

Expanding the Reach of Science Communication Through TikTok: Tips and Tricks for Geoscientists

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TikTok

TikTok is a social media platform to create and watch short-form vertical videos (~15 sec – 10 min).

Videos are primarily consumed through an algorithmic personal recommendation feed, the “For You” feed. Any video can be shown on “For You” feed and go ‘viral.’



Why Use TikTok for SciComm?

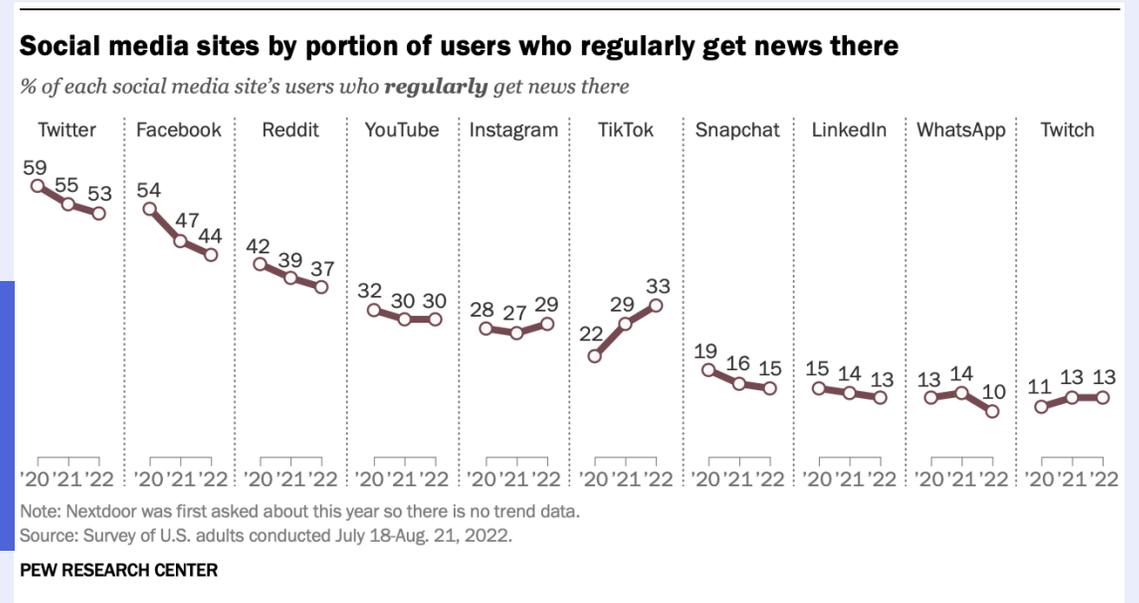
TikTok has over **1 billion** daily active users

Users spend an average of **1.5 hours** on the app **daily** (Statista, 2022)

~70% of US teens use TikTok (Pew Research Center, 2022; Statista, 2023)

Social media users increasingly get their news from TikTok

Science communicators can capitalize on this large, young user base and algorithmic video feed

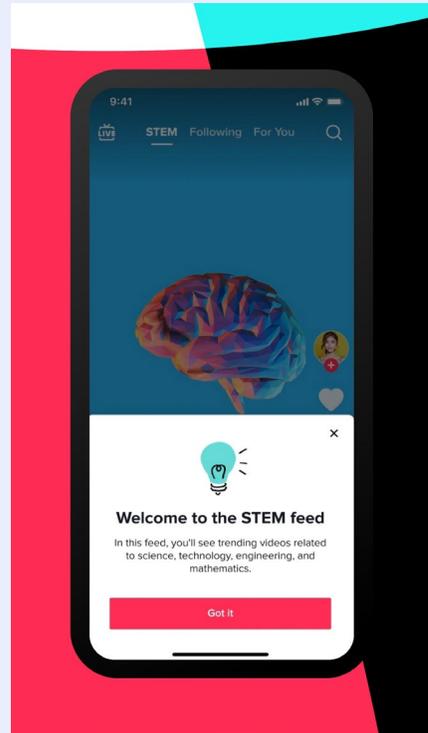


TikTok Supports Educational Science Content

Community May 28, 2020

Investing to help our community #LearnOnTikTok

By Bryan Thoensen, Head of Content Partnerships, TikTok US



Product Mar 14, 2023

Take discovery to a new level with the STEM feed

TikTok is home to boundless creativity and communities. From the connections forged on [#BookTok](#) to cultural trends created by using [imaginative effects](#), over one billion people worldwide come together on TikTok to learn something new, express themselves, connect with others around shared interests, and be inspired.

