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## **Do you know what researchers do and what they want? Experiences from a survey and user interviews**

*Tuesday, March 5, 2024 3:50 PM (20 minutes)*

Since the SSI surveys, we have known that research software is an essential part of the scientific work of many researchers. However, many researchers who develop software have not received specific training for that task, with the consequent impacts on the software quality, re-usability and sustainability. Central support units at the institutions where these scientists are employed can be important instruments to overcome this problem.

Such a group has existed at the Alfred Wegener Institute, Helmholtz Center for Polar and Marine Research for several years. It was originally initiated to integrate new numerical methods into various Earth system models. However, it quickly became clear that the need for support goes much further. In addition to specific tasks such as porting model code for new HPC platforms or new programming paradigms, it also includes more general tasks such as assistance in introducing better coding and developing practices and providing training.

Due to technical developments on the one hand and the strong staff fluctuations due to fixed-term contracts in the institute on the other, the range of services has to be constantly adjusted. Therefore, we conducted a survey at our institution to determine the status quo regarding the development of research software. It was found that scientific groups at AWI often invest enormous time and human resources in development and maintenance work. At the same time, the need for support services and consulting was articulated. In addition, our HPC and Data Processing support group organized interviews with specific user groups to better structure the support services of our group, using the small group's staff more efficiently. As a support unit for different working groups, it is important to find out early about planned new scientific projects that require support. At the same time, the interviews served to discover synergies where generalized solutions can support several scientific groups at the same time. Training and workshops for development best practices, code optimization, automation of tasks, etc are of general interest.

Our contribution will present the findings from the survey and interviews, and will introduce the measures taken by our group to help our users to develop code more sustainably.

### **Slot length**

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