
NASA
SVS

1
00:00:02,550 --> 00:00:00,709
[Music]

2
00:00:03,830 --> 00:00:02,560
scientists from nasa's goddard space

3
00:00:05,670 --> 00:00:03,840
flight center along with their

4
00:00:07,749 --> 00:00:05,680
international collaborators have

5
00:00:10,070 --> 00:00:07,759
demonstrated a new method for mapping

6
00:00:12,230 --> 00:00:10,080
the location and size of trees growing

7
00:00:14,629 --> 00:00:12,240
outside of forests

8
00:00:16,710 --> 00:00:14,639
the big surprise they discovered an

9
00:00:19,510 --> 00:00:16,720
unexpectedly high number of trees in

10
00:00:21,910 --> 00:00:19,520
semi-arid regions often thought of as

11
00:00:23,990 --> 00:00:21,920
too dry to support plant life

12
00:00:26,310 --> 00:00:24,000
mapping non-forest trees with this level

13
00:00:28,150 --> 00:00:26,320

of precision was previously impossible

14
00:00:29,830 --> 00:00:28,160
across broad areas

15
00:00:31,669 --> 00:00:29,840
this technology represents a

16
00:00:33,430 --> 00:00:31,679
breakthrough for mapping and measuring

17
00:00:35,270 --> 00:00:33,440
these trees

18
00:00:37,110 --> 00:00:35,280
using powerful supercomputers and

19
00:00:39,430 --> 00:00:37,120
machine learning algorithms the team

20
00:00:41,670 --> 00:00:39,440
mapped the crown size which is the width

21
00:00:45,190 --> 00:00:41,680
of a tree when viewed from above of more

22
00:00:48,630 --> 00:00:45,200
than 1.8 billion trees across an area of

23
00:00:50,389 --> 00:00:48,640
more than half a million square miles

24
00:00:52,630 --> 00:00:50,399
this study is the first in a series

25
00:00:55,110 --> 00:00:52,640
whose goal is not only to map non-forest

26
00:00:57,670 --> 00:00:55,120
trees across a wide area but also to

27
00:00:59,590 --> 00:00:57,680
calculate how much carbon they store

28
00:01:01,990 --> 00:00:59,600
vital information for understanding the