

FACILITY 10: eMarine Information Infrastructure (eMII)

IMOS NETCDF FILE NAMING CONVENTION

Version 1.3 May 8th, 2009

Table of contents

	PREFACE TO VERSION 1.3	1
	PREFACE TO VERSION 1.2	1
	PREFACE TO VERSION 1.1	1
1	1 - FILE NAMING CONVENTION	3
	1.1 - DATA FILE NAMING CONVENTION	3
	1.1.1 - Reference Table 1: Facility Codes	6
	1.1.2 - Reference Table 2: Data Codes	7
	1.1.3 Reference Table 3: Platform Codes	9
	1.1.4 Reference Table 4: File Version Codes	14
	1.2 - EXAMPLES	15
	1.2.1 - Facility 1: ARGO	15
	1.2.2 - Facility 2: SOOP	15
	1.2.3 - Facility 3: SOTS	16
	1.2.4 - Facility 4: ANFOG	17
	1.2.5 - Facility 5: AUV	17
	1.2.6 - Facility 6: ANMN	17
	1.2.7 - Facility 7: ACORN	19
	1.2.8 - Facility 8: AATAMS	19
	1.2.9 - Facility 9: FAIMMS	19
	4.0.40 Facility 44, CDC	40

PREFACE to version 1.3

The IMOS file naming discussion document has now been implemented as the IMOS NetCDF file naming convention.

Version 1.3 of the IMOS file naming convention has incorporated an extra **data code**: 'P' for pressure of sea water. **Data code** 'F' has been defined more clearly.

A number of facilities have provided platform codes which are now included in Reference Table 3.

PREFACE to version 1.2

Version 1.2 of the IMOS file naming convention incorporates a small number of additional **data codes** requested by users after the release of v 1.1:

F = Fluxes

K = Chemistry

R = Raw Data

Some facilities have provided us with extended lists of **platform codes**. The platform code table (Reference Table 3) has been updated to incorporate these codes.

If platform codes for your facility are not listed in this document, please provide the code table to eMII.

PREFACE to version 1.1

Thank you to everyone for your responses to our original file naming discussion document (1.0). The input we've received has been valuable and thought-provoking and we hope has lead to a better and more useful convention, outlined here in discussion document 1.1.

Summary of IMOS facility reponses to discussion document version 1.0:

- File names should be human-readable with less codes
- Platform codes need to be more flexible

- Data versions should be included: eg Level 0 = raw, Level 1 = ...
- Product codes are necessary for creation of unique file names in some facilities eg. 14 day average, 2m gridded data
- Time of file creation and other facility specific file reference codes should be integrated (though perhaps optional)
- End times for data could be included in file names
- Long file names are acceptable

Summary of changes made to document in producing version 1.1:

- 'Facility codes' were changed to facility acronyms (sub-facilities when necessary). Some suggested using whole words, eg. 'Moorings', but we decided against this as it could apply to SOTS moorings, ANMN moorings, NRS moorings, Acoustic listening moorings, AATAMS tag receiver moorings or Qld sensor network moorings. Acronyms are more clear for users familiar with IMOS data sets.
- 'Platform codes' are more flexible, with no limit to the number of characters that can be used.
- 5 levels of data versioning have been defined. Data versions are identified by the codes
 FV00 to FV04 as described in this document.
- Optional 'Product codes' have been incorporated into file names.
- An optional 'Time of creation' field has been incorporated in file names.
- Optional 'End time' for data has been incorporated into file names.

In addition:

- File names can be up to 255 characters long
- Date / time format complies with ISO 8601. eMII strongly prefer that all date / time fields are
 in UTC but have provided guidelines for local time if required.

As in version 1.0, we have provided example file names for each facility.

Please provide eMII with feedback on this discussion document if you believe that these suggestions will not work for your facility.

1 - FILE NAMING CONVENTION

For many data types, **IMOS** uses the netCDF (network Common Data Form) system, a set of software libraries and machine-independent data formats that support the creation, access, and sharing of array-oriented scientific data. ¹

The main purpose of this document is to specify the format of filenames that will be used to distribute **IMOS** data in netCDF format.

IMOS netCDF file naming conventions are based on those prescribed by the **OceanSITES** User's Manual, version 1.1. The **OceanSITES** program is a global network of open-ocean sustained time series reference stations that have been implemented by an international partnership of researchers. More information about this project is available at **http://www.oceansites.org**.

1.1 - Data file naming convention

The file name extension of each netCDF file must be ".nc".

