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Ειδικότητα: Διαχείριση υδατικών πόρων, Υδρολογία, Εδαφική υγρασία, Ξηρασία, Κλιματική αλλαγή, Υδραυλική ποταμών, Διόρθωση σφάλματος πόλωσης σε κλιματικά δεδομένα, Αστραπιαίες πλημμύρες, Υδρολογικά μοντέλα και Μοντέλα προσομοίωσης της επιφάνειας της γης (GHMs - LSMs)

Μεταδιδακτορικός ερευνητής, Εργαστήριο Γεωφυσικής-Δορυφορικής Τηλεπισκόπησης & Αρχαιοπεριβάλλοντος - Ινστιτούτο Μεσογειακών Σπουδών - ΙΤΕ

## **Εκπαίδευση**

Σεπ 2008 - Σεπ 2014 Σχολή Μηχανικών Περιβάλλοντος, Πολυτεχνείο Κρήτης  
**Ph.D. (2014)** Doctor of Philosophy - Τίτλος διατριβής: "Μελέτη επιπτώσεων κλιματικής μεταβολής σε βασικές υδρολογικές παραμέτρους και ο ρόλος του μεροληπτικού σφάλματος".  
Ειδίκευση στην **Υδρολογία και κλιματική αλλαγή**.

Σεπ. 2006- Σεπ. 2007 Σχολή Μηχανικών Περιβάλλοντος, Πολυτεχνείο Κρήτης  
**M.A.Sc. (2007)** Master of Applied Science - Τίτλος μεταπτυχιακής Διατριβής: «Χρήση τηλεπισκόπησης και ανάπτυξη αλγορίθμων για υδρολογικούς σκοπούς»  
Ειδίκευση στην **Τηλεπισκόπηση για υδρολογικές εφαρμογές**.

Σεπ. 2001- Αυγ. 2006 Σχολή Μηχανικών Περιβάλλοντος, Πολυτεχνείο Κρήτης  
**Δίπλωμα (2006)** Δίπλωμα Μηχανικού Περιβάλλοντος (Άριστα 8.6 / 10) – Τίτλος διπλωματικής διατριβής «Μελέτη και προσομοίωση της επιφανειακής απορροής της υδρολογικής λεκάνης του ποταμού Κερίτη, με χρήση δεδομένων πεδίου».  
Ειδίκευση στην **Υδρολογική προσομοίωση**.

Ξένες Γλώσσες: Αγγλικά (C2 – CPE, Michigan University)

## **Διδακτική Εμπειρία**

Σεπτ 2019 – Ιαν 2020 Διδάσκων του μαθήματος «Παράκτια Μηχανική» Πολυτεχνείο Κρήτης – Σχολή Μηχανικών Περιβάλλοντος

Ιαν 2019 – Ιουν 2019 Διδάσκων του μαθήματος «Υδραυλική Ι» (υδραυλική ανοικτών αγωγών) Πολυτεχνείο Κρήτης – Σχολή Μηχανικών Περιβάλλοντος

Σεπτ 2017 – Φεβ 2018 Διδάσκων του μαθήματος «Διαχείριση Περιβάλλοντος» στο Τεχνολογικό Εκπαιδευτικό Ίδρυμα Κρήτης – Τμήμα Μηχανολόγων Μηχανικών.

Ιούλ 2007 – Σεπτ 2016 Διδασκαλία θεωρίας και ασκήσεων – Συγγραφή σημειώσεων – Επίβλεψη φοιτητών σε εργασίες, στο Πολυτεχνείο Κρήτης στα μαθήματα Αριθμητικές μέθοδοι στην περιβαλλοντική μηχανική, Παράκτια Μηχανική, Υδραυλική Ανοικτών Αγωγών, Περιβαλλοντική υδραυλική, Υδραυλικά έργα

