

**IMAS**



translating **nature** into **knowledge**

**INSTITUTE FOR MARINE AND ANTARCTIC STUDIES**

# The Future of the Antarctic Treaty System

Dr Julia Jabour

*Master of Polar Law  
University of Akureyri  
Iceland  
21 October 2011*



# 10 – The future of the ATS

The concluding seminar will summarise the Antarctic Treaty System and look towards the future. One of the main considerations for the future will be climate change, and this session will also examine what the science is indicating and what kinds of challenges the Treaty Parties may face in the future. The Antarctic Treaty System is seen as a remarkable example of international cooperation, providing the basis for the establishment of a sophisticated system of management for uses of Antarctica and the Southern Ocean. This seminar acknowledges the achievements of the ATS, its critics and their criticisms, and looks at matters that may affect the region in the future.

# Antarctic Treaty System (ATS)

1959 ANTARCTIC TREATY

Original 12 Signatories (*all Consultative Parties*)  
36 other Contracting Parties (*16 Consultative Parties*)

Treaty Meeting Recommendations,  
Measures, Decisions, Resolutions

1972  
Convention for the Conservation of  
Antarctic Seals

1980  
Convention on the Conservation of  
Antarctic Marine Living Resources

1991  
Protocol on Environmental Protection

1988  
Convention on the  
Regulation  
of Antarctic Mineral  
Resource Activities

# How good is the Treaty?

## Original Goals    Achievements

- Peace             No wars; anyway no military activity allowed
- Science             Lots, duplication, ? quality results (“there are no woodpeckers in Antarctica”), science has priority
- Cooperation     Yes, especially about easy things; consensus drives agenda but protects the rights of all parties
- Exchange info ? Sometimes (web-based)
- Exchange personnel  Yes
- Exchange results  Yes (we presume...)
- Cooperation with specialised agencies  IMO, WMO, etc
- Nuclear ban             No testing or waste disposal
- Sovereign claims  elegance of Art.IV overrides and neutralises any individual action by claimants; nobody likely to challenge this for now
- High seas rights  X Complex (eg. Japan and whaling, CCAMLR and freedom to fish)

# How good is the Treaty?

## Original Goals

## Achievements

- Observation / inspection  No major disputes, but no major changes in behaviour either
- Jurisdiction  Flag-state for ships/aircraft; national over people
- Flexibility through ATCMs  Development of ATS
- Consultative Parties  From original 12 to 28 in 50 years
- Application to 3rd parties  Yes; only exceptions were Pakistan (late 1980s), Greenpeace (early 1990s), Malaysia
- Dispute resolution mechanism  No major disputes (not public ones)
- Modification / amendment  CCAS, CCAMLR, CRAMRA, MP
- Consensus  Means either 'yes' or no formal objection (not the same thing); protects/respects all positions
- Accession  From original 12 to 48 in 50 years (largest populations - India and China, power brokers - USA, UK, Fr)

# How good is CCAS?

## Original Goals

## Achievements

- Seals conservation  **Fur seals so numerous they are now de-listed from Protocol special protection status**
- Regulate harvesting  **Through governments, but no harvesting**
- Application  **Applies to all seal species**
- Flexibility  **Can be amended but hasn't**
- Application to 3rd parties  **No provisions; not tested**
- Dispute resolution mechanism  **No provisions**
  
- No commercial sealing; a few seals 'taken' each year for scientific research.
- Many now argue that CCAS is irrelevant since the Protocol gives blanket protection to all species.
  - Why don't the ATCPs get rid of the Convention, citing a fundamental change of circumstances?

|                          | <b>Antarctic Seals Captured</b> | <b>Antarctic Seals Killed</b> |
|--------------------------|---------------------------------|-------------------------------|
| Argentina                | 34                              | Nil                           |
| Australia                | Nil                             | Nil                           |
| Belgium                  | Nil                             | Nil                           |
| Brazil                   | 103                             | Nil                           |
| Canada                   | Nil                             | Nil                           |
| Chile                    | Nil                             | Nil                           |
| France                   | 150                             | Nil                           |
| Germany                  | Nil                             | Nil                           |
| Italy                    | Nil                             | Nil                           |
| Japan                    | Nil                             | Nil                           |
| Norway                   | Nil                             | Nil                           |
| Poland                   | Nil                             | Nil                           |
| Russia                   | Nil                             | Nil                           |
| South Africa             | Nil                             | Nil                           |
| United Kingdom           | Nil                             | Nil                           |
| United States of America | 1210                            | 1                             |

All reported capturing was for scientific research (from UK IP3 to ATCM XXXIV, 2011).

