

Publications in scientific journals

Evangelista A, Frate L, Carranza ML, Attorre F, Pelino G, Stanisci A. 2016. Changes in composition, ecology and structure of high-mountain vegetation: a re-visitation study over 42 years. *Aob Plants* 8: 11.

Niederheiser R., Rutzinger M., Lamprecht A., Steinbauer K., Winkler M. & Pauli H. (2016): Mapping alpine vegetation location properties by dense matching. In: *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*. Prague, Czech Republic Vol. XLI-B5, pp. 881-886.

Unterluggauer P., Mallaun M., Erschbamer B. (2016): The higher the summit, the higher the diversity changes – Results of a long-term monitoring project in the Dolomites. *Gredleriana* 16: 5-34.

Di Musciano M, Carranza ML, Frate L, Di Cecco V, Di Martino L, Frattaroli AR, Stanisci A. 2018. Distribution of Plant Species and Dispersal Traits along Environmental Gradients in Central Mediterranean Summits. *Diversity-Basel* 10/58(3): 1-17.

Frate L., Carranza M. L., Evangelista A., Stinca A., Schaminée J. H., & Stanisci A. (2018). Climate and land use change impacts on Mediterranean high-mountain vegetation in the Apennines since the 1950s. *Plant Ecology & Diversity*, 11(1), 85-96.

Niederheiser R., Rutzinger M., Bremer M. & Wichmann V. (2018): Dense image matching of terrestrial imagery for deriving high-resolution topographic properties of vegetation locations in alpine terrain. *International Journal of Applied Earth Observation and Geoinformation* 66: 146-158.

Rogora M., L. Frate, M.L. Carranza, M. Freppaz, A. Stanisci, I. Bertani, R. Bottarin, A. Brambilla, R. Canullo, M. Carbognani, C. Cerrato, S. Chelli, E. Cremonese, M. Cutini, M. Di Musciano, B. Erschbamer, D. Godone, M. Iocchi, M. Isabellon, A. Magnani, L. Mazzola, U. Morra di Cella, H. Pauli, M. Petey, B. Petriccione, F. Porro, R. Psenner, G. Rossetti, A. Scotti, R. Sommaruga, U. Tappeiner, J.-P. Theurillat, M. Tomaselli, D. Viglietti, R. Viterbi, P. Vittoz, M. Winkler, G. Matteucci, 2018. Assessment of climate change effects on mountain ecosystems through a cross-site analysis in the Alps and Apennines. *Sci Total Environ*, 624: 1429-1442.

Manuscripts in preparation

Lamprecht A., H. Pauli, M.R. Fernández Calzado, J. Molero-Mesa, M. Bardy-Durchhalter, A. Gattringer, D. Moser, K. Steinbauer, M. Winkler: Climate driven changes of high mountain plant communities at the cold edge of southern Europe. In prep.

Niederheiser R., M. Winkler, C. Geitner, H. Pauli, B. Erschbamer, R. Fernández Calzado, D. Ghosn, H. Hofbauer B., G. Kazakis, Klingraber, A. Lamprecht, J. Molero Mesa, A. Stanisci, K. Steinbauer, J.-P. Theurillat, P. Vittoz, M. Rutzinger: Automated vegetation cover estimation from close-range photogrammetric point clouds in alpine terrain for interpretation of micro topographic conditions in summit areas of the alps and mediterranean mountains. In prep.

Winkler M. *et al.* Climate change effects on species richness and composition of European mountain summits revisited. In prep.

Theses

Kamphuis J. (2015): Vegetation detection in Structure-from-Motion derived 3D-models. BSc Thesis. Applied Earth Sciences. Delft University of Technology.

Evangelista A. (2016): Resilience and turnover in high-altitude ecosystems in Central Apennines. PhD thesis in "Science, Technology and Biotechnology for Sustainability", 29° Cycle, University of Tuscia – University of Molise.

Di Musciano M. 2016: Vegetation analysis in the permanent plots of GLORIA project in Majella National Park: a synchronic approach to identify the key species for monitoring climate change. MSc Thesis. University of L'Aquila-University of Molise.

Den Outer J. (2016): Analyse von Vegetationsstandorten im Hochgebirge mithilfe des Verfahrens des dense matchings von terrestrischen Schrägbildaufnahmen. MSc Thesis. Institute of Geography, University of Innsbruck.

Mayr S. (2017): Analyse des Landbedeckungswandels von Vegetationsstandorten im Hochgebirge mittels Satellitenfernerkundung. Master Thesis, Institute of Geography, University of Innsbruck, 169 pp.

Hofbauer H. (2018): Mapping surface types in high mountain environments of the Alps. Bachelor Thesis, University of Natural Resources and Life Sciences Vienna (BOKU), Vienna, Austria, 29 pp.

Klingraber B. (2018): Comparing two methods of recording the top cover of surface types in permanent plots on GLORIA summits in Mediterranean regions. Bachelor Thesis, University of Natural Resources and Life Sciences Vienna (BOKU), Vienna, Austria, 24 pp.

Stackelberg, M. (in prep.): Modellierung und Analyse phänologischer Zeitreihen im Gebirge mit Landsat und Sentinel-2. MSc Thesis. School: Institute of Geography, University of Innsbruck. Innsbruck, Austria.

Di Musciano M. (in prep.) : Floristic diversity along elevation gradients in central Apennines: diversity pattern and global change. PhD School in "Sciences of health and environment" 32° Cycle, L'Aquila University.

Lamprecht A. (in prep.) Disentangling anthropogenic drivers of global change impacts on alpine plant species. PhD Thesis, University of Natural Resources and Life Sciences Vienna (BOKU), Vienna, Austria

Niederheiser R. (in prep.) Mapping alpine vegetation location properties. PhD Thesis, Institute of Geography, University of Innsbruck.

