

Oceans and Cryosphere / Theory and Observations Group Resources and Expectations

This document provides baseline information for members of the Oceans & Cryosphere / Theory & Observations (OCTO) group at Caltech. It seeks to provide (i) a general set of expectations for group members at various stages of their research careers; (ii) basic information about onboarding, availability of resources, and procedures for requesting resources; (iii) a statement of the group's goals and values. While this document serves to create an inclusive and supportive laboratory culture, it does not take the place of constructive group interactions – you should always feel welcome to bring forward concerns or suggestions for improvements to Andy or a group ombudsperson. We strive to have open group communications that lead to beneficial collaborations and better scientific research. Group member input on this document is welcome and we will revisit it annually (at the beginning of each academic year) to ensure it remains up to date.

Group statement. The following statement was drafted in 2021 and appears on the front page of the group website. It serves as the foundation for the group's research program and efforts.

The Oceans & Cryosphere, Theory & Observations (OCTO) Group seeks to improve scientific understanding of the ocean's role in Earth's climate. We are interested in the physical processes by which the ocean couples to and influences other components of the climate system, including the atmosphere, cryosphere, and marine ecosystems. Our research informs topics including global warming, sea level change, and the global carbon cycle. Work in the group develops and employs cutting-edge scientific techniques to study ocean dynamics, including the analysis of remote sensing observations; collection of novel observations using ship-based and autonomous platforms; the design of idealized and process-based models of ocean dynamics; and the analysis of global climate models. We are motivated by providing insight into how the ocean impacts Earth's climate during periods of global change.

We seek to foster an inclusive, collaborative, and supportive environment in which group members can develop scientific research, communication, and outreach skills. We are committed to training and enabling early career scientists with diverse backgrounds (country of origin, ethnicity, gender, race, sexual orientation, etc.) and preparing broadly-educated scientists for a variety of STEM careers of societal relevance.

Group Values

The OCTO group seeks to provide a friendly, supportive and collaborative environment. We believe that sharing your research with group members is a critical component of deepening understanding of your research and improving scientific communication skills. The group supports and enforces, in certain cases, the following practices:

- Being kind and respectful of each other and each other's work;
- Promoting effective and open communication between all group members;
- Fostering an environment where group members feel comfortable seeking advice and assistance from others within the group;
- Providing a safe and healthy working environment;
- Actively intervening and addressing cases of harassment, bias, discrimination and/or microaggressions;
- Continuing to update and discuss work expectations and goals;
- Offering opportunities to meet informally as a group and to socialize;
- Recognizing and celebrating group and individual achievements including, but not limited to, research papers, new positions, outreach efforts, personal awards, service;
- Promoting group members among our scientific networks, e.g. publicizing papers, including group members at conference activities/discussions, making informal introductions;
- Acknowledging and supporting group members during challenging periods including, but not limited to, paper reviews, proposal writing, job searches, personal hardships.

Group Expectations

We acknowledge that research does not progress at a steady pace. All group members will experience periods of high productivity and slower progress. The following are baseline expectations, but you are strongly encouraged to have frequent conversations with Andy (as well as other group members) with regard to expectations and your work. While we might not always have the same opinions, it is important to be aware of each other's goals, expectations, and perceived progress.

Graduate students

Graduate students are expected to:

- **Stay in good standing.** Each individual is responsible for knowing and following the graduate degree requirements in ESE/GPS; if you have any questions, please ask! This includes coursework and proposition deadlines during the first year, TAC meetings once a year starting in the spring of second year, and candidacy. The date of the candidacy meeting should occur either in 3rd year spring or 4th year fall – a discussion of the appropriate timing of the candidacy exam should occur in winter of the 3rd year. You should reference the Academic Committee's graduate student timeline for additional information about degree requirements.
- **Attend and participate actively in group meetings.** Group meetings are one of the most important venues for sharing your work and receiving feedback. The format of group meetings may vary, but in general, you should expect to give two 30-minute group presentations each year. You should also ask questions and offer constructive feedback to others in the group.
- **Share your research progress.** The best way to deepen understanding of your research is to share it with others. In addition to group meetings, you are encouraged to meet informally with other group members to talk about your work and potentially to establish collaborations.
- **Be dedicated to your research.** It is easy to fill your schedule with seminars, classes, and other meetings. Being productive at research requires dedicated periods of focused reading, coding, data analysis, etc. Each person will approach this differently, but during grad school, research should be your first priority. Note that during your first year, the emphasis is on coursework, rather than research, during the main academic terms. However, one should still reserve time to make progress on research propositions.
- **Engage with other group members.** Provide assistance to others when possible and be generally curious about other projects and research directions in the group.
- **Meet regularly with Andy to discuss research and your progress.** I like to meet with group members individually once every one to two weeks. This is an opportunity to dig into details of your current project, but also to discuss the trajectory of your research and work/life balance. As we return from the pandemic, I plan to re-establish an open door policy where you are also encouraged to stop by with questions.

- **Work hard at being a good TA.** Graduate students are expected to TA one course per year, except in your first and final years. As a teacher, you deepen your understanding of the course material and play a critical role in the education of your peers. You are expected to devote a significant amount of time to TA'ing and it is understood that this will require a reduction in the time that is spent on research. Caltech's [Center for Teaching Learning and Outreach \(CTLO\)](#) is an excellent resource for improving your teaching skills.

- **Attend the weekly ESE seminars.** Although our seminar series is quite broad, attending the ESE seminar on a regular basis is essential for learning (both from good and bad examples!) how to present research results.

- **Contribute to the ESE community.** While the main focus of your time at Caltech is your own research, you are part of a larger research community, and you should be committed to sustaining and improving ESE. Activities may include representing the students at faculty meetings, helping to organize ESE seminars, contributing to open house activities, etc.

Postdoctoral researchers and research staff

Postdocs and other senior researchers in the group are expected to:

- **Ensure that you have the time and resources needed to be productive.** Postdocs should be at or nearing the stage where they can work largely independently (although it is generally more fun and rewarding to work collaboratively). This means that you are expected, in discussion with Andy, to determine the timeline for individual projects and to ensure that you strike the right balance between research and other activities, such as mentoring more junior group members.

- **Engage with other group members.** Having successfully completed graduate school, you will be an important role model for other group members. Whether you are actively collaborating with other group members may depend on your project, but it is beneficial to be curious about other work in the group. You are encouraged to interact with group members outside of group meetings and share your experiences and/or aspects of navigating graduate school that you found useful.

- **Share your research progress.** Presenting your work at group meetings is an important part of developing your science communication skills and also teaching more junior group members how to organize and convey scientific results. At this stage, it is also expected that you will be considering which conferences are most appropriate for your research and future job interests.

- **Prepare for the future.** It is expected that you may devote a significant amount of time during your postdoctoral position looking and applying for future positions. This is normal. This process can also be time consuming, exhausting and, at times, stressful. Please communicate with Andy about striking the right balance between research and job searches.

Undergraduate students

Summer students

SURF and WAVE fellows are expected to be sponges! While you are expected to be diligent about your work and interact with other group members in a professional manner, there are few expectations in terms of your research output. Your goal is to be curious, learn from others in the group, try new (and sometimes difficult) tasks, and take as much in as possible as you explore what it is like to work in research and oceanography. You should also seek out mentors within the group besides Andy, since current graduate students and postdocs can provide different perspectives on their research experiences.

Caltech undergraduate researchers

We encourage Caltech undergraduates to explore opportunities to carry out research projects and/or senior theses in the group. While undergraduates may have schedules that preclude them from participating in all group activities, they are full group members and their contributions are valued.

