**Animal Tracking - Report templates**

This document contains information to produce reports for the following sub-facilities: Animal Tracking – acoustic tagging, Animal Tracking satellite tagging, and Animal Tracking Biologging.

Number of data reports: 10.

# 1. Acoustic tagging

## 1.1 Data summary – Detections by project

### Filename: ‘AnimalTracking\_AcousticTagging\_Summary\_Project’

### Description: ‘Data summary – Detections by project’

View to use:

|  |  |
| --- | --- |
| **Server** | dbprod.emii.org.au |
| **Database** | harvest |
| **Schema** | reporting |
| **View** | aatams\_acoustic\_project\_data\_summary\_view |

Filters: None, all filters have already been applied.

Data sorting options: None, data are already sorted by.

Data grouping options: Group by ‘funding\_type’.

Total: Calculate the total number of projects, installations, receiving stations, receivers deployed, animal releases, and detections for each type of funding. *Use the following view: ‘totals\_view’; filter by: ‘facility’ = ‘AATAMS’, ‘subfacility’ = ‘Acoustic tagging - Project’.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **IMOS receiver pool** | **IMOS funded and co-invested** | **Fully co-invested** | **TOTAL** |
| ***Total number of projects (‘no\_projects’)*** |  |  |  |  |
| ***Total number of installations (‘no\_platforms’)*** |  |  |  |  |
| ***Total number of receiving stations (‘no\_instruments’)*** |  |  |  |  |
| ***Total number of receivers deployed (‘no\_deployments’)*** |  |  |  |  |
| ***Total number of animal releases (‘no\_data’)*** |  |  |  |  |
| ***Total number of detections (‘no\_data2’)*** |  |  |  |  |

Below the above table list the following totals:  
 ***Other statistics:*** *Use ‘aatams\_acoustic\_stats\_view’; filter by: ‘type’ = ‘Project’, where statistics\_type = …*  ***Number of projects for which no receiver was deployed and no tag was released (‘Number of projects with no installation or release’): XX***  ***Number of projects for which receivers were deployed but no detection has been uploaded to the database (‘Number of projects with installations but no detection’): XX***  ***Number of protected projects (‘Number of protected projects’): XX***  
  ***Number of projects for which receivers have been deployed during the past year (‘Number of projects with receiver deployments during the past year’): XX***

Footnote: **Headers**: Type of funding.  
**# installations**: Total number of installations. An installation is a configuration of multiple receivers generally identified by a geographic location.   
**# stations**: Total number of receiving stations. A receiving station is a location within an installation where a receiver is deployed.  
**# deployments**: Total number of receiver deployments.   
**# releases:** Total number of animals released under each project’s name.  
**# transmitters**: Number of transmitters detected at a given receiving station.  
**# detections:** Total number of tag detections received by project.  
**% unregistered transmitters**: Number of unregistered transmitters detected at a given receiving station as a percentage of the total number of transmitters (*i.e.* % unregistered transmitters = .  
**% unregistered detections:** Number of detections of unregistered tags at a given receiving station as a percentage of the total number of detections (*i.e.* % unregistered detections = .  
**Last deployment**: Last receiver deployment date (format: dd/mm/yyyy).  
**Last detection**: Latest detection date (format: dd/mm/yyyy).  
**# years of data**: Number of years between the earliest and latest detection dates.  
**Animal Tracking Facility:** <http://imos.org.au/animaltracking.html>; web app: <https://aatams.emii.org.au/aatams/>.

### Template

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **project\_name** | **no\_installations** | **no\_stations** | **no\_deployments** | **no\_releases** | **no\_transmitters** | **no\_detections** | **prop\_unreg\_transmitters** | **prop\_unreg\_detections** | **latest\_deployment\_date** | **end\_date** | **coverage\_duration** |
| Project name | # installations | # stations | # deployments | # releases | # transmitters | # detections | % unregistered transmitters | % unregistered detections | Last deployment | Last detection | # years of data |
| Headers = funding\_type | | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |

## 1.2 Data summary – Detections by species

### Filename: ‘AnimalTracking\_AcousticTagging\_Summary\_Species’

### Description: ‘Data summary – Detections by species’

View to use:

|  |  |
| --- | --- |
| **Server** | dbprod.emii.org.au |
| **Database** | harvest |
| **Schema** | reporting |
| **View** | aatams\_acoustic\_species\_data\_summary\_view |

Filters: None, all filters have already been applied.