Filenames can be up to 255 characters in length and are composed of up to 10 fields separated by '_' (underscore) characters.

Characters which can be used within fields are letters (A to Z) and whole numbers (0 to 9). The hyphen character (-) may also be used within fields.

The NetCDF file name format is:

IMOS_<Facility-Code>_<Data-Code>_<Start-date>_<Platform-Code>_FV<File-Version>_

<Product-Type>_END-<End-date>_C-<Creation_date>_<PARTX>.nc

¹ http://www.unidata.ucar.edu.au/software/netcdf/

The first 6 fields are mandatory and must conform to the following content guidelines:

- 1. IMOS: Name of the project ²
- 2. <Facility-Code> : code representing a facility (and a sub-facility if applicable) (see 1.1.1 -Reference Table 1: Facility Codes).
- 3. <Data-Code>: list of data codes from reference table 2. The data codes are descriptors of the primary parameters measured. Data codes do not list secondary parameters (see 1.1.2 - Reference Table 2: Data Codes).
- 4. <Start-date>: start date and time of the measurement, not of file creation. The date and time are formatted to international standard ISO8601. eMII requests that the time be in UTC.

Date format is: YYYYMMDDTHHMMSSZ where T is the delimiter between date and time and Z indicates that time is in UTC. If time is not in UTC, local time must be shown as hours plus or minus from the longitudinal meridian. Z is not appended when local time is used. Examples of the time format are below.

- 20081024T080000Z (UTC)
- 20081024T180000+10 (Local)
- 20081024T020000-06 (Local)
- 5. <Platform-Code>: code representing the platform 3 (see 0 Reference Table 3: Platform Codes).
- 6. <File-Version>: value representing the version of the file (see 1.1.4 Reference Table 4: File Version Codes).

Platform codes must be unique within an IMOS facility and must apply to either one particular unit of equipment or to one particular location.

To finalise platform codes, eMII needs more information about the formats of different 'platform' codes that are currently used by each facility. eMII anticipate that the codes already in use within many facilities will be suitable.

Characters which can be used are capital letters (A to Z) and whole numbers (0 to 9). The hyphen character (-) may also be used.



² Any data produced by the IMOS project should be instantly identifiable as 'IMOS' data

³ Notes on platform codes: The platform codes for data file naming conventions (reference table 2) are under development.

The following 4 fields are optional:

- 7. <Product-Type>: This code will give information about the product included in the dataset.
- 8. <End-date>: end date and time of the measurement. The data format is the same as the start date. The code should be preceded by the following four characters END-. An example of the format of the end date should be: "END-20081112T231255Z"
- 9. <Creation-date>: creation date and time of the file. The data format is the same as the start and end date. The code should be preceded by the two characters C-. An example of the format of the creation date should be "C-20081112T231255Z".
- 10. <_PARTX>: when an IMOS data file size becomes excessive (eg: >100Mb), it can be split in smaller parts: PART1, PART2,....,PARTN

1.1.1 - Reference Table 1: Facility Codes

Facility	Sub-Facility (if applicable)	Code
ARGO		ARGO
	Multi-disciplinary Underway Network XBT	SOOP-XBT
	Multi-disciplinary Underway Network CO2	SOOP-CO2
SOOP	Multi-disciplinary Underway Network CPR	SOOP-CPR
	Sensors on Tropical Research Vessels	SOOP-TRV
	Sea Surface Temperature Sensors	SOOP-SST
	Research Vessel Real Time Air-Sea Fluxes	SOOP-ASF
SOTS		SOTS
ANFOG		ANFOG
AUV		AUV
	Queensland and Northern Australia	ANMN-QLD
	New South Wales	ANMN-NSW
ANMN	Southern Australia	ANMN-SA
	Western Australia	ANMN-WA
	Acoustic Observatories	ANMN-AO
	National Reference Stations Analysis and Coordination	ANMN-NRS
	Satellite Ocean Colour Calibration/Validation	ANMN-SOC
ACORN		ACORN
AATAMS		AATAMS
FAIMMS		FAIMMS
	Australian Satellite SST L2P Products	SRS-A
SRS	Australian Ocean Distributed Archive and Access Centre	SRS-B
	Upgrade Hobart Ground Station	SRS-C
	Upgrade Townsville Ground Station	SRS-D

