1
00:00:00,000 --> 00:00:03,180
Narrator: The most comprehensive dataset from NASA's

2
00:00:03,180 --> 00:00:05,650
Kepler Mission will help researchers discover

3
00:00:05,650 --> 00:00:09,440
how many Earth-size\hplanets are in our galaxy.\h

4
00:00:09,440 --> 00:00:12,070
Using\hthe first\hfour years of Kepler observations

5
00:00:12,070 --> 00:00:14,140
in the constellation of Cygnus,

6
00:00:14,140 --> 00:00:16,090
the\hPlanet Candidate Catalog\hcontains

7
00:00:16,090 --> 00:00:19,150
the best characterized data yet.

8
00:00:19,150 --> 00:00:23,520
The data contains 219 new planet candidates.

9
00:00:23,520 --> 00:00:26,130
Ten of these are less than twice the size of

10
00:00:26,130 --> 00:00:30,250
the Earth and orbit in their stars' habitable zones.

11
00:00:30,250 --> 00:00:32,960
The habitable zone is a range of distance from a

12
00:00:32,960 --> 00:00:35,660
star where liquid water could pool on the surface

13
00:00:35,660 --> 00:00:37,860

of a rocky planet.

14
00:00:37,860 --> 00:00:40,100
The data will be used by scientists to help

15
00:00:40,100 --> 00:00:42,690
determine the frequency and variety of planets

16
00:00:42,690 --> 00:00:44,760
in the galaxy.

17
00:00:44,760 --> 00:00:47,910
A recent discovery using Kepler data showed that

18
00:00:47,910 --> 00:00:51,850
small planets come in two distinct size classes:

19
00:00:51,850 --> 00:00:54,700
The Earth and super-Earth-size class and

20
00:00:54,700 --> 00:00:59,010
the slightly larger mini-Neptune-size class.

21
00:00:59,010 --> 00:01:02,680
The result shows that nature commonly makes rocky

22
00:01:02,680 --> 00:01:06,690
planets up to about 75 percent bigger than Earth.

23
00:01:06,690 --> 00:01:09,630
Kepler has identified more than 4,000 planet

24
00:01:09,630 --> 00:01:12,090
candidates beyond the solar system and

25
00:01:12,090 --> 00:01:17,640
2,335 of which have been confirmed as planets.

26
00:01:17,640 --> 00:01:20,780
Kepler's search for planets continues as part of

27
00:01:20,780 --> 00:01:24,600
an on-going study of different regions of space.