Data sorting options: None, data are already sorted.

Data grouping options: Group by ‘registered’.

Total: Calculate the number of species, animals and tags released, along with the corresponding number of detections. Also calculate how many of these are public, currently embargoed, currently embargoed for 1, 2, 3, or more than 3 years, and add the following lines to the report. *Use the following view: ‘aatams\_acoustic\_embargo\_totals\_view’.*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | ***Total number of releases/detections (‘total’)*** | ***Number of releases/detections that are public (‘total\_public’)*** | ***Number of releases/detections currently embargoed (‘total\_embargo’)*** | ***Currently embargoed for 1 year (‘embargo\_1’)*** | ***Currently embargoed for 2 years (‘embargo\_2’)*** | ***Currently embargoed for 3 years (‘embargo\_3’)*** | ***Currently embargoed for more than 3 years (‘embargo\_3\_more’)*** |
| ***Species*** |  |  |  |  |  |  |  |
| ***Animals*** |  |  |  |  |  |  |  |
| ***Tags*** |  |  |  |  |  |  |  |
| ***Detections*** |  |  |  |  |  |  |  |

Below the above table, calculate the number of tags and detections for registered and unregistered tags. *Use the following view: ‘aatams\_acoustic\_registered\_totals\_view’.*

|  |  |  |  |
| --- | --- | --- | --- |
|  | ***Number of times detected (‘no\_times\_detected’)*** | ***Number of tags (‘no\_transmitters’)*** | ***Number of detections (‘no\_detections’)*** |
| ***Registered tags*** | 0 |  |  |
| 1 |  |  |
| > 1 |  |  |
| **Subtotal** |  |  |
| ***Unregistered tags*** | 1 |  |  |
| > 1 |  |  |
| **Subtotal** |  |  |
|  | **Total** |  |  |

Below the above table list the following totals:  
 ***Other statistics:*** *Use ‘aatams\_acoustic\_stats\_view’; filter by: ‘type’ = ‘Species’, where statistics\_type = …*  ***Number of detections for registered tags that are public (‘no detections for registered tags that are public’): XX***  ***Number of detections with species information (‘no detections at species level’): XX***  ***Number of detections with species information that are public (‘no public detections at species level’): XX***  
  ***Number of unique tag IDs detected (‘no unique tag ids detected’): XX*** ***Number of unique tag IDs registered in the Animal Tracking database (‘no unique registered tag ids’): XX***  ***Number of unique tag IDs detected that are registered in the Animal Tracking database (‘no unique tag ids detected that aatams knows about’): XX***  ***Number of tags detected by species (‘tags detected by species’): XX***

Below the above totals put in the embargo plot for the current month, located at emiiSheryl/eMII\_data\_report/AATAMS\_EmbargoPlots/EmbargoPlot\_***TodaysDate***.jpeg

Footnote: **# transmitters**: Number of transmitters deployed.  
**# releases**: Number of animal releases.  
**# embargoed releases**: Number of embargoed releases.  
**# releases with detections**: Number of released animals that have been detected.  
**# releases with location**: Number of animal releases for which capture/release latitude and longitude coordinates are available.  
**# protected**: Number of transmitters that are part of a protected project.  
**# detections:** Total number of detections.  
**# public detections:** Total number of public detections. **First detection**: Date at which the first tag detection occurred (format: dd/mm/yyyy).  
**Last detection**: Date at which the last tag detection occurred (format: dd/mm/yyyy).  
**# days of data (range)**: Number of days between the first and last detection for each animal released (minimum – maximum).  
**Animal Tracking Facility:** <http://imos.org.au/animaltracking.html>; web app: <https://aatams.emii.org.au/aatams/>

