


Project Details	
<b>ESCC Project No. &amp; Title(s)</b>	2.4: Changing oceans and Australia's future climate
<b>Project Leader(s)</b>	Steve Rintoul
<b>Deliverable(s)</b>	IQuOD database products
<b>Data/software Manager</b>	Rebecca Cowley

Research Output data collection or software URLs if applicable
<a href="https://data.nodc.noaa.gov/cgi-bin/iso?id=gov.noaa.nodc:0170893">https://data.nodc.noaa.gov/cgi-bin/iso?id=gov.noaa.nodc:0170893</a>

Description (complete for data and software)	
<b>Title</b>	International Quality Controlled Ocean Database (IQuOD) version 0.1 - aggregated and community quality controlled ocean profile data 1772-2018 (NCEI Accession 0170893)
<b>Description</b>	This data set includes subsurface ocean profiles of temperature, salinity, oxygen, nutrients, ocean tracers, optics, and biology (chlorophyll, plankton) taken from 1772 to 2018 in the global ocean using bottles, CTD, XBT, MBT, profiling floats, moored buoys, ice drifting buoys, gliders, towed profilers, and instrumented pinnipeds.
<b>Temporal and spatial extent</b>	Global; 1772-12-15 to 2018-01-04
<b>Lineage</b>	As described in Lineage tab of above URL. <ul style="list-style-type: none"> <li>• 2018-03-26T22:21:50Z - NCEI Accession 0170893 v1.1 was published.</li> <li>• 2018-08-03T23:30:46Z - NCEI Accession 0175082 v1.1 was published.</li> <li>• 2020-08-07T04:11:21Z - NCEI Accession 0209629 v1.1 was published.</li> <li>• 2020-08-25T03:14:14Z - NCEI Accession 0217909 v1.1 was published.</li> <li>• 2020-12-28T17:26:17Z - NCEI Accession 0205726 v1.1 was published.</li> <li>• 2021-03-06T17:03:34Z - NCEI Accession 0225530 v1.1 was published.</li> </ul>
<b>Credit</b>	The IQuOD Team (2018). International Quality Controlled Ocean Database (IQuOD) version 0.1 - aggregated and community quality controlled ocean profile data 1772-2018 (NCEI Accession 0170893). Version 1.1. NOAA National Centers for Environmental Information. Dataset.
<b>Keywords</b>	As listed in the keywords tab of above URL.
<b>ABS Fields of Research Category / Subcategory*</b>	04 Earth Sciences 0405 Oceanography

\*These are listed in

<http://www.abs.gov.au/ausstats/abs@.nsf/0/4AE1B46AE2048A28CA25741800044242?opendocument>

Attribution/IP(complete for data and software)	
<b>Owning Organisation</b>	Data is public. Hosted by: National Centers for Environmental Information, NESDIS, NOAA, U.S. Department of Commerce
<b>Collaborating Organisations</b>	<p>CSIRO, ACE-CRC, UTAS, NCEI, UK MetOffice, Tohoku University, Scripps, Chinese Academy of Sciences, AOML, Universidad Autonoma de Baja California, Universidade Federal do Rio de Janeiro, University of Rhode Island,  National Marine Data and Information Service, Japan Hydrographic Association, INCOIS, Istituto Idrografico della Marina, Sezione di Bologna.</p> <p>Sponsors: WCRP CLIVAR Global Synthesis and observations Panel (GSOP)</p> <p>Scientific Committee on Oceanic Research (SCOR) Working Group 148, funded by national SCOR committees and a grant to SCOR from the U.S. National Science Foundation (Grant OCE-1546580)</p> <p>Intergovernmental Oceanographic Commission of UNESCO/ International Oceanographic Data and Information Exchange (IOC/IODE) IQuOD Steering Group</p> <p>Global Ocean Data Assimilation Experiment (GODAE) community</p> <p>Program for Climate Model Diagnosis and Intercomparison (PCMDI)</p> <p>Australian Government's National Environmental Science Program through the Earth Systems and Climate Change Hub</p> <p>Ministry of Environment of Japan, and Environmental Restoration and Conservation Agency of Japan (The Environment Research and Technology Development Fund [2-1506])</p>
<b>Primary contact for this data</b>	Rebecca Cowley <a href="mailto:Rebecca.cowley@csiro.au">Rebecca.cowley@csiro.au</a>
<b>Lead Researcher</b>	IQuOD Team
<b>Contributors</b>	
<b>Access</b>	The dataset is publicly available from the "access" tab of <a href="https://www.ncei.noaa.gov/access/metadata/landing-page/bin/iso?id=gov.noaa.nodc:0170893">https://www.ncei.noaa.gov/access/metadata/landing-page/bin/iso?id=gov.noaa.nodc:0170893</a>
<b>Licencing</b>	<p>Open.</p> <p>Constraints:</p> <ul style="list-style-type: none"> <li>• Cite as: The IQuOD Team (2018). International Quality Controlled Ocean Database (IQuOD) version 0.1 - aggregated and community quality controlled ocean profile data 1772-2018 (NCEI Accession 0170893). [indicate subset used]. NOAA National Centers for Environmental Information. Dataset. <a href="https://www.ncei.noaa.gov/archive/accession/0170893">https://www.ncei.noaa.gov/archive/accession/0170893</a>. Accessed [date].</li> <li>• Use liability: NOAA and NCEI cannot provide any warranty as to the accuracy, reliability, or completeness of furnished data. Users assume responsibility to determine the usability of these data. The user is responsible for the results of any application of this data for other than its intended purpose.</li> </ul>

