



Atlantic Cooperative Telemetry Network

ACT_MATOS database User Agreement and Data Policy Version 1.2

This is the formal ACT_MATOS user agreement and data policy based on the FACT User Agreement Version 1.1, which was accepted by FACT users after an open comment period and was last updated: 8 March 2018. MATOS version 1.1 was discussed at the 2019 Mid-Atlantic Telemetry Workshop and finalized 10 May 2019. Version 1.2 involves minor changes related to the integration of the ACT Network and MATOS data management efforts on April 1, 2020. Contact ACT Network Coordinator Matt Ogburn (ogburnm@si.edu) or the ACT Network Data Manager Kim Richie (east.coast.telemetry@gmail.com) if you have questions or comments regarding this agreement.

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1. Background

The ACT Network is a grassroots collaboration of researchers and partners using telemetry to resolve the life history of aquatic animals. Conceived in 2004 as a means of sharing acoustic telemetry data to facilitate tracking coastal fish and other species along the Atlantic coast of North America, it has expanded rapidly in geographic scope, membership, and number of species studied. MATOS (formerly the Mid-Atlantic Acoustic Telemetry Observation System) was developed separately as the mid-Atlantic regional node of the US Animal Telemetry Network. On 1 April 2020, the ACT and MATOS efforts were combined and the ACT_MATOS database node of the Ocean Tracking Network, also known as the ACT Network database, provides support to ACT Network researchers in sharing and archiving acoustic telemetry data.

The strength of the ACT Network is derived from the collaboration of our members. Due to our commitment to sharing data while protecting privacy and growing the network by welcoming new members, the ACT Network is fostering a community of researchers and furthering marine-related sciences and management.

2. Definitions and Acronyms

ACT Network Atlantic Cooperative Telemetry Network

ACT Node (ACT_MATOS) Data means the Unrestricted Data and the Restricted Data stored in the ACT_MATOS Database, but does not infer ownership.

ACT Network Steering Group means a representative body comprised of ACT_MATOS users working to manage and advance the ACT_MATOS Database and Portal for the ACT community.

ACT_MATOS Database Node means the instruments and systems that store and make accessible the information lodged with the ACT Network.

ACT_MATOS Portal means the website (matos.asascience.com) that enables users to upload data for processing into the database.

ACT_MATOS Users means those individuals who have agreed to this ACT_MATOS User Agreement and Data Policy with a registered account on the web portal (matos.asascience.com).

ACT_MATOS Portal User Types:

- i. **Investigator** – Principal investigator of ACT_MATOS project(s), Array Owners, Array Collaborators, Tag Owners, Tagging Collaborators. Investigators set up and maintain project page(s), set sharing permissions on data types, approve data sharing requests, and manage ring of users approved to download restricted data.
- ii. **Technician** – Person(s) responsible for preparation, operation and/or maintenance of shipboard, laboratory or deployed scientific instrumentation, but has no scientific interest in the data returned by that instrumentation
- iii. **Researcher** – Person(s) who may use/analyze the data to answer research questions, but is not the project lead. Can be a student if their involvement spans past the completion of an academic degree.

- iv. **Student** – Person(s) researching as part of a project in their work towards an academic degree.

Array Collaborators and Array Owners means those parties who deploy, maintain, and retrieve data from receivers.

ATN Animal Telemetry Network of the United States

Data Manager means the person appointed by the ACT Network steering group to manage ACT_MATOS Data.

Data Use Agreement means the agreement entered into between ACT_MATOS users and MARACOOS or other person which sets out the process through which ACT_MATOS Data may be accessed.

FACT Network South Carolina to the Caribbean Telemetry Network, a connected node

iTAG Integrated Tracking of Aquatic Animals in the Gulf of Mexico

MARACOOS Mid-Atlantic Regional Association Coastal Ocean Observing System

MIGRAMAR Marine Research and Conservation Network in Eastern Pacific, a connected node.

OTN Ocean Tracking Network, a global telemetry infrastructure and data management platform, manages several connected nodes, assists other organizations with data management systems.

Regional Data Node means a repository of region-specific data formed on an ad-hoc basis by OTN collaborators.

Restricted Data means the data which Tagging and Array Collaborators have submitted to the ACT_MATOS Database on the condition that access to that data is restricted in accordance with Section 5 of this policy.

Tagging Collaborators and Tag Owners means those parties who oversee the tagging of marine life and provision of the data.

Unrestricted Data means all ACT_MATOS Data that is not Restricted Data.