### Template

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **common\_name** | **no\_transmitters** | **no\_releases** | **no\_embargo** | **no\_releases\_with\_location** | **no\_protected** | **latest\_embargo\_date** | **total\_no\_detections** | **no\_detections\_public** | **earliest\_detection** | **latest\_dection** | **no\_data\_days** |
| Common name | # transmittters | # releases | # embargoed releases | # releases with location | # protected | Latest embargo date | # detections | # public detections | First detection | Last detection | # days of data (range) |
| Headers = registered | | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |

## 1.3 Data report – all projects and receiving stations

### Filename: ‘AnimalTracking\_AcousticTagging\_allProjects’

### Description: ‘All projects and receiving stations’

View to use:

|  |  |
| --- | --- |
| **Server** | dbprod.emii.org.au |
| **Database** | harvest |
| **Schema** | reporting |
| **View** | aatams\_acoustic\_project\_all\_deployments\_view |

Filters: None, all filters have already been applied.

Data sorting options: None, data are already sorted.

Data grouping options: Group by ‘project\_name’, sub-group by ‘installation\_name’.

Footnote: **Headers**: Names of acoustic tagging project.  
**Sub-headers**: Names of acoustic tagging installation. An installation is a configuration of multiple receivers generally identified by a geographic location  
**Station code**: Code attributed to a receiving station. A receiving station is a location within an installation where a receiver is deployed.  
**# deployments**: Number of receiver deployments at a given receiving station.  
**# transmitters**: Number of transmitters detected at a given receiving station.  
**# detections:** Number of detections at a given receiving station.  
**# unregistered transmitters**: Number of unregistered transmitters detected at a given receiving station.  
**# unregistered detections:** Number of detections of unregistered tags at a given receiving station. **Last deployment**: Last receiver deployment date (format: dd/mm/yyyy).  
**Last detection**: Last detection date (format: dd/mm/yyyy).  
**# days of data**: Number of days between the first and last detection dates.  
**Animal Tracking Facility:** <http://imos.org.au/animaltracking.html>; web app: <https://aatams.emii.org.au/aatams/>.

### Template

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **station\_name** | **no\_deployments** | | **no\_transmitters** | **no\_detections** | **no\_unreg\_transmitters** | **no\_unreg\_detections** | **last\_deployment\_date** | **end\_date** | **coverage\_duration** |
| Station code | # deployments | | # transmitters | # detections | # unregistered transmitters | # unregistered detections | Last deployment | Last detection | # days of data |
|  | | Headers = project\_name | | | | | | | |
|  | | Sub-headers = installation\_name | | | | | | | |
|  |  | |  |  |  |  |  |  |  |

## 1.4 Data report – All species and animals released

### Filename: ‘AnimalTracking\_AcousticTagging\_allSpecies’

### Description: ‘All tags detected during the past year’

View to use:

|  |  |
| --- | --- |
| **Server** | dbprod.emii.org.au |
| **Database** | harvest |
| **Schema** | reporting |
| **View** | aatams\_acoustic\_species\_all\_deployments\_view |

Filters: List all data for which ‘last\_detection’ is less than one year old.

Data sorting options: None, data are already sorted.

Data grouping options: Group by ‘registered’, sub-group by ‘common\_name’.

Footnote: **Headers**: Transmitter registration status.  
**Sub-headers**: Species common name.  
**Transmitter ID**: Tag code space and ID number.  
**Tag ID**: Internal tag ID indicative of registration status.  
**Release ID**: Animal release ID indicative of tag deployment.  
**Release location**: Are capture/release latitude and longitude coordinates available?  
**Embargo date**: Date from which data has been/will be made public.  
**Protected**: Is the transmitter and its detections part of a protected project?  
**# detections:** Total number of tag detections received and stored at a given receiving station. **First detection**: First detection date (format: dd/mm/yyyy).  
**Last detection**: Last detection date (format: dd/mm/yyyy).  
**# days of data**: Number of days between the first and last detection dates.  
**Animal Tracking Facility:** <http://imos.org.au/animaltracking.html>; web app: <https://aatams.emii.org.au/aatams/>.

