



# Tech Info Library

## Macintosh: Storage at Extreme Temperatures and Altitudes

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### TOPIC -----

Can the Macintosh withstand non-operating temperatures of -80 deg C? Can the Macintosh and a hard drive be modified to operate at altitudes of 12,000 feet?

I am interested in using a Macintosh at the South Pole. The elevation is 10,000 feet, but atmospheric conditions add the equivalent of approximately 2000 feet, for a total altitude factor of 12,000 feet.

The equipment will be installed during the summer (temp is -30 deg C to -40 deg C), which is within Apple's storage temperature specification guidelines. If there were a generator problem during the winter, the temperature could drop to -80 deg C for a period of time.

### DISCUSSION -----

There is a great probability of damage to any Macintosh used in the environment you describe.

Apple's storage temperature guidelines are specified for storage only. Under no circumstances should the system be operated at anything under 0 deg C. In fact, if the Macintosh is stored at its minimum temperature, it would need to be returned to above 0 deg C for AT LEAST 2 hours before operation.

Also, the battery on the logic boards of all Macintosh II computers is not good for any temperature under -40 deg C. Lubricants in a hard drive would also solidify at those low temperatures.

We know of no way to modify the Macintosh to work in such conditions.  
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