**Ships of Opportunity – Report templates**

This document contains information to produce reports for the following sub-facilities SOOP – ASF, SOOP – BA, SOOP – CO2, SOOP – CPR, SOOP – SST, SOOP – TMV, SOOP – TRV, and SOOP – XBT. The first part of this document provides information on how to build the data summary report for the whole SOOP facility. The second part of this document provides information on how to build data reports for each sub-facility.

Number of data reports: 10.

# 1. Ships of Opportunity facility

## 1.1 Data summary

### Filename: ‘ShipsOfOpportunity\_Summary’

### Description: ‘Data Summary’

View to use:

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

Filters: None, all filters have already been applied.

Data sorting options: None, data are already sorted.

Data grouping options: Group by ‘subfacility’, sub-group by data type.

Total: Calculate the total number of distinct vessels, deployments, data files or profiles (for SOOP-XBT only), measurements, days of data along with the temporal range. *Use the following view: ‘totals\_view’; filter by: ‘facility’ = ‘SOOP’.*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***Sub-facility*** | ***Type of file*** | ***Total number of vessels (‘no\_platforms’)*** | ***Total number of deployments (‘no\_deployments’)*** | ***Total number of data files (‘no\_data’)*** | ***Total number of measurements (‘no\_data2’)*** | ***Total number of days of data (‘no\_data3’)*** | ***Temporal range (‘temporal\_range’)*** |
| **ASF** | **Flux product** |  |  |  |  |  |  |
| **ASF** | **Meteorological SST observations** |  |  |  |  |  |  |
| **BA** |  |  |  |  |  |  |  |
| **CO2** |  |  |  |  |  |  |  |
| **CPR** | **AUS** |  |  |  |  |  |  |
| **CPR** | **SO** |  |  |  |  |  |  |
| **SST** | **Near real-time** |  |  |  |  |  |  |
| **SST** | **Delayed-mode** |  |  |  |  |  |  |
| **TMV** | **Near real-time** |  |  |  |  |  |  |
| **TMV** | **Delayed-mode** |  |  |  |  |  |  |
| **TRV** |  |  |  |  |  |  |  |
| **XBT** | **Near real-time** |  |  |  |  |  |  |
| **XBT** | **Delayed-mode** |  |  |  |  |  |  |
| **TOTAL** |  |  |  |  |  |  |  |

Footnote: **Headers**: Sub-facility .  
**Sub-headers**: Data type. **‘# deployments’**: Number of deployments/cruises for each line or vessel. For SOOP-TMV and XBT: number of years of deployments.  
**‘# data files/profiles’**: Number of data files or profiles (for SOOP-XBT only); for the CPR-AUS sub-facility: total number of PCI, phytoplankton, and zooplankton samples, for the CPR-SO sub-facility: total number of PCI and zooplankton samples.  
**‘# measurements’**: Number of measurements collected for each line or vessel, not applicable for the CPR-AUS and CPR-SO sub-facilities.  
**‘Start’** Data recording earliest date (format: dd/mm/yyyy).  
**‘End’**: Data recording latest date (format: dd/mm/yyyy).  
**‘# days of data**: Total number of days with data for each line or vessel.  
**Ships of Opportunity**: <http://imos.org.au/shipsofopportunity.html>.  
**ASF**: Air-Sea Fluxes sub-facility (<http://imos.org.au/airseaflux.html>).  
**BA**: Bio-Acoustic sub-facility (<http://imos.org.au/basoop.html>).  
**CO2**: CO2 sub-facility.  
**CPR**: Continuous Plankton Recorder (AUS – Australia, SO – Southern Ocean) sub-facility (<http://imos.org.au/auscontinuousplanktonrecorder.html>).  
**SST**: Sea Surface Temperature sub-facility (<http://imos.org.au/sstsensors.html>). Four additional vessels recording SST (*i.e.* R/V Southern Surveyor, RV Tangaroa, RV Cape Ferguson, and RV Solander) are not reported in the SST section but in the ASF and TRV sections.  
**TMV**: Temperate Merchant Vessels sub-facility (<http://imos.org.au/temperatemerchantvessels.html>).  
**TRV**: Tropical Research Vessels sub-facility (<http://imos.org.au/tropicalresearchvessels.html>).  
**XBT**: Expendable Bathythermograph sub-facility (<http://imos.org.au/expendablebathythermograph.html>).

