

## Principal Expeditions and Publications Poli-High Group

### 1) Principal expeditions and campaigns

We have carried out a number of scientific field campaigns, in Europe, South America, Karakoram, Himalaya, among others, as follows.

- 1) Fall-Summer 2003-2004. Development of INTERREG 3B DESERNET- Regione Liguria. EU project on Desertification in Mediterranean Environment.
- 2) CARIPanda (Climatic change and water resources in the Adamello park, Summer 2007, 2008, 2009). Monitoring of ice ablation and flow discharges on the Venerocolo glacier, North Adamello.
- 3) Summer 2009-2015. In situ runoff investigation of Dosdè the glacier (Arnoga, Valtellina, Italy), and installation of a depth gage for continuous monitoring of discharge since summer 2009.
- 4) Idro-Stelvio (July 2010 - now). Deployment of eleven hydrometric gauges in Stelvio Park of Italy, maintenance, and hydrological data assessment.
- 5) July 2011-now. Monitoring high altitude flow discharges from Indren glacier, Gressoney (AO).
- 6) Share-Paprika (Exp. 2010, 2012, 2013). Deployment of a network of hydrometric gauges within Baltoro Glacier and Indus river, Karakoram range (Pakistan, Asia). Circa 30 in situ working day per year.
- 7) February 9 2012-March 5 2012. Field expedition for design of hydro-glaciological stations (S. Francisco, Yerba Loca, Monos de Agua, Tapado, Cipreses, Olivares  $\beta$  glaciers), Santiago de Chile, Cooperation with DGA, Direccion General de Aguas.
- 8) April 22 2012-May 13 2012. Field expedition for glacier survey and installation of a hydrometric station, Changri-Nup glacier, Everest, Nepal, Paprika Nepal project.
- 9) July 20-30 2013. Upper Indus Basin in initiative. Field trip, Hunza Valley, Shimshal, Pakistan.
- 10) April 22 2014-May 18 2014. Field expedition for glacier survey and installation of a hydrometric station, Changri-Nup glacier, Everest, Nepal, Khumbu Hydrology project.
- 11) July 18-28 2014. Field scientific expedition Ararat, Turkey. Joint to CAI Expedition.
- 12) September 11-21 2015. Field scientific expedition Gilgit, Pakistani Karakoram, Polisocial Project *PolimiforKarakoram*.

### 2) Publications list

Full list of Publication (Daniele Bocchiola) reported, including a number of publications in the field of cryospheric sciences, as follows, with specific focus on POLI HIGH mission.

#### i) Books, chapters, reports

- 1) Bocchiola, D., Rosso, R., *River currents and assessment of flooding areas*, In: Manual of soil hydraulic defence, chapter 3, Italian Language, Edited by R. Rosso, CUSL Publishing, Milano, 2002.
- 2) Bocchiola, D., Grossi, G., Rosso, R., *Hydro-meteorologic Monitoring*, In: Manual of soil hydraulic defence, par. 5.2, Italian Language, Edited by R. Rosso, CUSL Publishing, Milano, 200.
- 3) Bocchiola, D., Rosso, R., *Methods and models of real time flood forecasting*, In: Manual of soil hydraulic defence, par. 5.5, Italian Language, Edited by R. Rosso, CUSL Publishing, Milano, 2002.
- 4) Rosso, R., Rulli, M.C., Bocchiola, D., Bozzi, S., Spada, M. (2004). Studio della risposta idrologica e sedimentologica dei bacini sollecitati da incendi boschivi [*Hydrological and Sedimentological Response within forest fire affected watersheds*] INTERREG IIIB, DESERTNET. Final Report.
- 5) Bocchiola, D., De Michele, C., Ghezzi, A., Groppelli, B., Rosso, R. e Rulli, MC. (2008). *Kioto Project 2004-2008, Impact of Climate Change on Italy: final report* [Progetto Kioto 2004-2008, impatto del cambio climatico sul territorio Italiano: report finale]. Research Line 1: Climatology, Group 4, Chapter 1, 19-51. Edited by Fondazione Lombardia per L'Ambiente and Regione Lombardia.
