# Stations and Observations

Stations are sited in stable, open locations.

Instruments are calibrated to NIST standards.

Triplicate sensor configuration for the primary measurements of temperature and precipitation

- internal consistency assures quality
- redundancy protects continuity

Ancillary measurements support the primary measurements

- global solar
- surface IR temperature
- low-level wind
- wetness

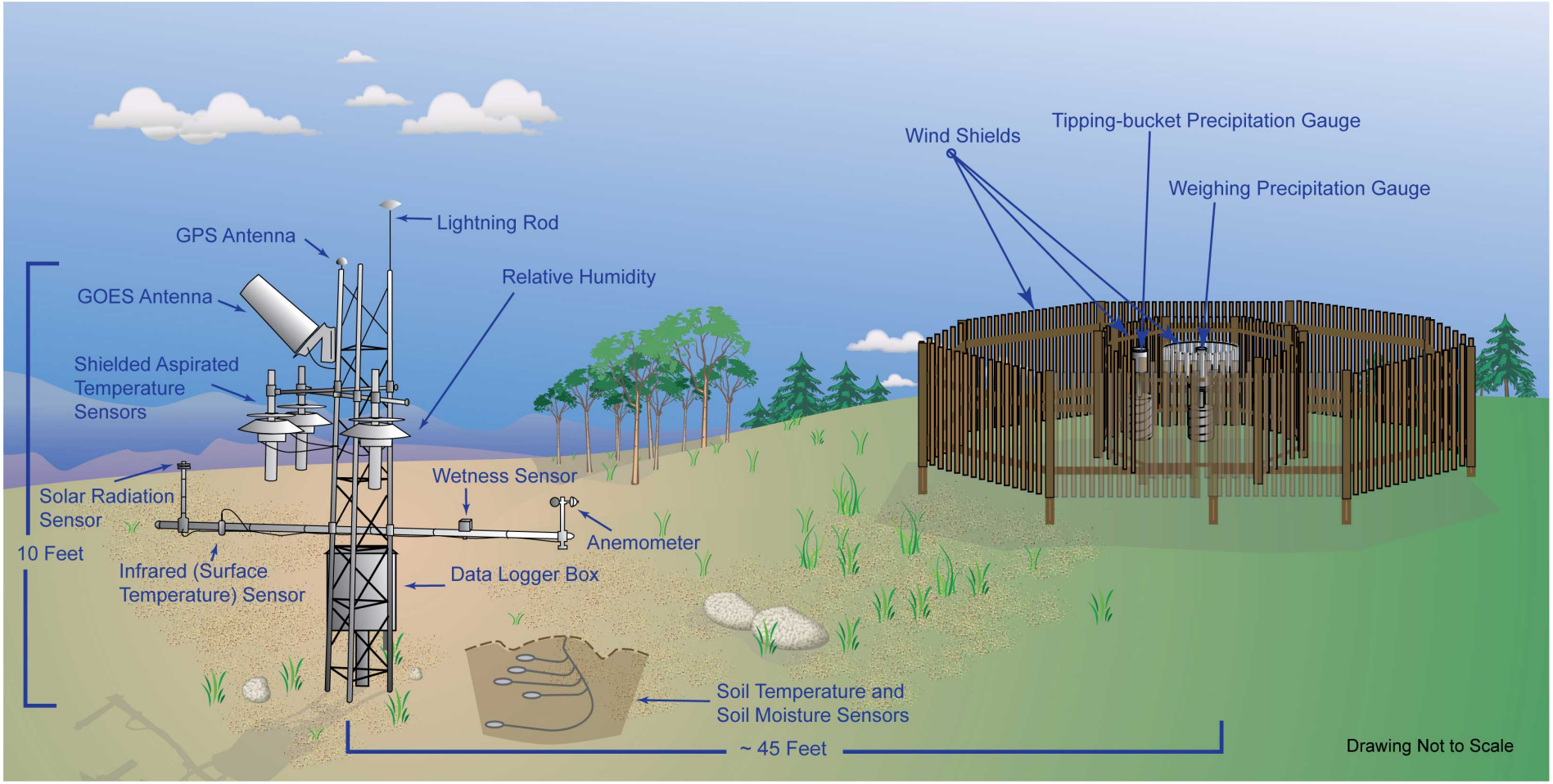
Additional measurements

- soil moisture
- soil temperature
- relative humidity

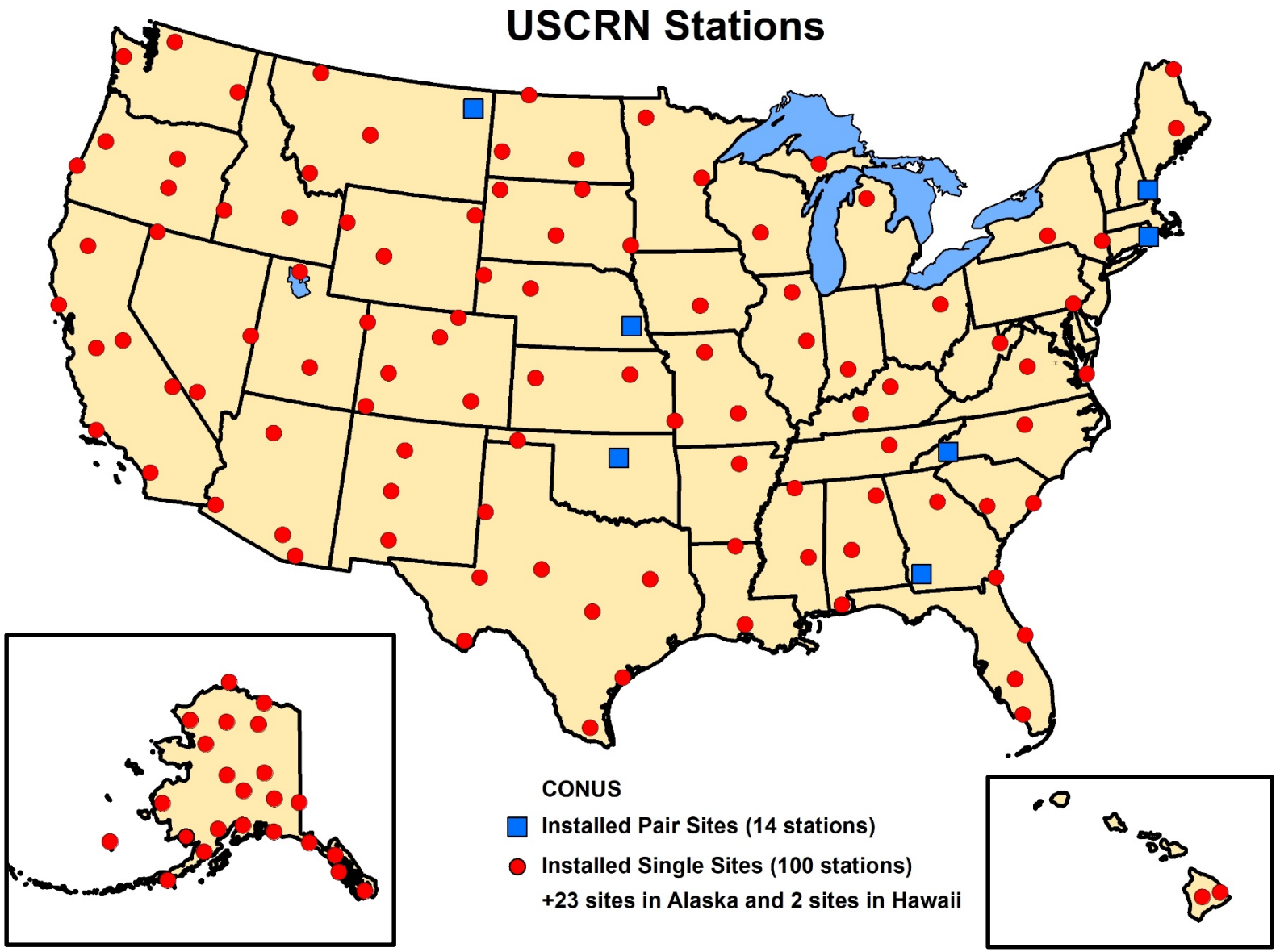
Data are acquired, processed and re-distributed hourly.

