

Vincent GODARD

Associate Professor (Maître de Conférences HDR)

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Employment History

Current Position Associate Professor (*Maître de Conférences HDR*^{●1}), Aix-Marseille Université

- 2016-** Associate Professor (*Maître de Conférences HDR*), Aix-Marseille Université
- 2007-2016** Assistant Professor (*Maître de Conférences*), Aix-Marseille Université
- 2008-2010** Visiting Researcher, Department of Earth Science, UC Santa Barbara, USA
Marie Curie International Outgoing Fellow
- 2006-2007** *Agrégé Préparateur* (AGPR) - ENS Lyon[●], France
Assistant Professor
- 2003-2006** *Allocataire Moniteur Normalien* - ENS Paris[●] and Université Paris XI, France
PhD fellowship - Ministry for Education and Research
- 1999-2003** *Élève Normalien* - ENS Lyon, France
Junior civil servant

Academic Background

- 2016** **Habilitation à Diriger des Recherches (HDR)**[●] (Aix-Marseille Université)
- 2003-2006** **PhD, Laboratoire de Géologie, École Normale Supérieure** (Paris)[●]
- 1999-2003** **Student at the École Normale Supérieure de Lyon**[●]
Bsc and Msc in Earth Sciences (Honours)
- 1997-1999** **Classes Préparatoires aux Grandes Écoles**[●] (Lycée Thiers, Marseille)
Training in Mathematics, Physics, Chemistry, Biology and Earth Sciences
- 1996-1997** **Baccalauréat Scientifique**[●] (Lycée Thiers, Marseille)
National Degree in Sciences with specialisation in Mathematics (Honours)

Academic Service

- **2011-2015** elected member of the French National University Council (CNU)
- **Since 2012** Panel member on 4 PhD defenses and 5 search committees
- Reviewing duty for various journals, including : Tectonics, Journal of Geophysical Research (*Solid Earth et Earth Surface*), Tectonophysics, Earth and Planetary Science Letters, Basin Research, Journal of Asian Earth Sciences , Journal of Hydrology, Geology, Quaternary Geochronology, Earth

¹This symbol (●) provides a clickable link toward corresponding institutional websites or explanations of particularism of the French academic system

Surface Dynamics, Elements, Geomorphology, G³ (Geochemistry, Geophysics, Geosystems), Lithosphere, Terra Nova, Earth Surface Processes and Landforms, Chemical Geology.

- Reviewing duty for various funding agencies, including INSU/CNRS, NSF, DFG.
- **2015-présent** : Member of the scientific panel of the *Form@ter* project (National data center for solid Earth observation, INSU/CNRS)
- **2015-présent** : In charge of the Geodynamics axis of National France-Taiwan International Laboratory LIA-D3E
- **2017-présent** Member of the prospective group for Continental Surfaces and Interfaces (INSU/CNRS)

Teaching

Experiences

- 2007-present** Assistant and Associate Professor, Aix-Marseille University
2006-2007 Assistant Professor (AGPR), École Normale Supérieure de Lyon
2003-2006 Assistant Lecturer, École Normale Supérieure and Université Paris XI
2002 *Agrégation* in Natural Sciences ●

Subjects Over the last five years I have been teaching the following subjects at the undergraduate and graduate levels.

- Mapping and field geology
- Tectonics and structural geology
- Geodynamics and geophysics
- Geomorphology and surface processes
- Geochronology
- Natural hazards

Administrative responsibilities

- **Since 2015** : in charge of the second year of a Master degree program focused on Earth Surface Sciences, Paleoclimatology, Active Tectonics and Geomorphology (M2R SYSTER - Master SET, Aix-Marseille Université)
- **2012-2015** : in charge of the second year of a Master degree program focused on Active Tectonics, Geomorphology and Natural Hazards (M2R GERINAT - Master SET, Aix-Marseille Université)
- **2011-2016** : in charge of the Earth Sciences curriculum for an Education Sciences Master program in Aix-Marseille University (*Préparation à l'Agrégation*)

Student supervision and mentoring

PhD advisor

- **November 2014 - présent** : Franck Thomas (30% - Olivier Bellier et Magali Rizza, AMU) - Active tectonics and geomorphology in western Provence
- **October 2012 - April 2016** : Claire Ansberque (50% - Olivier Bellier, AMU) - Morpho-tectonic study of the Longriba Fault Zone, Eastern Tibet
- **January 2012 - December 2015** : Jérémy Giuliano (50% - Thomas Lebourg, Université de Nice) - Multi-scales evolution processes and gravitational hazards along the rocky coastlines of Provence

I also participated in the mentoring of the following PhD students : Wang Wei (CEA, Beijing, J. Liu-Zeng), Mary Sterb (ENS Lyon, G. Mahéo et H. Leloup), Romain Le Roux-Mallouf (Géosciences Montpellier, R. Cattin et M. Ferry), Marianne Conin (CEREGE, P. Henry et S. Bourlange).