3. Data Collection

a) Tagging Collaborators must also participate in ACT_MATOS as an Array Collaborator. Much of the effort in conducting acoustic telemetry projects is spent on the maintenance and downloading of receivers in the field, an activity requiring substantial cost and time of personnel.

b) Array Collaborators must also participate in ACT_MATOS as a Tagging Collaborator to use detection data in accordance with Section 7.

c) If a Tagging Collaborator is unable to deploy receivers, the Tagging Collaborator must contact Array Owners in the proposed study area (with assistance from the ACT_MATOS Data Manager if needed) and agree upon a mutually beneficial arrangement. For example, Tagging Collaborators may devote time or personnel to help download receivers for the Array Collaborator.

d) Dual participation as a Tagging and Array Collaborator, or arrangements between Tagging and Array Collaborators, benefits the ACT Network by maximizing the value of investments in acoustic telemetry research and avoid potential conflicts that may arise in areas of shared interest.

4. Data Submission

a) Array and Tagging Collaborators are responsible for ensuring that data are uploaded in accordance with predefined ACT_MATOS standards and submitted in a timely fashion, but at least twice a year.

b) Array and Tagging Owners and Collaborators will upload their data to their designated project page via the ACT_MATOS Portal (matos.asascience.com). Projects are initially private by default, and multiple privacy levels are available as detailed in Section 5.

c) Array and Tagging Owners and Collaborators will inform the Data Manager of any errors, inaccuracies or necessary updates with respect to data that have been uploaded to ACT_MATOS as soon as possible after becoming aware of such issues.

d) Array and Tagging Owners and Collaborators will provide project metadata via the ACT_MATOS Portal at the initiation of the project, by creating a project page filling out all required data

e) On retrieval and downloading of a receiver, Array Owners and Collaborators will provide operational metadata along with raw instrument files (.vrl files preferred).

f) On deployment of a tag, Tagging Owners and Collaborators will provide tag metadata.

g) Oceanographic observation data are to be submitted to the MARACOOS portal. (Initial planning is currently underway to identify the appropriate mechanism for data submission).

5. Restricted Data Submission

a) Array and Tagging Collaborators are entitled to require access to the data which they upload to ACT_MATOS initially be restricted to only individuals who are approved by project principal investigators in their sole discretion (hereinafter referred to as Restricted Data).

I. Level of Project Sharing Permission per user:

- i. Project Detail: only able to edit project details
- ii. Data Submission: only able to submit data to project
- iii. Data Exports: able to submit/download restricted data

b) Tagging Collaborators are entitled to specify that the Restricted Data will not become Unrestricted Data until a desired date, but preferably within four years of the project end date, or last tag expires, whichever is longest. Tagging Collaborators also have the option to make tag data publicly available in the ACT_MATOS Portal.

c) Tagging Collaborators who wish to have the restricted access period extended for a period longer than what was agreed to, may request an extension from the Data Manager. Extension decisions will be made by majority vote of the ACT Network Steering Group.

d) Array and Tagging Collaborators are entitled to specify partial or modified release of Restricted Data to become Unrestricted Data. Note that this applies to official release of datasets under 5b and 5c above. Investigators also have the option to make projects public on the ACT_MATOS website, but the current version of the website does not have the capability of partial release.

e) Data access within ACT_MATOS Portal: Determines which users have the ability to see tag detection/receiver metadata in the mapping/search tool. Ability to search tags within that project and download detection data associated with a tag, but not able to download all associated tag metadata within project.

- I. All Public: anyone (ACT_MATOS Portal account not needed)
- II. Only Researchers: Visible to all ACT_MATOS Researchers
- III. Only Investigators: Visible to all ACT_MATOS Investigators
- IV. Only Custom Users: Visible only to ACT_MATOS account holders specified by the Project Investigator. Can add custom user who is not registered to ACT_MATOS. An account will be created and ACT data manager will provide account login details once new user has agreed to terms of this agreement.

6. Access to ACT Network (ACT_MATOS) Data

The following are the processes for accessing ACT_MATOS data:

a) Unrestricted access

- I. Unrestricted access to ACT Network data is through ACT_MATOS, ERDDAP, Geoserver, the Animal Tracking Network Data Assembly Center, FACT Network, and Ocean Tracking Network data portals.

b) Restricted Data

- I. Those who wish to access ACT_MATOS data other than what is provided via matos.asascience.com will be asked to become an ACT_MATOS user and provide registration information including, but not limited to full name, affiliation, electronic mail address and intended purpose for accessing the Restricted Data. Unless a special exemption is made, access to data will only be granted for the Tag Owner.
- II. Those who wish to access records from the ACT Network Database regarding individual receiver locations (coordinates) and precise time and date of tag detections for a given

tag ID which they have released, will be asked to provide release metadata to be incorporated into the database so future detections may be assigned to the tag ID. If they choose not to provide release metadata, detection data may still be released with the permission of the Array Owner(s).

