

Trip to Antarctica (2009)

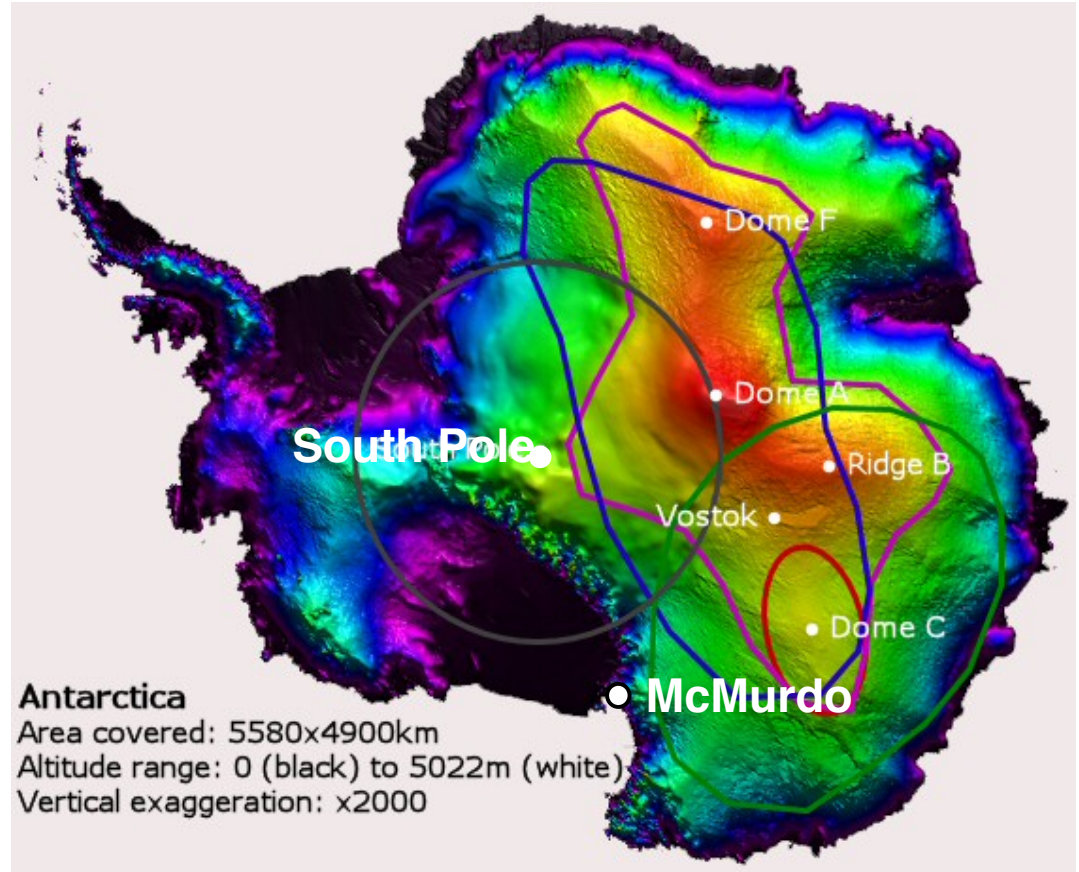
Final destination: the South Pole

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Antarctica (from the Greek word "antarktikos" = "opposite the Arctic")

- one of the coldest, windiest, highest, and driest locations in the world.



- Area: 1.5x size of US; 2nd-smallest continent (after Australia).
- Climate: severe low temperatures vary with latitude, elevation, and distance from the ocean;
 Record low@Vostok -128F (July 21, 1983)
- Terrain: about 98% thick continental ice sheet and 2% barren rock
 average elevation 2 300 m; mountains: up to 4 897 m

- Altitude > 3000m
- Slope < 1/1000
- Snow accumulation <5g/cm²/year,
- Auroral oval below the horizon
- Limit of visibility for geostationary satellites

Weather for South Pole Station

The date is 02-09-2009 at 4:03 PM



Temperature

-42.1 C -43.8 F

Windchill

-54.8 C -66.6 F

Wind

6.5 kts Grid 111

Barometer

684.0 mb (10478 ft)

UTC 02-09-2009 at 03:03 Z

If you want to see [official met data](#) - click on this link.

If you want to see South Pole Weather [FAQ's](#) - click this link.