Group leader

The group PI has a number of responsibilities that may be separate from direct interactions with the group, which include teaching, proposal writing, service to both Division and external groups, external seminars, etc. The following are the expectations you can have of Andy:

- **Maintain healthy and supportive communications within the group.**
- **Provide the resources needed to successfully complete your job.**
- **Provide frequent advice on research projects and career development.**
- **Establish clear and reasonable goals and expectations for research progress on an annual basis; this may involve the design of an individual development plan (IDP).**
- **Make group members aware of external professional development opportunities.**
- **Provide development opportunities within the group.**
- **Provide dedicated time to group discussion of non-research related topics.**
- **Acknowledge contributions and achievements from group members.**
- **Provide letters of recommendation for work-related opportunities.**
- **Be open to suggestions for improvements in group interactions and practices.**

Andy is always open to discussing research-related topics, but he is also willing to discuss other topics related to career paths, academia, job applications, etc. He will also attempt to provide support for personal challenges, including making group members aware of additional resources on campus. See further details in the Group Resources section below, including information about Andy's reporting responsibilities as a faculty member.

Dealing with challenges

It is foreseeable that over the course of your time at Caltech (as a student, postdoc, staff member) you may encounter difficulties either related to your work or due to personal challenges. You should feel free to seek help inside our group, formally or informally, as you feel comfortable. All group members have completed the required bystander training, and as a group, we seek to be active bystanders by acting upon what we have learned. Caltech also has resourceful information and trained professionals that are also available to provide support. Please see more information here: <https://wellness.caltech.edu/counseling>

Distribution of workload

Our group recognizes that there is work, carried out on a voluntary basis and not directly related to research, that benefits the entire group. While we strive to acknowledge these activities, they can go unrecognized, which can lead to an unequal distribution of effort among group members. We actively seek to have an equal distribution of this “invisible workload,” but this can be aided by everyone volunteering on a regular basis, consistent with your interests and comfort level. Some tasks are listed below – this list is not meant to be comprehensive, but provides some examples of opportunities of how to contribute.

- The group often hosts WAVE and/or SURF students during summer. Research staff, postdocs and senior graduate students interested in co-mentoring should contact Andy, including ideas for projects.
- Assisting in the organization of local scientific meetings (e.g. CalGFD) or contributing to organizing visits by visitors and seminar speakers.
- Contributing to ESE and GPS-wide activities, such as assisting with the seminar series, serving as a ESE option liaison, organizing the first-year Buddy program, organizing the Life Beyond Science discussions, etc.
- Leading discussions about diversity, equity, inclusion and accessibility within the Caltech/GPS/ESE community.
- The group values participation in outreach activities outside campus. You are encouraged to get involved in any existing activity, or start a brand new one!

Group Communication

The OCTO group uses both Slack and email for communication. Slack is ideal for small-group interactions, especially when the message volume is high. The participant list on Slack is larger than our core group, so email is typically used for focused information about group meetings or other messages that specifically pertain to the core group members.

The contact information for our current group members is here:

Group member (position)	Email	Office	Phone number (optional)
Luna Bai (she/her), Graduate Student	ybbai@caltech.edu		
Dave Bonan (he/him), Graduate Student	dbonan@caltech.edu	Linde 226	303-565-7872
Scott Conn (he/him), Graduate Student	sconn@caltech.edu		
Lily Dove (she/her), Graduate Student	dove@caltech.edu	Linde 121	717-673-3607
Mar Flexas (she/her), Senior Research Scientist	marf@caltech.edu	Linde 205	626-390-8367
Mukund Gupta (he/him), Postdoctoral Researcher	guptam@caltech.edu	Linde 226	
Patrice Klein (he/him), Visiting Associate	pklein@caltech.edu		
Ruth Moorman (she/her), Graduate Student	rmoorman@caltech.edu	Linde 226	626-298-9190
Shantong Sun (he/him), Postdoctoral Researcher	shantong@caltech.edu	Linde 205	
Andy Thompson (he/him), Faculty Member	andrewt@caltech.edu	Linde 224	626-633-2343
Earle Wilson (he/him), Postdoctoral Researcher	earlew@caltech.edu	Linde 205	