1.1.2 - Reference Table 2: Data Codes

Data Code	Meaning	
A	Acoustic measurements	
В	Biology (plankton, fluorescence)	
С	Conductivity (electrical conductivity of sea water)	
E	Engineering or technical parameters	
F	Fluxes (e.g. radiation, latent heat, sensible heat)	
G	Gas (measurement and fluxes)	
I	Images	
К	Chemistry (nutrients, trace metals)	
М	Meteorological parameters (e.g. wind, air pressure, air temperature)	
0	Oxygen concentration (in sea water)	
P	Pressure	
R	Raw data	
S	Salinity (of sea water)	
Т	Temperature (of sea water)	
U	Turbidity (of sea water)	
V	Velocity (of sea water)	
W	Wave parameters (significant wave height,	

peak period, peak direction)

1.1.3 Reference Table 3: Platform Codes

	Facility	Sub-facility	Platform	Platform	Code Description
			Codes	Description	
1	ARGO		Argo convention		No change to Argo
					data/file name formats
2	SOOP	2a(i) XBT	PX34	Sydney to Wellington	XBT line identifier
				(CSIRO line)	
			IX28	Dumont D'Urville to Hobart	
				(CSIRO line)	
			PX30-31	Brisbane to Noumea/	
				Suva/ Lautoka (CSIRO	
				line)	
			IX15-21	Melbourne/ Fremantle to	
				Mauritius/ Durban	
				(SCRIPPS line)	
			IX1	Fremantle to Sunda Straits	
				(BOM line)	
			IX12	Fremantle to Red Sea	
				(BOM line)	
			PX2	Flores Sea to Torres Strait	
				(BOM line)	
			IX22-PX11	Shark Bay to Japan (BOM	
				line)	
		2a(ii) CO2	Unknown		Ship call signs, or
					'system' identifiers eg.
					CO2 on Southern
					Surveyor = SSCO2
		2a(iii) CPR	Unknown		ID for CPR deployed, 2-
					6 letter/number codes
					eg. Unit 1 = U001 <i>or</i>
					CPR line if more
					appropriate
		2b Trop Res	RVCF	Cape Ferguson	Ship code : Call
			RVS	Solander	sign/AIMS code
		2c SST	VLHJ	RV Southern Surveyor	Ship call sign or WMO
			VHW5167	MV Seaflyte (Rottnest	code
				Island Ferry)	
			FHZI	RV L'Astrolabe	
			VNAA	RSV Aurora Australis	
			VLST	MV Spirit of Tasmania I	
			VNSZ	MV Spirit of Tasmania II	
			VJQ7467	MV Fantasea	
				(Whitsundays Ferry)	

			C6FS9	MV Stadacona	
			VNAH	MV Portland	
			MNPJ3	MV Pacific Sun	
			VROB	MV Kiribati Chief	
			VNVR	MV Iron Yandi	
			V2BJ5	MV ANL Yarunga	
		2d A-S Flux		As for 2c SST Platform Codes	Ship call sign <i>or</i> WMO code
3	SOTS		SAZOTS	Sediment traps	
			PULSE	Ocean observations	For 2008-2009 deployment : PULSEH, PULSEL
			SOFS	Meteorological mooring	
			PROF	Argo profiles	
			GLID	Glider	
4	ANFOG		SG151	Seaglider	Manufacturer unit
			SG152	Seaglider	number
			SG153	Seaglider	
			SG154	Seaglider	
			SG155	Seaglider	
			SL104	Slocum	
			SL106	Slocum	
			SL109	Slocum	
5	AUV		SIRIUS		If other AUVs are recruited to the facility, they will need codes
6	ANMN	6a QLD	GBROTE	One Tree East	AIMS mooring codes
			GBRHIS	Heron Island South	
			GBRHIN	Heron Island North	
			GBRELR	Elusive Reef	
			GBRCCH	Capricorn Channel	
			GBRMYR	Myrmidon	
			GBRPPS	Palm Passage	
			GBRLSH	Lizard Shelf	
			GBRLSL	Lizard Slope	
		6b NSW	NSCH10	Coffs Harbour 100m	NSW-IMOS mooring
			NSCH07	Coffs Harbour 70m	codes
			NSSY10	Sydney 100m	
			NSSY14	Sydney 140m	
			NSPH10	Port Hacking 100m	
			NSPH05	Port Hacking 50m	
			NSJB07	Jervis Bay	
			NSED07	Eden	
		6c SA	SAM1DS	M1 Deep Slope	SAIMOS mooring
			SAM2CP	M2 Cabbage Patch	codes

