing

*Notes:* \* Number of outbursts recorded in CRTS (over  $\sim 7$  year period, up until the end of June 2012); DN – dwarf nova; DNSU – dwarf nova of SU UMa type; DNHE – dwarf nova below orbital period minimum; IP – intermediate polar; Cea12 – Coppejans *et al.* (2012), in preparation



**Figure 1.** Upper panel: The period distribution of the 137 CVs identified from the Sloan Digital Sky Survey (SDSS) (Gänsicke *et al.* 2009). Middle panel: The period distribution of the 180 CVs identified from their outburst characteristics in the Catalina Real-Time Transient Survey (CRTS). The filled histogram in the upper and middle panels represent the 26 CVs in common between the two samples. Lower panel: The period distribution of the combined sample.

## References

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