Presentations at conferences

Niederheiser R., Rutzinger M., den Outer J. & Winkler M. (2015): Mapping vegetation location properties using a structure from motion approach. In: Perth III: Mountains of Our Future Earth. Perth, United Kingdom.

Evangelista A, Frate L, Carranza ML, Petriccione B, Pelino P, Attorre F, De Sanctis M & Stanisci A. (2015) Long-term ecological research in Italian summit vegetation: observations at central Apennines. 58th IAVS Symposium, Brno, Czech Republic, 19 – 24 July 2015, Book of Abstract, pp 62

Di Musciano M., Stanisci A., Frate L., Di Cecco V., Di Martino L., Frattaroli A.R. (2016). The Times they are a Changin': A Synchronic Approach for identifying the Key Plant Species to Monitor Climate Change: effects at high elevation in Majella National Park. 111° Congresso della Società Botanica Italiana, Roma 21-23 settembre 2016.

Frate L, Evangelista A, Stinca A, Schamineé JHJ, Hennekens SM, Carranza ML, Stanisci A. (2016) Vegetation databases and long-term analysis of high mountain EU habitats: detecting ecological and structural changes in central Apennines. Book of Abstract Poster. 25° Meeting of European Vegetation Survey, Rome 6-9 April 2016. Pag. 42. ISBN 9788890409155.

Di Musciano M., Stanisci A., Frate L., Carranza M.L., Di Cecco V., Di Martino L., Frattaroli A.R. 2017. Nurse plant effect along mountain vertical gradients. An insight in central Apennine. 112° Congress of Italian Botanical Society, Parma 20-23/9/2017.

Di Musciano M., Stanisci A., Frate L., Di Cecco V., Di Martino L., Frattaroli A.R. - The importance of dispersal traits in mountain environment to predict changes in plant species distribution under climate warming, the case study on central Apennines GLORIA summits. Communication at Plant Traits 2.0 congress, Bologna 9/02/2017.

Erschbamer B.: Hochgebirge als Hotspots der Diversität - durch den Klimawandel in Gefahr? Jahrestagung der Reinhold-Tüxen-Gesellschaft in Hannover. 10.-12.03.2017.

Erschbamer B.: Habitat monitoring – an essential tool to assess changes and predict consequences. Experiences from the Alpine region. Keynote IAVS 2017, Palermo 20.-24.06.2017 In: Guarino, R., Bazan, G. & Barbera G. (eds.) IAVS – Vegetation patterns in natural and cultural landscapes. Atti e Convegni 3: Abstract books, Palermo University Press: 18-19.

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Frate L., Di Febbraro M., Evangelista A., Di Cecco V., Carranza M.L., Cutini M., Theurillat J.-P., Stanisci A. (2017). Using a model based fourth-corner analysis to explain plant traits pattern in high mountain ecosystems. Atti delle giornata della ricerca scientifica Dipartimento di Bioscienze e Territorio. Volume degli atti pp: 33-34. ISBN: 9788896394205. http://www.unimol.it/wp-content/uploads/2017/02/ATTI_GRS_DIBT_2017.pdf

Freppaz. M., Rogora M., Stanisci A., 2017. Le montagne italiane, sentinelle europee del cambiamento climatico. Workshop 10th years of LTER Italy, Mantova 10 nov 2017.

Lamprecht A; Pauli H; Steinbauer K; Bardy-Durchhalter M; Winkler M. 2017: Do alpine plant communities respond differently to climate change impacts? - The Alps versus Mediterranean

mountains. 10th Annual Meeting of the Specialist Group on Macroecology of the Ecological Society of Germany Austria and Switzerland. Macroecology in Space and Time. , APR 19-21, 2017, Wien

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Winkler M. 2017: MediAlps: Disentangling anthropogenic drivers of global change impacts on alpine plant species composition: Alps versus Mediterranean mountains. Botanisches Kolloquium, Institute of Botany, University of Innsbruck , MAI 31, 2017, Innsbruck, AUSTRIA

Lamprecht A; Pauli H; Fernández Calzado M R; Steinbauer K; Winkler, M. 2018: Vascular plants at the cold edge of southern Europe. Jahrestagung des AK Hochgebirge, FEB 2-4, 2018, Innsbruck

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Mayr S., Rutzinger M., Geitner C., Niederheiser R. & Winkler M. (2018): Land cover classification and change detection in European high-altitude regions. In: eo4alps. Innsbruck, Austria (<https://www.dropbox.com/s/jx04b8nq7fixq5b/Abstract%20Book%20v.4.pdf?dl=1>)

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Public relations

Stanisci A. Il valore della biodiversità. SUMMER SCHOOL "Turismo, Biodiversità, Heritage: dall'integrazione delle risorse alla progettazione territoriale" Caramanico Terme, Majella National Park 23-27 september 2015

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Erschbamer B.: Der Klimawandel im Hochgebirge. Webforum 50 plus, Kolpinghaus Innsbruck; 07.03.2017

Erschbamer B.: Global Observation Research Initiative in Alpine Environments. Ausstellung Überlebenskunst, Botanischer Garten Innsbruck. 08.06.-15.10.2017

Erschbamer B.: Alpine Artenvielfalt in Gefahr? Die Vegetation der Berggipfel in Zeiten des Klimawandels – Untersuchungen in den Südtiroler Dolomiten. Berg, BergWissen, Alpenvereinsjahrbuch 2018: 212-217.

Stanisci A. The Mediterranean sentinels of global warming: GLORIA summits in Majella National Park. Forum degli Appennini. Caramanico (AQ). 20/12/2018.