## Συμμετογή σε ερευνητικά προγράμματα

1. **5DARE**: Development of an integrated 5-dimensional space based methodology for Assessing and modelling the Response of Erosion dynamics to land use and climatic changes in Mediterranean watersheds, Greek Institute for Research and Innovation (Hellenic Foundation for Research and Innovation) (2019-2020).
2. **H2020 IMPREX**: IMproving PRedictions and management of hydrological Extremes (2015-2019).
3. **HELIX FP7**: High-End cLimate Impacts and eXtremes. ENV.2013.6.1-3 Impacts of higher-end scenarios (global average warming > 2 °C with respect to pre-industrial level) – FP7-ENV-2013 (2013-2017).
4. **CASCADE FP7**: CAstrophic Shifts in drylands: how CAN we prevent ecosystem DEgradation? Collaborative Project/ Large Scale Integrated Project FP7-ENV-2011 (2012-2017)
5. **IMPACT2C FP7**: Quantifying projected impacts under 2°C warming. Collaborative project/Large-scale integrating project, FP7-ENV-2011 (2011-2015)
6. **ECLISE FP7**: Enabling CLimate Information Services for Europe - Programme “Environment” FP7-ENV-2010.1.1.4-1. Underpinning work to enable provision of local scale climate information (2011-2014)
7. **SATFLOOD**: Integrated Use of Satellite Remote Sensing and Hydraulic Modelling for the Flood Risk Assessment at Catchment Scale in Cyprus, Institute for Research Advancement, Nicosia, Cyprus (2011-2013)
8. **COMBINE FP7**: Comprehensive Modelling of the Earth System for better climate prediction and projection (Integrated Project), FP7-ENV-2008-1 (2009-2013)
9. **SIMFLOOD**: High Resolution Satellite Imagery for Floodplain Mapping, European Space Agency (ESA) (2009-2011)
10. **WATCH**: WATER & global CHange (Integrated Project), Sixth Framework Programme – Global Change and Ecosystems Priority – 4<sup>th</sup> Call Paragraph II.1.1 Global Water Cycle, Water Resources and Droughts (2008-2012)
11. **SCENES**: Water Scenarios for Europe and for Neighboring States (Integrated Project), Sub-Priority 6.3 – Global Change and Ecosystems, Sub-priority research area - II.4 Scenarios of water demand and availability, Topic - II.4.1 Water scenarios for Europe and for neighbouring countries (2007-2011).
12. **HYDRATE**: Hydrometeorological data resources and technologies for effective flash flood forecasting Sixth Framework Programme – Global Change and Ecosystems Priority – 4<sup>th</sup> Call Paragraph II.1.2 “Flash Flood forecasting (2007-2010).

## Δημοσιεύσεις σε διεθνή περιοδικά με κριτές

1. Polykretis, C.; **Grillakis, M.G.**; Alexakis, D.D. Exploring the Impact of Various Spectral Indices on Land Cover Change Detection Using Change Vector Analysis: A Case Study of Crete Island, Greece. *Remote Sens.* 2020, 12, 319.
2. Hunink, J.; Simons, G.; Suárez-Almiñana, S.; Solera, A.; Andreu, J.; Giuliani, M.; Zamberletti, P.; **Grillakis, M.**; Koutroulis, A.; Tsanis, I.; Schasfoort, F.; Contreras, S.; Ercin, E.; Bastiaanssen, W. A Simplified Water Accounting Procedure to Assess Climate Change Impact on Water Resources for Agriculture across Different European River Basins. *Water* 2019, 11, 1976.
3. Bischiniotis, K., van den Hurk, B., Zsoter, E., Coughlan de Perez, E., **Grillakis, M.G.**, Aerts, J.C.J.H., 2019. Evaluation of a global ensemble flood prediction system in Peru. *Hydrol. Sci. J.* 1–19. doi:10.1080/02626667.2019.1617868
4. Nerantzaki, S.D., Efstathiou, D., Giannakis, G.V., Kritsotakis, M., **Grillakis, M.G.**, Koutroulis, A.G., Tsanis, I.K., Nikolaidis, N.P., 2019. Climate change impact on the hydrological budget of a large Mediterranean island. *Hydrol. Sci. J.* 02626667.2019.1630741. doi:10.1080/02626667.2019.1630741