# How good is CCAMLR?

## Original Goals

## Achievements

- Conservation  rational use; ecosystem approach
- Regulate harvesting  but still some non-compliance issues/IUU
- Application  ? applies to all species except whales, seals and microorganisms (doesn't deal with bioprospecting, which is considered scientific research, or if re-sampling/harvesting occurs, then it would be fishing!)
- Flexibility  Is amended annually through conservation measures
- Application to 3rd parties  But little success
- Dispute resolution mechanism  Available, not used
- Observation / inspection  No major disputes
- Consensus  No formal objection
- Sovereign claims  Repeats Art.IV plus Chairman's Statement
- High seas rights  X complex, overridden by RFMO status



Patagonian toothfish, *Dissostichus eleginoides*  
hard hit by IUU and now protected through range of  
Conservation Measures including:

quotas

Catch Document Scheme chain of custody provisions  
Vessel Monitoring System – the boats that are licensed  
‘ping’ their position to their flag state and CCAMLR  
simultaneously; others in the area are thus known to  
be IUU vessels



# How good is the Protocol?

## Original Goals

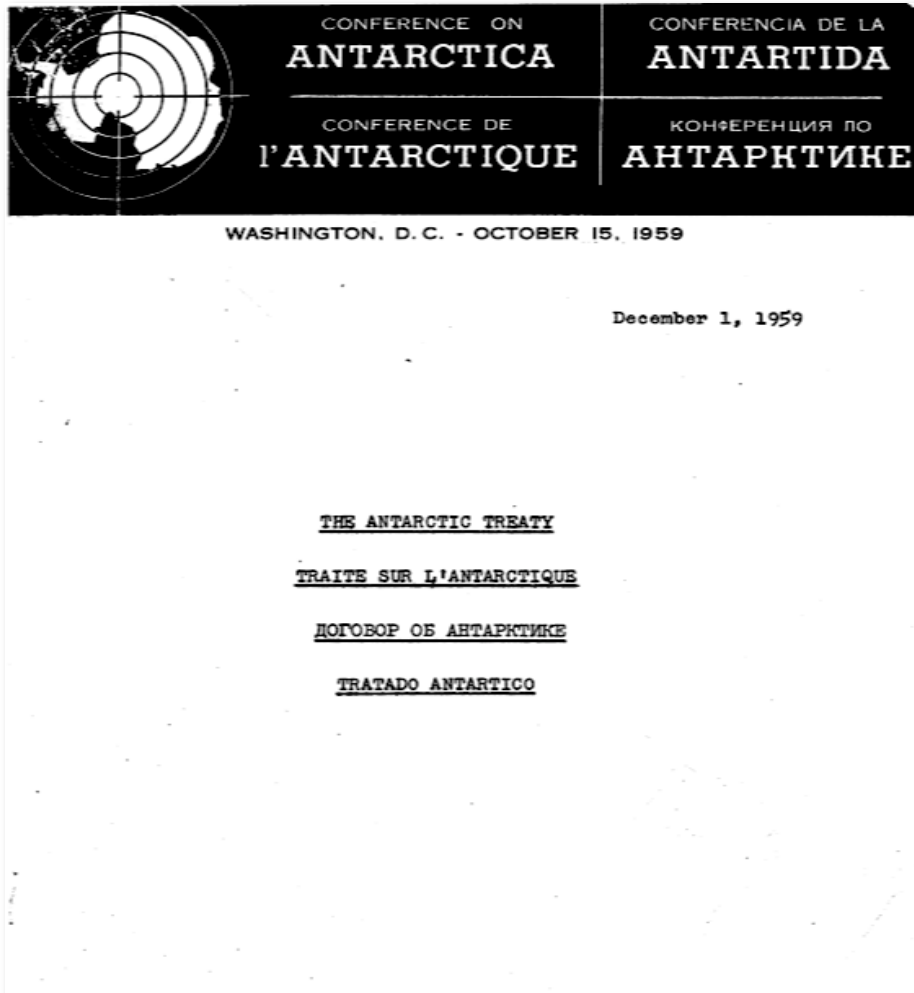
## Achievements

- Comprehensive protection  but dependent/associated ecosystems not defined, not tested
- Peace and science  no disputes; behind the scenes negotiations generally forestall problems; agreement not to discuss contentious issues such as sovereign claims, whaling
- Mining ban  “Prospecting” is science but exploration and exploitation are banned
- Application  applies to all authorised human activity
- Flexibility  Annexes can be amended
- Application to 3rd parties  but not tested
- Dispute resolution mechanism  not used
- Observation / inspection  but does not influence behaviour
- Sovereign claims  repetition of Art.IV
- High seas rights **X complex; not tested**
- Autonomy of CEP **X advisory only**

