

/findscale/graph36

Histograms of TM3 DN level for pixels grouped according to HOT level. The histogram lower bound values are observed to increase with increasing HOT level as expected for the additive effect of haze on image radiometry.

Figure 8



Observed histogram lower bound versus HOT for bands TM1 to TM3 for scene P55/R18. The clear area pixels exhibit a HOT level of approximately 30 while the dominating haze feature of the scene are characterized by HOT values between 30 and 39. The data presented can be used to adjust the radiometry of each band to the clear area level.

/findscale/graph26





Example result of employing the HOT image to radiometrically adjust band 3 of scene P55/R18. Besides the overall scene, selected windows (before and after adjustment images) are presented in full resolution to illustrate recovery of surface detail.



TM1-TM3 scatter plots of four image windows (lower right) with similar surface cover. Window 'C' is located in the clearest portion of the scene while the other three (labelled 1, 2 and 3) are under haze cover. The effect of the adjustment procedure is to bring hazy pixels into alignment with the reference clear area data.

Figure 11



Histograms of (a) HOT and (b) TM3 DN levels for the four windows illustrated in Figure 11. The TM3 data illustrates the data migration arising from the adjustment process.

/findscal/graph27

Figure 12