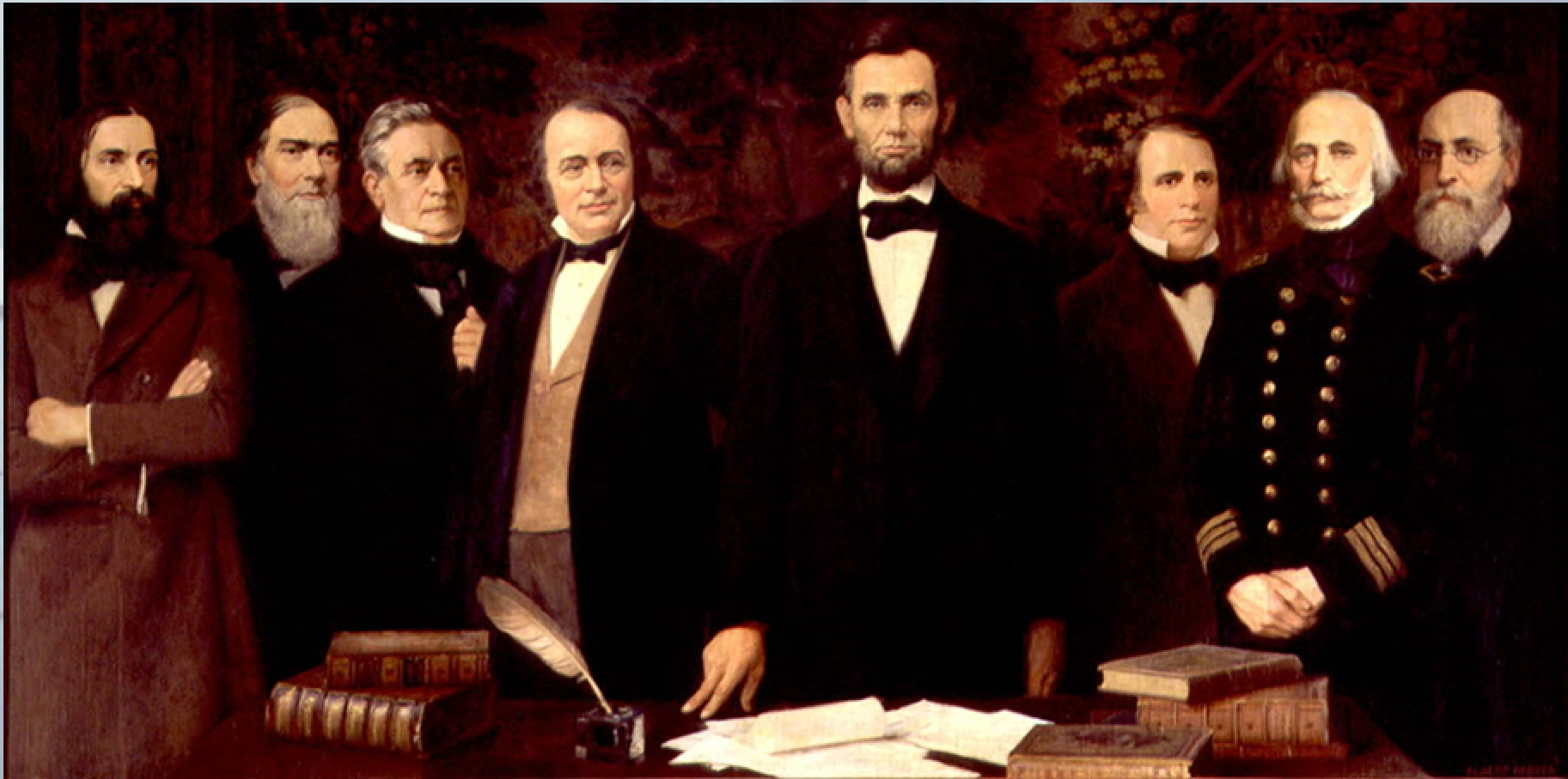




# U.S. Planning Activities for International Polar Year 2007-08

[www.us-ipy.org](http://www.us-ipy.org)

