

# SOUTHERN OCEAN SECTION CRUISE AND CLEAN FILE NAME LIST

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This is a list of all Southern Ocean files in 'The Best CTD/Hydrographic Data' area of the Java OceanAtlas Suite site ([https://joa.ucsd.edu/Data\\_homepage](https://joa.ucsd.edu/Data_homepage)). Because we are always adding new files, it may be slightly out of date, but the intent is to update this list as needed. There are two principal lists here: (1) A data file list organized by WOCE line number, year, and cruise, and (2) a list of matched cruise segments. The latter are data from different years which cover the same portion of a section within one geographic domain. [Note that many of the cruises in the list by WOCE line number, year, and cruise are also near-exact repeats.]

All "cleaned" data were downloaded from the CCHDO (<https://cchdo.ucsd.edu>) and then subjected to these procedures: (1) Bottle data columns and headers were rectified to a specified set and order. (2) Duplicate bottles and bottles with little or no data from oxygen titrations or nutrient analyses were discarded. (3) Data which were quality coded bad or uncertain were eliminated. (4) Where there were multiple casts at a single station (or a single location with multiple stations), the ones which comprised the most nearly complete profile were combined into a single vertical profile. (5) Transects were sorted with south-to-north or west-to-east left-right orientation. (6) Where it took several cruises to cover one very long transect, the data were combined. (7) Overlapping or off-transect data were eliminated. No measured data values were changed. In a few cases errors in station metadata such as position or depth to bottom were corrected.

PLEASE NOTE: The list of matched cruise segments appears at the end of this document.

## COMPLETE CRUISES BY WOCE LINE NUMBER AND YEAR

See the top of page <https://joa.ucsd.edu/southerndata> for a master map showing WOCE line numbers.

In the list which follows, a ~~cross-out~~ means that after inspection and/or cleaning, a cruise listed at the CCHDO was deemed not a suitable match for the intentions/criteria of the clean data project, or the data were not available from the CCHDO. Tasks not yet completed are highlighted in grey.

Files with suffix "\_hy1.csv" are in Exchange format (see <https://cchdo.ucsd.edu/formats>), which can be read by several data exploration applications and any application which can read ascii .csv files. Files with ".joa" suffix are in Java OceanAtlas binary format, which can be read only by that application. NOTE: Java OceanAtlas can be used to export an Exchange format (\_hy1.csv) file from any JOA binary (.joa) file.

"WOA" in a file name indicates a data set made from WOA files to as closely as feasible match the track of the WOCE line in question. We will make most of these later.

At this time the focus is on the bottle data files. Only a few cruises now have CTD data on line here. In the fullness of time, we intend that there should be a cleaned bottle file and a cleaned CTD file for each cruise, each in ascii/Exchange and JOA binary formats.

#### **S04\_circumAA (around Antarctica, zonal)**

1992\_1994\_1996  
S04\_circumAA\_1992\_1994\_1996\_bot\_clean.joa  
S04\_circumAA\_1992\_1994\_1996\_bot\_clean\_hy1.csv

WOA

#### **S04A (Atlantic sector, zonal)**

~~1990~~

1996  
S04A\_1996\_bot\_clean2\_hy1.csv  
S04A\_1996\_bot\_clean2.joa

#### **S04I (Indian sector, zonal)**

1994  
S04I\_1994\_bot\_clean\_hy1.csv  
S04I\_1994\_bot\_clean.joa

~~1995~~

1996\_a  
S04I\_1996a\_bot\_clean\_edited\_hy1.csv  
S04I\_1996a\_bot\_clean\_edited.joa  
S04I\_1996a\_bot\_clean\_with\_margin\_sections\_hy1.csv  
S04I\_1996a\_bot\_clean\_with\_margin\_sections.joa

1996\_b  
S04I\_1996b\_bot\_clean\_hy1.csv  
S04I\_1996b\_bot\_clean.joa

2006  
S04I\_2006\_bot\_clean\_edited\_hy1.csv  
S04I\_2006\_bot\_clean\_edited.joa  
S04I\_2006\_bot\_clean\_with\_margin\_sections\_hy1.csv  
S04I\_2006\_bot\_clean\_with\_margin\_sections.joa

