

Abstract Submitted
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High Dispersion Spectroscopic Analyses of the Open Clusters NGC 6819 and NGC 7789¹ BARBARA ANTHONY-TWAROG, University of Kansas, CONSTANTINE DELIYANNIS, Indiana University, EVAN RICH, BRUCE TWAROG, University of Kansas — We have used the HYDRA multi-object spectrograph on the WIYN 3.5m telescope to obtain high resolution spectra in the region of Li 6708 Å for 333 and 377 stars in the open clusters NGC 6819 and NGC 7789, respectively. Radial and rotational velocity measures have been obtained for the stars to identify and eliminate probable binaries and non-members from the sample through internal comparisons and external comparisons with previous work whenever possible. With the ultimate goal of mapping the evolution of Li with temperature, metallicity, and evolutionary phase, the samples cover the luminosity range from the tip of the giant branch to below the cluster turnoff. Reaching to $V=16.5$ in NGC 6819, we have identified and bracketed the location of the main sequence Li-dip in the turnoff region. A brighter limit to the sample in NGC 7789 at present allows us to just reach the hot side of the Li-dip in the turnoff, coincident with an apparent main sequence gap.

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