

December 16, 2022

Dr. Richard W. Spinrad Under Secretary of Commerce for Oceans and Atmosphere & NOAA Administrator Herbert C. Hoover Building, Room 6811 14th Street & Constitution Avenue, NW Washington, DC 20230

Dear Dr. Spinrad:

Subject: Transmittal of the NOAA Science Advisory Board Open Data/Open Science Report

On behalf of the NOAA Science Advisory Board (SAB), I am pleased to transmit to you the *Open Data/Open Science Subcommittee Report*. This report does not aim to revisit or evaluate NOAA's 2018 Data Strategy or NOAA's 2018 Cloud Strategy. It instead aims to bring attention to issues surrounding open data and highlight certain issues related to NOAA's support for open science.

In creating this report, four recommendations were made. These are summarized as follows:

Recommendation 1: NOAA should follow the principles of FAIR open data and, whenever possible, these principles should be prioritized over other mission requirements.

Recommendation 2: Encourage and support the use of open-source software as a key component of open science.

Recommendation 3: NOAA should engage with the open science community around open reproducible research and support workforce training on how to do open, collaborative, and reproducible science in support of the NOAA mission.

Recommendation 4: Consider providing consistent guidance across the agency for best practices, checklists, and dashboards to track adherence to open science principles, policies and mandates across the enterprise, while still supporting NOAA's distributed culture of data and science.

Additional details on each recommendation, as well as findings and survey results can be found in the full report.

The SAB would also like to emphasize the importance of open science and open data going into the future and would like this report to be a first step in an ongoing conversation on this subject area. This initial report is narrow, focusing FAIR open data, supporting open source software, and connecting with the open science community. There are additional open science and open data topics the SAB may like to consider hereafter, such as the importance of coproduction and diversity/equity in open science and open data.

The SAB greatly appreciates the opportunity to provide this advice to NOAA. We look forward to engagement with NOAA on this topic in the coming years.

Very Respectfully,

John R. Kreider SAB Chair

Cc: Sarah Kapnick Karen Hyun Michael Weiss Steve Volz Chelle Gentemann Robert Grossman Zhaoxia Pu Chris Lenhardt **Ilene Carpenter** Anthony Wu Emma Kelley Cynthia Decker Andrew Peck **Katherine Longmire** Viviane Silva

Attachment: NOAA Science Advisory Board Open Data/Open Science Subcommittee Report