5. Koutroulis AG, Papadimitriou LV, **Grillakis MG**, Tsanis IK, Warren R, Betts RA, (2019). Global water availability under high-end climate change: A vulnerability based assessment. *Glob Planet Change*. doi: 10.1016/J.GLOPLACHA.2019.01.013
6. **Grillakis, M.G.**, 2019. Increase in severe and extreme soil moisture droughts for Europe under climate change. *Science of The Total Environment*. 660, 1245-1255, <https://doi.org/10.1016/j.scitotenv.2019.01.001>
7. **Grillakis, M.**; Koutroulis, A.; Tsanis, I. Improving Seasonal Forecasts for Basin Scale Hydrological Applications. *Water* 2018, 10, 1593. <https://doi.org/10.3390/w10111593>
8. Koutroulis, A.G., **Grillakis, M.G.**, Tsanis, I.K. Jacob D., Mapping the vulnerability of European summer tourism under 2 °C global warming. *Climatic Change* (2018). <https://doi.org/10.1007/s10584-018-2298-8>
9. Koutroulis, A.G.; Papadimitriou, L.V.; **Grillakis, M.G.**; Tsanis, I.K.; Wyser, K.; Caesar, J.; Betts, R.A. Simulating Hydrological Impacts under Climate Change: Implications from Methodological Differences of a Pan European Assessment. *Water* 2018, 10, 1331.
10. Jacob, D. , Kotova, L. , Teichmann, C. , Sobolowski, S. P., Vautard, R. , Donnelly, C. , Koutroulis, A. G., **Grillakis, M. G.**, Tsanis, I. K., Damm, A. , Sakalli, A. and van Vliet, M. T. (2018), Climate Impacts in Europe Under +1.5°C Global Warming. *Earth's Future*, 6: 264-285. doi:10.1002/2017EF000710
11. A.G. Koutroulis, L.V. Papadimitriou, **M.G. Grillakis**, I.K. Tsanis, K. Wyser, R.A. Betts, Freshwater vulnerability under high end climate change. A pan-European assessment, *Science of The Total Environment*, Volumes 613–614, 2018, Pages 271-286, ISSN 0048-9697, <https://doi.org/10.1016/j.scitotenv.2017.09.074>.
12. **Grillakis, M. G.**, Koutroulis, A. G., Daliakopoulos, I. N., and Tsanis, I. K.: A method to preserve trends in quantile mapping bias correction of climate modeled temperature, *Earth Syst. Dynam.*, 8, 889-900, <https://doi.org/10.5194/esd-8-889-2017>, 2017.
13. Papadimitriou, L. V., Koutroulis, A. G., **Grillakis, M. G.**, and Tsanis, I. K.: The effect of GCM biases on global runoff simulations of a land surface model, *Hydrol. Earth Syst. Sci.*, 21, 4379-4401, <https://doi.org/10.5194/hess-21-4379-2017>, 2017.
14. Daliakopoulos, I.N., Panagea, S.I., Tsanis, I.K., **Grillakis, M.G.**, Koutroulis, A.K., Hessel, R., Mayor, A.G., and Ritsema, C.J., “Yield Response of Mediterranean Rangelands under a Changing Climate”, *Land Degradation & Development*, February 2017, <https://doi.org/10.1002/ldr.2717>
15. Koutroulis, A.G., **M.G. Grillakis**, I.K. Tsanis and L. Papadimitriou, “Evaluation of precipitation and temperature simulation performance of the CMIP3 and CMIP5 historical experiments”, *Climate Dynamics*, 47(5), pp 1881–1898, doi:10.1007/s00382-015-2938-x, September 2016.
16. **Grillakis M.G.**, Koutroulis A.G., Tsanis I.K., “The 2 °C global warming effect on summer European tourism through different indices”, *International Journal of Biometeorology*, 60(8), pp.1205–1215, doi:10.1007/s00484-015-1115-6, August 2016.
17. Daliakopoulos I.N., Pappa, P., **Grillakis, M.G.**, Varouchakis, E.A., Tsanis, I.K., “Modelling soil salinity in greenhouse cultivations under a changing climate with SALTMED: Model modification and application in Timpaki, Crete”, *Soil Science*, 181(6), doi:10.1097/SS.0000000000000161, June 2016.
18. **Grillakis, M.G.**, Koutroulis, A.G., Papadimitriou, L.V., Daliakopoulos, I.N. and Tsanis, I.K., “Climate induced shifts in global soil temperature regimes”, *Soil Science*, 181(6):1, doi:10.1097/SS.00000000156, May 2016.
19. Papadimitriou, L.V., Koutroulis, A.G., **Grillakis, M.G.**, and Tsanis, I.K., “High-end climate change impact on European runoff and low flows – exploring the effects of forcing biases”, *Hydrol. Earth Syst. Sci.*, doi:10.5194/hess-20-1785-2016, 20, pp.1785-1808, May 2016.
20. **Grillakis, M.G.**, Koutroulis, A.G., Seiradakis, K.D. and Tsanis, I.K., “Implications of 2° C global warming in European summer tourism”, *Climate Services*, 1, pp.30-38, March 2016. <https://doi.org/10.1016/j.cliser.2016.01.002>
21. **Grillakis, M.G.**, Koutroulis, A.G., Komma, J., Tsanis, I.K., Wagner, W. and Blöschl, G., “Initial soil moisture effects on flash flood generation—A comparison between basins of contrasting hydro-climatic conditions”, *Journal of Hydrology*, doi:10.1016/j.jhydrol.2016.03.007, March 2016.
22. Koutroulis, A.G., **Grillakis, M.G.**, Daliakopoulos, I.N., Tsanis, I.K. and Jacob, D., “Cross sectoral impacts on water availability at +2° C and +3° C for east Mediterranean island states: The case of Crete”, *Journal of Hydrology*, 532, pp.16-28, January 2016. <https://doi.org/10.1016/j.jhydrol.2015.11.015>
23. Koutroulis, A.G., **Grillakis, M.G.**, Tsanis, I.K., Jacob, D., “Exploring the ability of current climate

