

Assoc. Prof. Cengiz Zabıcı

Personal Information

Office Phone: [+90 212 285 6162](tel:+902122856162)

Fax Phone: [+90 212 285 6251](tel:+902122856251)

Email: zabci@itu.edu.tr

Web: <http://akademi.itu.edu.tr/zabci>

Address: İstanbul Teknik Üniversitesi, Ayazağa Yerleşkesi, Maden Fakültesi, Jeoloji Mühendisliği Bölümü 34460 Maslak İstanbul

International Researcher IDs

ORCID: 0000-0003-0814-0422

Publons / Web Of Science ResearcherID: X-3048-2018

ScopusID: 15050008700

Yoksis Researcher ID: 152436

Education Information

Doctorate, İstanbul Technical University, Avrasya Yer Bilimleri Enstitüsü, Katı Yer Bilimleri, Turkey 2005 - 2013

Postgraduate, İstanbul Technical University, Avrasya Yer Bilimleri Enstitüsü, Katı Yer Bilimleri, Turkey 2003 - 2005

Undergraduate, İstanbul Technical University, Maden Fakültesi, Jeoloji Mühendisliği, Turkey 1999 - 2003

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Kuzey Anadolu Fayının Ilgaz (Çankırı) - Karlıova (Bingöl) arasında kalan kesiminin morfokronoloji tabanlı son beşbin yıllık kayma hızı tarihçesi ve depremselliği, İstanbul Teknik Üniversitesi, Avrasya Yer Bilimleri Enstitüsü, Katı Yer Bilimleri, 2013

Postgraduate, Dokurcun-Beldibi (Adapazarı) arasındaki morfotektonik ve paleosismolojik özellikleri, İstanbul Teknik Üniversitesi, Avrasya Yer Bilimleri Enstitüsü, Katı Yer Bilimleri, 2005

Research Areas

Technical Sciences, Geological Engineering, General Geology, Areal Geology (general,maps and charts), Tectonics (Paleotectonics, Neotectonics, Seismotectonics), Structural Geology, Surficial Geology (geomorphology, quaternary geology, soils), Geology

Academic Titles / Tasks

Associate Professor, İstanbul Technical University, Maden, Jeoloji Mühendisliği, 2023 - Continues

Assistant Professor, İstanbul Technical University, Maden, Jeoloji Mühendisliği, 2018 - 2023

Assistant Professor, İstanbul Technical University, Maden, Jeoloji Mühendisliği, 2017 - 2018

Expert PhD, İstanbul Technical University, Maden, Jeoloji Mühendisliği, 2013 - 2017

Research Assistant, İstanbul Technical University, Maden, Jeoloji Mühendisliği, 2010 - 2013

Research Assistant, İstanbul Technical University, Maden, Jeoloji Mühendisliği, 2005 - 2010

Academic and Administrative Experience

Deputy Head of Department, İstanbul Technical University, Jeoloji Mühendisliği Bölümü, 2018 - 2020

Courses

Paleoseismology, Postgraduate, 2017 - 2018

Saha Jeolojisi, Undergraduate, 2017 - 2018

Sedimentology, Undergraduate, 2017 - 2018

Petrography of Sedimentary Rocks, Undergraduate, 2017 - 2018

General Geology, Undergraduate, 2017 - 2018

General Geology, Undergraduate, 2017 - 2018

Published journal articles indexed by SCI, SSCI, and AHCI

I. On the nature of the Cimmerian Continent

Şengör A. M. C., ALTINER D., Zabıcı C., Sunal G., Lom N., Aylan E., Öner T.
Earth-Science Reviews, vol.247, 2023 (SCI-Expanded)

II. Arrest of the Mw 6.8 January 24, 2020 Elazığ (Turkey) earthquake by shallow fault creep

Çakır Z., DOĞAN U., Akoğlu A. M., Ergintav S., ÖZARPACI S., ÖZDEMİR A., Nozadkhalil T., Çakır N., Zabıcı C., ERKOÇ M. H., et al.