Group Meetings

Group meetings are held roughly weekly; the day of the week and time will change from term to term to accommodate teaching and class schedules. For summer term 2022, group meetings will be held from 1.00pm to 2.00pm on Wednesdays; we will plan to go to lunch as a group at noon. Every group member is expected to attend group meetings, but occasionally there are conflicts. *As a courtesy you should let the presenter and Andy know that when you are unable to attend.*

Everyone in the group is expected to present, including senior members of the group. Typically the presentation will focus on some aspect of your research, but this need not always be the case. Other examples include leading a paper discussion (although you will be expected to summarize the paper and moderate the discussion), debrief of field work, science-related activity (e.g. outreach, communication, DEI activities).

Group meetings are scheduled for one hour. This does not imply that you need to present for the full hour! However, it is not uncommon for them to run longer and/or for a subset of the group to continue to discuss the presentation in greater detail. However, regardless of length, presenters should leave sufficient time for group members to ask questions and to have a discussion towards the end of the meeting.

Presentations do not need to be polished! This is an excellent opportunity to present results that are new, even if they are not completely understood. This venue is also a good opportunity to refine more mature work, and it is appropriate to use group meetings to practice conference or job talks.

Currently we are working on the following rotation:

Shantong, Scott, Mar, Mukund, Ruth, Dave, Andy, Patrice, Earle, Luna, Lily, Bia

The first speaker is responsible for communicating to the next speaker whether he/she intends to use the entire group meeting; it is fine to have two presenters in one group meeting. At least once per term (typically the first week of the term) we will reserve a group meeting to discuss non-research related topics (e.g. group/ESE dynamics and policies, campus events, DEI topics, etc.). Please let Andy know if you have suggestions for discussion topics.

Generally, we try to schedule group meetings either just before or just after lunch so that we can have a weekly group lunch. You are encouraged to join these group lunches, but it is not required. You should also feel free to invite the group if you are heading for a meal at any time during the week!

Our group will occasionally hold group retreats, which will provide more extended periods to reflect on the group's research directions, identify opportunities for collaboration, and improve group interactions/bonding. Finally, we often have informal visitors to Caltech; we may have special group meetings so these visitors can present their work; these often by early career researchers and have a more physical oceanography focus. It is encouraged to take time to meet these visitors and share your work, which is good practice for developing your science communication skills.

Group Resources

Personal computing. All group members will have access to a personal computer or laptop and a nice screen that will either be purchased or provided from group resources. You should discuss your computing requirements with Andy first; this may include smaller devices such as tablets that can be useful for your research. If you arrive at Caltech with a usable laptop or computer, you may continue to use this with the understanding that a replacement will be provided when required. Summer students should discuss their computing needs with Andy.

HPC computing. All group members are welcome to have an HPC account – Andy will need to request this account. If you plan to use HPC, please familiarize yourself with the performance information of the HPC cluster as well as the rate structure, which is based on a tiered structure. Please discuss with Andy any computing needs you will need in order to ensure there is an account associated with the jobs. Thorough descriptions of the services that the HPC cluster can provide, how to receive help, and documentation on accounts, getting started, storage, transferring files, common problems, etc., can all be found here: <https://www.hpc.caltech.edu/>

Group server. We have a group server, Eady, which can be used for storing large data sets or model output. Please ask Andy if you would like an account on Eady. The Eady server can also be used for some computing, but it is not meant to be an HPC resource. At present, most of Eady is not backed up (although this may change). Our main point of contact if there are any questions or issues about accessing is Scott Dungan scott@gps.caltech.edu.

Software development and coding practices. Most group members write code in Python and make use of Jupyter Notebooks to carry out their work. In order to take best advantage of resources and expertise in the group, this is the suggested computing language that you should use. However, some group members work with Matlab and Julia. You should write code under the assumption that it will be shared with other group members. Therefore, you should use clear structure and variable names and document your code thoroughly with comments and ReadMe files.

