

Colors of Inner Disk KBOs. W. Romanishin¹, S. C. Tegler² and G. J. Consolmagno, S. J.^{3, 1} University of Oklahoma (wjr@nhn.ou.edu) ²Northern Arizona University (Stephen.Tegler@nau.edu), ³ Vatican Observatory (gjc@specola.va)

We present new optical broadband colors, obtained with the Keck 1 and Vatican Advanced Technology telescopes, for six objects in the inner classical Kuiper Belt. Objects in the inner classical Kuiper Belt are of interest as they may represent the surviving members of the primordial Kuiper Belt that formed interior to the current position of the 3:2 resonance with Neptune, the current position of the plutinos. The inner classical Kuiper belt objects are non-resonant objects that form a natural sun-ward extension of the main classical Kuiper belt located exterior to the 3:2 resonance. The six new colors, combined with four previously published, show that the 10 inner objects with known colors form a neutral clump and a reddish clump in B-R color. Nonparametric statistical tests show no significant difference between the B-R color distribution of the inner disk objects compared with Centaurs, plutinos, or scattered disk objects. However, the B-R color distribution of the inner classical Kuiper belt objects *does* differ significantly from the distribution of colors in the main classical Kuiper belt. The main classical objects are predominately red, while the inner classical belt objects are a mixture of neutral and red. The color difference may reveal the existence of a gradient in the composition and /or surface processing history in the primordial Kuiper Belt.