

Publication list of Kamil Ustaszewski (Nov. '20)

Articles in peer-reviewed journals

In preparation:

- Biermanns, P., Schmitz, B., **Ustaszewski, K.**, Mechernich, S., Reicherter, K.: Apennine-style extensional deformation in the compressive Southern Dinarides (Southern Montenegro and Northern Albania). *Terra Nova*, in preparation.
- Cionoiu, S., Handy, M.R., **Ustaszewski, K.**: Comparison of the fault-parallel flow and fault-bend folding algorithms. *Journal of Structural Geology*, in preparation.
- Grützner, C., Aschenbrenner, S., Jamšek Rupnik, S., Reicherter, K., Saifelislam, N., Vičič, B., Vrabec, M., Welte, J., **Ustaszewski, K.**: Holocene surface rupturing earthquakes in western Slovenia, *Solid Earth*, in preparation.
- Löwe, G., Schneider, S., Sperner, B., Balling, P., Pfänder, J., **Ustaszewski, K.**: Torn between subducted slabs: exhumation of the Cer Massif (internal Dinarides) as a far-field effect of Carpathian slab rollback inferred from $^{40}\text{Ar}/^{39}\text{Ar}$ dating and cross section balancing. *Tectonics*, in preparation.
- Richter, M., Pollok, K., **Ustaszewski, K.**: Tectonometamorphic evolution of a subducting plate interface at the base of the Mirdita Ophiolite (Bajram Curri, northeastern Albania). *Swiss Journal of Geosciences*, in preparation.
- Schmitz, B., Hueck, M., Wemmer, K., Biermanns, P., Reicherter, K., **Ustaszewski, K.**: Kinematics and age of the orogen-perpendicular Shkoder-Peja Normal Fault in North Albania constrained from Raman spectroscopy and K-Ar fault-gouge dating. *EPSL*, in preparation.
- Ustaszewski, K.**, Zhang, Y., Suppe, J., Wu, Y.-M.: Improved constraints on the configuration of the Eurasian passive margin from crustal-scale balanced cross sections across the Taiwan fold-and-thrust belt. *Tectonics*, in preparation.

Submitted or in review:

- Zebari, M., Preusser, F., Grützner, C., Navabpour, P., **Ustaszewski, K.**: Late Pleistocene-Holocene Slip Rates in the Northwestern Zagros Mountains Derived from Luminescence Dating of River Terraces and Structural Modeling. *Tectonics*, in review.

In revision or pending acceptance:

- Balling, P., Tomljenović, B., Schmid, S.M., **Ustaszewski, K.**: Contrasting along-strike deformation styles in the external Dinarides: implications for the tectonic evolution of its Paleogene flexural foreland basin system. *Global and Planetary Change*, pending acceptance.
- Balling, P., Grützner, C., Tomljenović, B., Spakman, W., **Ustaszewski, K.**: Post-collisional mantle delamination in the Dinarides implied from staircases of Oligo-Miocene uplifted marine terraces. *Scientific Reports*, in revision.
- Diercks, M., Grützner, C., Vrabec, M., **Ustaszewski, K.**: A model for the formation of the Pradol (Pradolino) dry valley in W Slovenia and NE Italy, *Geologija*, pending acceptance.
- Le Breton, E., Brune, S., **Ustaszewski, K.**, Zahirovic, S., Seton, M., & Müller, R. D. (2020). Kinematics and extent of the Piemont-Liguria Basin – implications for subduction processes in the Alps: *Solid Earth Discuss.*, [doi:10.5194/se-2020-161](https://doi.org/10.5194/se-2020-161), in revision.
- Thieme, M., Malz, A., Fügenschuh, B., Linnemann, U., Jähne-Klingberg, F., **Ustaszewski, K.**: New constraints on the timing and kinematics of Late Cretaceous intraplate contraction in the Mid-German Crystalline Rise (Central Germany) from combined fission-track and U-Pb LA-ICP-MS dating. *International Journal of Earth Sciences*, in revision.