- information to facilitate local climate services for the water sector”. *Earth Perspectives*, 2:6, doi:10.1186/s40322-015-0032-5, November 2015. <https://doi.org/10.1186/s40322-015-0032-5>
24. Panagea, I.S., Tsanis, I.K., Koutroulis, A.G., **Grillakis, M.G.**, “Climate change impact on Photovoltaic Energy Output: The case of Greece”, *Advances in Meteorology*, Vol. 2014, Article ID: 264506, 11 pages, July 2014
  25. Tsanis I.K., Seiradakis K.D., Daliakopoulos I.N., **Grillakis M.G.**, Koutroulis A.G., “Assessment of Geoeye-1 Stereo-Pair Generated DEM in Flood Mapping of an Ungauged Basin”, *Journal of Hydroinformatics*, 16 (1), 1-18, 2014
  26. D.D. Alexakis, **M.G. Grillakis**, A.G. Koutroulis, A. Agapiou, K. Themistocleous, I.K. Tsanis, S. Michaelides, S. Pashiardis, C. Demetriou, K. Aristeidou, A. Retalis, F. Tymvios, D.G. Hadjimitsis, “GIS and Remote Sensing Techniques for the Assessment of Land Use Changes Impact on Flood Hydrology: the Case Study of Yialias Basin in Cyprus”, *Natural Hazards and Earth System Sciences*, 14, 413-426, 2014, February 2014
  27. **Grillakis M.G.**, Koutroulis A.G., Tsanis I.K., “Multisegment statistical bias correction of daily GCM precipitation output”, *Journal of Geophysical Research*, 118, 1–13, April 2013
  28. Vrochidou, A.-E.K.; Tsanis, I.K.; **Grillakis, M.G.**; Koutroulis, A.G., “The impact of climate change on hydrometeorological droughts at a basin scale”, *Journal of Hydrology*, 476, 290-301, January 2013
  29. Koutroulis A.G., **Grillakis, M.G.**, Tsanis I.K., V. Kotroni and K. Lagouvardos, “Lightning activity, rainfall and flash flooding. Occasional or interrelated events? A case study in the island of Crete”, *Natural Hazards and Earth System Sciences*, 12, 881-891, April 2012
  30. **Grillakis M.G.**, Koutroulis A.G., Tsanis I.K., “Climate change impact on the hydrology of Spencer Creek watershed in Southern Ontario, Canada”, *Journal of Hydrology*, 409(1-2), 1-19, October 2011
  31. **Grillakis, M.G.**, Tsanis, I.K., Koutroulis, A.G., “Application of the HBV hydrological model in a flash flood case in Slovenia”, *Natural Hazards and Earth System Sciences*, 10, 2713-2725, December 2010
  32. Daliakopoulos, I.N, E.G. **Grillakis, A.G.** Koutroulis, Tsanis, I.K., “Tree Crown Detection on Multispectral VHR Satellite Imagery”, 75(3), *Photogrammetric Engineering & Remote Sensing*, Journal of the American Society for Photogrammetry and Remote Sensing, 75(10), 1201-1211, October 2009