Average monthly temperatures and precipitation (Fahrenheit, inches) at the South Pole, Antarctica

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Avg high °F	-14	-35	-58	-63	-64	-65	-68	-68	-67	-54	-33	-15	-50
Avg low °F	-20	-44	-70	-76	-78	-79	-82	-81	-81	-64	-39	-20	-61
Precipitation inches	-	-	-	-	-	-	-	-	-	-	-	-	0.1

↔
Summer

↔
Summer

Antarctica: How to get there?



- Commercial flight to Christchurch, New Zealand
- US AirForce flight from NZ to Antarctica: McMurdo station (US base)
- US AirForce flight from McMurdo to South Pole station (US base)

Special Extreme Cold Weather Clothing

(Clothing Distribution Center, Christchurch NZ)

The Following Must be Worn or Carried on All Flights



- 1.) Goggles
- 2.) Balaclava or knit hat
- 3.) Red parka or Carhartt parka
- 4.) Mittens or gloves
(your choice of hand wear)
- 5.) Wind pants or Carhartt overalls
- 6.) Bunny boots or blue FDX boots

Sunglasses and long underwear are recommended for comfort.

- Closed-toe shoes or boots must be worn.
- In the event of a 'turn-around,' only the boomerang bag will be returned to passengers.





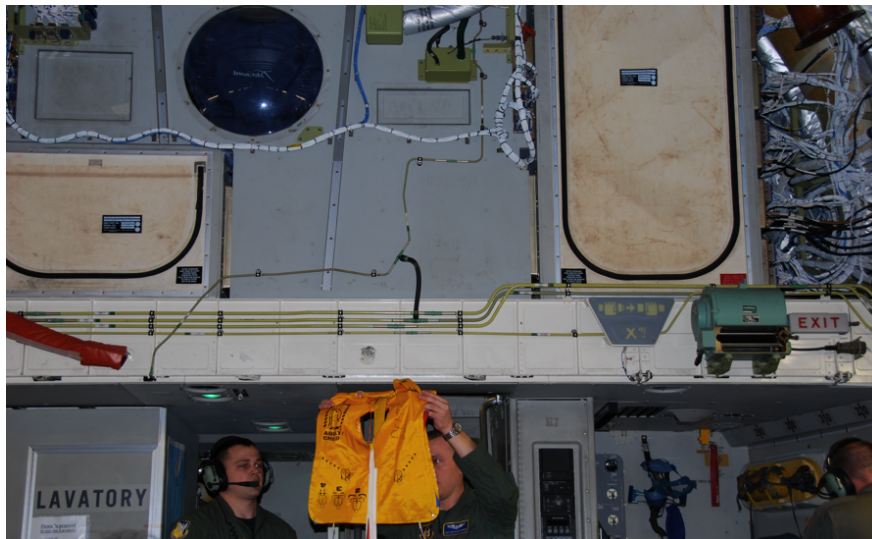
US AirForce flight from NZ to McMurdo Station in Antarctica

