1
00:00:00,010 --> 00:00:04,010
[Chimes] Narrator: We’ve grown accustomed to seeing images of our planet from space,

2
00:00:04,030 --> 00:00:08,060
but full Earth views like these have

3
00:00:08,080 --> 00:00:12,060
actually only seen by a few astronauts on their way to the moon,

4
00:00:12,080 --> 00:00:16,080
and a handful of retreating space probes like Galileo

5
00:00:16,100 --> 00:00:20,080
as they peered back toward home for the last time.

6
00:00:20,100 --> 00:00:24,170
But thanks to the EPIC camera on the DSCOVR satellite we now have a new

7
00:00:24,190 --> 00:00:28,190
image of the entire sunlit side of the Earth every two hours.

8
00:00:28,210 --> 00:00:32,190
Of course, satellites in low-

9
00:00:32,210 --> 00:00:36,210
Earth orbit give us high-resolution images of the planet every day,

10
00:00:36,230 --> 00:00:40,210
but they need to be patched together over time to make a composite

11
00:00:40,230 --> 00:00:44,230
“blue marble.”Seeing the full sunlit side

12
00:00:44,250 --> 00:00:48,230
of the Earth at once will advance our understanding of dust particles,

13
00:00:48,250 --> 00:00:52,230

or aerosols, traveling in the atmosphere, the height and location of

14
00:00:52,250 --> 00:00:56,240
daytime clouds, and the amount of the sun’s energy

15
00:00:56,260 --> 00:01:00,260
reflected by the Earth, all of which help calculate the Earth’s

16
00:01:00,280 --> 00:01:04,260
energy balance for climate studies. DSCOVR is the first

17
00:01:04,280 --> 00:01:08,270
Earth-observing satellite parked in orbit at L1,

18
00:01:08,290 --> 00:01:12,330
the first Lagrange point, a spot almost a million miles from Earth

19
00:01:12,350 --> 00:01:16,330
where the gravitational pull between our planet and the sun is at perfect balance.

20
00:01:16,350 --> 00:01:20,340
Even from so far away, EPIC will be able to make observations

21
00:01:20,360 --> 00:01:24,350
of vegetation cover on land and individual ship tracks at sea.

22
00:01:24,370 --> 00:01:28,350
DSCOVR also has instruments facing the sun,