

# LOUISE NUIJENS

## *Curriculum Vitae*

### Personalialia

Full name: Aloisia Antoinette Nuijens  
Date of birth: April 20, 1983  
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### Education

**Graduate school - Dept. of Atmos and Ocean Sciences, UCLA, Los Angeles-CA, USA** (2007 - present)

*Ph.D. degree expected: Spring 2010*

#### **Diploma's:**

***C.Phil*** Atmos and Ocean Sci. (Oct. 2008), UCLA

***M.Sc*** - Atmos. and Oceanic Sci., (2007-2008), UCLA

***M.Sc*** - Meteorology and Air Quality (cum laude), (2005-2006), Wageningen University (WUR), Wageningen, The Netherlands

*Thesis 1: 'Radar observations of precipitation in the trade-wind cumulus region'*

Advisors: Prof.Dr.B.Stevens (UCLA) and Dr.J.Vilá-Guerau de Arellano (WUR)

*Thesis 2: 'A study on the relations between thermodynamic profiles and rainfall in the trade wind region'*

Advisors: Dr.M.C.van Zanten and Dr.A.P.Siebesma (KNMI)

***B.Sc*** - Soil, Water and Atmosphere (cum laude) - (2002-2005), Wageningen University (WUR), Wageningen, The Netherlands

### Research and teaching experience

**Dept. of Atmos. Sci., UCLA** (2007 - present)

Research-assistant: research on precipitating shallow cumulus convection. Advisor: Prof. B. Stevens

**Meteorology and Air Quality Dept., WUR** (Sept 2005 - 2006)

Teaching-assistant: preparation of exercises, manual and class discussions for the MSc course 'Clouds and Climate' with guidance of Dr. J.Vilá-Guerau de Arellano.

**Royal Netherlands Meteorological Institute (KNMI)** (Jan 2006 - May 2006)

Research internship: preparation of the Large Eddy Simulation (LES) Intercomparison case of precipitation shallow cumulus. Advisors: Dr. A.P. Siebesma and Dr. M.A.C. Van Zanten

**Meteorology and Air Quality Dept., WUR** (June 2004)

Student-researcher: analysis of surface temperatures from NOAA-AVHRR satellite images en meteorological data from Cabauw. Advisors: Dr. H.A.R. de Bruin and Dr. W.M.L Meijninger

**Bijles Wageningen** (2002 - 2005)

Freelance tutor: coaching high-school students in physics / mathematics

## Publications

Nuijens, L., B. Stevens and A.P. Siebesma (2009): *The environment of precipitating shallow cumulus convection*. J.Atmos.Sci., 66, pp. 1962-1979

Rauber, R M., B. Stevens and co-authors (2007): *Rain in (shallow) cumulus over the ocean - The RICO campaign*. Bull. Amer. Soc. Meteor. 88 (12), pp. 1912-1928.

Rauber, R M., B. Stevens and co-authors (2007): *In the Drivers Seat RICO and Education*. Bull. Amer. Soc. Meteor. 88 (12), pp. 1929-1937.

Nuijens (2005), *Op jacht naar cumulus tijdens RICO*, Meteorologica 14.1, p.19-22, The Netherlands

## Talks

*'Relationships between wind speed, humidity and precipitating shallow cumulus convection'*  
- CFMIP/GCSS Boundary Layer WG Workshop, Vancouver, Canada (June 2009)

*'Relationships between wind speed, humidity and precipitating shallow cumulus convection'*  
- Workshop on "Advanced concepts for boundary layer parameterizations" - Offenbach, Germany (May 2009)

*'Relationships between wind speed, humidity and precipitating shallow cumulus convection'*  
- EGU meeting, Vienna (April 2009)

*'The chances of rain showers in the trades'* - Department of Meteorology, University of Reading, UK (Nov 2008)

*'Blustery, cloudy and rainy weather in the trades'* - Department of Meteorology, Wageningen

gen University and Research Center (WUR), Wageningen, The Netherlands (Oct 2008)

