The 2021-2022 A&A+KICP Climate Survey Final Report

Dec 15, 2023
The A&A+KICP Climate Survey Recommendation Committee

This report is a summary of the climate survey carried out at the University of Chicago’s Department of Astronomy and Astrophysics, together with the Kavli Institute for Cosmological Physics (hereafter A&A+KICP) between Summer 2021 and end of 2022. The report includes a brief background introduction, then describes the findings, comments and recommendations to A&A+KICP as well as other parts of the community.

The idea of a climate survey was initiated in 2019 by the IDEA (Inclusion, Diversity, Equity in Astronomy) group, and then A&A+KICP began discussion with the UChicago Survey Lab in Summer 2020. The survey consisted of first a qualitative part including interviews of a diverse (but not representative) group of community members, and then a quantitative part with questions designed based on the results from the interviews, and meant to be taken by nearly all community members to achieve a representative sample. The interviews (of 32 people) were carried out Summer 2021 to Spring 2022, with a report on this qualitative portion released Summer 2022. The quantitative survey was launched in Fall 2022 (with 65% response rate) and a summary of the survey was released Spring 2023. The qualitative and quantitative reports should be considered together when looking at this survey.

With the release of the survey results, in Summer 2023, the Climate Survey Recommendation Committee (hereafter this committee) was charged to digest the report and formulate concrete recommendations to A&A+KICP. This report is the main deliverable from this committee to its charge. This committee includes representation of members at different career stages (undergraduate student, graduate student, postdoc, faculty, staff) and is designed to ensure voices from different viewpoints are represented. It is the hope of this committee that the concrete recommendations in this report can be a foundation of continuous improvement of the climate in A&A+KICP.

We will first present a summary, and the remainder of the report is organized as follows. Section 1-4 corresponds to the 4 main sections in the quantitative survey; Section 5 looks at the general demographics; and Section 6 gives overall recommendations for future climate survey exercises. In specific:

- **Section 1: Overall climate and work environment**
- **Section 2: Detail about negative experiences**
- **Section 3: Departmental work to improve fairness, diversity and inclusion**
- **Section 4: Departmental structure and operations**
- **Section 5: Demographics**
- **Section 6: Overall recommendations**
Summary

In this survey we find that although the overall climate in A&A+KICP on average appears positive and welcoming, when split by role and gender/gender identity, there are often differential responses. These trends appear in multiple places in the survey, and generally fall into the following points:

- Female and/or gender minorities community members report feeling a lower sense of belonging in A&A+KICP. They encounter a higher level of negative experiences, which potentially contributes to them being more likely to leave the program/field.
- There exists a moderate level of distrust within the community between different parties of different roles or different viewpoints.
- Not all community members are familiar with the different structures and procedures in A&A+KICP, which is often the source of many issues.

We present concrete recommendations that generally fall into four directions:

- Better awareness on the issues ongoing in the community and how one’s action is experienced by others.
- Better communication channels that are safe and inclusive to different demographics and viewpoints.
- Better mentoring and feedback structures to provide guidance for community members navigating the overall academic environment.
- More transparency and clear documentation of procedures, accompanied by regular reminders and updates.

Section 1: Overall Climate and Work Environment

This section looks at the overall feelings from people in the community regarding the environment they work in.

Findings

1. Of all respondents, 30% have some or mostly stressful interactions at work [Q1.5]; around 20% do not have peers to discuss stressful interactions and personal concerns with [Q1.7].
2. Over 90% of faculty, postdocs and grads have peers or seniors with whom they can comfortably discuss research and practical research questions [Q1.6A, Q1.6B].
3. About 25% of faculty/postdocs feel their work is not well promoted in A&A+KICP when compared to peers [Q1.9].
4. While a large number of people (30%+) have faced financial/health/personal problems [Q1.11], those who were able to make others aware of their issues were very likely (90%+) to have requirements/deadlines adjusted when possible [Q1.12, Q1.13].
5. About 20% of all respondents have been made to feel inferior or lacking the ability to do well based on different reasons, the dominant of them being gender (10%) [Q1.15,
Q1.16]. Also, 14% are made to feel inferior based on their research area [Q1.14A]. A small number (1.9%) of people feel that the distinction between being appointed at A&A, KICP, or both make them feel inferior [Q1.14B, Q1.15].