### Template

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **vessel\_name** | **no\_deployments** | **no\_files\_profiles** | **total\_no\_measurements** | **earliest\_date** | **latest\_date** | **coverage\_duration** |
| Line or Vessel name | # deployments | # data files/profiles | # measurements | Start | End | # days of data |
| Headers = ‘subfacility’ | | | | | | |
| Sub-headers = ‘data\_type’ | | | | | | |
|  |  |  |  |  |  |  |

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

### Filename: ‘ShipsOfOpportunity\_newData’

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

Views to use:

|  |  |
| --- | --- |
| **Server** | dbprod.emii.org.au |
| **Database** | harvest |
| **Schema** | reporting |
| **Views** | soop\_all\_deployments\_view soop\_cpr\_all\_deployments\_view |

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

Data sorting options: None, data are already sorted.

Data grouping options: Group by ‘subfacility’.

Footnote: **Headers**: Sub-facility and type of data.  
**‘Start’** Data recording first date (format: dd/mm/yyyy).  
**‘End’**: Data recording last date (format: dd/mm/yyyy).  
**‘# days of data’**: Number of days with data for each vessel.  
**Ships of Opportunity**: <http://imos.org.au/shipsofopportunity.html>.  
**ASF**: Air-Sea Fluxes sub-facility (<http://imos.org.au/airseaflux.html>).  
**BA**: Bio-Acoustic sub-facility (<http://imos.org.au/basoop.html>).  
**CO2**: CO2 sub-facility.  
**CPR**: Continuous Plankton Recorder (AUS – Australia, SO – Southern Ocean) sub-facility (<http://imos.org.au/auscontinuousplanktonrecorder.html>).  
**SST**: Sea Surface Temperature sub-facility (<http://imos.org.au/sstsensors.html>). Four additional vessels recording SST (*i.e.* R/V Southern Surveyor, RV Tangaroa, RV Cape Ferguson, and RV Solander) are not reported in the SST section but in the ASF and TRV sections.  
**TMV**: Temperate Merchant Vessels sub-facility (<http://imos.org.au/temperatemerchantvessels.html>).  
**TRV**: Tropical Research Vessels sub-facility (<http://imos.org.au/tropicalresearchvessels.html>).  
**XBT**: Expendable Bathythermograph sub-facility (<http://imos.org.au/expendablebathythermograph.html>).

### Template

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **vessel\_name** | **lat\_range** | **lon\_range** | **start\_date** | **end\_date** | **coverage\_duration** |
| Vessel name | Latitudinal range | Longitudinal range | Start | End | # days of data |
| Headers = ‘subfacility’ | | | | | |
|  |  |  |  |  |  |

# 2. Ships of Opportunity sub-facilities

## 2.1 Data report – all SOOP – ASF data available on the portal

### Filename: ‘A\_ShipsOfOpportunity\_ASF\_allData\_dataOnPortal’

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

View to use:

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

Filters: List all data WHERE substring(subfacility, '[a-zA-Z]+') = 'ASF'.

Data sorting options: None, data are already sorted.

Data grouping options: Group by subfacility, sub-group by vessel\_name.

Footnote: **Headers**: Sub-facility and type of data.  
**Sub-headers**: Vessel name.  
**‘Start’** Data recording first date (format: dd/mm/yyyy).  
**‘End’**: Data recording last date (format: dd/mm/yyyy).  
**‘# days of data’**: Number of days with data for each vessel.   
**Ships of Opportunity**: <http://imos.org.au/shipsofopportunity.html>.  
**ASF**: Air-Sea Fluxes sub-facility (<http://imos.org.au/airseaflux.html>).

### Template

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **deployment\_id** | **no\_files\_profiles** | **no\_measurements** | **lat\_range** | **lon\_range** | **start\_date** | **end\_date** | **coverage\_duration** |
| Deployment ID | # data files | # measurements | Latitudinal range | Longitudinal range | Start | End | # days of data |
| Headers = ‘subfacility’ | | | | | | | |
| Sub-headers = ‘vessel\_name’ | | | | | | | |
|  |  |  |  |  |  |  |  |

## 2.2 Data report – all SOOP – BA data available on the portal

### Filename: ‘A\_ShipsOfOpportunity\_BA\_allData\_dataOnPortal’

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

View to use:

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

Filters: List all data WHERE substring(subfacility, '[a-zA-Z]+') = 'BA'.

Data sorting options: None, data are already sorted.

Data grouping options: Group by ‘vessel\_name’.

Footnote: **Headers**: Vessel name.  
**‘Start’** Data recording first date (format: dd/mm/yyyy).  
**‘End’**: Data recording last date (format: dd/mm/yyyy).  
**‘# days of data’**: Number of days with data for each cruise.  
**Ships of Opportunity**: <http://imos.org.au/shipsofopportunity.html>.   
**BA**: Bio-Acoustic sub-facility (<http://imos.org.au/basoop.html>).

