

# CV Wolfgang Schöner

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## Education

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| 1995      | PhD in Geography, University of Salzburg (Austria)  |
| 1995      | Unigis diploma, University of Salzburg (Austria)  |
| 1982-1990 | Studies of Geography, Meteorology and Geophysics, Universities of Vienna, Innsbruck (Austria) |

## Academic positions

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| 2020-     | Director of Austrian Polar Research Institute (APRI)   |
| 2019-2021 | Head of Institute of Geography and Regional Science, Austria   |
| 2014-     | Professor of Physical Geography, University of Graz, Austria   |
| 2009-2014 | Section head “Climate Change Impacts” at Austrian Weather Service (Zentralanstalt für Meteorologie und Geodynamik) |
| 1995-2009 | Researcher at “Climate Department” at Austrian Weather Service (Zentralanstalt für Meteorologie und Geodynamik)    |
| 1991-1995 | Research Assistant at Institute of Meteorology and Geophysics, University of Vienna (Austria)                      |

## Main areas of research

Mountain climate variability and change; interaction between the atmosphere and the cryosphere (snow, glaciers, permafrost) in a mountain/Arctic environment, impact of snow and glaciers on runoff, climate time series homogenization and statistical analysis, droughts in mountain regions.

## Most important research achievements and activities

- Initiator of IACS-MRI-WMO/GCW Joint Body on “The status of mountain snow cover”( Co-chairs: Wolfgang Schöner, Lijuan Ma, Shawn Marshall), currently under review
- Organizer/Convener/Co-Convener of the session “Mountain climates: processes, change and related Impacts” at EGU (2016 -)
- Member of EU-Polarnet1 and 2 (coordinating and co-designing the European Research Area consortium <https://eu-polarnet.eu/> (2015 -)
- Member of the MRI working group on elevation dependent climate change EDCC (2014 -)
- Chairman of Climate Change Centre Austria CCCA (2015-2016)
- Council member and Austrian representative for International Arctic Science Committee IASC (2014 -)
- Together with A. Richter (University of Vienna) Initiator of the Austrian Polar Research Institute: [www.polarresearch.at](http://www.polarresearch.at) (2013)
- Chair of Working Group, Surface Observations of WMO-Global Cryosphere Watch and member of Steering Group (2012 -)
- Initiator of the Austrian Radiation Network ARAD, with Sonnblick Observatory as BSRN station

- Installation of mass balance monitoring at Sonnblick (Austrian Alps) and Freya glacier (NE-Greenland) as part of the World Glacier Monitoring Service
- Deputy director of Sonnblick Observatory (Austrian Alps) 2002-2015
- Homogenization methods for climate times series and development of the HISTALP data set (together with I. Auer and R. Böhm) a widely used climate data set in climate research
- Coordination of Austrian Contribution to International Polar Year 2007/08.
- Successful supervision of 9 PhD students, >30 MSc/diploma students.

## Selected relevant academic publications

Shahi, S., J. Abermann, G. Heinrich, R. Prinz, and **W. Schöner**. 2020. Regional Variability and Trends of Temperature Inversions in Greenland. *Journal of Climate*. 33. 2020. 9391-9407. doi:10.1175/JCLI-D-19-0962.1

Haslinger, K.; Hofstaetter, M.; Kroisleitner, C.; **Schöner, W.**; Laaha, G.; Holawe, F. and G. Bloeschl. 2019. Disentangling Drivers of Meteorological Droughts in the European Greater Alpine Region During the Last Two Centuries. *Journal of Geophysical Research: Atmospheres*. 124. 2019. -. doi:10.1029/2018JD029527

Matiu, M., Crespi, A., Bertoldi, G., Carmagnola, C. M., Marty, C., Morin, S., **Schöner W.**, ... Weilguni, V. (2021). Observed snow depth trends in the European Alps: 1971 to 2019. *Cryosphere*, 15(3), 1343-1382. <https://doi.org/10.5194/tc-15-1343-2021>

**Schöner W.**, Koch R., Matulla C., Marty. C., A.M. Tilg. 2018. Spatiotemporal patterns of snow depth within the Swiss - Austrian Alps for the past half century (1961 to 2012) and linkages to climate change, *Int. J. Climat.*, 39/3, 1589-1603, <https://doi.org/10.1002/joc.5902>, 2018.

Pepin N., Bradley R.S., Diaz H.F., Baraer M., Caceres E.B., Forsythe N., Fowler H., Greenwood G., Hashmi M.Z., Liu X.D., Miller J., Ning L., Ohmura A., Palazzi E., Rangwala I., **Schöner W.**, Severskiy I., Shahgedanova M., Wang M.B., Williamson S.N. and D.Q. Yang. 2015. Elevation-Dependent Warming in Mountain Regions of the World. *Nature Climate Change*. 2015. 424 - 430, 7 S. doi:10.1038/nclimate2563.

**Schöner W.**, Auer I., Böhm R. 2009. Long term trend of snow depth at Sonnblick (Austrian Alps) and its relation to climate change. *Hydrological Processes* 23, 1052-1063, DOI: 10.1002/hyp.7209.

Koboltschnig GR, **Schöner W**, Zappa M, Kroisleitner C, Holzmann H. 2008. Runoff modelling of the glacierized alpine Upper Salzach basin (Austria): Multi-criteria result validation. *Hydrological Processes* 22: 3950–3964. DOI: 10.1002/hyp.7112.

Michlmayr G, Lehning M, Koboltschnig GR, Holzmann H, Zappa M, Mott R, **Schöner W**. 2008. Application of the Alpine3D model for glacier mass balance and glacier runoff studies at Goldbergkees, Austria. *Hydrological Processes* 22: 3941–3949. DOI: 10.1002/hyp.7102.

Mott R., Faure F., Koboltschnig G., Lehning M., Löwe H, Michlmayr G, Prokop A., **Schöner W**. 2008. Simulation of seasonal snow cover development and seasonal snow cover distribution for glaciated sites (Sonnblick, Austrian Alps) with the ALPINE3D model. *Annals of Glaciology* 49, 155-160.

Auer I, Böhm R, Jurkovic A, Lipa W, Orlik A, Potzmann R, **Schöner W**, Ungersböck M, Matulla C, Briffa K, Jones PD, Efthymiadis D, Brunetti M, Nanni T, Maugeri M, Mercalli L, Mestre O, Moisselin J-M, Begert M, Müller-Westermeier G, Kveton V, Bochnicek O, Stastny P, Lapin M, Szalai S, Szentimrey T, Cegnar T, Dolinar M, Gajic-Capka M, Zaninovic K, Majstorovic Z, Nieplova E, 2007. HISTALP – Historical instrumental climatological surface time series of the greater Alpine region 1760-2003. *International Journal of Climatology*, 27: 17-46.

Böhm, R., IAuer I., Brunetti M., Maugeri M., Nanni T., **Schöner W**. 2001. Regional temperature variability in the European Alps 1760-1998 from homogenised instrumental time series. *International Journal of Climatology* 21: 1779-1801.