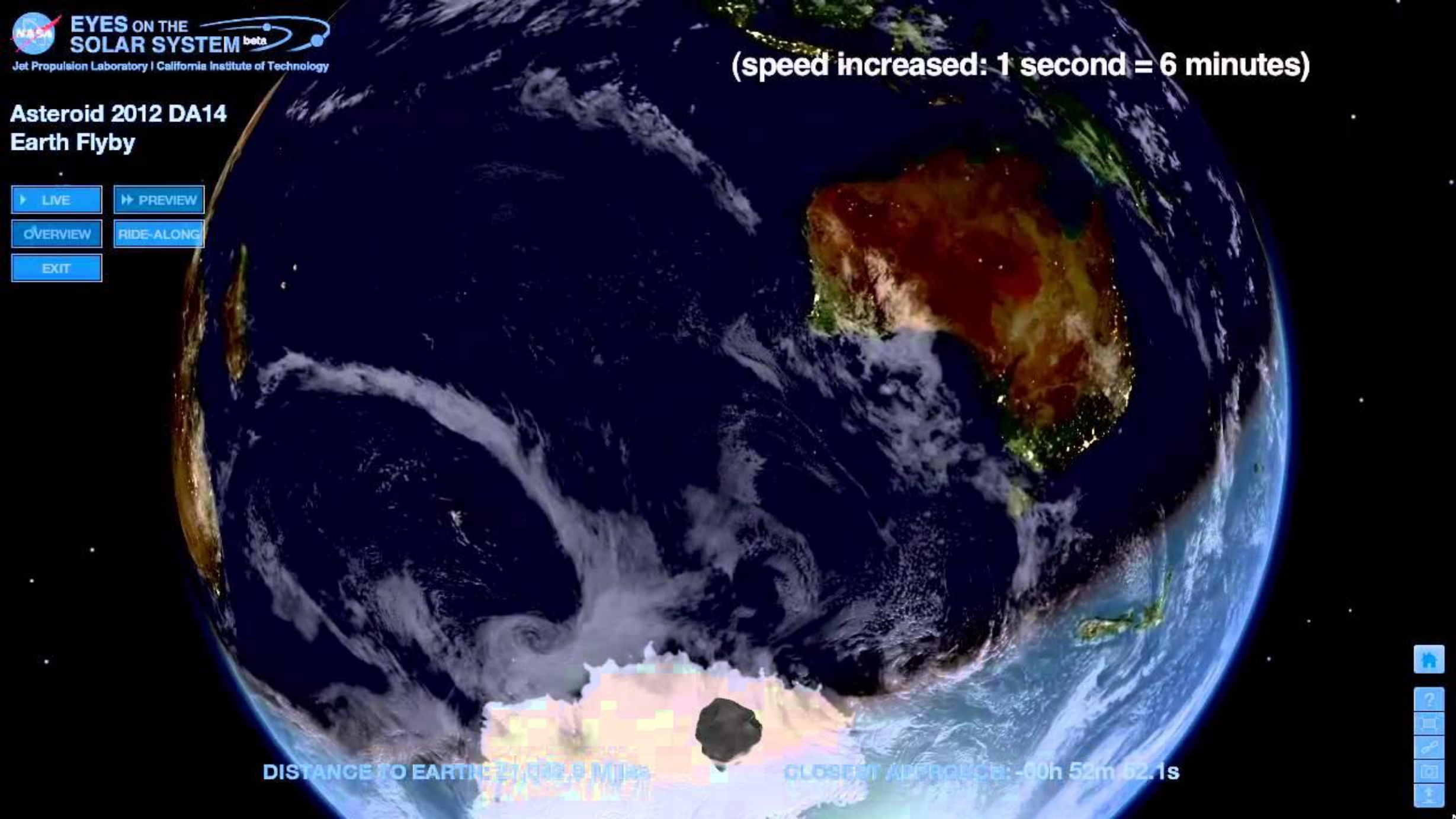
EYES ON THE SOLAR SYSTEM beta
Jet Propulsion Laboratory | California Institute of Technology
(speed increased: 1 second = 6 minutes)
Asteroid 2012 DA14
Earth Flyby
LIVE
PREVIEW
OVERVIEW
RIDE-ALONG
EXIT
DISTANCE TO EARTH: 21,082.8 Miles
CLOSEST APPROACH: -00h 52m 52.1s

1
00:00:06,000 --> 00:00:14,000
Asteroid 2012 DA14 will get close on Feb. 15, 2013, but it will fly safely past Earth.

2
00:00:14,000 --> 00:00:21,000
Using NASA's Eyes on the Solar System web visualization tool, we can see the asteroid's flight path.

3
00:00:21,000 --> 00:00:28,000
At 72 hours before its closest approach, it is a million miles away approaching Earth from the south.

4
00:00:28,000 --> 00:00:34,000
24 hours from closest approach, DA14 is about 300,000 miles away.

5
00:00:34,000 --> 00:00:40,000
We see NASA's fleet of Tracking and Data Relay Satellites, or TDRS, in geostationary orbit,

6
00:00:40,000 --> 00:00:44,000
which is more than 22,000 miles above Earth's surface.

7
00:00:44,000 --> 00:00:50,000
DA 14 will pass to the interior of the ring of geostationary orbiters so there is very little chance

8
00:00:50,000 --> 00:00:56,000
that it will hit one because almost no satellites are orbiting at the distance the asteroid will pass.

9
00:00:56,000 --> 00:01:02,000
12 hours out, we begin to see the bright white of Antarctica as DA 14 approaches.

10
00:01:02,000 --> 00:01:07,000
It's summer at the South Pole, when the continent basks in sunlight 24 hours a day.

11
00:01:07,000 --> 00:01:14,000
At the 6-hour mark, flying less than 500 miles above us.

12
00:01:14,000 --> 00:01:21,000
The asteroid will be flying at much higher altitude and none of these spacecraft are in danger of being hit.

13
00:01:21,000 --> 00:01:25,000

30 minutes before closest approach, the sun is about to rise over eastern Australia.

14
00:01:25,000 --> 00:01:32,000
At its closest point, DA 14 will be no less than 17,000 miles above Indonesia,

15
00:01:32,000 --> 00:01:37,000
traveling about 17,500 miles per hour relative to Earth.

16
00:01:37,000 --> 00:01:43,000
DA14 becomes visible over Europe about an hour after closest approach

17
00:01:43,000 --> 00:01:48,000
and visible to telescopes in North America, 6 hours later, after sunset.

18
00:01:48,000 --> 00:01:52,000
The asteroid will be fading in brightness by this time because it will be moving away from Earth.

19
00:01:52,000 --> 00:01:58,000
NASA scientists will capture radar images using the 70-meter telescope at NASA's Deep Space Network