

AN OBSERVATIONAL TEST ON STELLAR INTERIOR MIXING: THE LITHIUM DEPLETION IN TWELVE HYADES DWARFS

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High signal to noise reticon spectra have been taken at the CFHT coudé spectrograph for 11 Hyades main sequence solar type stars and one Eggen's Hyades group star. A differential detailed analysis is being carried out using as comparison star the integrated solar spectrum obtained through the asteroid Ceres. The depletion of the Li-abundance along the main sequence has been determined as the depth of the convective zone deepens towards the right of the H-R diagram. The equivalent width of the lithium doublet decreases from 83 mÅ (VB 73) to below 3 mÅ (VB 46) at KOV - K1V. This represents an abundance reduction by a factor over 100 between G1V to K1V. Theoretical work has been started to account for this slope (see the posters of R.Cayrel and A.Baglin) in this conference and the paper: 'The lithium abundance of Hyades main sequence stars' by Cayrel, Cayrel de Strobel, Campbell and Däppen, 1984, ApJ (in press).