

A Continental-Scale Design



- 1. Core sites:**
Located in unmanaged wildland conditions
- 2. Relocatable sites:**
Representative of human land management effects on ecosystems
- 3. Aquatic sites:**
Measure changes in aquatic systems over time

Domain 18, Tundra

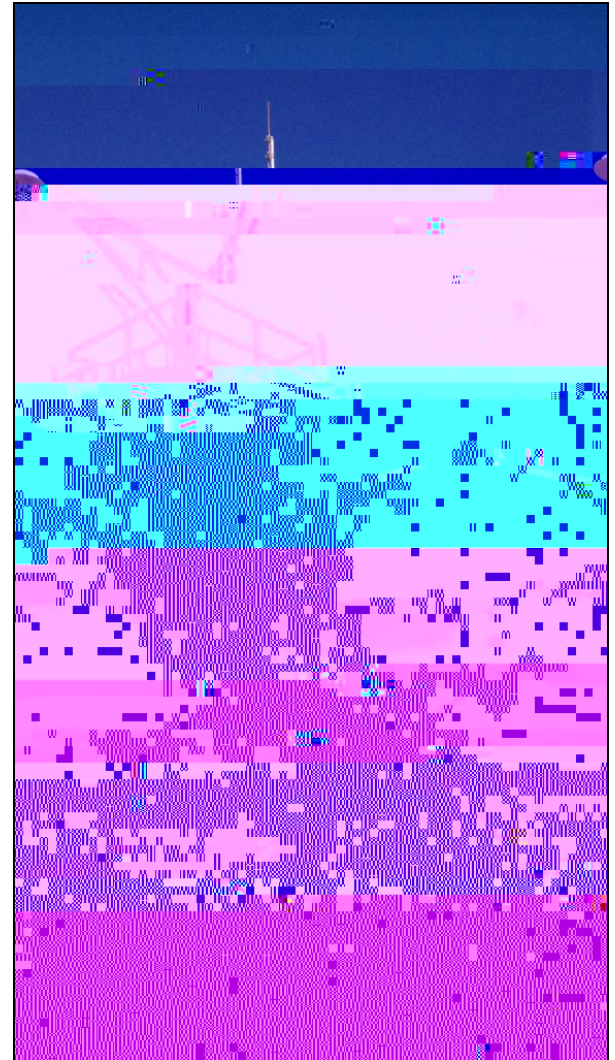
TERRESTRIAL	Toolik Lake (Core)
Site Construction	Jan-15 to Oct-15
Sensor Infrastructure Installation	Apr-16 to May-16
TIS Initial Operational Capability	Jun-16
TOS Initial Operational Capability	Aug-16

Site Locations

Core site tower and instrumentation will be located off the Dalton Hwy at MP 289.2, roughly five miles north of Toolik Field Station (MP 284.5). Site will include 26 ft tower, instrument hut, soil array, soil pit, precipitation gauge, generator / power run, parking area, and boardwalks.

Core aquatic / STREON site will be northeast of core tower location at Oks creek. Site will include sensors, groundwater wells, met station, streambed experiment baskets, and boardwalks.

Relocatable aquatics site at Toolik Lake. Site will include buoy and sensors, groundwater wells, met station, and boardwalks.



Plot Establishment Activities, 2015



TOS Plot Establishment Activities, 2015

NEON field team of six will be on-site at Toolik for approximately three weeks, July 13-31.

From a large pool of randomly selected potential plots, selection will be narrowed to 30 base plots, 30 distributed tower plots, 6-8 mammal grids, 10-15 bird plots, 6 tick plots, and 10 mosquito points

	Plants	Soil Microbes	Small Mammals	Mosquitoes	Birds	Beetles	Ticks	Soil
Abundance	✓	✓	✓	✓	✓	✓	✓	✓
Pathways	✓	✓	✓	✓	✓	✓	✓	✓
Phenology	✓	✓	✓	✓	✓	✓	✓	✓
Peaks/fluxes	✓	✓	✓	✓	✓	✓	✓	✓
Community	✓	✓	✓	✓	✓	✓	✓	✓
Function	✓	✓	✓	✓	✓	✓	✓	✓
Productivity & Biomass	✓	✓	✓	✓	✓	✓	✓	✓

Questions?