Conference attendance and reimbursement. Each group member can expect to receive support to travel to one conference per year. In general, one conference per year is about the right pace for graduate students to be able to generate new results for each meeting. However, in discussion with Andy, there may be opportunities to attend more than one external program in a year, in particular for a focused workshop, project meeting, summer school, training course, collaborative visit, etc.

All first year graduate students may attend one scientific meeting or workshop with \$500 funding from the GPS Division. Once you have identified a meeting that you would like to attend and have discussed this with Andy, you should contact Jen Shechet.

Reimbursement for conference attendance typically includes all travel (flights, Ubers, parking), accommodation (hotel, AirBnB), and meals. I ask that reimbursement of meals roughly reflect your expenses, e.g. do not request the per diem if it is well over what you spent; however I also realize that meals can be expensive, especially if you are out with large groups. For any expense that can be charged prior to a meeting (e.g. conference registration, flights, etc.), please see Bronagh and she will use the ESE credit card. Save receipts for expenses you incur while traveling and submit these to Bronagh with a summary of each expense when you return.

Administrative staff. Bronagh Glaser (bglaser@caltech.edu) is our group's grant administrator. She will be able to assist with any purchasing or conference requirements. Nora Oshima (nora@caltech.edu) is the Linde Center building manager and advises on office space, furniture requests, room reservations, etc. Julie Lee (julielee@caltech.edu) is the ESE and GPS Graduate Option Manager and deals with all academic issues for the graduate students. Julie will be the contact person for submitting material for quals, TAC meetings, and candidacy.

Please respond promptly if Julie contacts you by email. Jen Shechet (shechet@caltech.edu) is the Division Academic Affairs Manager for GPS, but she handles all hiring, onboarding, and visa issues for postdoctoral researchers. Bronagh, Nora, Julie and Jen are all members of the group and should be treated following the same Group Values described above. In general, all of the administrative staff in ESE/GPS take on work that exceeds their job expectations because they care about supporting students and postdocs in the Division and value your success. Please take the time to introduce yourself to the administrative staff, to share your research and other interests with them, and to thank them for their hard work.

Outreach. This group explicitly acknowledges that outreach may be an important component of your graduate school training. You are welcome to register for up to 3 credits per term as part of the Ge/ESE 298 course for outreach activities (defined broadly) in which you participate. Enrolling for course credits requires you to complete a short proposal at the start of the term, which Andy will need to sign, as well as a short report summarizing the work to be completed at the end of the term.

If you are interested in engaging in outreach, you are encouraged to explore the opportunities that already exist on campus. Resources include:

- The Center for Teaching Learning and Outreach ([CTLO](#))
- The [GPS Go Outdoors](#) program
- [GO-BGC/SOCCOM Adopt-a-Float](#)
- [Letters to a Pre-Scientist](#)
- [Skype a Scientist](#)
- [Caltech Y: Rise Tutoring](#)

Diversity and Equity. Our group values a commitment to diversity and equity as described in the Group Values page above. There are also a number of resources on campus to support students that associate with various affinity groups. Some of these resources include:

Equity and Title IX Office: <https://titleix.caltech.edu>

Caltech Center for Inclusion and Diversity (CCID): <https://diversity.caltech.edu>

GPS DEI Committee: <https://www.gps.caltech.edu/resources/dei-gps>

Teaching and Mentoring. Our group acknowledges that teaching is an important component of your graduate training. Some of this training and experience is gained through TA'ing (see Graduate Student Expectations), but you are welcome to explore other teaching opportunities, such as giving guest lectures or enrolling in the CTLO's teaching training and short courses ([here](#)) or the Certificate Program for Effective Teaching. Please be sure to discuss these activities with Andy so he is aware of your time commitments. Here are a list of potential resources:

Certificate of Practice in Effective Teaching (grad students and postdocs):

<https://ctlo.caltech.edu/universityteaching/programs/cpet>

Student-Faculty programming mentoring resources: <https://sfp.caltech.edu/mentoring-resources>

Reporting discrimination, harassment, and un-inclusive behavior. We collectively agree to follow and support the group values discussed above. This requires all of us to be mindful of instances where these values are not being followed. You are encouraged to be an active bystander and speak up in a constructive manner so behavior can change. If you witness discriminatory and/or persistently harmful behavior, you should report to Andy or other campus resources.