Preparing for Departure



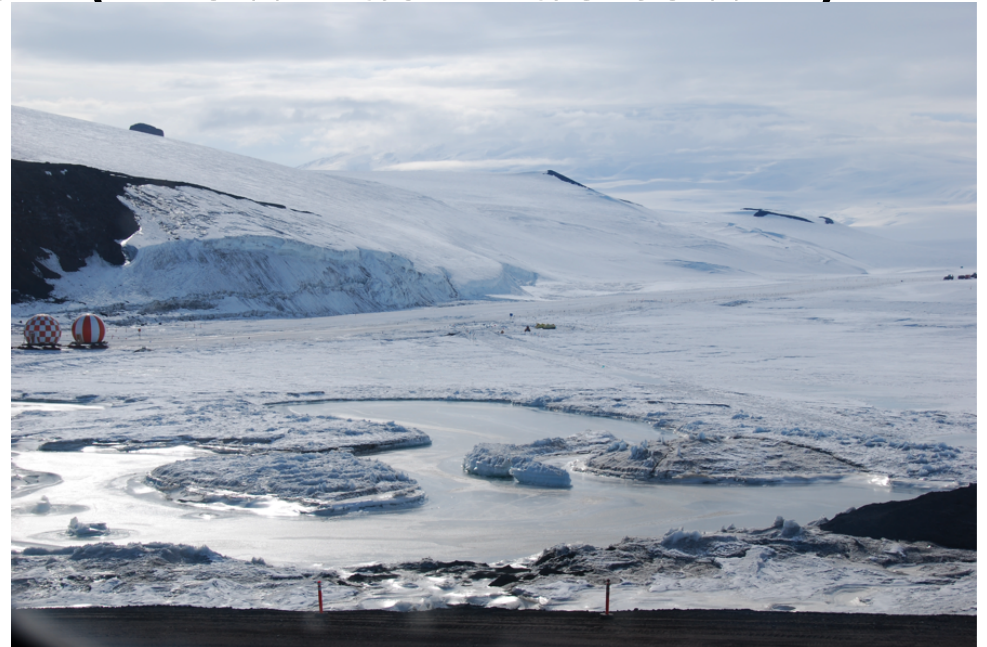


US AirForce flight from NZ to McMurdo Station in Antarctica



Christchurch, NZ

Bus ride to McMurdo station (known as 'Mac town')



