



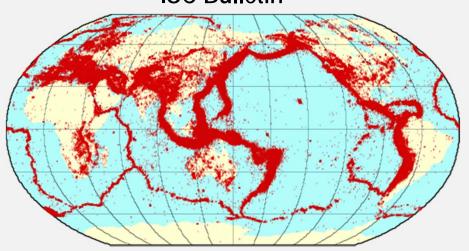
Prof. Ambraseys' contribution to the ISC Event Bibliography

Dmitry A. Storchak & Domenico Di Giacomo

www.isc.ac.uk/event_bibliography

The ISC main products

ISC Bulletin



- global definitive seismic bulletin
- □ used in many areas of geophysical research
- **1**960-2014
- earthquakes and anthropogenic events
- □ ~5 million events
- based on reports from 130 networks worldwide

ISC-GEM Catalogue



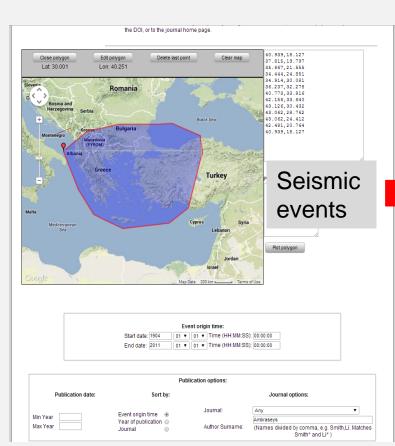
- global catalogue of large earthquakes
- □ prepared for seismic hazard and risk assessment
- **1900-2009**
- □ large earthquakes only
- \square ~19,000 <u>homogeneous</u> hypocentre locations and M_W estimates
- □ with the estimates of <u>uncertainty</u>
- prepared using <u>uniform technique</u> and original seismic wave arrival times and amplitude measurements

Motivation for the ISC Event Bibliography

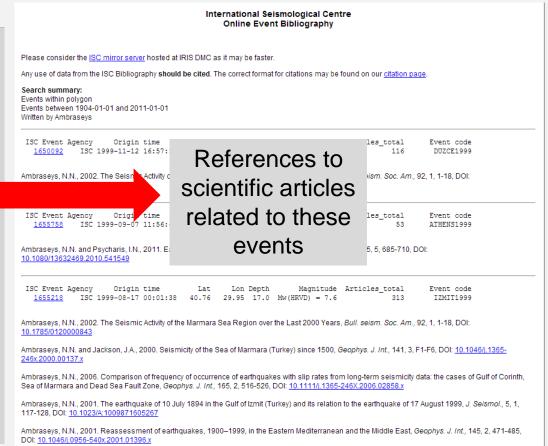


- ☐ Geophysicists often need to identify <u>scientific</u>
 <u>articles</u> related to <u>specific seismic events</u>
 (earthquakes and anthropogenic events) that
 occurred at particular times or in specific regions.
- Most advanced bibliographical searches such as Google Scholar would require them to type a text ■ string containing a commonly used name for the earthquake or the region and date it occurred.
- The search may need to be <u>repeated several</u> <u>times</u> to account <u>for all possible transliterations</u> of a place name in English, several different ways of specifying a date and a variety of names of the area where the earthquake has occurred.
 - The results then have to be merged and unavoidable <u>duplicates removed</u>. This procedure is daunting and often leads to unstable results.

What does the ISC Event Bibliography do?



interactive search based on seismic event (location, time, magnitude) and/or publication parameters (author, journal, publication year).



references to scientific publications associated with seismic events worldwide;

Output example

Link to the ISC Bulletin

International Seismological Centre Online Event Bibliography

Please consider the ISC mirror server hosted at IRIS DMC as it may be faster.

Any use of data from the ISC Bibliography should be cited. The correct format for citations may be found on our citation page.

