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00:00:00,350 --> 00:00:10,420

My name is Nikolas Trawny, I work here at JPL on the ADAPT G-FOLDS Project.

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00:00:10,420 --> 00:00:16,180

Music

We'll imagine here on Earth we've become

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00:00:16,180 --> 00:00:20,560

so used to having a cell phone with GPS available to us at all times.

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But on Mars we don't have GPS, so our technology tries to address this problem.

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00:00:25,949 --> 00:00:30,840

We have camera that looks on the ground and can figure out where we are what we are seeing

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00:00:30,840 --> 00:00:33,010

with respects to a preloaded map.

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00:00:33,010 --> 00:00:38,539

While current Mars mission have landing ellipses landing uncertainties of several kilometers,

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00:00:38,539 --> 00:00:43,300

we want to reduce that to about a hundred meters which will allow us to land near very

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interesting science sites that we couldn't get to in the past.

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00:00:46,050 --> 00:00:52,460

Typically, the most interesting science sites are very small, very precise locations on

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00:00:52,460 --> 00:00:54,039

a planet or on a moon.

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This technology allows us to land very precisely,  
really close to where we really want to go,

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00:00:58,609 --> 00:01:02,539

where the scientists are really interested  
to exploring the terrain and the ground.

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00:01:02,539 --> 00:01:07,869

In the future, when we get ready to land humans  
on Mars, we would first preposition habitats