ICOADS can be downloaded in a variety of formats and either individual observations or summary statistics are available. For more details, including how to download subsets of observations, visit the data products page on the ICOADS website: http://icoads.noaa.gov/products.html

ICOADS has always worked closely with initiatives that extend the climate record through new sources of historical information. Ship logbooks containing weather observations digitized by citizen science initiatives like Old Weather and Weather Detective have been selected to help improve data coverage in regions and periods where observations in ICOADS are sparse.

ICOADS in Numbers
- 1662 first observations
- 455 million number of observations
- > 10 Terabyte data served as individual observations, data subsets and summary statistics
- Users from 78 different countries have downloaded data from the most recent release

ICOADS is a collaborative effort, the core team is able to call on an international partnership for help and scientific advice.

Any questions? Email icoads@noaa.gov or visit http://icoads.noaa.gov/

International Comprehensive Ocean-Atmosphere Dataset
The most complete archive of surface marine observations, spanning three centuries

Annual average sea surface temperature from ICOADS, as reported
The ICOADS is the world’s most extensive surface marine meteorological data collection. Building on extensive national and international partnerships, ICOADS provides thousands of users with easy access to many different data sources in a consistent format. Data sources range from early non-instrumental ship observations to more recent measurements from automatic measurement systems including moored buoys and surface drifters. Each new release of ICOADS has enriched spatial and temporal coverage and data and metadata quality has been improved.

ICOADS meets the needs of different types of users by providing both individual observations and also monthly gridded summary data. Monthly updates make sure the dataset is kept up to date.

ICOADS underpins a wide range of climate products including the global surface temperature record, winds, pressure, humidity, clouds and estimates of air-sea exchange. ICOADS is used as input data for many well-used sources of marine climate information, including reanalyses and gridded analyses of sea surface temperature. Papers describing datasets using ICOADS as input data were cited in the scientific literature more than six thousand times during 2015.