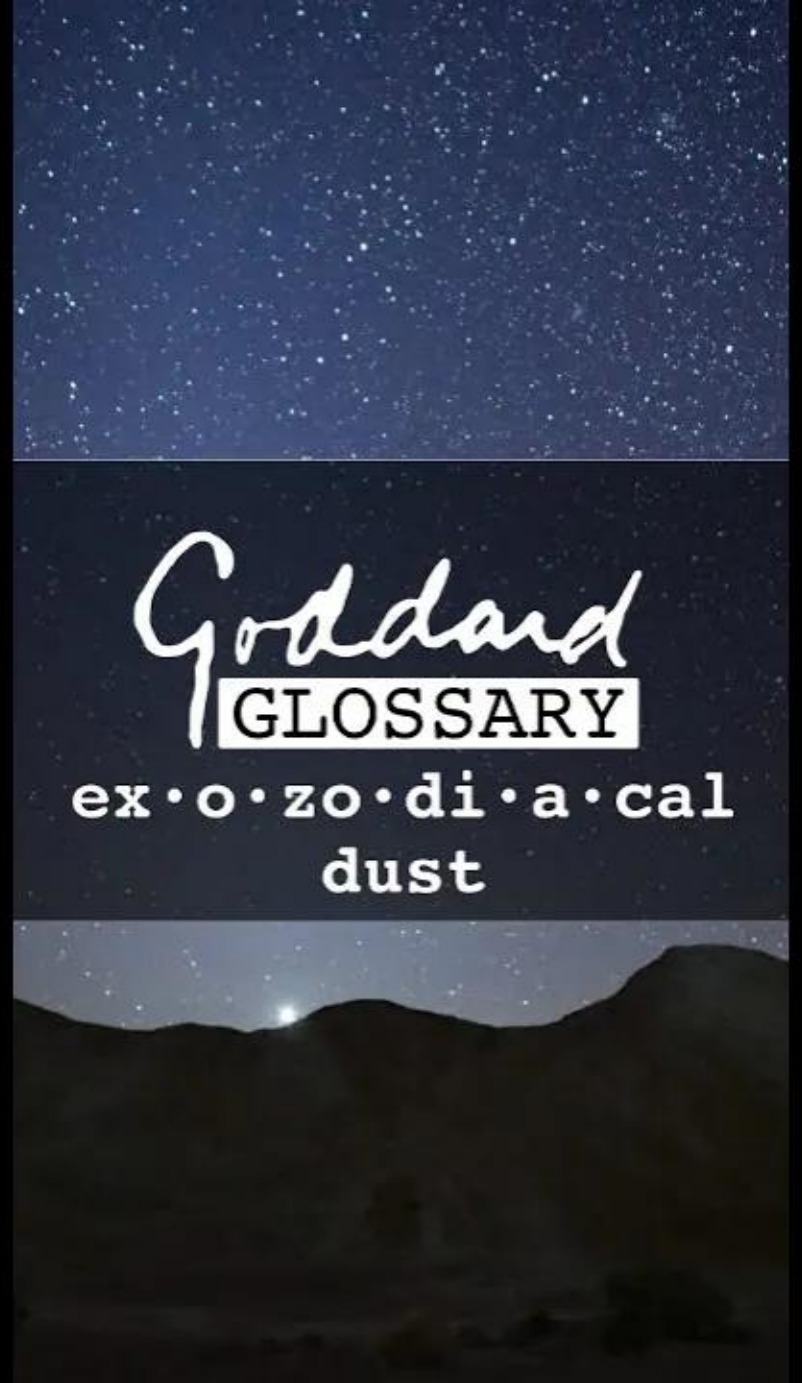
Goddard
GLOSSARY
ex·o·zo·di·a·cal
dust

1
00:00:00,533 --> 00:00:02,133
Exozodiacal dust.

2
00:00:02,133 --> 00:00:04,866
If we break this word
down, exo means external.

3
00:00:05,100 --> 00:00:07,533
And zodiacal, similar to the word zodiac,

4
00:00:08,033 --> 00:00:10,900
means the portion of the sky through
which the Sun and the planets move.

5
00:00:11,300 --> 00:00:14,400
Put these two compounds together
and you get exozodiacal dust.

6
00:00:14,800 --> 00:00:16,166
But what does this mean?

7
00:00:16,166 --> 00:00:18,966
Exozodiacal dust is the dust around stars

8
00:00:19,300 --> 00:00:22,633
produced mainly by colliding asteroids
or passing comets.

9
00:00:22,966 --> 00:00:26,066
We can see these same tiny grains
in our solar system, too.

10
00:00:26,433 --> 00:00:27,566
The dust reflects sunlight,

11
00:00:27,566 --> 00:00:30,166
so we can often see it in pictures
taken at dawn or dusk.

12
00:00:30,566 --> 00:00:32,900
This is an illustration
of exozodiacal dust.

13
00:00:33,200 --> 00:00:37,033
So why look at exozodiacal dust,
the dust outside of our solar system?

14
00:00:37,633 --> 00:00:41,333
Distribution patterns of space dust
can offer clues about planets

15
00:00:41,333 --> 00:00:45,000
orbiting other stars,
and the amount of dust in a star system

16
00:00:45,233 --> 00:00:48,166
can inform scientists
about the frequency of comet activity.

17
00:00:49,100 --> 00:00:51,966
NASA's Roman telescope,
launching in the next few years,