



[Home](#) [News](#) [Sport](#) [Radio](#) [TV](#) [Weather](#) [Languages](#)

UK version International version | [About the versions](#)



[WATCH](#) One-Minute World News

Search

[Low graphics](#) | [Accessibility help](#)

News services
Your news when you want
it



News Front Page



- [Africa](#)
- [Americas](#)
- [Asia-Pacific](#)
- [Europe](#)
- [Middle East](#)
- [South Asia](#)
- [UK](#)
- [Business](#)
- [Health](#)
- [Science/Nature](#)
- [Technology](#)
- [Entertainment](#)
- [Also in the news](#)
-
- [Video and Audio](#)
-
- [Have Your Say](#)
- [In Pictures](#)
- [Country Profiles](#)
- [Special Reports](#)

RELATED BBC SITES

- [SPORT](#)
- [WEATHER](#)
- [ON THIS DAY](#)
- [EDITORS' BLOG](#)

Last Updated: Friday, 21 September 2007, 12:16 GMT 13:16 UK

[E-mail this to a friend](#)

[Printable version](#)

Ice withdrawal 'shatters record'

Arctic sea ice shrank to the smallest area on record this year, US scientists have confirmed.

The National Snow and Ice Data Center (NSIDC) said the minimum extent of 4.13 million sq km (1.59 million sq miles) was reached on 16 September.

The figure shatters all previous satellite surveys, including the previous record low of 5.32 million sq km measured in 2005.

Earlier this month, it was reported that the Northwest Passage was open.

The fabled Arctic shipping route from the Atlantic to the Pacific is normally ice-bound at some location throughout the year; but this year, ships have been able to complete an unimpeded navigation.

'Fast track'

Arctic sea ice loses area in summer months and regrows in the winter cold.

The researchers at NSIDC judge the ice extent on a five-day mean. The minimum for 2007 falls below the minimum set on 20-21 September 2005 by an area roughly the size of Texas and California combined, or nearly five UKs.

Speaking to BBC News on Monday this week, Mark Serreze, a senior research scientist at the NSIDC, said: "2005 was the previous record and what happened then had really astounded us; we had never seen anything like that, having so little sea ice at the end of summer. Then along comes 2007 and it has completely shattered that old record."

He added: "We're on a strong spiral of decline; some would say a death spiral. I wouldn't go that far but we're certainly on a fast track. We know there is natural variability but the magnitude of change is too great to be caused by natural variability alone."

The team will now follow the progress of recovery over the winter months.

Modelled decline

In December 2006, a study by US researchers forecast that the Arctic could be ice-free in summers by 2040.



Scientists will be looking now to see how well the ice recovers

[OPEN](#) More details

SEE ALSO

- [Plain sailing on the Northwest Passage](#)
19 Sep 07 | Americas
- [Warming 'opens Northwest Passage'](#)
14 Sep 07 | Americas
- [Arctic sea ice set to hit new low](#)
13 Aug 07 | Science/Nature
- [Arctic sea ice 'faces rapid melt'](#)
12 Dec 06 | Science/Nature
- [Vast ice island trapped in Arctic](#)
31 Aug 07 | Science/Nature

RELATED INTERNET LINKS

NSIDC
The BBC is not responsible for the content of external internet sites

TOP SCIENCE/NATURE STORIES

- [Extended delay for European lab Telescope spies newborn planet](#)
- [Bio-rich Costa Rica's new marvels](#)
- [News feeds](#)

MOST POPULAR STORIES NOW

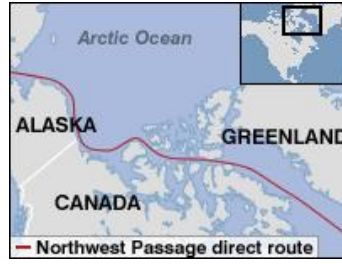
[MOST E-MAILED](#) | [MOST READ](#)

- [Iowa starts 2008 US election race](#)
- [Facebook tackles Bhutto hoaxers](#)
- [Single trader behind oil record](#)
- [Lions devour man at SA game lodge](#)
- [Weekly world news quiz](#)

[Most popular now, in detail](#)

A team of scientists from the National Center for Atmospheric Research (NCAR), the University of Washington, and McGill University, found that "positive feedbacks" were likely to accelerate the decline of the region's ice system.

Sea ice has a bright surface which reflects 80% of the sunlight that strikes it back into space. However, as the ice melts during the summer, more of the dark ocean surface becomes exposed.



'Northwest Passage opens' Sailing the passage

Rather than reflecting sunlight, the ocean absorbs 90% of it, causing the waters to warm and increase the rate of melting.

Scientists fear that this feedback mechanism will have major consequences for wildlife in the region, not least polar bears, which traverse ice floes in search of food.

On a global scale, the Earth would lose a major reflective surface and so absorb more solar energy, potentially accelerating climatic change across the world.

In contrast to the Arctic, the extent of sea ice in the Antarctic has come close this year to breaking its satellite-monitored record for maximum area of 16.03 million sq km.

[E-mail this to a friend](#)

[Printable version](#)

Bookmark with: [Delicious](#) [Digg](#) [reddit](#) [Facebook](#) [StumbleUpon](#) [What are these?](#)

FEATURES, VIEWS, ANALYSIS



Kenya crisis
Despite calls for dialogue, the country's turmoil continues



Primary roadmap
Find out about key primaries in the race for the White House



It's quiz time
Who won a lengthy battle to shed their Devilish association?

[PRODUCTS & SERVICES](#)

[E-mail news](#)

[Mobiles](#)

[Alerts](#)

[News feeds](#)

[Podcasts](#)

MMVIII

Most Popular Now | The most e-mailed story right now is: Stomach bug sweeping the country

[Back to top ^^](#)

[Help](#) | [Privacy and cookies policy](#) | [News sources](#) | [About the BBC](#) | [Contact us](#) | [Advertise with us](#)