Earth and Planetary Science Letters, vol.608, 2023 (SCI-Expanded)

III. Earthquake history of the Milas Fault: an active dextral fault in an extensional province (SW Anatolia, Türkiye)

Kirkan E., Akyüz H. S., Basmenji M., DİKBAŞ A., Zabıcı C., Yazıcı M., Erturaç M. K.
Natural Hazards, vol.116, no.2, pp.1639-1662, 2023 (SCI-Expanded)

IV. Internal deformation of continental blocks within converging plates: insights from the Ovacık Fault (Anatolia, Türkiye)

Zabıcı C., Sançar T., Tikhomirov D., Ivy-Ochs S., Vockenhuber C., Friedrich A. M., Yazıcı M., Akçar N.
Turkish Journal of Earth Sciences, vol.32, no.SI-3, pp.351-379, 2023 (SCI-Expanded)

V. The Saharides: Turkic-type orogeny in Afro-Arabia

Şengör A. M. C., Lom N., Zabıcı C., Sunal G., Oner T.
International Journal of Earth Sciences, vol.111, no.8, pp.2885-2924, 2022 (SCI-Expanded)

VI. Palaeoseismic behaviour of strike-slip faults in slowly deforming regions: palaeoearthquakes and long-term slip history of the Ovacık Fault (eastern Turkey)

Yazıcı M., Zabıcı C., Natalin B., SANÇAR T., Akyüz H. S.
JOURNAL OF SEISMOLOGY, vol.25, no.1, pp.255-272, 2021 (SCI-Expanded)

VII. Reconstructing orogens without biostratigraphy: The Saharides and continental growth during the final assembly of Gondwana-Land

Şengör A. M. C., Lom N., Zabıcı C., Sunal G., Oner T.
Proceedings of the National Academy of Sciences of the United States of America, vol.117, no.51, pp.32278-32284, 2020 (SCI-Expanded)

VIII. Geodynamic importance of the strike-slip faults at the eastern part of the Anatolian Scholle: Inferences from the uplift and slip rate of the Malatya Fault (Malatya-Ovacık Fault Zone, eastern

Turkey)

Sancar T., Zabcı C., Akcar N., Karabacak V., Yesilyurt S., Yazıcı M., Akyüz H. S., Onal A. O., Ivy-Ochs S., Christl M., et al.
JOURNAL OF ASIAN EARTH SCIENCES, vol.188, 2020 (SCI-Expanded)

- IX. Spatio-temporal behaviour of continental transform faults: implications from the late Quaternary slip history of the North Anatolian Fault, Turkey

Zabcı C.

CANADIAN JOURNAL OF EARTH SCIENCES, vol.56, no.11, pp.1218-1238, 2019 (SCI-Expanded)

- X. Fluvial response to rising levels of the Black Sea and to climate changes during the Holocene: Luminescence geochronology of the Sakarya terraces

ERTURAÇ M. K., Sahiner A., Zabcı C., Okur H., Polymeris G. S., MERİÇ N., İKİEL C.
HOLOCENE, vol.29, no.6, pp.941-952, 2019 (SCI-Expanded)

- XI. Geometry and Paleoseismology of the Malatya Fault (Malatya-Ovack Fault Zone), Eastern Turkey: Implications for intraplate deformation of the Anatolian Scholle

SANÇAR T., Zabcı C., KARABACAK V., Yazıcı M., Akyüz H. S.

JOURNAL OF SEISMOLOGY, vol.23, no.2, pp.319-340, 2019 (SCI-Expanded)

- XII. The role of intraplate strike-slip faults in shaping the surrounding morphology: The Ovacık Fault (eastern Turkey) as a case study

Yazıcı M., Zabcı C., Sancar T., Natalin B.

GEOMORPHOLOGY, vol.321, pp.129-145, 2018 (SCI-Expanded)

- XIII. Mechanics of plio-quaternary faulting around the Karliova triple junction: implications for the deformation of Eastern part of the Anatolian Scholle

Sancar T., Akyüz H. S., Schreurs G., Zabcı C.

