High Resolution Granulation Spectroscopy with a 100x100 RETICON
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We present some results of solar spectroscopic granulation observations made with the Gregory Coude Telescope at Izaña, Tenerife, on Oct. 26, 1988. The spectra were recorded using a 100 x 100 RETICON array, on magnetic tape. Seeing conditions were quite good. One could clearly distinct line wiggles on the online data monitor. The solar line Fe I $\lambda = 6494.991$ Å which has a formation head of 500 km was observed in Ca active and non-active regions as well as in a sunspot. After reducing the data one could clearly make a distinction of the origination of the line bisectors in granular and inter-granular regions. The resolution of the diode-array was 0'5 per pixel. To reduce this poor resolution only the extreme cases were the pixel centers exactly fall on a bright or dark element were considered to calculate the line asymmetries which were found to be $\pm 16$ mA (this is similar to previous photographic results). For active regions a decrease of velocity fluctuations from 500 m/s to 370 m/s was found. The great advantage of using a diode-array is a less laborious reduction procedure, a larger amount of data that can be controlled on a monitor online during the observation.