

PLAIN LANGUAGE SUMMARY

A Plain Language Summary (PLS) is a concise, jargon-free paragraph summarizing a scientific study: the context for the work, the major results, and the *So What?* The language should be easy for the interested non-specialist, including researchers from other fields and certainly including members of the public. Some journals are requiring a PLS in addition to a scientific abstract. The UW requires a PLS for all grant proposals submitted through the Office of Grants and Contracts.

WRITING AN EFFECTIVE PLAIN LANGUAGE SUMMARY

- No more than 200 words long
- Written for an undergraduate level of scientific understanding
- Define any terms specific to your scientific field, avoiding technical jargon
- Be cautious of words that may have different meanings for non-scientists (e.g. skill, regime, signal, uncertainty, etc.)
- Avoid acronyms, mathematical formulae, and citations

FOUR KEY ELEMENTS OF YOUR PLS

1. Topic Overview

What does a non-specialist reader need to know about the topic to understand your paper? Explain the broad scientific topic to provide context for your study.

2. Paper Overview

What did you set out to investigate? Give a brief overview of what you set out to do in the research and how you went about it.

3. Findings Summary

What was the most significant result or conclusion in your paper? Describe your overall findings but don't get caught up in explaining technical details

4. Key Takeaways

Why should a reader care about your findings? Explain the scientific importance or societal relevance of your study

SAMPLE PLS

Based on: Fernando, B., Wójcicka, N., Froment, M., Maguire, R., Stähler, S. C., Rolland, L., et al. (2021). Listening for the landing: Seismic detections of Perseverance's arrival at Mars with InSight. *Earth and Space Science*, 8, e2020EA001585

When it lands on Mars, NASA's Perseverance Rover will have to slow down rapidly to achieve a safe landing. In doing this, it will produce a sonic boom and eject two large balance masses which will hit the surface at very high speed. The sonic boom and balance mass impacts will produce seismic waves which will travel away from Perseverance's landing site. Here, we evaluate whether these seismic waves will be detectable by instruments on the InSight lander (3,452 km away). We predict that the waves from the balance mass impacts may be detectable. If the waves are recorded by InSight, this would represent the first detection of ground motion generated by a seismic

source on Mars at a known time and location. This would be of enormous value in advancing our understanding of the structure and properties of Mars' atmosphere and interior as well as in improving our understanding of how seismic waves are produced by meteorites hitting the surface.

FOR MORE INFORMATION ON PLS

AGU: Plain Language Summaries for AGU Journals

<https://www.agu.org/Publish-with-AGU/Publish/Author-Resources/Plain-Language-Summary>