# Ólafur Rögnvaldsson

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#### **Education:**

2006	The Weather Research & Forecasting (WRF) Model tutorial. Boulder,
	Colorado, USA.
2005	Summer school: From micro to mesoscale. Castro Marina, Lecce,
	Italy. Organized by the Institute of Atmospheric Sciences and Climate
	of National Research Council (CNR) and the University of Lecce.
2004	The University of Trento Summer School on Mountain Meteorology:
	Orographic effects on precipitation. Trento, Italy.
2002 - present	PhD student in meteorology, University of Bergen, Norway:
•	The study focuses on mapping precipitation in Iceland in current
	climate using dynamical downscaling techniques. Supervisors are Dr.
	Sigbjørn Grønås, University of Bergen, and Dr. Haraldur Ólafsson,
	University of Iceland.
2002	The Copenhagen Summer School on water isotopes in glacier ice and
	in palaeoclimate studies.
	The Swiss NCCR Climate Summer School in Grindelwald,
	Switzerland.
2001	Cand. Scient. in meteorology, University of Bergen, Norway.
1998	B.S. in geophysics, University of Iceland, Iceland.

# **Research experience:**

2001

2001 - present Co-founder and CEO of Institute for Meteorological Research (IMR):

> Consulting work for e.g. the Icelandic Power Company, the Public Roads Administration, the Icelandic Energy Authority, the Icelandic Meteorological Office and various engineering companies. Participants in the CWE (Climate, Water and Energy), and CE (Climate and Energy), and the CES (Climate and Energy Systems) Nordic projects. IMR has further been running numerical weather forecasts daily for Iceland and surrounding waters since March 2004:

http://www.belgingur.is

Visiting scientist at NOAA/ESRL (formerly NOAA/ETL), Boulder, 2003, '04, '07 & '08 USA:

> The research has focused on orographic effects on precipitation and has been done in collaboration with Dr. Jian-Wen Bao.

Specialist at the Icelandic Energy Authority:

System administration of a PC Linux cluster, installation and porting of the iTOUGH2 and TOUGH2 multiphase fluid and heat flow models.

1999-2001 Cand. Scient. student at the University of Bergen:

• Installing and running the MM5 mesoscale atmospheric model, both

on a DEC-Alpha workstation and a PC Linux cluster.

1998 Researcher at the Icelandic Meteorological Office.

Summer 1997 Research assistant at HALO, Reykjavík, Iceland:

• Work under supervision of Dr. Guðmundur Bjarnason. The research included running and investigating the ETA mesoscale atmospheric

model.

Summer 1995/96 Field assistant in seismic and electromagnetic measurements in

Iceland.

**Teaching experience:** 

2002 & 2004 Part time teaching of the course "Classical Mechanics", at the

University of Iceland.

### Workshops and conferences:

Over forty domestic and Internationale conferences with oral and/or poster presentations.

# **Technical reports and conference proceedings:**

Over sixty technical reports and conference proceedings.

# Peer reviewed publications:

Rögnvaldsson, Ó., P. Crochet and H. Ólafsson, 2004. Mapping of precipitation in Iceland using numerical simulations and statistical modeling. *Meteorolog. Z.*, Vol. 13, No. 3, 209-219 (June 2004).

Rögnvaldsson, Ó., J.F. Jónsdóttir and H. Ólafsson, 2007. Numerical Simulations of Precipitation in the Complex Terrain of Iceland – Comparison with Glaciological and Hydrological Data. *Meteorolog. Z.*, Vol. **16**, No. 1, 71-85 (February 2007).

Rögnvaldsson, Ó., J-W. Bao and H. Ólafsson, 2007. Sensitivity Simulations of Orographic Precipitation with MM5 and Comparison with Observations in Iceland during the Reykjanes EXperiment. *Meteorolog. Z.*, Vol. **16**, No. 1, 87-98 (February 2007).

Elíasson, J., Ó. Rögnvaldsson and T. Jónsson, 2009. Extracting statistical parameters of extreme precipitation from a NWP model. *Hydrol. Earth Syst. Sci.*, **13**, 2233-2240.

Arason, T., Ó. Rögnvaldsson and H. Ólafsson, 2010. Validation of Numerical Simulations of Precipitation in Complex Terrain at high Temporal Resolution. *Hydro. Res.*, **41.3-4**, 164-170.

Rögnvaldsson, Ó., J.F. Jónsdóttir and H. Ólafsson, 2010. Dynamical Downscaling of Precipitation in Iceland 1961-2006. *Hydro. Res.*, **41.3-4**, 153-163.

Rögnvaldsson, Ó., J.-W. Bao, H. Ágústsson, and H. Ólafsson, 2011. Downslope windstorm in Iceland – WRF/MM5 model comparison. *Atmos. Chem. Phys.*, **11**, 103-120, doi:10.5194/acp-11-103-2011. Available on-line:

### http://www.atmos-chem-phys.org/11/103/2011/acp-11-103-2011.pdf.

Joachim Reuder, Markus Ablinger, Hálfdán Ágústsson, Pascal Brisset, Sveinn Brynjólfsson, Markus Garhammer, Tómas Jóhannesson, Marius O. Jonassen, Rafael Kühnel, Stephan Lämmlein, Tor de Lange, Christian Lindenberg, Sylvie Malardel, Stephanie Mayer, Martin Müller, Haraldur Ólafsson, Ólafur Rögnvaldsson, Wolfgang Schäper, Thomas Spengler, Günther Zängl and Joseph Egger, 2011. FLOHOF 2007: An overview of the mesoscale meteorological field campaign at Hofsjökull, Central Iceland. *Meteorol. Atmos. Phys.*, doi: 10.1007/s00703-010-0118-4, January 2011. Available on-line: <a href="http://www.springerlink.com/content/jx08142x45286722/fulltext.pdf">http://www.springerlink.com/content/jx08142x45286722/fulltext.pdf</a>.