### Template

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **deployment\_id** | **no\_data\_files** | **no\_measurements** | **lat\_range** | **lon\_range** | **start\_date** | **end\_date** | **coverage\_duration** |
| Deployment ID | # data files | # measurements | Latitudinal range | Longitudinal range | Start | End | # days of data |
| Headers = ‘vessel\_name’ | | | | | | | |
|  |  |  |  |  |  |  |  |

## 2.3 Data report – all SOOP – CO2 data available on the portal

### Filename: ‘A\_ShipsOfOpportunity\_CO2\_allData\_dataOnPortal’

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

View to use:

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

Filters: List all data WHERE substring(subfacility, '[a-zA-Z]+') = 'CO'.

Data sorting options: None, data are already sorted by ASCENDING ‘vessel\_name’, and then by ASCENDING ‘deployment\_id’.

Data grouping options: Group by ‘vessel\_name’.

Footnote: **Headers**: Vessel name.  
**‘Start’** Data recording first date (format: dd/mm/yyyy).  
**‘End’**: Data recording last date (format: dd/mm/yyyy).  
**‘# days of data’**: Number of days with data for each cruise.  
**Ships of Opportunity**: <http://imos.org.au/shipsofopportunity.html>.   
**CO2**: CO2 sub-facility.

### Template

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **deployment\_id** | **no\_data\_files** | **no\_measurements** | **lat\_range** | **lon\_range** | **start\_date** | **end\_date** | **coverage\_duration** |
| Deployment ID | # data files | # measurements | Latitudinal range | Longitudinal range | Start | End | # days of data |
| Headers = ‘vessel\_name’ | | | | | | | |
|  |  |  |  |  |  |  |  |

## 2.4 Data report – all SOOP – CPR data available on the portal

### Filename: ‘A\_ShipsOfOpportunity\_CPR\_allData\_dataOnPortal’

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

View to use:

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

Filters: None, all filters have already been applied.

Data sorting options: None, data are already sorted.

Data grouping options: Group by ‘subfacility’, sub-group by ‘vessel\_route’.

Footnote: **Headers**: Sub-facility and type of data.  
**Sub-headers**: Vessel name | Route.   
**‘Start’** Data recording first date (format: dd/mm/yyyy).  
**‘End’**: Data recording last date (format: dd/mm/yyyy).  
**‘# days of data’**: Number of days with data for each cruise.  
**Ships of Opportunity**: <http://imos.org.au/shipsofopportunity.html>.  
**CPR**: Continuous Plankton Recorder (AUS – Australia, SO – Southern Ocean) sub-facility (<http://imos.org.au/auscontinuousplanktonrecorder.html>).  
**PCI**: Phytoplankton Colour Index.

### Template

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **deployment\_id** | **no\_pci\_samples** | **no\_phyto\_samples** | **no\_zoop\_samples** | **lat\_range** | **lon\_range** | **start\_date** | **end\_date** | **coverage\_duration** |
| Cruise ID | # PCI samples | # phytoplankton samples | # zooplankton samples | Latitudinal range | Longitudinal range | Start | End | # days of data |
| Headers = ‘subfacility’ | | | | | | | | |
| Sub-headers = ‘vessel\_route’ | | | | | | | | |
|  |  |  |  |  |  |  |  |  |

## 2.5 Data report – all SOOP – SST data available on the portal

### Filename: ‘A\_ShipsOfOpportunity\_SST\_allData\_dataOnPortal’

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

View to use:

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

Filters: List all data WHERE substring(subfacility, '[a-zA-Z]+') = 'SST'.

Data sorting options: None, data are already sorted.

Data grouping options: Group by subfacility, sub-group by vessel\_name.

Footnote: **Headers**: Sub-facility and type of data.  
**Sub-headers**: Vessel name.  
**‘Start’** Data recording first date (format: dd/mm/yyyy).  
**‘End’**: Data recording last date (format: dd/mm/yyyy).  
**‘# days of data’**: Number of days with data for each vessel.  
**Ships of Opportunity**: <http://imos.org.au/shipsofopportunity.html>.  
**SST**: Sea Surface Temperature sub-facility (<http://imos.org.au/sstsensors.html>). Four additional vessels recording SST (*i.e.* R/V Southern Surveyor, RV Tangaroa, RV Cape Ferguson, and RV Solander) are not reported in the SST section but in the ASF and TRV sections.