- 6) Romang, H., Fuchs, S., Holub, M., Faug, T., Naaïm, M., Tacnet, J., Durand, Y., Giraud, G., Dall'Amico, M., Larcher, M., Rigon, R., Kveldsvik, V., Sandersen, F., Bocchiola, D., Rulli, C., Bischof, N., Bründl, M., Rheinberger, C., Rhyner, J., Barbolini, F., Cappabianca, F. (2008): *Best Practice Handbook*, Deliverable 5.4, Integral risk management of snow avalanches, rock avalanches and debris flow in Europe, IRASMOS. EU, 148 S.
- 7) Mari, F., Gallo, M., Bocci, A., Buraschi, E., Vuillermoz, E., Milanese, D., Decè, L., Melis, M.T., Ferrari, E., Anfodillo, T., Poretti, G., Calligaris, C., Smiraglia, C., Diolaiuti, G., Bocchiola, D., Lami, A., Cristofanelli, P., Palazzi, E., Rossi, L., *Integrated park management plan (IPMP) for the Central Karakorum National Park CKNP*, Edited by EVK2CNR, November 2012.
- 8) Soncini, A., Bocchiola, D., Rosso, R., Meucci, S., Pala, F., Valé, G. *Water and sanitation in Multan - Pakistan*. In: Sustainable Social, Economic and Environmental Revitalization in Multan City: A Multidisciplinary Italian-Pakistani Project, Series: Research for development, Eds: Del Bo, A., Bignami, D. F., 2014, XXVII, 288 pp. Springer.
- 9) Bocchiola, D., Bocci, A., Cristofanelli, P. Eds. *Karakoram resources and climate change: glaciers, water, and ecosystems*, Proceedings of the International Conference, Islamabad, September 10 2013. EVK2CNR Publ. Pp. 110.
- 10) Bersani, E., Bocchiola, D., Colombo, E., E. Invernizzi, M., Locatelli, M. *POLIMI-FOR-KARAKORUM, Progetto di valorizzazione turistica nel central Karakorum National Park*, Ed. E. Bersani, E. Invernizzi, M. Locatelli, Edifir, 2016. ISBN 978-88-7970-793-0. 145 pp. In Italian. <http://hdl.handle.net/11311/1020936>.
- 11) Bocchiola, D. *Water resources in the Indus River under present and prospective climate change*. Book Chapter, in *Indus River Basin: Water Security and Sustainability*, **In preparation**. Eds: T. Adams, S. Khan, Elsevier Imprints.

ii) **Refereed Journals.** Last Journal IF reported where suitable. H-index: 19 (ISI), 20 (SCOPUS), 21 (ResearchGate). G-index: 25 (ISI), 26 (SCOPUS).

- 1) Bocchiola D., Catalano F., Menduni G., Passoni, G., *An analytical-numerical approach to the hydraulics of floating debris in river channels*, Journal of Hydrology, 269/1-2, 65-78, 2002. IF 2009: 2.305, ISI, SCOPUS
- 2) Bocchiola, D., Menduni and Ward, D., *Testing block probes for wall shear stress measurement in water flows*, ASCE Journal of Hydraulic Engineering, Volume 129, Issue 2, 102-109, 2003. IF 2007: 0.876, ISI, SCOPUS
- 3) Bocchiola, D., De Michele, C., Rosso, R., *Review of recent advances in index flood estimation*, Hydrology and Earth System Sciences, vol 7 (3), 283-296, 2003. IF 2007: 2.27, ISI, SCOPUS
- 4) Bocchiola, D., Rulli, M.C., Rosso, R., *Transport of Large Woody Debris in the presence of obstacles*, Geomorphology, 76, 166–178, 2006. IF 2009: 2.339, ISI, SCOPUS
- 5) Bocchiola, D., Rosso, R., *Real time flood forecasting at dams: a case study in Italy*, Int. J. on Hydropower and Dams, 13 (1), 92-99, 2006. SCOPUS
- 6) Bocchiola, D., Rulli, M.C., Rosso, R., *Flume experiments on wood entrainment in rivers*, Advances in Water Resources, 29, 8, 1182-1195, 2006. IF 2009: 2.235, ISI, SCOPUS
