

Creating a Plain Language Summary

www.agu.org/sharingscience

SCIENTIFIC MANUSCRIPTS allow you to tell other scientists about your research. A plain language summary allows you to explain your science to broader audiences. A summary contains essentially the same information as an abstract; however, the language and tone are different. You'll want to contextualize information, explain scientific terms, use straight-forward descriptions, and avoid jargon and acronyms. Use the following tips and tools to develop a summary of your research.



THINK ABOUT YOUR AUDIENCE

Who are you trying to reach: Journalists, the science-interested public, fellow scientists? How much science do they know and what will interest them?

AVOID JARGON

This includes undefined/excessive acronyms, terms specific to your scientific field, obscure and unnecessarily long words, and words that have different meanings to non-scientists (e.g. modeling, positive feedback, mean, etc.).



DEVELOP YOUR TAKE-HOME MESSAGE

Explain what the research is about, what you found, and why it matters/what the impact is. Remember, those outside of your specific area of science will need more context about what you studied and why it matters or is relevant to them.

TEST THE SUMMARY

Ask someone who is not a scientist (or at least not in your field) to read your summary and then explain your study back to you. If they can't do it, the summary should be revised.



TAKE TIME TO DO IT RIGHT

Your summary may generate wider notice for your paper than your abstract – it might be read by journalists, shared on social media, or quoted in a blog post – so make sure to highlight the novelty and value of your research so that everyone can appreciate and understand it.

Craft Your Plain Language Summary

PREPARE!

Who is your intended audience?

What scientific terms or jargon relating to your study might need to be explained?

What was the research question (in the larger context of your field)?

What did your study find?

Why does it matter (e.g. what's the impact on society)?

What's the take-home message (e.g. what do you want people to most remember)?



Example Abstract

The 8 September 2017 M8.2 Tehuantepec, Mexico, earthquake ruptured an ~150-km-long high-angle normal fault below the subduction zone megathrust. A tsunami was generated by the event with surveyed runup as large as 3 m. Tide gauges in the region show a remarkably long duration of the tsunami with oscillations within the very wide and shallow Tehuantepec shelf lasting as long as 3 days. Here we produce a model of the tsunami and validate it by comparing it to the tsunami survey and to the time and frequency domain features of regional tide gauges. We analyze the model results and show that the long-lived oscillations are a result of wholesale resonance of the shelf as well as very efficient trapping of edge waves at the shore. These resonant features are the result of the Tehuantepec shelf morphology and illuminate a previously unidentified tsunami hazard for the region.

Geophysical Research Letters, <https://doi.org/10.1029/2018GL080823>, 2018

Example Summary

The Tehuantepec earthquake generated a tsunami that, while modest in size, lasted a very long time. Specialized instruments, called tide gauges, measure the sea-level and registered tsunami waves for as long as 3 days in the region. In order to understand why the tsunami lasted so long, we model it using specialized computer code and analyze the results of the model. We find that the long duration is most likely due to where the tsunami happened. It occurred inside of a very flat and shallow part of the ocean called the Tehuantepec shelf. Because of its shape, the Tehuantepec shelf traps tsunami waves and these slosh around the region for a very long time. This trapping effect had not been identified in the region before, and it is important to understand because future earthquakes in the region might generate much larger tsunamis which will have the added hazard of also lasting a very long time. Future tsunami planning efforts should take these results into account.