Search summary:

Events within polygon Events between 1904-01-01 and 2011-01-01 Written by Ambraseys



ncy	Origin	time	Lat	Lon	Depth	Magnitude	Articles_total	Event code
ISC	1999-11-12	16:57:19	40.81	31.19	10.4	Mw(HRVD) = 7.2	116	DUZCE1999

Ambraseys, N.N., 2002. The Seismic Activity of the Marmara Sea Region over the Last 2000 Years, Bull. seism. Soc. Am., 92, 1, 1-18, DOI: 10.1785/0120000843

ISC Event Agency Origin time Lat Lon Depth Magnitude Articles_total Event code 1655758 ISC 1999-09-07 11:56:49 38.12 23.58 9.4 Mw(HRVD) = 6.0 53 ATHENS1999

Ambraseys, N.N. and Psycharis, I.N., 2011. Earthquake stability of columns and statues, J. Earthq. Eng., 15, 5, 685-710, DOI: 10.1080/13632469.2010.541549

ISC Event Agency Origin time Lat Lon Depth Magnitude Articles_total Event code 1655218 ISC 1999-08-17 00:01:38 40.76 29.95 17.0 Mw(HRVD) = 7.6 313 IZMIT1999

Ambraseys, N.N., 2002. The Seismic Activity of the Marmara Sea Region over the Last 2000 Years, Bull. seism. Soc. Am., 92, 1, 1-18, DOI: 10.1785/0120000843

Ambraseys, N.N. and Jackson, J.A., 2000. Seismicity of the Sea of Marmara (Turkey) since 1500, Geophys. J. Int., 141, 3, F1-F6, DOI: 10.1046/j.1365-246x.2000.00137.x

Ambraseys, N.N., 2006. Comparison of frequency of occurrence of earthquakes with olip rates from rong-term salemicity data: the cases of Gulf of Corinti Sea of Marmara and Dead Sea Fault Zone, Geophys. J. Int., 165, 2, 516-526, DOI: 10.1111/j.1365-246X.2006.02858.x

Ambraseys, N.N., 2001. The earthquake of 10 July 1894 in the Gulf of Izmit (Turkey) and its relation to the earthquake of 17 August 1999, J. Seismol., 5, 1, 117-128, DOI: 10.1023/A:1009871605267

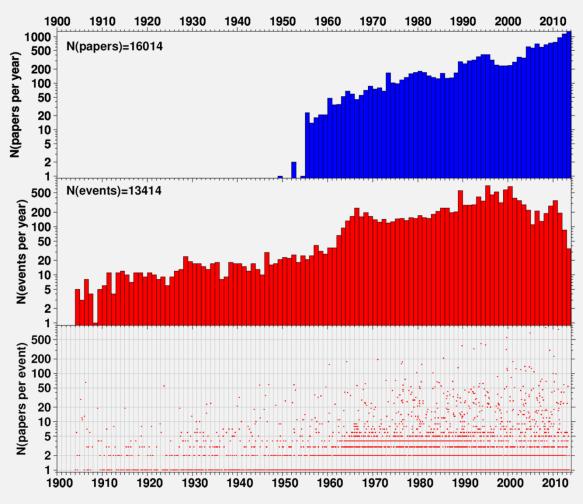
Ambraseys, N.N., 2001. Reassessment of earthquakes, 1900–1999, in the Eastern Mediterranean and the Middle East, Geophys. J. Int., 145, 2, 471-485, DOI: 10.1046/j.0956-540x.2001.01396.x

Earthquake parameters

Link to the paper abstract webpage via the DOI

Content of the ISC Event Bibliography

As of February 2016, the ISC Event Bibliography includes over 16,000 articles associated to ~13,500 seismic events (natural or man-made);



- ☐ This service covers the last 50-60 years of publications from nearly 500 titles;
- ☐ Some significant events in the first part of last century are also included;
- □ Publications dealing with catalogues and/or large dataset in a specific region are not included;
- Ongoing work to add missing references (Authors are encouraged to check for missing publications and contact us).