# ...and its Annexes?

- Annex I  Better than nothing; applies to all authorised human activity; but EIA state responsibility, no useful guidelines, no formal veto allowed
- Annex II  Conserves fauna and flora but weak because no direction for how to avoid introduction of aliens, for example; defers to International Convention for Regulation of Whaling, so whales not covered
- Annex III  Relatively good, considering location of activities; rubbish or heritage? Inspections available but reports don't change bad behaviour
- Annex IV  Better now collaborating with International Maritime Organization on mandatory polar shipping code
- Annex V  Strong system of area management/permit system
- Annex VI  Useless; even 'polluter pays' principle watered down

# The next 50 years...

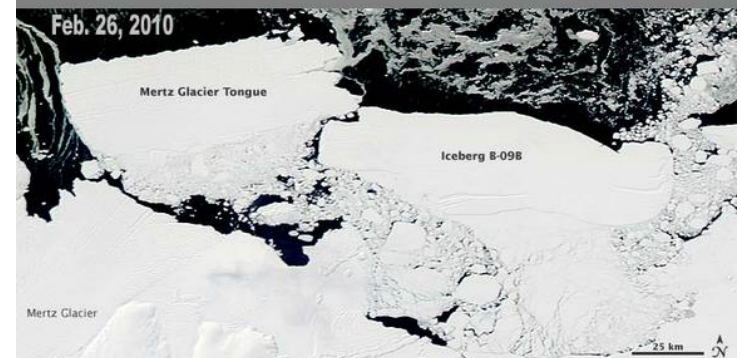
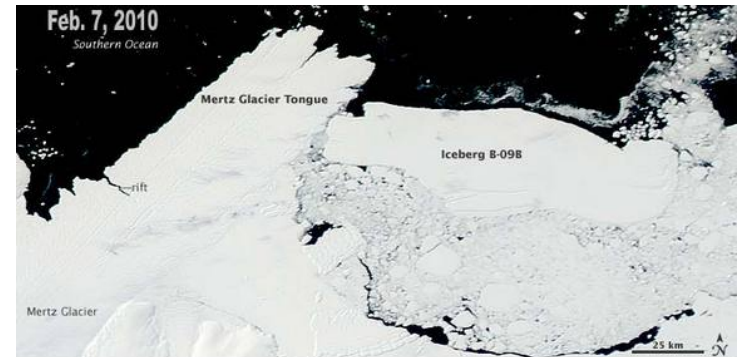
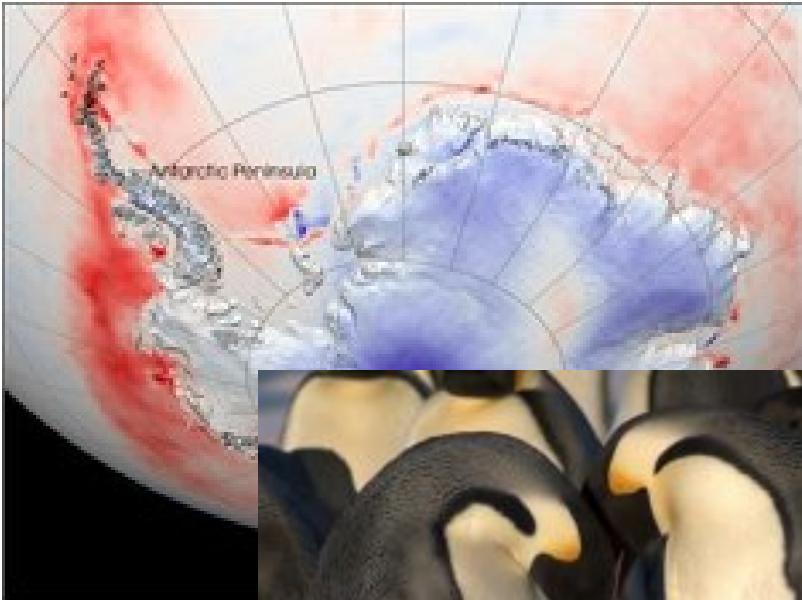


Challenges based on:

- Changing physical conditions
- Tourism growth
- National agendas and sovereignty
- Relevance of science
- Mineral resources
- Law of the Sea and other regime overlaps
- Non-traditional uses

