

UNDERSTANDING THE CHANGING NATURAL-BUILT LANDSCAPE IN AN ARCTIC COMMUNITY: AN INTEGRATED SENSOR NETWORK



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USACE Cold Regions Research and Engineering Laboratory



North Slope Borough
Planning & Public Works



UKPEAGVIK
INUPIAT
CORPORATION

Ukpeagvik Inupiat Corporation
UIC Science, UIC Land



Tagiugmiullu Nunamiullu
Housing Authority



Cold Climate Housing
Research Center



Ground Penetrating Radar and Electrical Resistivity Tomography to measure active layer and ground ice (UVA and CRREL)

TERRESTRIAL METEOROLOGICAL SENSOR NETWORK

- prototyping at UVA



Sensor arrays to
be installed
within the city of
Utqiagvik

Air temp, relative humidity, wind
speed / direction, ground temp.
& moisture content, snow depth,
etc.