GEODINAMICA ACTA, vol.30, no.1, pp.287-305, 2018 (SCI-Expanded)

- XIV. Evidence for tear faulting from new constraints of the 23 october 2011 Mw 7.1 Van, Turkey, earthquake based on InSAR, GPS, coastal uplift, and field observations

Akoglu A. M., Jonsson S., Wang T., Cakir Z., Doğan U., Ergintav S., Osmanoglu B., Feng G., Zabcı C., Özdemir A., et al.
Bulletin of the Seismological Society of America, vol.108, no.4, pp.1929-1946, 2018 (SCI-Expanded)

- XV. Paleoseismic history and slip rate along the Sapanca-Akyazı segment of the 1999 Izmit earthquake rupture (M-w=7.4) of the North Anatolian Fault (Turkey)

Dikbaş A., Akyüz H. S., Meghraoui M., Ferry M., Altunel E., Zabcı C., LANGRIDGE R., YALÇINER C. C.
TECTONOPHYSICS, vol.738, pp.92-111, 2018 (SCI-Expanded)

- XVI. Palaeoseismic history of the eastern part of the North Anatolian Fault (Erzincan, Turkey): Implications for the seismicity of the Yedisu seismic gap

Zabcı C., Akyüz H. S., Sancar T.

JOURNAL OF SEISMOLOGY, vol.21, no.6, pp.1407-1425, 2017 (SCI-Expanded)

- XVII. Spatial slip behavior of large strike-slip fault belts: Implications for the Holocene slip rates of the eastern termination of the North Anatolian Fault, Turkey

Zabcı C., Sancar T., Akyüz H. S., Kiyak N. G.

JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH, vol.120, no.12, pp.8591-8609, 2015 (SCI-Expanded)

- XVIII. Distributed transpressive continental deformation: The Varto Fault Zone, eastern Turkey

Sancar T., ZABCİ C., Akyüz H. S., SUNAL G., Villa I. M.

TECTONOPHYSICS, vol.661, pp.99-111, 2015 (SCI-Expanded)

- XIX. The region of the Strandja Sill (North Turkey) and the Messinian events

Suc J., GILLET H., Cagatay M. N., POPESCU S., LERICOLAIS G., ARMijo R., MELINTE-DOBRINESCU M. C., SEN S., CLAUZON G., SAKINC M., et al.

MARINE AND PETROLEUM GEOLOGY, vol.66, pp.149-164, 2015 (SCI-Expanded)

- XX. Discussion: A critique of Possible waterways between the Marmara Sea and the Black Sea in the late Quaternary: Evidence from ostracod and foraminifer assemblages in lakes İznik and Sapanca, Turkey, Geo-Marine Letters, 2011

Yaltırak C., ÜLGEN U. B., Zabcı C., FRANZ S. O., ÖN S. A., Sakınç M., CAGATAY M. N., Alpar B., Öztürk K., TUNOĞLU C., et al.

- Geo-Marine Letters, vol.32, no.3, pp.267-274, 2012 (SCI-Expanded)
- XXI. **Palaeoearthquakes on the Kelkit Valley Segment of the North Anatolian Fault, Turkey: Implications for the Surface Rupture of the Historical 17 August 1668 Anatolian Earthquake**
 Zabci C., Akyüz H. S., Karabacak V., SANCAR T., Altunel E., Gursoy H., Tatar O.
 TURKISH JOURNAL OF EARTH SCIENCES, vol.20, no.4, pp.411-427, 2011 (SCI-Expanded)
- XXII. **Paleoearthquakes of the Duzce fault (North Anatolian Fault Zone): Insights for large surface faulting earthquake recurrence**
 PANTOSTI D., PUCCI S., PALYVOS N., DE MARTINI P. M., D'ADDEZIO G., Collins P. E. F., Zabci C.
 JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH, vol.113, 2008 (SCI-Expanded)
- XXIII. **Antik Perinthos (Marmara Ereğlisi) kentinin 15. yüzyila kadar gerçekleşen tarihsel depremleri (Historical earthquakes of Ancient Perinthos (Marmara Ereğlisi) until the 15th century)**
 Erel T. L., Zabci C., Akyüz H. S., CAGATAY M. N.
 Türkiye Jeoloji Bülteni, vol.51, pp.77-89, 2008 (SCI-Expanded)
- XXIV. **Paleoseismological evidence of recent earthquakes on the 1967 Mudurnu Valley earthquake segment of the North Anatolian fault**
 PALYVOS N., PANTOSTI D., Zabci C., D'ADDEZIO G.
 BULLETIN OF THE SEISMOLOGICAL SOCIETY OF AMERICA, vol.97, no.5, pp.1646-1661, 2007 (SCI-Expanded)
- XXV. **Deprem yapan deniz tanrısı Poseidon**
 Erel T. L., Zabci C.
 Arkeoloji ve Sanat, vol.126, pp.71-78, 2007 (SCI-Expanded)
- XXVI. **Coseismic ruptures and tectonic landforms along the Duzce segment of the North Anatolian Fault Zone (Ms 7.1, November 1999)**
 PUCCI S., PALYVOS N., Zabci C., PANTOSTI D., BARCHI M.
 JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH, vol.111, 2006 (SCI-Expanded)