Articles in many Fields of Geoscience

The ISC Event Bibliography is not limited to publications in Seismology. It includes articles on:

□ Earthquake engineering
 □ Tectonics
 □ Structural geology
 □ Geodesy
 □ Remote sensing
 □ Landslides
 □ Environmental studies
 □ Hydrology
 □ Geochemistry
 □ Atmospheric sciences

Geomagnetism

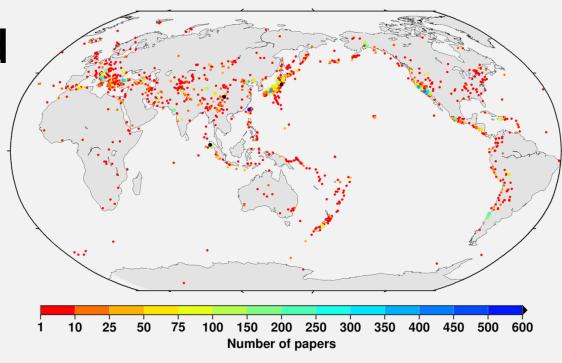
others

Nuclear test monitoring

Tsunami and coastal studies

Most Referenced Events

- Most of the events are linked to one or two articles, a few to hundreds
- Events with many references are in Japan, Euro-Mediterranean and U.S. West coast areas
- Some events attracted attention of many researches in various geoscience disciplines



"The most studied events"

L	Event origin time	Ν	Code	Event origin time	Ν	Code
	2008-05-12 06:27:59 2011-03-11 05:46:23 2004-12-26 00:58:52 999-09-20 17:47:16 994-01-17 12:30:54 995-01-16 20:46:51 989-10-18 00:04:14 992-06-28 11:57:35 999-08-17 00:01:38 2009-04-06 01:32:42 2010-02-27 06:34:13 985-09-19 13:17:50 971-02-09 14:00:40 964-03-28 03:36:13 2001-01-26 03:16:40 201-01-26 03:16:40 976-07-27 19:42:53 976-05-06 20:00:12 980-11-23 18:34:52 960-05-22 19:11:14 2003-09-28 17:15:24 988-12-07 07:41:24	886 8682 5554 411 389 374 322 299 226 207 175 174 158 154 157 135 137 137 137	WENCHUAN2008 TOHOKU2011 SUMATRA2004 CHI-CHI1999 NORTHRIDGE1994 SHYOGO1995 LOMAPRIETA1989 LANDERS1992 IZMIT1999 LAQUILA2009 MAULE2010 MEXICOCITY1985 SANFERNANDO1971 ALASKA1964 BHUJ2001 TANGSHAN1976 FRIULI1976 CAMPANIA1980 CHILE1960 TOKACHI-OKI2003 MID-NIIGATA2004 PARKFIELD2004 ARMENIA1988 HECTOR-MINE1999	2001-11-14 09:26:10 2002-11-03 22:12:41 1999-11-12 16:57:19 2003-12-26 01:56:53 2005-10-08 03:50:35 1979-10-15 23:16:57 1983-05-26 02:59:58 2010-01-12 21:53:10 2010-09-03 16:35:46 1997-09-26 09:40:25 2000-10-06 04:30:17 2007-07-16 01:13:21 1977-03-04 19:21:54 1972-12-23 06:29:42 1975-02-04 11:36:05 2007-03-25 00:41:57 2008-06-13 23:43:46 1987-10-01 14:42:18 1984-04-24 21:15:19 2010-04-13 23:49:37 1980-10-10 12:25:22 1906-04-18 13:12:00 1984-09-13 23:48:51 1994-06-09 00:33:16 1968-05-16 00:48:57	125 121 116 1103 1103 1103 1103 1103 1103 1103	KUNLUN2001 DENALI2002 DUZCE1999 BAM2003 KASHMIR2005 IMPERIAL1979

First 20 Journals and Authors

Journal	N(papers)
Bull. seism. Soc. Am.	1991
J. geophys. Res.	1062
Geophys. Res. Lett.	973
Tectonophysics	616
Geophys. J. Int.	596
Pure appl. Geophys.	423
Earth Planets Space	415
Earthq. Spectra	409
Seismol. Res. Lett.	383
Acta seism. sin.	289
Bull. Earthq. Res. Inst. Tokyo Univ.	252
EOS. Trans. Am. geophys. Un.	233
Annls Geophys.	227
Natural Hazards	213
Phys. Earth planet. Interiors	211
Zisin	207
Nature	207
Chinese J. Geophys.	205
Nat. Hazards Earth Syst. Sci.	192
J. Seismol.	179