### Template

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **deployment\_id** | **no\_files\_profiles** | **no\_measurements** | **lat\_range** | **lon\_range** | **start\_date** | **end\_date** | **coverage\_duration** |
| Deployment ID | # data files | # measurements | Latitudinal range | Longitudinal range | Start | End | # days of data |
| Headers = ‘subfacility’ | | | | | | | |
| Sub-headers = ‘vessel\_name’ | | | | | | | |
|  |  |  |  |  |  |  |  |

## 2.6 Data report – all SOOP – TMV data available on the portal

### Filename: ‘A\_ShipsOfOpportunity\_TMV\_allData\_dataOnPortal’

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

View to use:

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

Filters: List all data WHERE substring(subfacility, '[a-zA-Z]+') = 'TMV'.

Data sorting options: None, data are already sorted

Data grouping options: Group by subfacility, sub-group by vessel\_name.

Footnote: **Headers**: Sub-facility and type of data.  
**Sub-headers**: Vessel name.  
**‘Start’** Data recording first date (format: dd/mm/yyyy).  
**‘End’**: Data recording last date (format: dd/mm/yyyy).  
**‘# days of data’**: Number of days with data for each cruise.   
**Ships of Opportunity**: <http://imos.org.au/shipsofopportunity.html>.  
**TMV**: Temperate Merchant Vessels sub-facility (<http://imos.org.au/temperatemerchantvessels.html>).

### Template

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **year** | **no\_files\_profiles** | **no\_measurements** | **lat\_range** | **lon\_range** | **start\_date** | **end\_date** | **coverage\_duration** |
| Deployment year | # data files | # measurements | Latitudinal range | Longitudinal range | Start | End | # days of data |
| Headers = ‘subfacility’ | | | | | | | |
| Sub-headers = ‘vessel\_name’ | | | | | | | |
|  |  |  |  |  |  |  |  |

## 2.7 Data report – all SOOP – TRV data available on the portal

### Filename: ‘A\_ShipsOfOpportunity\_TRV\_allData\_dataOnPortal’

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

View to use:

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

Filters: List all data WHERE substring(subfacility, '[a-zA-Z]+') = 'TRV'.

Data sorting options: None, data are already sorted.

Data grouping options: Group by ‘vessel\_name’.

Footnote: **Headers**: Vessel name.  
**‘Start’** Data recording first date (format: dd/mm/yyyy).  
**‘End’**: Data recording last date (format: dd/mm/yyyy).  
**‘# days of data’**: Number of days with data for each cruise.  
**Ships of Opportunity**: <http://imos.org.au/shipsofopportunity.html>.  
**TRV**: Tropical Research Vessels sub-facility (<http://imos.org.au/tropicalresearchvessels.html>).

### Template

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **deployment\_id** | **no\_data\_files** | **no\_measurements** | **lat\_range** | **lon\_range** | **start\_date** | **end\_date** | **coverage\_duration** |
| Deployment ID | # data files | # measurements | Latitudinal range | Longitudinal range | Start | End | # days of data |
| Headers = ‘vessel\_name’ | | | | | | | |
|  |  |  |  |  |  |  |  |

## 2.8 Data report – all SOOP – XBT data available on the portal

### Filename: ‘A\_ShipsOfOpportunity\_XBT\_allData\_dataOnPortal’

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

View to use:

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

Filters: List all data WHERE substring(subfacility, '[a-zA-Z]+') = 'XBT'.

Data sorting options: None, data are already.

Data grouping options: Group by subfacility, sub-group by vessel\_name.

Footnote: **Headers**: Sub-facility and type of data.  
**Sub-headers**: Line | Line description or vessel name.  
**‘Start’** Data recording first date (format: dd/mm/yyyy).  
**‘End’**: Data recording last date (format: dd/mm/yyyy).  
**‘# days of data’**: Number of days with data for each year.  
**Ships of Opportunity**: <http://imos.org.au/shipsofopportunity.html>.  
**XBT**: Expendable Bathythermograph sub-facility (<http://imos.org.au/expendablebathythermograph.html>).

### Template

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **year** | **no\_files\_profiles** | **no\_measurements** | **lat\_range** | **lon\_range** | **start\_date** | **end\_date** | **coverage\_duration** |
| Deployment year | # profiles | # measurements | Latitudinal range | Longitudinal range | Start | End | # days of data |
| Headers = ‘subfacility’ | | | | | | | |
| Sub-headers = ‘vessel\_name’ | | | | | | | |
|  |  |  |  |  |  |  |  |