Articles Published in Other Journals

- I. **How to make continental reconstructions: the importance of the knowledge of high strain along former plate boundaries**
 Şengör A. M. C., Natalm B., Lom N., Zabci C., Sunal G.
 Mediterranean Geoscience Reviews, vol.5, no.2, pp.77-84, 2023 (Scopus)
- II. **Çok bantlı Landsat 8-OLI ve Sentinel-2A MSI uydu görüntülerinin karşılaştırmalı jeoloji uygulaması: Örnek çalışma alanı olarak Doğu Anadolu Fayı boyunca Palu – Hazar Gölü bölgesi (Elazığ, Türkiye)**
 Zabci C.
 Geomatik, vol.6, no.3, pp.238-246, 2021 (Peer-Reviewed Journal)
- III. **Malatya Fayı'nın morfometrik özellikleri**
 ZABCI C.
 TÜRK COĞRAFYA DERGİSİ, no.75, pp.107-118, 2020 (Peer-Reviewed Journal)
- IV. **The phanerozoic palaeotectonics of Turkey. Part I: an inventory**
 ŞENGÖR A. M. C., LOM N., SUNAL G., ZABCI C., SANÇAR T.
 Mediterranean Geoscience Reviews, vol.1, no.1, pp.91-161, 2019 (Peer-Reviewed Journal)
- V. **The late quaternary tectono-stratigraphic evolution of the Lake Van, Turkey Van gölü'nün geç kuvaterner tektono-stratigrafik evrimi**
 GÖRÜR N., Çapatacay M. N., Zabci C., Sakınç M., AKKÖK R., ŞILE H., Örçen S.
 Bulletin of the Mineral Research and Exploration, vol.2015, no.151, pp.1-47, 2015 (Scopus)
- VI. **1939 Erzincan Depremi yüzey kırığının Ortaköy-Suşehri segmenti üzerinde paleoseismolojik bulgular, Kuzey Anadolu Fay Zonu (Paleoseismological findings on the Ortaköy-Suşehri Segment of the 1939 Erzincan Earthquake surface rupture, North Anatolian Fault Zone)**
 Polat A., Tatar O., Gursoy H., Karabacak V., Zabci C., SANCAR T.
 Türkiye Jeoloji Bülteni, vol.55, pp.137-157, 2012 (Peer-Reviewed Journal)

Books & Book Chapters

I. Continental Transform Faults

ŞENGÖR A. M. C., ZABCİ C., NATALINE B.

in: Encyclopaedia of Geology, Alderton, David; Scott, A. Elias, Editor, Academic Press , pp.913-929, 2021

II. The North Anatolian Fault and the North Anatolian Shear Zone

Şengör A. M. C., Zabcı C.

in: Landscapes and Landforms of Turkey, Kuzucuoğlu, C, Çiner, A., Kazancı, N., Editor, Springer International Publishing, Cham, pp.481-494, 2019

III. The Continental Transform Faults: Congruence and incongruence with normal plate kinematics

Şengör A. M. C., Zabcı C., Natalin B.

in: Transform plate boundaries and fracture zones, Duarte, J. C. , Editor, Elsevier, Amsterdam, pp.170-246, 2019

Episodes in the Encyclopedia

I. Encyclopedia of Earthquake Engineering

Akyüz H. S., Karabacak V., Zabcı C.

