REVIEW SUMMARY

The <u>DataWave</u> project aims to use novel data sources to better understand atmospheric gravity waves and improve their representation in climate models. These waves, caused by atmospheric flow over obstacles such as mountains, large storms, and weather fronts, fundamentally affect major features of the atmosphere, including the direction of tropical upper atmospheric winds, and polar phenomena such as the ozone hole. Understanding how these phenomena respond to a changing climate is of great importance to our planning for a warming world.

Schmidt Futures organized an on-site, midterm review panel with seven expert, external reviewers on May 9 and 10, 2023 to a) gather an independent assessment of the DataWave project's progress to date, and b) have the expert reviewers provide feedback on the future direction of DataWave's efforts as it enters the second half of its project lifecycle.

The external review allows Schmidt Futures to check-in on DataWave's progress in its scientific outputs, to determine the influence of the project's work in the climate sciences, and to see the team's dynamics, including its support for early career researchers.

EXPERT REVIEWERS



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Dr. Tapio Schneider

VESRI Advisory Board Member and Theodore Y. Wu Professor of Environmental Science and Engineering, Caltech



Dr. Cecilia Bitz

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Dr. Emily Shuckburgh

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Dr. Peter Cox

VESRI Advisory Board Member and Professor of Climate System Dynamics, University of Exeter



Dr. Paul Kushner

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VESRI Advisory Board Member and Senior Research Meteorologist, Geophysical Fluid Dynamics Laboratory