### Template

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **transmitter\_id** | **tag\_id** | **release\_id** | **releaselocation\_info** | **embargo\_date** | **is\_protected** | **no\_detections** | **first\_detection** | **last\_detection** | **coverage\_duration** |
| Transmitter ID | Tag ID | Release ID | Release location | Embargo date | Protected | # detections | First detection | Last detection | # days of data (days) |
| Headers = registered | | | | | | | | | |
| Sub-headers = common\_name | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |

# 2. Satellite tagging

## 2.1 Data summary

### Filename: ‘AnimalTracking\_SatelliteTagging\_Summary’

### Description: ‘Data summary’

View to use:

|  |  |
| --- | --- |
| **Server** | dbprod.emii.org.au |
| **Database** | harvest |
| **Schema** | reporting |
| **View** | aatams\_sattag\_data\_summary\_view |

Filters: None, all filters have already been applied.

Data sorting options: None, data are already sorted.

Data grouping options: Group by ‘data\_type’, sub-group by ‘species\_name’.

Total: Calculate the total number of satellite tagging programs, species tagged, tag types, tags deployed, CTD profiles and individual measurements collected. Also compute the temporal, latitudinal, longitudinal, and depth range of those data. *Use the following view: ‘totals\_view’; filter by: ‘facility’ = ‘AATAMS’, ‘subfacility’ = ‘Biologging’*, and ‘no\_projects’ IS NOT NULL.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Near real-time CTD data** | **Delayed mode CTD data** | **TOTAL** |
| ***Total number of satellite tagging programs (‘no\_projects’)*** |  |  |  |
| ***Total number of species equipped with satellite tags (‘no\_platforms’)*** |  |  |  |
| ***Total number of different tag types deployed (‘no\_instruments’)*** |  |  |  |
| ***Total number of animals equipped with satellite tags (‘no\_deployments’)*** |  |  |  |
| ***Total number of CTD profiles (‘no\_data’)*** |  |  |  |
| ***Total number of individual measurements (‘no\_data2’)*** |  |  |  |
| ***Temporal range (‘temporal\_range’)*** |  |  |  |
| ***Latitudinal range (‘lat\_range’)*** |  |  |  |
| ***Longitudinal range (‘lon\_range’)*** |  |  |  |
| ***Depth range (‘depth\_range’)*** |  |  |  |

Footnote: **Headers**: Data type.  
**Sub-headers:** Species common name.  
**‘Campaign name’**: Name of satellite tagging program. All tags deployed under the same campaign have the same software configuration.  
**‘# animals’**: Total number of animals equipped with satellite tags.   
**‘# CTD profiles’**: Total number of CTD profiles relayed. SMRU CTD tags relay both temperature and salinity profiles while SMRU SRDL tags only relay temperature profiles.  
**‘# measurements’**: Total number of measurements across all CTD profiles.  
**‘Start’**: Recording date of the first CTD profile (format: dd/mm/yyyy).  
**‘End’**: Recording date of the last CTD profile (format: dd/mm/yyyy).  
**# days of data (range)**: Number of days during which CTD profiles were recorded (minimum – maximum).   
**Animal Tracking Facility:** <http://imos.org.au/animaltracking.html>.   
**CTD**: Conductivity Temperature and Depth  
**SMRU:** Sea Mammal Research Unit (<http://www.smru.st-andrews.ac.uk/>)

### Template

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **sattag\_program** | **release\_site** | **no\_animals** | **total\_nb\_profiles** | **total\_nb\_measurements** | **coverage\_start** | **coverage\_end** | **no\_data\_days** |
| Campaign name | Deployment location | # animals | # CTD profiles | # measurements | Start | End | # days of data (range) |
| Headers: data\_type | | | | | | | |
| Sub-headers = species\_name | | | | | | | |
|  |  |  |  |  |  |  |  |

## 2.2 Data report – all data on the portal

### Filename: ‘A\_AnimalTracking\_SatelliteTagging\_allData\_dataOnPortal’

### Description: ‘All data available on the portal’

View to use:

|  |  |
| --- | --- |
| **Server** | dbprod.emii.org.au |
| **Database** | harvest |
| **Schema** | reporting |
| **View** | aatams\_sattag\_all\_deployments\_view |

Filters: None, all filters have already been applied.