# Changing physical conditions

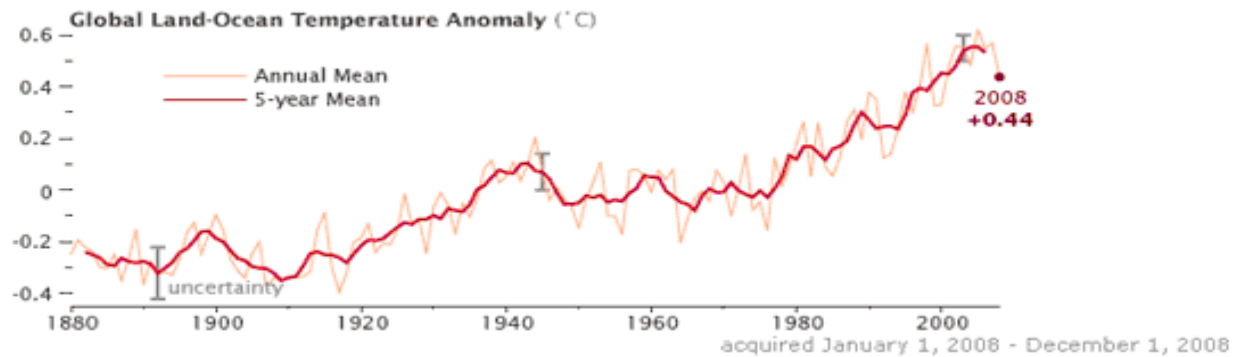
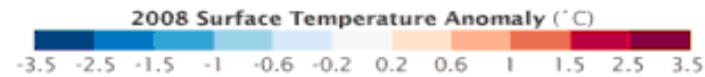
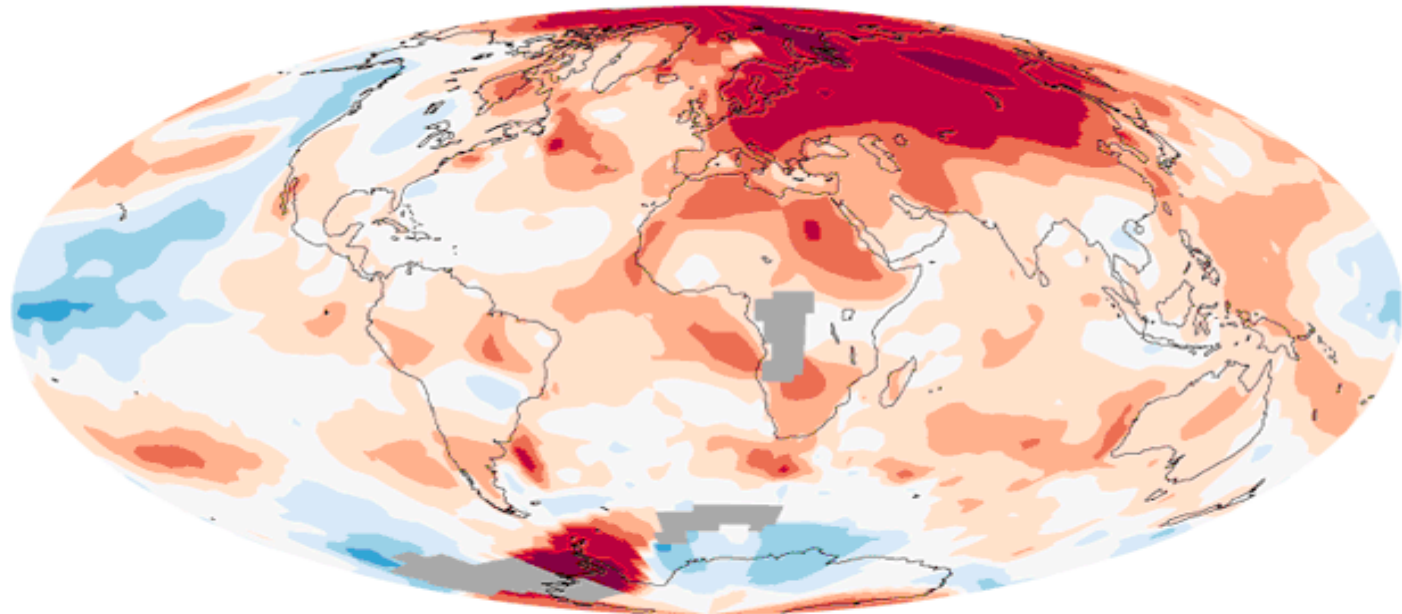
- warming
- ice regime changes
- species shifts
- strengthening westerly winds
- ocean acidification