US Climate Reference Network

# Instruments at a Typical USCRN Station



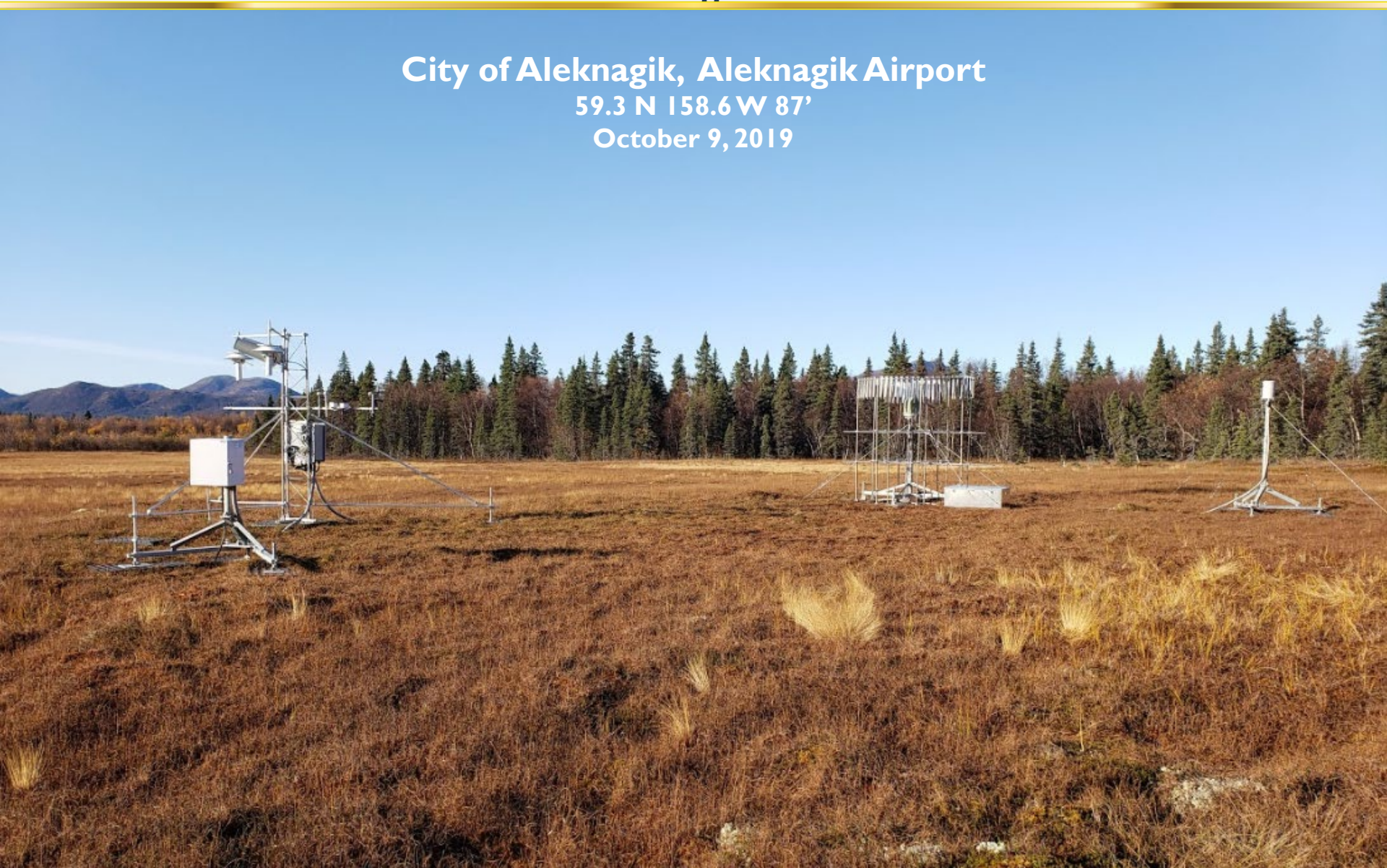
# US Climate Reference Network



# US Climate Reference Network

*Non-commissioned*

## AK Aleknagik 1NNE



# US Climate Reference Network

## AK Bethel 87 WNW



# US Climate Reference Network

## AK Cordova 14 ESE



# US Climate Reference Network

## AK Deadhorse 3 S



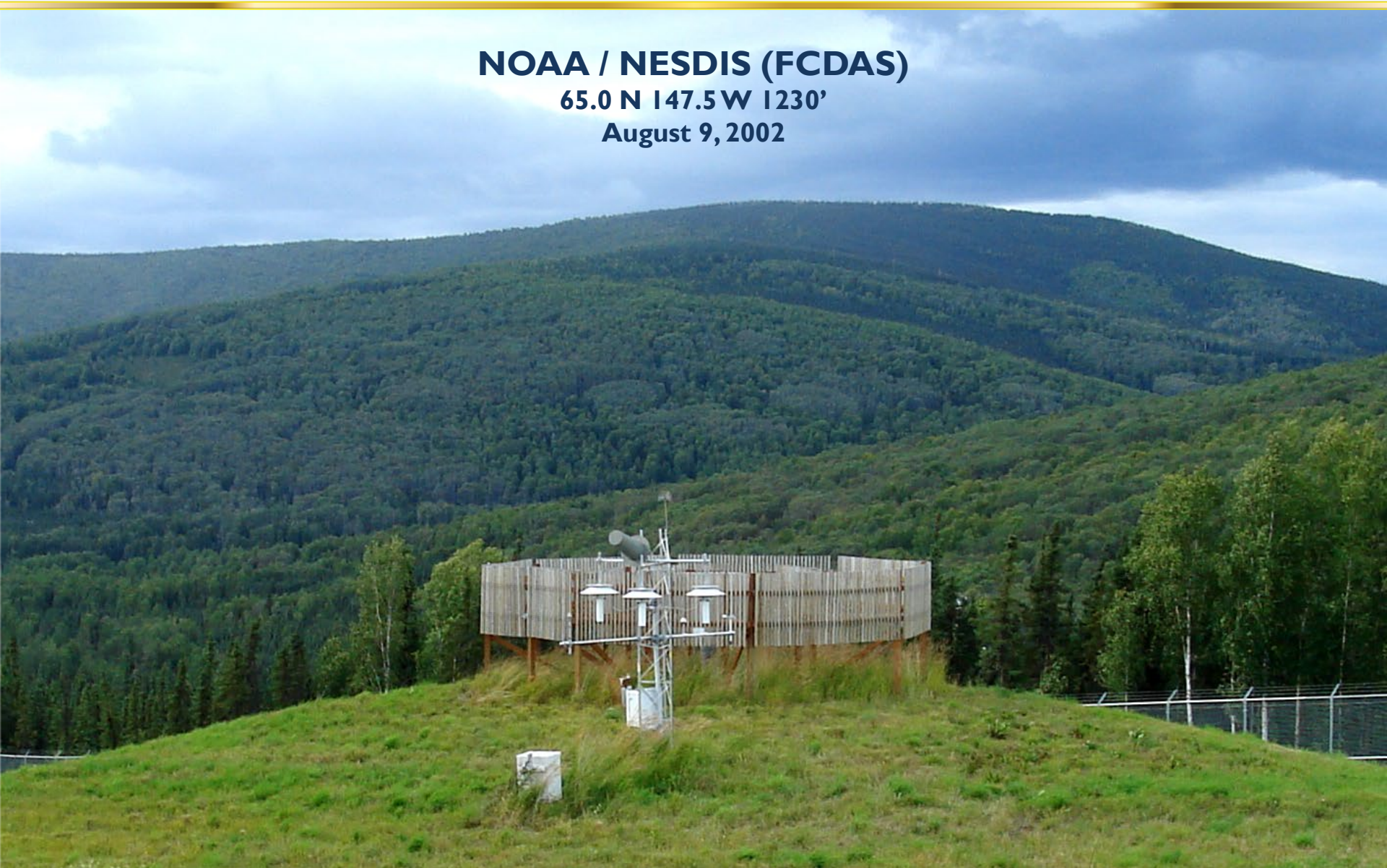
# US Climate Reference Network

## AK Denali 27 N



# US Climate Reference Network

## AK Fairbanks 11 NE



# US Climate Reference Network

## AK Glennallen 64 N



# US Climate Reference Network

## AK Gustavus 2 NE



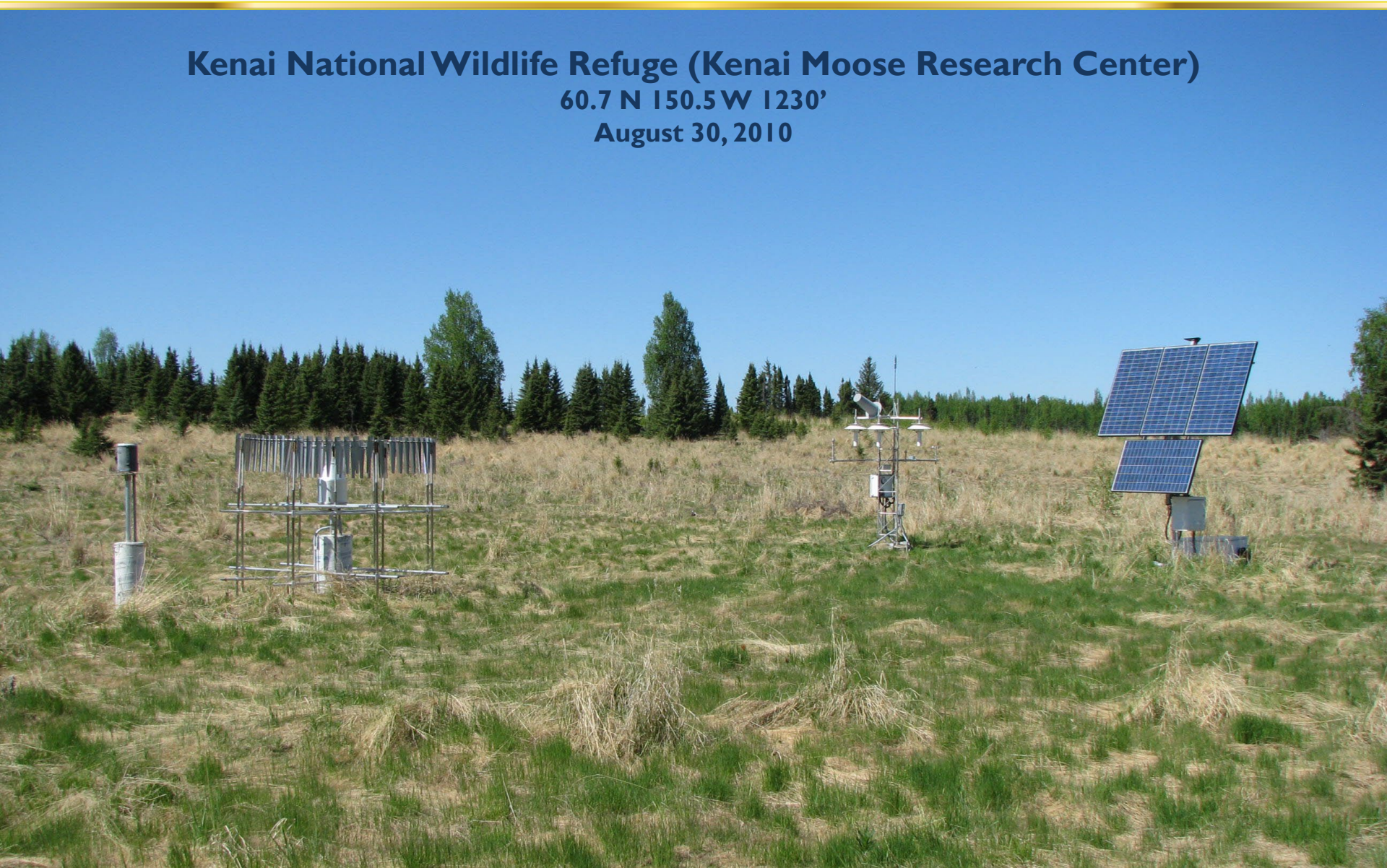
# US Climate Reference Network

## AK Ivotuk 1 NNE



# US Climate Reference Network

## AK Kenai 29 ENE



# US Climate Reference Network

## AK King Salmon 42 SE



# US Climate Reference Network

## AK Metlakatla 6 S

### National Weather Service (Annette Island WSO)

55.0 N 131.6 W 105'

July 26 2012



# US Climate Reference Network

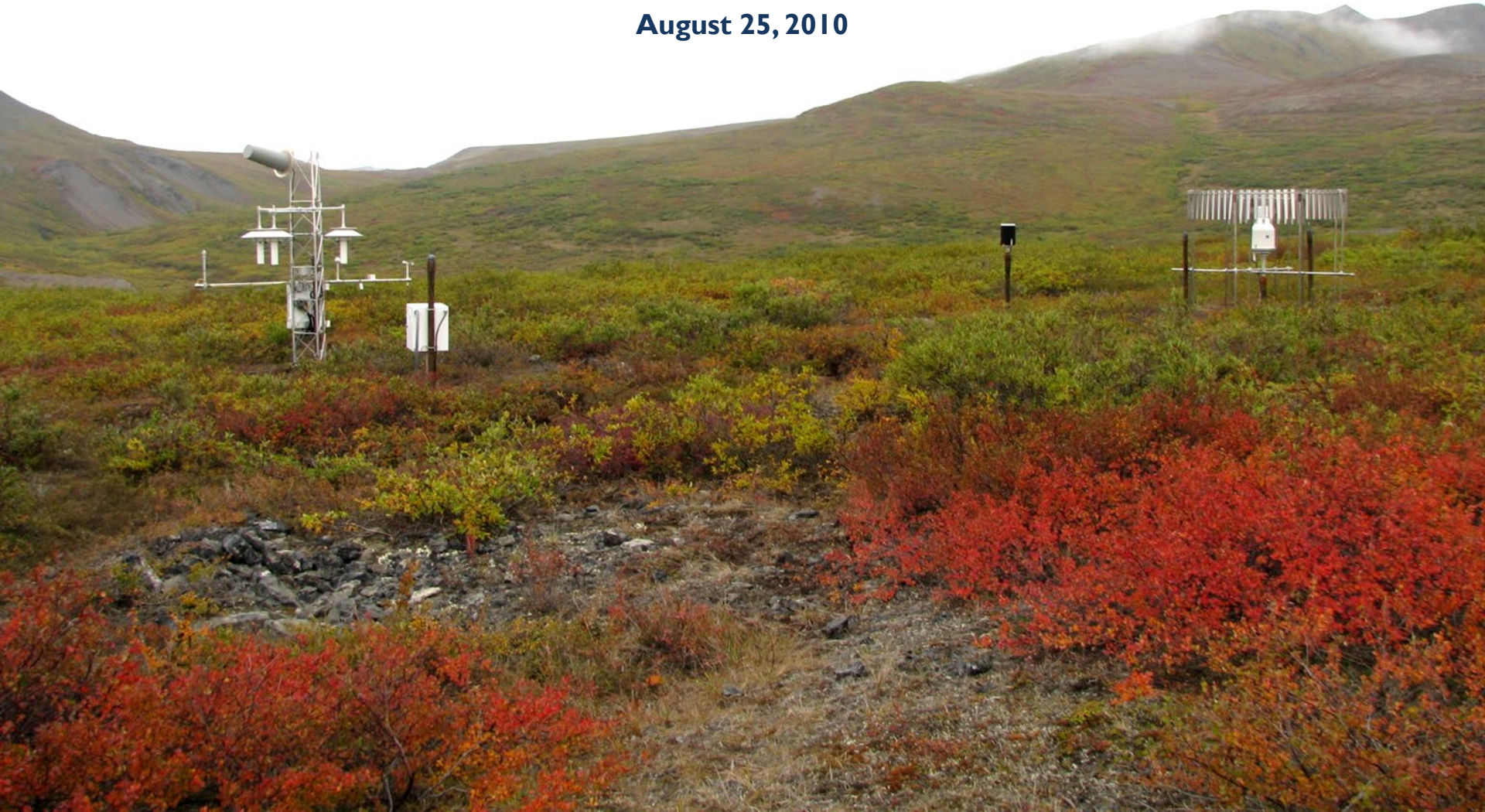
## AK Port Alsworth 1 SW



# US Climate Reference Network

## AK Red Dog Mine 3 SSW

### NANA Regional Corp Red Dog Mine
**68.0 N 162.9 W 942'**
**August 25, 2010**



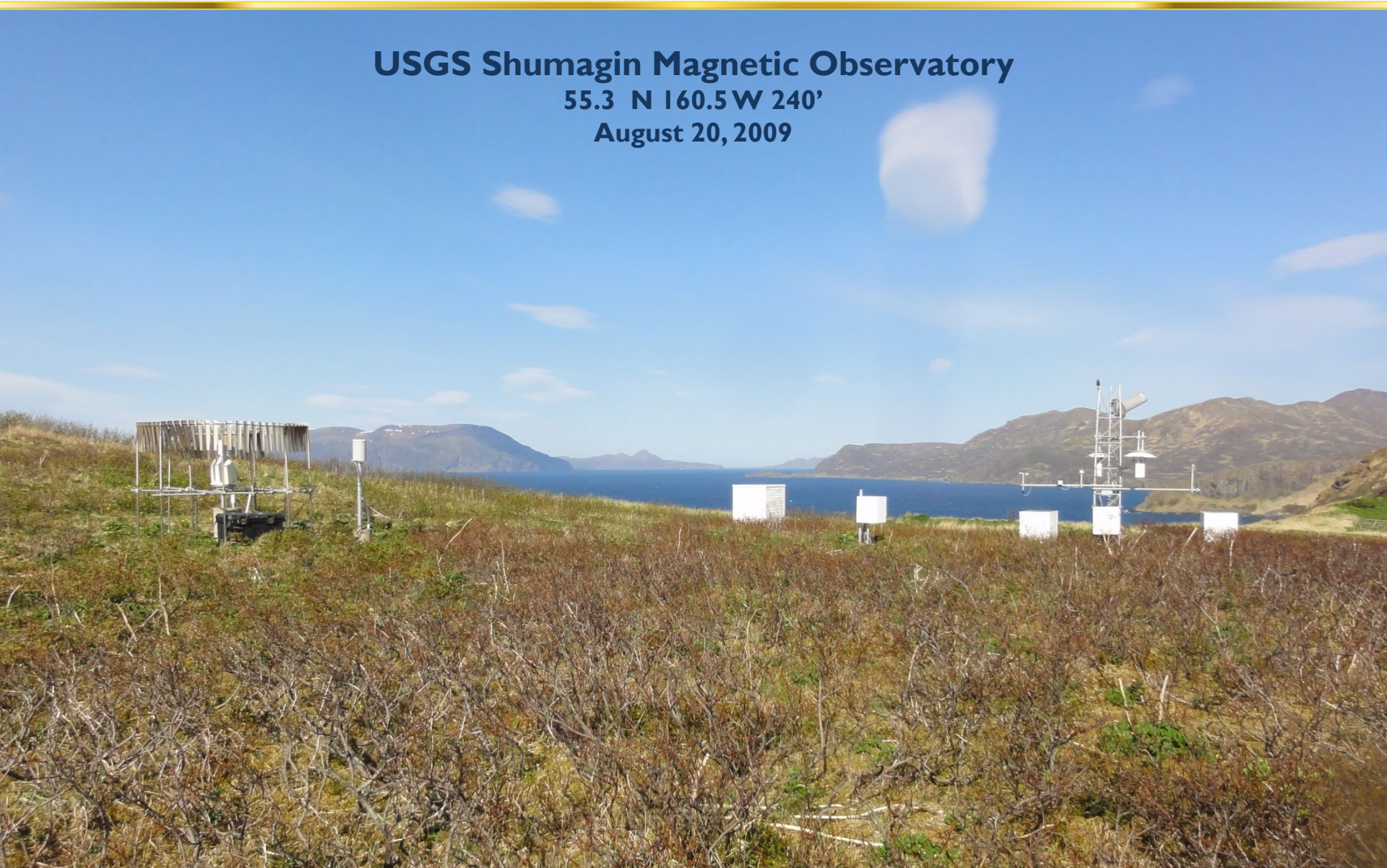
# US Climate Reference Network

## AK Ruby 44 ESE



# US Climate Reference Network

## AK Sand Point 1ENE



# US Climate Reference Network

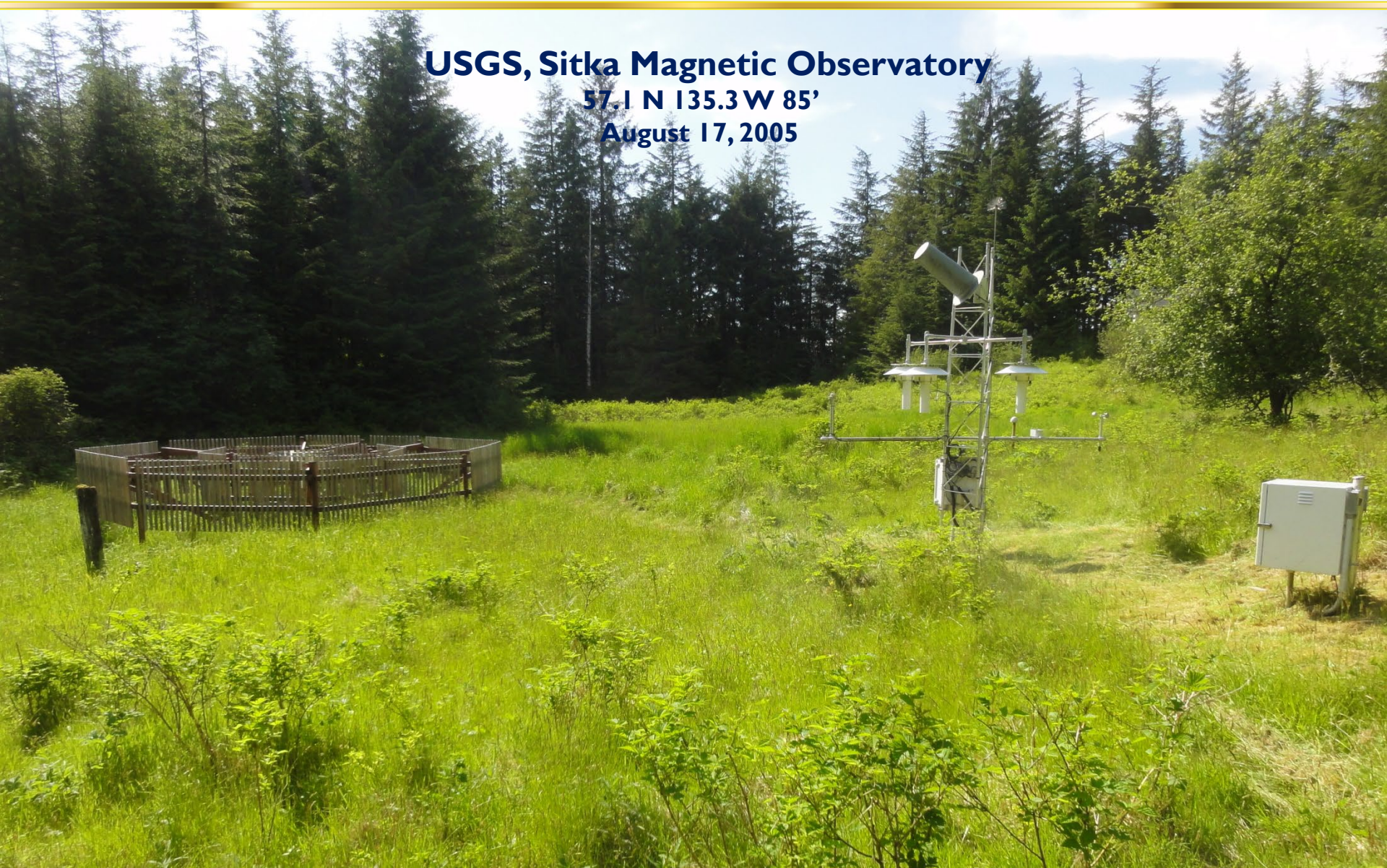
## AK Selawik 28 E



**FWS, Selawik National Wildlife Refuge (Cabin Site)**
**66.6 N 159.0 W 22'**
**Aug 14 2015**

# US Climate Reference Network

## AK Sitka 1 NE



# US Climate Reference Network

## AK St Paul 4 NE



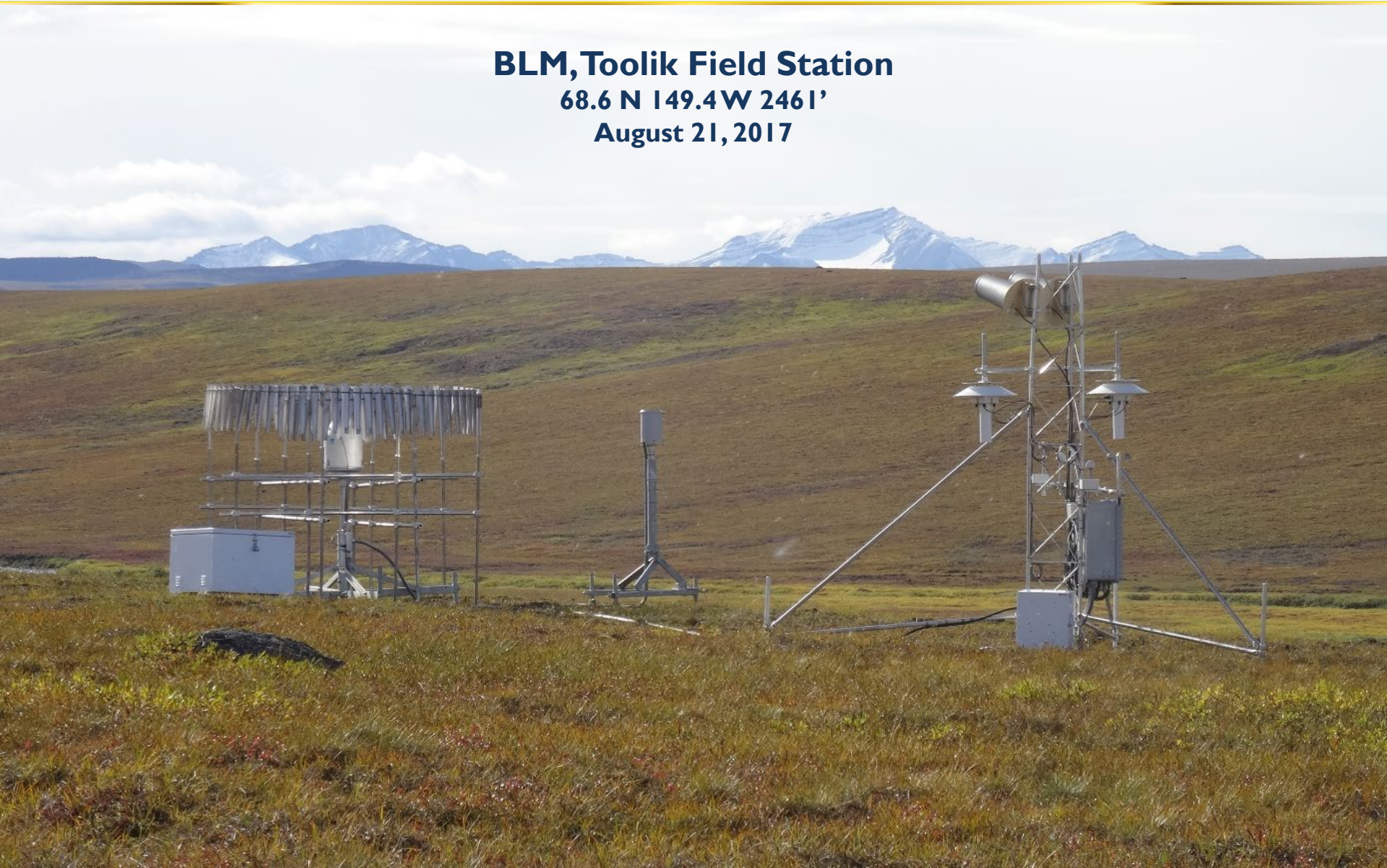
# US Climate Reference Network

## AK Tok 70 SE



# US Climate Reference Network

## AK Toolik Lake 5 ENE



# US Climate Reference Network

## AK Utqiaġvik 4 ENE (formerly Barrow)



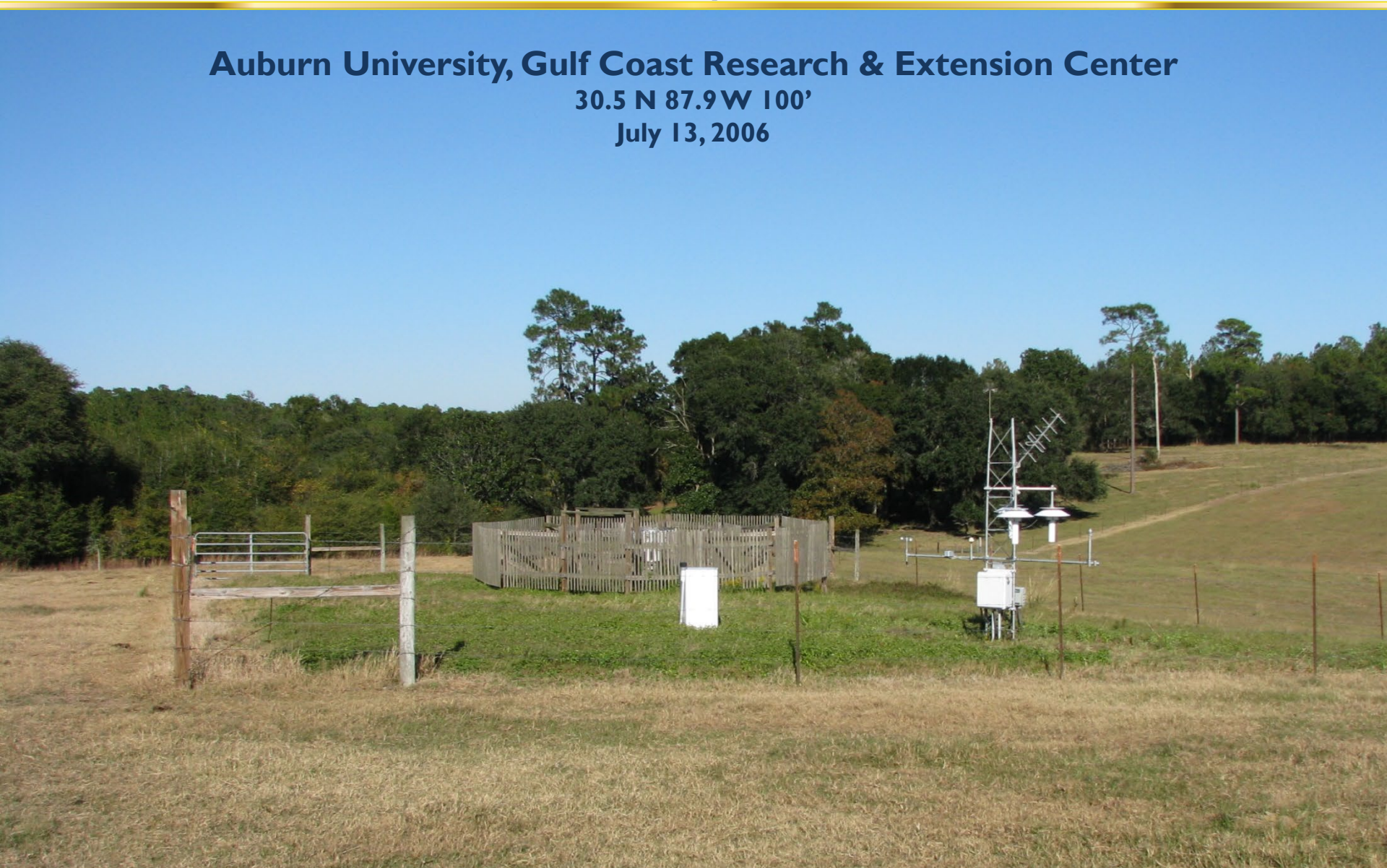
# US Climate Reference Network

## AK Yakutat 3 SSE



# US Climate Reference Network

## AL Fairhope 3 NE



# US Climate Reference Network

## AL Gadsden 19 N



# US Climate Reference Network

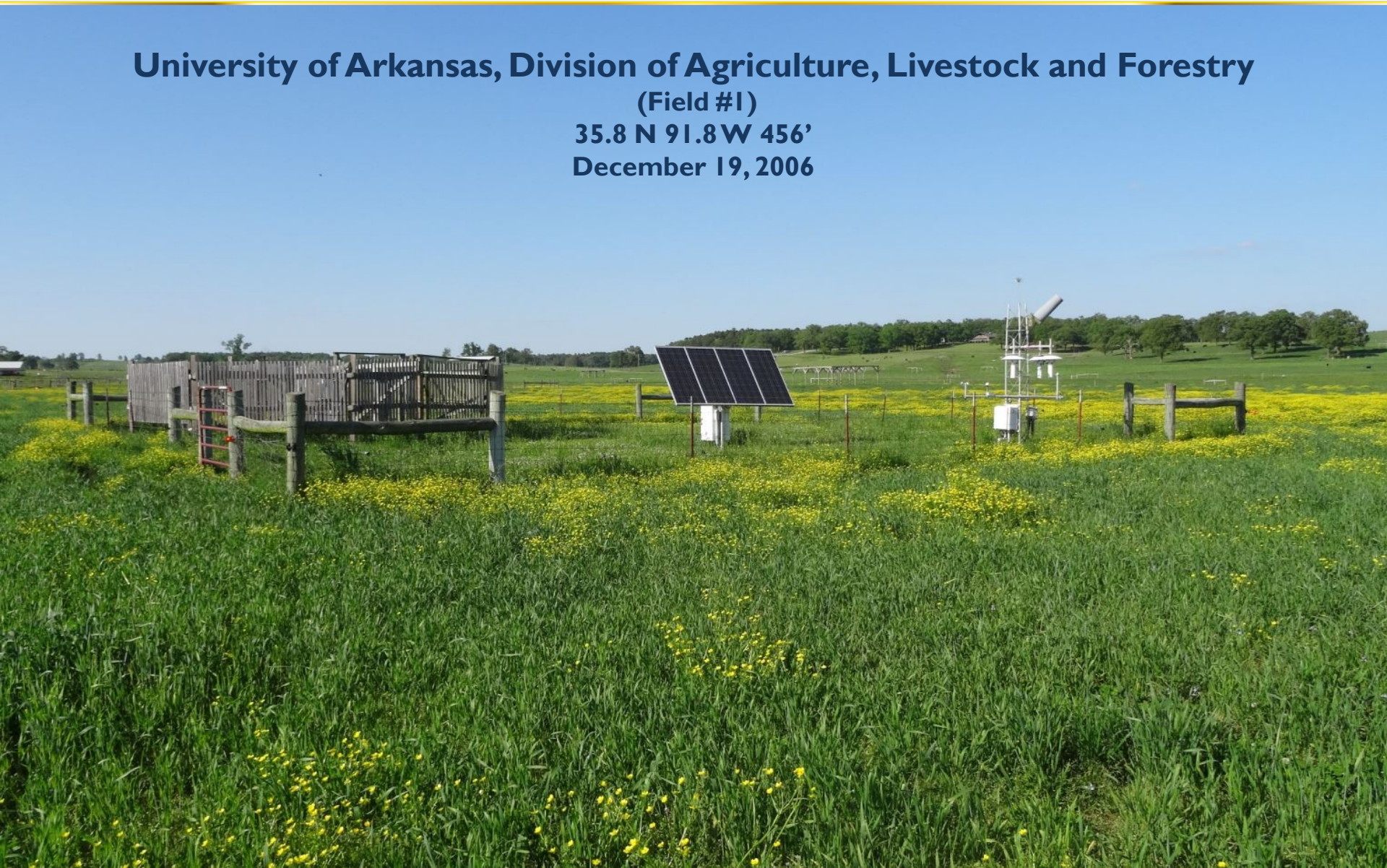
