KEPLER 2: CAMPAIGN 0 (2014 MAR-MAY)
Cataclysmic variables and related binary systems
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It is proposed to observe 13 targets concerning cataclysmic variables (CVs) and related systems in the long cadence mode (30-min exposures). Δ refers to the approximate angular distance from the boresight coordinate position (in degrees). In the case of dwarf novae (UG, UGSU), a magnitude range is given, corresponding to the outburst maximum and the minimum in quiescent state. If some of these targets cannot be detected by Kepler during their quiescent state, the information of non-detection should be kept, it is important for the outburst activity statistics. The attached ASCI file lists only the maximum magnitudes for the dwarf nova targets.

Target No.	Δ (°)	Name	α (2000) δ	sub-type	V magnitude range	orbital period (days)
01	3.5	J06526+2436	06 52 37.2 +24 36 22	CV?	14.4	?
02	3.7	UV Gem	06 38 44.0 +18 16 12	UGSU	14.7 – 18.5	0.0895
03	4.0	CI Gem	06 30 05.9 +22 18 51	UGSU	14.7 – 21	0.11
04	5.4	J0632+2536	06 32 13.1 +25 36 23	UG?	17.9	0.326
05	6.4	V418 Gem	07 04 08.7 +26 25 11	NL	16.3	0.1821
06	6.7	IR Gem	06 47 34.6 +28 06 23	UGSU	10.7 – 16.3	0.0684
07	7.8	NLTT 16249	06 13 46.6 +20 50 33	DD	15.4	1.17
08	8.6	DM Gem 1903	06 44 12.1 +29 56 42	N	16.7	0.1228
09	9.1	NSV 2853	06 10 44.0 +25 10 31	NL	15.3	?
10	9.3	CZ Ori	06 16 43.2 +15 24 11	UG	11.2 – 17	0.2189
11	9.5	V344 Ori	06 15 18.9 +15 31 00	UG?	14.2 – 17.5	0.234
12	10.8	AW Gem	07 22 40.8 +28 30 17	UGSU	13.1 – 19.4	0.0765
13	10.9	DN Gem 1912	06 54 54.4 +32 08 28	N	15.8	0.1278

Subtypes and motivations:
UGSU: dwarf novae of the SU UMa subclass (occasional longer lasting superoutbursts, showing superhumps with periods wich are similar, but different from the orbital period).
UG: other dwarf novae; their longer orbital periods will enable to resolve orbital phases within the long cadence mode. Their classification is doubtful in cases marked UG? and could be confirmed with the proposed observations. - The main motivation of all dwarf nova targets is to improve the statistics on their outburst cycle behaviour (frequency and duration of outbursts).
NL: nova-like variables, normally high mass transfer systems with unknown period (target 9) and/or unknown photometric behaviour.
N: classical novae, with their outburst year given. Many ex-novae display dwarf-nova like activities several decades after their nova eruption. It would be interesting to search for such activities in the two targets proposed.

Special cases:
J06526+2436 = Target 1: Recently identified as a likely cataclysmic variable based on broad Balmer-emission features superimposed on a DA white dwarf spectrum (Roy Østensen, private communication)
NLTT 16249 = Target 7: Interesting double-degenerate white dwarf binary (Vennes & Kawka 2012, ApJ 745, L12; Vennes et al 2012, ApJ 756, L5), only spectroscopic observations are available. It would be very interesting to search for photometric variability (reflection effects?).

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