# can only get worse...

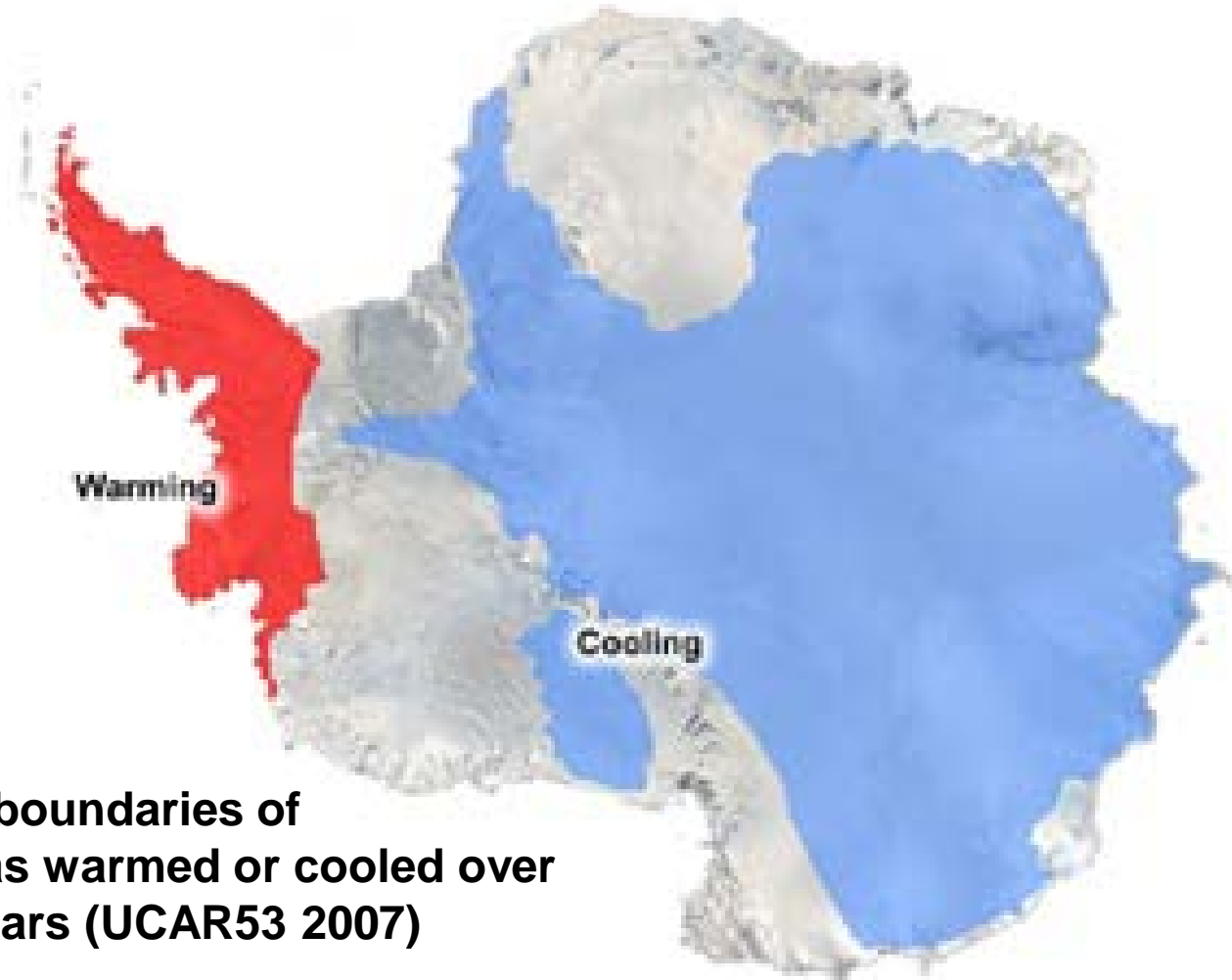
2008 Global Temperature

Posted January 21, 2009



# if these trends continue...