## AL Selma 13 WNW

**Auburn University (Black Belt Research and Extension Center)**
**32.5 N 87.2 W 204'**
**May 26, 2005**



# US Climate Reference Network

## AR Batesville 8 WNW



# US Climate Reference Network

## AZ Elgin 5 S



# US Climate Reference Network

## AZ Tucson 11 W



# US Climate Reference Network

## AZ Williams 35 NNW



# US Climate Reference Network

## AZ Yuma 27 ENE



# US Climate Reference Network

## CA Bodega 6 WSW



# US Climate Reference Network

## CA Fallbrook 5 NE



# US Climate Reference Network

## CA Merced 23 WSW



**Kesterson Reservoir, (U.S. Bureau of Reclamation)**
**37.2 N 120.9 W 64'**
**March 25, 2004**

# US Climate Reference Network

## CA Redding 12 WNW

### Whiskeytown National Recreation Area (RAWS Site)

40.7 N 122.6 W 1412'

March 25, 2003



# US Climate Reference Network

## CA Santa Barbara 11 W



# US Climate Reference Network

## CA Stovepipe Wells 1 SW



# US Climate Reference Network

## CA Yosemite Village 12 W



# US Climate Reference Network

## CO Boulder 14 W



# US Climate Reference Network

## CO Cortez 8 SE



# US Climate Reference Network

## CO Dinosaur 2 E



# US Climate Reference Network

## CO La Junta 17 WSW



# US Climate Reference Network

## CO Montrose 11 ENE



# US Climate Reference Network

## CO Nunn 7 NNE



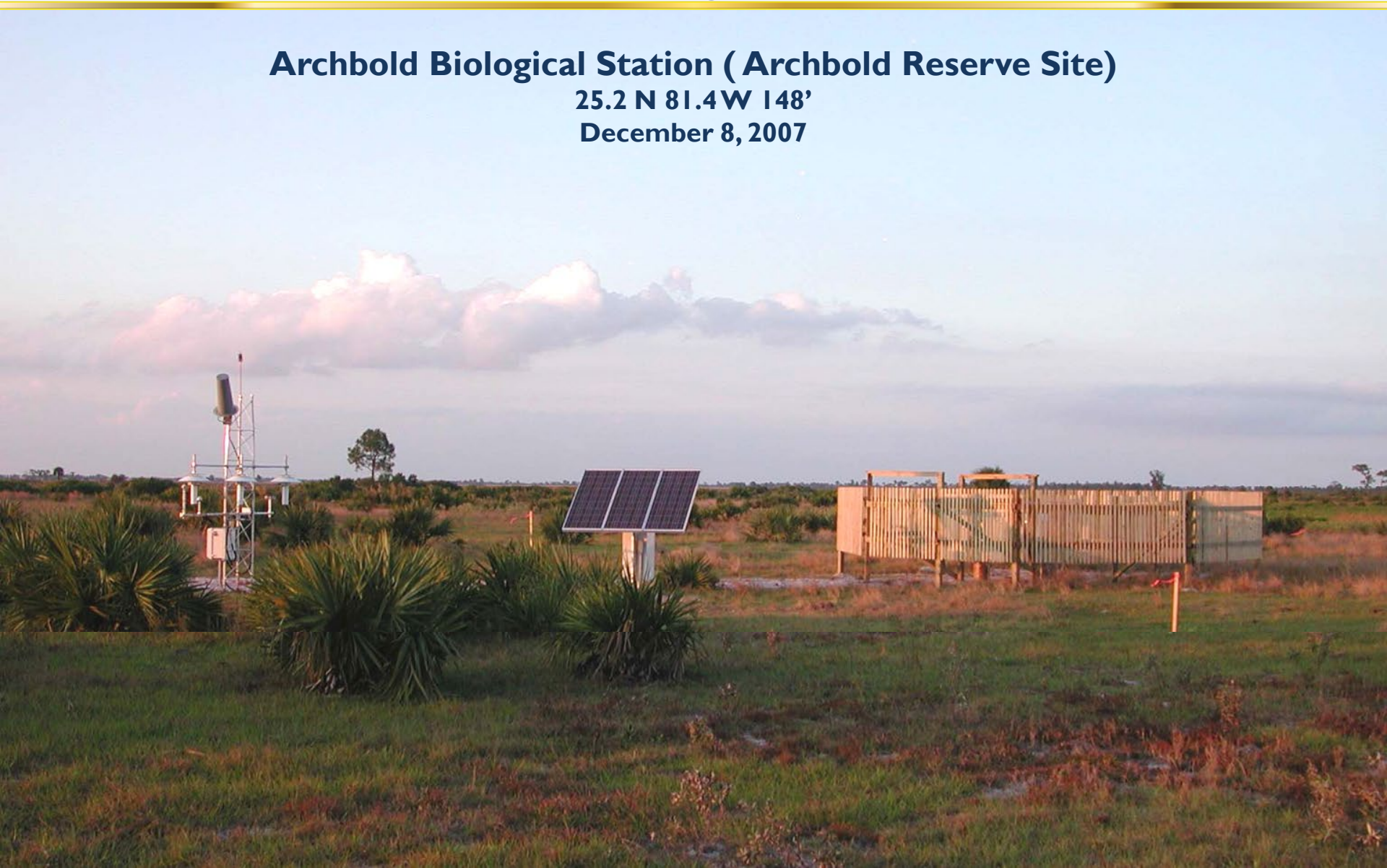
# US Climate Reference Network

## FL Everglades City 5 NE



# US Climate Reference Network

## FL Sebring 23 SSE



### Archbold Biological Station ( Archbold Reserve Site)

25.2 N 81.4W 148'

December 8, 2007

# US Climate Reference Network

## FL Titusville 7 E



# US Climate Reference Network

## GA Brunswick 23 S



# US Climate Reference Network

## GA Newton 8 W



# US Climate Reference Network

## GA Newton 11 SW



# US Climate Reference Network

## GA Watkinsville 5 SSE



# US Climate Reference Network

*Experimental*

## HI Hilo 5 S

### University of Hawaii (Waiakea Experiment Station)

19.6N 155.1W 730'

September 26, 2005



# US Climate Reference Network

*Experimental*

## HI Mauna Loa 5 NNE



# US Climate Reference Network

## IA Des Moines 17 E



### Neal Smith National Wildlife Reserve (NOAA Station Site)

41.6 N 93.3 W 938'

September 16, 2004

# US Climate Reference Network

## ID Arco 17 SW



# US Climate Reference Network

## ID Murphy 10 W



# US Climate Reference Network

## IL Champaign 9 SW



# US Climate Reference Network

## IL Shabonna 5 NNE

### Northern Illinois Agronomy Research Center

41.8 N 88.9W 892'

August 16, 2003



# US Climate Reference Network

## IN Bedford 5 WNW



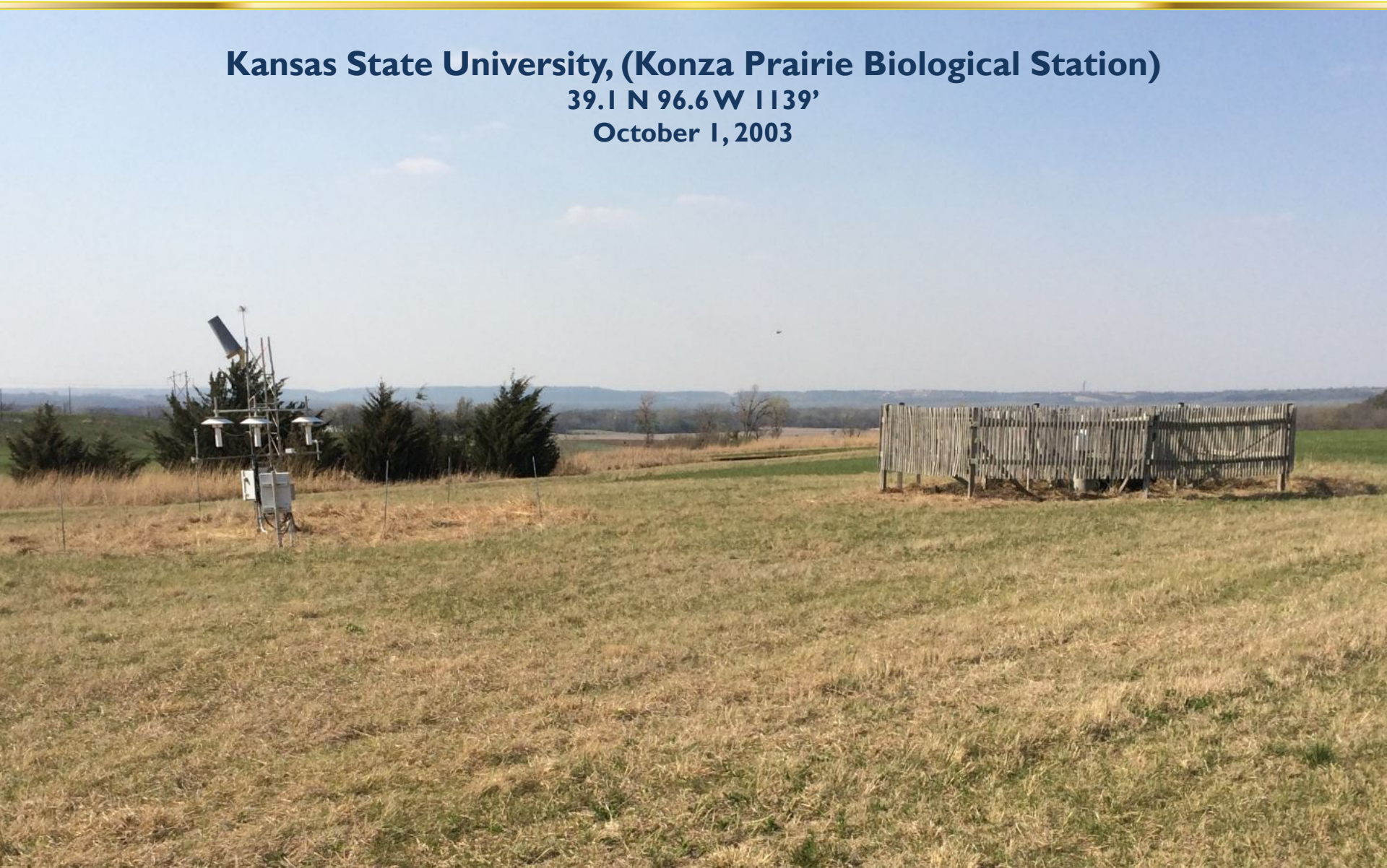
### Feldun-Purdue Agricultural Center (Pasture 17 Site)

