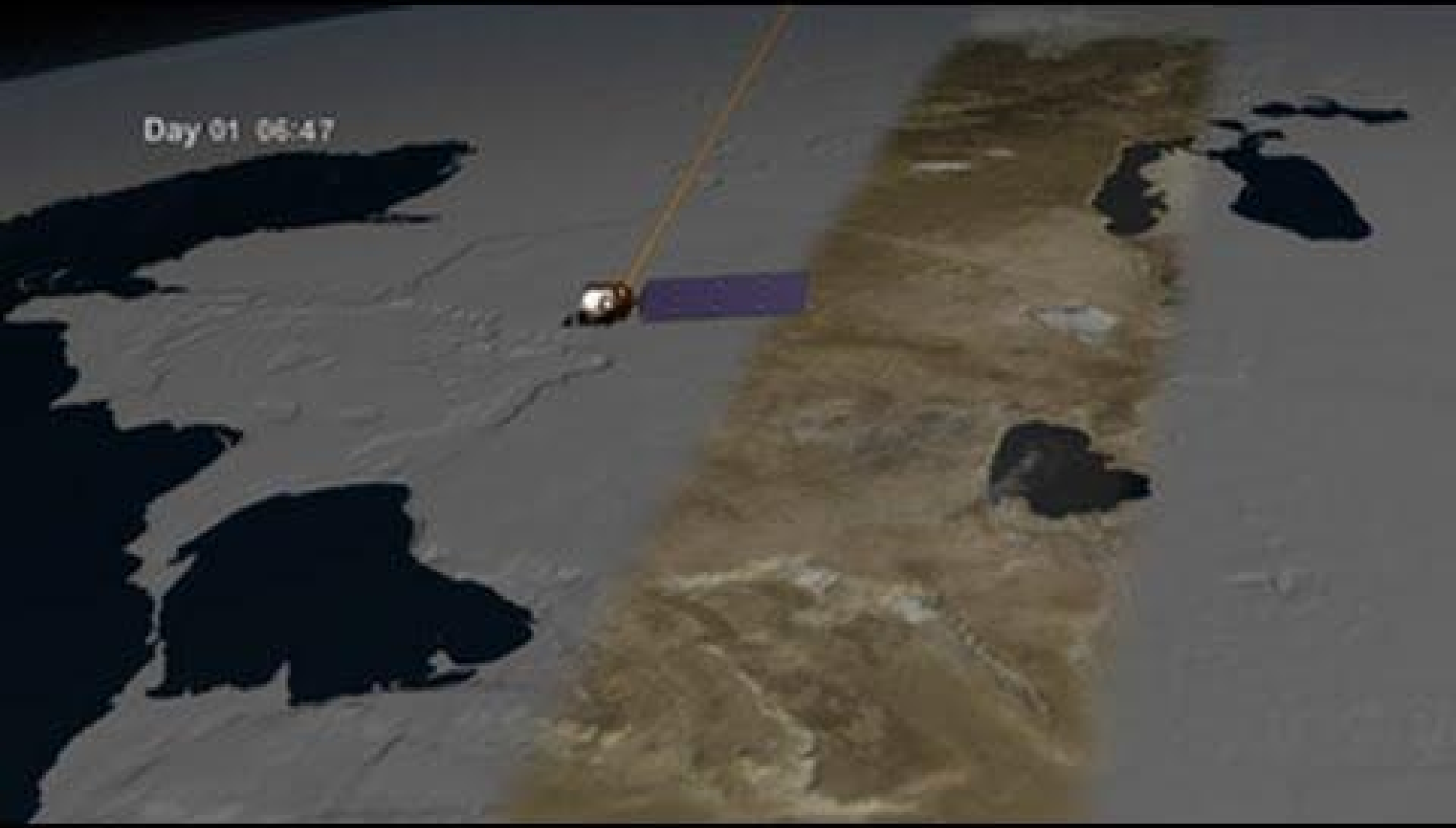
Day 01 06:47

1
00:00:00,030 --> 00:00:04,050
As a Landsat satellite flies over the surface of the Earth

2
00:00:04,070 --> 00:00:08,100
the instruments aboard the satellite

3
00:00:08,120 --> 00:00:12,150
are able to view a swath 185 kilometers wide

4
00:00:12,170 --> 00:00:16,190
and collect images along that swath as the satellite proceeds

5
00:00:16,210 --> 00:00:20,230
through its orbit. The spacecraft travels at approximately

6
00:00:20,250 --> 00:00:24,260
4.7 miles per second. The satellite travels

7
00:00:24,280 --> 00:00:28,290
from north to south while it's over the sunlit portion of the Earth,

8
00:00:28,310 --> 00:00:32,310
and travels south to north over the dark side of the Earth.

9
00:00:32,330 --> 00:00:36,320
One orbit takes about 99 minutes, so that's about

10
00:00:36,340 --> 00:00:40,380
approximately 15 orbits in a 24 hour period.

11
00:00:40,400 --> 00:00:44,410
The orbit's maintained such that after

12
00:00:44,430 --> 00:00:48,440
16 days, the entire surface of the Earth has come

13
00:00:48,460 --> 00:00:52,460

within view of the Landsat instruments, while sunlit,

14
00:00:52,480 --> 00:00:56,480
and then on day 17 the first ground path