

MAP Open Data Survey

This survey by the Platform Mathematics, Astronomy and Physics (MAP) of the Swiss Academy of Sciences (SCNAT) is a response to recurring comments, questions and sometimes concerns expressed by scientists on the transition toward Open Research Data. Following on other activities of the Swiss Academies of Arts and Sciences like the Open Data Workshop¹ and the factsheet on Open Science in Switzerland², the survey aims to collect the diverse opinions of active researchers in Switzerland on this important topic. The results are foreseen to be published in autumn upon decision by the MAP Plenum. The more of you who participate, the greater weight this could have in shaping the transition to Open Science in Switzerland.

The survey is anonymous, though we need your academic position and your field of research in order to best characterise your researcher profile. To ease the completion and the evaluation of the results, we propose multiple-choice answers. The study is intentionally kept very focused with only 16 questions and a small set of possible answers to allow rapid completion and a simple processing and evaluation of the results. An optional field for clarifications, comments and feedback is provided at the end.

1. What is your academic position?

- a) Professor (or similar position with PhD/Postdoc supervision)
- b) Senior scientist
- c) Postdoc
- d) PhD student
- e) I am not (anymore) an active researcher

2. What is your main field of research?

- a) Mathematics, statistics
- b) Astronomy, astrophysics (observational)
- c) Particle physics (experimental)
- d) Condensed matter and other physics
- e) Theoretical physics or astrophysics
- f) Other fields (biology, chemistry, geosciences, ...), please specify:
[text field to appear, if option (f) is selected]

3. What kind of data do you mainly work with?

- a) Data obtained within a large international collaboration (>50 scientists)
- b) Data using a shared infrastructure (telescope, synchrotron source, etc.)
- c) Data obtained by my own group/collaboration or with my own experiment

¹ <https://naturalsciences.ch/service/events/105080>

² <https://naturalsciences.ch/service/publications/116620>

- d) Archive data from one or several sources
- e) Data generated electronically (e.g. computer simulations)
- f) My research does not really rely on data (e.g. mathematics, theory)

4. Are you quite familiar with Open Data issues?

- a) Yes
- b) Somewhat
- c) No, not really

5. How do you see the transition towards Open Data policy?

- a) I am happy with this transition
- b) The transition goes in the right direction, but more should be done
- c) I understand the objectives, but I am concerned about aspects of its implementation
- d) I am unsatisfied with the current transition
- e) No opinion yet

6. Are you interested in accessing data of other researchers?

- a) Yes, quite often
- b) Somewhat, occasionally
- c) No, not really
- d) No opinion yet

7. Who could be interested in accessing your research data?

Several answers are possible:

- a) Almost nobody
- b) Scientists working in the same very specific field
- c) Scientists working in my discipline on related topics
- d) Scientists of other disciplines
- e) Companies and industries
- f) The general public
- g) No opinion yet

8. What type of your data would be useful/interesting to share?

Several answers are possible:

- a) None, the publication contains everything that is of interest
- b) The published high-level results displayed in graphs
- c) Processed data underlying the publication
- d) Metadata necessary to make them useable by others
- e) Basic, raw data used for the publication
- f) Preliminary data or data finally not used for the publication
- g) Software code to generate simulated data
- h) Software code to process/analyse/display the data
- i) No opinion yet

9. What data volume would this represent for one publication?

- a) Less than 100 Megabyte
- b) Between 100 Megabyte and 10 Gigabyte
- c) Between 10 Gigabyte and 1 Terabyte
- d) More than 1 Terabyte
- e) No opinion yet

10. Is there something preventing you from sharing your data?

Several answers are possible:

- a) No, there is nothing really preventing me to share my data
- b) The data I use belong to a large collaboration, this is out of my control
- c) My data are ethically sensitive and cannot be fully anonymised
- d) I fear my data could freely benefit a private company
- e) I fear my data could be misinterpreted or misused
- f) I consider my data and methods as confidential, it is my intellectual property
- g) I do not have the resources to share my data
- h) I have no data to share
- i) No opinion yet

11. Under which conditions are you willing to share your data?

Several answers are possible:

- a) I have no extra need to share my data
- b) Better infrastructures are needed for data storage and access
- c) I would need additional technical support
- d) I would need additional financial support
- e) I wish to share only after full exploitation within my collaboration
- f) I wish to share only with countries following similar Open Data policies
- g) I wish to share only with people motivating their request to access my data
- h) I have no data to share
- i) No opinion yet

12. Do you already know how to share your data?

- a) Yes, in my research field, data sharing is already common practice
- b) Yes, I know and I already started sharing them
- c) Somewhat, I have some idea on the repository, and how to prepare the data and metadata
- d) Somewhat, I am confident to work this out with some guidance
- e) No, this is completely new to me and I really would need proper assistance
- f) I have no data to share
- g) No opinion yet

13. Is there a need for defining common formats for data and metadata?

- a) Yes, but it would require additional resources and a better organisation of the community
- b) Somewhat, there are a few different formats commonly used, but no clear standard
- c) No, my community already uses a common format
- d) No, this is not really relevant in my field of research
- e) No opinion yet

14. What is your opinion on the Data Management Plan requested by SNSF?

Several answers are possible:

- a) I find it normal that it is now part of the proposal submission
- b) It helps me structure the data management aspect of my research
- c) It helps me become aware of applicable open data policies
- d) I have difficulties filling some of its parts (please specify this at the end)
- e) It is too detailed, it could be simplified (please specify how at the end)
- f) It forces me to open my data beyond what I am willing to
- g) I have no data to share
- h) No opinion yet

15. Is it easy for you to comply with the FAIR data principle?

(FAIR = Findable, Accessible, Interoperable, Reusable)

- a) Yes, I have already experience with this
- b) Somewhat, I am confident to be able to comply
- c) No, it is not easy, because of many constraints on metadata, etc.
- d) I am not sure, since I do not know what FAIR really means
- e) I have no data to share
- f) No opinion yet

16. Do you have the necessary resources to share your data according to applicable open data policies?

- a) Yes, because the amount of data is small enough
- b) Yes, because I can get enough support from my institute or a funding agency
- c) Somewhat, but it slightly exceeds the support of up to 10 kCHF from SNSF
- d) No, because it exceeds this by a large factor (3 to 10 times more)
- e) No, because it exceeds this by a very large factor (more than 10 times more)
- f) It is not a question of money (please specify your needs at the end)
- g) I am not sure, because I do not fully understand the implications of open data policies
- h) I have no data to share
- i) No opinion yet

Please specify any input and/or add comments or feedback

[Free text field]