

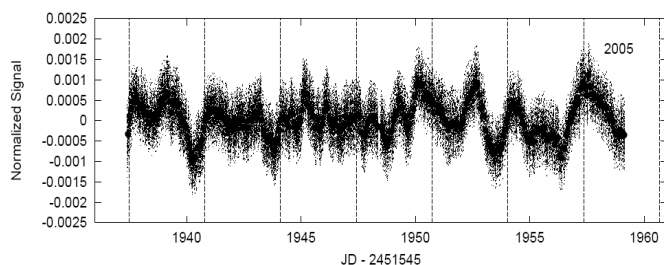
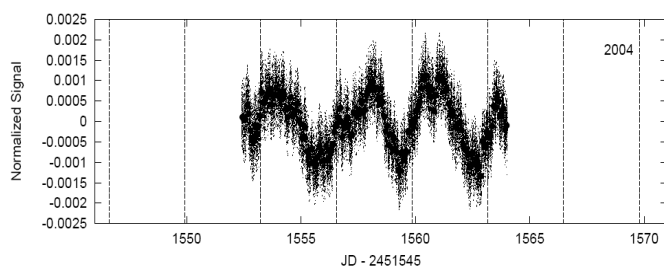
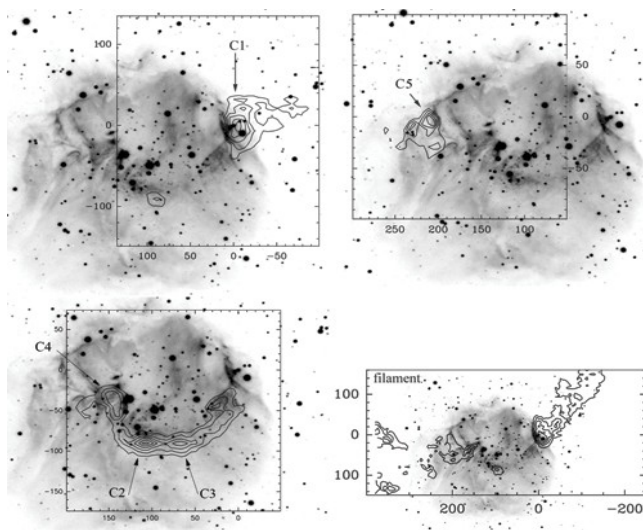
HIGHLIGHTS: this week in A&A

Volume 482-2 (May I 2008)

In section 6. Interstellar and circumstellar matter

"Triggered massive-star formation on the borders of Galactic HII regions.IV. Star formation at the periphery of Sh2-212", by L. Deharveng et al., *A&A* 482, p. 585

The question of whether the HII region surrounding a young O-star can trigger star formation in the nearby molecular cloud has been of interest for a long time. However, the recent availability of both sensitive molecular line observations and high-quality infrared and radio imaging means that reasonable answers to this question are feasible. The article of Deharveng et al. highlighted in this issue shows an example where the formation of a young 14 solar mass star has apparently been triggered by the expansion of the HII region Sh2-212 into the surrounding cloud.



In section 10. Planets and planetary systems

"MOST detects variability on tau Bootis A possibly induced by its planetary companion", by G.A.H. Walker et al., *A&A* 482, p. 691

The authors suggest a possible magnetic interaction between the parent star and its giant planetary companion in the 51 Peg-type systems tau Bootis A. Using MOST satellite photometry and Ca II K line emission, they find that there has been a persistent, variable region on the surface of the star that has tracked its giant planetary companion for some 440 planetary revolutions. The apparently constant rotation period of the variable region and its rapid variation make an explanation in terms of conventional star spots unlikely. The lack of complementary variability and the detection of the variable region so far in advance of the sub-planetary point excludes tidal excitation, but the combined photometric and Ca II K line reversal results make a good case for an active region induced magnetically on the surface of tau Bootis A by its planetary companion.