A Bibliometric Analysis of Publications by NOAA’s National Oceanographic Data Center (1991-2011)

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About this Report

This report presents a basic bibliometric analysis of the peer-reviewed journal articles produced by authors affiliated with NOAA’s National Oceanographic Data Center between 1991 and 2011. The bibliometric data presented in this report were collected from Web of Science, Science Citation Index Expanded (WoS) on 5 January 2012. This report only analyzes articles published in the select set of peer-reviewed journals indexed by WoS; it does not include citations to NODC data sets or products. A full list of the journal articles analyzed in this report is provided in the Appendix.

Summary Metrics

<table>
<thead>
<tr>
<th>Bibliometric Indicator</th>
<th>Value</th>
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<tbody>
<tr>
<td>Number of Articles</td>
<td>112</td>
</tr>
<tr>
<td>Number of Citations</td>
<td>4,021</td>
</tr>
<tr>
<td>Average Number of Citations per Article</td>
<td>35.9</td>
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<tr>
<td>H-Index</td>
<td>30</td>
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These metrics suggest that while NODC has published relatively infrequently over the past 20 years, it has produced a relatively large number of highly cited articles. This conclusion is suggested by the relatively high average citation rate of 35.9 citations received per article and supported by the article set’s relatively high H-Index of 30, which means that this group of 112 publications includes 30 publications that have each been cited 30 or more times. This conclusion is further supported by the fact that NODC authors have produced 10 articles that have each been cited over 100 times. These 10 articles are listed on page 3 of this report.
Figure 1: non-cumulative number of NODC journal articles published per calendar year

Figure 2: non-cumulative number of citations received per year by all NODC journal articles analyzed in this report
## Top 10 Most Highly Cited Articles

<table>
<thead>
<tr>
<th>Article</th>
<th>Citations Received</th>
</tr>
</thead>
</table>
Appendix: NODC Publications Analyzed in this Report


Levitus S, Antonov JI, Boyer TP. 1994. Interannual variability of temperature at a depth of 125

Levitus S, Antonov JI, Boyer TP, Garcia HE, Locarnini RA. 2005. EOF analysis of upper ocean heat

Levitus S, Antonov JI, Boyer TP, Garcia HE, Locarnini RA. 2005. Linear trends of zonally averaged
thermosteric, halosteric, and total steric sea level for individual ocean basins and the world
doi:10.1029/2005gl023761

Levitus S, Antonov JI, Boyer TP, Locarnini RA, Garcia HE, Mishonov AV. 2009. Global ocean heat
content 1955-2008 in light of recently revealed instrumentation problems. Geophysical

287(5461):2225-2229. doi:10.1126/science.287.5461.2225


and silicate in the world oceans. Progress in Oceanography 31(3):245-273. doi:10.1016/0079-
6611(93)90003-v

Levitus S, Isayev G. 1992. Polynomial-approximation to the international equation of state for
seawater. Journal of Atmospheric and Oceanic Technology 9(5):705-708. doi:10.1175/1520-
0426(1992)009<0705:pattie>2.0.co;2

Levitus S, Isayev G. 1994. Polynomial-approximation to the international equation of state for


Levitus S, Sarkisyan AS. 2001. Ocean dynamic characteristics obtained by synthesizing climatic
data and the WOCE program information. Izvestiya Atmospheric and Oceanic Physics 37(4):496-
507.
Link JS, Ford MD. 2006. Widespread and persistent increase of Ctenophora in the continental shelf ecosystem off NE USA. Marine Ecology-Progress Series 320:153-159. doi:10.3354/meps320153