6. Over 30% of all respondents have considered at least moderately seriously leaving UChicago/A&A/KICP. This excludes “expected” reasons such as retirement, completion of major, and end of appointment [Q1.17]. The leading reason among grads/postdoc is not seeing a path to employment (55%) Q[1.18_20], and leading reasons for all respondents are the feeling of not belonging (45%) [Q1.18_2], feeling invisible (45%) [Q1.18_3], and/or feeling socially isolated (45%) [Q1.18_7].

7. Women and gender minorities have a substantially worse experience in the department. For example, 30% of women and gender minorities have been made to feel that they lack the intelligence, ability, drive, and/or focus to succeed in the department/field, in contrast to 0% of cisgender men [Q1.16_A].

Comments
Several issues in this section appear to be interconnected: a sense of unwelcomeness, isolation and inferiority among the respondents creates a deficient social environment and peer support network. In turn, these contribute to an increased likelihood of individuals considering a premature departure from their academic programs / positions. There is a notable trend along the lines of gender and gender identity, with female and/or gender minorities community members (at all levels) reporting a higher incidence of these issues than their male counterparts. Among early-career scientists, an additional reason for considering leaving (in principle unrelated to welcomeness) is the perceived absence of a path to employment, and feedback has shown that negative influences from academic advisors/peers can often hinder career searching. Trends are also observable among other minority groups, but are slightly less marked than gender.

Although not explicitly mentioned in the report, during the feedback period, another issue that was brought up was the prevalent yet often invisible nature of mental health issues experienced by the community members. We recognize that this could also significantly contribute to the feeling of isolation and inferiority.

Recommendations

1. **Create (a continued) awareness**: Ensure that the community members are aware of these existing feelings and trends in the people around them. The first step will be the formulation of this report and its continued development. Semi-regular Tuesday lunch talks on these issues could be a way to keep the issues in front of people and a sustained way to check-in on the community.

2. **Tailor events so that they enhance socializing without pressure**: A few socializing options already exist which nominally don’t involve work, but in practice might include coffee & pastries, post-colloquium food, etc. A revisit/restructure/rethink of all existing social and science+social events in A&A+KICP could be helpful. This could be done
through a discussion between the A&A Chair, the KICP Director, committees that organize the events, the A&A+KICP Events Administrator, and with feedback from the community members.

3. **Address negative gender trends in several survey questions:** We will consider these together with the next section when touching upon microaggressions and bias. General recommendations include anti-bias training, positive messaging, and clarifying reporting channels and accountability (see also Section 2).

4. **Create better tools and awareness for career pathways outside of academia:** There are some very concrete things we can do here that are rather low-hanging fruits. For example: create a formal, up-to-date database of alumni for networking purposes; make “Broader Horizons” talks regular as well as institutionalized (moving the burden from grad student and postdoc volunteers to a faculty, staff, or committee); designate someone to take on the task of making sure opportunities such as internships, career fairs, panel discussions (from e.g. UChicagoGrad, myCHOICE) are advertised in A&A+KICP. But perhaps more importantly, **we need to normalize the conversation around career searching among our community and encourage advisors to be open to students exploring different careers.**

5. **Collect and make visible resources related to mental health:** Highlight resources on the department website as well as the grad student handbook. Advertise relevant talks and workshops happening on campus. In addition, include more specific questions related to mental health in the next climate survey.

### Section 2: Detail about Negative Experiences

This section focuses on the sources of the negative experiences people encountered in A&A+KICP and how they vary across the different demographics in the community.

**Findings**

1. About 25% of all respondents have experienced microaggressions in the last twelve months [Q2.1], approximately 5% of all respondents report experiences of bullying, deliberate social isolation, or discrimination [Q2.1]. Of these negative experiences, two-thirds of all reports belong to underrepresented groups [Q2.1_Summary X Underrep]. 50% reported some/a lot of interference with their work/studies and contributions to major stress or illness [Q2.2, Q2.3].
   a. Of the 50 total instances of negative experiences, 25 were experienced by grad students, 10 by faculty, 7 by postdocs, 5 by undergrads and 3 by staff. There is a clear gender-based dependence when splitting by role: 10-30% of all cisgendered, male respondents have negative experiences, whereas when taking all respondents of other genders and splitting by role, 65% of grad
students, 50% of faculty and of postdocs, 25% of staff, and 10% of undergraduates have these experiences [Q2.1_Sum-Reduced X Gender].

b. The perpetrators of such instances are primarily faculty and grad students, who caused 33 and 24 events, respectively [Q2.4_Summary_1 Role]. We have checked that there are no qualitative differences in the above numbers if we divide the responses into three subsets, consisting of individuals affiliated to only A&A, only KICP, or to both.