38.9 N 86.6 W 747'

October 3, 2007

# US Climate Reference Network

## KS Manhattan 6 SSW



# US Climate Reference Network

## KS Oakley 19 SSW



# US Climate Reference Network

## KY Bowling Green 21 NNE



# US Climate Reference Network

## KY Versailles 3 NNW

### University of Kentucky (Woodford County Site)

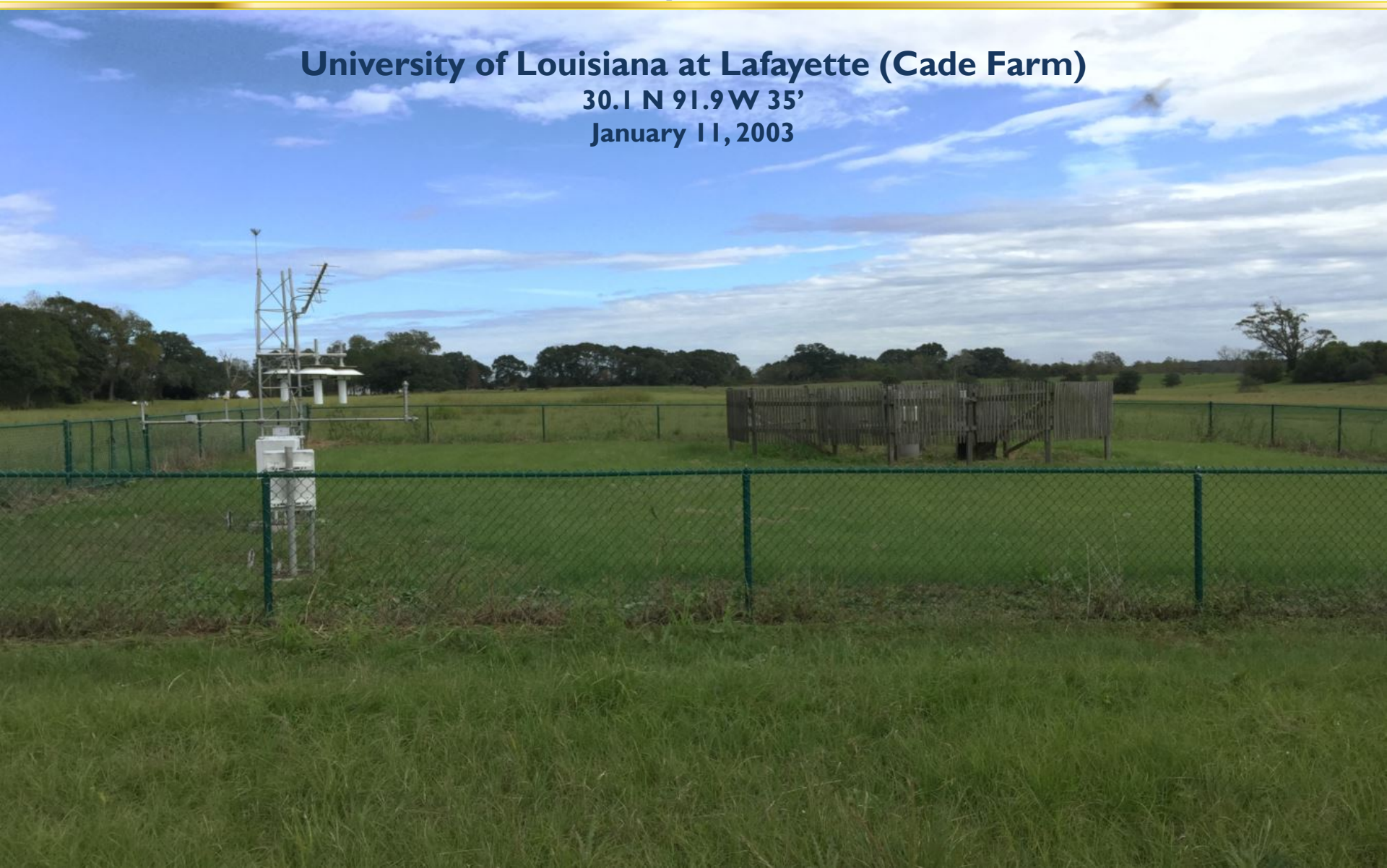
38.1 N 84.7 W 915'

June 12, 2003



# US Climate Reference Network

## LA Lafayette 13 SE



# US Climate Reference Network

## LA Monroe 26 N



# US Climate Reference Network

## ME Limestone 4 NNW



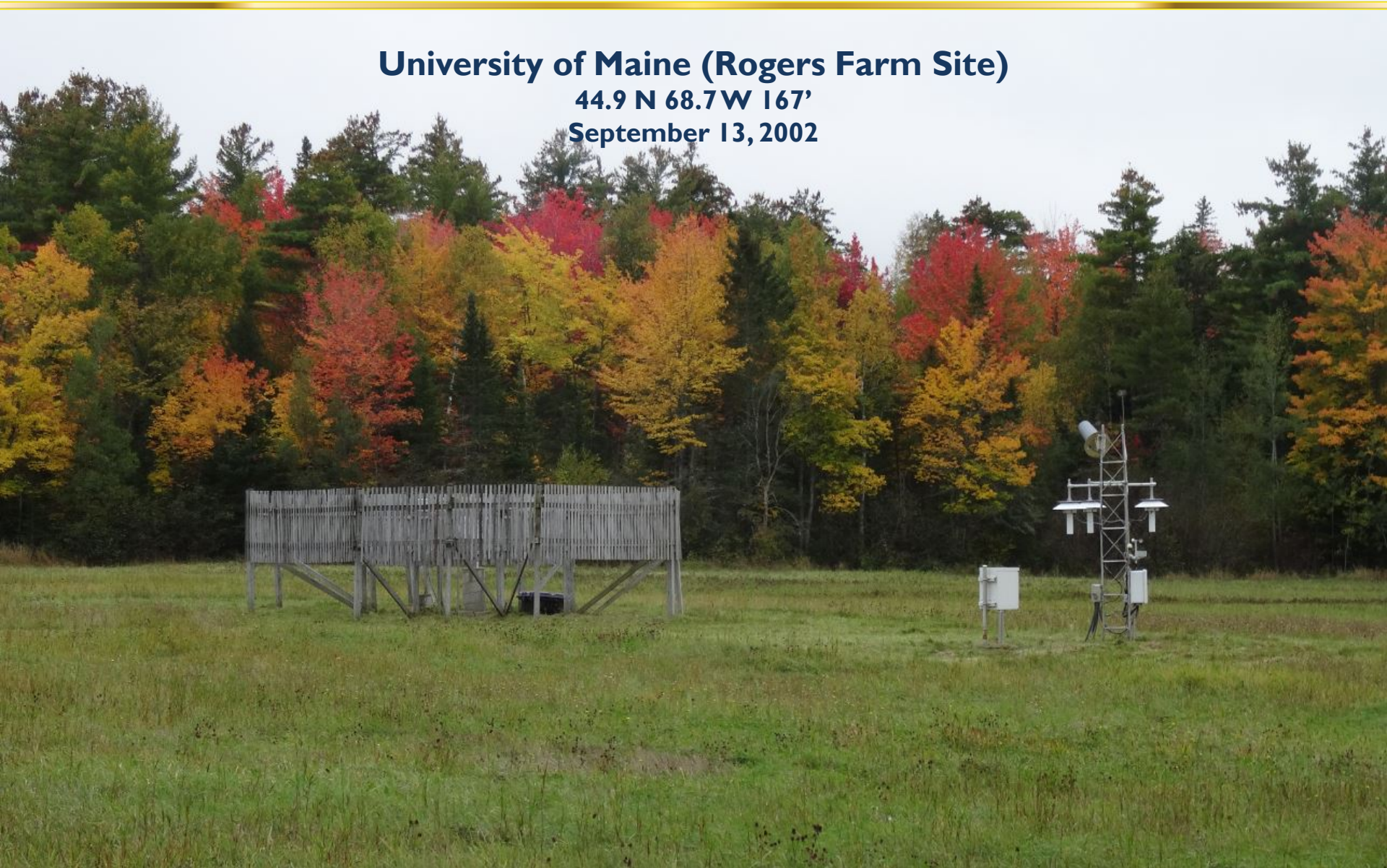
### Aroostook National Wildlife Refuge (Fire Training Area)