Postdocs

- **2014-2015** : Valerio Olivetti (50% Olivier Bellier) - Identification of recent geomorphological markers in the Lower Rhone valley (SIGMA-EDF funding)
- **2011-2012** : Esmail Shabanian (40% Olivier Bellier) - Landscape evolution and seismotectonic context of western Provence (Université Paul Cezanne funding)

Funding history

- **2017-2018** ECCOREV Research Federation (PI) 7 k€: topographic transient response to climatic and tectonic forcing
- **2017-2018** CNRS-INSU-SYSTER (PI) 5 k€: climatic controls on the denudation of carbonate landscapes
- **2016-2018** CNRS-INSU-ALEA (PI) 13 k€: tectonic and denudation in the Western Himalayas
- **2015-2016** CNES-TOSCA (PI) 15 k€: landscape dynamics along the SE Australian escarpment
- **2013-2014** ECCOREV Research Federation (PI) 5 k€: Investigation of the denudation of carbonate landscapes with cosmogenic nuclides
- **2011-2012** CNRS-INSU-CT2-SYSTER (PI) 7 k€: Investigation of the denudation of carbonate landscapes with cosmogenic nuclides
- **2011-2015** ANR (PI J. de Sigoyer, ENS Paris, co-PI) 300 k€: The Longriba fault: the key to unravel the tectonics of the Eastern Tibetan Margin?
- **2011-2012** Postdoc funding (E. Shabanian, U. Paul Cézanne) : landscape evolution and seismotectonic context of the western Provence ranges
- **2010-2011** CNRS-INSU-CT3-ALEA (PI) 15 k€: Geomorphological investigation of the post-seismic evolution of the Longmen Shan range, after the 2008 Wenchuan earthquake
- **2011** BQR equipment (U. Paul Cézanne) 4 k€: high resolution photogrammetry for geomorphological studies
- **2008-2011** Marie Curie IOF grant, European Commission FP7 (PI) 150 k€: Influence of climate changes on the evolution of mountain ranges
- **2006-2009** ANR (PI R. Cattin, ENS Paris, co-PI) 140 k€: Processes coupling in continental dynamics, Eastern Tibet

Publications

† : student first author, ‡ : postdoc first author

Submitted

- Ansberque C.[†], **Godard V.**, Olivetti V., Bellier O., de Sigoyer J., Bernet M., Stübner K., Tan X., Xu X. & Ehlers T. A., Differential exhumation across the Longriba Fault System: implications for the Eastern Tibetan Plateau, submitted to *Tectonics*.