2. For those people having negative experiences, 40% spoke to an authority, while 16% directly spoke with the perpetrator [Q2.5_Summary]. Of the former cases, a little less than half (8 out of 20) received no response [Q2.6_Summary]. Of those who were responded to, most felt the fairness, pacing, and privacy adopted by the response to the report were adequate [Q2.7_Summary_1,2,3]. Respondents with resolved cases are split equally between being satisfied and dissatisfied with the final outcome [Q2.9_Summary].

3. The ombudspeople have been approached to handle interpersonal issues within the dept, with 7 total instances in the last 12 months [Q2.11]. The ensuing conversations/actions were generally effective, with a majority of respondents feeling satisfied [Q2.13].

Comments

The predominant factor affecting A&A+KICP climate/interactions are microaggressions. Not all cases of this are reported, which suggests that some microaggressions are not necessarily significant/blatant enough to report, or that individuals may not feel comfortable enough to report. While we cannot speculate further given limited data, the fact that microaggressions are seen at equal frequency within different subdivisions of the community (A&A, KICP, etc.) implies this is not a situation where there are just a few bad actors. This view is further corroborated by both grad students and faculty having equal responsibility in causing such instances. Thus, the solutions to this problem must involve a large fraction of the community. This is challenging given a large aspect of the community (postdocs and students) change on a yearly timescale, and highlights the need for a solution that is institutionalized, and thus able to be reliably and sustainably carried out on a yearly basis.

Recommendations

1. **Reviewing existing reporting procedures:** Understand the cases where reports of bad behaviors were made but no responses were given. Provide broader advertisement of ombudspeople and clarify their roles in A&A+KICP. This includes reviewing and clarifying other potential avenues of reporting outside ombudspeople. Furthermore, clarify what role ombudspeople, faculty mentors and graduate student mentors play in this area.

2. **Addressing “low-level constant bias”** (as phrased in interview report): A reliable, sustainable solution for microaggressions and other harassment could be to have appropriate training or workshops provided to the community. This could be like the mandatory yearly PSD sexual harassment training or others such as the PSD inclusion workshops and Ally training or bystander training. Two important aspects are to carefully select a small number of training programs that are likely to be more effective, and
recognize that even with training some microaggressions will continue to occur so resources should be provided for victims of these low-level biases.

3. **Improving faculty/grad student interactions with regular town hall meetings:** As the two largest groups in A&A+KICP, most negative interactions are experienced between these two groups. Frank conversations in small-groups was suggested as a potential solution. There are organizations within the University that facilitate such sitdowns (e.g. BEST). However, its practicality and whether it will be adopted widely enough are not yet understood. In addition, the organizing of periodic town halls during Tuesday AstroLunch could be a good first step.

**Section 3: Departmental Work to Improve Fairness, Diversity and Inclusion**

This section focuses on topics associated with Equity Diversity and Inclusion (EDI) in the A&A+KICP community.

**Findings**

1. Overall, a significant majority (>70%) of the department believes there are real EDI issues within the department [Q3.1].
   a. 60% of cisgender men believe there are real EDI issues, whereas 85% of other genders (woman, non-binary, agender, transgender) believe there are real EDI issues.
   b. When split by roles, graduate students have the highest percentage (90%) of people who think there are real EDI issues.
   c. People of different races perceive EDI to be an issue at the same rate (all ~70%).
   d. Most (70%) of the people who believe there are problems believe the problems are minor or moderate [Q3.2]. About 40% of respondents believe these issues are getting better in the department, while 26% feel it is staying the same and 5% feel that it is getting worse [Q3.3]. Of the people who believe they have a sense of the current pace of change with respect to EDI, 55% of these respondents think the current pace of change is about right [Q3.4].

2. When asked about whether the appropriate amount of time and energy is being spent on EDI, about half of respondents with a sense of the issue said that faculty should be spending more effort, while over half said students and postdocs spend about the right amount of effort [Q3.5]. The overall burden/work falls on a relatively small fraction of the department, as only 30% of people are engaged in EDI activities, who are 80% volunteers (at equal rates for members of underrepresented or disempowered groups and not, Q3.8 and 3.9), as opposed to being asked to do it. Most people (~55%) thought that the majority of effort should come from within A&A+KICP, with the remainder thinking that outside experts should be brought in.
3. A majority of participants (60%) were worried that publicly expressing their current EDI views would hurt them within A&A+KICP [Q3.10].