Related Materials. Publications, tools, websites, related input data. Please provide full citations for publications, data and software.	
Details	URL
Palmer, M.D., Boyer, T., Cowley, R., Kizu, S., Reseghetti, F., Suzuki, T., Thresher, A., 2018. An algorithm for classifying unknown expendable bathythermograph (XBT) instruments based on existing metadata. J. Atmos. Ocean. Technol. 35, 429–440.	<a href="http://journals.ametsoc.org/doi/10.1175/JTECH-D-17-0129.1">http://journals.ametsoc.org/doi/10.1175/JTECH-D-17-0129.1</a>
IQuOD website	<a href="http://iquod.github.io/">http://iquod.github.io/</a>

Technical Details	
<b>For data: Total Size of this data collection</b>	Approximately 460 files
<b>For data: Total Number of Files</b>	Approximately 120GB
<b>Current location of files (data or software)</b>	National Centers for Environmental Information, NESDIS, NOAA
<b>Format(s)</b>	NetCDF
<b>Associated tool(s)/ Dependencies</b>	N/A
<b>Proposed publication host</b>	National Centers for Environmental Information, NESDIS, NOAA <a href="https://data.nodc.noaa.gov/cgi-bin/iso?id=gov.noaa.nodc:0170893">https://data.nodc.noaa.gov/cgi-bin/iso?id=gov.noaa.nodc:0170893</a>

Project Details	
<b>ESCC Project No. &amp; Title(s)</b>	2.4: Changing oceans and Australia's future climate
<b>Project Leader(s)</b>	Steve Rintoul
<b>Deliverable(s)</b>	ACCESS-OM2 Model Output Collection
<b>Data/software Manager</b>	Andy Hogg

Research Output data collection or software URLs if applicable
ACCESS-OM2 Model Output Collection: <a href="http://dx.doi.org/10.4225/41/5a2dc8543105a">http://dx.doi.org/10.4225/41/5a2dc8543105a</a>

Description (complete for data and software)	
<b>Title</b>	COSIMA Model Output Collection
<b>Description</b>	Output from COSIMA's ACCESS-OM2 suite of global ocean-sea ice models at 1, 0.25 and 0.1deg horizontal resolution.
<b>Temporal and spatial extent</b>	Global, 1/1/1958 – 31/12/2018
<b>Lineage</b>	ACCESS-OM2 model simulations  A. E. KISS, A. McC. HOGG & 28 others (2020). ACCESS-OM2: A Global Ocean-Sea Ice Model at Three Resolutions, Geosci. Model Dev., Geosci. Model Dev., 13, 401–442, doi: 10.5194/gmd-13-401-2020.  <a href="https://github.com/COSIMA/access-om2">https://github.com/COSIMA/access-om2</a>
<b>Credit</b>	Consortium for Ocean-Sea Ice Modelling in Australia ( <a href="http://cosima.org.au">http://cosima.org.au</a> )
<b>Keywords</b>	Ocean, sea ice, model
<b>ABS Fields of Research Category / Subcategory*</b>	04 Earth Sciences 0405 Oceanography

\*These are listed in

<http://www.abs.gov.au/ausstats/abs@.nsf/0/4AE1B46AE2048A28CA25741800044242?opendocument>

Attribution/IP(complete for data and software)	
<b>Owning Organisation</b>	Consortium for Ocean-Sea Ice Modelling in Australia (COSIMA)
<b>Collaborating Organisations</b>	ANU, UNSW, UTas, Bureau of Meteorology, Australian Antarctic Division, CSIRO and NCI
<b>Primary contact for this data</b>	Prof. Andy Hogg <a href="mailto:Andy.Hogg@anu.edu.au">Andy.Hogg@anu.edu.au</a>
<b>Lead Researcher</b>	Prof. Andy Hogg
<b>Contributors</b>	Dr Aidan Heerdegen
<b>Access</b>	Open
<b>Licencing</b>	Creative Commons - Attribution - Non Commercial - No Derivatives 4.0 International <a href="http://creativecommons.org/licenses/by-nc-nd/4.0/legalcode">http://creativecommons.org/licenses/by-nc-nd/4.0/legalcode</a>