47.0 N 67.9 W 775'

September 24, 2002

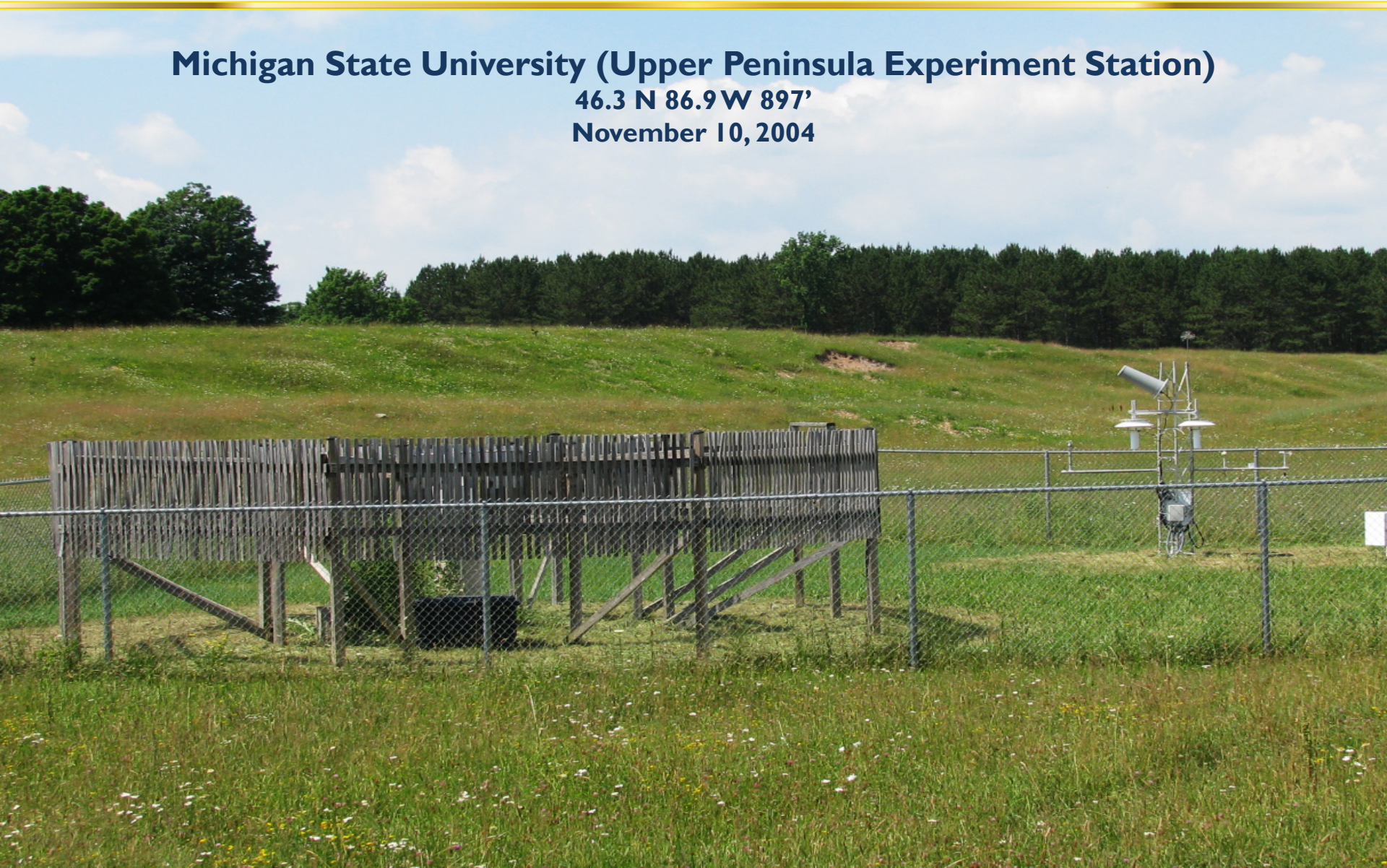
# US Climate Reference Network

## ME Old Town 2 W



# US Climate Reference Network

## MI Chatham 1 SE



**Michigan State University (Upper Peninsula Experiment Station)**
**46.3 N 86.9 W 897'**
**November 10, 2004**

# US Climate Reference Network

## MI Gaylord 9 SSW



# US Climate Reference Network

## MN Goodridge 12 NNW



# US Climate Reference Network

## MN Sandstone 6 W



# US Climate Reference Network

## MO Chillicothe 22 ENE



# US Climate Reference Network

## MO Joplin 24 N



# US Climate Reference Network

## MO Salem 10 W



# US Climate Reference Network

## MS Holly Springs 4 N



# US Climate Reference Network

## MS Newton 5 ENE



# US Climate Reference Network

## MT Dillon 18 WSW



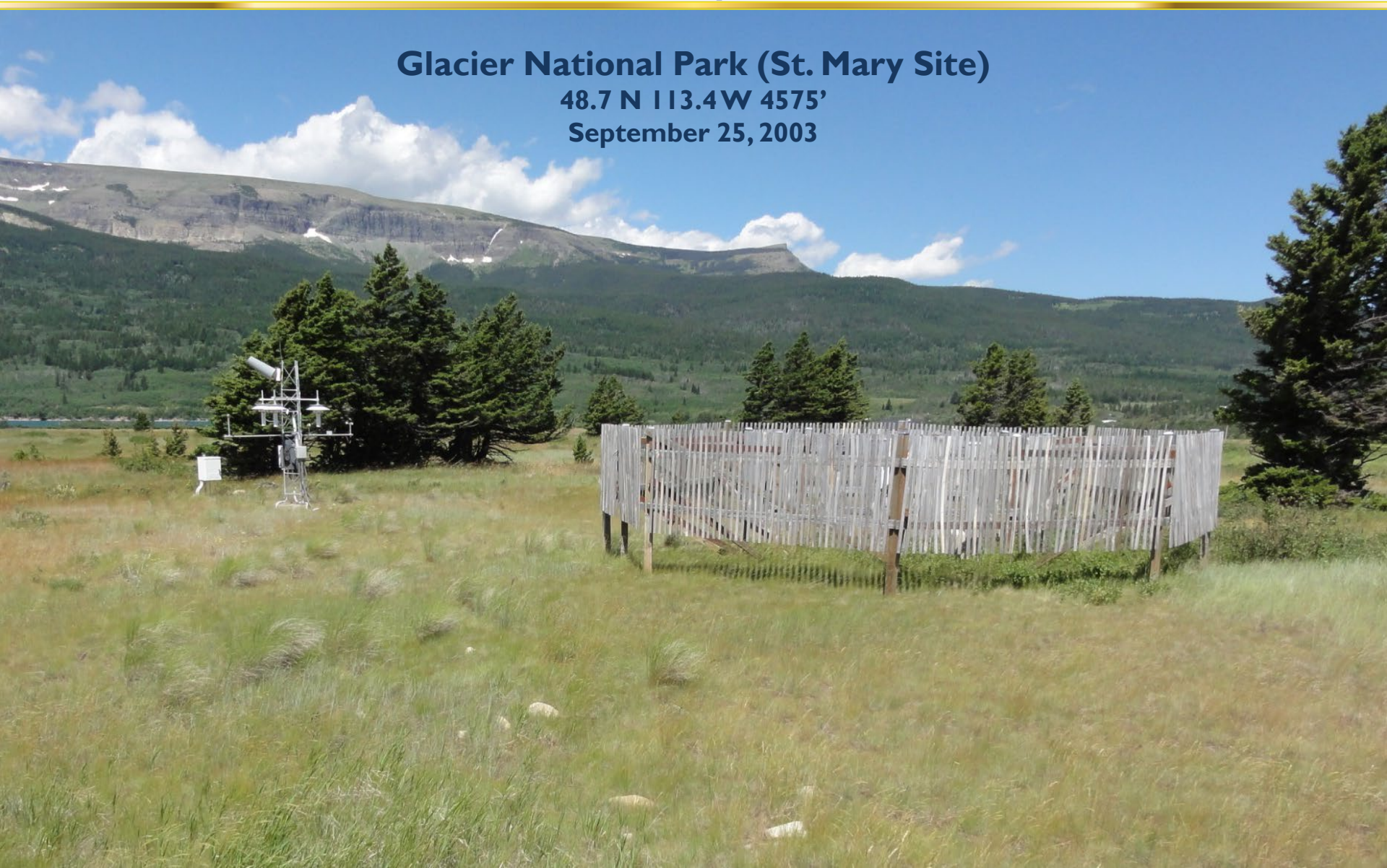
# US Climate Reference Network

## MT Lewistown 42 WSW



# US Climate Reference Network

## MT St. Mary 1 SSW



# US Climate Reference Network

## MT Wolf Point 29 ENE

### Fort Peck Indian Reservation (Poplar River Site)

48.3 N 105.1 W 2079'

December 20, 2001



# US Climate Reference Network

## MT Wolf Point 34 NE



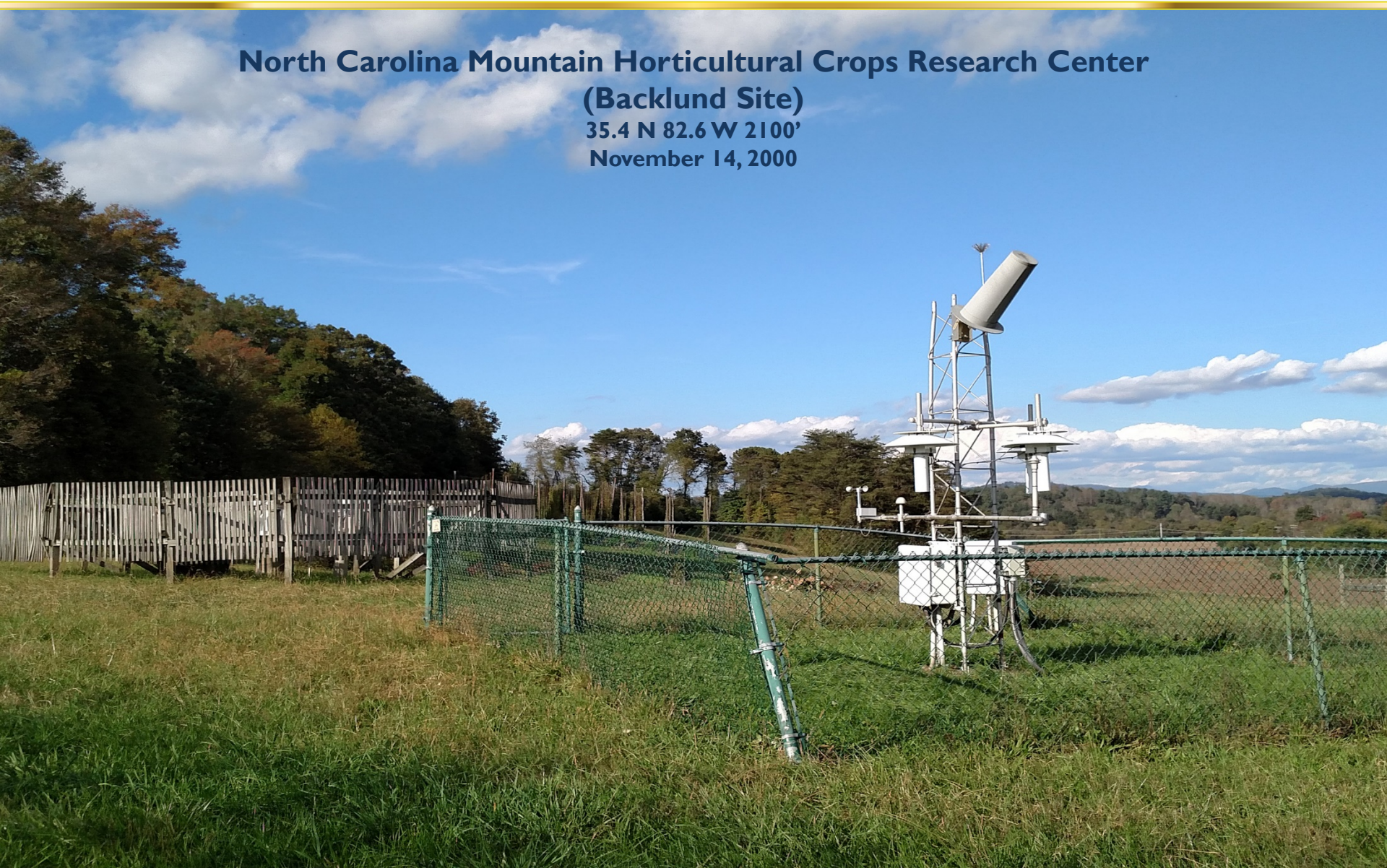
# US Climate Reference Network

## NC Asheville 8 SSW



# US Climate Reference Network

## NC Asheville 13 S



# US Climate Reference Network

## NC Durham 11 W



# US Climate Reference Network

## ND Jamestown 38 WSW



# US Climate Reference Network

## ND Medora 7 E

### Theodore Roosevelt National Park (Painted Canyon Site)

46.9 N 103.4 W 2805'

September 19, 2004



# US Climate Reference Network

## ND Northgate 5 ESE



# US Climate Reference Network

## NE Harrison 20 SSE



# US Climate Reference Network

## NE Lincoln 8 ENE



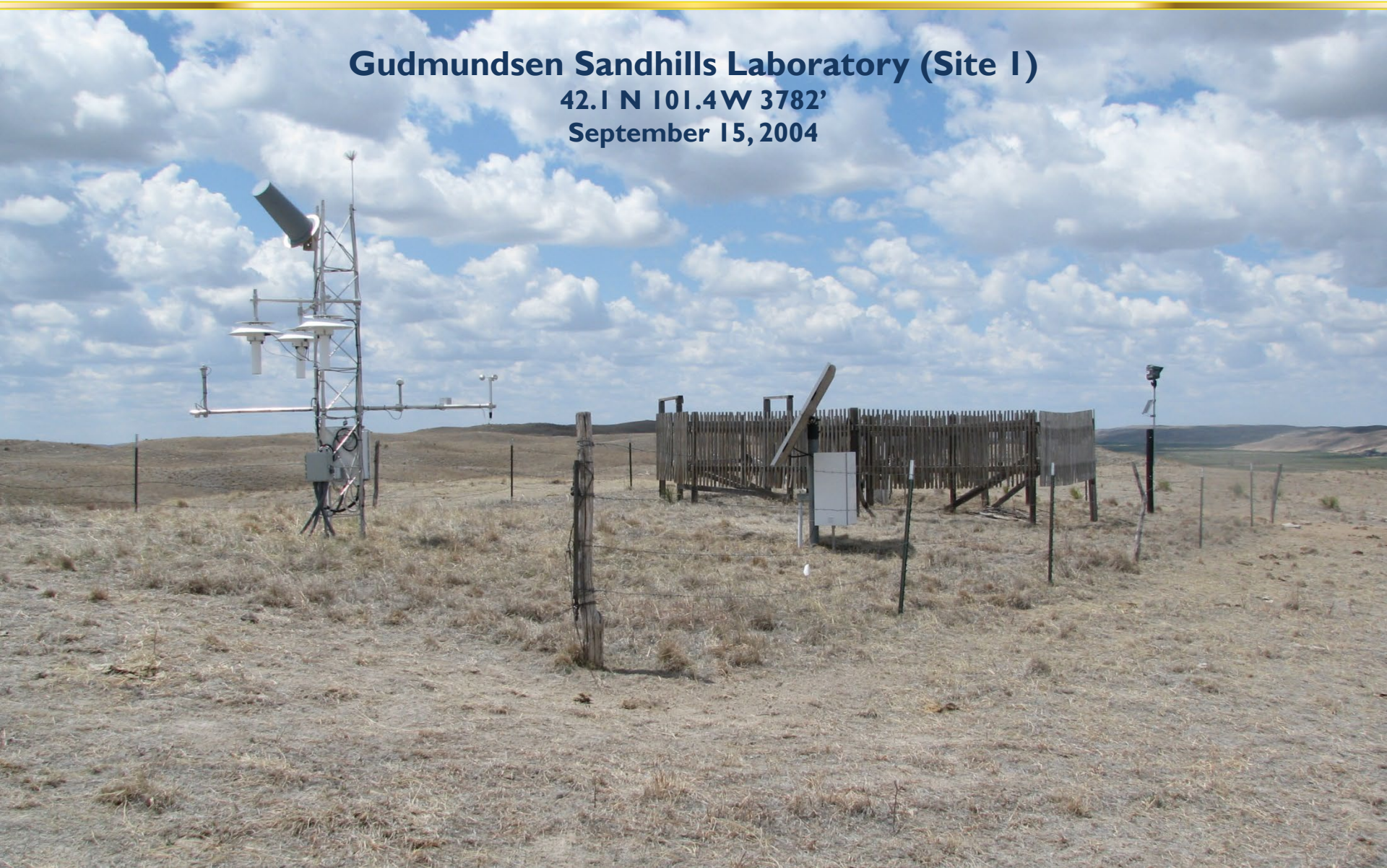
# US Climate Reference Network

## NE Lincoln 11 SW



# US Climate Reference Network

## NE Whitman 5 ENE



# US Climate Reference Network

## NH Durham 2 N



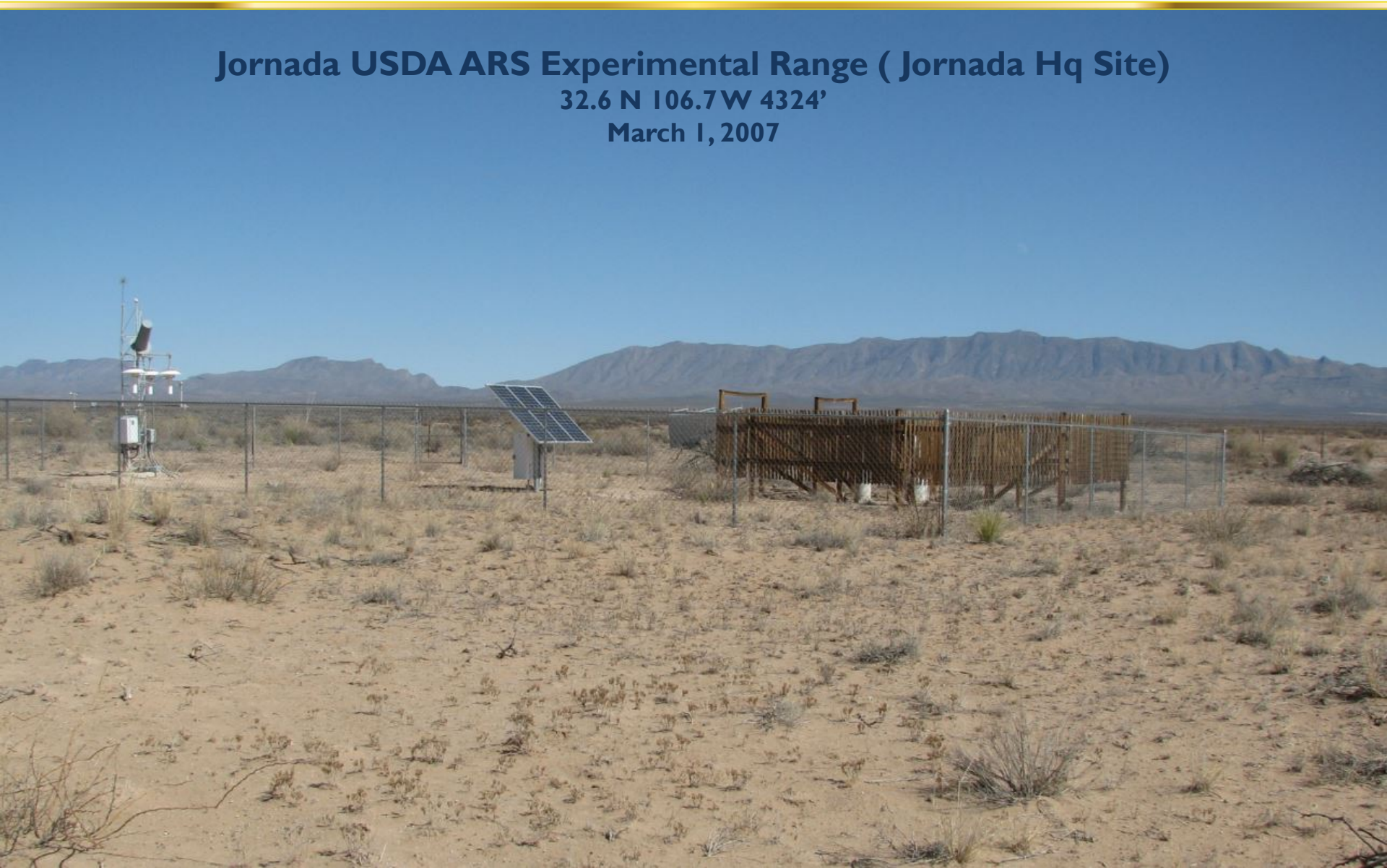
# US Climate Reference Network

## NH Durham 2 SSW



# US Climate Reference Network

## NM Las Cruces 20 N



# US Climate Reference Network

## NM Los Alamos 13 W

**NPS, Valles Caldera National Preserve**
**35.9 N 106.5 W 8705'**
**July 31, 2004**



# US Climate Reference Network

## NM Socorro 20 N



# US Climate Reference Network

## NV Baker 5 W



**Great Basin National Park (Gravel Pit Site)**
**39.0 N 114.2 W 6594'**
**May 9, 2004**

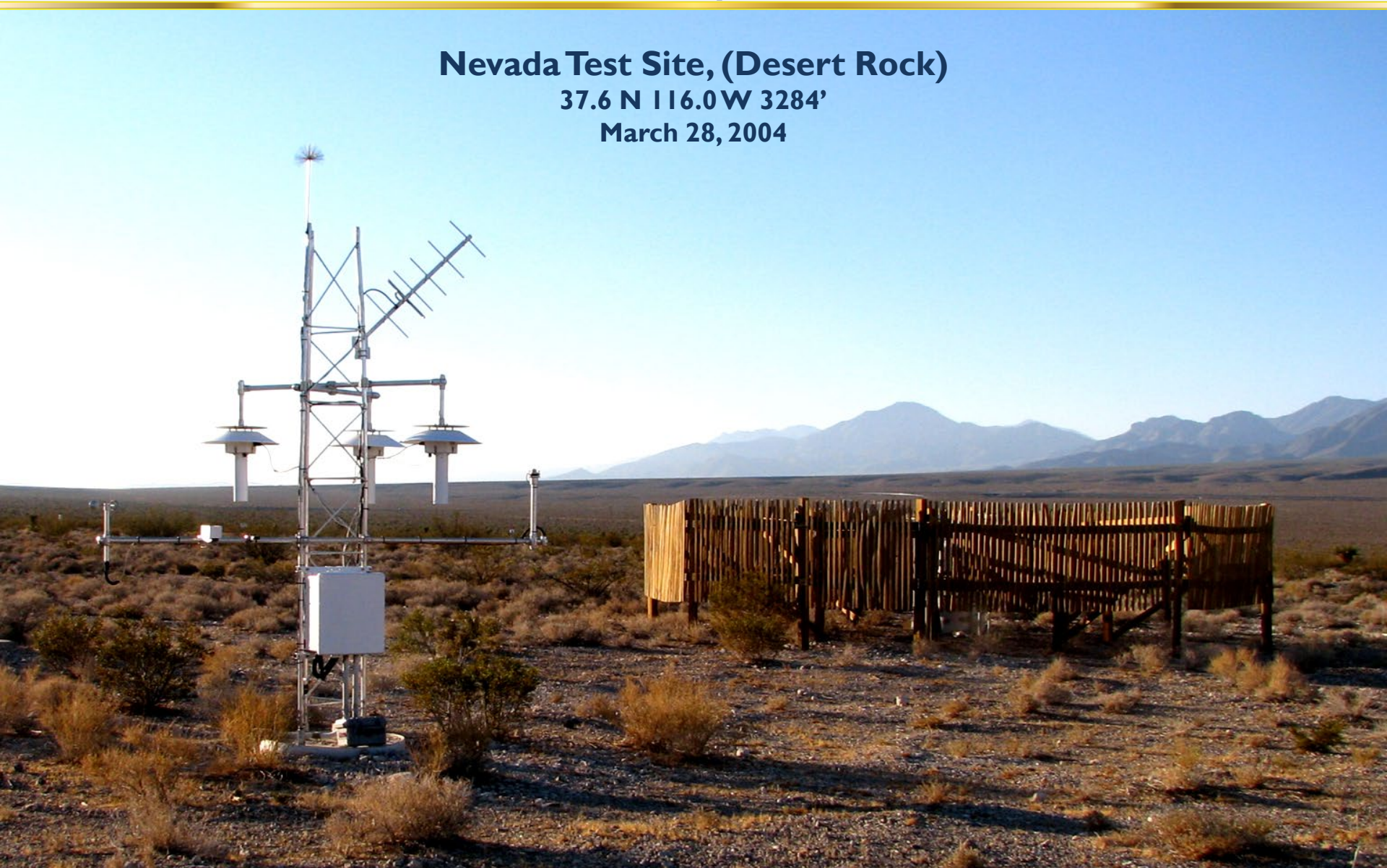
# US Climate Reference Network

## NV Denio 52 WSW



# US Climate Reference Network

## NV Mercury 3 SSW



# US Climate Reference Network

## NY Ithaca 13 E

### Cornell University (Harford Teaching & Research Center)

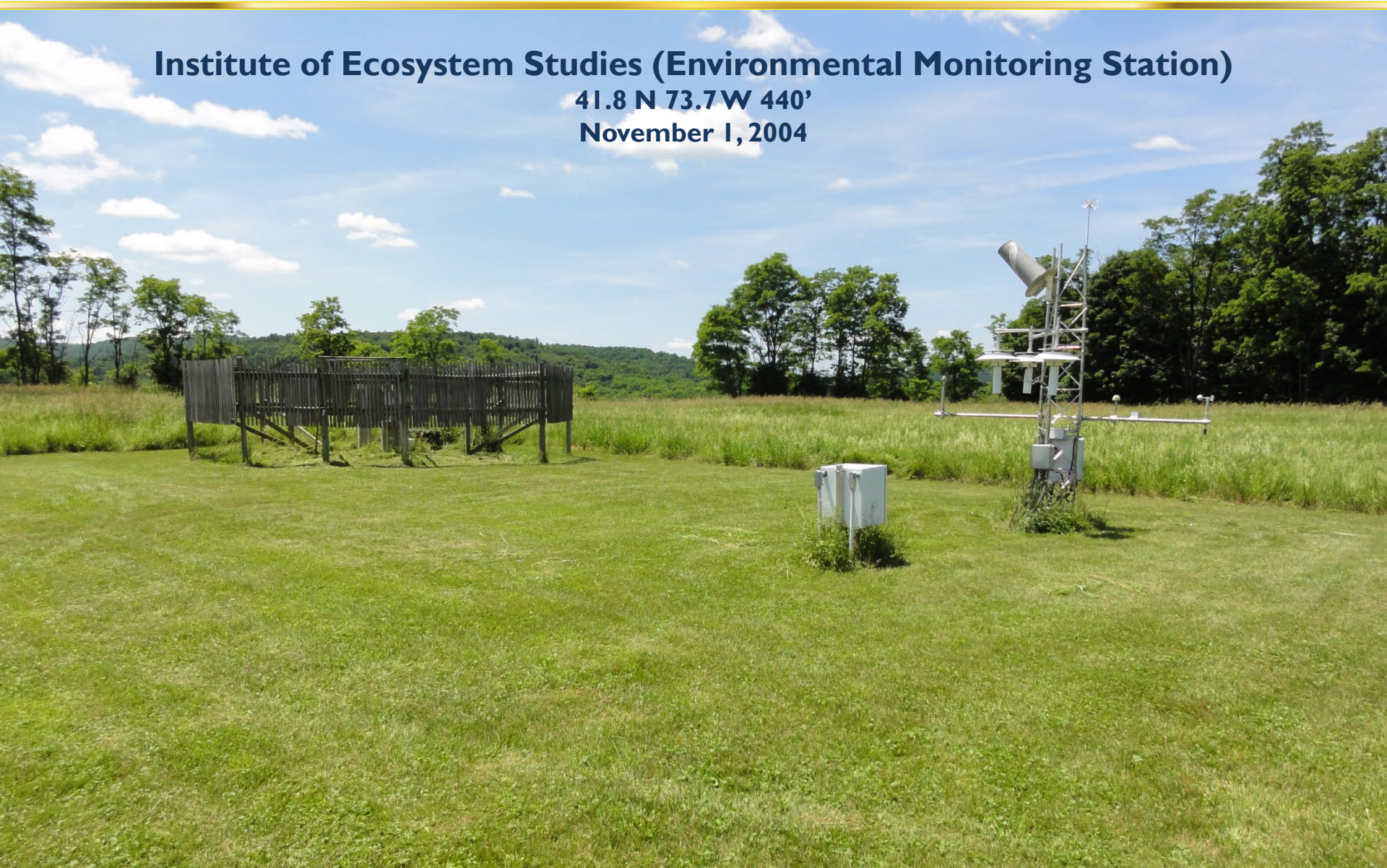
42.4 N 76.2 W 1248'

