Catalina MORALES YÁÑEZ

Santiago, Chile

i Date of birth: October 29, 1990

I am Doctor on seismology, looking for a teaching and/or research position. Throughout my career, I have gained and developed expertise in various areas of basic sciences regarding geophysics. My area of interest is oriented towards the field of seismology and seismic simulation. I had experience in field work, teaching for different kind of public and working with multidisciplinary

EDUCATION

2016 to 2020	Ph. D. in Seismology, IPGS - EOST, Université de Strasbourg, France.
	PhD thesis: "Earthquake source characterization: accounting for 3D structure".
2014 to 2016	M.S. in Geophysics, Universidad de Chile, Chile.
	Master thesis: "Inversion of the tensor moment and the source time function, using near-field seismo-
	grams."
2009 to 2014	Geophysics, Universidad de Concepción, Chile
	Geophysics thesis: "Analysis of the site effect between seismological stations using compressional waves
	from a laboratory experiment on a small scale."
2013 to 2014	International Diploma of specialization. Human Rights, global risk management and public policies for
	the disaster and prevention in Latin America and the Caribbean. Henry Dunant Foundation

2009 to 2013 B.S. in Geophysics at Universidad de Concepción, Chile



PUBLICATIONS

Morales, C., Catalina Morales-Yáñez, Zacharie Duputel, Luis Rivera, Impact of 3-D Earth structure on W-phase CMT parameters, Geophysical Journal International, Volume 223, Issue 2, November 2020, Pages 1432–1445, https://doi.org/10.1093/gji/ggaa377



EXPERIENCE

January 2015

FONDECYT project 1130071, UNIVERSITY OF CHILE, Chile

> Maintenance of seismological stations, in charge of Dr. Diana Comte

2014

GPS Campaign in Chile, GFZ POTSDAM, Germany

2011

I actively participated in three GPS Campaign (April 2014, February 2012, November 2011) in north and south of Chile, in charge of Dr. Marcos Moreno, GFZ Potsdam, Germany (actually associate professor in Universidad de Concepción).

> Install GPS receivers in different point of chile

2014

Technical support for Firefighters and USAR Team, Concepción, Chile

2013

Search for missing person (2014), search of missing plain (2013) and volcano evacuation (2013)

> Analysis of risk and coordination team.

December 2013

Teaching Assistant, UNIVERSIDAD DE CONCEPCIÓN, Chile

June 2013

Course: Physics for Biologists

> Development of weekly classes, evaluations and homeworks.

March 2013

Professional Internship, NATIONAL SEISMOLOGICAL CENTER, Chile

January 2013

> Statistic analysis of Local Magnitude for 2012 earthquakes recorded in the National Seismological Center in Chile

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AGU FALL MEETING, SAN FRANCISCO, UNITED STATES

DECEMBER 2019

Postei

o Impact of 3D Earth's structures on W-phase CMT parameters

o 3D CMT Inversion of Mw ≥ 5 Earthquakes during the Mayotte Seismic Crisis

AGU FALL MEETING, WASHINTON DC, UNITED STATES

DECEMBER 2018

Contribution poster (second author)

o Inversion of source-time function for earthquakes in northern Chile using different least squares regularization methods

CONGRÈS DES DOCTORANTS ED 413, STRASBOURG, FRANCE

NOVEMBER 2018

Talk

o Effects of 3D Earth structure on W-phase CMT parameter.

XV CHILEAN GEOLOGICAL CONGRESS, CONCEPCIÓN, CHILE

NOVEMBER 2018

Contribution poster (second author)

o Simultaneous inversion of the seismic moment tensor and temporal source function for earthquakes in northern Chile, using different least squares regularization methods

ESC GENERAL ASSEMBLY, VALLETA, MALTA

SEPTEMBER 2018

Poster

o Effects of different earth's structures on W-phase CMT parameters

CONGRÈS DES DOCTORANTS ED 413, STRASBOURG, FRANCE

NOVEMBER 2017

Poster

o Effects of 3D Earth structure on W-phase CMT parameter.

EGU GENERAL ASSEMBLY, VIENA, AUSTRIA

APRIL 2017

Poster

o Retrieving Source-Time Function and Seismic Moment Tensor From Near Field Records

o Effects of 3D Earth structure on W-phase CMT parameters

AGU FALL MEETING, SAN FRANCISCO, UNITED STATES

DECEMBER 2016

Poster

• Retrieving Source-Time Function and Seismic Moment Tensor From Near Field Records

X APRU RESEARCH SYMPOSIUM ON MULTI-HAZARDS AROUND THE PACIFIC RIM, SANTIAGO, CHILE

November 2013

Talk

o Inclusion of Geoscience in the Disaster Risk Management in Chile



OUTREACH, ORGANIZATION CONFERENCE AND WORKSHOP

GEOCHARLAS T3 - OUTREACH PROJECT

MARCH-NOVEMBER 2020

Organization and talk, online

o Impacto de las heterogeneidades de la Tierra en las soluciones de los terremotos

IS SCIENCE EQUAL? - CONFERENCE

MARCH 2019

Organization of discussion panel, France

PDI AUTUMN SESSION - CONFERENCE FOR INTERNATIONAL IDEX STUDENTS

OCTOBER 2018

Organization and talk. France

o Diversity (Talk about diversity, feelings and respect in the research)

SERIOR (SECURITY-RISK-ORIENTATION) SUMMER SCHOOL "RISK WITHOUT BORDERS" - WORKSHOP

JUNE 2018

Trinational training program: Germany, France and Switzerland

Contributes to establishing Eucor-The European Campus and cooperates with the Upper Rhine Cluster for Sustainability Research

CONGRES DES DOCTORANTS ED 413 - INTERNAL CONGRESS OF IPGS

NOVEMBER 2017

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Organization of Congress, France

PDI ENTRY DAYS - RECEPTION CONFERENCE FOR INTERNATIONAL IDEX STUDENTS

OCTOBER 2017

• Earthquake source characterization accounting for 3D structure.

FORMATION GITHUB - WORKSHOP

MARCH 2017

Formation and training in GitHub, France

COMPETENCES

Programmation Bash, Python, MatLab Operating systems Linux, Mac OS X

Software knowledge Office, GMT, Latex, SAC, Obspy, ArcGis, Comcot, NewWave, SPECFEM, W-phase algorithm



LANGUAGES





- > Founder scicomm project "Geociencias para terrícolas" (Geoscience for earthling)
- > Founder of "GeoCharlas T³"
- > Active member of "GeoLatinas"
- > Volunteer firefighter, Chile. 2007-2016



GRANTS AND SCHOLARSHIP

Doctoral Founding "Idex", Université de Strasbourg, France

2016-2020

Founding for projects of excellence

SCHOLARSHIP "MAGISTER NACIONAL", CONICYT, CHILE

Support for master students with academic excellent

2014-2016

66 References

Luis Rivera

Zacharie Duputel

Javier Ruiz

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Ignacia Calisto

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