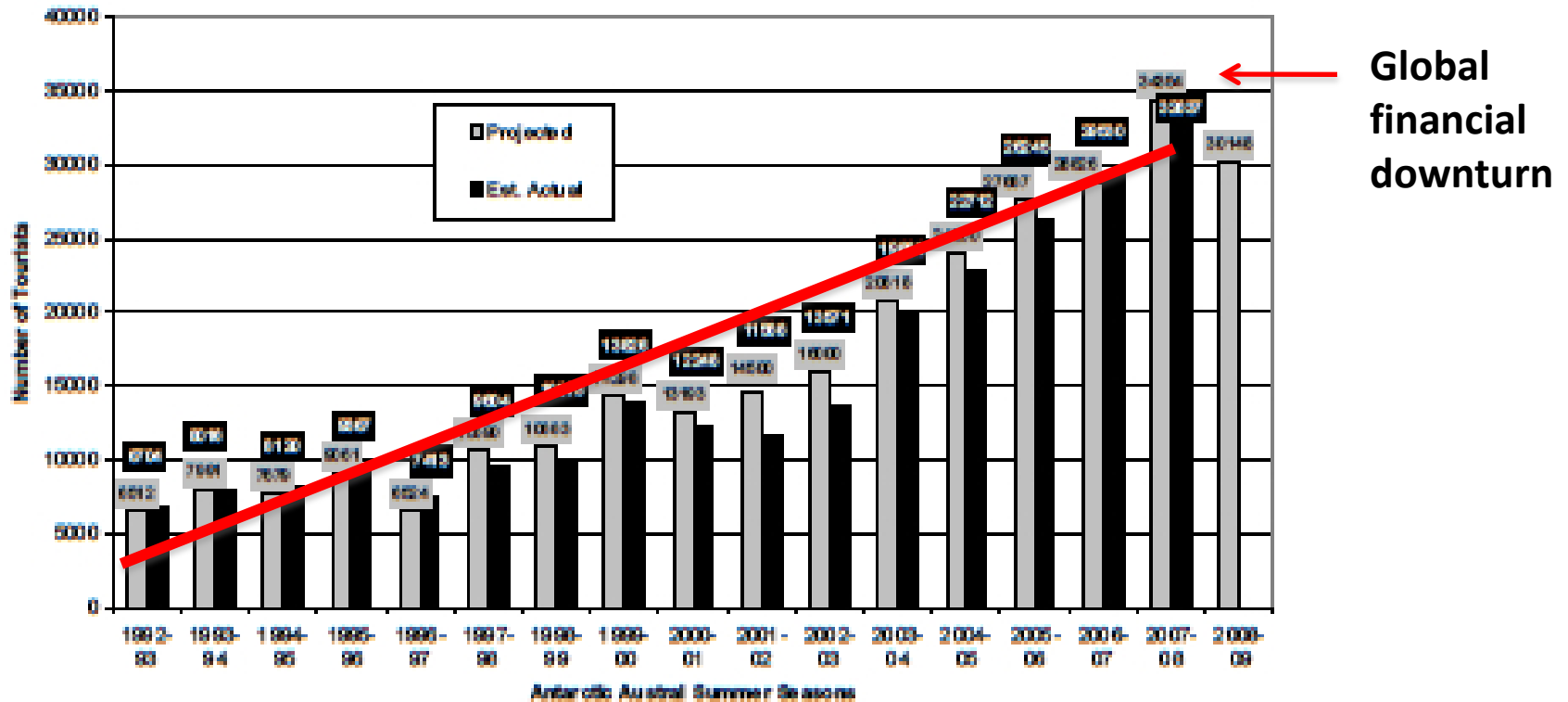
Antarctic Temperature Trends



Approximate boundaries of  
Antarctic areas warmed or cooled over  
the past 35 years (UCAR53 2007)