- 7) Rulli, M.C., Bozzi, S. Spada, M., Bocchiola, D. and Rosso, R., *Rainfall simulations on a fire disturbed mediterranean area*, Journal of Hydrology, 327, 3-4, 323-338, 2006. IF 2009: 2.305, ISI, SCOPUS
- 8) Bocchiola, D., Medagliani, M., Rosso, R., *Regional snow depth frequency curves for avalanche hazard mapping in central Italian Alps*, Cold Regions Science and Technology, 46, 3, 204-221, 2006. Five years IF 1.95, ISI, SCOPUS
- 9) Bocchiola, D., Rosso, R. *The use of scale recursive estimation for short term Quantitative Precipitation Forecast*, Physics and chemistry of the earth, 31, 18, 1228-1239, 2006. IF 2009: 1.138, ISI, SCOPUS
- 10) Bocchiola, D., Rosso, R., *The distribution of daily Snow Water Equivalent in the Central Italian Alps*, Advances in Water Resources, 30, 135–147, 2007. IF 2009: 2.235, ISI, SCOPUS
- 11) Rosso, R. Rulli, M.C., Bocchiola, D., *Transient catchments hydrology after wildfires in a Mediterranean watershed: runoff, sediment and woody debris*, Hydrology and Earth System Sciences, 11(1), 125-140, 2007. IF 2007: 2.27, ISI, SCOPUS
- 12) Bocchiola, D., *Use of Scale Recursive Estimation for multisensor rainfall assimilation: a case study using data from TRMM (PR and TMI) and NEXRAD*, Advances in Water Resources, 30, 2354–2372, 2007. IF 2009: 2.235, ISI, SCOPUS
- 13) Bocchiola, D., Rulli, M.C., Rosso, R., *A flume experiment on the formation of wood jams in rivers*, Water Resour. Res., 44, W02408, doi:10.1029/2006WR005846, 2008. IF 2007: 2.154, ISI, SCOPUS
- 14) Bocchiola, D., Rosso, R., *The use of regional approach for hazard mapping at an avalanche site in northern Italy*, Advances in Geosciences, 14, 1-9, 2007. SCOPUS
- 15) Bianchi Janetti, E., Gorni, E., Sovilla, B., Bocchiola, D., *Regional snow depth estimates for avalanche calculations using a 2d model with snow entrainment*, Ann. Glaciol., 49, 63-70, 2008. IF 2005: 0.802, ISI, SCOPUS
- 16) Simaityte, J., Bocchiola, D., Augutis, J., Rosso, R., *Use of a snowmelt model for weekly flood forecast for a major reservoir in Lithuania*, Ann. Glaciol., 49, 33-37, 2008. IF 2005: 0.802, ISI, SCOPUS
- 17) Bocchiola, D., Bianchi Janetti, E., Gorni, E., Marty, C., Sovilla, B., *Regional evaluation of three day snow depth frequency curves for Switzerland*, NHESS, 8, 685-705, 2008. IF 2009: 1.345, ISI, SCOPUS
- 18) Bocchiola, D., Medagliani, M., Rosso, R., *Use of a regional approach for long term simulation of snow avalanche regime: a case study in the Italian Alps*, Arctic Antarctic and Alpine Research, 41,3, 285-300, 2009. IF 2007: 1.045, ISI, SCOPUS
- 19) Maragno, D., Diolaiuti, G., D'agata, C., Mihalcea, C., Bocchiola, D., Bianchi Janetti, E., Riccardi, A., Smiraglia, C., *New evidence from Italy (Adamello Group, Lombardy) for analysing the ongoing decline of Alpine glaciers*, Physical Geography and Quaternary Dynamics, GFDQ, 32, 31-39, 2009. ISI, SCOPUS
- 20) Bocchiola, D., Rosso, *Use of a derived distribution approach for extreme floods design: a case study in Italy*, Advances in Water Resources, 32, 8, 1284-1296. IF 2009: 2.235, ISI, SCOPUS
- 21) Bocchiola, D., Diolaiuti, G. *Evidence of climate change within the Adamello Glacier of Italy*, Theor. App. Climat., 100, 3-4, 351-369, 2010, doi: 10.1007/s00704-009-0186-x. IF 2008: 1.621, ISI, SCOPUS.