(STEM 'value' / quality of videos on feed is debatable...)

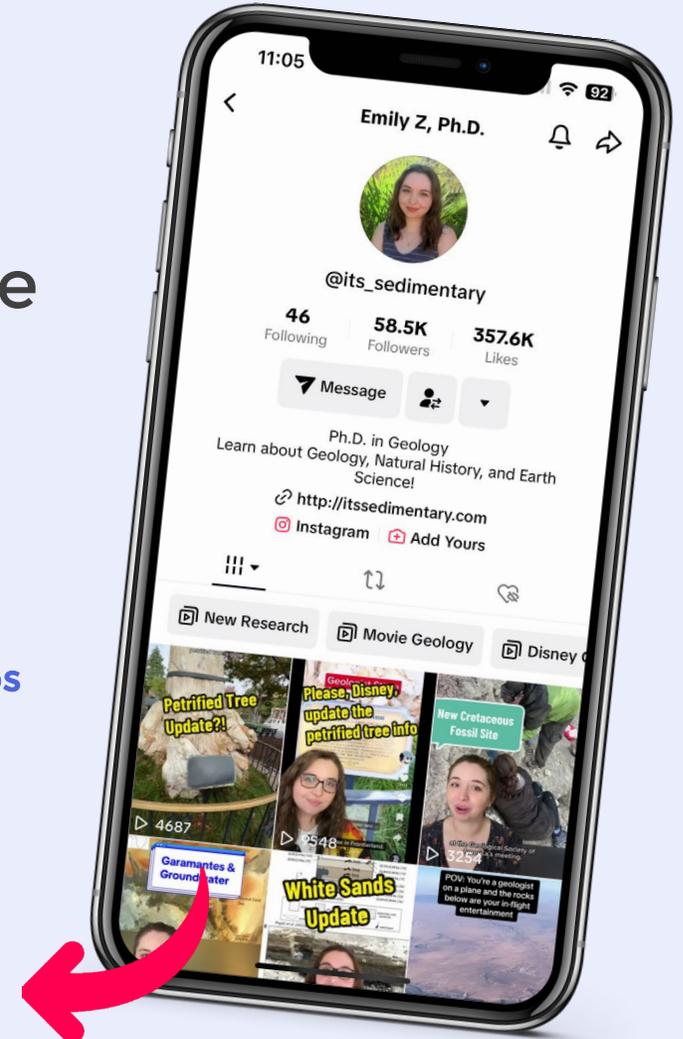
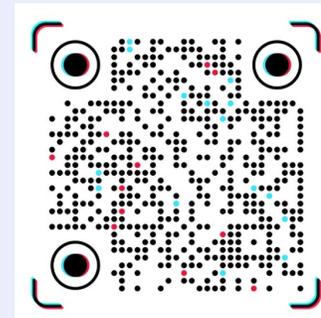
Creating Geoscience Videos for TikTok

Made TikTok account in April 2021
(@its_sedimentary), 130 videos, 58k followers

Increase visibility of geoscience content on the app, which still lags behind other sciences

Hashtag	Video View Count (Nov. '23)
#physics	14.5 billion
#biology	11.6 billion
#chemistry	10.9 billion
#geology	3.6 billion

