

## Possible Water Flows on Mars

Transcript:

Here is rotating globe of Mars and we're going to zoom in on the middle Southern latitudes. The part of Mars where we find these active slope features and we're zooming in on the Newton Basin crater here.

What you can see are lots of gullies. The active features that we've recently discovered are on the slopes that are facing mostly to the North to the equator.

What we see are much smaller scale features than gullies. You can see an area of bedrock, a steep cliff here, and it's from that bedrock that these dark features flow out.

Given the latitude and the slope aspect and particular the temperatures, it suggests that there's a volatile involved here and the appropriate volatile for this temperature is water, probably salty water because sometimes these are active when it's a little bit below the freezing point of pure water, salt lowers the melting point. And water on Mars should be salty; we know there's lots of salts on Mars.

This is potentially actual water, in the liquid state, flowing on Mars today not millions of years ago.

In late spring and into the summer is when these features form and fade. By late summer, early fall they'll be completely gone and we'll see just a normal looking slope throughout the winter.

Every place where we have multiple years these features recur.

They're not exactly the same, they may be more or less active one year than another but they keep coming back.

NASA Jet Propulsion Laboratory, California Institute of Technology