## **Δημοσιεύσεις σε συνέδρια με κριτές**

1. Koutroulis, A.; **Grillakis, M.**; Tsanis, I.; Daliakopoulos, I. Projections of Mediterranean Freshwater Vulnerability in a Global Context and Emerging Adaptation Developments at the Local Scale. Proceedings 2019, 30, 31.
2. C. Telteu, H. M. Schmied, S. Gosling, W. Thiery, Y. Pokhrel, **M. Grillakis**, A. Koutroulis, Y. Wada, Y. Satoh, J. Boulange, L. P. Seaby, T. Stacke, X. Liu, F. Tao, R. Z., A. Ducharne, G. Leng, P. Burek, N. Wanders, T. Trautmann, V. Mishra, J. Schewe, F. Zhao, I. Menke, A. Shmurak, A. Koudou, A. K. Ahmed. Co-design of a Water Cycle Diagram to Discover Similarities and Differences among Global Water Impact Models. In: AGU Fall Meeting 2019. AGU, 10 December 2019, San Francisco, CA, USA.
3. **Manolis Grillakis**, Dimitrios Alexakis, “Comparison of different rainfall erosion estimation methods for the Island of Crete”. TERRAenVISION 2019, Barcelonna, Spain, 2 - 7 September 2019 (poster).
4. Dimitrios Alexakis, Efie Tampakopoulou, **Manolis Grillakis**, Ioannis Tsanis. Using satellite remote sensing and regional climate change scenario data for projecting soil erosion risk. A case study in Crete, Greece. IGARSS 2019, July 28 - August 2, 2019, Yokohama, Japan.
5. Camelia Eliza Telteu, Hannes Müller Schmied, Simon Newland Gosling, Wim Thiery, Yadu Pokhrel, **Manolis Grillakis**, Aristeidis Koutroulis, Yusuke Satoh, Yoshihide Wada, Julien Boulange, Lauren Paige Seaby, Tobias Stacke, Xingcai Liu, Agnès Ducharne, Guoyong Leng, Peter Burek, Tim Trautmann, Jacob Schewe, Fang Zhao, Inga Menke, and Anatolii Shmurak., “Understanding each other’s models: a standard representation of global water models to support intercomparison, development, and communication” EGU2019-6212, Vienna, Austria, 7-12 April, 2019 (pico).
6. Lukas Gudmundsson, Hong X. Do, Simon N. Gosling, **Manolis G. Grillakis**, Aristeidis G. Koutroulis, Michael Leonard, Junguo Lui, Hannes Müller Schmied, Lamprini Papadimitriou, Yadu Pokhrel, Jacob

Schewe, Sonia I. Seneviratne, Wim Thiery, Seth Westra, Xuebin Zhang, and Fang Zhao, “Detection of Human influence in global accounts of observed indicators of low, mean and high streamflow” EGU2019-13487, Vienna, Austria, 7-12 April, 2019 (oral).