- 22) Bocchiola, D., *Regional estimation of Snow Water Equivalent using Kriging: a preliminary study within the Italian Alps*, Physical Geography and Quaternary Dynamics, GFDQ, 33, 3-14, 2010, ISI, SCOPUS. <http://www.glaciologia.it/gfdq/?p=1742>
- 23) Groppelli, B., Bocchiola, D., Rosso, R. *Precipitation downscaling using random cascades: a case study in Italy*, Advances in Geosciences, 8, 1-6, 2010. SCOPUS.
- 24) Bocchiola, D., Groppelli, B., *Spatial estimation of Snow Water Equivalent at different dates within the Adamello Park of Italy*, Cold Regions Science and Technology, 63(3), 97-109, 2010. Five years IF 1.95, ISI, SCOPUS
- 25) Bocchiola, D., Mihalcea, C., Diolaiuti, G., Mosconi, B., Smiraglia, C., Rosso, R., *Flow prediction in high altitude ungauged catchments: a case study in the Italian Alps (Pantano Basin, Adamello Group)*, Advances in Water Resources, 33, 1224-1234, 2010. IF 2010: 2.354, ISI, SCOPUS
- 26) Diolaiuti, G., Maragno, D., D'Agata, C., Smiraglia, C., Bocchiola, D., *Glacier retreat and climate change: Documenting the last 50 years of Alpine glacier history from area and geometry changes of Dosdè Piazzi glaciers (Lombardy Alps, Italy)*, Progress in Physical Geography, 35(2), 161-182, 2011. IF 2014: 3.89, ISI, SCOPUS
- 27) Groppelli, B., Bocchiola, D., Rosso, R., *Spatial downscaling of precipitation from GCMs for climate change projections using random cascades: A case study in Italy*, Water Resour. Res., 47, W03519, doi:10.1029/2010WR009437, 2011. IF 2009: 2.45, ISI, SCOPUS.
- 28) Bocchiola, D., Diolaiuti, G., Soncini, A., Mihalcea, C., D'Agata, C., Mayer, C., Lambrecht, A., Rosso, R., Smiraglia, C. *Prediction of future hydrological regimes in poorly gauged high altitude basins: the case study of the upper Indus, Pakistan*, **Invited contribution** for the: HESS Special Issue on "Catchment classification and PUB", HESSD, hessd-8-3743-2011. <http://www.hydrol-earth-syst-sci-discuss.net/8/3743/2011/hessd-8-3743-2011.html>, Hydrol. Earth Syst. Sci., 15, 2059-2075, 2011. IF 2013: 3.59, ISI, SCOPUS
- 29) Groppelli, B., Soncini, A., Bocchiola, D., Rosso, R., 2011. *Evaluation of future hydrological cycle under climate change scenarios in a mesoscale Alpine watershed of Italy*, NHESS, 11, 1769-1785. doi:10.5194/nhess-11-1769-2011. <http://www.nat-hazards-earth-syst-sci.net/11/1769/2011/nhess-11-1769-2011.html>, IF 2013: 1.75, ISI, SCOPUS
- 30) Soncini, A., Bocchiola, D., *Assessment of future snowfall regimes within the Italian Alps using general circulation models*, CRST, 68, 113-123, doi:10.1016/j.coldregions.2011.06.011. Five years IF 1.95, ISI, SCOPUS

- 31) Bocchiola, D., *Modified river hydraulics and habitat suitability in presence of woody debris: a flume experiment*, *Advances in Water Resources*, 34, 1304-1319, 2011. IF 2013: 2.41, *ISI, SCOPUS*
- 32) Confortola, G., Maggioni, M., Freppaz, M., Bocchiola, D., *Modelling soil removal from snow avalanches: a case study in the North-Western Italian Alps*, *CRST*, 70, 43-52, 2012, doi:10.1016/j.coldregions.2011.09.008. Five years IF 1.95, *ISI, SCOPUS*  
