

Some key messages

- The Arctic is warming much and fast
- All components of the Arctic cryosphere respond
- Feedbacks enhancing warming have been observed
- Changes in the cryosphere happen much faster than we thought possible.
- Changes fundamentally alter characteristics of Arctic ecosystems.
- Observed and future changes impact Arctic societies on many levels and have global implications.
- Everyone in the Arctic will need to adapt
- Uncertainty of the speed and consequences of future change.

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Recommendations condensed

- Inform and educate Arctic societies and the global society about changes in the Arctic linked to climate change, and how they affect people, locally regionally and globally.
- Develop plans and strategies for adaptation appropriate to scales and anticipated challenges.
- Reduce global GHG emissions.

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Inform and educate

- SWIPA executive summary presented to Ministers in Nuuk 2011
- Science conference Copenhagen May 2011
- SWIPA films
- Science background report in print
- SWIPA "teenagers" report in print
- SWIPA overview report in progress

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Inform and educate

- SWIPA presentations at IPY conference and other events
- Scientific publications based on SWIPA
- Visits on AMAP homepage
- Media coverage based on SWIPA
- National education follow up

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Adaptation

- Develop plans and strategies for adaptation appropriate to scales and anticipated challenges.
 - Regional scale assessments of cryospheric change and associated risks.
 - Improve our knowledge and predictive capability through systematic observations and research
 - Increase cooperation and conduct an integrated assessment of the combined impacts of change in the Arctic

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Some ongoing AC activities feeding into adaptations efforts

- Arctic Marine Shipping Assessment follow up activities
- Arctic Biodiversity Assessment
- Arctic Ocean Acidification
- Arctic Resilience Report
- Arctic Human Development Report II
- Task Force on Marine Oil Pollution Preparedness and response
- [Sustaining Arctic Observations Network (SAON)]
- [Actions for Change in the Arctic]

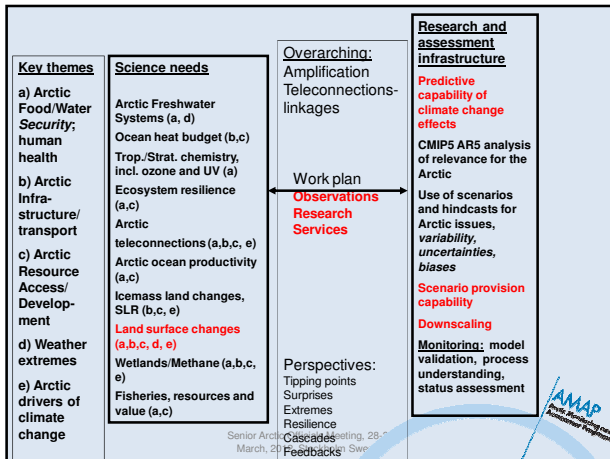
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Improving predictive capability

- Sustaining Arctic Observations Network
- Science community and international organisations (IPCC, WMO/WCRP, IASC, IASSA, etc)
- AMAP CEG WS focus on:
 - What are the key themes
 - Mapping the relationship to scientific challenges
 - Roadmap to knowledge needs
 - Scientific aspects that need to be taken into account
 - First steps to improve predictive capability

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Follow up by AMAP CEG

IMPROVING PREDICTIVE CAPABILITY

- Workshop fall 2012 in Stockholm or US
 - How well do global climate models capture Arctic climate change and how could they be improved?
- Workshop spring 2013 in Russia
 - How can predictions of (ecological) effects of climate change in the Arctic be improved

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Thank you



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