			SAM5CY	M4 Canyons	
			SAM5CB	M5 Coffin Bay	
			SAM6IS	M6 Investigator Strait	
		6d WA	WATR05	Two Rocks 50	WAIMOS mooring
			WATR10	Two Rocks 100	codes
			WATR15	Two Rocks 150	
			WATR20	Two Rocks 200 (BGC)	
			WATR50	Two Rocks 500	
			WACA20	Canyon 200m Head	
				(BGC)	
			WACANO	Canyon 500m North	
			WACASO	Canyon 500m South	
		6e Acoustic	PAPCA1	Perth Canyon, WA 1	Acoustic mooring site
			PAPCA2	Perth Canyon, WA 2	codes
			PAPCA3	Perth Canyon, WA 3	
			PAPCA4	Perth Canyon, WA 4	
			PAPOR1	Portland, VIC 1	
			PAPOR2	Portland, VIC 2	
			PAPOR3	Portland, VIC 3	
			PAPOR4	Portland, VIC 4	
			PASYD1	Sydney, NSW 1	
			PASYD2	Sydney, NSW 2	
			PASYD3	Sydney, NSW 3	
			PASYD4	Sydney, NSW 4	
		6f NRS	NRSYON	Yongala, QLD	NRS codes
			NRSDAR	Darwin, NT	
			NRSROT	Rottnest, WA	
			NRSMAI	Maria Island, TAS	
			NRSKAI	Kangaroo Island, SA	
			NRSESP	Esperance, WA	
			NRSNIN	Ningaloo, WA	
			MRSMOR	Moreton Bay, QLD	
			NRSPHB	Port Hacking, NSW	
		6g SOOC	CRSLUC	Lucinda Jetty, QLD	Colour mooring code
7	ACORN		CBG	Capricorn Bunker Group	ACORN codes
			TAN	CBG Tannum Sands	
			LEI	CBG Lady Elliot Island	
			SAG	South Australia Gulf	
			CSP	SAG Cape Spencer	
			CWI	SAG Cape Wiles	7
			BONC	Bonnie Coast	†
			NOCR	BONC Noora Creena	1
			CPDG	BONC Cape Douglas	1
			COF	Coffs Harbour	1
			RRK	COF Red Rock	-

		NNB	COF North Nambucca	
		PCY	Perth Canyon	
		LEB	PCY Leighton Beach	
		GUI	PCY Guilderton	
		TURQ	Turquoise Coast	
		SBRD	TURQ Seabird	
		CRVT	TURQ Cervantes	
8	AATAMS	SYD1	Sydney line (1-30)	Location and receiver
0	AATAWS	PER1	Perth line (1-30)	position e.g. SYD1 =
		NRETAN1	Ningaloo Reef Ecological	Sydney line position 1,
		TAKE 17 WY	Tracking Array North line	SYD30 = Sydney line
			(1-7)	position 30.
		NRETAC1	NRETA Central line (1-7)	pooliion oo.
		NRETAS1	NRETA South line (1-18)	
		MAL1	Mallacoota line (1-30)	
		PORT1	Portland line (1-30)	
		COF1	Coffs Harbour line (1-30)	
9	FAIMMS	HIRP1	Heron Island Relay Pole 1	AIMS sensor network
9	FAIIVIIVIS	HIRP2	Heron Island Relay Pole 2	codes eg. Heron Island
		HIRP3	Heron Island Relay Pole 3	Relay Pole 1 = HIRP1.
		HIRP4	Heron Island Relay Pole 4	relay role r = rinki r.
		HIRP5	Heron Island Relay Pole 5	
		HIRP6	Heron Island Relay Pole 6	
		HISF1	Heron Island Sensor Float	
		ПОГІ	1	
		HISF2	Heron Island Sensor Float	
		ПОГ2	2	
		HISF3	Heron Island Sensor Float	
		11131-3	3	
		HISF4	Heron Island Sensor Float	
		111014	4	
		HISF5	Heron Island Sensor Float	
		11101 0	5	
		HIWS	Heron Island Weather	
		111110	Station	
		HIBSE	Heron Island Base Station	
		OTIRP1	One Tree Island Relay	
			Pole 1	
		OTIRP2	One Tree Island Relay	
		J.II.V. Z	Pole 2	
		OTIRP3	One Tree Island Relay	
		2	Pole 3	
		OTIWS	One Tree Island Weather	
			Station	
		OTIBSE	One Tree Island Base	
		31.502	Station State	
]		

11	SRS	Unknown	Data products in
			netCDF format may
			need defining 'codes',
			eg. SSTL2P. These
			codes may necessarily
			be quite complex.