7. **Manolis Grillakis**, Aristeidis Koutroulis, and Ioannis Tsanis, “Seasonal drought forecast. A catchment scale assessment in the island of Crete, Greece”. EGU2019- 13799, Vienna, Austria, 7-12 April, 2019 (poster).
8. **Grillakis, M.G.**, Koutroulis, A.G., “Hydrometeorological extremes in a warmer climate. A local scale assessment for the island of Crete”, ECWS-3, 15 November 2018. MDPI AG, 10.3390/ECWS-3-05818
9. Bischiniotis K, Van den Hurk B, de Perez EC, Zsoter E, **Grillakis M.G.**, Aerts JCJH., “Evaluation of ensemble streamflow predictions and flood warnings in Peru”, EGU2018-15318
10. **Grillakis, M.G.**, Koutroulis, A.G., Tsanis, I.K., “Assessing the skill of two operational seasonal forecast systems on a small insular Mediterranean catchment.” EGU2018-10048, Vienna, Austria, 4-13 April, 2018 (poster).
11. Koutroulis, A.G., Papadimitriou, L.V., **Grillakis, M.G.**, Tsanis, I.K., Betts R., “Uncertainties in large-scale hydrological projections. A pan European assessment under high-end climate change.” EGU2018-11676, Vienna, Austria, 4-13 April, 2018 (poster).
12. **Grillakis, M.G.**, Tsanis, I.K., “Assessment Of The Probabilistic Forecasting Of The European Flood Awareness System”, HEPEX 2018, Melbourne, Australia, 6 – 8 February, 2018.
13. Koutroulis, A.G., **Grillakis, M.G.**, “Unraveling the net effect of human induced climate change to the evolution of soil water resources”, TERRAenVISION 2018, Barcelona, Spain, 29 January - 01 February 2018. (poster).
14. Koutroulis, A.G., Papadimitriou, L.V., **Grillakis, M.G.**, Tsanis, I.K., “European freshwater vulnerability under high rates of global warming and plausible socio-economic narratives”, EGU2017-11960, Vienna, Austria, 23–28 April 2017 (poster).
15. Koutroulis, A.G., **Grillakis, M.G.**, Tsanis, I.K., “Introducing seasonal hydro-meteorological forecasts in local water management. First reflections from the Messara site, Crete, Greece”, EGU2017-12072, Vienna, Austria, 23–28 April 2017 (poster)
16. Papadimitriou L.V., Koutroulis A.G., **Grillakis M.G.**, Tsanis I.K., “Representation of droughts under different forcing datasets”, ISIMIP workshop 22-24 June, 2016, Potsdam Institute for Climate Impact Research (PIK) in Potsdam, Germany.
17. Papadimitriou L.V., Koutroulis A.G., **Grillakis M.G.**, Tsanis I.K., “Sensitivity of a global land surface model to the meteorological forcing. Effects on the representation of droughts”, 2<sup>nd</sup> EWaS International Conf., June 1-4, Chania, Greece.
18. Daliakopoulos, I.N., Wagner, K., **Grillakis, G.M.**, Apostolakis, A., Koutroulis, A.G., Tsanis, I.K., “An Open-source Low-cost Portable Apparatus for Soil Fauna Sampling”, Geophysical Research Abstracts, Vol. 18, EGU2016-16745-2, Vienna, Austria, 17-22 April 2016 (poster)
19. Papadimitriou, L., **Grillakis, M.G.**, Koutroulis, A.G., Tsanis, I.K., “Sensitivity of hydrologic simulations to bias corrected driving parameters”, Geophysical Research Abstracts, Vol. 18, EGU2016-12021, Vienna, Austria, 17-22 April 2016 (poster)
20. **Grillakis, M.G.**, Koutroulis, A.G., Tsanis, I.K., “A new method of adjusting spatial and temporal biases for selected climate variables”, Geophysical Research Abstracts, Vol. 18, EGU2016-11928, Vienna, Austria, 17-22 April 2016 (poster)
21. Koutroulis, A.G., **Grillakis, M.G.**, Tsanis, I.K., “Storms from the past in a warmer climate. Results from high-res non-hydrostatic modeling over Crete”, Geophysical Research Abstracts, Vol. 18, EGU2016-11785, Vienna, Austria, 17-22 April 2016 (poster)
22. Tsanis I. K., L. Alfieri, A. Koutroulis, **M. Grillakis**, L. Papadimitriou, L. Feyen, M. Voudoukas, E. Voukouvalas), M. Rozsai, A. Kitous, P. Ciais, X. Wang, K. Wyser, R. A. Betts, “The impact of high-end climate change scenarios over Europe - Key Risks of Climate Change”, International Scientific Conference – Our Common Future Under Climate Change (CFCC2015), 7-10 July 2015, Paris, France

(poster)