Comments
This section asked questions about fairness, equity, diversity, inclusion, and justice within A&A+KICP (EDI below for short). It is important to note that the survey did not define these terms, and they mean different things to different people. Thus, it is possible for respondents to answer a question the same way, but with very different ideas about what their answer means or what actions should be done. Thus, this committee believes that the top level-conclusion of this section is that the majority of the community thinks that it is worth putting in continued effort on EDI issues, and additional work from the community is both needed and generally welcome. The committee notes that any EDI efforts within the department should be recognized, incentivized, and/or funded.

The worry that publicly expressing current EDI views would hurt them within A&A+KICP may reflect overall low trust levels within the department. The qualitative report describes a general perception of low or waning trust and transparency, including between graduate students and postdocs on one hand and faculty on the other [p. 5]; or between minority persons with respect to the larger department [p. A3, A12]. This is important when considering the efficacy of recommendations for public forums, like periodic town halls during Tuesday AstroLunch.

Recommendations
1. **Define more specific goals and scope of action in the area of EDI:** It would be important for A&A+KICP to recognize that action in this regard should be taken even in the presence of differing opinions. Town halls are one good format, but they should not be the only type of activity, as the majority of participants are worried about publicly expressing their current EDI views. One important discussion is to come up with a community definition of EDI.

2. **Take advantage of existing community interest in EDI to broaden participation:** One way to incentivize participation from a broader group with different views may be giving EDI groups more substantial decision making power. If decisions are made by the committee, rather than having an external authority make a final decision without community discussion, it could incentivize more viewpoints to participate in the discussions.

3. **Review the existing EDI structures in the community and what level A&A+KICP can formally support:** Provide incentives to participate in EDI activities and/or integrate into existing responsibilities.
4. **Find and fund external experts to support EDI-related training or presentations:** The topics of the training programs should be determined by the community discussions. Participation across demographics should be recorded and assessed.

5. **Establish an anonymous feedback form:** This can be used by the community to communicate their EDI viewpoints to this committee less publicly, which will allow the committee to have a more fair sample of the voices in the community than what can be gathered in a town hall. These viewpoints can then be incorporated into any action items carried out by this committee or passed on to the A&A Chair and KICP Director.

6. **Future Climate Surveys with more specific questions:** This survey was unable to discern many aspects of climate related to EDI. Based on the results of community discussion and priorities, future climate surveys should ensure that the questions asked are able to provide more specific quantitative input into whether the climate is improving, defining clear goals before the survey is released.

**Section 4: Departmental Structure and Operations**

This section contains a number of topics related to departmental structure and operations. The topics are distinct and not connected, so we will discuss them separately. The three main topics are: 1) overall operation of A&A+KICP 2) mentorship 3) undergraduate research/education. Some of these points also draw from earlier sections in the survey.

**Section 4.1: Overall operation of A&A+KICP**

**Findings**

1. About 15% of A&A+KICP members are dissatisfied with available channels to express concerns or requests. A similar fraction feel their concerns are requests are not usually taken seriously [Q4.1-4.3].

2. About 50% of faculty say that their rights and responsibilities are not very clear (12%) or somewhat clear (37%) [Q4.4].

3. About 85% of grads say that TA-ships are assigned in a very or moderately fair way, and about 13% say they are assigned either somewhat unfairly (10.2%), moderately unfair (59.2%) or very unfairly (10.2%) [Q4.15]. However, only 1/3 of grad respondents TA'd in the year prior to the survey.

4. Postdocs, graduate and undergraduate students self-report that their expected working hours are reasonable (71% say very reasonable) [Q4.11]. The median postdoc, graduate student, and undergraduate student reported working 40-49h per week, 30-39h per week, and 6-10h per week, respectively. The number of hours worked over the weekend are similar between faculty, postdocs, and grad students, typically up to 4 hours per weekend days [Q4.17].
5. Over 80% of graduate students, postdocs, faculty and staff had a work schedule flexible enough to accommodate unpredictable aspects of daily living [Q4.18].
6. 40% of staff/admin take less than half of their vacation and personal time due to work obligations [Q4.19].