Scan to watch videos



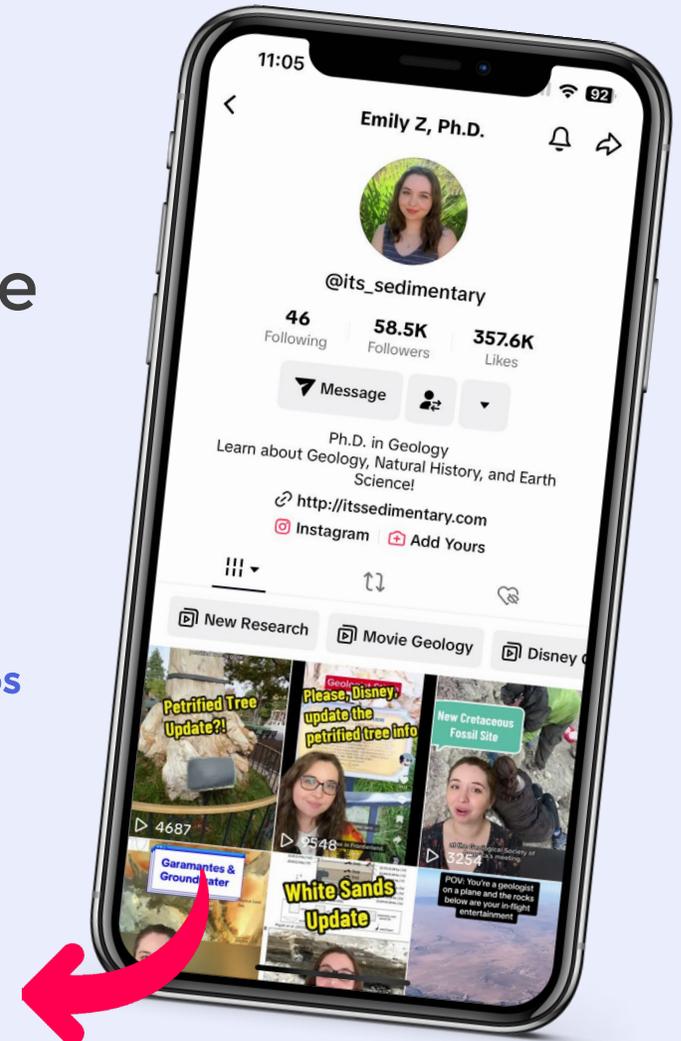
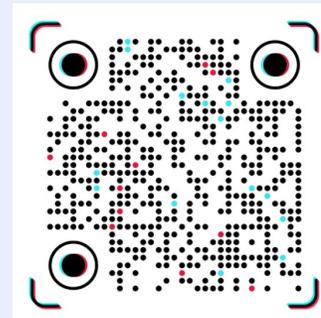
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Videos share general geoscience topics, new research, experiences in geology, natural hazards, and pop culture science topics