Published, in press or accepted

- Wang W.[†], **Godard V.**, Liu-Zeng J., Scherler D., Xu C., Zhang J., Xie K., Bellier O., Ansberque C., de Sigoyer J., ASTER Team, Perturbation of fluvial sediment fluxes following the 2008 Wenchuan earthquake, *Earth Surface Processes and Landforms*, **2017**, 42(15), 2611-2622.
- Thomas F.[†], **Godard V.**, Bellier O., Shabanian E., Ollivier V., Benedetti L., *Rizza M.*, Espurt N., Guillou V., Hollender F., Molliex S. & ASTER Team, Morphological controls on the dynamics of carbonate landscapes under mediterranean climate, *Terra Nova*, **2017**, 29(3), 173-182.
- Billant, J.[†], Bellier, O., **Godard, V.**, & Hippolyte, J.-C., Constraining recent fault offsets with statistical and geometrical methods: Example from the Jasneuf Fault (Western Alps, France), *Tectonophysics*, **2016**, 693, 1-21.
- **Godard, V.**, Ollivier V., Bellier O., Miramont C., Shabanian E., Fleury J., Benedetti L., & Guillou V., ASTER Team. Weathering-limited hillslope evolution in carbonate landscapes, *Earth and Planetary Sciences Letters*, **2016**, 446, 10-20.
- Olivetti V.[‡], **Godard V.**, Bellier O. & ASTER Team, Cenozoic rejuvenation events of Massif Central topography (France): insights from cosmogenic denudation rates and river profiles, *Earth and Planetary Sciences Letters*, **2016**, 444, 179-191.
- Ansberque C.[†], Bellier O., **Godard V.**, Lasserre C., Wang M., Braucher R., Talon B., de Sigoyer J., Xu X. & Bourlès D. L. The Longriqu fault zone, eastern Tibetan Plateau: Segmentation and Holocene behavior. *Tectonics*, **2016**, 35(3), 565-585.
- Ansberque C.[†], **Godard V.**, Bellier O., De Sigoyer J., Liu-Zeng J., Xu X., Ren Z., Li Y. & ASTER Team, Denudation pattern across the Longriba fault system and implications for the geomorphological evolution of the eastern Tibetan margin: *Geomorphology*, **2015**, 246, 542-557.
- Le Roux-Mallouf R.[†], **Godard V.**, Cattin R., Ferry M., Gyeltshen J., Ritz J., Drupka D., Guillou V., Arnold M., Aumaître G., Bourlès D.L., & Keddadouche K., Evidence for a wide and gently dipping Main Himalayan Thrust in western Bhutan, *Geophysical Research Letters*, **2015**, 42(9), 3257-3265.
- **Godard V.**, Bourles D. L., Spinabella F., Burbank D.W., Bookhagen B., Fisher G.B., Moulin A., & Leanni L., Dominance of tectonics over climate in Himalayan denudation, *Geology*, **2014**, 42(3) 243-246.
- Giuliano J.[†], **Godard V.**, Lebourg T., Dewez T., Tric E., & Marçot N., Large scale structural control on regional coastline orientations: example from South-eastern France, *Journal of Coastal Research*, **2013**, 1687-1691.
- **Godard V.**, Tucker G.E., Fisher G. B., Burbank D.W., & Bookhagen B., Frequency-dependent landscape response to climatic forcing, *Geophysical Research Letters*, **2013**, 40, 859-863.
- Fisher G. B., Amos, C. B., Bookhagen B., Burbank D. W. & **Godard V.** Channel widths, landslides, faults, and beyond: The new world order of high-spatial resolution Google Earth imagery in the study of earth surface processes, *Geological Society of America Special Paper*, **2012**, 492, 1-22.
- **Godard V.**, Burbank D. W., Bourlès D. L., Bookhagen B., Braucher R. & Fisher G. B. Impact of glacial erosion on ¹⁰Be concentrations in fluvial sediments of the Marsyandi catchment, central Nepal. *J. Geophys. Res. - Earth Surface*, **2012**, 117, F03013.

- Conin M.[†], Henry P., **Godard V.** & *Bourlange S.* Splay fault slip in a subduction margin, a new model of evolution. *Earth. Planet. Sci. Lett.*, **2012**, 341-344, 170-175.
- **Godard V.** & Burbank D. W. Mechanical analysis of controls on strain partitioning in the Himalayas of central Nepal. *J. Geophys. Res. - Solid Earth*, **2011**, 116, B10402.
- Hetényi G., **Godard V.**, Cattin R. & Connolly J. A. D. Incorporating metamorphism in geodynamic models: the mass conservation problem. *Geophys. J. Int.*, **2011**, 186, 6-10.
- Steer P., Cattin R., Lavé J. & **Godard V.** Surface lagrangian remeshing: A new tool for studying long term evolution of continental lithosphere from 2D numerical modelling. *Computers & Geosciences*, **2011**, 37, 1067-1074.
- Siame L. L., Angelier J., Chen R. F., **Godard V.**, Derrieux F., Bourlès D. L., Braucher R., Chang K. J., Chu H. T. & Lee J. C. Erosion rates in an active orogene (NE-Taiwan): A confrontation of cosmogenic measurements with river suspended loads. *Quaternary Geochronology*, **2011**, 6, 246-260.
- **Godard V.**, Lavé J., Carcaillet J., Cattin R., Bourlès D. L. & Zhu J. Spatial distribution of denudation in Eastern Tibet and regressive erosion of plateau margins. *Tectonophysics*, **2010**, 491, 253-274.
- **Godard V.**, Cattin R. & Lavé J. Erosional control on the dynamics of low-convergence rate continental plateau margins. *Geophys. J. Int.*, **2009**, 179, 763-777.
- **Godard V.**, Pik R.; Lavé J., Cattin R., Tibari B., de Sigoyer J., Pubellier M. & Zhu J. Late Cenozoic evolution of the central Longmen Shan, eastern Tibet: Insight from (U-Th)/He thermochronometry. *Tectonics*, **2009**, 28, TC5009.
- **Godard V.**, Lavé J. & Cattin R., Numerical modelling of erosion processes in the Himalayas of Nepal: effects of spatial variations of rock strength and precipitation. *Geol. Soc. London Spec. Pub.*, Analogue and Numerical Modelling of Crustal-Scale Processes, R. Buiter, S. J. H. & Schreurs, G. (Eds.), **2006**, 253, 341-358.
- **Godard V.**, Cattin R. & Lavé J. Numerical modeling of mountain building: Interplay between erosion law and crustal rheology. *Geophys. Res. Lett.*, **2004**, 31, L23607.