~~2012~~

~~2013~~

2012\_2013  
S04I\_2012\_2013\_bot\_clean\_edited\_hy1.csv

S04I\_2012\_2013\_bot\_clean\_edited.joa

### **S04P (Pacific sector, zonal)**

1992

S04P\_1992\_bot\_clean.joa

S04P\_1992\_bot\_clean\_hy1.csv

S04P\_1992\_bot\_clean\_all.joa

S04P\_1992\_bot\_clean\_all\_hy1.csv

2011

S04P\_2011\_bot\_clean.joa

S04P\_2011\_bot\_clean\_hy1.csv

S04P\_2011\_bot\_clean\_with\_margin\_sections.joa

S04P\_2011\_bot\_clean\_with\_margin\_sections\_hy1.csv

S04P\_2011\_CTD\_clean\_unsorted\_ct1.zip

S04P\_2011\_ctd\_clean.joa

2018

S04P\_2018\_bot\_clean.joa

S04P\_2018\_bot\_clean\_hy1.csv

S04\_2018\_bot\_clean\_with\_margin\_sections.joa

S04\_2018\_bot\_clean\_with\_margin\_sections\_hy1.csv

### **SR01 (Drake Passage; several different tracks)**

1990\_Drake

SR01\_1990\_bottle\_clean\_sorted\_hy1.csv

SR01\_1990\_bottle\_clean\_sorted.joa

1992a

1992b

1993a

1993b

1994a

1994b

1995

1996a

1996b

1997\_east

SR01\_1997\_bot\_clean\_no\_O2\_sorted\_hy1.csv

SR01\_1997\_bot\_clean\_no\_O2\_sorted.joa

**1998**

1999\_Drake

SR01\_1999\_bot\_clean\_sorted\_hy1.csv

SR01\_1999\_bot\_clean\_sorted.joa

2000\_east

SR01\_2000\_bot\_clean\_no\_O2.joa

SR01\_2000\_bot\_clean2\_no\_O2\_hy1.csv

2001\_east

SR01\_2001\_bot\_clean\_no\_O2.joa

SR01\_2001\_bot\_clean2\_no\_O2\_hy1.csv

2002\_east

SR01\_2002\_bot\_clean\_no\_O2\_sorted\_hy1.csv

SR01\_2002\_bot\_clean\_no\_O2\_sorted.joa

2003\_east

SR01\_2003\_bot\_clean\_no\_O2.joa

SR01\_2003\_bot\_clean2\_no\_O2\_hy1.csv

2005\_DrakeSE

SR01\_2005\_bot\_clean\_nuts\_no\_bottle\_O2\_hy1.csv

SR01\_2005\_bot\_clean\_nuts\_no\_bottle\_O2.joa

2006\_Drake

SR01\_2006\_bot\_clean.joa

SR01\_2006\_bot\_clean2\_hy1.csv

**2006\_2**

2007\_far\_east

SR01\_2007\_bot\_clean\_no\_O2.joa

SR01\_2007\_bot\_clean2\_no\_O2\_hy1.csv

2008\_DrakeSE

SR01\_2008\_bot\_clean\_nuts\_nobottleO2\_edited\_hy1.csv

SR01\_2008\_bot\_clean\_nuts\_nobottleO2\_edited.joa

2009\_1\_Drake

SR01\_2009\_92\_FEB\_1\_bottle\_clean\_sorted\_hy1.csv

SR01\_2009\_92\_FEB\_1\_bottle\_clean\_sorted.joa

2009\_2\_east

SR01\_2009\_02\_FEB\_2\_bot\_clean.joa

SR01\_2009\_02\_FEB\_2\_bot\_clean2\_hy1.csv

2009\_3\_east

SR01\_2009\_11\_NOV\_bot\_clean\_no\_O2\_sorted\_hy1.csv

SR01\_2009\_11\_NOV\_bot\_clean\_no\_O2\_sorted.joa

2011\_east  
SR01\_2011\_11\_NOV\_bot\_clean\_no\_O2.joa  
SR01\_2011\_11\_NOV\_bot\_clean2\_no\_O2\_hy1.csv