October 27, 2004



# US Climate Reference Network

## NY Millbrook 3 W



# US Climate Reference Network

## OH Wooster 3 SSE

### OSU, Ohio Agricultural Research & Development Center (Snyder Farm Site)

N 40.8 N 81.9 W 1102'

November 11, 2016



# US Climate Reference Network

## OK Goodwell 2 E



### Oklahoma Panhandle Research & Extension Center (Native Grassland Site)

36.6 N 101.6 W 3275'

February 27, 2004

# US Climate Reference Network

*Non-commissioned*

## OK Goodwell 2 SE



# US Climate Reference Network

## OK Stillwater 2 W

**Oklahoma State University (Agricultural Research Farm Site)**
**36.1 N 97.1 W 910'**
**March 15, 2002**



# US Climate Reference Network

## OK Stillwater 5 WNW



# US Climate Reference Network

## OR Coos Bay 8 SW

### South Slough National Estuarine Research Reserve (Frederickson Marsh Site)

43.3 N 124.3 W 20'

August 10, 2008



# US Climate Reference Network

## OR Corvallis 10 SSW



# US Climate Reference Network

## OR John Day 35 WNW

### John Day Fossil Beds National Monument (Sheep Rock Headquarters)

44.6 N 119.6 W 2220'

March 20, 2004



# US Climate Reference Network

## OR Riley 10 WSW



# US Climate Reference Network

## PA Avondale 2 N



# US Climate Reference Network

## RI Kingston 1 NW

### University of Rhode Island (Plains Road Site)

41.5 N 71.5 W 140'