Published (in inverse chronological order):

- Zebari, M., Balling, P., Grützner, C., Navabpour, P., Witte, J., & **Ustaszewski, K.** (2020). Structural style of the NW Zagros Mountains and the role of basement thrusting for its Mountain Front Flexure, Kurdistan Region of Iraq. *Journal of Structural Geology*, 104206, doi: [10.1016/j.jsq.2020.104206](https://doi.org/10.1016/j.jsq.2020.104206).
- Schmitz, B., Biermanns, P., Hinsch, R., Đaković, M., Onuzi, K., Reicherter, K., & **Ustaszewski, K.** (2020). Ongoing shortening in the Dinarides fold-and-thrust belt: A new structural model of the 1979 (Mw 7.1) Montenegro earthquake epicentral region. *Journal of Structural Geology*, 104192, doi: [10.1016/j.jsq.2020.104192](https://doi.org/10.1016/j.jsq.2020.104192).
- Zhang, Y., Tsai, C.-H., Froitzheim, N., **Ustaszewski, K.** (2020). The Yuli Belt in Taiwan: part of the suture zone separating Eurasian and Philippine Sea plates. *Terrestrial, Atmospheric and Oceanic Sciences*, 31, 415-435, doi: [10.3319/TAO.2020.06.28.01](https://doi.org/10.3319/TAO.2020.06.28.01).
- Viscolani, A., Grützner, C., Diercks, M., Reicherter, K., & **Ustaszewski, K.** (2020). Late Quaternary Tectonic Activity of the Udine-Buttrio Thrust, Friulian Plain, NE Italy. *Geosciences* 10(2), 84, doi: [10.3390/geosciences10020084](https://doi.org/10.3390/geosciences10020084).
- Schmid, S.M., Fügenschuh, B., Georgiev, N., Kounov A., Matenco, L., Nievergelt, P., Oberhänsli, R., Pleuger, J., Schefer, S., Schuster, R., Tomljenović, B., **Ustaszewski, K.**, van Hinsbergen, D. (2020): Tectonic units of the Alpine collision zone between Eastern Alps and western Turkey, *Gondwana Research*, 78, 308-374, doi: doi.org/10.1016/j.gr.2019.07.005.
- Handy, M.R., Giese, J., Pleuger, J., Schmid, S.M., Spakman, W., Onuzi, K., **Ustaszewski, K.** (2019): Coupled Crust-Mantle Response to Slab Tearing, Bending, and Rollback Along the Dinaride-Hellenide Orogen, *Tectonics*, 38, 2803-2828, doi: doi.org/10.1029/2019TC005524.
- Zebari, M., Grützner, C., Navabpour, P., **Ustaszewski, K.** (2019): Relative Timing of Uplift along the Zagros Mountain Front Flexure Constrained by Geomorphic Indices and Landscape Modelling, Kurdistan Region of Iraq, *Solid Earth*, 10, 663-682, <https://doi.org/10.5194/se-10-663-2019>.
- Biermanns, P., Schmitz, B., **Ustaszewski, K.**, Reicherter, K. (2019): Tectonic geomorphology and Quaternary landscape development in the Albania - Montenegro border region: An inventory. *Geomorphology*, 326, 116-131, doi: [10.1016/j.geomorph.2018.09.014](https://doi.org/10.1016/j.geomorph.2018.09.014).
- Le Breton, E., Handy, M.R., Molli, G., **Ustaszewski, K.** (2017): Post-20 Ma motion and rotation of the Adriatic microplate – new constraints from surrounding orogens and implications for crust-mantle decoupling. *Tectonics*, 36, doi: [10.1002/2016TC004443](https://doi.org/10.1002/2016TC004443).
- Dhansay, T., Navabpour, P., de Wit, M., **Ustaszewski, K.** (2017): Assessing the reactivation potential of pre-existing fractures in the southern Karoo, South Africa: evaluating the potential for sustainable exploration across its Critical Zone. *Journal of African Earth Sciences*, 134, 504-515.
- Navabpour, P., Malz, A., Kley, J., Siegburg, M., Kasch, N., **Ustaszewski, K.** (2017): Intraplate brittle deformation and states of paleostress constrained by fault kinematics in central German platform. *Tectonophysics*, 694, 146-163, doi: [10.1016/j.tecto.2016.11.033](https://doi.org/10.1016/j.tecto.2016.11.033).
- Sandmann, S., Nagel, T.J., Froitzheim, N., **Ustaszewski, K.**, Münker, C. (2015): Late Miocene to Early Pliocene blueschist from Taiwan and its exhumation via forearc extraction. *Terra Nova*, 27, 285-291.
- Handy, M.R., **Ustaszewski, K.**, Kissling, E. (2015): Reconstructing the Alps-Carpathians-Dinarides as a key to understanding switches in subduction polarity, slab gaps and surface motion. *International Journal of Earth Sciences*, 104, 1-26.
- Ustaszewski, K.**, Herak, M., Herak, D., Tomljenović, B., Matej, S. (2014): Neotectonics of the Dinarides–Pannonian Basin Transition Area and possible earthquake sources in the Banja Luka epicentral area. *Journal of Geodynamics*, 82, 52-68.

