Science Abstract

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Archived data from GALEX, WISE, and SDSS was used to construct a color-magnitude diagram for Type I quasars at redshift values of 0.1<z<0.5. Several color indices were investigated, including indices using magnitudes in the near ultraviolet region (from GALEX) through the infrared region (from WISE). Color was plotted against absolute magnitude at a variety of wavelengths, from near ultraviolet to infrared. No correlation was found when comparing a color index to an infrared luminosity, indicating that the brightness of the dust surrounding the accretion disk, which peaks in the IR, is not well correlated to the temperature of the accretion disk. A relationship was found, however, between color and luminosity in the near ultraviolet. Color was determined based on the ratio of intensity in the near UV (from GALEX) to the intensity in the near infrared region (zband of SDSS). Luminosity in the near UV was determined based on GALEX data.