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IS THE VARIABLE WX CETI A NOVA ?

I have examined more than 300 plates of the Harvard College Observatory Collection stretching from the year 1920 till 1951 and I have found three additional outbursts of WX Ceti. On the Palomar Chart (1949?) it is of the 18th mg.

|                    |                     |                     |                     |                    |
|--------------------|---------------------|---------------------|---------------------|--------------------|
| 1938               | 1939                | 1945                | 1945                | 1963               |
| June 28.5          | Oct.30.6            | July 5.6            | July 9.4            | Sept.21.4          |
| 9 <sup>m</sup> .45 | 10 <sup>m</sup> .20 | 13 <sup>m</sup> .52 | 14 <sup>m</sup> .14 | 10 <sup>m</sup> .5 |

Significant is that the new maximum of 1938 is much brighter than that of the discovery (1963); the three outbursts of mine and that of Strohmeier (1963) together with many important not seen observations permit to determine the cycle of the light variation: 450 days  $\pm$  25 days.

NOVAHOOD

| Class:    | U Geminorum      | Subnova          | Nova               | Subsupernova         | Supernova            |
|-----------|------------------|------------------|--------------------|----------------------|----------------------|
|           | Nova Dwarf       | Novalike         |                    |                      |                      |
| Amplitude | 3-5 <sup>m</sup> | 7-9 <sup>m</sup> | 11-13 <sup>m</sup> | 16:-20: <sup>m</sup> | 22:-26: <sup>m</sup> |
| Average   | 4 <sup>m</sup>   | 8 <sup>m</sup>   | 12 <sup>m</sup>    | 18 <sup>m</sup>      | 24 <sup>m</sup>      |

For the Subsupernova we have now two Novae: Nova Puppis 1942 and Nova Cygni 1975, both are with the range of 18<sup>m</sup>.

The Table "Novahood" and the cycle of 450 days place this variable not in the class Nova but in a group of demidecoded U Geminorum (Dwarf Nova) or semiundecoded Nova like (Subnova).

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Reference:  
 Strohmeier, W. 1963, Inf.Bull.Var.Stars No.47