Dust evolution in Intermediate Velocity Clouds

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We search for evidence of dust evolution in high Galactic latitude regions by looking at variations in the emissivities of dust associated with different velocity clouds. In order to do so, we spatially correlate infrared IRAS/IRIS dust maps with HI column density maps derived from 21-cm radio observations with the GBT. Our findings show that halo clouds (IVCs) have a higher 60/100 and lower 12/100 color ratios when compared to dust in local low-velocity gas. This suggests that large thermal dust grains are shattered into smaller ones (VSGs) and that there is a low relative abundance of PAHs in intermediate velocity clouds.