<http://www.sciencedirect.com/science/article/pii/S0165232X1100190X>
- 33) Diolaiuti, G., Bocchiola, D., D'agata, C., Smiraglia, C., *Evidence of climate change impact upon glaciers' recession within the Italian alps: the case of Lombardy glaciers*, *Theoretical and Applied Climatology*, 109(3-4), 429-445. DOI: 10.1007/s00704-012-0589-y. <http://www.springerlink.com/content/jp57023765r31436/> IF 2012: 1.76, *ISI, SCOPUS*
- 34) Diolaiuti, G., Bocchiola, D., Vagliasindi, M., D'agata, C., Smiraglia, C., *The 1975-2005 glacier changes in Aosta Valley (Italy) and the relations with climate evolution*, *PPG*, 36(6), 764-785, 2012. Available at Online first, <http://ppg.sagepub.com/content/early/2012/08/13/0309133312456413.abstract?rss=1> IF 2014: 3.89, *ISI, SCOPUS*
- 35) Bocchiola, D., Nana, E., Soncini, A., *Impact of climate change scenarios on crop yield and water footprint of maize in the Po valley of Italy*, *Agricultural Water Management*, 116, 50-61, 2013, doi: 10.1016/j.agwat.2012.10.009, <http://www.sciencedirect.com/science/article/pii/S0378377412002569#> IF 2013: 2.20, *ISI, SCOPUS*. Highest Cited Paper Award, January 2017. One of the 5 most highly cited papers during 2014, 2015 and up until June 2016.
- 36) Bocchiola, D., Diolaiuti, G., *Recent (1980-2009) evidence of climate change in the upper Karakoram, Pakistan*, *Theoretical and Applied Climatology*, 113(3-4), 611-641, 2013. IF 2016: 2.02, *ISI, SCOPUS*
- 37) U. Minora, D. Bocchiola, C. D'Agata, D. Maragno, C. Mayer, A. Lambrecht, B. Mosconi, E. Vuillermoz, A. Senese, C. Compostella, C. Smiraglia, G. Diolaiuti, *2001-2010 glacier changes in the Central Karakoram National Park: a contribution to evaluate the magnitude and rate of the Karakoram anomaly*, *The Cryosphere Discussion*, <http://www.the-cryosphere-discuss.net/7/2891/2013/tcd-7-2891-2013.html>. IF 2013: 3.77, *ISI, SCOPUS*.
- 38) D'agata, C., Bocchiola, D., Maragno, D., Smiraglia, C., Diolaiuti, G., *Glacier shrinkage driven by climate change during half century (1954-2007) in the Ortles-Cevedale group (Stelvio national park, Lombardy, Italian Alps)*, *Theor. Appl. Climatology*, <http://link.springer.com/article/10.1007%2Fs00704-013-0938-5>, 116, 1, 169-190, 2014. IF 2016: 2.02, *ISI, SCOPUS*
- 39) Confortola, G., Soncini, A., Bocchiola, D., *Climate change will affect water resources in the Alps: a case study in Italy*, *Journal of Alpine Research, RGA/JAR*, 101(3), 2013. Selected among the final six papers for the Young Alpine Research Award of RGA/JAR, edition 2013. <http://rga.revues.org/2176>. *SCOPUS*
- 40) Ravazzani, G., Bocchiola, D., Groppelli, B., Soncini, A., Rulli, M.C., Colombo, F., Mancini, M., Rosso, R., *Continuous stream flow simulation for index flood estimation in an Alpine basin of Northern Italy*, *Hydrological Sciences Journal*, 60(6), 1013-1025, 2015. <http://www.tandfonline.com/doi/full/10.1080/02626667.2014.916405#>. 5-year IF 1.86. *ISI, SCOPUS*.