Scan to watch videos



Making Videos

Write script

- Imbue storytelling

Collect imagery/visuals

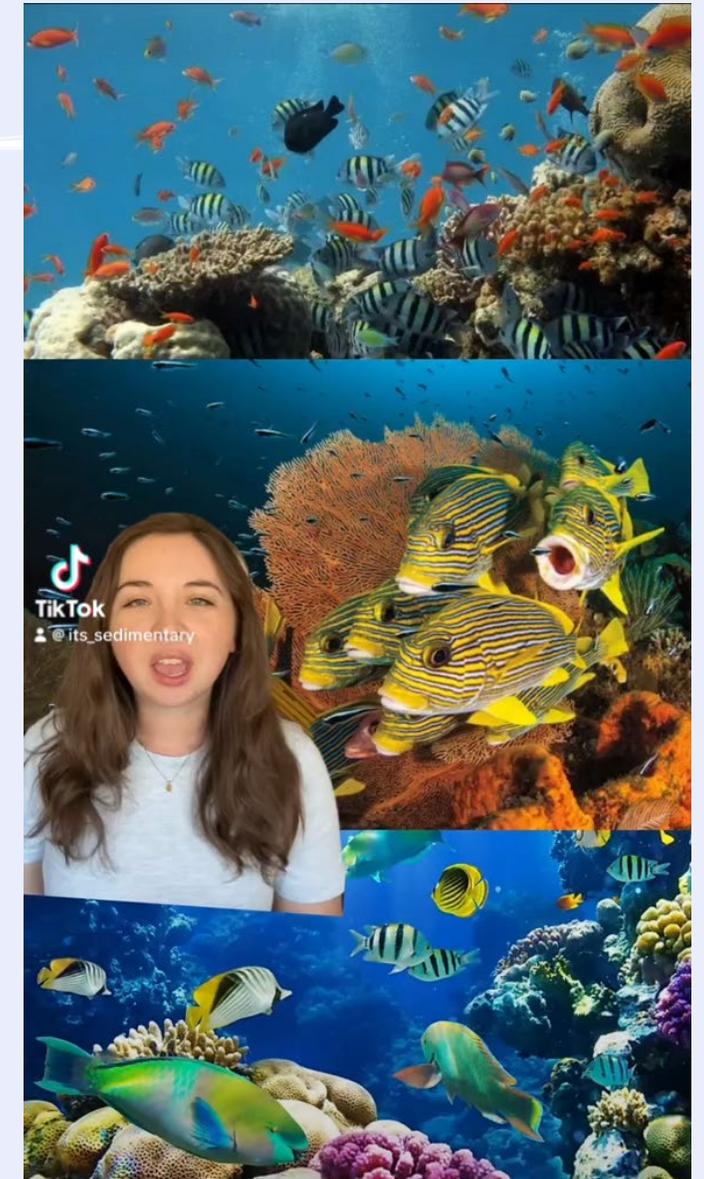
Film video

- Phone camera / TikTok app

Edit video

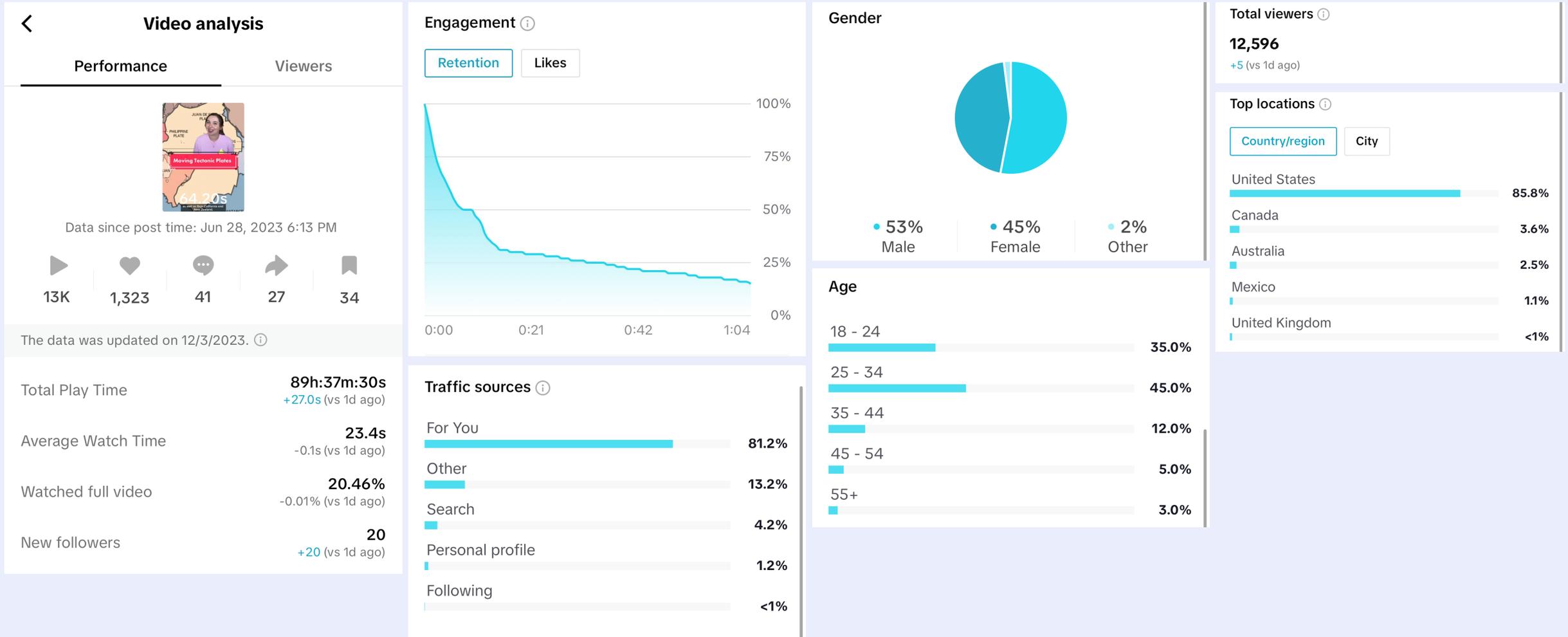
- TikTok app, phone/desktop apps (e.g., CapCut)

Most Viewed Video



850,000 views

Video Analytics & Demographics



(Other = STEM feed? TikTok provides no view information from the STEM feed)

Sharing New Science Research

The general public does not have access to and does not read peer-reviewed publications