McMurdo station:

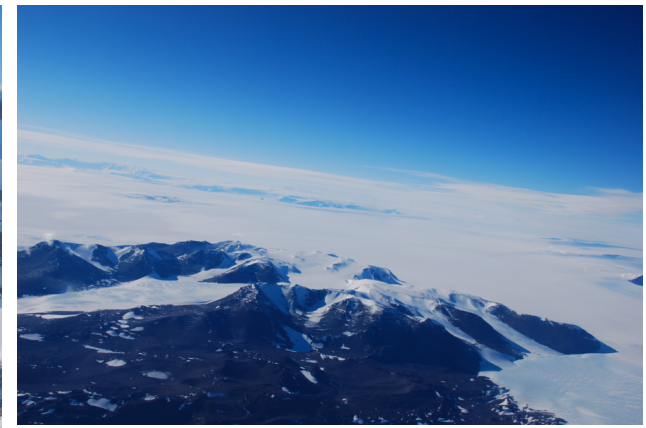




US AirForce flight from McMurdo to the South Pole (US base)

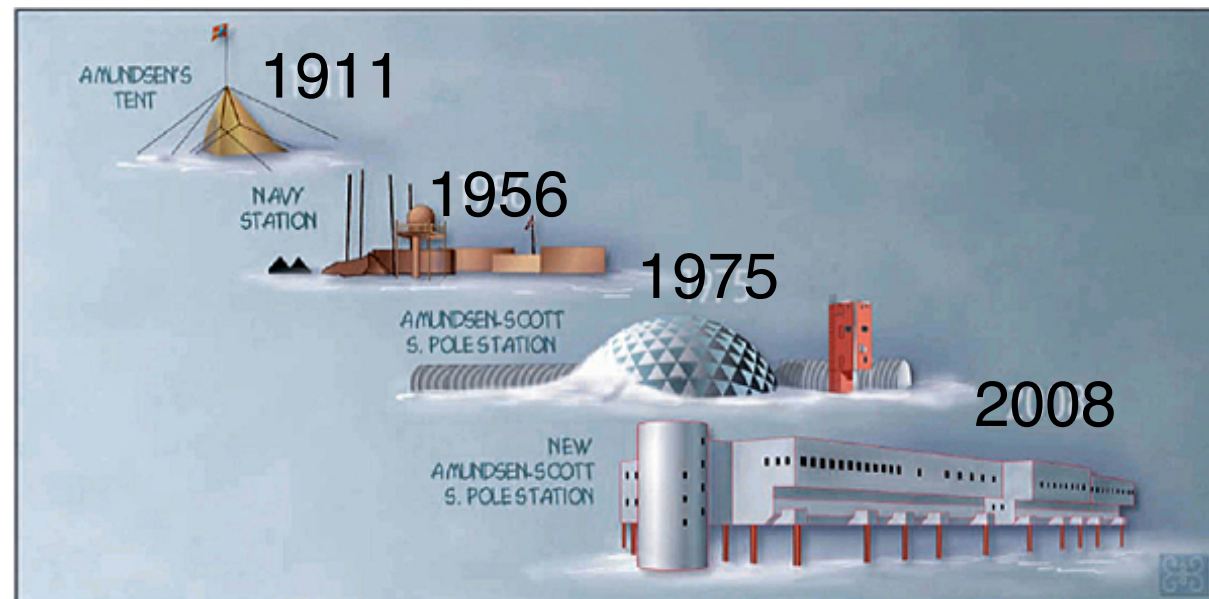
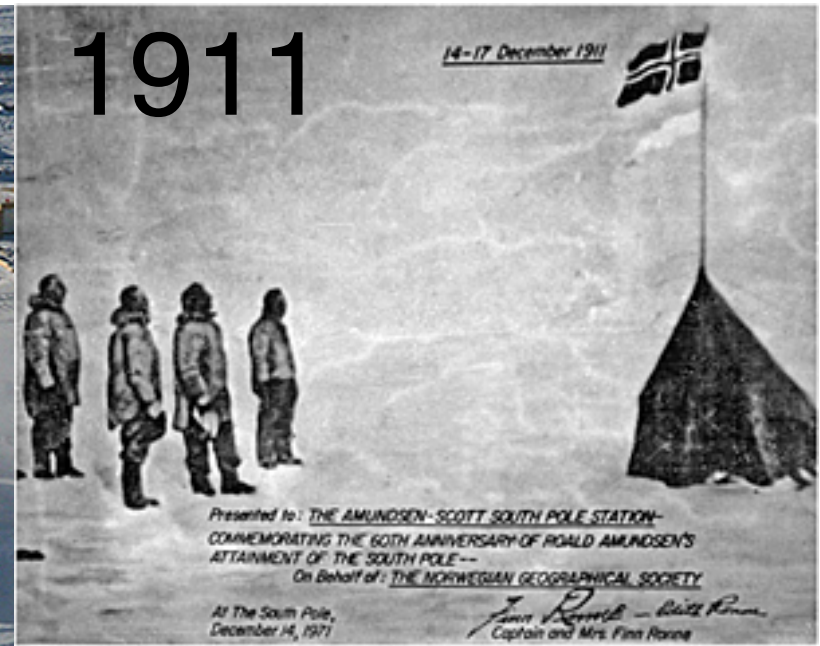


