

Remembering Peter Duynkerke

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On 18 January 2002 Peter Duynkerke died due to a tragic accident at the age of 42. As such a premature end came to the life of a driven scientist, inspired teacher and an enthusiastic colleague. Peter was also a very friendly and helpful fellow man, blessed with an enormous energy. With the death of Peter we do not only lose a driven expert for our profession, but also a colorful personality. Peter often attracted attention by the brightly colored 'Hawaii-shirts' he preferred to wear, but even more by his cheerful character that typically was marked by a roaring laughter.



Peter Duynkerke was born on 22 September 1959 in Borssele, a little town in the South-West part of the Netherlands. After the primary and the secondary schools, Peter chose a technical study (with much fluid dynamics) at the Technical University in Delft, the Netherlands.

After his study Peter started at KNMI in 1983 to work on a PhD thesis directed to the modeling of Stratocumulus. This was done under the guidance of Ad Driedonks and Henk Tennekes. In fact Peter was employed by the Free University of Amsterdam, but as his mentors were working at KNMI it was more logic to work in De Bilt as well.

Despite his modesty, it took only a short while at KNMI before Peter struck the eye by his "no-nonsense" attitude and fresh, own way of working. As an example, at that time his advisors were charmed by mixed-layer models for the atmospheric boundary layer. Peter himself saw more in the use of models with high vertical resolution, in which turbulence and thermodynamics of clouds can be described in more detail (see Duynkerke and Driedonks, 1987).

In 1988 Peter defended his PhD thesis at the Free University in Amsterdam. His thesis is still worthwhile to inspect because it combines five nice pieces of work, which became standard articles later on (see list

below). Of interest is also the illustration reproduced here on the next page. Remarkably the articles that had been published before, are simply inserted as a copy in the thesis, without using the typesetting as in the other chapters. Why would you spend time on details, if the contents is ok?

In any case, Peter made with the work in his thesis a very good basis for his later, innovating attributions in the different fields of meteorology and atmospheric physics. Besides of clouds, Peter has worked on atmospheric turbulence, katabatic flows over ice, the interaction of chemistry and turbulence, atmospheric radiation, et cetera. Eventually he published over 50 articles in the international professional literature. A summary of the papers and books published since 1998 is given below.

After his graduation, Peter was employed by KNMI. In 1990 Peter went to the Institute for Marine and Atmospheric Research at the University of Utrecht (IMAU), where he recently was appointed to be a full professor and chair in Physics and Chemistry of the Atmosphere.

The past twelve years Peter gave a special meaning to education at IMAU, as he gave with much enthusiasm lectures and tuition to many MSc and PhD students. In fact, it was never necessary to make an appointment, as

Peter was always in for a good scientific discussion. Because people came along so regularly, his room sometimes resembled a 'cosy pub'. The focus point was mostly the writing board on the wall where quite often some layers of discussions were written in different colors one over the other. Often it was very lively with lots of laughing and shouting, but it was always productive.

After a visit to Peter, you would feel that you made some progression and that you were full of new ideas again. This applies both to students as well as colleagues. Often, Peter was not in his room, but was roaming around. Then he went to students in their offices, to inquire about the progression of their research. Peter took also interest in the personal lives of students and his colleagues. That meetings with Peter were very inspiring and were appreciated highly by the students is clearly visible from the many "thank-you's" in the MSc and PhD theses. Peter used the word "tickle" to make people work or think, and as such he was able to get the best of most of them.

Peter had a rather classical way of teaching courses, such as those in Boundary Layer Meteorology, Radiation Theory, and Dynamical Meteorology. Only a few transparencies were used, as Peter preferred to explain the theory on the blackboard. He also tried to provoke students somewhat in order to

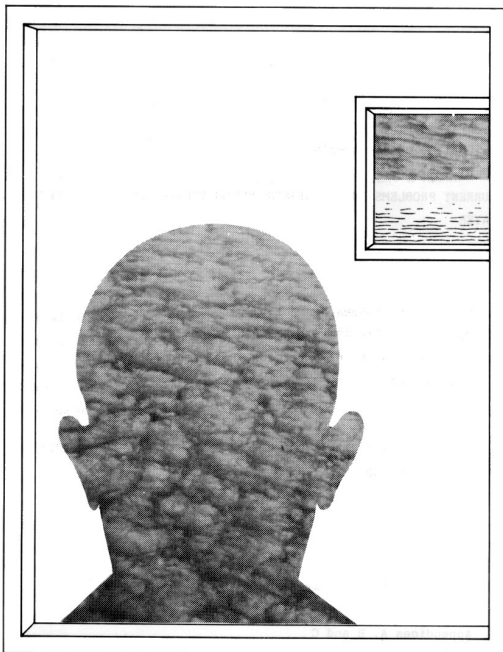


Illustration taken from Peter's PhD thesis

start a discussion. He was always somewhat disappointed if that did not work out.

In his lectures Peter gave little attention to weather prediction. Maybe this was a result of his own education in fluid dynamics and his preference for theory. In any case Peter thought the representation of the atmospheric boundary layer in the numerical models still too coarse, so that the weather predictions - in his opinion - were more engineering than physics. On the other hand Peter could look at a sounding of De Bilt with full enthusiasm, especially if stratocumulus or cumulus could be indicated. He gave special attention to the temperature and humidity jumps across the inversion that according to him were crucial for the eventual breaking-up of stratocumulus.

Peter always very much enjoyed the field experiments on the KNMI terrain close to the 200 meter tower in Cabauw. A great part of the year he had installed a few towers equipped with several standard meteorological instruments, radiometers and high-frequency instruments that measured the turbulent structure of the surface. Last year he took measurements with the IMAU tethered balloon at Cabauw as part of an international campaign. Every now and then Peter went to the village to get some provisions (like herring, sweets and beer) which he and his co-workers then would consume very informally sitting at a camping table outside.

Peter was remarkably energetic and efficient in his work. Mostly texts that students and colleagues gave to him to judge, were read and provided with remarks and useful tips the next day already. His efficiency was perhaps best seen by his emails. Often there was no beginning, the essence of the message was given point by point and sometimes he just sent a simple 'reply' with only a 'yes' or 'OK'. He considered correction of typing or spelling errors to be a waste of time. His room was very orderly too. That was most of all due to the fact that cleaning was to Peter synonym with filling the waste-paper-basket.

Due to all his activities Peter was very well known in the field of boundary layer meteorology and turbulence. He had also a very relaxed attitude regarding the passing on of his observations and models. During the last five years he was also leading an active group of researchers in working group 1 of the "GEWEX Cloud System Study (GCSS)".

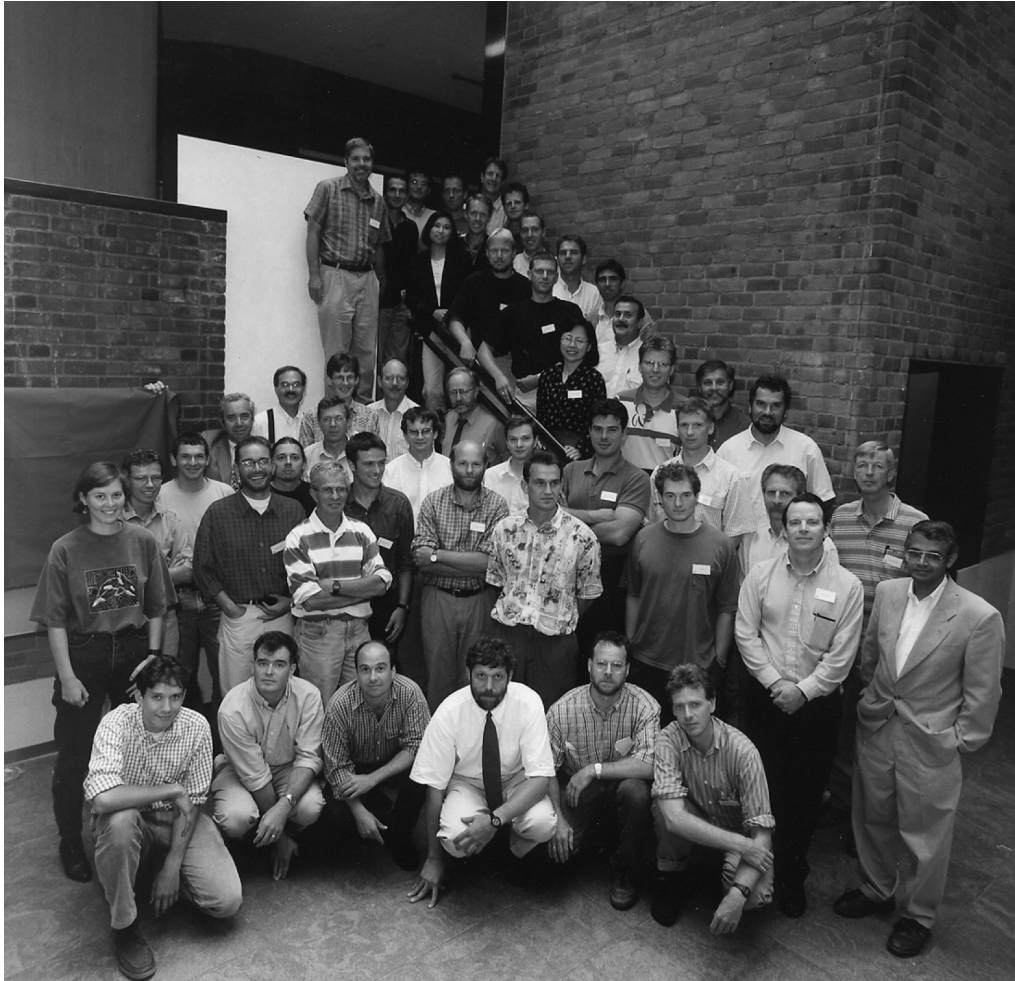


Photo of Peter and the participants of a workshop on 'Clear and Cloudy Boundary Layers' at the Academy of Arts and Sciences in Amsterdam, August 1997 (see Holtslag and Duynkerke, 1998 for details).

Despite Peter's very productive attribution to science, he had also much time for his wife Karin and their four children. He was regularly volunteering to teach computer lessons at the primary school of his children. He also regularly went home early to bring the children to gym, hockey or swimming lessons. At home he loved to carpenter, repair bikes and toys.

During the farewell ceremony on 25 January 2002, many colleagues were present, amongst them some colleagues that had come from abroad especially for this service. He will be greatly missed by friends and colleagues alike, and we share the deep loss felt by Karin and their children.

Acknowledgment

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