- Ustaszewski, K.**, Wu, Y.-M., Suppe, J., Huang, H.-H., C.-H. Chang (2012): Crust-mantle boundaries in the Taiwan–Luzon arc-continent collision system determined from local earthquake tomography and 1D models. [Tectonophysics, 578, 31–49](#).
- Ustaszewski, K.**, Kounov, A., Schmid, S.M., Schaltegger, U., Krenn, E., Frank, W., Fügenschuh, B. (2010): Evolution of the Adria–Europe plate boundary in the northern Dinarides: From continent-continent collision to back-arc extension. [Tectonics, 29, TC6017, doi:10.1029/2010TC002668](#).
- Ustaszewski, K.**, S. M. Schmid, B. Lugović, R. Schuster, U. Schaltegger, D. Bernoulli, L. Hottinger, A. Kounov, B. Fügenschuh, and S. Schefer (2009): Late Cretaceous intra-oceanic magmatism in the internal Dinarides (northern Bosnia and Herzegovina): Implications for the collision of the Adriatic and European plates. [Lithos, 108, 106-125](#).
- Ustaszewski, K.**, S. M. Schmid, B. Fügenschuh, M. Tischler, E. Kissling, and W. Spakman (2008): A map-view restoration of the Alpine-Carpathian-Dinaridic system for the Early Miocene. [Swiss Journal of Geosciences, 101 \(Supplement Issue 1\), 273-294](#).
- Krenn, E., **Ustaszewski, K.**, Finger, F. (2008): Detrital and newly formed metamorphic monazite in amphibolite-facies metapelites from the Motajica Massif, North Bosnia. [Chemical Geology 254, 164-174](#).
- Schmid, S. M., Bernoulli, D., Fügenschuh, B., Matenco, L., Schefer, S., Schuster, R., Tischler, M. & **Ustaszewski, K.** (2008): The Alpine-Carpathian-Dinaridic orogenic system: correlation and evolution of tectonic units. [Swiss Journal of Geosciences 101, 139-183](#).
- Hinsken, S., **Ustaszewski, K.**, Wetzels, A. (2007): Graben-width controls synrift sedimentation: the Palaeogene Upper Rhine Graben as an example. [International Journal of Earth Sciences, 96, 979-1002](#).
- Ustaszewski, K.**, Schmid, S.M. (2007): Latest Pliocene to recent thick-skinned tectonics at the Upper Rhine Graben - Jura Mountains junction. [Swiss Journal of Geosciences, 100, 293-312](#).
- Cloetingh, S., Ziegler, P.A., Cornu, T., **Ustaszewski, K.**, Schmid, S.M., Dèzes, P., Hinsch, R., Decker, K., Lopes Cardozo, G., Granet, M., Bertrand, G., Behrmann, J., Michon, L., Pagnier, H., Rozsa, S., Heck, B., Kahle, H.G., Winter, T., Dewez, T., Tesauro, M. (2006): Neotectonics and intraplate continental topography of the northern Alpine Foreland. [Earth-Science Reviews, 74, 127-196](#).
- Ustaszewski, K.**, Schmid, S.M. (2006): Control of pre-existing faults on geometry and kinematics in the northernmost part of the Jura fold-and-thrust belt, [Tectonics, 25, TC5003, doi:10.1029/2005TC001915](#).
- Picot, L., Becker, D., Lapaire, F., **Ustaszewski, K.**, Hug, W.A., Berger, J.P. (2005): Sédimentologie, paléontologie et reconstruction des paléo-environnements côtiers de la bordure sud-rhénane (Groupe des Gompholites et Conglomérats, Paléogène, Jura, Suisse). [Eclog. Geol. Helv., 98, 281-296](#).
- Ustaszewski, K.**, Schumacher, M.E., Schmid, S.M., Nieuwland, D. (2005): Erratum to “Fault reactivation in brittle-viscous wrench systems – Dynamically scaled analogue models and application to the Rhine–Bresse transfer zone”. [Quaternary Science Reviews 24, 2303](#).
- Ustaszewski, K.**, Schumacher, M.E., Schmid, S.M. (2005): Simultaneous normal faulting and extensional flexuring during rifting – an example from the southernmost Upper Rhine Graben. [International Journal of Earth Sciences, 94, 680-696](#).
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- Giamboni, M., **Ustaszewski, K.**, Schmid, S.M., Schumacher, M.E., Wetzel, A. (2004) Plio-Pleistocene Transpressional Reactivation of Paleozoic and Paleogene Structures in the Rhine-Bresse transform Zone (northern Switzerland and eastern France). [International Journal of Earth Sciences 93, 207–223.](#)
- Cloetingh, S., Ziegler, P.A., Cornu, T., **Ustaszewski, K.**, Schmid, S.M., Dèzes, P., Hinsch, R., Decker, K., Lopes Cardozo, G., Granet, M., Bertrand, G., Behrmann, J., Michon, L., Pagnier, H., van Wees, J.-D., Rozsa, S., Heck, B., Verdun, J., Kahle, H.-G., Fracassi, U., Winter, T., Burov, E. (2003): Investigating Environmental Tectonics in Northern Alpine Foreland of Europe. [Eos 84\(36\), 356–357.](#)