LCI30
Hercules



Transantarctic Mountains

Amundsen-Scott South Pole Station



Amundsen-Scott South Pole Station



Original signatories of Antarctic Treaty (1 December 1959)

Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, the Soviet Union, the United Kingdom and the United States.

The treaty has now been signed by 46 countries.

“It regulates [international relations](#) with respect to [Antarctica](#), [Earth's](#) only [continent](#) without a native human population set aside Antarctica as a scientific preserve, established freedom of scientific investigation and banned [military activity on that continent](#).”

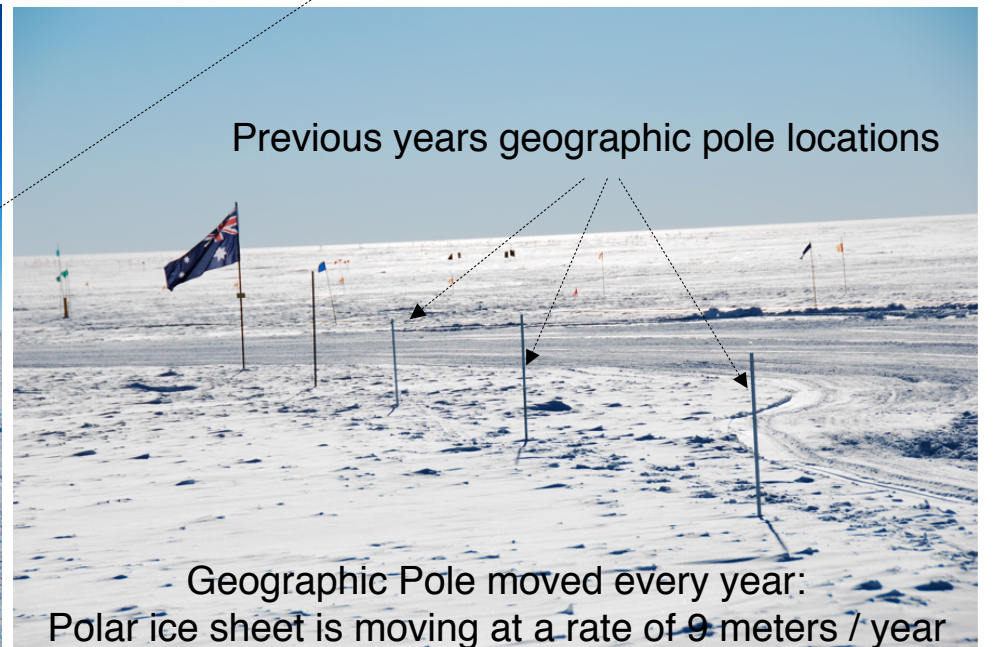
Amundsen-Scott South Pole Station



Ceremonial South Pole



Geographic South Pole



Previous years geographic pole locations

Geographic Pole moved every year:
Polar ice sheet is moving at a rate of 9 meters / year



GEOGRAPHIC SOUTH POLE



ROALD AMUNDSEN

1911

ROBERT F. SCOTT

JANUARY 17, 1912

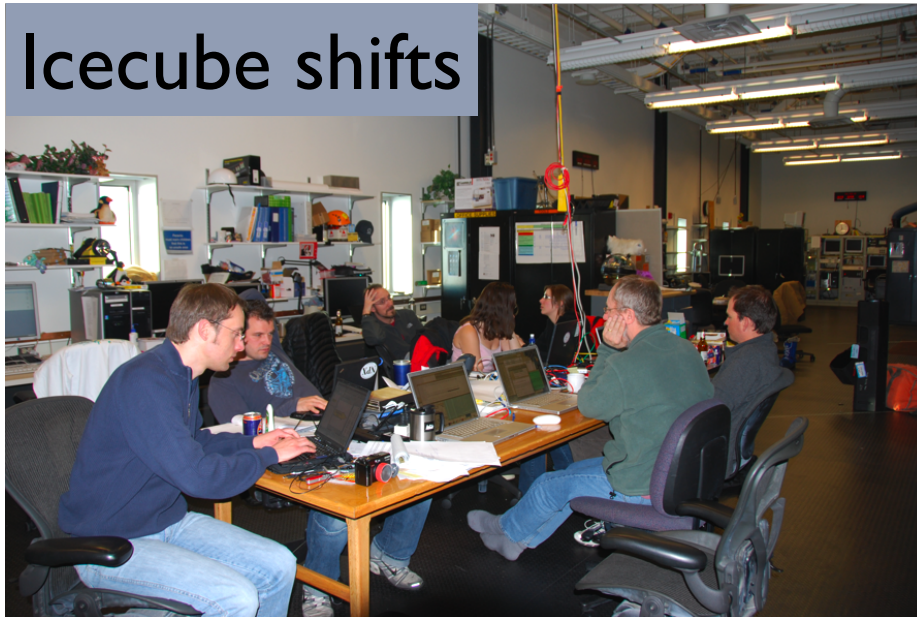
ELEVATION 9,301 FT.

"The Pole. Yes, but under very different circumstances from those expected."

Inside the Station



Icecube shifts



Inside the Station



gym



Lots of activities



'quiet reading room'

Inside the Station

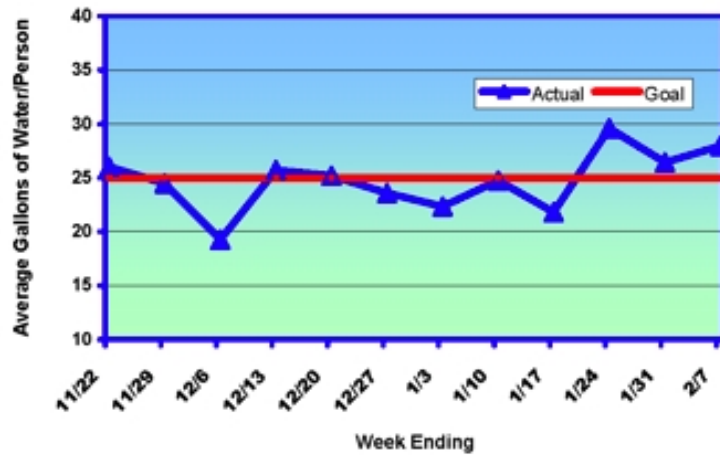


green house



Post office && store

Water Consumption



Population: 237

**28
Gallons/**



Last Week, Our Water Consumption/Person is:

HIGH

**676
kW**

Last Week, Our Average Power Consumption was:

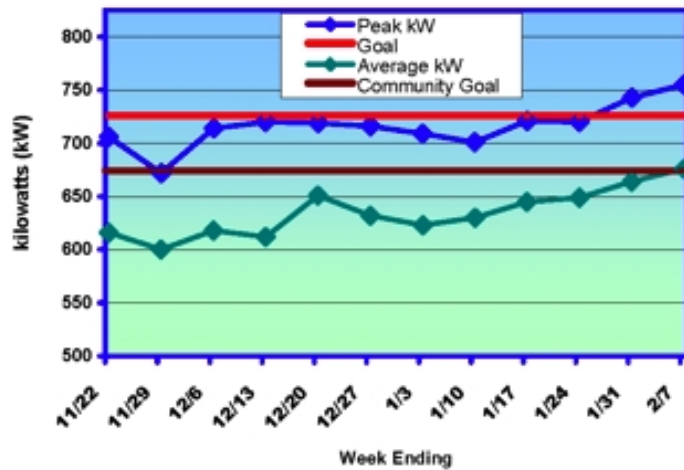
PEAK HIGH

**23,719
Gallons**

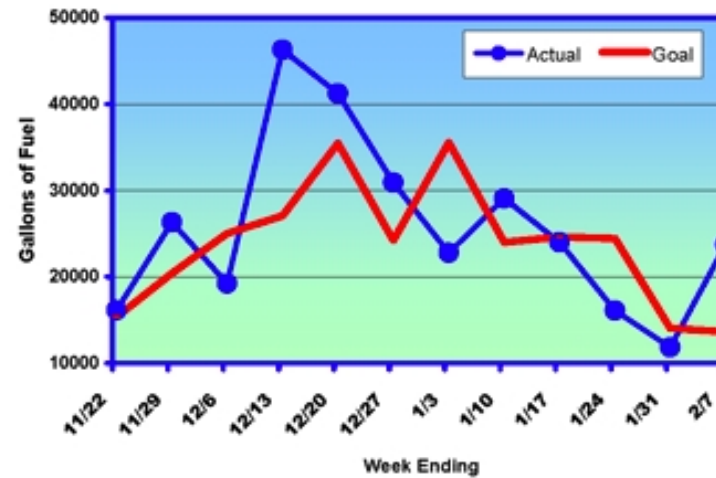
Last Week, Our Total Fuel Consumption was:

HIGH

Power Consumption



Fuel Consumption



Outside the Station: Summer Camp



Trip to the Dome (old station)

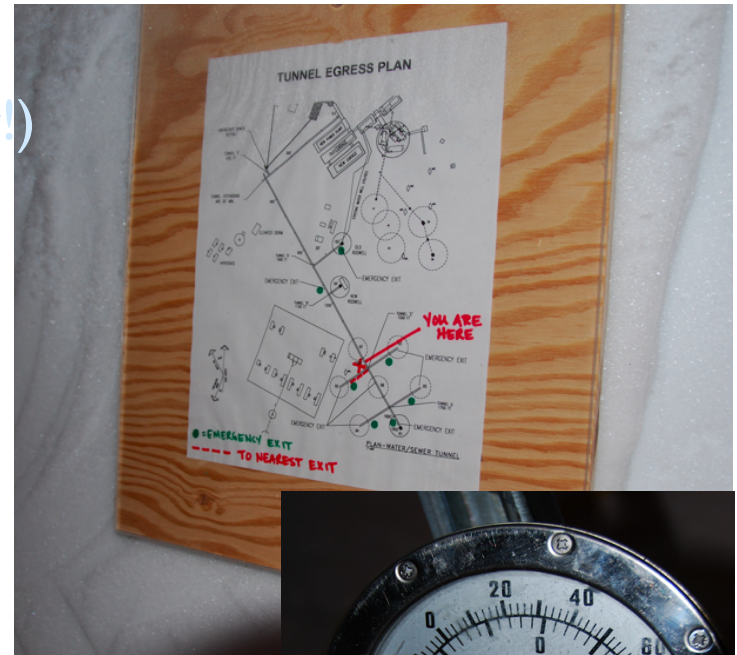


a storage place e.g. food

Now (2011): Dismounted and shipped back to the US

the SouthPole station tunnels

Tunnels provide maintenance access to water piping independent of outside conditions (winter!)

