Variable Star Of The Month

November, 1998: FG SGE

Every month we will feature a special variable star in the AAVSO observing program. If you have a favorite variable star you would like to see featured feel free to contact us.

FG SGE

FG SGE & nebula - 15 mag. July 1, 1998. 18" F7 Newt CCD Tricolor by AAVSO Council Member Ron Royer. (South is up, East is right)

At the AAVSO Annual Meeting in October, Royer presented a paper titled "FG Sge: Amateur Challenge, Professional Enigma". Below is the abstract:

FG Sagittae in the last hundred years has gone from magnitude 13.7 to 9.1 and at the same time has dropped each year about 250K in temperature. It has also gone from a B spectral type star, through descending types, to its present K2Ib, and has now a definite warm color tone visually.

In August of 1992 it started into decline down to about 16th magnitude, from which it has not fully recovered, though in the Fall of 1997 it almost completely recovered its full brightness. It is currently at about 15.0 magnitude (Oct. 1998).

The challenge to amateur astronomers: the slightly variable '10 second of arc' east companion star of about 12.5 magnitude when FG Sge is faint. Many have confused the companion (2007+20D VAR? E) with FG Sge itself.

The enigma to professionals: What is happening here? Get good spectra of the 30-arcsecond emission nebula surrounding FG Sge; now is the time to do it.
What will FG Sge become, an S-type star or R CrB type?
The paper will be available in the *Journal Of The AAVSO* Volume 27, #2 expected to be available next Spring.

*Light curve* for FG SGE

*This month's Variable Star of the Month* was prepared by Aaron Price.

- **Variable Star of the Month Archive**