Springer, pp.1779-1792, 2015

Supported Projects

Zabcı C., Project Supported by Higher Education Institutions, 6 Şubat 2023 Mw 7.7 Pazarcık Depremi'ne ait yüzey deformasyonu ve atım dağılımının haritalanması, 2023 - Continues

Özeren M. S., Şengör A. M. C., Tari E., Özbeş V., ERGİNTAV S., Zabcı C., Project Supported by Higher Education Institutions, Güney Anadolu Tektoniğinin Kinematik Sınır Koşullarının Kuzey Kıbrıs Türk Cumhuriyetinde Yapılacak Jeodezik ve Morfotektonik Ölçmelerle Yüksek Çözünürlükte Belirlenmesi, 2020 - Continues

Uçarkuş G., Zabcı C., Akyüz H. S., Eriş K. K., Biltekin D., TUBITAK Project, Assessing Earthquake Activity along the Pazarcık Segment of the East Anatolian Fault usina a multi-proxy approach based on analysis of Earthquake Triggered Subaqueous Sediments within the Lakes of Gölbaşı Basin, 2022 - 2024

Zabcı C., Sunal G., ERTURAÇ M. K., Natalin B., TÜBİTAK International Bilateral Joint Cooperation Program Project, Spatio-temporal seismic behaviour of intracontinental strike-slip faults: the Western Bogd Fault (Mongolia) as a case study , 2021 - 2024

Akyüz H. S., Zabcı C., Yıldırım C., SANÇAR T., TUBITAK Project, Paleoseismology and Tectonic Geomorphology of Central Anatolian Zone between Kayseri and Altinyayla (Sivas), 2021 - 2023

Eriş K. K., Uçarkuş G., ŞAŞMAZ A., Zabcı C., Çakır Z., ÖN S. A., Çelik Balcı N., KÖKÜM M., TUBITAK Project, Hazar Gölü'nde (Elazığ) Depremsel-Türbiditlerin (Sismik-Türbidit) Tayini ile Doğu Anadolu Fayı Hazar-Sincik ve Palu-Hazar Segmentlerinin Deprem Riskinin Tahmini, 2020 - 2022

Zabcı C., Yazıcı M., Project Supported by Higher Education Institutions, Ovacık Fayı'nın kısa ve uzun dönem deformasyonu ve deprem tarihçesi: Türkiye'nin levha içi deformasyonu hakkında fikirler, 2017 - 2019

Zabcı C., Yazıcı M., Project Supported by Higher Education Institutions, Büyük doğrultu atımlı fayların zamansal ve mekansal atım tarihçesinin araştırılması: Kuzey Anadolu ve Ovacık faylarının morfokronoloji tmelli kayma hızları, 2017 - 2019

Zabcı C., TUBITAK Project, Malatya Fayı (Malatya-Ovacık Fay Zonu)'nın Jeolojik Kayma Hızının ve Eski Deprem Tarihçesinin Araştırılması, 2015 - 2018

Zabcı C., TUBITAK Project, Sakarya Nehri ve Adapazarı Ovası'nın Orta-Geç Pleyistosen-Holosen Gelişiminde Tektonizma, İklim ve Karadeniz Seviye Değişikliklerinin İlişkisi: Geyve Boğazı Taraçalarının İşinim Yöntemleri ile Tarihlendirilmesi, 2015 - 2017

Zabcı C., Natalin B. A., Akyüz H. S., Akçar N., TUBITAK Project, Ovacık Fayı (Malatya-Ovacık Fay Zonu) üzerinde morfokronolojik ve paleosismolojik çalışmalar: Jeolojik kayma hızı ve eski deprem tarihçesinin araştırılması, 2014 - 2017

Zabıcı C., EU Framework Program Project, MARsite (New Directions in Seismic Hazard Assessment through Focused Earth Observation in the Marmara Supersite), 2012 - 2016

Zabıcı C., Project Supported by Other Official Institutions, Geyve (Sakarya) – Bandırma (Balıkesir) arasında Kuzey Anadolu Fay Zonu'nun paleosismolojisi, 2014 - 2014

Zabıcı C., EU Framework Program Project, ESONET NoE: European Seas Observatory Network of Excellence, Marmara Demo Mission, 2008 - 2011

Zabıcı C., TUBITAK Project, Kuzey Anadolu Fay Zonu üzerindeki Yedisu sismik boşluğu ve Karlıova Fayı (Bingöl) üzerinde paleosismolojik ve morfotektonik araştırmalar, 2006 - 2009

Zabıcı C., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Aktif fay zonları ve doğal afetler: Kuzey Anadolu Fay Zonu üzerinde Kelkit Vadisi boyunca yer alan yerleşim alanlarının doğal risk analizi ve afet bilgi sisteminin oluşturulması, 2006 - 2009