TikTok can greatly expand the visibility of scientific research

New Research
12 parts

- Part 1** | A new Patagonian fossil site helps shed light on life at the end of th...
02:13 · 3256 views
- Part 2** | How an ancient Saharan society harvested groundwater #geology #sah...
02:18 · 3401 views
- Part 3** | #stitch with @Emily Z, Ph.D. New research confirms the age of the...
01:37 · 4017 views
- Part 4** | Earliest record of wildfires found 430 million years ago! #geology #wildf...
01:51 · 3876 views
- Part 5** | Yellowstone's hydrothermal explosion craters #geology #yellowsto...
01:49 · 7495 views
- Part 6** | Reconstructing the advance of Greenland's glaciers #geology #glacier...
02:00 · 3889 views
- Part 7** | A window to the past and future hazards of the Popocatepetl volcano #...
01:59 · 25.0K views
- Part 8** | Using fish fossils to figure out when extinctions occurred #geology #f...
01:29 · 24.7K views
- Part 9** | Perseverance rover samples rocks on Mars! #geology #mars #perse...
01:14 · 14.0K views
- Part 10** | The amazing footprints of the White Sands National Park #fossils #tr...
01:15 · 13.8K views
- Part 11** | Grim updates from the IPCC #geology #IPCC #ClimateReport #clim...
01:01 · 2690 views
- Part 12** | Active geologic hazards from the Mount Nyiragongo volcano #geolo...
00:48 · 3288 views

Natural Hazards in the News

Parts of Yellowstone National Park may stay closed for 'substantial length of time' after severe flooding

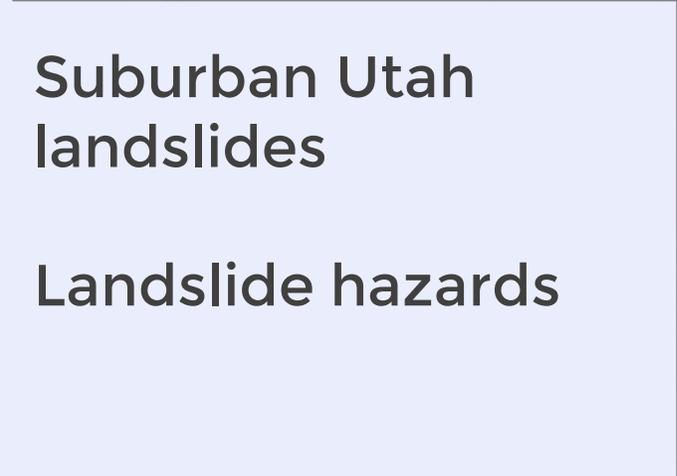


Historic Yellowstone flooding

Flood frequency analysis

13,800 views

Two Draper homes collapse after foundations give way to landslide, two more evacuated



Suburban Utah landslides

Landslide hazards

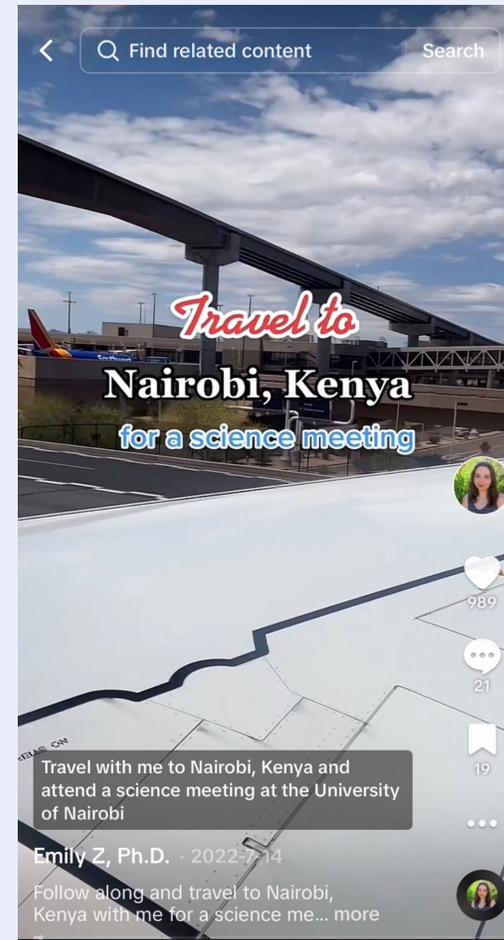
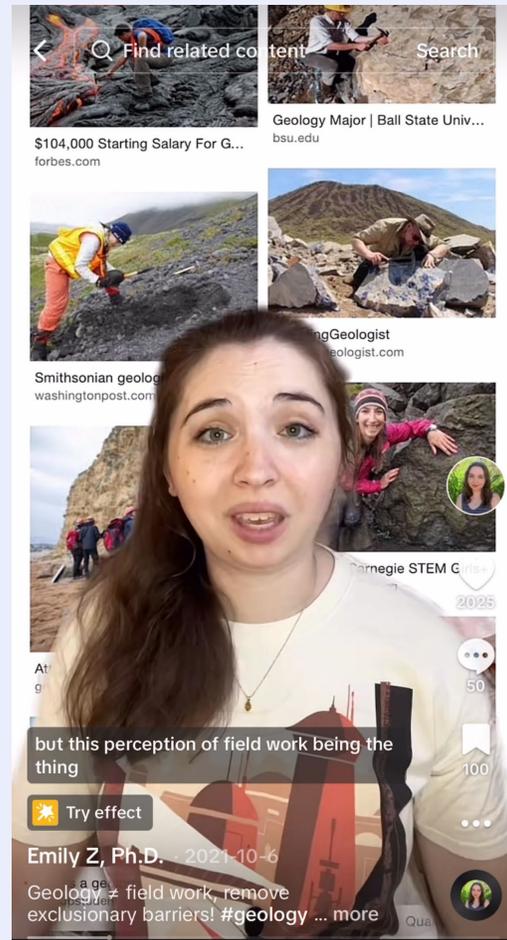
24,200 views