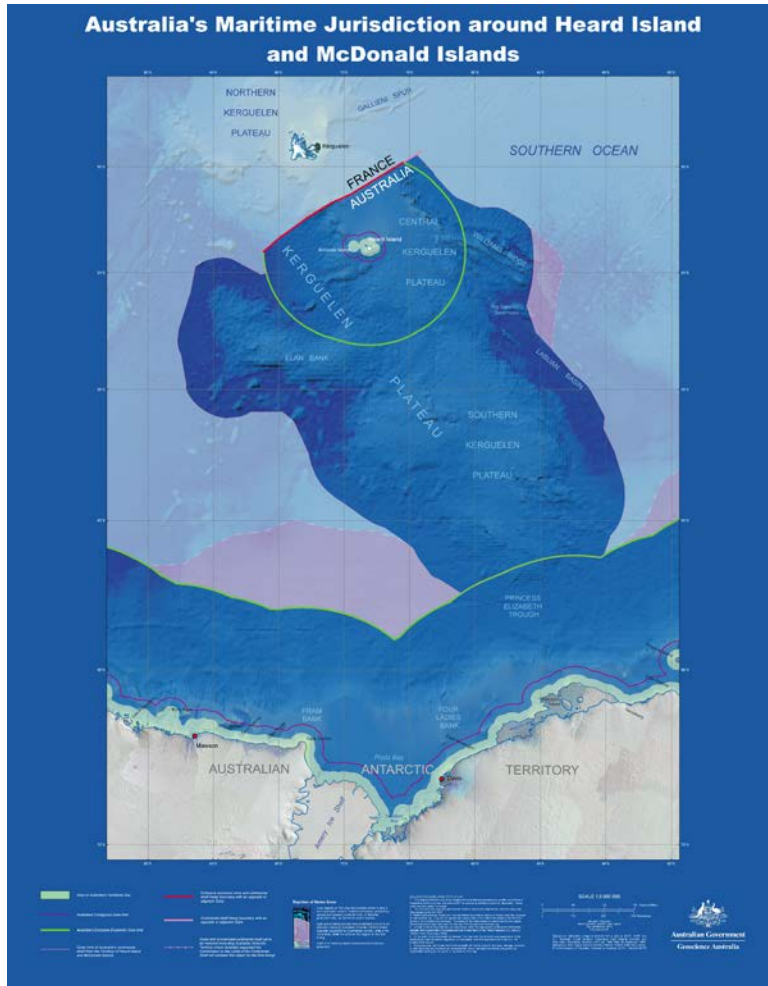
# Tourism growth

1992-2008 ANTARCTIC TOURIST TRENDS - Landed (includes Ship and Land-based passenger numbers. 1997-98 onwards includes some commercial yacht activity)  
May 20, 2008





# National agendas and sovereignty



- Australia's Heard Island extended continental shelf zone extends south of 60°; confirmed by CLCS
- Would Australia exploit the seabed resources there?
- No AT Consultative Party would deliberately jeopardise the stability of the system...

# Relevance of science

|    | <b>Top 10 Consultative Parties (output)</b> | <b>Scientific Output 1980-2004</b> | <b>\$ R&amp;D Expenditure (gross per capita)</b> |
|----|---|------------------------------------|--|
| 1  | USA   | 2,887                              | 954  |
| 2  | UK  | 1,492                              | 491  |
| 3  | Australia                                   | 1,052                              | 405  |
| 4  | Germany                                     | 949                                | 686  |
| 5  | Italy                                       | 653                                | 289  |
| 6  | France                                      | 526                                | 611  |
| 7  | Japan                                       | 492                                | 837  |
| 8  | New Zealand                                 | 430                                | 246  |
| 9  | Russia                                      | 306                                | 102  |
| 10 | Spain                                       | 241                                | 222  |

Scientific Output 1980-2004 – from Riddle Presentation to 75<sup>th</sup> Anniversary Symposium, after Dastidar and Ramachandran 2008

# Census of Antarctic Marine Life 2005-2010

- One of the leading Antarctic projects of the IPY 2007/2008
- 19 research voyages
- over 300 biologists from 30 countries
- continuing collaboration through SCAR
- for the first time, species in the Antarctic were compared with the Arctic

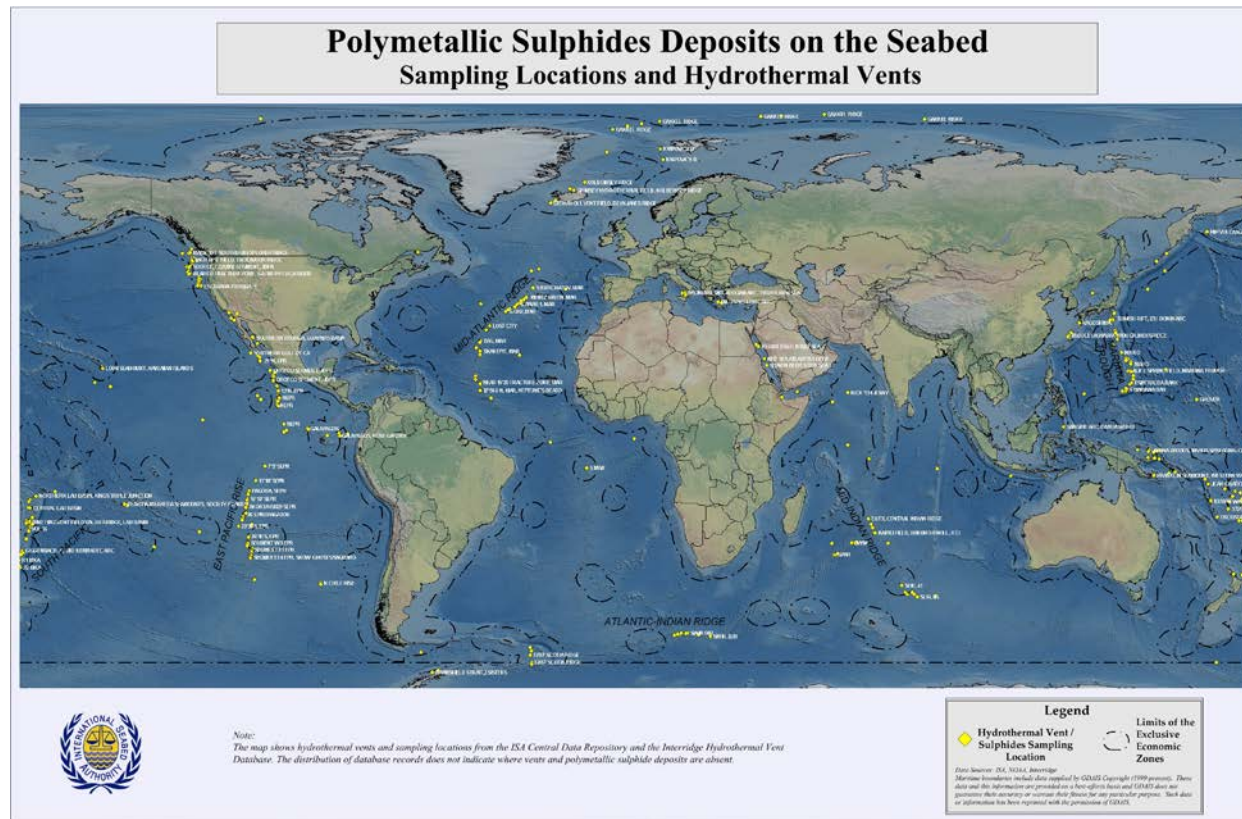
**Never before seen  
underwater world...**



