

CURRICULUM VITAE – Matthias Huss, Dr. sc. nat.

Personal Data

Date of birth: 9 March 1980
Nationality: Swiss
Address: Laboratory of Hydraulics, Hydrology and Glaciology (VAW), ETH Zurich, Hönggerberggring 26, 8093 Zurich, Switzerland
Tel. / Email: +41 44 632 40 93 / huss@vaw.baug.ethz.ch
ORCID: 0000-0002-2377-6923

Education

Nov. 2010 **Didaktischer Ausweis**, Geography; permission to teach at Swiss High School
Mar. 2009 **PhD**, Glaciology, ETH Zurich, Switzerland. Thesis title: “Past and future changes in glacier mass balance” (advisors: Prof. M. Funk, Dr. A. Bauder)
May 2005 **Diploma (MSc)**, Earth Sciences, ETH Zurich, Switzerland

Employment history

Since 10.2013 **Senior lecturer (60/50%)**, Laboratory of Hydraulics, Hydrology and Glaciology (VAW), ETH Zurich, Switzerland
Since 03.2009 **Senior lecturer (40/20%)**, Department of Geosciences, University of Fribourg, Switzerland
5./6. 2013 **Visiting Scientist**, Geophysical Institute, University of Alaska Fairbanks, Alaska, USA
8.2010–7.2011 **High school teacher, Geography (25%)**, Kantonsschule MNG Rämibüel, Zurich, Switzerland
7.2005–2.2009 **Research Associate**, VAW-ETH Zurich, Switzerland

Publications

- Peer-reviewed journal articles (2007-2019): **101** (thereof as first author: **27**)
- Other publications: Non-peer reviewed papers (**4**), Popular Science (**6**), Published Abstracts (**>50**)
- Total citations 2007-2019 according to *ISI Web of Knowledge* (July 2019): **3243**; h-index: **33**
- Total citations 2007-2019 according to *Google Scholar* (July 2019): **5255**; h-index: **41**

Most important publications (selected, more than 100 citations):

Huss and Hock (2018). Global-scale hydrological response to future glacier mass loss. *Nature Climate Change*.
Huss and Hock (2015). A new model for global glacier change and sea-level rise. *Frontiers in Earth Science*.
Huss (2013). Density assumptions for converting geodetic glacier volume change to mass change. *The Cryosphere*
Huss and Farinotti (2012). Distributed ice thickness and volume of all glaciers around the globe. *Journal of Geophysical Research*.
Huss (2011). Present and future contribution of glaciers to runoff from macroscale drainage basins in Europe. *Water Resour. Res.*
Huss et al. (2008). Modelling runoff from highly glacierized alpine drainage basins in a changing climate. *Hydrological Processes*.

Institutional responsibilities

Since 1.2016 **Head of Glacier Monitoring Switzerland (GLAMOS)**, hosted at VAW-ETH Zurich and University of Fribourg, Switzerland

Teaching activities

- Courses at Bachelor / Master level at the **University of Fribourg** (2009-2017/18):
GG.0101 Introduction aux Géosciences ; GG.0253 Introduction à la Cryosphère ; GG.0444 Alpine Cryosphere ; GG.0448 Modelling of Glaciers and Permafrost
- Courses at Bachelor / Master level at the **ETH Zurich** (2014-2019):
651-3561-00L Kryosphäre
- Guest Lecturer at **UNIS Svalbard** (2014-2017):
AG-325 Glaciology

Supervision of junior researchers

Completed *PhD* theses (main advisor **MA** / committee member **CM**): **4 / 8**

2010: Daniel Farinotti, ETH Zurich (**CM**)

2016: James Douglas, University of Sheffield (**CM**)

2014: Annina Sorg, University of Geneva (**CM**)

2017: Kathrin Naegeli, University of Fribourg (**MA**)

2015: Jeannette Gabbi, ETH Zurich (**CM**)
 2015: Rainer Prinz, University of Innsbruck (**CM**)
 2015: Leo Sold, University of Fribourg (**MA**)
 2016: Marion Réveillet, LGGE Grenoble (**CM**)
 2017: Daphné Freudiger, University of Freiburg (**CM**)
 2018: Mauro Fischer, University of Fribourg (**MA**)
 2018: Fanny Brun, LGGE Grenoble (**CM**)
 2018: Martina Barandun, University of Fribourg (**MA**)