Comments

There seems to be general confusion about many of the departmental operation procedures (e.g. TA assignment) in the departments. It is especially noteworthy that a high fraction of the faculty may not be fully clear on their rights and responsibilities. It is worth noting that procedures may be different between A&A and Physics, but both are reflected here.

Recommendations

1. **Clarifying departmental procedures whenever it makes sense**: Some of this could be clarified in faculty meetings, graduate student orientation, etc. or in written handbooks. These documents should be collated in one place on the A&A or KICP websites and regularly maintained.

2. **Connected departmental committees should have better communication**: This will make sure that there is consistency between them.

3. **Clarify how the process of selecting TAs works**: There is a procedure described by this document, but this should be periodically circulated with students.

Section 4.2: Mentorship

Findings

1. Nearly all faculty and postdocs say the amount of formal and informal advising/mentoring they undertake is reasonable. However, about 44% say the work is not properly recognized by A&A+KICP. [Q4.22]

2. Nearly all faculty and postdocs say the amount of personal support and counseling that comes up during mentoring is reasonable. However, 25% of them think this is outside of their current skill set. [Q4.23]

3. The amount of informal advising/mentoring by faculty and postdocs varies based on identity. 60% of minority faculty and postdocs self-reported that students seek them out for informal mentoring at a higher than average rate [Q1.10]. The average faculty belonging to one or more under-represented or disempowered groups *informally* advised an average of 1.9 additional students or postdocs than those not belonging to such groups. For postdocs belonging to one or more under-represented or disempowered groups, they on average advise 0.5 additional students. [Q4.20]. This supports a finding of the qualitative report [p. 9] that women and minorities, especially faculty, carry a disproportionate mentoring burden.
4. 40% of graduate students engage in peer mentoring or advising for fellow graduate students or undergraduate students [Q4.21].

Comments

Overall due to the anonymization process, no breakdowns could be made with more detailed faculty roles, e.g. research vs. teaching faculty, or tenured vs. untenured faculty. 45% of faculty respondents are full-time, tenured faculty, which will dominate the overall numbers.

Insufficient information was available to assess the total mentoring burden for faculty and postdocs: very detailed numbers were asked for informal advising, but qualitative assessments were asked for formal advising.

In general during the comment and town hall period, the community expressed that mentoring is a strong priority for A&A+KICP, and that improvement in mentorship at all levels seems necessary. Some notable observations include (also related to Section 1):

- A&A graduate student peer mentoring is going well
- At the postdoc level, only KICP Fellows have formal faculty mentors
- There is a mix of A&A and non-A&A students in KICP, who receive different mentoring support
- If the department intends to continue hiring junior faculty, it is worth investing in systems to bring them up to speed more efficiently and provide support

Recommendations

1. **Consider mentoring experience and ability as a factor in the hiring:** This is important for faculty hires, but also possibly postdoc fellowships and graduate admissions.

2. **More formally recognize/incentivize mentoring efforts:** Identify what types of mentoring are going unrecognized (e.g. is it informal mentoring, undergraduate student mentoring, student mentoring by research faculty, etc) and take community suggestions for ensuring this is recognized.

3. **Better mentoring resources:** Provide faculty and postdocs with resources for personal support and counseling skills that may arise during mentoring (e.g. the PSD mentoring toolkit).

We provide additional recommendations below to improve mentoring at each career stage. Undergraduate students are covered in Section 4.3.

1. Graduate students: Consider how KICP can support graduate student mentoring for students outside of A&A, or establish better coordination with the mentoring program in Physics/GeoSci. Provide more specific expectations for the official faculty mentors that are assigned at the start of the program.
2. Postdocs: If there is a need, A&A+KICP could initiate a program to ensure that all postdocs receive sufficient mentoring, especially those not falling within the KICP Fellow umbrella.
3. Junior faculty: More regular meetings between junior faculty and their senior faculty mentors. Create a faculty handbook for the most common questions.

Section 4.3: Undergraduate research and education

We note that this section is almost exclusively focused on the A&A undergraduate majors. We do recognize that there are also undergraduate students of other majors, but it is somewhat challenging for A&A+KICP to make structural changes in those programs. The findings below are mainly based on Section 1 of the survey, but since the recommendations are specific to the functions of Academic Affairs, they are being included in this section (Departmental Structure and Operations).

Findings

30/70 undergraduates responded to this survey (42.9% response rate).

