The Role of Land-Cover Change in High Latitude Ecosystems: Implications for the Global Carbon Cycle

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•Semi-automated methodology that uses Landsat and AVHRR data to estimate historical decadal scale land-cover change in high latitude ecosystems. Methodology is capable of being adjusted to use Landsat 7 and MODIS scenes to estimate interannual changes in land-cover for high latitude regions.

•Modeling framework based on the Terrestrial Ecosystem Model (TEM) that simulates terrestrial carbon storage responses to historical fire and climate in Alaska.

•Implementation:
- Supports CCSI program element regarding disturbance effects to ecosystem function.
- Supports the National Assessment through evaluation of the vulnerability of Alaska to climate variability and change.

(For more info see http://alces.sel.uaf.edu)