

ACT Publication Policy
May 5, 2004; Last revised May 20, 2017

I. Introduction and Background

The Atacama Cosmology Telescope (ACT) Project aims to produce arcminute-resolution maps of the cosmic microwave background radiation intensity and polarization, and perform astronomical follow-up observations of objects discovered in the maps. Project funding through the NSF began January 1, 2004, with observing seasons in 2008, 2009, and 2010. Funding for ACTPol, an upgraded polarized receiver, began in 2009 with observing seasons in 2013, 2014, and 2015. Funding for the third-generation Advanced ACT began on September 1, 2015, with observing seasons in 2016 and anticipated for 2017, and 2018 with a third-generation multichroic polarized receiver.

The purpose of the ACT Publication Policy is to help ensure that ACT publications are accurate, and that people are fairly treated with regard to authorship and other credit. It is also the intent that team members work for the betterment of the project as a whole. While it is impossible to make a policy which anticipates every possibility, it is our intention to give recognition and acknowledgment to all contributors to the Project while ensuring that those who have given especially generously are especially recognized. This document therefore summarizes the rights and responsibilities of the ACT Board and the greater ACT Science Team.

This Policy applies throughout the time period during which ACT is funded to perform scientific observations, until the final data release, and to any related official ACT projects until their completion. All ACT data and analysis will be released to the public in a timely manner.

This Policy applies to publications defined in the broad sense of any release of ACT-related data or information to anyone outside the ACT Science Team, including press releases, popular and professional articles whether refereed or not, web sites, books, circulars, computer files, text, graphics, and lecture content and materials based on information not previously released.

The ACT Project is committed to producing and releasing microwave sky maps, with known systematic errors removed, along with full documentation of the instruments and data reduction process and software. The Project will compile and release associated galaxy cluster and point-source catalogs based on the microwave maps, perform basic scientific analyses of the data, and obtain related data in other wavebands. This Policy pertains only to the methods, instrumentation, and analysis for the mm-wave observations, astronomical follow-up observations based on the mm-wave data, and analyses combining ACT mm-wave data with external data sets at other wavelengths. Additional specific projects can be brought into the domain of this Policy by a vote of the Science Team. Other work loosely related to the Project, such as theoretical developments or stand-alone analyses of optical and X-ray observations, may be carried out independent of this policy. This policy, written by Arthur Kosowsky with significant input from Suzanne Staggs, Andrew Baker, Megan Gralla, and other members of the ACT collaboration, was originally adapted from the publication policy for the WMAP project, written by Charles Bennett. The WMAP policy in turn was adapted from the publication policy for COBE, written by Rainer Weiss.

II. The ACT Guiding Board

The Guiding Board (the “Board”) currently consists of the following people: Mark Devlin (University of Pennsylvania), Jo Dunkley (Princeton), Rolando Dünner (Catolica), Jack Hughes (Rutgers), Kent Irwin (Stanford/SLAC), Arthur Kosowsky (University of Pittsburgh), Jeff McMahon (University of Michigan), Mike Niemack (Cornell), Lyman Page (Princeton), David Spergel (Princeton), and Suzanne Staggs (Princeton). This group will be referred to as the Guiding Board or the ACT Board. The term “ACT Science Team” or ACT Team will refer to the Guiding Board plus the other members of the ACT collaboration with a scientific interest in the Project. The Guiding Board shall have the authority to add additional members to the Science Team as it deems necessary. The Board shall consult with the Science Team before adding any new members above the post-doctoral level. Suzanne Staggs is the Principal Investigator and Director of the ACT project; Mark Devlin is the Deputy Director. David Spergel is the Analysis Leader and Lyman Page is the Project Scientist.

III. Responsibilities of the Principal Investigator

The Principal Investigator, with the support of the Project Scientist, shall:

- (A) Receive and share progress reports from team members on their tasks and facilitate communication among members of the Science Team.
- (B) Ensure that the established publication review procedures given below are followed in a timely manner.
- (C) Keep records of people who have access to ACT data and information.
- (D) Decide disputes or disagreements among members of the ACT Science Team related to the interpretation or implementation of any policies outlined in this document.

