



# NEWNET

Neighborhood Environmental Watch Network at the

# University of Alaska Fairbanks

Wily F. Splain



# NEWNET

at the UNIVERSITY OF ALASKA FAIRBANKS

The NEWNET Project is supported by the Battelle- Pacific Northwest National Laboratory in collaboration with the American Indian Science and Engineering Society at the University of Alaska Fairbanks, the Alaska Department of Environmental Conservation, and the Los Alamos National Laboratory.

# What is NEWNET?

NEWNET is a network of meteorological and radiological monitoring stations, that gather important environmental measurements for the purpose of public disclosure. These measurements are transmitted via satellite to the Los Alamos National Laboratory (LANL). Here the data are carefully inspected and interpreted to be made available over the Internet. In many cases, the data is available directly from the station that collected it.

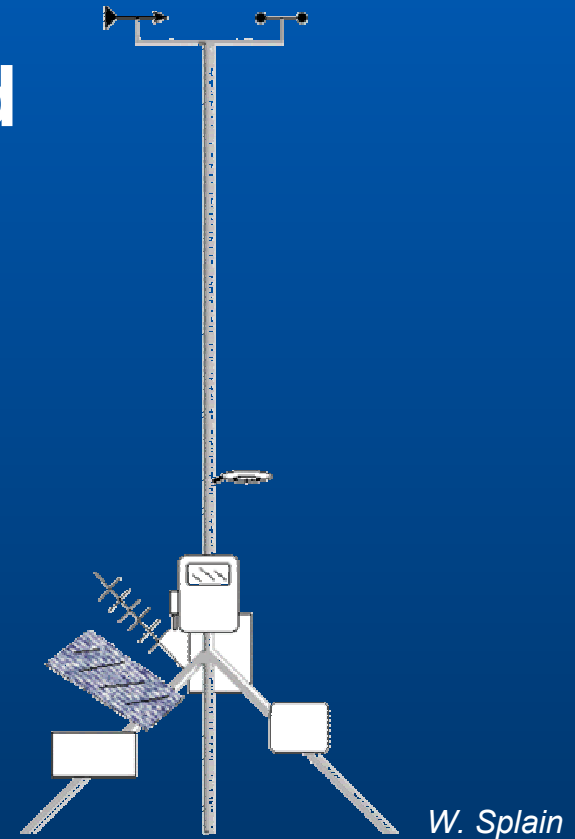
(NEWNET website: <http://newnet.lanl.gov>)



W. Splain

# What kind of Data is gathered?

- Wind Direction and Speed
- Barometric Pressure
- Humidity
- Ambient Temperature
- Gamma Radiation



# What is AISES?



The American Indian Science & Engineering Society (AISES) is a private, non-profit organization which nurtures building of community by bridging science and technology with traditional Native values. Through its educational programs, AISES provides opportunities for Alaska Natives and American Indians to pursue studies in science, engineering, technology and other academic areas\*.

\*From UAF AISES website <http://www.uaf.edu>

# NEWNET and UAF AISES

The University of Alaska Fairbanks chapter of AISES has been involved with the NEWNET project since 1998. Through bi-weekly meetings UAF AISES has drafted several students into the NEWNET project as interns.



# NEWNET and UAF AISES

Doug Dasher,  
Dr. John Kelley, and  
members of the UAF  
chapter of AISES  
stand in front of the  
Fairbanks NEWNET  
station at the  
University of Alaska  
Fairbanks Museum.



# NEWNET and UAF AISES

The UAF AISES students work to support NEWNET stations in Alaska. Students work on installation and maintenance of the stations as well as presentations about the stations.



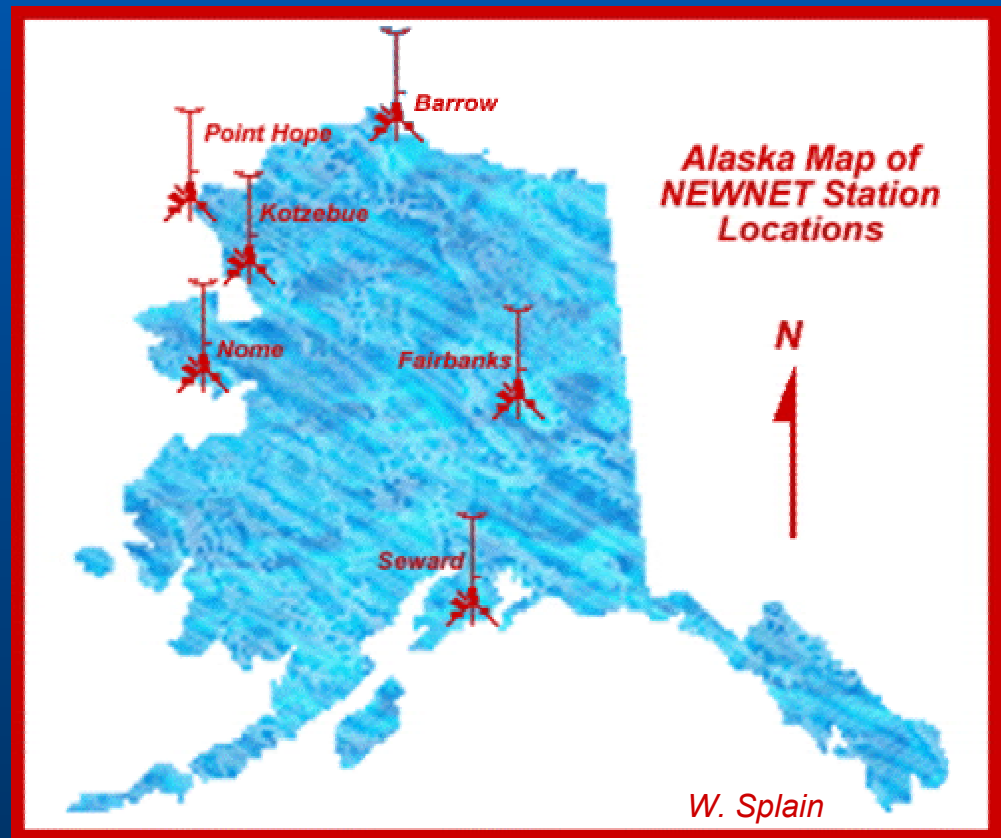
# NEWNET and UAF AISES

AISES students give a presentation about NEWNET at the Arctic Council at the University of Alaska Fairbanks. From left to right: Adrienne Orr, Loda Griffeth, and Wily Splain.



# NEWNET Station Locations

The map shown here illustrates the locations of the six stations in Alaska. The Barrow station is the most recent addition to the fleet. The first data from the Barrow station was received on September 26, 2000.



# Barrow Station Installation



Stan Read, Alaska Department of Environmental Conservation, installs some conduit for hooking up the station's battery. The stations are designed to be autonomous, and run on 12 volt batteries with solar power charging.

# Barrow Station Installation



Wily Splain, an Electrical Engineering student at the University of Alaska Fairbanks, installs the stations transmitter antenna. The stations transmit data every four hours, via GOES satellite, to the Los Alamos National Laboratory.

# Barrow Station's First visitor

This Least Weasel, sometimes called Ermine, stopped by the Barrow station to give an inspection. Soon his fur will turn white with a black tipped tail for winter.





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