December 16, 2001



# US Climate Reference Network

## RI Kingston 1 W



# US Climate Reference Network

## SC Blackville 3 W



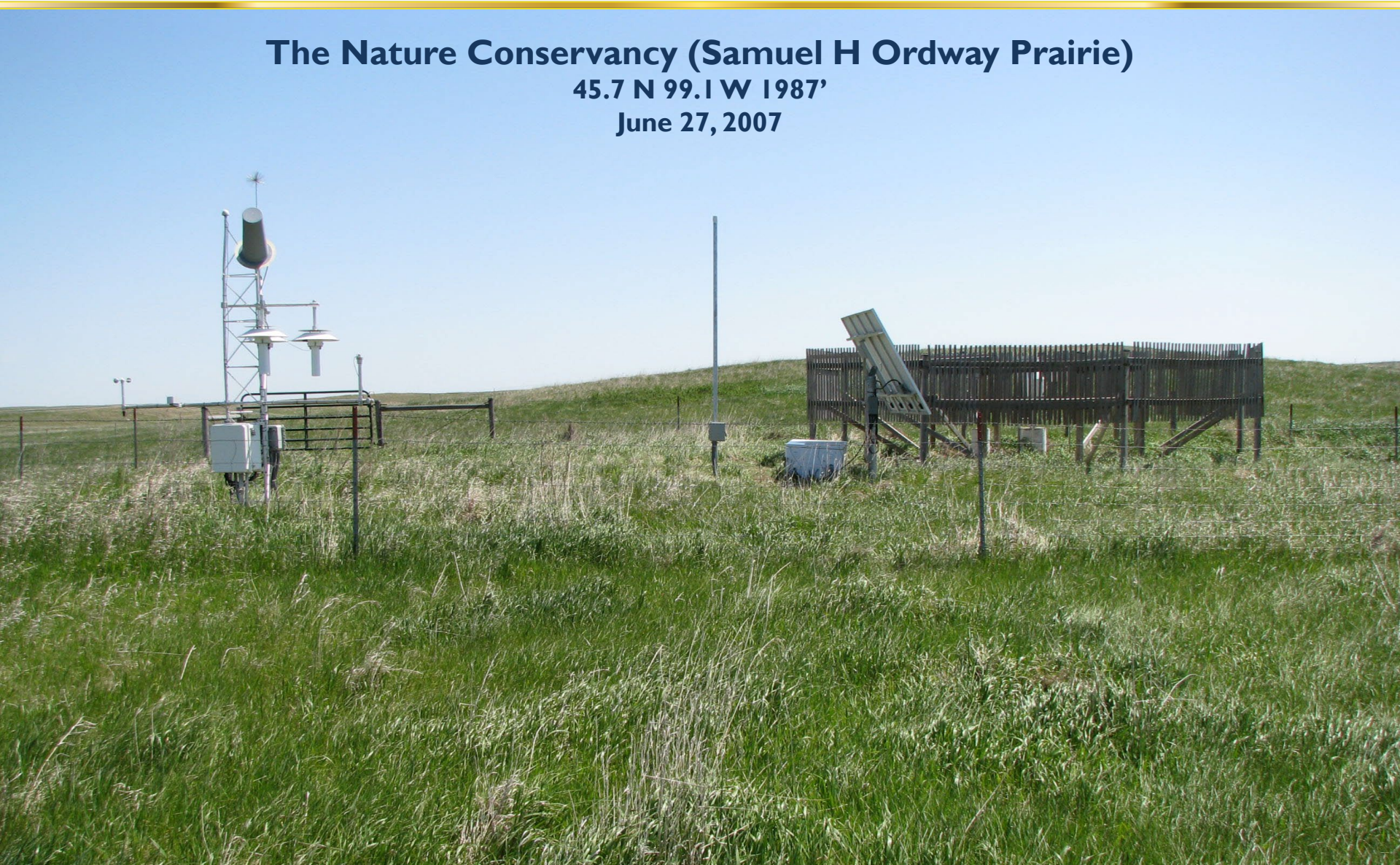
# US Climate Reference Network

## SC McClellanville 7 NE



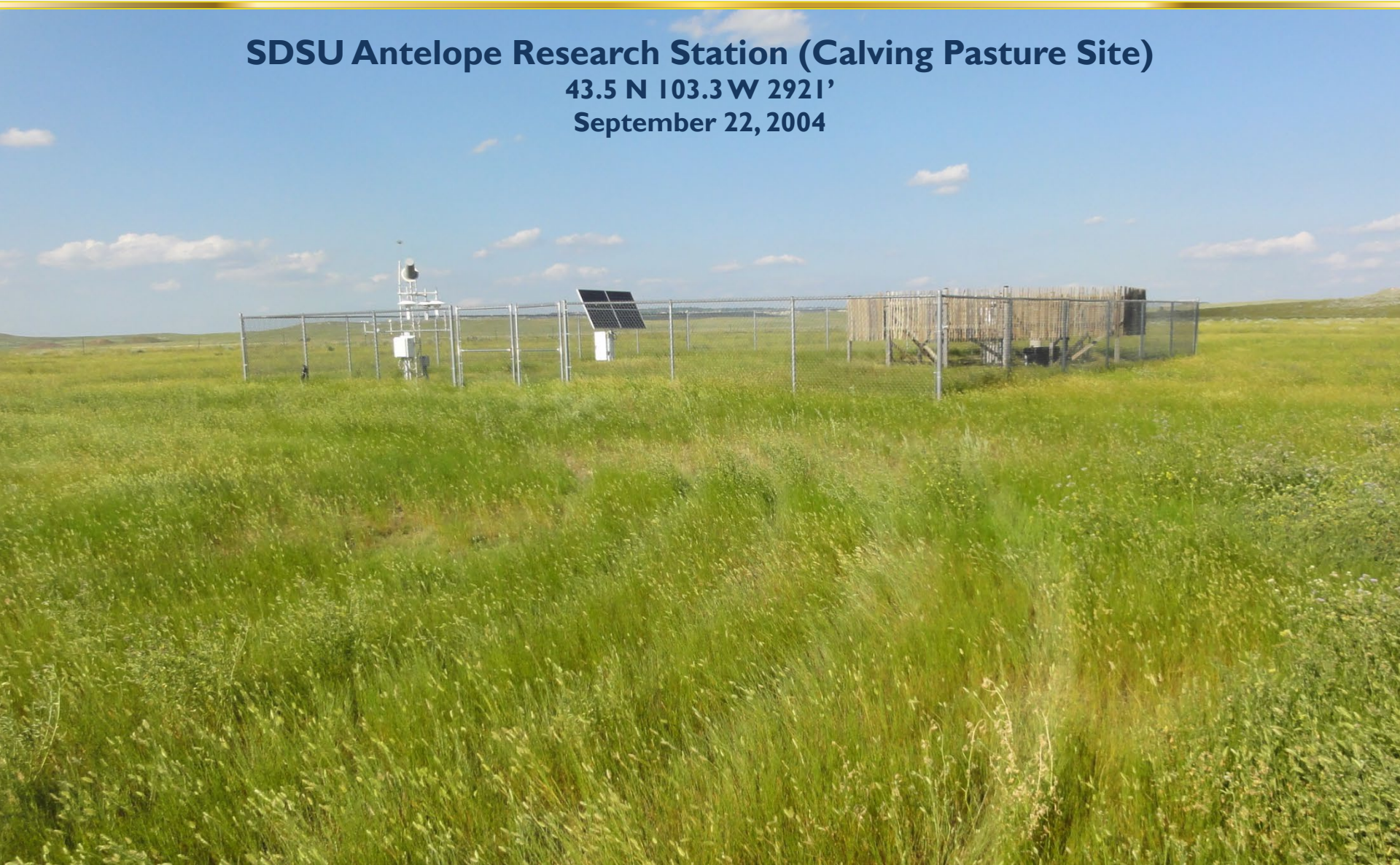
# US Climate Reference Network

## SD Aberdeen 35 WNW



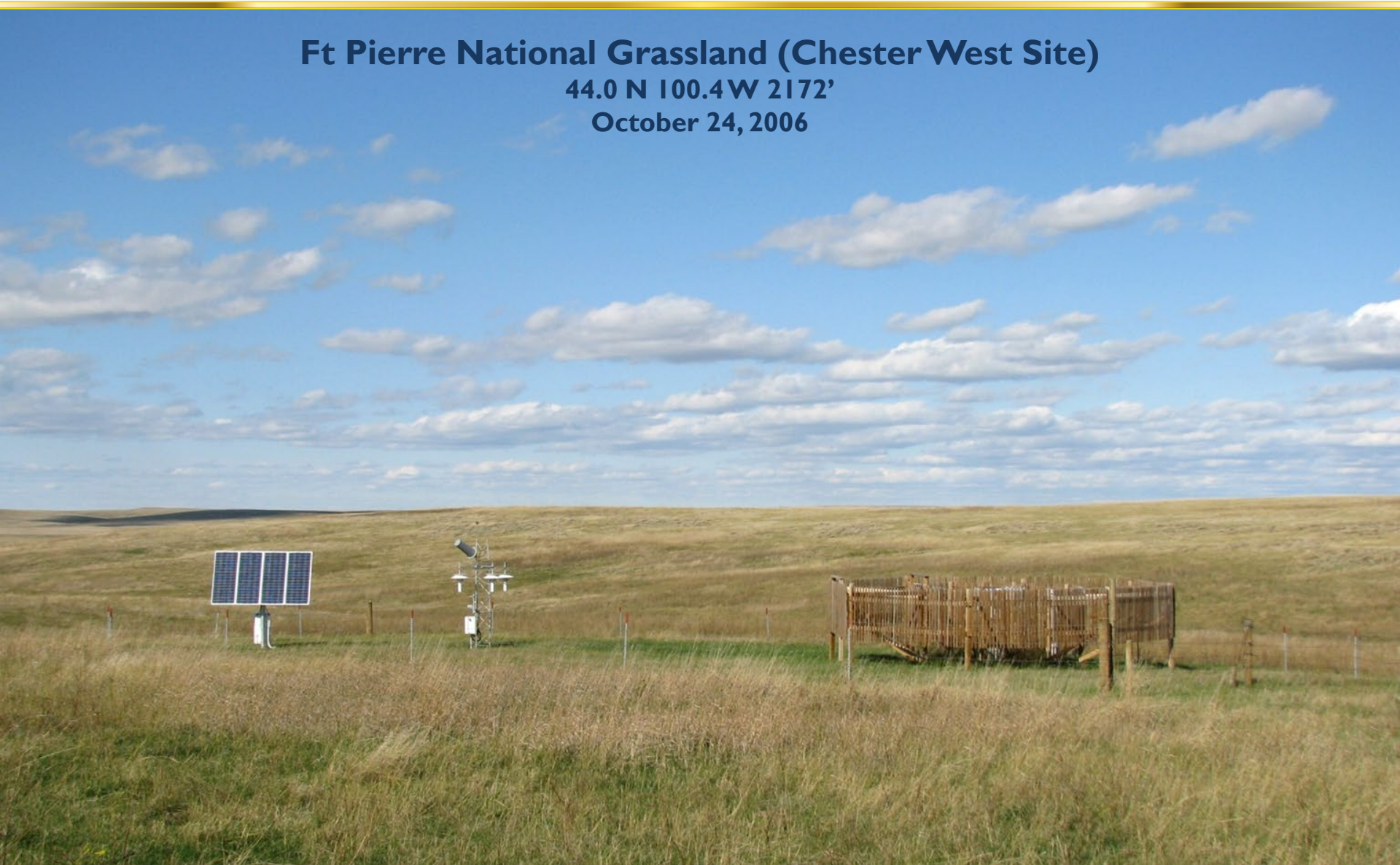
# US Climate Reference Network

## SD Buffalo 13 ESE



# US Climate Reference Network

## SD Pierre 24 S



# US Climate Reference Network

## SD Sioux Falls 14 NNE

### EROS Data Center

**43.8 N 96.9 W 1629'**

**September 25, 2002**



# US Climate Reference Network

## TN Crossville 7 NW



# US Climate Reference Network

## TX Austin 33 NW



# US Climate Reference Network

## TX Bronte 11 NNE



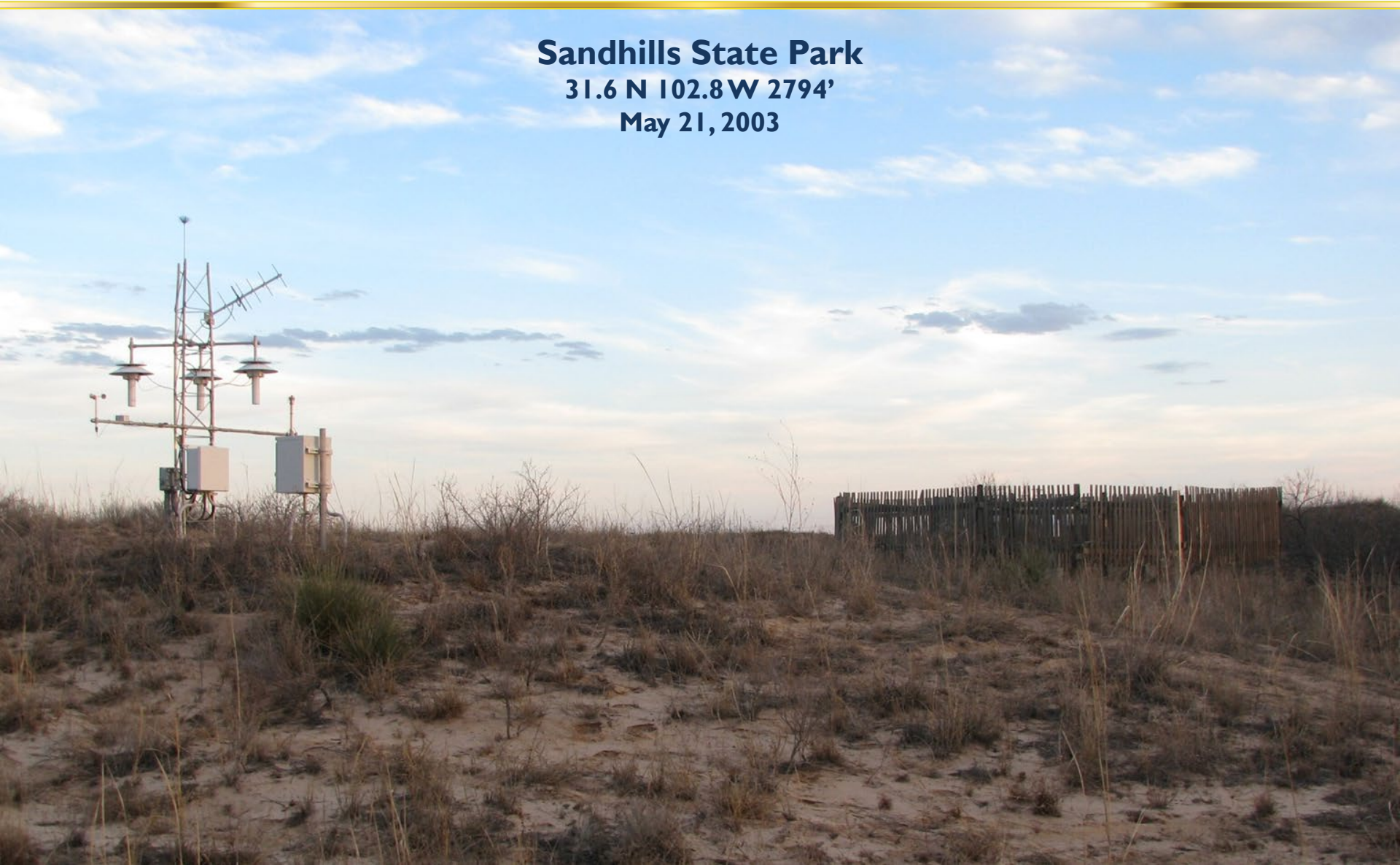
# US Climate Reference Network

## TX Edinburg 17 NNE



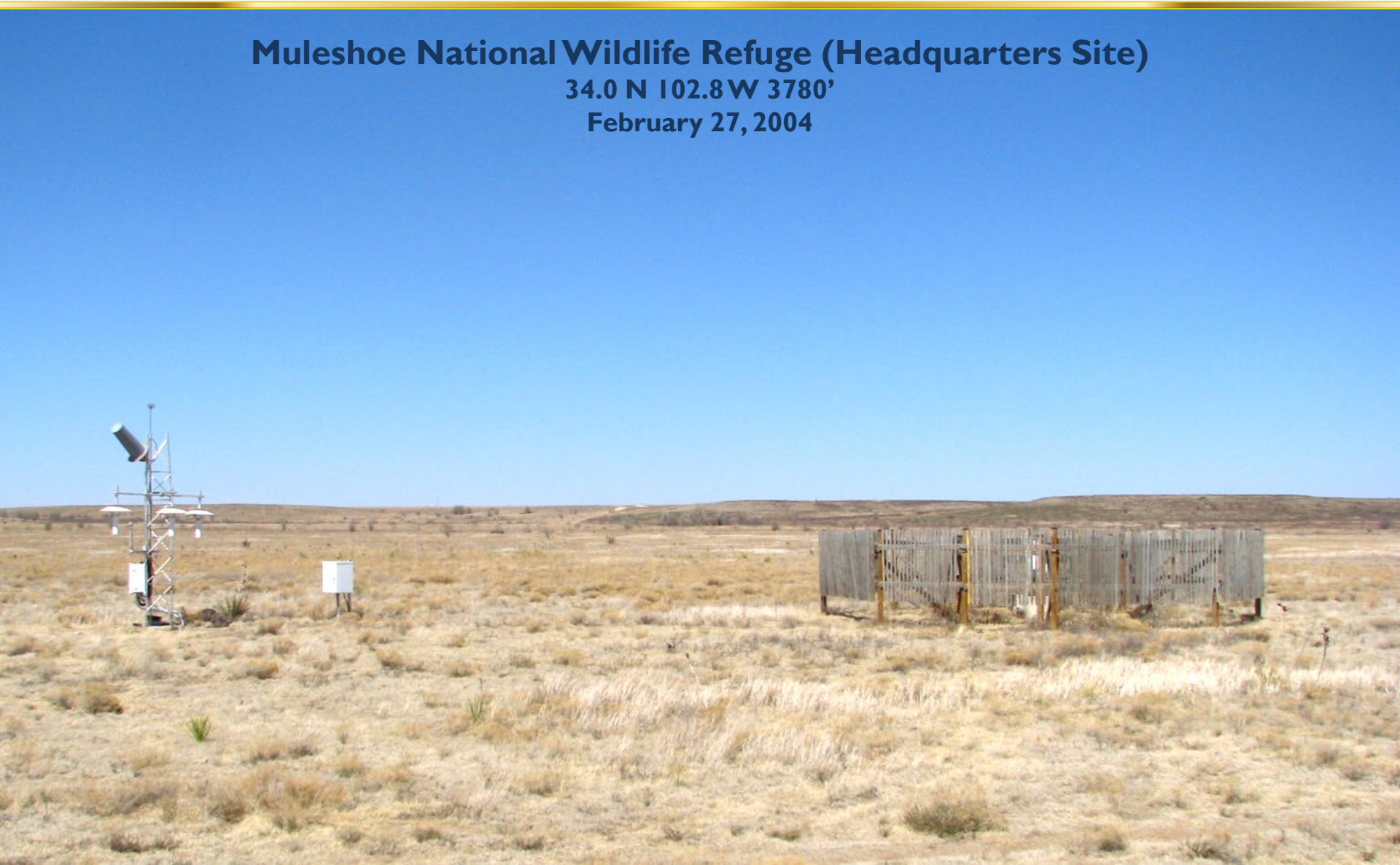
# US Climate Reference Network

## TX Monahans 6 ENE



# US Climate Reference Network

## TX Muleshoe 19 S



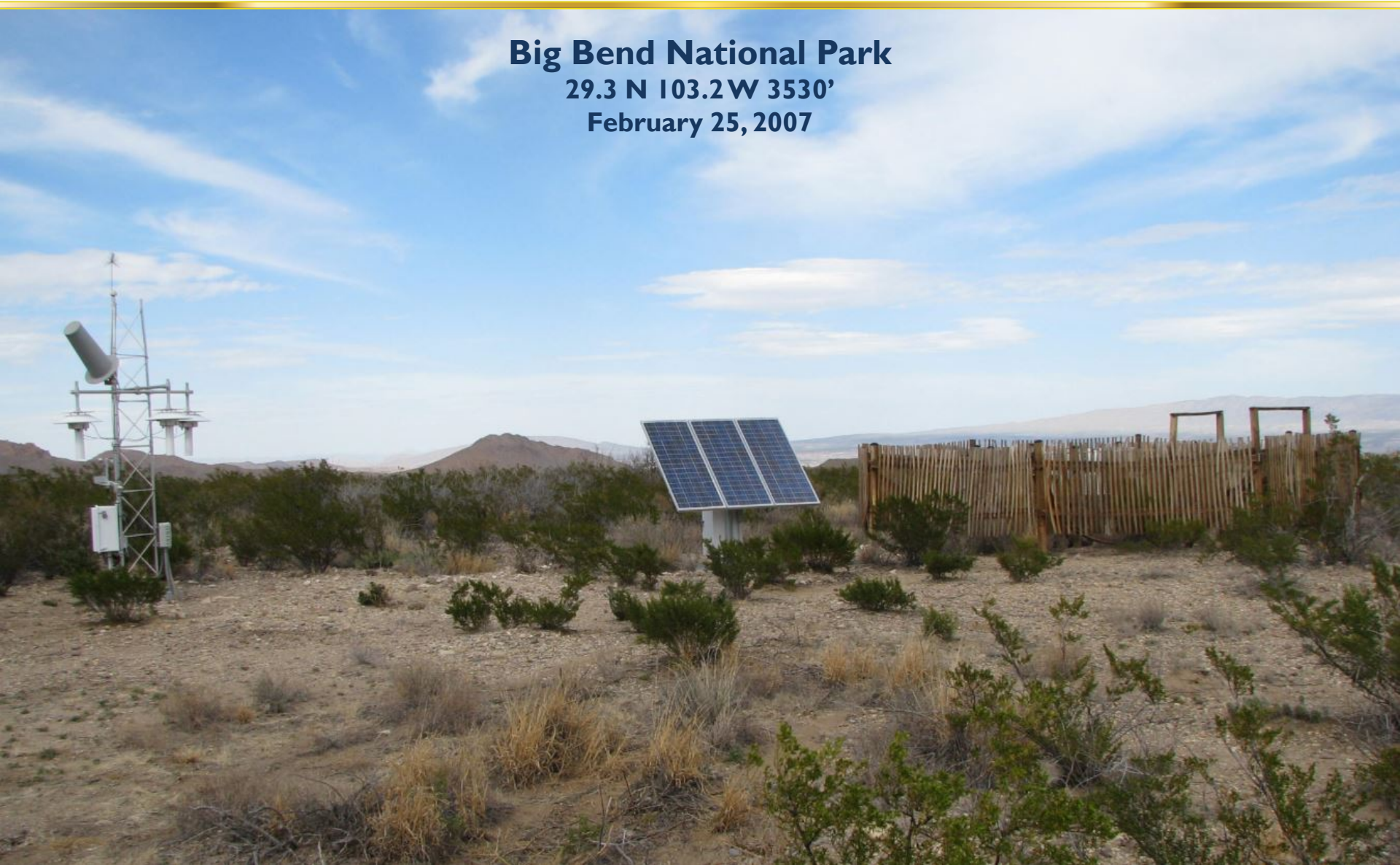
# US Climate Reference Network

## TX Palestine 6 WNW



# US Climate Reference Network

## TX Panther Junction 2 N



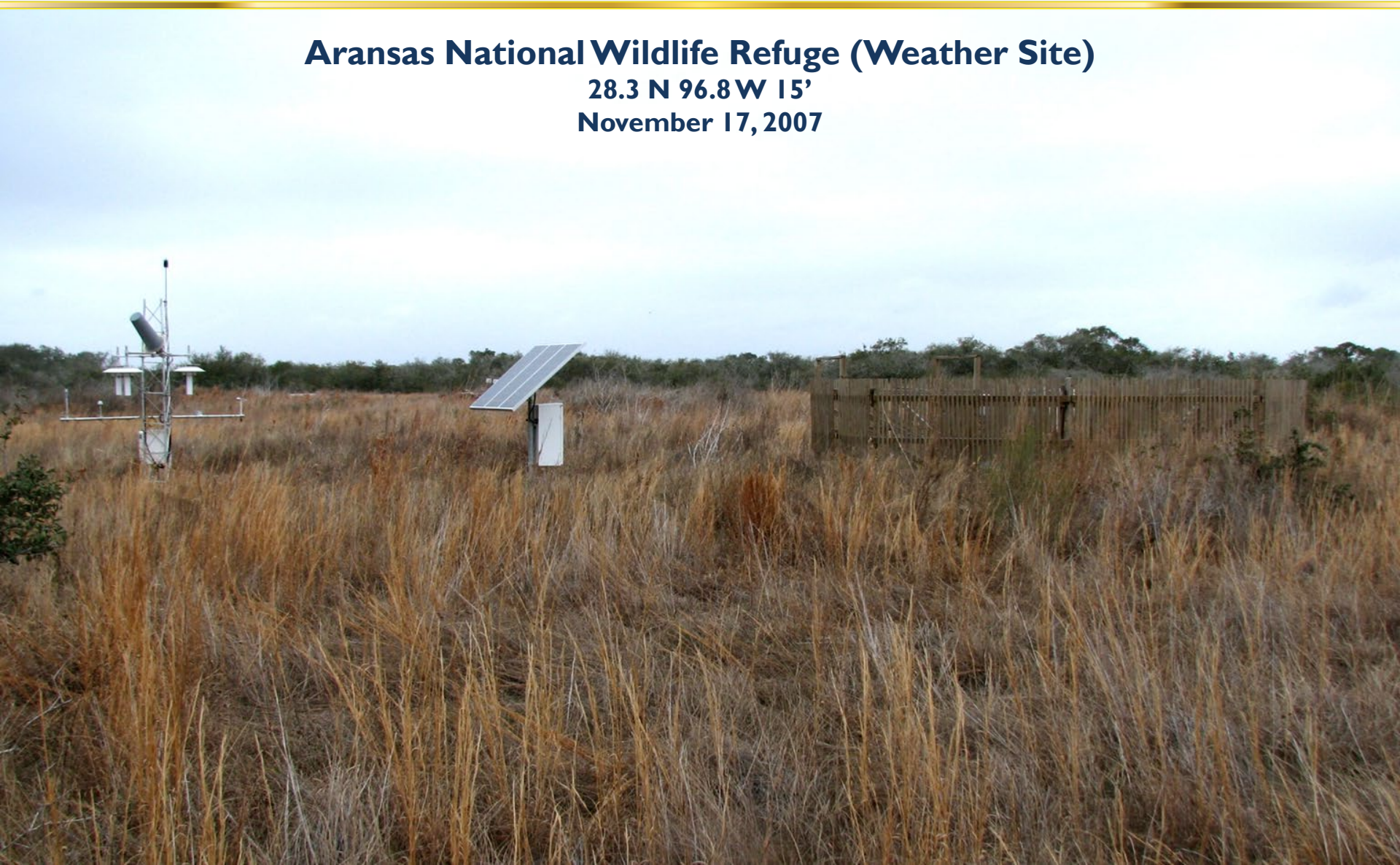