Related Materials. Publications, tools, websites, related input data. Please provide full citations for publications, data and software.	
Details	URL
Andy Hogg, 2017: COSIMA model output collection v1.0 . NCI National Research Data Collection , doi:10.4225/41/5a2dc8543105a .	10.4225/41/5a2dc8543105a

Technical Details	
Andy Hogg, 2017: COSIMA model output collection v1.0 . NCI National Research Data Collection , doi:10.4225/41/5a2dc8543105a .	10.4225/41/5a2dc8543105a
ACCESS-OM2 model code	<a href="https://github.com/COSIMA/access-om2">https://github.com/COSIMA/access-om2</a>

Technical Details	
<b>For data: Total Size of this data collection</b>	125TB (total COSIMA collection)
<b>For data: Total Number of Files</b>	187k files
<b>Current location of files (data or software)</b>	NCI Research Data Catalogue, <a href="http://dx.doi.org/10.4225/41/5a2dc8543105a">http://dx.doi.org/10.4225/41/5a2dc8543105a</a>
<b>Format(s)</b>	netCDF
<b>Associated tool(s)/ Dependencies</b>	
<b>Proposed publication host</b>	Same as current location

Project Details	
ESCC Project No. & Title(s)	2.4: Changing oceans and Australia's future climate
Project Leader(s)	Steve Rintoul
Deliverable(s)	Ocean observations along the GO-SHIP SR3 section
Data/software Manager	Steve Rintoul

Research Output data collection or software URLs if applicable

Description (complete for data and software)	
Title	SR3 – GO-SHIP data
Description	Ocean observations along the GO-SHIP SR3 section
Temporal and spatial extent	2018-01-11 to 2018-02-22; line Hobart -> Antarctica
Lineage	Independently derived.
Credit	Steve Rintoul
Keywords	Ocean in-situ observations
ABS Fields of Research Category / Subcategory*	04 Earth Sciences 0405 Oceanography

\*These are listed in

<http://www.abs.gov.au/ausstats/abs@.nsf/0/4AE1B46AE2048A28CA25741800044242?opendocument>

Attribution/IP(complete for data and software)	
Owning Organisation	CSIRO
Collaborating Organisations	UWA, PMEL
Primary contact for this data	<a href="mailto:Steve.Rintoul@csiro.au">Steve.Rintoul@csiro.au</a> <a href="mailto:Bernadette.Sloyan@csiro.au">Bernadette.Sloyan@csiro.au</a>
Lead Researcher	As above
Contributors	Bronte Tilbrook <a href="mailto:Bronte.Tilbrook@csiro.au">Bronte.Tilbrook@csiro.au</a>
Access	Public release
Licencing	Undefined open licence

Related Materials. Publications, tools, websites, related input data. Please provide full citations for publications, data and software.	
Details	URL
Cruise Report: SR3	<a href="https://cchdo.ucsd.edu/cruise/096U20180111">https://cchdo.ucsd.edu/cruise/096U20180111</a>

Technical Details	
For data: Total Size of this data collection	Exchange format = 7 MB Netcdf = 7.2 MB
For data: Total Number of Files	2
Current location of files (data or software)	CCHDO
Format(s)	Exchange and Netcdf
Associated tool(s)/ Dependencies	N/A
Proposed publication host	<a href="https://cchdo.ucsd.edu/cruise/096U20180111">https://cchdo.ucsd.edu/cruise/096U20180111</a>

Project Details	
ESCC Project No. & Title(s)	2.4: Changing oceans and Australia's future climate
Project Leader(s)	Steve Rintoul
Deliverable(s)	Ocean observations along the GO-SHIP P15S section
Data/software Manager	Steve Rintoul

Research Output data collection or software URLs if applicable

Description (complete for data and software)	
Title	P15S – GO-SHIP data
Description	Ocean observations along the GO-SHIP P15S section
Temporal and spatial extent	2016-04-26 to 2016-06-22; line Hobart to central Pacific
Lineage	Independently derived.
Credit	Bernadette Sloyan
Keywords	Ocean in-situ observations
ABS Fields of Research Category / Subcategory*	04 Earth Sciences 0405 Oceanography

\*These are listed in

<http://www.abs.gov.au/ausstats/abs@.nsf/0/4AE1B46AE2048A28CA25741800044242?opendocument>