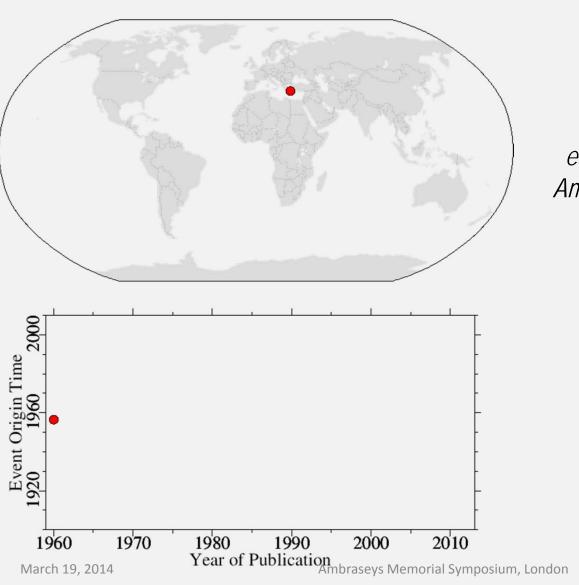
With rare exceptions,
we include only
publications with
English title and
abstract.

We make no
judgement of the
quality of the articles.

Author	N(papers)			
Kanamori,H.	201			
Satake,K.	97			
Ambraseys,N.N.	89			
Okal,E.A.	84			
Helmberger,D.	84			
Bürgmann,R.	78			
Lay,T.	76			
Hasegawa,A.	74			
Singh,S.K.	72			
Sato,T.	71			
Aki,K.	70			
Jackson,J.A.	69			
Hayakawa,M.	62			
Liu,J.	61			
Mori,J.	59			
Dreger,D.	59			
Irikura,K.	58			
Li,Y.	55			
Hauksson,E.	54			
Hartzell,S.	53			

ISC Event Bibliography: Ambraseys

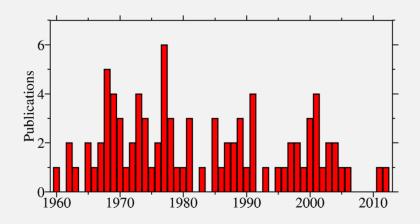
Publication year = 1960



The map of ~500 individual earthquakes described by Prof.
Ambraseys in 89 scientific articles

The timeline

ISC Event Bibliography: Ambraseys



89 publications of Ambraseys related to ~500 earthquakes in the most active regions of the world are included in the ISC Event Bibliography

Journal/Series	N(papers)
Geophys. J. Int.	10
Bull. seism. Soc. Am.	9
Annls Geophys.	9
Nature	7
Earthq. Engng struct. Dyn.	6
UNESCO Publ.	5
J. Seismol.	4
Curr. Sci.	4
Seismol. Res. Lett.	3
Europ. Earthq. Engng	3
Others	29

First 20 authors

Author	N(papers)
Kanamori,H.	201
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Ambraseys,N.N.	89
Okal,E.A.	84
Helmberger,D.	84
Bürgmann,R.	78
Lay,T.	76
Hasegawa,A.	74
Singh,S.K.	72
Sato,T.	71
Aki,K.	70
Jackson,J.A.	69
Hayakawa,M.	62
Liu,J.	61
Mori,J.	59
Dreger,D.	59
Irikura,K.	58
Li,Y.	55
Hauksson,E.	54
Hartzell,S.	53

Summary

- ☐ The ISC Event Bibliography allows an interactive search for seismic event oriented articles based on event and/or publication parameters.
- Ambraseys is the 3rd top scoring author in the ISC Event Bibliography.
- ☐ The ISC Event Bibliography is multidisciplinary and is an attractive tool for <u>researchers</u> and <u>students</u> from different fields.
- ☐ This new ISC service is expected to facilitate the work of <u>authors</u>, <u>reviewers</u> and journal <u>editors</u> during the entire process of scientific article publication.
- ☐ Articles describing catalogues or large datasets are not included.
- ☐ For further details see Di Giacomo *et al.* (SRL 2014).
- ☐ We continue improving the Event Bibliography; individual authors are encouraged to report missing papers using:

www.isc.ac.uk/event_bibliography