Data sorting options: None, data are already sorted.

Data grouping options: Group by ‘data\_type’, sub-group by ‘headers’.

Footnote: **Headers**: Data type. **Sub-headers:** Campaign name – Deployment location – Principal investigator.  
**‘Tag code’**: All tags deployed under the same satellite tagging campaign have the same software configuration.  
**‘# CTD profiles’**: Number of CTD profiles relayed. SMRU CTD tags relay both temperature and salinity profiles while SMRU SRDL tags only relay temperature profiles.  
**‘# measurements’**: Number of measurements across all CTD profiles.  
**‘Start’**: Recording date of the first CTD profile (format: dd/mm/yyyy).  
**‘End’**: Recording date of the last CTD profile (format: dd/mm/yyyy).  
**# days of data**: Number of days during which CTD profiles were recorded.  
**Animal Tracking Facility:** <http://imos.org.au/animaltracking.html>.   
**CTD**: Conductivity Temperature and Depth  
**SMRU:** Sea Mammal Research Unit (<http://www.smru.st-andrews.ac.uk/>)

### Template

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **tag\_code** | **species\_name** | **release\_site** | **nb\_profiles** | **nb\_measurements** | **coverage\_start** | **coverage\_end** | **coverage\_duration** |
| Tag code | Species name | Deployment location | # CTD profiles | # measurements | Start | End | # days of data |
| Headers: data\_type | | | | | | | |
| Sub-headers = headers | | | | | | | |
|  |  |  |  |  |  |  |  |

## 2.3 Data report – New data on the portal (last month)

### Filename: ‘B\_ AnimalTracking\_SatelliteTagging\_newData’

### Description: ‘New data on the portal (since DATE)’

View to use:

|  |  |
| --- | --- |
| **Server** | dbprod.emii.org.au |
| **Database** | harvest |
| **Schema** | reporting |
| **View** | aatams\_sattag\_all\_deployments\_view |

Filters: List all data for which ‘coverage\_end’ is less than one month.

Data sorting options: None, data are already sorted.

Data grouping options: Group by ‘data\_type’, sub-group by ‘headers’.

Footnote: **Headers**: Data type. **Sub-headers:** Campaign name – Deployment location – Principal investigator.  
**‘Tag code’**: All tags deployed under the same satellite tagging campaign have the same software configuration.  
**‘# CTD profiles’**: Number of CTD profiles relayed. SMRU CTD tags relay both temperature and salinity profiles while SMRU SRDL tags only relay temperature profiles.  
**‘# measurements’**: Number of measurements across all CTD profiles.  
**‘Start’**: Recording date of the first CTD profile (format: dd/mm/yyyy).  
**‘End’**: Recording date of the last CTD profile (format: dd/mm/yyyy).  
**# days of data**: Number of days during which CTD profiles were recorded.  
**Animal Tracking Facility:** <http://imos.org.au/animaltracking.html>.  
**CTD**: Conductivity Temperature and Depth  
**SMRU:** Sea Mammal Research Unit (<http://www.smru.st-andrews.ac.uk/>)

### Template

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **tag\_code** | **species\_name** | **release\_site** | **nb\_profiles** | **nb\_measurements** | **coverage\_start** | **coverage\_end** | **coverage\_duration** |
| Tag code | Species name | Deployment location | # CTD profiles | # measurements | Start | End | # days of data |
| Headers: data\_type | | | | | | | |
| Sub-headers = headers | | | | | | | |
|  |  |  |  |  |  |  |  |

# 3. Biologging

## 3.1 Data summary

### Filename: ‘AnimalTracking\_Biologging\_Summary’

### Description: ‘Data summary’

View to use:

|  |  |
| --- | --- |
| **Server** | dbprod.emii.org.au |
| **Database** | harvest |
| **Schema** | reporting |
| **View** | aatams\_biologging\_data\_summary\_view |

Filters: None, all filters have already been applied.