Attribution/IP(complete for data and software)	
Owning Organisation	CSIRO
Collaborating Organisations	UWA, PMEL
Primary contact for this data	Bernadette Sloyan <a href="mailto:Bernadette.Sloyan@csiro.au">Bernadette.Sloyan@csiro.au</a>
Lead Researcher	As above
Contributors	Bronte Tilbrook <a href="mailto:Bronte.Tilbrook@csiro.au">Bronte.Tilbrook@csiro.au</a>
Access	Public release
Licencing	Undefined open licence

Related Materials. Publications, tools, websites, related input data. Please provide full citations for publications, data and software.	
Details	URL
Cruise Report: P15S	<a href="https://cchdo.ucsd.edu/cruise/096U20160426">https://cchdo.ucsd.edu/cruise/096U20160426</a>

Technical Details	
For data: Total Size of this data collection	Exchange format = 7 MB Netcdf = 7.2 MB
For data: Total Number of Files	2
Current location of files (data or software)	CCHDO
Format(s)	Exchange and Netcdf
Associated tool(s)/ Dependencies	N/A
Proposed publication host	<a href="https://cchdo.ucsd.edu/cruise/096U20160426">https://cchdo.ucsd.edu/cruise/096U20160426</a>

Project details	
<b>ESCC Project No. &amp; Title(s)</b>	5.7: Tracking ocean change: ocean observations and models
<b>Project Leader(s)</b>	Bernadette Sloyan
<b>Deliverable(s)</b>	Depth corrected XBT data for IX28 for publication
<b>Data/software Manager</b>	Rebecca Cowley

Research output data collection, tool or software URLs if applicable
<a href="http://thredds.aodn.org.au/thredds/catalog/IMOS/SOOP/SOOP-XBT/PRODUCTS/BiasCorrectedData_ChengEtAl_2014/catalog.html">http://thredds.aodn.org.au/thredds/catalog/IMOS/SOOP/SOOP-XBT/PRODUCTS/BiasCorrectedData_ChengEtAl_2014/catalog.html</a>
<a href="http://imos-data.s3-website-ap-southeast-2.amazonaws.com/?prefix=IMOS/SOOP/SOOP-XBT/PRODUCTS/BiasCorrectedData_ChengEtAl_2014/">http://imos-data.s3-website-ap-southeast-2.amazonaws.com/?prefix=IMOS/SOOP/SOOP-XBT/PRODUCTS/BiasCorrectedData_ChengEtAl_2014/</a>
IMOS - SOOP Expendable Bathythermographs (XBT) Research Group - XBT delayed mode data ( <a href="http://aodn.org.au">aodn.org.au</a> )

Description (complete for data, tools and software)	
<b>Title</b>	Depth corrected XBT data for line IX28
<b>Description</b>	Cheng et al, 2014 XBT bias corrections have been applied to the XBT data from the IX28 line and are available for research use.
<b>Temporal &amp; spatial extent</b>	Hobart to Antarctica, 1992-2020
<b>Lineage</b>	
<b>Credit</b>	CSIRO, IMOS, IPEV, Scripps
<b>Keywords</b>	Ocean temperature, ocean profiles, XBT, southern ocean, XBT bias correction
<b>ABS Fields of Research Category / Subcategory*</b>	37 Earth Sciences

\*These are listed in <https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/1297.02020?OpenDocument>

Attribution/IP (complete for data, tools and software)	
<b>Owning organisation</b>	IMOS
<b>Collaborating organisations</b>	CSIRO, IPEV
<b>Primary contact for this data</b>	Rebecca Cowley
<b>Lead researcher</b>	Rebecca Cowley
<b>Contributors</b>	
<b>Access</b>	Publicly available via IMOS at above URLs
<b>Licencing</b>	<a href="http://creativecommons.org/licenses/by/4.0/">http://creativecommons.org/licenses/by/4.0/</a>

Related materials: publications, tools, websites, related input data. Please provide full citations for publications, data and software.	
Details	URL
Auger, M., Morrow, R., Kestenare, E. <i>et al.</i> Southern Ocean in-situ temperature trends over 25 years emerge from interannual variability. <i>Nat Commun</i> 12, 514 (2021). <a href="https://doi.org/10.1038/s41467-020-20781-1">https://doi.org/10.1038/s41467-020-20781-1</a>	<a href="https://doi.org/10.1038/s41467-020-20781-1">https://doi.org/10.1038/s41467-020-20781-1</a>

Technical details	
<b>For data: Total size of this data collection</b>	750MB
<b>For data: Total number of files</b>	11,644
<b>Current location of files (data or software)</b>	At above URLs
<b>Format(s)</b>	Netcdf
<b>Associated tool(s)/dependencies</b>	None
<b>Proposed publication host</b>	IMOS