As a faculty member, Andy is required to notify the Institute's Equity and Title IX Office is made aware of discrimination, sexual harassment, or sex- or gender-based misconduct involving our group or other members on campus. If a group member shares such an experience, Andy can help connect them to support resources but he will not be able to keep that information confidential as part of fulfilling his responsibility. For more information, you can email equity@caltech.edu, go to equity.caltech.edu ([Links to an external site.](#)), or review the Institute's [Sex- and Gender-Based Misconduct Policy](#) ([Links to an external site.](#)).

If you experience such prohibited conduct and would like confidential support, please contact Student Wellness Services [626-395-8331; <https://wellness.caltech.edu/counseling> ([Links to an external site.](#))]; Yazmin Gonzalez, Center for Inclusion and Diversity [626-395-6207; yazminyg@caltech.edu]; or Pilar Montenegro, Campus Sexual Violence Advocate [626-395-4770; ConfidentialAdvocate@caltech.edu].

Publishing. The primary way for our group to share their research and indicate progress to colleagues outside of the group is through the writing and publishing of scientific manuscripts. The number of papers that each group member publishes will vary, but it is expected that at the time of graduation you will have published or are close to submitting more than one first-author paper. Note that it is not uncommon to work on a project for multiple years before submitting a manuscript on the topic. However, it can be helpful at times to organize your research by writing up notes and figures in a manuscript template so that you begin to see how to present results and where open questions lie – you should also be prepared to iterate on text and figures many times!

To be listed as an author of a paper, you should have contributed significantly to one or more of the following: intellectual direction of the project, design of experiments, data analysis, generation of results, producing new figures, manuscript editing. If you have had multiple conversations with a group member about your work and they have made helpful suggestions, you should acknowledge this in the paper, but it does not necessarily require co-authorship. A gray area is data processing and/or production of data sets that might be used by others in the group. Curation of data can consume significant time and co-authorship should be considered in consultation with Andy.

Letters of recommendation. Over the course of your graduate career, you will likely need to request many(!) letters of recommendation. This is normal, especially if you are considering applying for jobs, postdoctoral positions, and/or fellowships towards the end of grad school. Andy is, in almost all cases, happy to provide these letters. As a courtesy, it is helpful to request these letters at least two weeks in advance, but situations regularly come up when deadlines are tight. Never hesitate to ask for a letter in these cases.

Work Expectations

Working hours. Becoming a good researcher is hard work! For most group members, you should treat your position as a full-time job with at least a 40-hour work week, averaged over a month or longer. There are circumstances where this may change from week-to-week, e.g. class/project/proposal deadlines. Like most professions, proficiency at research typically reflects the amount of time invested. As mentioned above, improving your research skills requires dedicated periods of focused reading, coding, data analysis, etc. If you are uncertain about whether you are effectively partitioning your time, you should discuss this with Andy.

Productivity drops quickly when individuals are overworked and stressed. Having activities outside of work that allow you to have a break from your research and recharge is key to staying motivated and productive. Individuals are principally responsible for establishing a suitable work-life balance. However, if you have any questions/concerns about the amount of time you are working, Andy is always available to discuss this. Campus resources are also available:

Occupational therapy: <https://wellness.caltech.edu/ot>
Counseling (students): <https://wellness.caltech.edu/counseling>
Staff and Faculty Consultation Center (staff): <https://sfcc.caltech.edu/>

Mental health is as important as physical health. If you require time off for mental health reasons, you should treat this just as you would a physical issue. Please let Andy know that you will be taking some time off. If you feel uncomfortable sharing mental health issues, then you can simply state that you are feeling unwell.

