

Chromospheric activity variations in late-type stars members of young stellar kinematic groups

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During the last years (1999 - 2004), our group has been studying the spectroscopic properties of a large sample of stars members of the young stellar kinematic groups Local Association (Pleiades moving group, 20 - 150 Myr), IC 2391 supercluster (35 Myr), Ursa Major group (Sirius supercluster, 300 Myr), Hyades supercluster (600 Myr) and Castor moving group (200 Myr). The high resolution spectroscopic observations used in this study allow us to better determine radial velocities, chromospheric activity and lithium abundance of these objects. The chromospheric activity level of these stars has been analysed using the information provided by several optical spectroscopic features (from the Ca II H & K to Ca II IRT lines). We present here our results on chromospheric activity variability of several of these active stars. We analyse the possible rotational modulation, long term variability, as well as possible flare-like events.