*'The chances of getting wet'* - 4th Pan-GCSS meeting 'Advances on Modeling and Observing Clouds and Convection', Toulouse, France , (June 2008)

*'Relations between thermodynamic profiles and rainfall in the trade wind region'* - Royal Netherlands Meteorological Institute (KNMI), De Bilt, The Netherlands (Okt 2006)

*'Atmospheric profile and precipitation properties derived from radar and radiosondes during RICO'* - GEWEX Cloud System Studies workshop, New York, USA (Sept 2006)

*'Estimating precipitation from radar observations in the trade-wind cumulus region'* - Royal Netherlands Meteorological Institute (KNMI), De Bilt, The Netherlands (Nov 2005)

## Posters presentations

*'On the chances of getting wet'* - Autumn School on 'Climate Change, Causes and Impacts', Paphos, Cyprus (12 - 19th October 2008)

*'On the chances of getting wet'* - 15<sup>th</sup> International Conference on Clouds and Precipitation, Cancun, Mexico (July 2008)

*'The Environment of Precipitating Shallow Convection'*, 4th Pan-GCSS meeting 'Advances on Modeling and Observing Clouds and Convection', Toulouse, France, (June 2-6, 2008)

*'Precipitating Shallow Cumulus'*, Berkeley Atmospheric Sciences Center (BASC) Symposium, Berkeley CA, USA (September, 2007)

## Scholarships, Grants & Awards

Bosart Award, for unselfish service to fellow students and positive contribution to department life while demonstrating a firm commitment to academics. Dept of Atmos. Sci., UCLA, Fall 2008.

2nd Award for best Student Poster, Autumn School on 'Climate Change, Causes and Impacts', Paphos, Cyprus (Oct 2008)

IGPP scholarship - UCLA (2006-2007)

Schuurman-Schimmel van Outeren Stichting - Travel grant (Jan 2005)

Hendrik-Müller Vaderlandsch Fonds - Travel grant (Jan 2005)

## Field campaigns & Summer schools

Autumn School on 'Climate Change, Causes and Impacts', Paphos, Cyprus (Oct 2008)

Rain In Cumulus over the Ocean (RICO) Field Campaign, the Caribbean (Jan 2005)

## Extra-curricular activities

Co-president and faculty representative for Chi Epsilon Pi, graduate student association  
Dept. of Atmos. Sci, UCLA (2007 - 2008)

Student-member of various organizations at Wageningen University:

*'Teacher of the Year' Award Committee* (2005 - 2006)

*OpCie study association* (2004 - 2005)

*Board member BSc/MSc study association Pyrus* (2003 - 2004)

Student-assistant Wageningen University, Wageningen (2004 - 2005)

Duties: organization of a two-day meteorology seminar for high school students,  
advising future students through informative presentations.

## References:

Prof.Dr.A.A.M.Holtzlag and Dr. J.Vila-Guerau de Arellano  
Department of Meteorology and Air Quality  
Wageningen University and Research Center (WUR)  
Email: *bert.holtzlag@wur.nl / jordi.vila@wur.nl*

Prof.Dr. A.P.Siebesma  
Royal Netherlands Meteorological Institute (KNMI)  
Email: *siebesma@knmi.nl*

Prof.Dr.B. Stevens  
Max Planck Institute for Meteorology and  
University of California Los Angeles (UCLA)  
Email: *bjorn.stevens@zmaw.de*

## Research interests

My interest is in understanding the dynamics and microphysics of boundary layer clouds and their interaction with large-scale dynamics. My PhD research focuses on the characteristics and behavior of shallow cumulus clouds in the (sub)tropics. By using both remote sensing (in-situ and satellite-based cloud and rain radars, lidars), as well as modeling tools (Large-Eddy Simulation), my goal is to understand the processes responsible for any change in mean characteristics of precipitating trade-wind cumuli under a varying large-scale environment.