



OCEANS  
BEYOND

EARTH

1  
00:00:00,334 --> 00:00:04,004  
Here's what you need to know  
about ocean worlds.

2  
00:00:06,640 --> 00:00:10,244  
Earth is not the only world  
in our solar system with an ocean.

3  
00:00:10,677 --> 00:00:14,047  
Oceans worlds exist in diverse forms

4  
00:00:14,081 --> 00:00:15,148  
on planets,

5  
00:00:15,182 --> 00:00:16,416  
dwarf planets,

6  
00:00:16,450 --> 00:00:18,719  
and even moons.

7  
00:00:18,752 --> 00:00:21,021  
Let's dive in and take a deeper look.

8  
00:00:22,189 --> 00:00:24,725  
Jupiter's moon, Europa,

9  
00:00:25,459 --> 00:00:31,732  
has a vast subsurface ocean  
hidden beneath its icy crust.

10  
00:00:31,765 --> 00:00:34,501  
Saturn's moon, Enceladus,

11  
00:00:34,535 --> 00:00:36,937  
has a buried global ocean

12  
00:00:36,970 --> 00:00:38,605  
with geysers that spew its contents out

13

00:00:38,639 --> 00:00:41,441  
hundreds of miles into space.

14

00:00:41,475 --> 00:00:44,678  
Dwarf planet Ceres

15

00:00:44,711 --> 00:00:47,915  
is believed to consist of about 25% water,

16

00:00:47,948 --> 00:00:51,151  
some of which could be liquid.

17

00:00:51,185 --> 00:00:54,721  
Jupiter's moon, Ganymede,

18

00:00:55,856 --> 00:01:00,561  
could have several layers of ice and water  
sandwiched between its crust and core.

19

00:01:00,594 --> 00:01:03,730  
Dwarf planet Pluto

20

00:01:03,764 --> 00:01:07,100  
could be home to buried oceans

21

00:01:07,134 --> 00:01:09,770  
that slosh around far beneath  
its frozen surface.

22

00:01:09,803 --> 00:01:11,338  
Saturn's moon, Titan,

23

00:01:11,371 --> 00:01:13,974  
is home to bizarre methane lakes  
scattered across its exterior.

24

00:01:14,007 --> 00:01:16,143

But below the surface you'll find

25

00:01:16,176 --> 00:01:18,779

this mammoth moon  
contains a liquid water ocean

26

00:01:18,812 --> 00:01:23,150

as salty as the Dead Sea on Earth.

27

00:01:23,183 --> 00:01:26,553

Neptune's far away moon, Triton,

28

00:01:26,587 --> 00:01:30,057

is predicted to hide an ocean deep beneath  
its cantaloupe-like terrain.

29

00:01:30,090 --> 00:01:33,260

So why are ocean worlds so fascinating?

30

00:01:34,661 --> 00:01:38,098

They offer clues in the quest to discover  
life beyond our home planet.

31

00:01:38,765 --> 00:01:41,335

Because where there is water,

32

00:01:41,368 --> 00:01:44,004

there is the potential for life.

33

00:01:44,037 --> 00:01:49,109

And that's what you need to know  
about ocean worlds.