Ongoing *PhD* theses (main advisor / committee member): **1 / 2**

2016 – : Simon Förster, ETH Zurich (**main advisor**)
 2017 – : Johannes Landmann, ETH Zurich (**committee member**)
 2018 – : Luisa Pruessner, ETH Zurich (**committee member**)

Completed *MSc* thesis: **13**

Memberships in panels, boards and scientific reviewing activities

- *Contributing Author* (WG I, Chapter 4) to the 5th assessment report of the IPCC (2014)
- *Contributing Author*, IPCC Special Report on Ocean and Cryosphere in a Changing Climate (2019)
- Member of the *Research Council of Norway* (since 2019)
- *Scientific Editor* for *Frontiers in Earth Science* (since 2015)
- *Scientific Editor* for *Annals of Glaciology* (“Glacier and Ice sheets in a warming climate”, 2012)
- *National Correspondent to the World Glacier Monitoring Service* (since 2015)
- *Advisory board member* of the IACS working group on “Glacier ice thickness estimation”
- *Member* of the IACS working group on the “Randolph Glacier Inventory”
- *Member* of the “Glacier Model Intercomparison Project (GlacierMIP)”, a Climate and Cryosphere (CliC) targeted activity
- *Reviewer for various funding agencies* (e.g. SNF, DfG, NSF, etc.)
- *Reviewer for various journals*: >100 papers since 2008 (e.g. *Nature*, *Nature Climate Change*, *Proceedings of the National Academy of Sciences*, *Geophysical Research Letters*, *Journal of Geophysical Research*, *The Cryosphere*, *Journal of Glaciology*, *Annals of Glaciology*, *Water Resources Research*, *Hydrology and Earth System Sciences*, *Journal of Hydrology*, *Hydrological Processes*, *Climatic Change*, *Natural Hazards*, *Geomorphology*, *Earth Surface Processes and Landforms*, *Remote Sensing of the Environment*, etc.)

Active memberships in scientific societies

- *Vice-president* of Expertenkommission für Kryosphärenmessnetze (EKK) (since 2014/2018)
- *Member* of Schweizerische Kommission für Fernerkundung (SKF) (since 2013)
- *President* of the Swiss snow, ice and permafrost society (SEP) (since 2018)

Organisation of conferences

- *Lead / co-convener* at the European Geophysical Union, Vienna, Austria (since 2012)
- *Lead convener* at the Swiss Geoscience Meeting, Switzerland (since 2016)

Prizes, Awards, Fellowships

June 2015 **“Early Career Award”** by the International Union of Geodesy and Geophysics (IUGG)
 Apr. 2014 **“Arne Richter Award”** for outstanding young scientists by the European Geosciences Union (EGU)
 Dec. 2013 **“Cryosphere Young Investigator Award”** by the American Geophysical Union (AGU)
 Dec. 2012 **“Editors’ Choice Award”** for the best paper of the year by *Water Resources Research*
 April 2010 **“Young Scientists Outstanding Poster Paper Award”** by the EGU
 Aug. 2006 **“Best Student Poster Presentation”** by the Int. Association of Cryospheric Sciences (IACS)
 Dec. 2005 **“Medal of the ETH Zurich”** for an outstanding Diploma (MSc) thesis
 Dec. 2005 **“Willi-Studer Preis”** for the best student of the age group

Outreach

Numerous newspaper articles (>100) TV / radio interviews (>30) and about ongoing research: e.g. *Science News* (11.2008), *BBC* (8.2008), *Spiegel* (12.2009, 8.2016), *Nature News* (6.2010), *The Guardian* (8.2011), *Tages Anzeiger* (3./8.2017), *NZZ* (10.2017), *20 Minuten* (7.2015, 7.2018); *national Swiss radio and television SRF* (7./8.2011, 10.2013, 7./8.2015, 7./10./11.2017, 10./11.2018), *German television ARD / ZDF* (8.2017, 11.2018, 1.2019), *Swedish television* (6.2019), etc.