**2013**

2015\_east  
SR01\_2015\_JAN\_bot\_clean\_no\_O2\_hy1.csv  
SR01\_2015\_JAN\_bot\_clean\_no\_O2\_hy1.joa

**2015b**

2016\_1\_east  
SR01\_2016\_01\_JAN\_bot\_clean2\_hy1.csv  
SR01\_2016\_01\_JAN\_bot\_clean.joa

2016\_2\_east  
SR01\_2016\_11\_NOV\_bot\_clean.joa  
SR01\_2016\_11\_NOV\_bot\_clean2\_hy1.csv

2018\_east  
SR01\_2018\_bot\_clean\_sorted\_hy1.csv  
SR01\_2018\_bot\_clean\_sorted.joa

2021\_east  
SR01\_2021\_bot\_clean\_edited\_hy1.csv  
SR01\_2021\_bot\_clean\_edited.joa

### **SR03 (Antarctica to Australia; formerly also known as "P12S")**

1991  
SR03\_1991\_bot\_clean\_edited\_hy1.csv  
SR03\_1991\_bot\_clean\_edited.joasv

1993  
SR03\_1993\_bot\_clean\_edited\_hy1.csv  
SR03\_1993\_bot\_clean\_edited.joa

1994<sup>a</sup>  
SR03\_1994\_bot\_clean3\_edited\_hy1.csv  
SR03\_1994\_bot\_clean3\_edited.joa

**1994b**

**1994c**

1995  
SR03\_1995\_bot\_clean\_sorted\_hy1.csv  
SR03\_1995\_bot\_clean\_sorted.joa

1996<sup>a</sup>  
SR03\_1996\_bot\_clean\_edited\_hy1.csv

SR03\_1996\_bot\_clean\_edited.joa

1996b

1998

2001

SR03\_2001\_bot\_clean1\_sorted\_hy1.csv

SR03\_2001\_bot\_clean1\_sorted.joa

2002

2003a

2003b

2007a

2007b

2008

SR03\_2008\_bot\_clean\_edit2\_hy1.csv

SR03\_2008\_bot\_clean\_edit2.joa

2011

SR03\_2011\_bot\_clean\_edited\_sorted\_hy1.csv

SR03\_2011\_bot\_clean\_edited\_sorted.joa

2017

2018

SR03\_2018\_bot\_clean\_edited\_hy1.csv

SR03\_2018\_bot\_clean\_edited.joa

WOA

## **SR04 (Weddell Sea)**

In the cruise records at the CCHDO both "A12" and "SR04" are used to designate some cruises in the Atlantic sector of the Southern Ocean which cross the Weddell Sea (more or less northwest to southeast) *and/or* traverse the region between Antarctica (on the eastern boundary of the Weddell Sea) to South Africa. After examining the schematic maps of the WOCE One-Time Survey and Repeat Hydrography lines in the WOCE Southern Ocean Atlas, we have decided for the cleaned data set to call the Antarctica-to-South-Africa leg of A12/SR04 "A12" and the Weddell Sea leg of A12/SR04 "SR04".

Data from the A12 section in the eastern Weddell Sea and the region from Antarctica to South Africa can be found in the Atlantic Ocean area of the "The Best CTD/Hydrographic Data" area of the JOA Suite data site.

Note: In some of the bottle data files from the Alfred-Wegener Institute there are no bottle salinities or oxygens reported. This is a serious deficiency. The affected files are noted here via the file names (e.g., "SR04\_2005\_bot\_clean\_edited\_nobottleO2\_hy1.csv").

Efforts should be made to obtain and merge the missing bottle oxygen data into the main bottle data files.

Other A12/S02/SR04 bottle files still to be sought from AWI archives: 1986, 1999, 2000, and 2002.

