

CNRS/GFZ IPOC meeting: Iquique-Pisagua seismic crisis

12-13 February 2015

IPG Paris, 1 rue Jussieu, 75005 Paris (Salle 310, 3rd floor)

(<http://www.ipgp.fr/en>)

Thursday February 12

09:00 – 09h30 Welcome coffee

09h30 – 09h50 Marcos Moreno (GFZ)

Geodetic measurements and kinematic modelling of the Iquique-Pisagua earthquake

09h50 – 10h00 Discussion

10h00 – 10h20 Raphael Grandin (IPG Paris)

Source parameter modelling of the 2014 Pisagua-Iquique sequence constrained by geodesy and seismology

10h20 – 10h30 Discussion

10h30 – 10h50 Felix Eckelmann (GFZ)

Co- and post-seismic crustal deformation of the 2014 Iquique-Pisagua Earthquake observed with InSAR and GPS data

10h50 – 11h00 Discussion

11h00 – 11h20 Anne Socquet (ISTerre, Grenoble)

Geodetic coupling in the North Chile - South Peru seismic gap: preliminary results from GPS measurements in Peru

11h20 – 11h30 Discussion

11h30 – 12h00 General Discussion

12h00 – 13:15 Lunch (IPGP restaurant)

13h30 – 13h50 Frederik Tillmann (GFZ Potsdam)

Vp/Vs ratios from differential travel times in Tocopilla and Maule rupture zones

13h50 – 14h00 Discussion

14h00 – 14h20 Martina Gassenmeier (GFZ Potsdam)

Modelling seismic velocity changes based on local ground shaking in Northern Chile with ambient seismic noise

14h20 – 14h30 Discussion

14h30 – 14h50 Raul Madariaga (ENS Paris)

Iquique earthquake, a challenge for standard problem of subduction earthquakes

14h50 – 15h00 Discussion

15h00 – 15h20 Bernd Schurr (GFZ, Potsdam)

A Mogi Doughnut preceding the Mw 8.1 2014 Northern Chile earthquake

15h20 – 15h30 Discussion

15h30 – 15h50 Claudio Satriano (IPG Paris)

A Multiscale imaging of the rupture process of the M8 Iquique earthquake, and its largest aftershock

15h50 – 16h00 Discussion

16h00 – 16h30 General Discussion

16h30 – 17h00 *Coffee break*

17h00 – 17h20 Simone Cesca (GFZ Potsdam)

Preparation and consequences of the 2014 Iquique earthquake: insights from foreshocks and aftershocks

17h20 – 17h30 Discussion

17h30 – 17h50 Frédéric Boudin (Geosciences, Montpellier)

Evidence for slow slip events preceding the M8, April 1st, 2014 Pisagua Earthquake (Chile), from an underground long base tiltmeter

17h50 – 18h00 Discussion

18h00 – 18h20 Pia Victor (GFZ Potsdam)

Title yet to be precised

18h20 – 18h30 Discussion

18h30 – 19h00 General discussion

Friday, February 13

09h00 – 09h30 Welcome Coffee

09h30 – 09h45 El-Madani Assaoui (IPG Paris)

Short update of the seismological instrumental efforts in North Chile and of associated data management

09h45 – 09h50 Discussion

09h50 – 10h05 Christophe Vigny (ENS Paris)

Short update of the GPS instrumental efforts in North Chile and associated data management

09h05 – 10h15 Discussion

10h15 – 10h30 Kirsten Elger (GFZ Potsdam)

IPOC - start of a new website

10h30 – 10h40 Discussion

10h40 – 11h00 Coffee break

11h00 – 12h15 Informal discussions of on going efforts and potential collaboration on pre- and post seismic GPS-InSAR-inclinometry analysis

12h15 – 13h30 Lunch (IPGP restaurant)

13h30 – 14h30 Breakout sessions

- Main shock and aftershocks source analysis

- Data management and IPOC website

14h30 – 15h30 Informal discussions and potential collaborations on ongoing efforts
Foreshocks and aftershocks seismicity activity analysis

16h00 – 16h30 Debriefing of the discussions and action plane

16h30 – 17h00 Coffee break

GFZ participants

Simone Cesca
Felix Eckelmann
Kristen Elger
Martina Gassenmeier
Marcos Moreno
Bernd Schurr
Frederik Tilmann (*Thursday only*)
Pia Victor

CNRS (IPGP-ENS-ISTerre-GM) participants

Florent Aden-Antoniow (*IPG Paris*)
El-Madani Assaoui (*IPG Paris*)
Pascal Bernard (*IPG Paris*)
Frédéric Boudin (*Geosciences, Montpellier*)
Raphael Grandin (*IPG Paris, Thursday only*)
Hélène Lyon-Caen (*ENS Paris*)
Raul Madariaga (*ENS Paris, Thursday only*)
Alexandre Nercessian (*IPG Paris*)
Natalia Poiata (*IPG Paris*)
Claudio Satriano (*IPG Paris*)
Anne Socquet (*ISTerre, Grenoble*)
Christophe Vigny (*ENS Paris*)
Jean-Pierre Vilotte (*IPG Paris*)