

## LETTER TO THE EDITOR

### "Use of Charts"

The November 1982 AAVSO Circular contained a note regarding problems in observing the R Coronae Borealis star SU Tauri. While some observers were reporting a rapid decline in the star's brilliancy, others were reporting the star near maximum. Those reporting the decline were correct. Because I was one of the guilty parties, the event caused me to ask why the error occurred -- and continued to occur for nearly two months. It was a case of mistaken identity. Fundamentally, the cause was too much reliance on the memorization of the SU Tauri chart.

When observing long period variables once every week or two, charts are usually not memorized. Each time they are observed, your memory must be reloaded with the chart details. The cataclysmic variables and some others are observed nightly and sometimes several times a night. As a result, the chart can be memorized. The question, in my opinion, is whether it should be memorized.

Ernst Mayer, one of the most active and capable cataclysmic variable star observers, presented a paper in the Journal of the AAVSO 5, 1, explaining how to observe the eruptive variables efficiently. He suggests that after observing the fields many times, it is possible "to do away with star atlases and charts after a while, except for occasional refreshers. This can save lots of time." However, psychologists have demonstrated that memory is quite fallible in most people. Although such an approach apparently works for some people like Ernst, for most of us our recall processes are not so well tuned. Some fields, like SS Cygni and EM Cygni, are very distinctive and can be easily and reliably memorized. Other fields, like SU Tauri, YZ Cancr, and SW Ursae Majoris, can be very tricky and can lead to errors.

The solution to the problem, in my opinion, is to always check the chart before making an estimate. Spending those extra 15 seconds helps avoid confusing one field with another.

I suggest that observers spend a little more time to be sure of what they are seeing rather than place faith in a memory that is less reliable than one would like to believe. According to Janet Mattei, it can take about two hours at Headquarters to check and correct or delete a "bad" estimate once it is processed. Taking those extra few seconds can save the AAVSO staff and the observer a lot of headaches and embarrassment as well as increase the value of the estimates without appreciably affecting the quantity.

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