Experiences in the Geosciences

Share personal experiences in the geosciences, show diversity of what it means to be a geoscientist

Thoughts on how field camps are a huge exclusionary barrier

20,600 views



Cool experiences!
Traveling abroad for a science meeting

10,100 views

Science in Pop Culture

Connect topics to pop culture, or your personal interests

“Disney Geology”
playlist

The awesome fake
geology of Cars Land

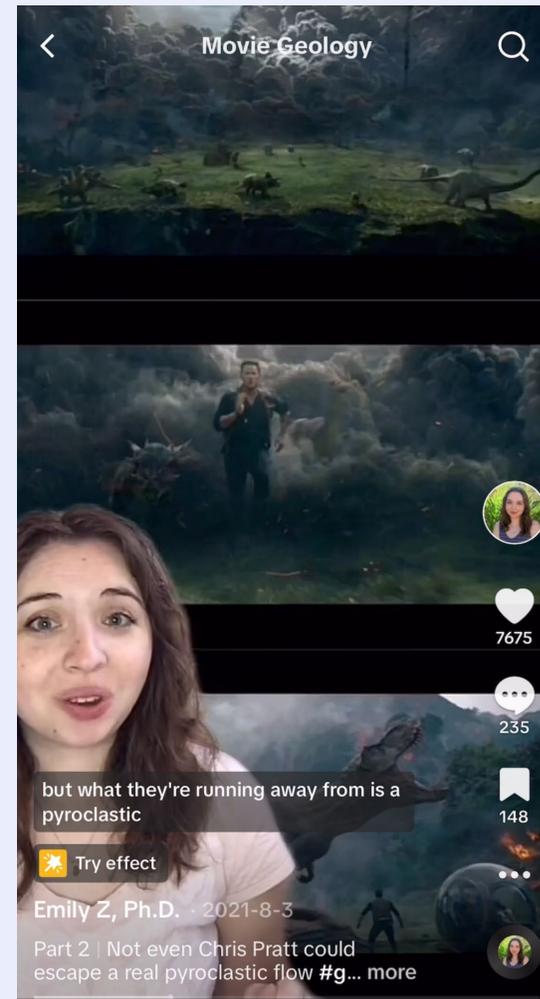
4,500 views



“Movie Geology”
playlist

Jurassic World’s
deadly pyroclastic
flow

54,100 views



TikTok Drawbacks

Any video has the potential to reach large audiences with TikTok's algorithmic feed, but...

Puts pressure on all videos to go 'viral'

Followers are essentially meaningless
Followers \neq views

No analytics or transparency regarding STEM feed



Thank you!

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Communicating Science Through Short-Form Video on Social Media (TikTok, Instagram Reels, YouTube Shorts)

Now - 12:50 pm