

Title:/Titre:/Titel: Factors that Affect Multitemporal LANDSAT MSS Classification Performance of Sugar Cane.

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Abstract:/Sommaire:/Zusammenfassung: The objective of this study was to determine the effects of site characteristics, acquisition dates, and number of features on multitemporal classification performance of sugar cane. Four segments (9 x 11 km approx.) located at two different sites (high and low crop density) were classified using a maximum likelihood classifier based on 40 pixels for training and 60 for bias correction. Combinations of four acquisition dates available for each segment were analysed varying the number of features per date. CIR photographs and field check were used for labelling in the training procedure and for assessment of classification performance. Preliminary analyses indicate that acquisition date selection is very important for accurate classification of sugar cane. Accuracy of classification varied from site to site indicating that a more site independent training procedure is required for high accuracy overall results.