IV. Responsibilities of the ACT Board

The ACT Guiding Board shall:

- (A) Guarantee the accuracy of all data, information, and publications about ACT prior to their public release. To fulfill this responsibility, the Board shall review all publications and publicly presented materials prior to presentation or submission for publication, as described below under the heading of Publications and Lecture Materials Clearance. In this case “public” means both the general public and the scientific community outside the ACT Project.
- (B) Guarantee that the text, authorship, and references and acknowledgment lists of each publication fully and fairly represent all contributions made to the publication, consistent with this Policy document.
- (C) Decide any issues of disputed credit or authorship. The Board will approve all proposed ACT scientific paper topics and assign lead authors to ACT scientific publications in cases of dispute.
- (D) Review all requests from ACT team members to add additional collaborators or observational programs to the ACT Project. The Board also shall have the authority to remove a member from the collaboration for cause.
- (E) Review all publications relating to ACT data prior to the publication release.
- (F) Maintain a repository of approved topics and materials for use in presentations by team members.
- (G) If the need arises, the ACT Board may appoint a publication committee which will fulfill the role of the Guiding Board regarding publications.

V. Responsibilities of the ACT Team

The ACT team shall:

- (A) Carry out specific investigations and write specific publications in accord with tasks assigned by the P.I., with resources and schedules determined in negotiation of subawards with the institution of the team member(s).
- (B) Post copies of technical and scientific reports on the ACT web site and notify the rest of the Science Team and Board of their presence.
- (C) Notify the Board of intended or proposed investigations or publications, and of any proposed additions to the ACT team. Members of the team shall not imply that any outside person will be accepted as an ACT Team member prior to a decision by the Board.
- (D) Show and explain this Policy to both present and potential collaborators, students, and contractors. Obtain their agreement with the policy, as well as their commitment to provide specific assistance or products, prior to giving them access to actual ACT data or information.
- (E) Obtain approval from the Board prior to giving access to ACT data or information to collaborators, students, and contractors.
- (F) Notify the P.I. promptly of the names of any collaborators, students, and contractors to whom data and/or information have been made available. This information should also be posted on the web.
- (G) Protect ACT data from unauthorized use, including protecting computer files and passwords.

(H) Insure that talks or presentations do not use any ACT-related materials which have not been approved for release, including technical specifications, data, or analysis. All approved materials will be available on the web. Upon approval from the Board, the first authors shall send the Science Team a brief abstract, inviting collaboration. The Board’s approval will be contingent on timely progress on the work; when a year or more passes with no progress reported, the proposed publication may be reviewed again. The Board may also suggest additional first authors based on the work’s progress.

(I) Submit proposed publications and proposed primary authors (see VI(C) below) to the Board for approval prior to initiating the writing. The Project Scientist will maintain and update a list of approved publications, posted on the internal ACT website. Upon maintain In the interests of fairness and efficiency, a team member can serve as the primary author on only one ACT publication in preparation at a time, unless no other team member is interested in being primary author for a particular publication.

The team members may:

(J) Have access to the archive data from the ACT telescope and from associated astronomical surveys.

(K) Speak publicly about ACT and its data, providing the ACT-related content of the talk has been approved for release, as described below. Team members must notify the rest of the Team about all talks which discuss ACT-related content and post talk dates, titles, and locations on the web site.

(L) Write articles for publication, and submit them for publication following the reviews and approvals described in this Policy.

(M) Make agreements with other team members to collaborate on articles or research projects.

(N) Collaborate with outside co-authors on topics related to ACT with approval of the Board.

Team members may not:

(O) Make any unilateral agreement guaranteeing a student or anyone else an exclusive right to a research topic or authorship of an article based on ACT data or on restricted ACT information. Any such proposed agreement must be presented to the Board for prior approval.

VI. Credit and Authorship

(A) ACT papers are designated as either “opt-out” or “opt-in” papers. Opt-out papers are generally the first paper from a new instrument, or papers of broad and general interest where acknowledgment of all contributions of any size to the ACT effort is appropriate. The opt-out author list will include all ACT contributors to the data on which the paper is based, whether direct or indirect. If a proposed author does not feel they have made sufficient contributions to warrant inclusion on the list or does not want to be included for any other reason, they can remove their names by request prior to the paper submission. “Opt-in” papers will include an author list restricted to those ACT collaborators who specifically request authorship after reviewing the paper draft.

(B) Any Team member who writes or contributes substantially to work leading to the publication and has reviewed the publication shall be included in the authorship list, if that person so chooses, subject to the general review and approval processes described in this Policy.

(C) The default author ordering policy for ACT papers is that one primary author, or a small group of untenured contributors (typically up to four) will be listed first, followed by the other authors in alphabetical order. Tenured (or equivalent) collaborators shall be named in the alphabetical list. The Board shall have the authority to approve alternative authorship ordering proposed for specific papers if a strong reason is presented. Any disputes shall be decided by the Board.

(D) Anyone who is listed as an author of a publication must read and review the entire publication within two weeks of its being posted on the ACT web site for review.