# Mineral resources

- Under CRAMRA, Sponsoring States were required for all mineral activities
- They would have regulated but not had exclusive jurisdiction over resources
- CRAMRA was rejected in favour of the environmental view
- Article 7, Madrid Protocol, prohibits mineral resource activities but permits scientific research - “prospecting”?
- Ban can be lifted at any time by consensus (Art.25.1) and only applies to Treaty/Protocol States Parties anyway

# LOSC and other regime overlaps



Antarctica hardly even on the ISA map of interest for seabed deposits! Resources of a last resort?

# Whaling Convention

- Despite everything, Southern Ocean whaling is not an Antarctic issue!
- Japanese whaling under Art VIII of ICRW seems legal, if not ideologically acceptable
- Awaiting the outcome of Australia's ICJ case against Japan
- Unlikely IWC will make any major decisions in the meantime



# Biodiversity Convention

Obligations generic and of less value overall than current Antarctic Treaty System means of biodiversity protection



Climate change will have biggest impact so essential to integrate sciences and adopt scientific information into decision-making



# Non-traditional uses

## Ocean fertilisation

- Trials in high nutrient low chlorophyll areas of open ocean to test additional uptake of CO<sub>2</sub>
- Theory is that adding fertiliser (eg. iron) will stimulate phytoplankton growth
  - Photosynthesis uses CO<sub>2</sub> therefore extra productivity will use extra CO<sub>2</sub> from the atmosphere as the air/sea interface is usually in balance
- Purpose is two-fold: increased CO<sub>2</sub> drawdown used to offset carbon and increased productivity might increase fish stocks
- Not proven; environmental effects poorly understood

# Non-traditional uses

## Fresh water harvesting

- Some optimism that technology will be developed for in-situ 'harvesting' of fresh water from ice or towing icebergs
- Ice is not a mineral under ATS (though geologically speaking it is) therefore 'harvesting' is not mining
- Jurisdiction over ice is problematic
- Environmental effects not understood, eg.
  - scouring of seabed
  - loss of critical habitat
  - changes in bottom water production

# Exploding the myths...

- The Treaty does not expire and has never itself been modified
- Claims to sovereignty are not “frozen” but rather (arguably) are acknowledged and protected by Article IV; *discussion* about claims has been frozen, however
- Any State that is in the UN can accede to the Treaty
- Consultative Party status is earned through scientific research, but doesn't mean a ship/expedition/station
- Mining is banned, not just subject to a moratorium, and the ban can be lifted at any time by consensus; but only applies to States Parties
- The unclaimed sector will remain unclaimed while the Treaty is in force, no matter who plants a flag there!

# Summary: ATS criticisms

Everything is criticised by someone!

Some commonly recurring themes are:

- Acknowledgement and preservation of sovereign claims
- Lack of regulation of tourism
- Lack of liability for environmental damage
- Poor operation of the Madrid Protocol, eg.
  - EIA the responsibility of States Parties and no ATCM veto of activities therefore no true accountability
  - Inconsistency of approach to environmental matters

# Summary: ATS defence

- Treaty is now 52 years old!
- Some form of regulation is better than none
- Some environmental leeway is practical in such a harsh environment where humans are aliens
- Consensus does not disenfranchise any party

# Exam, 28 Oct, 1300 hrs, 70%

- Read the question! Only write the answer, not everything you know about something
- 10 short answer questions (each worth 2.5 marks = 25 marks in total)
- 3 problem-solving questions (each worth 25 marks = 75 marks in total)
- 180 minutes
  - = ~5 minutes for each short question
  - = ~30–45 minutes for each long question