23. Koutroulis A.G., **Grillakis M.G.**, Tsanis I.K., “Studying the climate change impact at 2 degree warming on Water Resources for the island of Crete: A cross-sectoral approach”, International Scientific Conference – Our Common Future Under Climate Change (CFCC2015), 7-10 July 2015, Paris, France (poster)
24. Tsanis I.K., **Grillakis M.G.**, Koutroulis A.G., “Mapping the vulnerability of European summer tourism at a 2°C globally warmer climate”, European Climate Change Adaptation Conference, 12-14 May 2015, Copenhagen, Denmark (poster)
25. Tsanis I.K., Papadimitriou L., **Grillakis M.G.**, Koutroulis A.G., “The effect of bias adjustment in modeling global terrestrial water cycle and extremes”, European Climate Change Adaptation Conference, 12-14 May 2015, Copenhagen, Denmark (poster)
26. Tsanis I.K., **Grillakis M.**, Varouchakis E., Koutroulis A., Seiradakis K., “Assessing regression kriging for its ability to represent precipitation fields over complex terrain using different gauging network densities”, EGU2015, Vienna, Austria, 12-17 April 2015 (poster)
27. **Grillakis M.**, Koutroulis A., Tsanis I.K., Jacob D., “Projections of European summer tourism demand at a +2 degrees warmer climate”, EGU2015-9448, Vienna, Austria, 12-17 April 2015 (poster)
28. Daliakopoulos I., **Grillakis M.**, Tsanis I.K., “Observed and Projected Aridity Trends in the CASCADE Project Mediterranean Drylands”, EGU2015-10497, Vienna, Austria, 12-17 April 2015 (poster)
29. Koutroulis A.G., Tsanis I.K., **Grillakis M.G.**, Jacob D., “Assessing the ability of current climate information to facilitate local climate services for the water sector”, EGU2014-4006, Vienna, Austria, 27 April–2 May 2014 (poster)
30. **Grillakis M.G.**, Panagea I., Koutroulis A.G., Tsanis I.K., “Estimating the efficiency of P/V systems under a changing climate—the case study of Greece”, EGU2014-3969, Vienna, Austria, 27 April–2 May 2014 (poster)
31. Tsanis I.K., Koutroulis A.G., **Grillakis M.G.**, Konstantopoulos K., Jacob D., “Estimating the impact of +2 degrees of global warming on European Tourism”, EGU2014-3988, Vienna, Austria, 27 April–2 May 2014 (poster)
32. **Grillakis M. G.**, Koutroulis A. G., Tsanis I.K. “Piece wise statistical bias correction for daily precipitation” International Conference on Regional Climate - CORDEX 2013, A partnership between WCRP, the European Commission and IPCC, Brussels, Belgium, 4-7 November 2013 (poster)
33. Alexakis D.D., A.G. Koutroulis, **M.G. Grillakis**, A. Agapiou, K. Themistocleous, I.K. Tsanis, D.G. Hadjimitsis. “Using spatio-temporal Markov model for Flood mapping: The case study of Yialias river in Cyprus”. Remote Sensing for Agriculture, Ecosystems, and Hydrology. SPIE Remote Sensing. ERS13-RS101-88. Internationales Congress Center, Dresden, Germany, 23-26 September 2013.
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35. Tsanis I.K., **Grillakis M.G.**, Koutroulis A.G., Jacob D., “Developing local climate services to support climate adaptation policies for Greek region”, EGU2013-4462, Vienna, Austria, 7–12 April 2013 (poster)
36. Koutroulis A.G., **Grillakis M.G.**, Tsanis I.K., “Comparison of precipitation simulation performance by the CMIP3 and new CMIP5 models”, EGU2013-4435, Vienna, Austria, 7–12 April 2013 (poster)
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38. Tsanis I.K., **Grillakis M.G.**, Polcher J., “Assessing the climate change impact on the hydrology of Spencer Creek watershed based on RCMs and an interpolated GCM”, EGU2012, Vienna, Austria, 22–27 April 2012.
39. Koutroulis A.G., **M.G. Grillakis**, I.K. Tsanis, V. Kotroni, K. Lagouvardos. “Examining correlation between lightning activity, rainfall and flash flooding. A case study in the island of Crete”, 13, 13th

