GZ Cnc was discovered as a variable star by Takamizawa (Tnz V34). Subsequent observations revealed that this object is a dwarf nova which is identified with a ROSAT source (Kato et al., 2001). The object was independently confirmed to be a cataclysmic variable in the course of optical identifications of ROSAT bright sources (Bade et al., 1998). Jiang et al. (2000) reported an optical spectrum which showed strong Balmer and HeI emission lines. Although Jiang et al. (2000) did not explicitly mentioned, HeII emission lines were detected stronger than in typical dwarf novae (Williams, 1983). Kato et al. (2001) obtained time-resolved CCD photometry of the 2000 February long outburst. The long duration of the outburst and the slow rising rate suggested that GZ Cnc is a good candidate for a long-period dwarf nova. As reported in Kato et al. (2001), the recorded outbursts up to 2001 were relatively rare. Although there were unavoidable seasonal observational gaps, only three outbursts were recorded between 1999 and 2001.

In 2002 March – May, we noticed a dramatic increase of the outburst frequency. Figure 1 shows the light curve of the 2002 season, mainly drawn from visual observations by the authors. Some additional observations (visual and CCD) reported to the VSNET Collaboration (http://www.kusastro.kyoto-u.ac.jp/vsnet/) have been incorporated. All observers used V-band calibrated comparison stars. The uncertainties of the observations are 0.2–0.3 mag, which will not affect the following discussion.

Table 1 lists the known outbursts of GZ Cnc since the discovery by Takamizawa. The shortest interval outbursts in the 2002 unusually active season was only 11 d, and the other two intervals were 21–22 d. As shown in Figure 1, the durations of the outbursts in 2002 were very short in contrast to the long outbursts in 2000 February (Kato et al., 2001). Although such bimodal activity may suggest an outburst activity seen in SU UMa-type dwarf novae (Vogt, 1980; Warner, 1983), the apparent lack of superhumps during the long outburst seems to exclude the possibility of an SU UMa-type dwarf nova (Kato et al., 2001).

Alternately, the present behavior in some aspects resembles a “clustering” of outbursts observed in some intermediate polars (IPs) [EX Hya: Bateson et al. (1986); Hellier et al. (1989); TV Col: Uemura et al. in preparation], whose interpretation is still in debate.
Figure 1. Light curve of GZ Cnc in the 2002 season. Large and small dots represent positive and negative (upper limit) observations, respectively. Note the high frequency of outbursts (large dots).

(Hellier et al., 2000). Although no clear coherent pulses were detected during the 2000 February outburst (Kato et al., 2001), the presence of HeII emission lines and the relatively hard X-ray spectrum (Bade et al., 1998) would encourage a more extensive search for the IP-type coherent signal in quiescence and outburst (e.g. Kemp et al. 2002; Ishioka et al. 2002).

The present activity can also be comparable to V426 Oph, another dwarf nova which is known to show occasionally increased activities (Figure 2; see also Wenzel, Splittgerber 1990). V426 Oph has been also suggested to be an IP (Szkody, 1986), but this possibility is recently questioned (Hellier et al., 1990). The relatively hard X-ray spectrum of V426 Oph (Verbunt et al., 1997) is also suggestive of an analogy between GZ Cnc and V426

| Date          | Max  |
|---------------|------|
| 1994 November | 13.1 |
| 2000 February | 13.7 |
| 2000 December | 13.1 |
| 2002 March    | 13.3 |
| 2002 April    | 13.3 |
| 2002 April    | 13.4 |
| 2002 May      | 13.1 |

\(^{a}\) Discovery observation by Takamizawa.

\(^{b}\) Long outburst reported in Kato et al. (2001).

Table 1. Outbursts of GZ Cnc.
Figure 2. An state of increased outburst activity in V426 Oph (1999–2000). The data are from reports to VSNET.

Oph, which may comprise a new class of cataclysmic variables with prominent occasional increases of outburst activities. These activities may be a result of the weak presence magnetic fields, although the evidence of the magnetic nature (at least in V426 Oph) is still tantalizing. Further research to elucidate the relation between these unusual cataclysmic variables and IPs is encouraged.

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