- 41) Nana, E., Corbari, C., Bocchiola, D., *A model for crop yield and water footprint assessment: study of maize in the Po valley*, *AGSYS*, 127, 139-149, 2014. 5 year IF: 3.28. *ISI, SCOPUS*
- 42) Salerno, F., Gambelli, S., Viviano, G., Thakuri, S., Guyennon, N., D'Agata, C., Diolaiuti, G., Smiraglia, C., Stefani, F., Bocchiola, D., Tartari, G., *High alpine ponds shift upwards as average temperatures increase: a case study of the Ortles-Cevedale mountain group (southern Alps, Italy) over the last 50 years*, *Global and Planetary Change*, 120, 81-91, 2014. DOI: 10.1016/j.gloplacha.2014.06.003. 5 year IF: 3.61. *ISI, SCOPUS*
- 43) Bocchiola, D., *Long term (1921-2011) changes of Alpine catchments regime in Northern Italy*, *Advances in Water Resources*, 70, 51-64, 2014. DOI: 10.1016/j.advwatres.2014.04.017. <http://authors.elsevier.com/sd/article/S0309170814000840>. 5 year IF: 3.53. *ISI, SCOPUS*
- 44) Bocchiola, D., Rosso, R. *Safety of dams against floods in Italy*, *Adv. Water Resour.*, 71, 23-31, 2014. <http://www.sciencedirect.com/science/article/pii/S0309170814001006>. 5 year IF: 3.53. *ISI, SCOPUS*
- 45) Addimando, N., Nana, E., Bocchiola, D., *Modelling pasture dynamics in a Mediterranean environment: a case study in Sardinia*, *ASCE Journal of Irrigation and Drainage Engineering*, 10.1061/(ASCE)IR1943-4774.0000818, 04014063. 5 year IF: 1.59. *ISI, SCOPUS*, 2015. <http://ascelibrary.org/doi/pdf/10.1061/%28ASCE%29IR.1943-4774.0000818>
- 46) Palazzoli, I., Maskey, S., Uhlenbrook, S., Nana, E., Bocchiola, D., *Impact of prospective climate change upon water resources and crop yield in the Indrawati basin, Nepal*. *Agricultural Systems*, 133, 143-157, 2015. 5 year IF: 3.28. *ISI, SCOPUS*. <http://dx.doi.org/10.1016/j.agsy.2014.10.016>
- 47) Soncini A., Bocchiola, D., Confortola, G., Bianchi, A., Rosso, R., Mayer, C., Lambrecht, A., Palazzi E., Smiraglia C., Diolaiuti G., *Future hydrological regimes in the upper Indus basin: a case study from a high altitude glacierized catchment*, *Journal of Hydrometeorology*, 16(1), 306-326, 2015. IF 5 years: 3.93. *ISI, SCOPUS*
- 48) U. Minora, A. Senese, D. Bocchiola, A. Soncini, C. D'agata, R. Ambrosini, C. Mayer, A. Lambrecht, E. Vuillermoz, C. Smiraglia, G. Diolaiuti, *A simple model to evaluate ice melt over the ablation area of glaciers in the Central Karakoram National Park, Pakistan*, *Annals of glaciology*, 56(70), 202-216, 2015. Special issue: Contribution of glaciers and ice sheets to sea-level change: observations, modelling and prediction, IF 2014: 2.52. <http://www.igsoc.org/annals/56/70/a70a206.html>. *ISI, SCOPUS*
- 49) Bocchiola, D., *Impact of potential climate change on crop yield and water footprint of rice in the Po Valley of Italy*, *Agricultural Systems*, 139, 223-237, 2015. 5 year IF: 3.28, <http://www.sciencedirect.com/science/article/pii/S0308521X15300135>. *ISI, SCOPUS*
- 50) Migliavacca, G. Confortola, A. Soncini, G. A. Diolaiuti, C. Smiraglia, G. Barcaza, D. Bocchiola, *Hydrology and potential climate changes in the Rio Maipo (Chile)*, *Physical Geography and Quaternary Dynamics*, *GFDQ*, 38(2), 155-168, 2015. 5 years IF: 0.652. [http://gfdq.glaciologia.it/038\\_2\\_05\\_2015](http://gfdq.glaciologia.it/038_2_05_2015). *ISI, SCOPUS*
- 51) Minora, U., D. Bocchiola, C. D'Agata, D. Maragno, C. Mayer, A. Lambrecht, E. Vuillermoz, A. Senese, C. Compostella, C. Smiraglia, G. Diolaiuti, *Glacier area stability in the Central Karakoram National Park (Pakistan) in 2001-2010: The "Karakoram Anomaly" in the spotlight*, *Progress in Physical Geography*, 40, 629-660, 2016. doi: 10.1177/0309133316643926. *ISI, SCOPUS*. 5-year IF 4.49.