Zabıcı C., EU Framework Program Project, RELIEF: Large Earthquake Faulting and Implications for the seismic hazard assessment in Europe: The İzmit-Düzce earthquake sequence of August-November 1999 (Turkey, Mw 7.4, 7.1), 2002 - 2005

Zabıcı C., TUBITAK Project, Kuzey Anadolu Fayı'nın Gemlik-Mekece kolu, Ecemış Fayı ve Sultandağ Fayı üzerinde paleosismolojik araştırmalar, 2001 - 2003

Memberships / Tasks in Scientific Organizations

Bilimsel Kurul, Member, 2016 - Continues

Geological Society of America, Member, 2007 - Continues

Seismological Society of America, Member, 2007 - Continues

American Geophysical Union, Member, 2007 - Continues

Scientific Refereeing

Arabian Journal of Geosciences, SCI Journal, July 2018

Balıkesir Üniversitesi Fen Bilimleri Enstitüsü Dergisi, National Scientific Refreed Journal, January 2018

Arabian Journal of Geosciences, SCI Journal, January 2018

Tectonophysics, SCI Journal, December 2017

Tectonophysics, SCI Journal, September 2017

Muğla Journal of Science and Technology, National Scientific Refreed Journal, May 2017

Geomatic, Natural Hazards and Risk, SCI Journal, July 2016

Geodinamica Acta, SCI Journal, June 2014

Türkiye Jeoloji Bülteni, National Scientific Refreed Journal, September 2013

Geodinamica Acta, SCI Journal, July 2013

Earth Science Reviews, SCI Journal, December 2012

Scientific Consultations

TÜBİTAK, Project Consultancy, Istanbul Technical University, Maden, Jeoloji Mühendisliği, Turkey, 2017 - Continues

Scientific Research / Working Group Memberships

Aktif Tektonik Araştırma Grubu, ATAG, Turkey, <http://www.atag.itu.edu.tr>, 2003 - Continues

Metrics

Publication: 149
Citation (WoS): 328
Citation (Scopus): 405
H-Index (WoS): 12
H-Index (Scopus): 14

Congress and Symposium Activities

EGU General Assembly 2018, Attendee, Vienna, Austria, 2018
ATAG-21, Attendee, Afyon, Turkey, 2017
International Conference On Astronomy and Geophysics, Attendee, Ulaanbaatar, Mongolia, 2017
EGU General Assembly 2016, Attendee, Wien, Austria, 2016
EGU General Assembly 2015, Attendee, Wien, Austria, 2015
ATAG-18, Attendee, Muğla, Turkey, 2014
EGU General Assembly 2014, Attendee, Wien, Austria, 2014
ATAG-17, Attendee, Antalya, Turkey, 2013
ATAG-16, Attendee, İstanbul, Turkey, 2012
Paleoseismology along the North Anatolian Fault, Attendee, İstanbul, Turkey, 2012
EGU General Assembly 2010, Attendee, Wien, Austria, 2010
EGU General Assembly 2009, Attendee, Wien, Austria, 2009
ATAG-12, Attendee, Düzce, Turkey, 2008
EGU General Assembly 2008, Attendee, Wien, Austria, 2008
ATAG-11, Attendee, Kocaeli, Turkey, 2007
EGU General Assembly 2007, Attendee, Wien, Austria, 2007
ATAG-10, Attendee, İzmir, Turkey, 2006
International workshop on comparative studies of the North Anatolian Fault (Northwest Turkey) and the San Andreas Fault (Southern Turkey), Attendee, Turkey, 2006
ATAG-9, Attendee, Sivas, Turkey, 2005
İstanbul'un Jeolojisi I, Attendee, İstanbul, Turkey, 2003
ATAG-7, Attendee, Van, Turkey, 2003
Paleontoloji ve Stratigrafi Çalıştayı, Attendee, Düzce, Turkey, 2002

Scholarships

Short Term Research Grant, Official Institutions of Foreign Countries, 2016 - Continues

Non Academic Experience

Ludwig-Maximilians Universität München
Institut Français de Recherche L'Exploitation de la Mer
Universidade de Lisboa
Istituto Nazionale di Geofisica e Vulcanologia