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41. Koutroulis A.G., **Grillakis M.G.**, I.K. Tsanis, V. Kotroni, K. Lagouvardos. “Lightning activity, rainfall and flash flooding. Occasional or interrelated events? A case study in the island of Crete”, 12th Plinius Conference on Mediterranean Storms, Corfu Island, Greece, 1–4 Sept. 2010.
42. **Grillakis, M.G.** and I.K. Tsanis, Integrated flash flood analysis in ungauged watersheds, 12th Plinius Conference on Mediterranean Storms, Corfu Island, Greece, 1–4 Sept. 2010.
43. Tsanis, I.K., A.G. Koutroulis, I.N. Daliakopoulos, **E.G. Grillakis**, Studying the hydro-meteorological extremes. The benefits from the European Flash Flood research oriented HYDRATE project. EGU2010-8744, Vienna, May 5-7, 2010.
44. Tsanis, I.K., **M. G. Grillakis**, G. Blöschl and N. Pogacnik. The HBV spatially distributed flash flood forecasting model - The Slovenia case study, EGU2009, Vienna, April 20-21, 2009.
45. Tsanis I. K., L. Alfieri, A. Koutroulis, M. Grillakis, L. Papadimitriou, L. Feyen, M. Vousdoukas, E. Voukouvalas), M. Rozsai, A. Kitous, P. Ciais, X. Wang, K. Wyser, R. A. Betts. .The impact of high-end climate change scenarios over Europe - Key Risks of Climate Change. International Scientific Conference – Our Common Future Under Climate Change, 1-10 July 2015, Paris, France.
46. Koutroulis A.G., **Grillakis M.G.**, Tsanis I.K. Studying the climate change impact at 2 degree warming on Water Resources for the island of Crete: A cross-sectoral approach. Multi-sectoral analysis of risks to climate change (hot spots) at 2 °C warming. International Scientific Conference – Our Common Future Under Climate Change, 1-10 July 2015, Paris, France.

## Ακαδημαϊκές Διακρίσεις

- Βραβείο επίδοσης στις προπτυχιακές σπουδές Εμμ. Μιχαηλάκη. Υψηλότερη βαθμολογία κατά το 3<sup>ο</sup> και 4<sup>ο</sup> έτος σπουδών, 2003-2004 και 2004-2005.
- Βραβείο αριστείας στις προπτυχιακές σπουδές. Ιδρύματος Κρατικών Υποτροφιών (ΙΚΥ). Υψηλότερη βαθμολογία κατά το 3<sup>ο</sup> και 4<sup>ο</sup> έτος σπουδών, 2003-2004 και 2004-2005.
- Βραβείο/υποτροφία εισαγωγής στο ΜΔΕ Περιβαλλοντική και Υγειονομική Μηχανική (1<sup>ος</sup> εισακτέος) 2006-2007.
- Βραβείο/Υποτροφία επίδοσης στο 1<sup>ο</sup> εξάμηνο του ΜΔΕ Περιβαλλοντική και Υγειονομική Μηχανικής 2006-2007.

## Προσφορά προς την Επιστημονική Κοινότητα

1. **Κύριος συγγραφέας στην Ειδική Έκθεση Εμπειρογνομώνων για την αλλαγή του κλίματος και το περιβάλλον στη Μεσόγειο (MedECC) - Chapter 3 (3.3 Society).** Contributing author in Chapter 3.1 – Soil moisture).
2. **Αξιολογητής** στο Πανεπιστήμιο Wisconsin-Milwaukee το 2016 στην πρωτοβουλία για την ανάπτυξη της έρευνας (Research Growth Initiative )
3. **Ειδικός Κριτής** στην Ειδική Έκθεση της IPCC για την παγκόσμια αύξηση της θερμοκρασίας κατά 1.5°C (**IPCC SR15 report**).
4. **Αξιολογητής** σε διεθνή περιοδικά: Nature Scientific Reports, Frontiers, Climatic Change, Journal of Hydrology, Solar Energy, Climate Services Journal, Natural Hazards and Earth System Sciences, Hydrology and Earth System Sciences, Natural Hazards journal, International Journal of Climatology, Soil Science, Entropy MDPI, Water MDPI, Stochastic Environmental Research and Risk Assessment,.

## **Συμμετοχές σε επαγγελματικούς και ακαδημαϊκούς οργανισμούς**

1. **ISIMIP:** Inter-Sectoral Impact Model Intercomparison Project – Active member and active data contributor to water sector with the Joint UK Land Environment Simulator (JULES-W1) και CaMa-Flood global hydrodynamic simulation model (2016-σήμερα)
2. **IAHS:** INTERNATIONAL ASSOCIATION OF HYDROLOGICAL SCIENCES (2018- σήμερα)
3. Τεχνικό Επιμελητήριο Ελλάδος, (2006- σήμερα)

## **Συμμετοχή σε συντακτικές επιτροπές**

- 2018-2019 Guest editor στο επιστημονικό περιοδικό *Resources MDPI*. Τίτλος του ειδικού θέματος: “Υδατικοί πόροι και κλιματική αλλαγή”.