

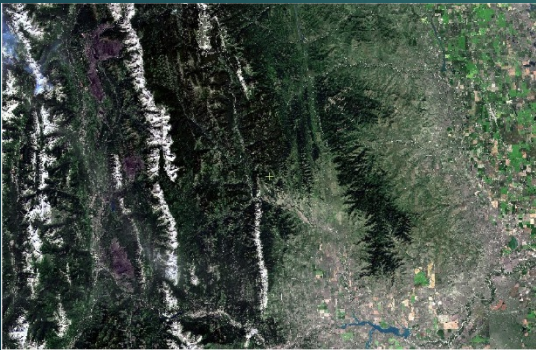
Image Classification of Sparwood, BC and Fort MacLeod, Alberta

Study Area

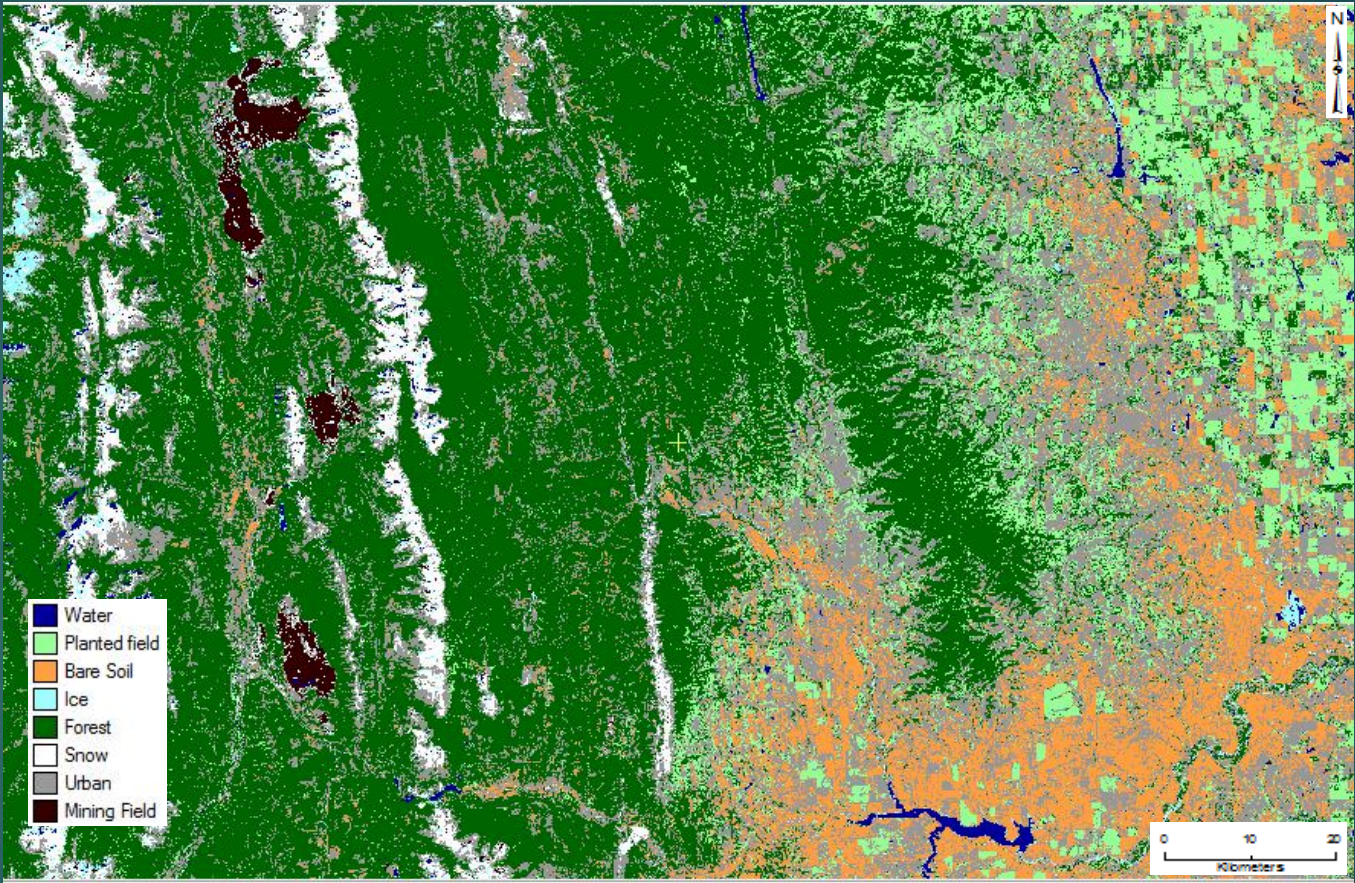


Image captured in August, 2014 with little cloud cover. The study area contains several coal mines with small urban communities among the mountainous regions. This area was chosen due to the ideal weather conditions for Landsat 8 imagery. This includes a humid continental climate and warm, hot summers. In addition, the variety of land uses allows us to complete image classification, including mountains, farm fields, mining, and urban areas.

Original Landsat 8 Imagery



Results: Classified Satellite Image



This area contains a variety of land features. Different land features were identified using different Landsat 8 band combinations. Water, ice, snow, and mining fields were identified using band combination 6-5-4. There was also a large area with agricultural fields which were identified primarily using band combination 5-4-3.

Mining, Snow and Forest Area in Different Band Combinations



Landsat 8 Bands 4-3-2 (True Colour)



Landsat 8 Bands 6-5-4 (False Colour)

Mining, Snow and Forest Area after Classification