There are no formal expectations or rules for when/how many hours a student/postdoc is expected to work each week. Everyone's productivity is optimized with different schedules and therefore there are also no expectations for which specific hours of the day you choose to work. However, being present in the office for at least part of your working week during regular working hours (M-F, 9.00am to 5.00pm) is the most effective way of stimulating informal conversations that are an essential component of fostering a supportive, open and inclusive environment in the group. You need not always be in the office during these times.

Please keep in mind that group members may have different priorities and demands on their time and you should not necessarily model your work habits on others. For example:

- Andy often sends emails on the weekend and outside of typical working hours. There are no expectations that you need to reply during these times.
- Group members may celebrate different holidays and/or may choose to work during institute breaks.
- Group members participating in field work or working remotely may keep different hours.
- Periods of field work, including piloting/deploying/recovering gliders, often requires work commitments outside of regular working hours and on the weekends. This is true for the "on-shore" team members as well as those at sea.

Group meetings. (See description above). Every group member is expected to attend group meetings, but occasionally there are conflicts. As a courtesy you should let the presenter and Andy know when you will be unable to attend.

Seminars. Attending seminars is one of the best ways of learning how (and how not) to give a scientific talk. Even if the topic of the seminar is outside of your research area, there is value in attending and seeing how others approach their science. Graduate students and postdoctoral researchers are expected to attend the weekly ESE seminar (regardless of topic) and other Division seminars if pertinent to your research or simply of interest. Each group member is responsible for following the seminar notices. Seminars of interest include: GPS Division seminar (Mondays 4.00pm), Planetary seminar (Tuesdays 4.00pm), ESE seminar (Wednesdays, 4.00pm), Geoclub (Thursdays, 4.00pm), Seismolab seminar (Fridays, 4.00pm), Fluid seminar (EAS, Tuesdays, 4.00pm).

Vacation. It is essential that everyone take breaks - this is an important part of maintaining one's health and wellbeing. Under Caltech policy, all employees are guaranteed two weeks of paid holiday leave in addition to Institute holidays (the Institute holidays are listed here). However, in our group this is a **minimum amount of vacation time**. If you feel that you need additional time off during the year, please take that time. If you are planning to take time off, please let Andy know ahead of time, and as a courtesy, please provide suitable notice to other group members who may be impacted by your absence (e.g. project collaborators, undergraduate/graduate students that you are mentoring, etc.). You should contact Andy if you are interested in working remotely. While the group is generally accommodating for short periods of remote work, and special circumstances where more extended periods are necessary, there are also benefits in being present for group meetings, seminars, visits from colleagues, etc.

Personal Emergencies. If you need time off for a personal emergency (i.e. family emergency, mental health emergency, physical health emergency), please contact Andy. There is no need to explain the situation in detail or share any personal information you do not wish to share - simply let him know that you have an emergency, and let him know once the emergency has passed.

Appendix A. Typical conferences, workshops, summer schools attended by the group

- AGU Ocean Sciences (even-numbered years, late-February)
- AGU Fall meeting (annually, mid-December)
- AMS Atmospheric and Oceanic Fluid Dynamics (AOFD), (even-numbered years, mid-June)
- AMS Polar Meteorology and Oceanography (even-numbered years, summer)
- Ocean Carbon and Biogeochemistry (OCB), (annually, June)
- Geophysical Fluid Dynamics Summer School (Woods Hole, application required, summer, 10-weeks)
- The Fluid Dynamics of Sustainability and the Environment (FDSE) (Cambridge/Paris in alternating years, application required, late summer, 2 weeks)
- Advanced Climate Dynamics Course (ACDC) (Norway, application required, summer)