# The National Academies



# USNC for IPY

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# U.S. Planning Activities for IPY

**US National Committee (USNC) was formed for IPY startup planning activities Aug 2003-Dec 2004.**

- ❖ **USNC organized IPY community interaction sessions at conferences: AGU fall 03, spring 04, fall 04, many other meetings. Also published articles, sent letters to organizations.**
- ❖ **USNC nurtured US agency buy-in & ownership of IPY (summer 03 & ongoing)**
- ❖ **USNC collected ideas & disseminates info via web site ([www.us-ipy.org](http://www.us-ipy.org)) & mass email (fall 03 & ongoing)**
- ❖ **USNC developed & articulated the science vision: “A Vision for the International Polar Year”, in press 2004, NRC.**
- ❖ **Academy hosted interagency-USNC-PRB implementation workshop to begin defining US IPY initiatives (July 04).**
- ❖ **USNC nurturing congressional action for IPY (summer-fall 04)**

# U.S. Agencies Actively Planning for IPY as of July 2004

- ❖ **NSF** (designated by the White House as the lead US federal agency)
- ❖ **NOAA**
- ❖ **NASA**
- ❖ **USGS**
- ❖ **Dept of Interior**
- ❖ **DoD**
- ❖ **DOE**
- ❖ **EPA**
- ❖ **NIH**
- ❖ **Smithsonian**
- ❖ **State Department**
- ❖ **OSTP**

## ***Recommendation 1***

# **Initiate a sustained effort to assess large-scale environmental change and variability in the polar regions**

- ❖ **Provide a comprehensive assessment of polar environmental changes – activities to understand past changes and measure current changes to facilitate predictions for the future.**
- ❖ **Encourage interdisciplinary studies and the development of models**

## ***Recommendation 2***

**Include studies of coupled human-natural systems critical to societal, economic, and strategic interests**

- ❖ **Examine role of the polar regions in globally linked systems**
- ❖ **Investigate physical-chemical-biological interactions**
- ❖ **Examine the effects of polar environmental change on the human-built environment**

## ***Recommendation 3***

# **Explore new scientific frontiers from the molecular to the planetary scale**

- ❖ **Involve multidisciplinary studies of biological communities; oceanographic processes; the Earth's deep interior; and sun-earth connections**
- ❖ **Apply new knowledge gained from exploration to questions of societal importance**
- ❖ **Invest in new capabilities essential to support interdisciplinary exploration at the poles**



## ***Recommendation 4***

# **Design multidisciplinary polar observing networks that provide a long-term perspective**

- ❖ **Establish integrated multidisciplinary observing networks that employ new sensing technologies and data assimilation**
- ❖ **Conduct an internationally coordinated “snapshot” of the polar regions using all available satellite sensors**

## ***Recommendation 5***

# **Invest in critical infrastructure and technology to guarantee enduring benefits**

- ❖ **Ensure the long-term availability of assets necessary to support science in the polar regions**
- ❖ **Encourage development of innovative technologies (UAVs, AUVs, etc.)**
- ❖ **Develop advanced communications systems**
- ❖ **Establish international data standards, policies, and procedures**
- ❖ **Train the next generation of scientists, engineers, and leaders**

## *Recommendation 6*

# **Create new connections between science and the public**

- ❖ **Develop programs in education and outreach that build on the inherent public interest**
- ❖ **Create opportunities for education, training, and outreach for all age groups and build on successful existing models**

## *Recommendation 7*

# **US Should Participate as Leaders in International Polar Year 2007-2008**

- ❖ **Use the IPY to build long-lasting partnerships across national borders**
- ❖ **Capitalize on existing agency missions and create new opportunities**
- ❖ **Provide mechanisms for individuals, early-career researchers, and small teams to contribute to IPY**



*Enthusiasm is snowballing and actions are  
evolving on all fronts!  
Participate in planning for*

**International Polar Year 2007-08**

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