

2015-04-31 05:50:58 UTC



DIS-14.065-13

GAT

ASCCO

311 Can

311 Can  
Yanu

1  
00:00:02,620 --> 00:00:08,520

So, here is the animation of asteroid 2015TB145 as it goes in its orbit around the sun.

2  
00:00:08,780 --> 00:00:11,540

These dots everywhere, that's the main belt.

3  
00:00:11,700 --> 00:00:15,040

Those are the asteroids that are between Mars and Jupiter.

4  
00:00:15,960 --> 00:00:21,400

This asteroid is going to fly by Earth on October 31st. So, this is our Halloween asteroid.

5  
00:00:22,420 --> 00:00:26,820

We are going to study it with optical, infrared, and radar wavelengths.

6  
00:00:28,180 --> 00:00:31,840

This is the Goldstone Solar System Radar located in Mojave Desert, California.

7  
00:00:32,920 --> 00:00:39,240

So, imagine that the radar is a very large flashlight. But, instead of transmitting visible light, we are transmitting

8  
00:00:39,380 --> 00:00:43,040

And these microwaves are bouncing off the asteroid and we are receiving it back.

9  
00:00:43,160 --> 00:00:49,320

These received microwaves, they carry the imprint of asteroids that helps us learn about its characteristics.

10  
00:00:51,040 --> 00:00:53,540

On October 30th, this is our very first track.

11  
00:00:53,540 --> 00:00:59,580

We are going to use both Goldstone and Arecibo radars to get the images of this asteroid.

12  
00:01:00,160 --> 00:01:08,080

And then October 31st, during the closest approach, we are going to have a short track, when Goldstone is tra

13  
00:01:08,560 --> 00:01:15,480

And, then a little bit later we are going to have this long track where Goldstone is transmitting and Green Bank

14

00:01:16,480 --> 00:01:19,520

At this point we expect to achieve our highest resolution images.