1.1.4 Reference Table 4: File Version Codes

The File Version code will enable a file creator to specify the processing version of the file. The different data levels listed below were derived from a discussion paper "Data Standards Framework for the IMOS Instrument Data" prepared by Scott Bainbridge (AIMS) for the AODCJF ⁴.

File Version	Definition	Description
FV00	Level 0 – Raw data	Raw data is defined as unprocessed data and data products
		that have not undergone quality control. The data may be in
		engineering units or physical units, time and locations details
		can be in relative units and values can be pre-calibration
		measurements. Level 0 data is not suitable for public access
		within IMOS.
FV01	Level 1 – Quality	Quality controlled data have passed quality assurance
	Controlled data	procedures such as routine estimation of timing and sensor
	Controlled data	calibration or visual inspection and removal of obvious errors.
		The data are in physical units using standard SI metric units
		with calibration and other routine pre-processing applied, all
		time and location values are in absolute coordinates to agreed
		to standards and datum, metadata exists for the data or for the
		higher level dataset that the data belongs to. This is the
		standard IMOS data level and is what should be made
		available to eMII and to the IMOS community.
FV02	Level 2 – Derived	Derived products require scientific and technical interpretation.
	Products	Normally these will be defined by the community that collects
	1 100000	or utilises the data.
FV03	Level 3 – Interpreted	These products require researcher driven analysis and
	Products	interpretation, model based interpretation using other data
	1 1000013	and / or strong prior assumptions.
FV04	Level 4 – Knowledge	These products require researcher driven scientific
	Products	interpretation and multidisciplinary data integration and include
		model-base interpretation using other data and/or strong prior
		assumptions.

⁴ http://www.aodc.gov.au/

1.2 - Examples

Example data file names for each **IMOS** facility can be found in this section. These examples are suggestions only.

Please provide eMII with feedback on this discussion document if you believe that these suggestions will not work for your facility.

1.2.1 - Facility 1: ARGO

eMII intend to use the internationally accepted Argo netCDF conventions for GDAC data file naming, ie:

<FloatID>_prof.nc, <FloatID>_traj.nc, <FloatID>_meta.nc, <FloatID>_tech.nc

1.2.2 -Facility 2: SOOP

2a Multidisciplinary Underway Network

XBT

IMOS_SOOP-XBT_T_20080501T100000Z_PX-02_FV01.nc

This file would contain quality controlled Temperature data starting from the 1st May 2008 at 10:00 UTC and collected along XBT line PX-02 by the XBT group in the **IMOS** SOOP Multidisciplinary Underway Network sub-facility.

CO₂

IMOS_SOOP-CO2_GST_20080901T120000Z_SSCO2_FV01.nc

This file would contain quality controlled Gas, Salinity and Temperature data starting from the 1st September 2008 at 12:00 UTC and collected with the CO2 system (and associated underway systems) on the Southern Surveyor by the CO2 group in the **IMOS** SOOP Multidisciplinary Underway Network sub-facility.

CPR

IMOS SOOP-CPR B 20080901T120000Z U001 FV01.nc

This file would contain quality controlled Biological data starting from the 1st September 2008 at 12:00 UTC collected with CPR Unit 1 by the CPR group in the IMOS SOOP Multidisciplinary Underway Network sub-facility.

2b Sensors on Tropical Research Vessels

IMOS SOOP-TRV BTS 20081011T083000Z RVCF FV01.nc

This file would contain quality controlled Biological, Temperature and Salinity data starting from the 11th October 2008 at 08:30 UTC collected on RV Cape Ferguson by the IMOS SOOP Sensors on Tropical Research Vessels sub-facility.

2c SST

IMOS SOOP-SST T 20081030T122500Z VHW5167 FV00.nc

This file would contain raw Temperature data starting from the 30th of October 2008 at 12:25 UTC, collected from the Rottnest Island Ferry (call sign VHW5167) by the IMOS SOOP SST sub-facility.

2d Air-Sea Flux

IMOS_SOOP-ASF_MT_20080204T100000Z_VLHJ_FV01.nc

This file would contain quality controlled Meteorological and Temperature data starting from the 4th of February 2008 at 10:00 UTC, collected from the Southern Surveyor (call sign VLHJ) by the IMOS SOOP Air-Sea Flux sub-facility.

1.2.3 -Facility 3: SOTS

IMOS_SOTS_E_20081011T083000Z_PULSEH_FV00.nc

This file would contain raw Engineering data starting from the 11th October 2008 at 08:30 UTC collected by the Heavy Pulse platform of the IMOS SOTS facility.