Non-peer-reviewed articles (in inverse chronological order)

- Zinke, C., Navabpour, P., **Ustaszewski, K.**, 2015. Analyse des Bruchflächeninventars in Grundgebirgs- und Rotliegendeaufschlüssen am Nordrand des Thüringer Waldes bei Ilmenau/Thüringen) hinsichtlich ihrer Versagenstendenz im rezenten Spannungsfeld. [Beiträge zur Geologie von Thüringen, N.F., 22, 137 – 152.](#)
- Zinke, C., **Ustaszewski, K.**, 2015: Geologische Neukartierung am Nordrand des Thüringer Waldes bei Ilmenau. Beiträge zur Geologie von Thüringen, N.F. 22, 127-136.
- Ustaszewski, K.**, Schmid, S.M., 2007. Neotectonic activity in the Upper Rhine Graben - Jura Mountains junction (North-Western Switzerland and adjacent France). [Bulletin für Angewandte Geologie, 12 \(1\), 3-19.](#)

Technical reports

- Hesse, G., Richling, S., Schaub, A., Will, J., Eckardt, S., **Ustaszewski, K.**, Kasch, N., Siegburg, M., and Thieme, M., 2015, OPTIRISS - Geothermisches Verbundprojekt Thüringen-Sachsen zur Entwicklung einer risikominimierten petrothermalen Explorations- und Erschließungsmethode für geeignete mitteldeutsche Kristallingesteine (Projektteil Thüringen), [Abschlussbericht, JENA-GEOS Ingenieurbüro GmbH, 106 pp.](#)

Book articles

- Ustaszewski, K.**, Schumacher, M.E., Schmid, S.M. and Nieuwland, D.A., 2005. Fault reactivation in brittle-viscous wrench systems - dynamically scaled analogue models and application to the Rhine-Bresse Transfer Zone. In: S. Cloetingh and T. Cornu (Editors), Neotectonics and Quaternary Fault reactivation in Europe's Intraplate Lithosphere. Elsevier, pp. 280, ISBN: 0-08-044687-6.

Monographies

- Ustaszewski, K.**, 2004. Reactivation of pre-existing crustal discontinuities: the southern Upper Rhine Graben and the northern Jura Mountains - a natural laboratory. [PhD Thesis, University of Basel, Basel, 162 pp.](#)
- Ustaszewski, K.**, 2000. Stratigraphische und strukturgeologische Untersuchungen am Ostrand der Engadiner Dolomiten (Ortler Gruppe, Südtirol). MSc thesis, University of Innsbruck, Innsbruck, 102 pp.