1. 44.4% of undergraduates responded that they considered changing majors to some degree [Q1.17D]
   a. 41.7% responded that insufficient academic preparation at the high school level figured as a major reason [Q1.18_22]
   b. 33.3% responded that an inability to see a path to employment was a reason for changing; for 25% this is a major reason [Q1.18]
   c. 33.3% responded that an inability to find a research opportunity was a reason for changing; for 8.3% this is a major reason [Q1.18]
   d. 33.3% responded that an inability to find a mentor the student is comfortable with was a major reason [Q1.18]
   e. 25% responded that the program is too difficult [Q1.18]

2. These numbers were also reflected in the qualitative report:
   a. Many undergraduates report that they could use specific help in one underlying skill area such as coding or writing, and this is more true for those from less advantaged backgrounds [p.15]
   b. Undergraduates who come from schools with fewer research opportunities and less research training need to be told the importance of research experience if they want to go further in this field. They also need more mentoring in the culture of research, and help being linked to research projects [p.15]
   c. Undergraduate students from lower class or different cultural backgrounds typically come from high schools/colleges with less socialization into the ways of research. [p. 9-10]

Comments

Through both the qualitative and quantitative report, one theme is that undergraduate research is an expected part of the major, but finding opportunities is biased against students from less
advantaged backgrounds. In general, given that each of our undergraduate class cohorts in A&A is about 20 students, to ensure all of them have research experiences means we will need as many as 40 research opportunities, and have a mechanism to place them. This is a big logistical challenge. Another analogous topic is related to students not seeing a path to employment.

Recommendations

Here we only list the top-line recommendations from this committee. Detailed implementation of each item can be found in a separate document here.

1. **Strengthen support for academic career and employment both in the academic and non-academic pathways:** For students interested in pursuing the academic pathway, provide resources and supporting workshops preparing students for graduate school. For students interested in pursuing a non-academic pathway, combine with recommendations from Section 1 effort and partner with Career Advancement to provide resources.

2. **Better support for placement of students into research opportunities:** Survey the faculty to have an accurate understanding of the capacity of research opportunities in A&A+KICP. Create a department committee or role in A&A to oversee the placement and progress of undergraduate research.

3. **Strengthen academic support:** Create a plan for year 1-4 advising to support students of different levels academically. Establish a peer mentoring system. Additional hiring (e.g. [Senior] Instructional Professors) to provide additional support for undergraduate majors.

Section 5: Demographics

In the pie charts below we show the bulk demographics of A&A + KICP. To preserve anonymity, a very limited amount of cross-tabulation was allowed. **We here note that there are major demographic differences with respect to role.**

- **Faculty**
  - 73% White, 18% Asian, 9% Other
  - 80% cis-gender men, 20% other
  - 67% native English speakers
- **Postdocs**
  - 34% White, 47% Asian, 19% Other
  - 72% cis-gender men, 28% other
  - 34% native English speakers
- **Staff**
  - 78% White, 0% Asian, 22% Other
14% cis-gender men, 86% other
93% native English speakers

Graduate Students
49% White, 34% Asian, 15% Other
43% cis-gender men, 57% other; 45% LGBTQ+
63% native English speakers

Undergrad students
46% White, 8% Asian, 46% Other
44% cis-gender men, 56% other; 41% LGBTQ+
82% native English speakers

Section 6: Overall Recommendations

In writing this report, this committee has attempted to summarize the work of many of the community members over the last 3 years. Overall, the survey has been a useful exercise for all and has revealed a number of important issues that we can collectively improve on. This
committee has formulated a number of top-level recommendations for future implementation of climate surveys in A&A+KICP:

1. **Continued regular climate surveys**: This will be the only way to monitor the reaction to any action items that the community has taken to respond to the previous survey. A cadence of every ~2 years could be sufficient, and this could be the responsibility of future renditions of this committee.

2. **More concise survey questions and quicker turnaround**: This climate survey has taken 3 years and was a major undertaking of many volunteers. A lighter-weight survey would be more sustainable in the future. This could be achieved by using more standated questions and establishing other forms of regular feedback (e.g. anonymous feedback forms to the climate committee).

3. **Regular update to the community on progress related to recommendations in this report**: A quarterly update from this committee at the AstroLunch could be a good way to have a sustained way to keep the community informed about actions that have been taken to address the recommendation to the report. This will also serve as a way to hold ourselves accountable.