1.2.4 -Facility 4: ANFOG

IMOS_ANFOG_TS_20081011T083000Z_SG154_FV01.nc

This file would contain quality controlled Temperature and Salinity data starting from the 11th October 2008 at 08:30 UTC collected by Seaglider Unit 154 of the **IMOS** ANFOG facility.

1.2.5 -Facility 5: AUV

IMOS_AUV_TS_20080812T122500Z_SIRIUS_FV00.nc

This file would contain raw Temperature and Salinity data starting from the 12th August 2008 at 12:25 UTC collected by AUV Sirius of the **IMOS** AUV facility.

1.2.6 -Facility 6: ANMN

6a Qld and Northern Aust

IMOS ANMN-QLD VT 20080801T000000Z GBRMYR FV01.nc

This file would contain quality controlled Current Velocity and Temperature data starting from the 1st August 2008 at 00:00 UTC and collected at the Myrmidon mooring site by the **IMOS** ANMN Queensland and Northern Australia sub-facility.

6b NSW

IMOS_ANMN-NSW_VT_20080801T000000Z_NSJB07_FV01.nc

This file would contain quality controlled Current Velocity and Temperature data starting from the 1st August 2008 at 00:00 UTC and collected at the Jervis Bay mooring site by the **IMOS** ANMN NSW sub-facility.

6c SA

IMOS_ANMN-SA_VT_20080801T000000Z_SAM1DS_FV01.nc

This file would contain quality controlled Current Velocity and Temperature data starting from the 1st August 2008 at 00:00 UTC and collected at the M1 Deep Slope mooring site by the **IMOS** ANMN SA sub-facility.

6d WA

IMOS ANMN-WA VT 20080801T000000Z WATR05 FV01.nc

This file would contain quality controlled Current Velocity and Temperature data starting from the 1st August 2008 at 00:00 UTC and collected at the Two Rocks 50m mooring site by the **IMOS** ANMN WA sub-facility.

6e Acoustic Observatories

IMOS_ANMN-AO_B_20080801T000000Z_PAPCA1_FV00.nc

This file would contain raw Biological data starting from the 1st August 2008 at 00:00 UTC and collected at the Perth Canyon 1 mooring site by the **IMOS** ANMN Acoustic Observatories subfacility.

6f NRS

IMOS_ANMN-NRS_STV_20080801T000000Z_NRSMAI_FV01.nc

This file would contain quality controlled Salinity, Temperature, Current Velocity and data starting from the 1st August 2008 at 00:00 UTC and collected at the Maria Island mooring site by the **IMOS** ANMN NRS sub-facility.

6g Ocean Colour Validation

IMOS_ANMN-SOC_B_20080801T000000Z_CRSLUC_FV01.nc

This file would contain quality controlled Biological data starting from the 1st August 2008 at 00:00 UTC and collected at Queensland Colour Mooring site by the **IMOS** ANMN Ocean Colour Validation sub-facility.

1.2.7 -Facility 7: ACORN

IMOS_ACORN_VW_20081122T133000Z_TAN_FV01.nc

This file would contain quality controlled current Velocity and Wave parameters from the Queensland radar site located at Tannum Sands and Elliot Islands, from the **IMOS** ACORN facility and for the date of 22nd of November 2008 at 13:30 UTC.

1.2.8 -Facility 8: AATAMS

IMOS_AATAMS_B_20081231T013000Z_NL4_FV01.nc

This file would contain quality controlled Biological data starting from the 31st December 2008 at 01:30 UTC collected at location 4 on the North Line acoustic receiver installation of the **IMOS** AATAMS facility.

1.2.9 -Facility 9: FAIMMS

IMOS_FAIMMS_T_20081231T013000Z_HIRP1_FV01.nc

This file would contain quality controlled Temperature data starting from the 31st December 2008 at 01:30 UTC collected on Heron Island Relay Pole 1 by the **IMOS** FAIMMS facility.

1.2.10 - Facility 11: SRS

IMOS_SRS-A_T_20080801T231000Z_AVHRR17-L-AVHRR18-L_FV03_ L3-GHRSST-SSTsubskin-14day-mosaic _C-20081112T125500Z.nc

This file would contain Temperature data in a 'SST subskin' product as a 14 day mosaic from the L3-GHRSST-AVHRR17-L platform starting from the 1st August 2008 at 23:10 UTC, produced by the **IMOS** SRS facility.