1
00:00:00,030 --> 00:00:04,070
It’s always a challenge to predict each year how much Arctic sea ice

2
00:00:04,070 --> 00:00:08,140
coverage might change with the seasons. Now we have a new tool

3
00:00:08,140 --> 00:00:12,150
to make the summer forecast for sea ice minimums just a little bit better.

4
00:00:12,150 --> 00:00:16,190
NASA scientists can make a reasonable estimate of September’s

5
00:00:16,190 --> 00:00:20,290
sea ice extent as early as this March, with the predictions getting more reliable everyday.

6
00:00:20,290 --> 00:00:24,410
This new forecasting model

7
00:00:24,410 --> 00:00:28,440
uses real-time NASA satellite data of Arctic sea ice melt,

8
00:00:28,440 --> 00:00:32,560
so the predictions improve through late spring and early summer

9
00:00:32,560 --> 00:00:36,600
as they incorporate more information about the state of sea ice melt

10
00:00:36,600 --> 00:00:40,630
and distribution of open water across the Arctic Ocean.

11
00:00:40,630 --> 00:00:44,690
Although most forecast models focus on predicting the extent of sea ice

12
00:00:44,690 --> 00:00:48,730
across the entire Arctic, this model also produces reliable forecasts

13
00:00:48,730 --> 00:00:52,810

of sea ice in specific regions, like the seas north of Alaska,

14
00:00:52,810 --> 00:00:57,000
crucial information for people living in and moving through the region.

15
00:00:57,000 --> 00:01:01,070
Arctic sea ice plays an important role in regulating the planet’s climate,

16
00:01:01,070 --> 00:01:05,150
so predictions of sea ice extent can help us better

17
00:01:05,150 --> 00:01:09,310
understand how global temperatures might change.

18
00:01:09,310 --> 00:01:13,370
Scientists can continue to train the model based on historical observations.

19
00:01:13,370 --> 00:01:17,490
In just a few weeks, the model will begin producing forecasts of Arctic sea ice extent