- III. Registered users will be required to agree to terms and conditions of use relating to the ACT_MATOS Portal prior to receiving a confidential username and password by which they can access the ACT_MATOS Portal.
- IV. Any registered user who wishes to access Restricted Data and is not named on the project page submitted by the project owner, must obtain the consent of the ACT_MATOS user who submitted the Restricted Data, which consent shall be provided directly from the ACT_MATOS user to the Data Manager in a manner satisfactory to the ACT Network. Once consent has been received from the ACT_MATOS user who submitted the Restricted Data, access shall be provided on the terms set by the granting ACT_MATOS user.
- V. All persons accessing Restricted Data will include a pre-formed attribution to the ACT Network and ACT_MATOS in Acknowledgements in all publications and appropriate citations for all publications which use ACT_MATOS data. Publications with ACT Network and ACT_MATOS attributions shall be forwarded to the Data Manager.

7. Use of ACT_MATOS Data

- a) All individuals who access ACT_MATOS data shall provide attribution to all Data Providers and the ACT Network if ACT_MATOS data are used in a publication, product, or commercial application.
- b) Telemetry data, including tag metadata and detection data, by default are considered owned by the ACT_MATOS user who deployed the tag.
- c) ACT_MATOS users must abstain from publishing any data on tags they did not deploy, unless the tag owner provides consent.
- d) If an ACT_MATOS user cannot state certain conclusions but for the detection data provided by another ACT_MATOS user, both parties must agree on a suitable level of attribution, including but not limited to, co-authorship and acknowledgement mentions.
- e) ACT_MATOS users are entitled to produce non-published reports including grant updates, on all data collected by their receivers, including tags they did not deploy. Non-published reports may only include basic information on tags which they did not deploy, such as the number and species detected with basic summary data such as the number of detections. Non-published reports must follow proper tag owner attribution as stated in 7.a above.

f) ACT_MATOS user data may be used in informational material for the ACT Network (www.theactnetwork.com) or ACT_MATOS (matos.asascience.com) websites or OTN (<https://oceantrackingnetwork.org/>) or social media accounts (Twitter: @ACTtelemetry). Consent of the ACT_MATOS user is required for use of all information except:

- I. Receiver location (for map making – map zoom is fixed at minimal zoom on the ACT_MATOS website to show only the general location),
- II. Number, types and species of animals tagged,
- III. Project information including description and a point of contact.

g) All individuals who access ACT_MATOS Data agree and acknowledge that neither the ACT Network including the Coordinator and Data Manager, MARACOOS, nor the Data Provider is liable for any inaccuracies in ACT_MATOS data.

h) All users for ACT_MATOS Database are responsible for investigating and understanding the limitations of the data.

i) All registered users of ACT_MATOS Data are required to report all problems with respect to ACT_MATOS Data to the Data Manager.

8. Data Exchange Among Regional Data Nodes

a) Projects (including tag and receiver metadata) of ACT_MATOS users will be mirrored with Regional Data Nodes for the purposes of tag matching. Projects of non-ACT_MATOS members will be mirrored with ACT_MATOS for the purposes of tag matching.

b) Mirrored projects are not the property of the node with which they are mirrored and are subject only to the rules of data submission and access of the Parent Node.

c) If detection data from a ACT_MATOS user are matched to non-ACT_MATOS member tags, the detection data will be shared with the non-ACT_MATOS project in the appropriate Regional Data Node.

d) If detection data from a non-ACT_MATOS member are matched to ACT_MATOS user tags, the detection data will be shared with the appropriate project in ACT_MATOS.

e) Use of detection data will follow the rules set forth by the node of which the tag owner is a member.

9. Data Exchange Outside Regional Data Nodes

a) ACT_MATOS users may disperse their data to a researcher outside of ACT_MATOS: however, each ACT_MATOS user will also direct outside researchers seeking access to ACT_MATOS Data to the Data Manager.

b) The Data Manager will attempt to resolve unmatched tags twice a year by providing the full tag identifier, date and general location of detection, and contact information of the array owner to Innovasea, FACT and OTN.

10. References

The Ocean Tracking Network (OTN) Data Policy: <https://members.oceantrack.org/data/policies/otn-data-policy-2018.pdf>

The FACT Network Data Policy: <https://secoora.org/fact/resources/fact-user-agreement/>