Data sorting options: None, data are already sorted.

Data grouping options: None.

Total: None.

Footnote: **‘Tagged animals’**: Common name of animals equipped with biologgers.  
**‘# animals’**: Total number of animals equipped with biologgers.   
**‘# locations**: Total number of locations obtained across all animals.  
**‘Start’**: Date of the first location (format: dd/mm/yyyy).  
**‘End’**: Date of the last location (format: dd/mm/yyyy).  
**# days of data (range)**: Number of days during which locations were obtained (minimum – maximum).  
**Animal Tracking Facility:** <http://imos.org.au/animaltracking.html>.

### Template

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **tagged\_animals** | **nb\_animals** | **total\_nb\_locations** | **earliest\_date** | **latest\_date** | **no\_data\_days** |
| Tagged animals | # animals | # locations | Start | End | # days of data (range) |
|  |  |  |  |  |  |

## 3.2 Data report – all data on the portal

### Filename: ‘A\_AnimalTracking\_Biologging\_allData\_dataOnPortal’

### Description: ‘All data available on the portal’

View to use:

|  |  |
| --- | --- |
| **Server** | dbprod.emii.org.au |
| **Database** | harvest |
| **Schema** | reporting |
| **View** | aatams\_biologging\_all\_deployments\_view |

Filters: None, all filters have already been applied.

Data sorting options: None, data are already sorted.

Data grouping options: Group by ‘tagged\_animals’.

Footnote: **Headers**: Common name of animals equipped with biologgers.  
**‘# locations**: Number of locations obtained for each animal.  
**‘Start’**: Date of the first location (format: dd/mm/yyyy).  
**‘End’**: Date of the last location (format: dd/mm/yyyy).  
**# days of data**: Number of days during which locations were obtained.  
**Animal Tracking Facility:** <http://imos.org.au/animaltracking.html>.

### Template

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **animal\_id** | **nb\_locations** | **lat\_range** | **lon\_range** | **start\_date** | **end\_date** | **coverage\_duration** |
| Animal ID | # locations | Latitudinal range | Longitudinal range | Start | End | # days of data |
| Headers = tagged\_animals | | | | | | |
|  |  |  |  |  |  |  |

## 3.3 Data report – New data on the portal (last month)

### Filename: ‘B\_ AnimalTracking\_Biologging\_newData’

### Description: ‘New data on the portal (since DATE)’

View to use:

|  |  |
| --- | --- |
| **Server** | dbprod.emii.org.au |
| **Database** | harvest |
| **Schema** | reporting |
| **View** | aatams\_biologging\_all\_deployments\_view |

Filters: List all data for which ‘end\_date’ is less than one month.

Data sorting options: None, data are already sorted.

Data grouping options: Group by ‘tagged\_animals’.

Footnote: **Headers**: Common name of animals equipped with biologgers.  
**‘# locations**: Number of locations obtained for each animal.  
**‘Start’**: Date of the first location (format: dd/mm/yyyy).  
**‘End’**: Date of the last location (format: dd/mm/yyyy).  
**# days of data**: Number of days during which locations were obtained.  
**Animal Tracking Facility:** <http://imos.org.au/animaltracking.html>.

### Template

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **animal\_id** | **nb\_locations** | **lat\_range** | **lon\_range** | **start\_date** | **end\_date** | **coverage\_duration** |
| Animal ID | # locations | Latitudinal range | Longitudinal range | Start | End | # days of data |
| Headers = tagged\_animals | | | | | | |
|  |  |  |  |  |  |  |