Published on *American Geosciences Institute* (https://www.americangeosciences.org)

Slow-moving slides may be triggered by cold temperatures

Slow-moving slides may be triggered by cold temperatures
FOR IMMEDIATE RELEASE
Joseph Lilek (jlilek@americangeosciences.org)
12/28/2016

Slow-moving landslides, while not as dramatic as their faster-moving counterparts, can damage infrastructure and cause headaches for the communities they affect. Slow-moving slides are generally associated with rainfall or snowmelt, but a new study in Japan has shown that some of these slides may occur when a certain kind of clay is exposed to cold temperatures. In the January issue of EARTH Magazine, the link between ground temperature and slow slides is explored, including implications for the science of predicting similar landslides around the world.

These unique slides occur throughout Japan, but also in other areas that contain a special type of clay formed from the mixing of volcanic ash into sedimentary layers. The study area, in north-central Japan, has soils rich with this clay, and has experienced hundreds of slow-moving slides over several decades. Most of the sliding is observed during the winter, but rain and snow appear to have little effect. Instead, the researchers suggest that this clay is the culprit: a sort of geologic glue that loosens its grip in cold temperatures. Want to learn more about slow-moving landslides? Read more about this study in EARTH Magazine: http://www.earthmagazine.org/article/slow-moving-slides-may-be-triggered-cold-temperatures.

The January issue of EARTH Magazine is now available online at www.earthmagazine.org. Read about one of the first studies to include observations from the deep seafloor of the Southern Ocean, shedding new light on the mechanisms that power the global conveyor belt. Or travel to Australia, where fossil records have revealed unique characteristics of the extinct marsupial lion, setting it apart from most known predators. For these stories and more, subscribe to EARTH Magazine.

###

Keep up to date with the latest happenings in Earth, energy and environment news with EARTH Magazine online at www.earthmagazine.org. Published by the American Geosciences Institute, EARTH is your source for the science behind the headlines.

###

The American Geosciences Institute is a nonprofit federation of geoscientific and professional associations that represents more than 250,000 geologists, geophysicists and other earth scientists. Founded in 1948, AGI provides information services to geoscientists, serves as a voice of shared interests in the profession, plays a major role in strengthening geoscience education, and strives to increase public awareness of the vital role the geosciences play in society's use of resources, resiliency to natural hazards, and interaction with the environment.

Press Release PDF:

12-28-2016Slow-movingSlidesFinal.pdf