Data from the A12 section in the eastern Weddell Sea can be found in the Atlantic Ocean area of the "The Best CTD/Hydrographic Data" area of the JOA Suite data site.

1989

SR04\_1989\_bot\_clean\_edited.joa  
SR04\_1989\_bot\_clean\_edited\_hy1.csv

1990

SR04\_1990\_bot\_clean\_edited.joa  
SR04\_1990\_bot\_clean\_edited\_hy1.csv

1992

SR04\_1992\_bot\_clean.joa  
SR04\_1992\_bot\_clean2\_hy1.csv

1995

SR04\_1995\_bot\_clean\_sorted.joa  
SR04\_1995\_bot\_clean\_sorted\_hy1.csv

1996

SR04\_1996\_bot\_clean\_edited.joa  
SR04\_1996\_bot\_clean\_edited\_hy1.csv

1998

SR04\_1998\_westWeddell\_bot\_clean.joa  
SR04\_1998\_westWeddell\_bot\_clean2\_hy1.csv

2005

SR04\_2005\_bot\_clean\_edited\_nobottleO2.joa  
SR04\_2005\_bot\_clean\_edited\_nobottleO2\_hy1.csv

2008

SR04\_2008\_bot\_clean\_nobottleO2\_edited.joa  
SR04\_2008\_bot\_clean\_nobottleO2\_edited\_hy1.csv

2010

SR04\_2010\_nobottleO2\_bot\_edited.joa  
SR04\_2010\_nobottleO2\_bot\_edited\_hy1.csv

## **FILE NAMES FOR MATCHED CRUISE SEGMENTS**

These matched segments are data from different years covering, as best as feasible, the same segment or portion of a section. Each sub-section was selected to lie within one geographic domain, such as an ocean basin. (Comparison of complete matched sections, for example S04P\_1992 versus S04P\_2018, can be gleaned from the master cleaned cruise files.) The matched segments from the same line number and with the same name convention are the closest feasible matches to each other. For example, "SR03\_1991\_bot\_clean\_edited\_northof54S.joa" covers the same stretch of ocean as do the SR03 files with similar names from 1993, 1994, 1995, 1996, 2001, 2008, 2011, and 2018, in order to facilitate interannual comparisons.

Note also that for any cruise segment data file available on the site only in JOA binary format (.joa), one can use the Java OceanAtlas "Export WOCE Exchange file" command (under the JOA "File" menu) to export and save an ascii, comma-delimited WOCE Exchange file (\_hy1.csv), which can then be used in any application which can read ascii, comma-delimited data (such as Ocean Data View or Excel, for example).

### **SR03 (Antarctica to Australia)**

SR03\_1991\_bot\_clean\_edited\_northof54S.joa  
SR03\_1991\_bot\_clean\_edited\_southof54S.joa

SR03\_1993\_bot\_clean\_edited\_northof54S.joa  
SR03\_1993\_bot\_clean\_edited\_southof54S.joa

SR03\_1994\_bot\_clean3\_edited\_northof54S.joa  
SR03\_1994\_bot\_clean3\_edited\_southof54S.joa

SR03\_1995\_bot\_clean\_sorted\_northof54S.joa  
SR03\_1995\_bot\_clean\_sorted\_southof54S.joa

SR03\_1996\_bot\_clean\_edited\_northof54S.joa  
SR03\_1996\_bot\_clean\_edited\_southof54S.joa

SR03\_2001\_bot\_clean1\_sorted\_northof54S.joa  
SR03\_2001\_bot\_clean1\_sorted\_southof54S.joa

SR03\_2008\_bot\_clean\_edit2\_northof54S.joa  
SR03\_2008\_bot\_clean\_edit2\_southof54S.joa

SR03\_2011\_bot\_clean\_edited\_sorted\_northof54S.joa  
SR03\_2011\_bot\_clean\_edited\_sorted\_southof54S.joa

SR03\_2018\_bot\_clean\_sorted\_northof54S.joa  
SR03\_2018\_bot\_clean\_sorted\_southof54S.joa