

Abstract Submitted
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Thermal Processing of Silicate Dust Grains in Class II YSOs JARRON LEISENRING, University of Rochester, IRS DISKS TEAM COLLABORATION — Working in conjunction with the IRS Disks Team, this project makes use of the hundreds of objects recently observed using the Spitzer Space Telescope within the Taurus-Auriga star-forming region of the sky. This project focuses on analyzing the mid-infrared emission features indicative of Class II YSOs at 8-13 microns which relates to the processing of initially amorphous silicate grains into partially crystalline form. Questions that I attempt to examine include the crystalline versus amorphous silicate mass ratios in the disk surrounding the star along with the conditions that affect change in this relationship. From reduced spectra obtained using the Spitzer Space Telescope, I have attempted to discern any trends between relative crystalline-to-amorphous silicate mass ratios and other known properties such as luminosities, disk masses, accretion rates, and estimated ages.

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