- 52) Bocchiola, D., Senese, A., Mihalcea, C., Mosconi, B., D'Agata, C., Smiraglia, C., Diolaiuti, G., *An ablation model for debris covered ice: the case study of Venerocolo Glacier (Italian Alps)*, *Physical Geography and Quaternary Dynamics*, *GFDQ*, 38(2), 113-128, 2015. 5 years IF: 0.652. [http://gfdq.glaciologia.it/038\\_2\\_02\\_2015](http://gfdq.glaciologia.it/038_2_02_2015). *ISI, SCOPUS*
- 53) Minora, U., D. Godone, S. Lorenzini, C. D'Agata, D. Bocchiola, G. S. Barcaza, C. Smiraglia, G. A. Diolaiuti, *2008-2011 snow cover area (SCA) variability over 18 watersheds of the Central Chile through MODIS data*, *Physical Geography and Quaternary Dynamics*, *GFDQ*, 38(2), 169-174, 2015. 5 years IF: 0.652. [http://gfdq.glaciologia.it/038\\_2\\_06\\_2015](http://gfdq.glaciologia.it/038_2_06_2015). *ISI, SCOPUS*

- 54) Viganò, G., Confortola, G., Fornaroli, R., Canobbio, S., Mezzanotte, V., Bocchiola, D., *Future climate change may affect habitat in Alpine streams: a case study in Italy*, ASCE J. Hydrol. Eng., [10.1061/\(ASCE\)HE.1943-5584.0001293](https://doi.org/10.1061/(ASCE)HE.1943-5584.0001293), 04015063, 21(2), 2016. IF 3 years: 1.59. ISI, SCOPUS
- 55) Bozza, A., Durand, A., Confortola, G., Allenbach, B., Bocchiola, D., *Potential of remote sensing and open street data for flood mapping in poorly gauged areas: a case study in Gonaives, Haiti*, Applied Geomatics, 2016. <http://link.springer.com/article/10.1007/s12518-016-0171-x>, 1-15. ISI, SCOPUS
- 56) Senese, A., Maugeri, M., Ferrari, S., Confortola, G., Bocchiola, D., Diolaiuti, G., *Modelling shortwave and longwave downward radiation and air temperature driving ablation at the Forni glacier (Stelvio national park, Italy)*, Physical Geography and Quaternary Dynamics, GFDQ, 39, 89-99, 2016.
- 57) Soncini A., Bocchiola, D., Confortola, G., Minora, U., Vuillemoz, E., Salerno, F., Viviano, G., Shrestha, D., Senese, A., Smiraglia, C., Diolaiuti, G., *Future hydrological regimes and glacier cover in the Everest region: the case study of the Dudh Koshi basin*, Science of the Total Environment STOTEN, 565, 1084-1101, 2016. <http://www.sciencedirect.com/science/article/pii/S0048969716310683> IF 5-years: 4.32.
- 58) Soncini, A., Bocchiola, D., Azzoni, R.S., Diolaiuti, G., *A methodology for monitoring and modeling of high altitude Alpine catchments*, Progress in Physical Geography, 41, 4, 393-420, 2017. DOI: 10.1177/0309133317710832. Online first. <http://journals.sagepub.com/doi/full/10.1177/0309133317710832>. IF 5-years: 4.49.
- 59) Bocchiola, D., *Agriculture and food security under climate change in Nepal: Mini-Review*, Advances in Plants and Agriculture Research, 6(6), 00237, 2017. DOI: 10.15406/apar.2017.06.00237
- 60) Bocchiola, D., Soncini, A., *Pasture modeling in mountain areas: the case of Italian Alps, and Pakistani Karakoram*, Agricultural Research and Technology, 8(3): 555736, 1-8, 2017. DOI: 10.19080/ARTOAJ.2017.08.555736, 2017.
- 61) Bocchiola, D., Soncini, A., Pelosi, M.G., *Effects of hydrological changes upon cooperation in transnational catchments: the case of Syr Darya*. Water International, 42, 1-22, 2017. DOI: 10.1080/02508060.2017.1376568. IF 2016: 1.54. Latest Articles. <http://www.tandfonline.com/doi/full/10.1080/02508060.2017.1376568>.
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