# US Climate Reference Network

## TX Port Aransas 32 NNE,

### Aransas National Wildlife Refuge (Weather Site)

28.3 N 96.8 W 15'

November 17, 2007



# US Climate Reference Network

## UT Brigham City 28 WNW



### Golden Spike National Historic Site

41.6 N 112.5 W 4938'

August 19, 2007

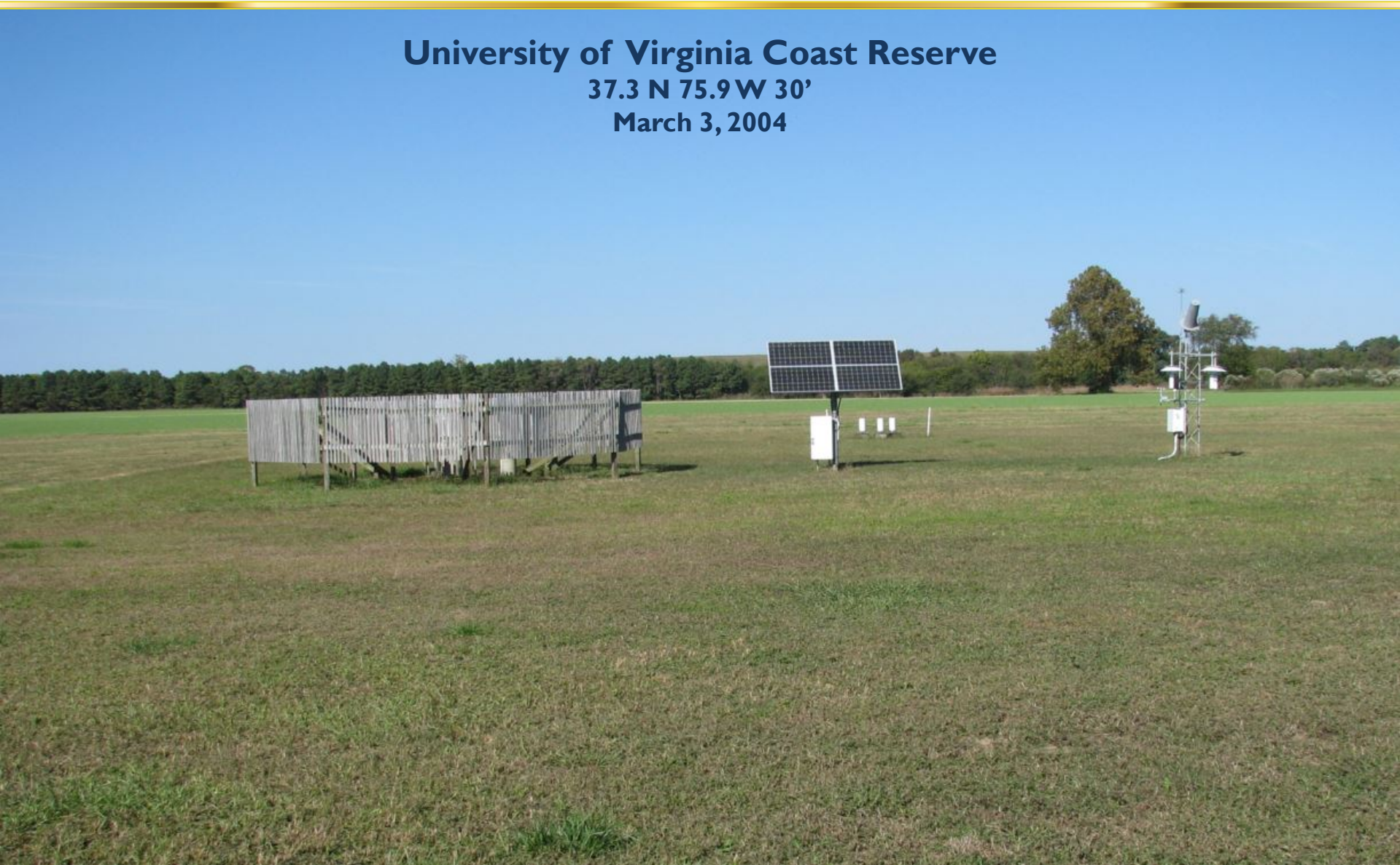
# US Climate Reference Network

## UT Torrey 7 E



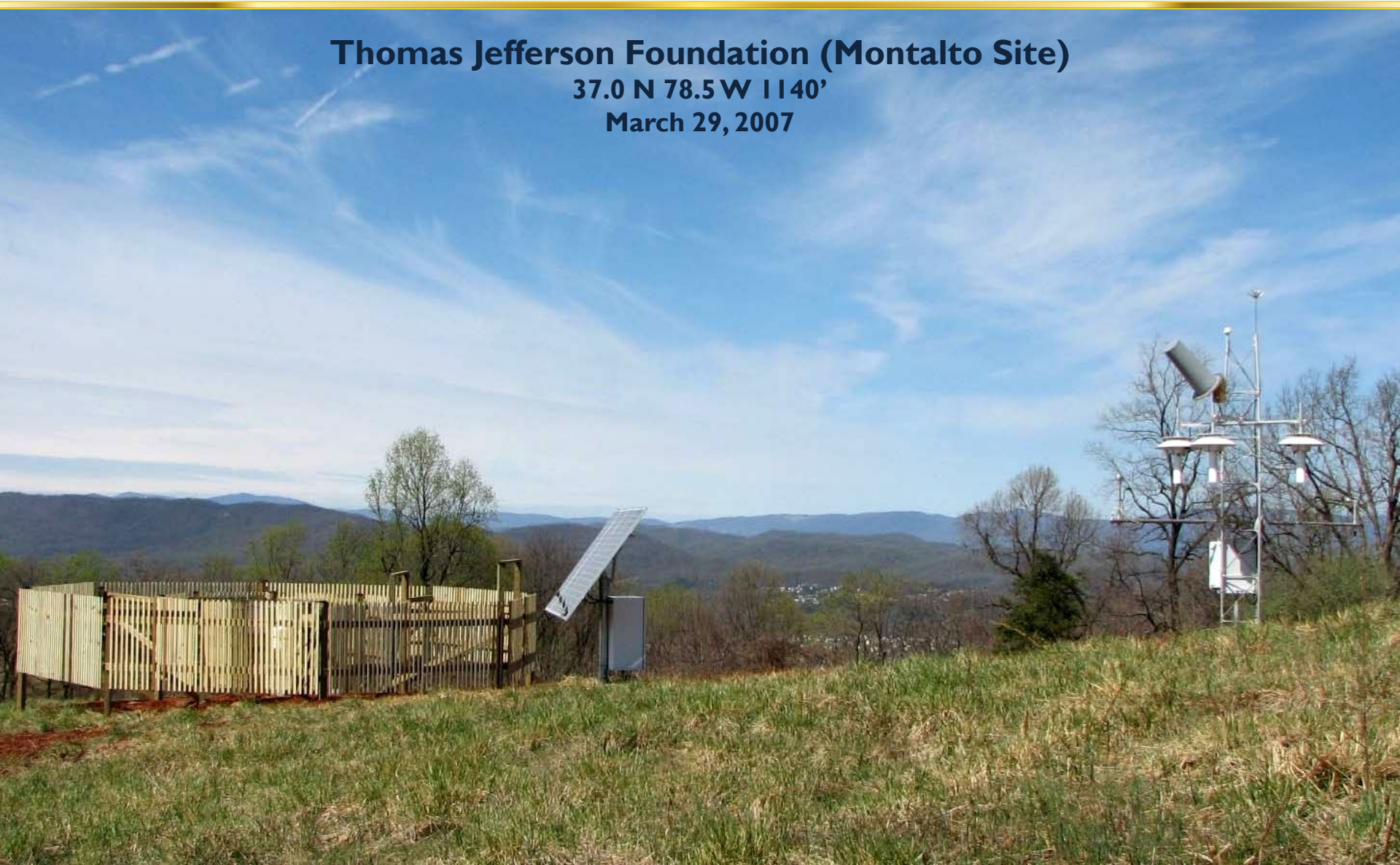
# US Climate Reference Network

## VA Cape Charles 5 ENE



# US Climate Reference Network

## VA Charlottesville 2 SSE



# US Climate Reference Network

## WA Darrington 21 NNE



# US Climate Reference Network

## WA Quinault 4 NE



# US Climate Reference Network

## WA Spokane 17 SSW



# US Climate Reference Network

## WI Necedah 5 WNW



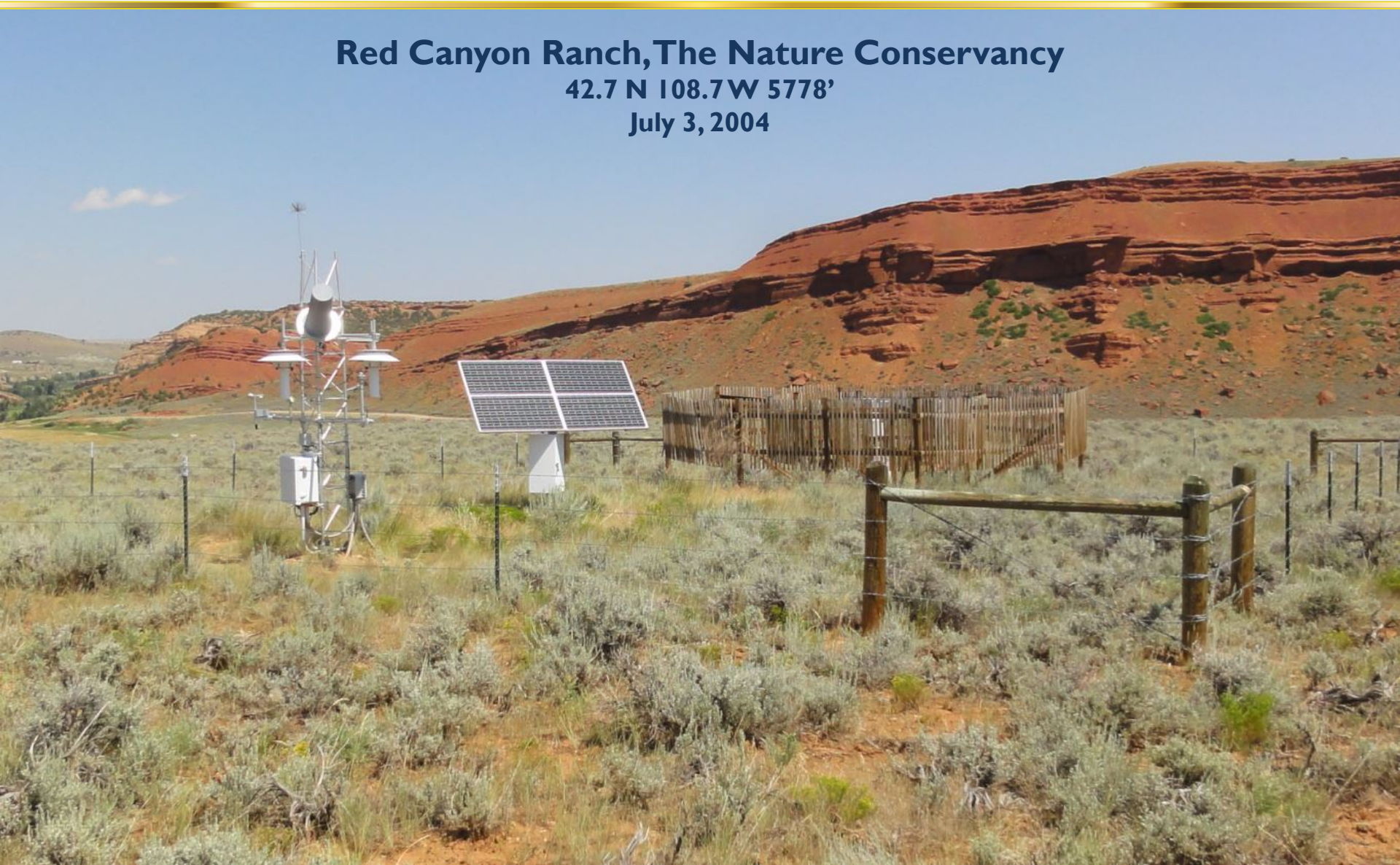
# US Climate Reference Network

## WV Elkins 21 ENE



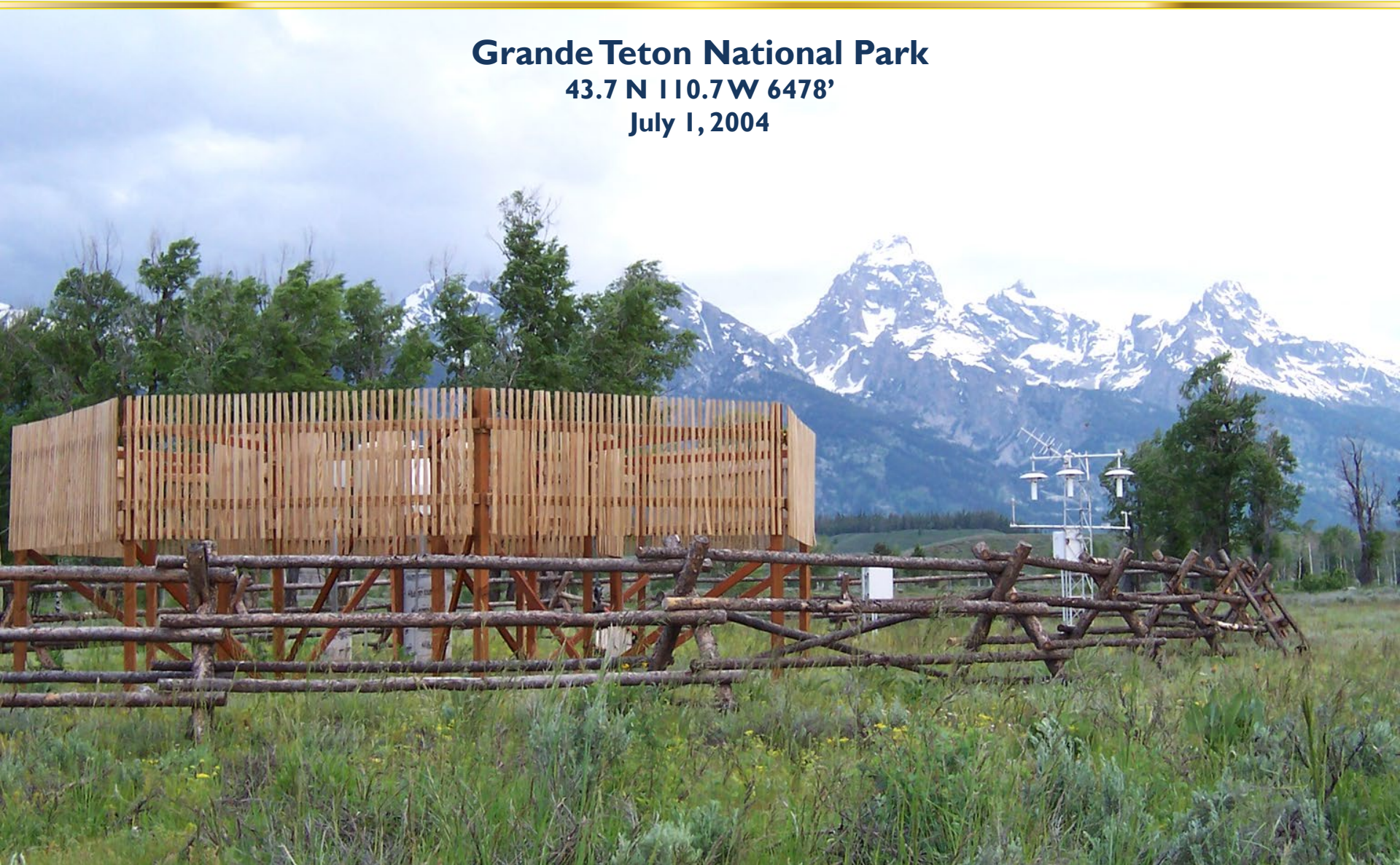
# US Climate Reference Network

## WY Lander 11 SSE



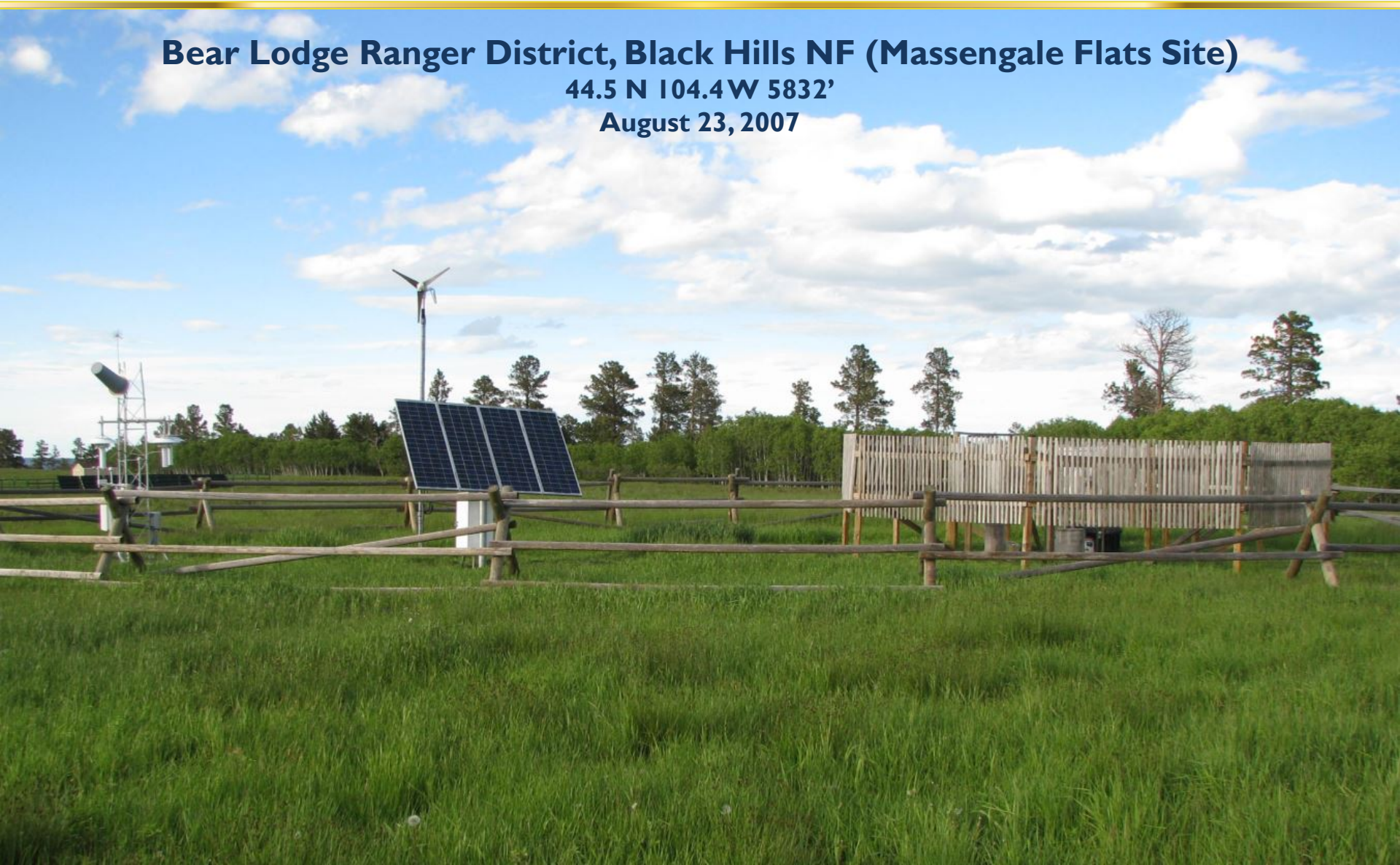
# US Climate Reference Network

## WY Moose 1 NNE



# US Climate Reference Network

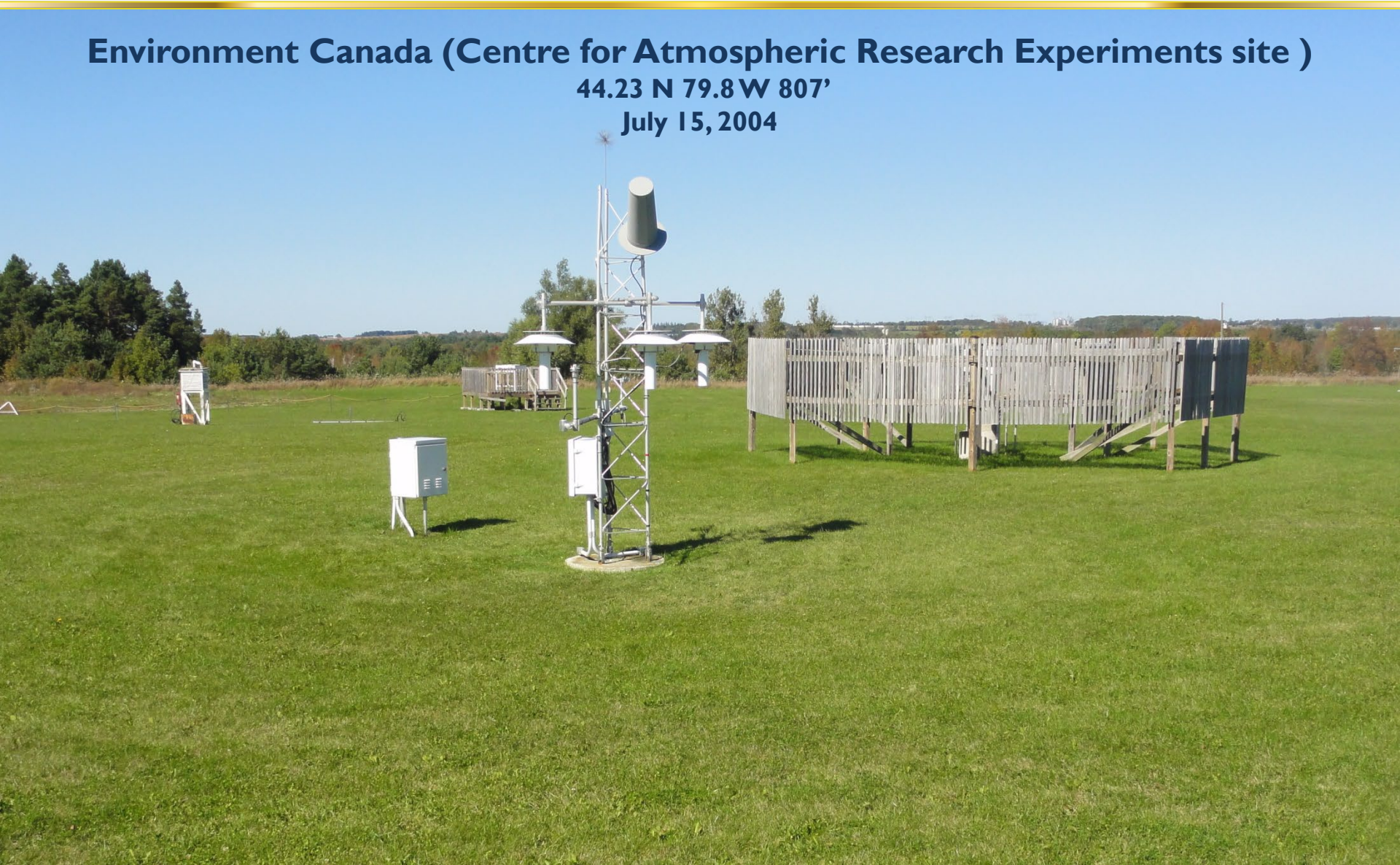
## WY Sundance 8 NNW



# US Climate Reference Network

*Experimental*

## ON Egbert 1W



# US Climate Reference Network

*Experimental*

## SA Tiksi 4 SSE