(E) Students, collaborators, software contractors, engineers and managers may be co-authors of scientific publications provided that they contributed in a long-term sustained and significant manner to the ACT effort. The co-authorship is to be decided by the Board based on these conditions. Such co-authors may also speak publicly about ACT provided that they use approved lecture materials.

(F) The Board shall have the authority to remove a name from the author list of any particular paper in the event that the person in question has not made a substantial contribution to any part of the work on which the publication depends, or has not met the obligations stated in this document.

(G) Data collected by the ACT project will be made publicly available in a timely manner. Once data become public, ACT Team members continue to be bound by the restrictions outlined in this document in relation to the newly-public data for six months. After a period of six months, ACT Team members may use the public ACT data in publications without approval by the Board. However, all ACT Team members are encouraged to offer co-authorship to all appropriate ACT members of any publications using ACT data beyond this six-month period and to report plans for such publications to the Board, as described in V (I) above. Team members are required to present to the ACT team a draft of any publication using ACT data beyond this six-month period, at least one week prior to submitting the work for publication or making it public on a web site or other medium.

VII. Membership on Outside Collaborations

Members of the ACT collaboration may accept invitations to participate in other collaborations with similar science goals. Any member of the ACT collaboration considering accepting such an invitation must notify the ACT Board and describe how their commitments to ACT will be impacted. The ACT member may not discuss non-public ACT information with the other collaboration, including plans and status, without permission from the Board. The ACT member must obtain permission from the Board prior to using any non-public code originally written for ACT for purposes of the other collaboration.

Joint collaboration membership may lead to potential conflicts of interest, and the ACT collaboration member must promptly bring any conflict to the attention of the Board. Conflicts of interest include any situation where advancing the interests of the outside collaboration would negatively impact the ACT collaboration. This might include, for example, allocation of limited resources or observing time, conference talk invitations to publicize one collaboration and not the other, policies of the outside collaboration which would impinge on the collaborator's work for ACT, or undue demands on the collaborator's time which prevents them from meeting ACT responsibilities.

VIII. Procedures for Follow-Up Observations

To facilitate obtaining observing time on external instruments for follow-up observations of sources discovered in ACT data, it may be beneficial for ACT collaborators to participate in joint observing proposals with people external to ACT. The following provisions apply to such observing proposals with participation by members of the ACT Collaboration.

(A) Any point source paper that depends only on ACT data, existing public data, and/or follow-up observations that were obtained exclusively by ACT members will follow the general ACT publication policy.

(B) For follow-up observations of unpublished ACT sources, the coordinators will have the latitude to arrange collaborations to propose or pursue these observations without a specific Memorandum of Understanding as long as the following conditions are satisfied:

1. ACT collaborators are notified as soon as a new externally collaborative follow-up proposal is submitted for review by a time allocation committee and as soon as that proposal is accepted or rejected.
2. Before any external collaboration is finalized, ACT collaborators will be given the opportunity to comment on its objective, scope, and membership.
3. External collaborators will only have access to relevant source catalog data, and will not be allowed to publish or pursue additional follow-up of ACT point sources on their own, until these sources become public.
4. Papers resulting from observations including external collaborators must undergo the same process of internal ACT review as all other papers before they are submitted for publication. Follow-up alerts for time-variable sources sent via mechanisms such as the Astronomer's Telegram or the Gamma-ray Coordinate Network are exempt from this requirement, provided that they result from previously approved analyses.
5. Coauthorship on papers resulting from external collaborations will be offered to all ACT collaborators in accordance with this publication policy. The ACT policy on author order may be waived if necessary to secure an agreement for external collaboration.

(C) For collaborative observations following up published ACT point source samples, the coordinators will endeavor to follow as closely as possible the above guidelines for unpublished point source samples.

IX. Publications and Presentation Materials Clearance

(A) Publications, lecture materials, press releases, and other public presentations describing instrument-specific hardware, observing plans, and non-public data and its interpretation, must be approved.

(B) Publications and press releases derived from ACT data shall be reviewed by all members of the Board for accuracy, fairness, and presentation. Any such release must be posted to the web site for the Science Team to review. Authors must allow two weeks for the necessary reviews.

(C) To facilitate preparation of talks and lectures, the Project will maintain an on-line archive of approved materials, both graphics and text, available to ACT team members. Beyond their use in talks and lectures, these materials may not be released to outsiders without Board approval. Purely cosmetic changes to previous presentations may be made without further approval.

(D) Team members shall avoid talking about subjects not already approved in interviews with news organizations or in conversations with colleagues outside the ACT Team.