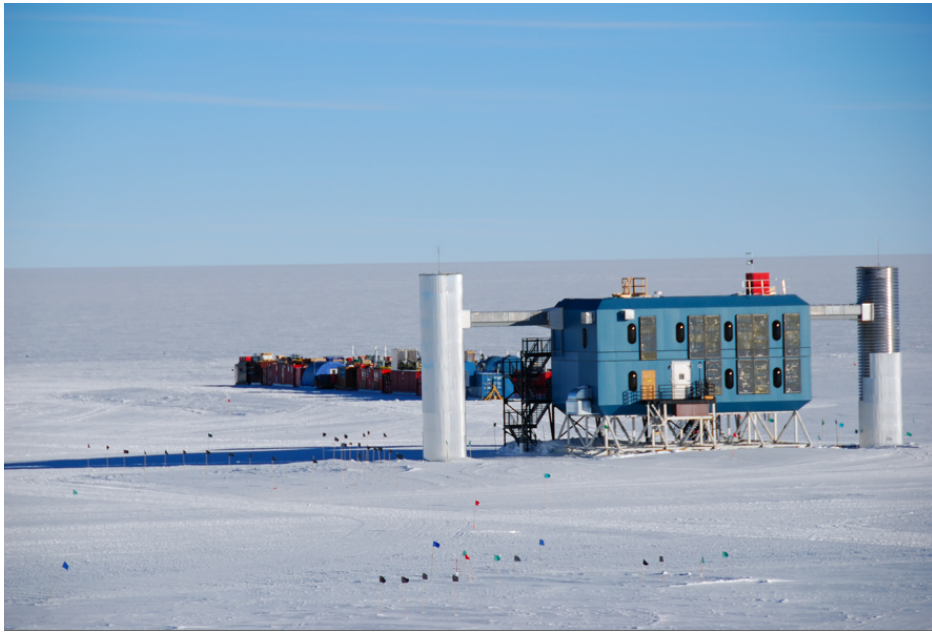


Icicles created by condensation from sewage outfall pipes ...

Outside the Station: transportation



IceCube:

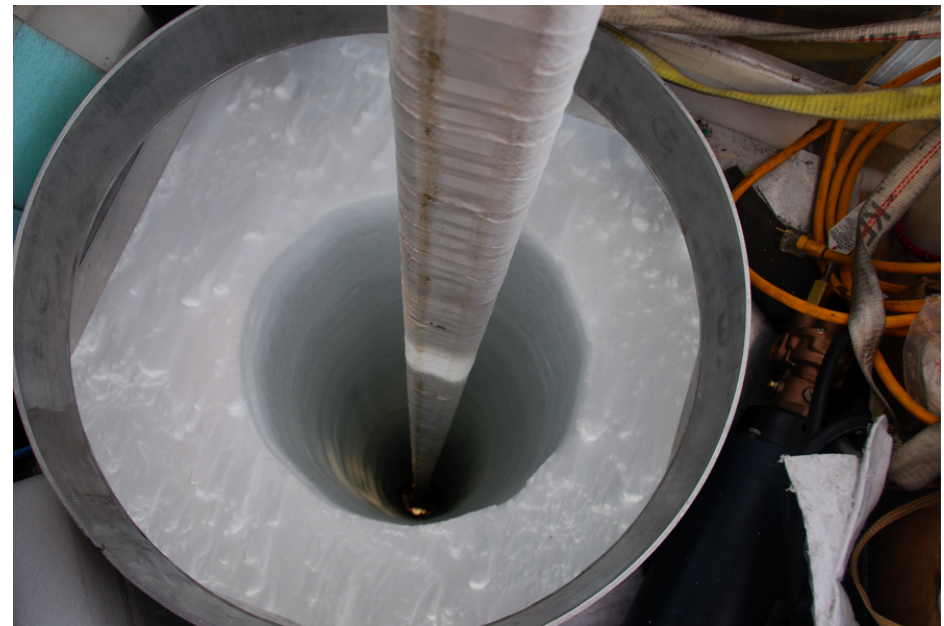


IceCube:

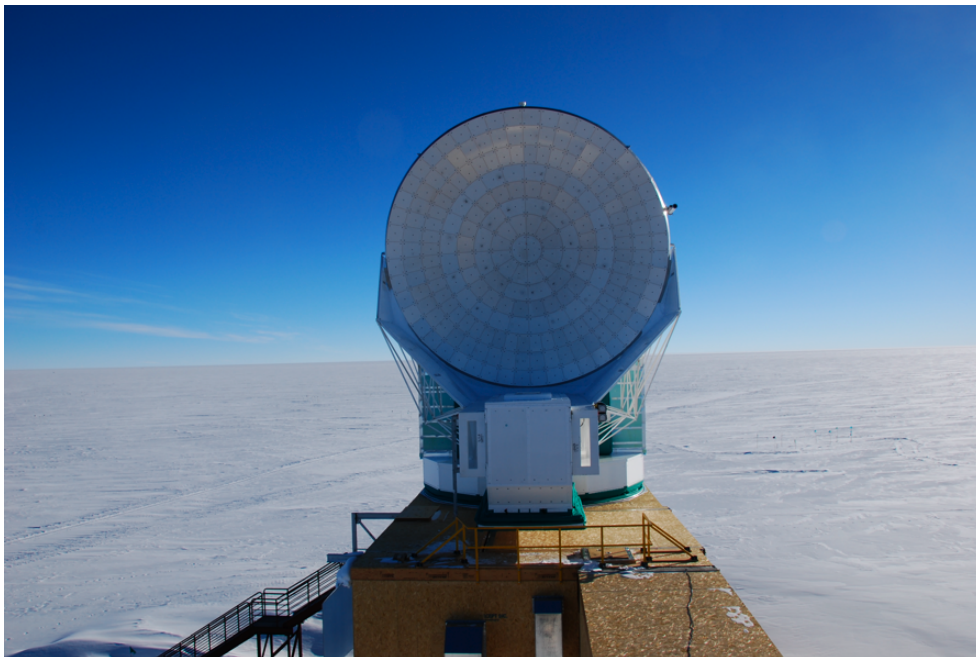
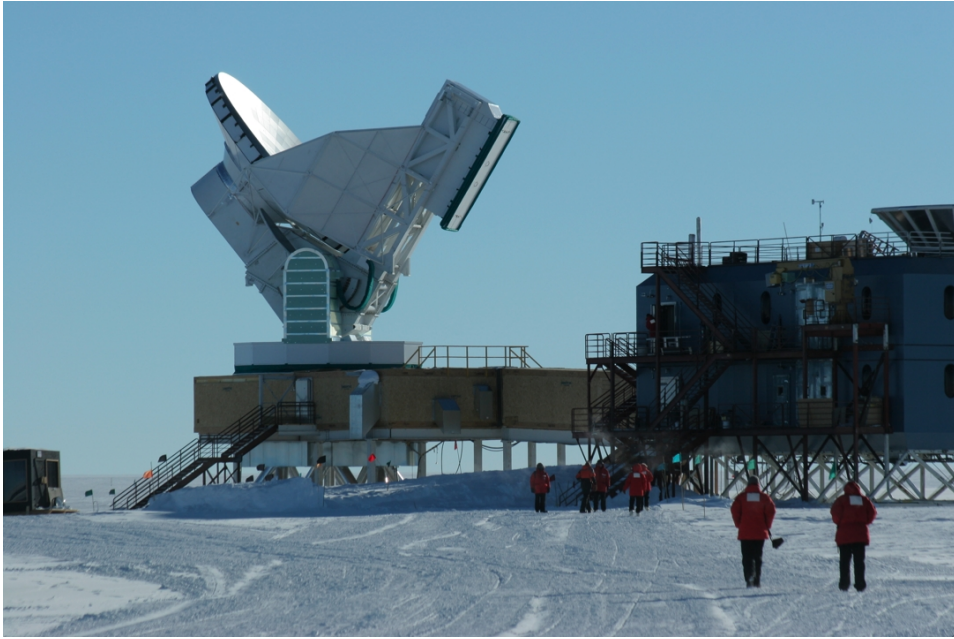


"The only scientific data you've recorded for the past three months is, 'Froze my butt off?'"

IceCube: 'winterized'



Visit to the South Pole Telescope



Visit to the satellite dishes



Going home February 13, 2009

One of the last few flights from the Pole



Change planes in McMurdo:

