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10 tips for writing a truly terrible journal article

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About the speaker



About the speaker

Bert Blocken (*1974, Hasselt, Belgium)

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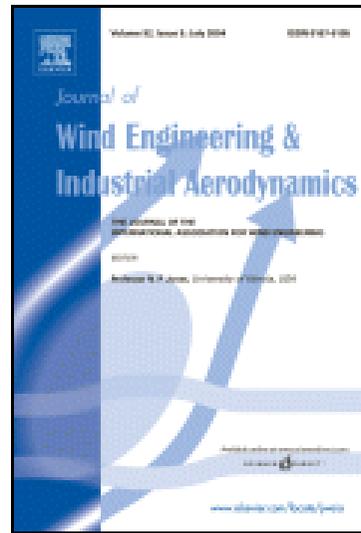
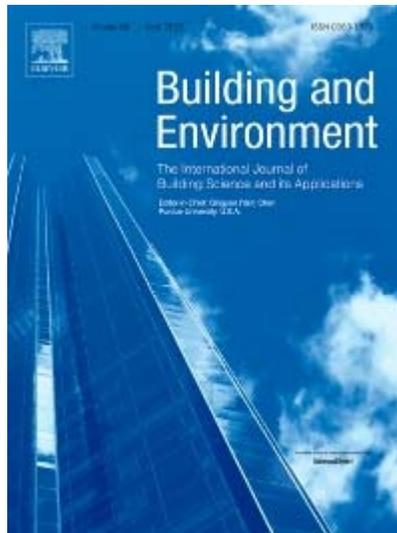
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Expertise: Urban Physics, Wind Engineering, Sports Aerodynamics

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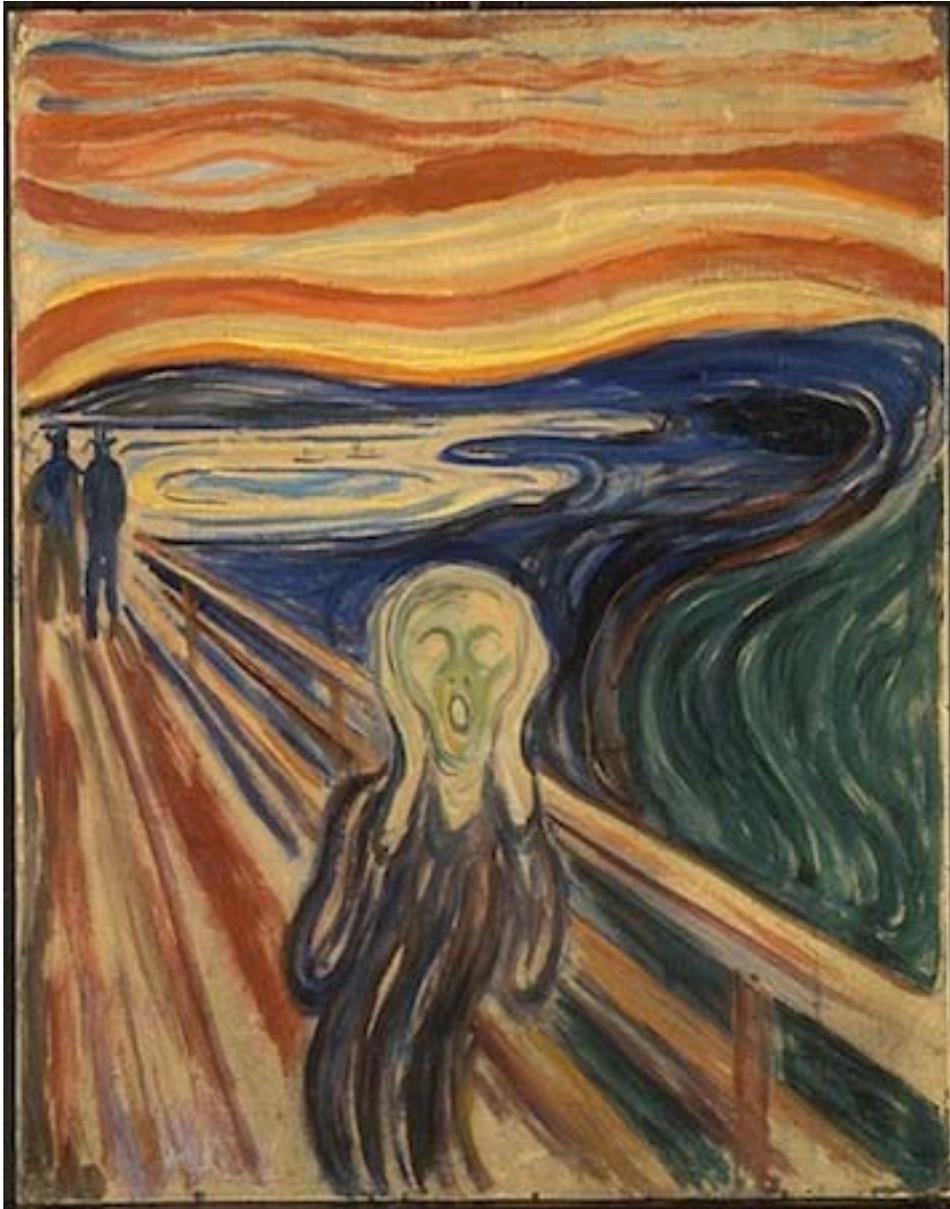
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The painting





The scream (Skrik)
Edvard Munch (1893)
(*Norwegian Expressionist Artist*)



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To publish or not to publish...



Why should you publish your results?

Reason 1:

“When you are long gone, your scientific legacy is, in large part, the literature you left behind and the impact it represents.”

(Bourne 2005)

Reason 2:

“The object of research is to extend human knowledge beyond what is already known.”

(National Academies Press, “On being a scientist”, 1995)

Why should you publish your results?

Reason 3:

“A paper is an organized description of hypotheses, data and conclusions, intended to instruct the reader. If your research does not generate papers, it might just as well not have been done.”
(Whitesides 2004)

“If it wasn’t published, it wasn’t done.”
(Miller 1993)

“If it is good and useful, why keep it a secret?”

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Reason 5:

Supporting your department, university, institute (international rankings)

Reason 6:

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Why should you publish your results?

Other reasons (*Modified from Wellington 2003*):

- Joining the research community
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- Financial reward
- Challenging a previously published or commonly adopted viewpoint
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Research misconduct means **Fabrication, Falsification, or Plagiarism (FFP)** in proposing, performing, or reviewing research, or in reporting research results.

1. **Fabrication**: making up data or results and recording or reporting them.
2. **Falsification**: manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.
3. **Plagiarism**: the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

Note: Not honest error or differences of opinion.

What is scientific misconduct?

Other items of scientific/publishing misconduct:

1. Duplicate publication/submission
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3. Adding people that did contribute significantly not to the author list
4. Incorrect or missing acknowledgment of (re)sources
5. Etc.



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10 tips for writing a truly terrible journal article



Motivation

1. Experiences as research supervisor, reviewer and editor. Frequency of occurrence and obstinacy of some errors.
2. Efficiency. **Time is a very precious resource.** Reducing waste of time for supervisors, reviewers and editors.

→ *highlighting 10 things you should certainly NOT do.*

Disclaimers

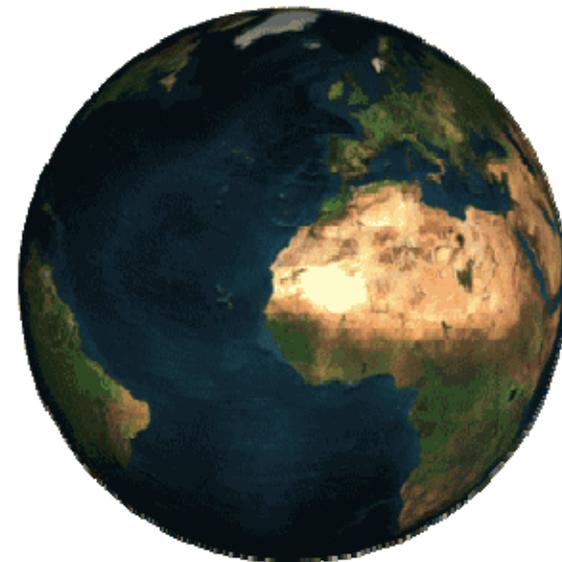
1. Intended for **early-career researchers** (ECRs). Others will probably know the information in this webinar very well.
2. **Not complete**: evidently, as there are only 10. 10 others are given at the end of this webinar. But still these 20 will not be complete.
3. Tips are based on my experiences in the **exact sciences/ engineering fields**, but some of them may well hold true, whatever your discipline.

You only get once chance to make a first impression

A truly terrible article will reflect negatively on yourself and your co-authors.

Scenario 1: rejected by editors and reviewers.

Scenario 2: published, digitally archived, visible for whole world for as long as electronic records will exist.



10 tips

1. Refuse to read the previous literature published in your field
2. Take the lazy route and plagiarize
3. Omit key article components
4. Disrespect previous publications
5. Overestimate your contribution
6. Excel in ambiguity and inconsistency
7. Apply incorrect referencing of statements
8. Prefer subjective over objective statements
9. Give little care to grammar, spelling, figures and tables
10. Ignore editor and reviewer comments

TIP 1: Refuse to read the previous literature published in your field

- Any worthy research activity should be based on **thorough literature study**.
- Your publication should **add knowledge** to the field. This also holds for review papers!
- Repetition of earlier work is a **waste of time and resources**.
- Some might argue that it is impossible to **read everything** that has been published.
 - Not if you narrow it down to your specific field of study
 - Not if you discriminate based on reading titles and abstracts only



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Aerodynamic benefit for a cyclist by a following motorcycle

Bert Blocken^{a,b,*}, Yasin Toparlar^a, Thomas Andrianne^c^a Department of the Built Environment, Eindhoven University of Technology, P.O. Box 513, 5600 Eindhoven, The Netherlands^b Department of Civil Engineering, KU Leuven, Kasteelpark Arenberg 40 – Bus 2447, 3001 Leuven, Belgium^c Department of Aerospace and Mechanical Engineering, University of Liège, Allée de la Découverte, 9 Quartier Polytech 1, B52/3, B-4000 Liège, Belgium

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ABSTRACT

In recent years, many accidents have occurred between cyclists and in-race motorcycles, even yielding fatal injuries. The accidents and the potential aerodynamics issues have impelled the present authors to perform dedicated wind-tunnel measurements and Computational Fluid Dynamics (CFD) simulations to assess cyclist drag reduction when followed by one, two or three motorcycles. The 3D steady-state Reynolds-Averaged Navier–Stokes simulations with the standard $k-\epsilon$ model are validated by the wind-tunnel tests. The cyclist drag reduction goes up to 8.7% for a single trailing motorcycle and to 13.9% for three trailing motorcycles at a distance of 0.25 m behind the cyclist. This distance is not uncommon in elite races, as evidenced by the many recent accidents. The effect by a single following motorcycle at realistic short distances $d=0.25$ m (8.7%), $d=0.5$ m (6.4%) and $d=1$ m (3.8%) is larger than that by a following car at realistic short distance $d=5$ m (1.4%). Therefore it could be argued that in-race motorcycles are not only more dangerous but also aerodynamically more influential. This study reinforces the necessity for the International Cycling Union to change the rules concerning in-race motorcycles, not only to avoid accidents but also to avoid unwanted aerodynamic benefits.

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Particle levels at different microenvironments at an academic institute in India and regional dose deposition in lungs of students
BY ANUBHA GOEL

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Manuscript Draft

Manuscript Number:

Title: Particle levels at different microenvironments at an academic institute in India and regional dose deposition in lungs of students

Article Type: Original Research Paper

Keywords: Particles, Fine, Coarse, Multiple-Path Particle Dosimetry, Deposition fraction, Microenvironments

Corresponding Author:

Corresponding Author's Institution:

First Author:

Order of Authors

Abstract: This study examines regional deposition of particulate matter in the respiratory tract for students exposed to ambient levels in different microenvironments frequented over a day during winter period (January 2016) at an academic institute, IIT Kanpur, India. Particle size distributions (0.25-10 µm) were measured by Optical Particle Counter in hostel room, dining room, classroom, play court, canteen etc. within IIT Kanpur premises. Fine (PM1) mass concentration exceeded coarse (PM10-1)

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1 Introduction

2 Particulate matter is a complex mixture of significantly small particles and liquid droplets suspended

3 in the atmosphere originating from various sources (such as traffic, industry, energy production or

4 domestic combustion). Consequently, its composition and size are broadly variable in space and time.

5 Urban population is daily exposed to air particulate pollution from different sources in the ambient

6 environment and different microenvironments (home, workplace, schools, etc). In fact, the exposure to

7 airborne particles depends on the lifestyle of every individual and the unlike microenvironments

8 frequented (Buonanno et al., 2011). Epidemiological and toxicological studies have shown

9 associations between particles and adverse health effects (Dominici et al., 2006; Pope and Dockery,

10 2006; Schikowski et al., 2007). It has been estimated that particulate matter alone is responsible for

11 around 2.1 million of premature deaths per year globally (Kelly and Fussell, 2012; Kim et al., 2015).

12 Airborne particle size is relevant to health considerations as aerodynamic diameters decide where

13 each particle is probable to deposit in the human respiratory tract (Raabe et al., 1986).

14

15

16

17

18 The mechanisms of toxic effects linked to airborne particles are still poorly understood but several

19 leading hypotheses focus on the size distribution of airborne particles and their chemical composition.

20 Inhalation of submicron particles (PM₁ < 1 μm) can constitute an excess health risk compared to coarse

21 particles (PM_{2.5} > 2.5 μm) of similar chemical composition (Kreyling et al., 2006). Health effects are

22 largely linked with the higher concentration of insoluble particles deposited in human respiratory

23 tract, their very small size and large total surface area (Carvalho et al., 2011). Significance of the

24 possible lung overburden by accumulation of submicron particles in the human body is indecisive.

25 More knowledge on human exposure, deposition, clearance and toxicity hazard of the deposited

26 particles is needed.

27

28

29

30

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- There can be (very) **stringent repercussions** by actions incited by the plagiarized authors, journal editor and publishers.
- Example: actions taken by Elsevier as a result of plagiarism of one of my articles.
- **Plagiarism is a crime!**

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Based on literature review of more than 350 articles and books

Application of computational fluid dynamics in building performance simulation for the outdoor environment: an overview

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^b*Department of Building, Civil and Environmental Engineering, Concordia University, 1455 de Maisonneuve Blvd. West, Montreal, Quebec, H3G 1M8, Canada;* ^c*Swiss Federal Institute of Technology, ETHZ, Zürich, Switzerland, and Laboratory for Building Science and Technologies, Empa, Swiss Federal Laboratories for Materials Testing and Research, Überlandstrasse 129, CH-8600 Dübendorf, Switzerland*

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This article provides an overview of the application of computational fluid dynamics (CFD) in building performance simulation for the outdoor environment, focused on four topics: (1) pedestrian wind environment around buildings, (2) wind-driven rain on building facades, (3) convective heat transfer coefficients at exterior building surfaces and (4) air pollutant dispersion around buildings. For each topic, its background, the need for CFD, an overview of some past CFD studies, a discussion about accuracy and some perspectives for practical application are provided. This article indicates that for all four topics, CFD offers considerable advantages compared with wind tunnel modelling or (semi-)empirical formulae because it can provide detailed whole-flow field data under fully controlled conditions and without similarity constraints. The main limitations are the deficiencies of steady Reynolds-averaged Navier–Stokes modelling, the increased complexity and computational expense of large eddy simulation and the requirement of systematic and time-consuming CFD solution verification and validation studies.

Keywords: computational fluid dynamics; wind comfort; wind-driven rain; surface transfer coefficients; air pollution; review

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present situation in which CFD can technically be applied for case studies involving complex geometries and flow fields (Figure 1).

However, while the use of CFD in engineering practice is becoming quite well established for indoor environment applications, this is considerably less pronounced for outdoor environment applications. In complex case studies, wind environmental problems such as pedestrian wind nuisance and air pollutant dispersion are still typically investigated in atmospheric boundary layer wind tunnels (Stathopoulos 2002), while WDR exposure and convective heat transfer coefficients (CHTCs) at exterior building surfaces are generally estimated from simplified empirical or semi-empirical formulae (Blocken and Carmeliet 2004a, 2010, Palyvos 2008, Defraeye *et al.* 2010). An important disadvantage of wind tunnel measurements however is that usually only point measurements are obtained. Techniques such as particle image velocimetry (PIV) and laser-induced fluorescence (LIF) in principle allow planar or even full 3D data to be obtained, but the cost is considerably higher and application for complicated geometries can be hampered by laser-light shielding by the obstructions constituting the urban model. Another disadvantage is the required adherence to similarity criteria in reduced-scale testing. This can be a problem for, e.g., multi-phase flow problems and buoyant flows. Examples are WDR and pollutant dispersion studies. Empirical and semi-empirical formulae generally only provide a first, crude indication of the relevant parameters, often in averaged form (e.g. surface-averaged) or at a few discrete positions. Examples are the semi-empirical formulae for WDR intensities (Lacy 1965, Sanders 1996, Straube and Burnett 2000, Blocken and Carmeliet 2004a, 2010, ISO

2009) and the (semi-)empirical expressions for CHTCs (e.g. Sharples 1984, Loveday and Taki 1996, Liu and Harris 2007, Palyvos 2008). In addition, a recent study comparing validated CFD simulations with the two most commonly used semi-empirical WDR models identified some important physical deficiencies in these models (Blocken *et al.* 2010). Also, a sensitivity study demonstrated the very large impact of changes in heat transfer coefficients and the related mass transfer coefficients on the drying behaviour of ceramic bricks in facades (Janssen *et al.* 2007a). The information provided by empirical and semi-empirical formulae is often also too simplified compared with the well-established building performance simulation tools in which this information is used, such as BE-HAM transfer tools and BES software.

Numerical modelling with CFD can be a powerful alternative because it can avoid some of these limitations. It can provide detailed information on the relevant flow variables in the whole calculation domain ('whole-flow field data'), under well-controlled conditions and without similarity constraints. However, the accuracy of CFD is an important matter of concern. Care is required in the geometrical implementation of the model, in grid generation and in selecting proper solution strategies and parameters. The latter include choices between steady Reynolds-averaged Navier–Stokes (RANS), unsteady RANS (URANS), large eddy simulation (LES) or hybrid URANS/LES, between different turbulence models or subgrid-scale turbulence models, discretization schemes, etc. In addition, numerical and physical modelling errors need to be assessed by solution verification and validation studies.

This article provides an overview of the application of CFD in building performance simulation for

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buildings. Wise (1970) reports about shops that are left untenanted because of the windy environment, which discouraged shoppers. Lawson and Penwarden (1975) report the death of two old women due to an unfortunate fall caused by high wind speed at the base of a tall building. Today, many urban authorities only grant a building permit for a new high-rise building after a wind comfort study has indicated that the negative consequences for the pedestrian wind environment remain limited. Note that a wind comfort study is generally performed by a combination of three types of information/data: (1) statistical meteorological information; (2) aerodynamic information and (3) a comfort criterion. CFD or wind tunnel data can be used to provide part of the aerodynamic information.

4.2. CFD versus wind tunnel measurements

Wind comfort studies require knowledge of at least the mean wind velocity vector field at pedestrian height ($z = 1.75$ or 2 m). This information can be obtained by wind tunnel modelling or by CFD. Wind tunnel tests are generally point measurements with laser Doppler anemometry (LDA) or hot wire anemometry (HWA). In the past, also area techniques such as sand erosion (Beranek and van Koten 1979, Beranek 1982, 1984, Livesey *et al.* 1990, Richards *et al.* 2002) and infrared thermography (Yamada *et al.* 1996, Sasaki *et al.* 1997, Wu and Stathopoulos 1997) have been used. They are however considered less suitable to obtain accurate quantitative information. Instead, they can be used as part of a two-step approach: first, an area technique is used to qualitatively indicate the most important problem locations, followed by accurate point measurements at these most important locations (Blocken and Carmeliet 2004b).

One of the main advantages of CFD in pedestrian-level wind comfort studies is avoiding this time-consuming two-step approach by providing whole-flow field data. Despite its deficiencies, steady RANS modelling with the $k-\epsilon$ model or with other turbulence

2008a), Blocken and Carmeliet (2008), Tominaga *et al.* (2008a) and Mochida and Lun (2008). Apart from these fundamental studies, also several CFD studies of pedestrian wind conditions in complex urban environments have been performed (Murakami 1990a, Gardilhe *et al.* 1993, Takakura *et al.* 1993, Baskaran and Kashef 1996, Stathopoulos and Baskaran 1996, He and Song 1999, Ferreira *et al.* 2002, Hirsch *et al.* 2002, Miles and Westbury 2002, Richards *et al.*, 2002, Westbury *et al.* 2002, Blocken *et al.* 2004, Yoshie *et al.* 2007, Blocken and Carmeliet 2008, Blocken and Persoon 2009). Some of the computational grids and some typical presentations of results of these studies are shown in Figure 3. Almost all these studies were conducted with the steady RANS approach and a version of the $k-\epsilon$ model. An exception is the study by He and Song (1999) who used LES.

4.3. Accuracy of CFD

Attempts to provide general statements about the accuracy of steady RANS CFD for pedestrian-level wind environment studies can easily be compromised by the presence of a combination of numerical errors (such as discretization errors and iterative convergence errors) and physical modelling errors (by using steady RANS, a turbulence model, simplified boundary conditions, etc.). Statements on the accuracy of steady RANS with a certain turbulence model should therefore be based on CFD studies that have undergone solution verification, i.e. it should be proven that numerical errors are limited, so clear conclusions about the physical modelling errors can be made. Several studies have adopted this approach in their validation of CFD with wind tunnel measurements and on-site measurements. A general observation from these studies is that the prediction accuracy is a pronounced function of the location in the flow pattern, and therefore of the wind direction. While several validation studies have been performed for multi-building configurations, at least two of those have provided

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guidelines for CFD WDR simulation (Choi 1994a,b, Blocken and Carmeliet 2002, 2004b, 2006, Brüggen *et al.* 2009). It should be noted that the guidelines mentioned in Section 3 also apply for CFD WDR studies, as accurate calculation of the wind-flow pattern is the first step for successful WDR simulations. There are two main reasons for the current limited practical use of CFD for WDR studies: (1) the very time-consuming character of Lagrangian particle tracking of raindrops, in which the entire building facade needs to be covered by a large number of raindrops. Lagrangian particle tracking implies solving the equation of motion of individual raindrops within the wind-flow field. Note that this wind-flow field is generally obtained with an Eulerian approach, i.e. not focusing on individual particles but on fixed positions in space. Lagrangian tracking needs to be performed for a large number of combinations of reference wind speed, wind direction and raindrop diameter; (2) the fact that steady RANS generally does not allow accurate modelling of turbulence fields around buildings, and therefore also not of turbulent dispersion of raindrops, which is important for calculating WDR intensities at the lower part of high-rise building facades. Accurate turbulent dispersion modelling would require transient simulations with LES or hybrid URANS/LES, which would require even more intensive Lagrangian particle tracking efforts. To alleviate these problems, it might be necessary to abandon the traditional 'Eulerian-Lagrangian' framework in CFD WDR simulations, and to resort to 'Eulerian-Eulerian' modelling instead, in which not only the wind-flow pattern but also the WDR intensities are computed with an Eulerian approach. It implies that the rain phase, like the air phase, is treated as a continuum.

practice in BE-HAM tools (e.g. Künzel 1994, Hens 1996, Janssen *et al.* 2007b, Blocken *et al.* 2007b, Scheffler 2008, Steeman *et al.* 2009a,c). Determining the values of exterior CHTC across building facades is a difficult task, because they are a complex function of a wide range of parameters including building geometry, environment topography, wind speed, wind direction, turbulence intensity, surface roughness, texture and geometry, and moisture content.

6.2. CFD versus measurements and (semi-)empirical correlations

In the past, CHTCs for exterior building surfaces have been determined using wind tunnel measurements (e.g. Kelnhofer and Thomas 1976) and full-scale measurements (e.g. Ito *et al.* 1972, Sharples 1984, Loveday and Taki 1996, Liu and Harris 2007), and many (semi-)empirical CHTC correlations have been provided (for a review, see Palyvos 2008). The main disadvantages of these assessment methods have been mentioned in the introduction. CFD could be a valuable alternative to avoid time-consuming and expensive experiments, and to provide more detailed and accurate information than (semi-)empirical formulae.

6.3. Accuracy of CFD

However, while a large number of valuable experimental investigations have been conducted, the number of CFD analyses for exterior CHTC for buildings is very small (Emmel *et al.* 2007, Blocken *et al.* 2009, Defraeye *et al.* 2010). This might seem strange given the very large number of such CFD studies that have been conducted in other disciplines, such as mechanical and electronic engineering. The

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This article has been retracted at the request of the Editor-in-Chief.

The authors have plagiarized part of a paper that had already appeared in Journal of Building Performance Simulation, 4 (2011), 157–184, <http://dx.doi.org.dianus.libr.tue.nl/10.1080/19401493.2010.513740>. One of the conditions of submission of a paper for

publication is that authors declare explicitly that their work is original and has not appeared in a publication elsewhere. As such this article represents a severe abuse of the scientific publishing system. The scientific community takes a very strong view on this matter and apologies are offered to readers of the journal that this was not detected during the submission process.

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Computational fluid dynamics, a building simulation tool for achieving sustainable buildings



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ABSTRACT

Buildings use about 40% of the global energy, thus making them the prime consumers and therefore the center of attention. The analysis of most of the building related problems such as the thermal analysis, effects of wind loading, ventilation analysis and the environmental effects etc. were conducted by the wind tunnel tests, earlier. However, nowadays, these tests can be done effectively with the aid of a mathematical technique called computational fluid dynamics (CFD). This paper is a brief, non-exhaustive overview of the status of application of CFD in building performance simulation for the indoor and outdoor environment. The discussion is focused on the management of the thermal comfort based on the ventilation loss, thermal loss and some other topics like the effect of fire inside the building and the hospital environment along with the discussions on the movement of the pedestrians, effect of rain and wind or wind driven rain (WDR) and pollutants etc. on the buildings especially artifacts. It is seen that CFD technique offers many advantages over the wind tunnel testing and simplified empirical or semi-empirical equations. Deficiencies of steady RANS and LES modeling, the need for high-resolution grids and lastly, the requirement of a valid CFD model and its verification poses some limitations. Still efforts are being done and will continue to focus on alleviating these limitations, but at least equally important is avoiding user errors.

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1. Introduction

As stated by the United Nations Environment Programme the buildings use about 40% of the global energy and emit approximately 1/3 of green house gas (GHG) emissions. However, the energy

consumption in buildings can be reduced by 30–80% using proven technologies [1]. The impact of these technologies on improving building efficiencies can be further enhanced by use of mathematical techniques such as, Computational fluid dynamics (CFD).

In the past era of construction, the analysis of most build-

TIP 2: Take the lazy route and plagiarize

- **Plagiarism is a crime!**
- Plagiarism, no matter how small, and no matter how old the documents being plagiarized, is a very effective route to **academic self-destruction**.

TIP 3: Omit key article components

- **Essential components** that should appear in the correct order:
 - Summary of the state of the art
 - Identification of knowledge gap
 - Specification of novelty/objectives/scope
 - Applied research methodology
 - Obtained results
 - Conclusions
- Guideline: methodology should be reported in such a way that readers have **enough information** to repeat the work you did and can obtain **exactly the same results** as you did.

TIP 4: Disrespect previous publications

- **Disrespecting** previous publications can be done in many ways:
 - Plagiarism
 - Repeating earlier work without adding substantial novelty
 - Claiming research findings by others (either directly or without adding the proper references)
 - Not citing previous publications similar to or essential to your study
 - Providing dismissive statements on others' publications

“The work by A and B (2016) was executed in a very poor way therefore we did it again”.

Some authors think that citing the work of others detracts from the novelty of their own contribution. **The opposite is true.** Correct referencing is **proof** that the author is aware of relevant previous work and is actually capable of defining a truly novel contribution.

TIP 5: Overestimate your contribution

- Incorrect or unjustified self-congratulations
- Lack of critical self-reflection
- Lack of modesty

“This paper demonstrates for the first time that...”

“This paper provides the first evidence that...”

“To the best of our knowledge, this paper is the first attempt to...”

- It is much easier to identify deficiencies in others' work than in your own.
- Welcome comments by co-authors, reviewers, editors. Use them to improve your contribution/paper.

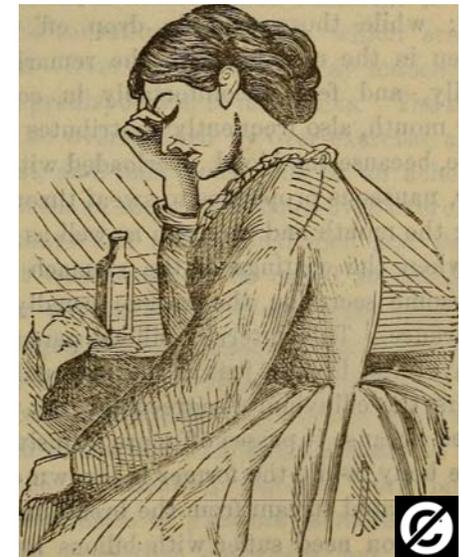
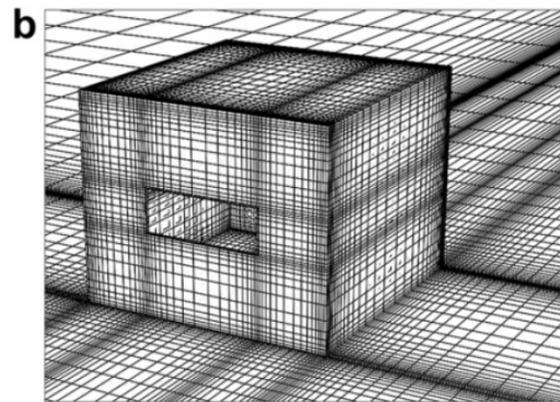
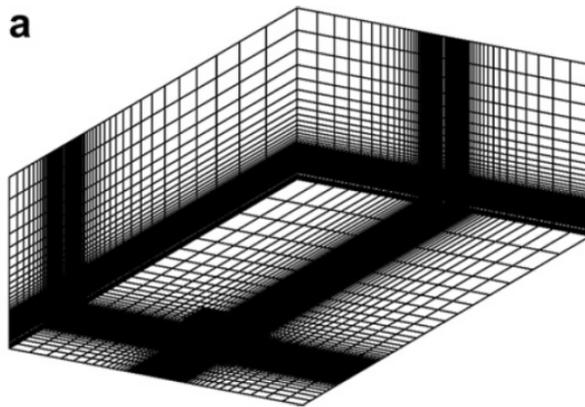
TIP 6: Excel in ambiguity and inconsistency

- Readers cannot read your mind; they can only read your article.



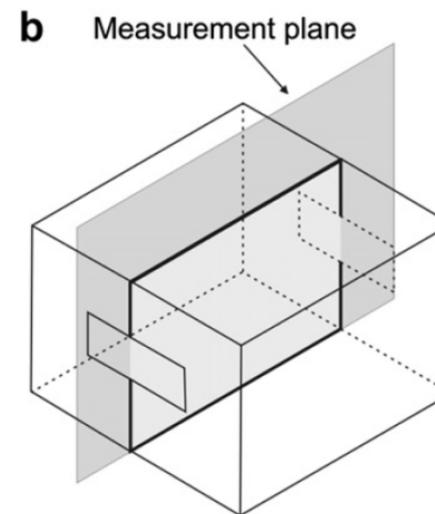
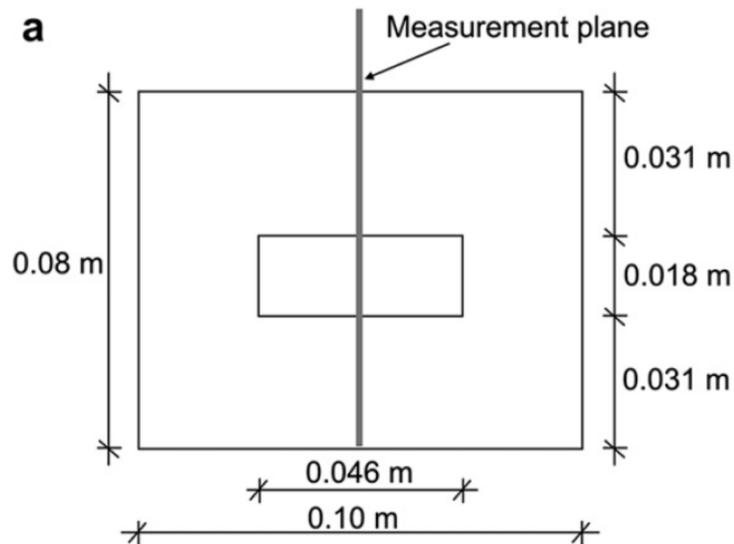
TIP 6: Excel in ambiguity and inconsistency

- “The *model* has dimensions $L \times W \times H = 0.2 \times 0.1 \times 0.15 \text{ m}^3$... The *model* is shown in the Figure below... We use the standard *k-epsilon model* for closure... Near-wall physics is taken into account by a wall function *model*.”
 - Model = geometry
 - Model = computational grid
 - Model = turbulence model
 - Model = near-wall treatment



TIP 6: Excel in ambiguity and inconsistency

- “The **geometry** is shown in the Figure below... The **building** is oriented south-west... The surface roughness of the **obstacle** is 0.01 m.”
 - Geometry = the building
 - Building = the building
 - Obstacle = the building



CC BY-SA 3.0 – Tim Bartel

TIP 6: Excel in ambiguity and inconsistency

- In high school you were probably taught to avoid repeating the same words, and to use comparisons and metaphors, etc.
- Do not do this in scientific articles! **A scientific article is not a novel.**
- Reader interpretation is not welcomed and means the writer has failed.

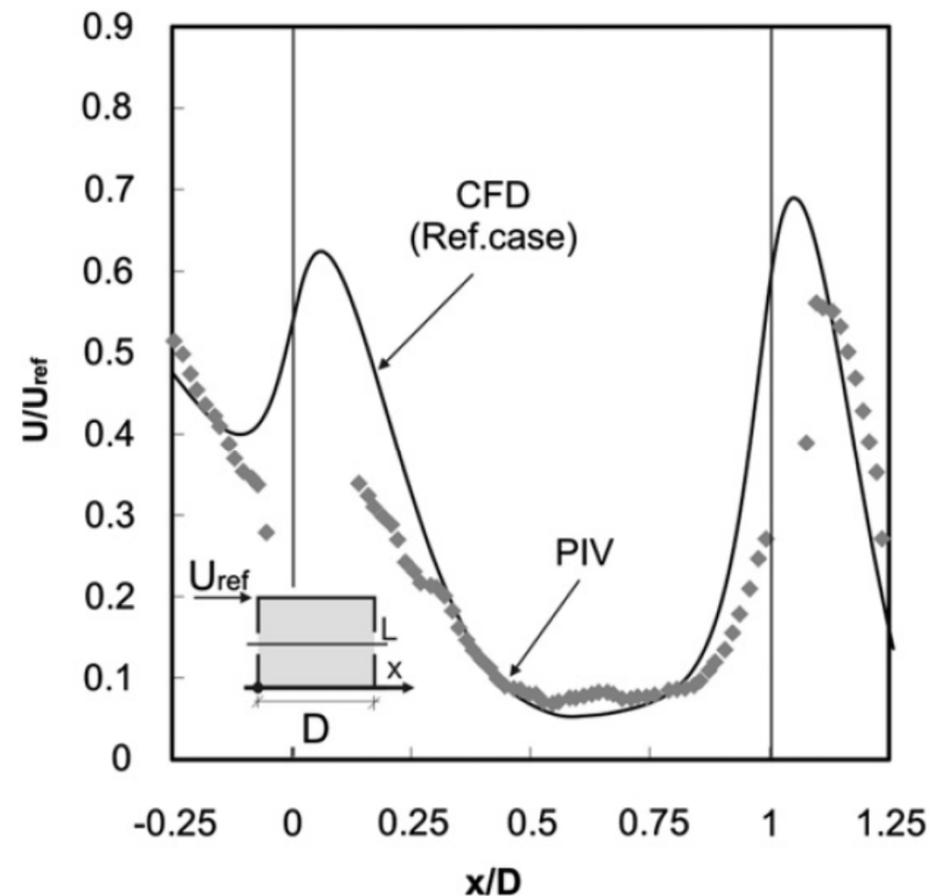
TIP 7: Apply incorrect referencing of statements

- Every statement in a scientific article should be **immediately backed up by a suitable reference** (to previous work by others or yourself) or by evidence reported in your article.

Example: *“It was shown that the deviation between this type of numerical simulation and corresponding measurements was consistently below 10% (Authors 2016)”*.

TIP 8: Prefer subjective over objective statements

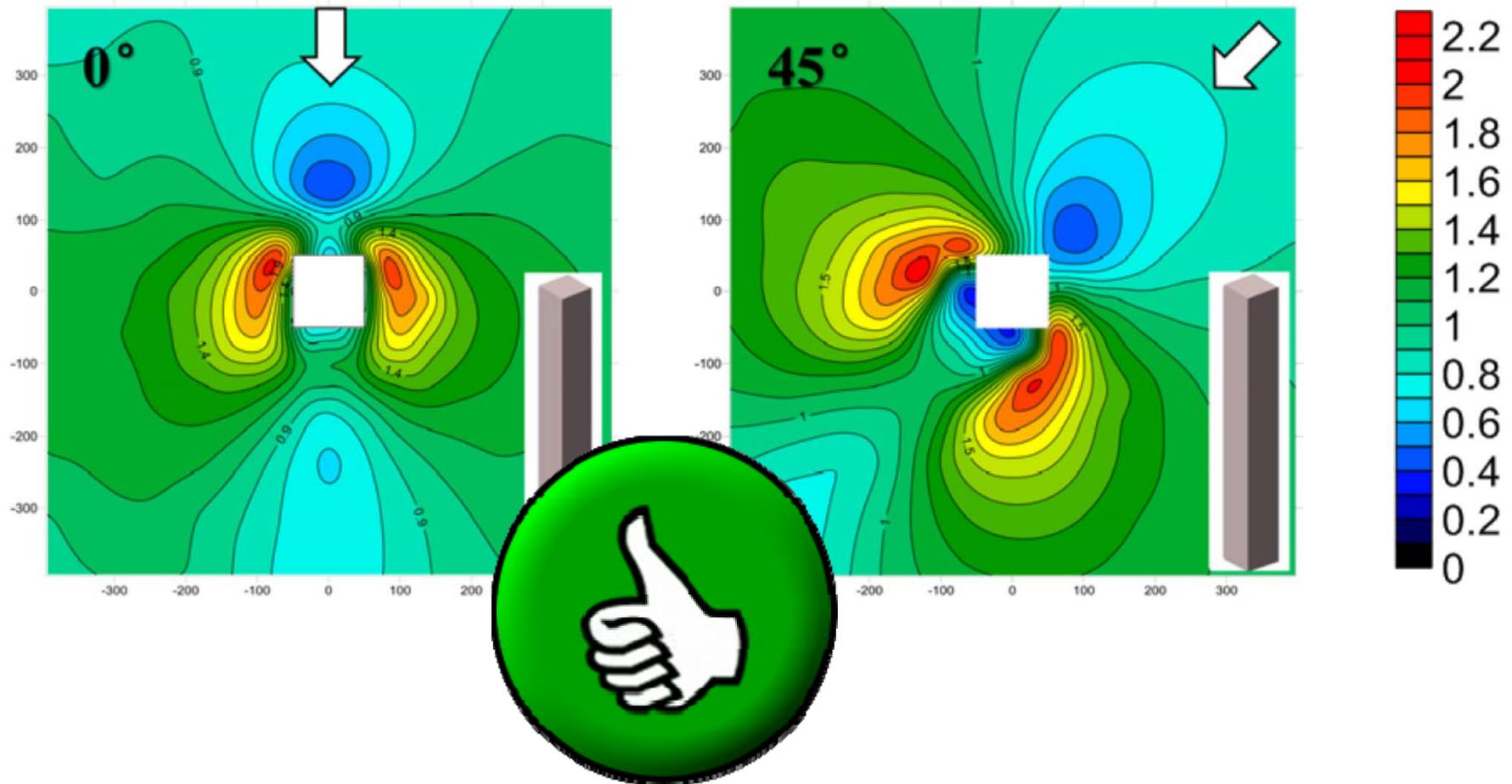
- “*The figure should that our numerical simulations are in **excellent agreement** with the experiments*”.
- Remove personal bias, emotional expression, etc.



TIP 9: Give little care to grammar, spelling, figures and tables

- Care for grammar, spelling, figures and tables is a **matter of respect** for your supervisors, reviewers and editors.
- Proverb: “*A picture is worth a thousand words*”. Only if the picture can actually be read.

TIP 9: Give little care to grammar, spelling, figures and tables



TIP 10: Ignore editor and reviewer comments

- You do not need to agree with all comments, but:
 - Always remain polite and respectful
 - Provide an answer to every comment raised by the reviewers and/or editor
 - Remember that the reviewers and editor represent your audience: integrate your arguments in the document “response to reviewers” also in your article.
- *“Thank you for your comment. However, we do not fully agree that ... because ...”.*
- *“Thank you for your comment. This is a very valuable comment.”*



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10 additional tips



10 additional tips: what you **should** do:

1. Carefully select the **most appropriate journal**. Read and adhere to journal scope. If in doubt, ask the editor by email.
2. First decide **where** you want to publish, and write your paper based on **journal guidelines**. See guide for authors and previous publications in the journal.
3. Follow the rule: “***one paper, one message***”.
4. Select an **attractive and descriptive title**. Most scientists will only read your title. This is your most important chance to convince them to read further (abstract, etc).
5. Figures are seductive items. Should be **as attractive and clear as possible** – many “readers” will browse the paper and the figures should convince them to read (and later cite) the paper.

10 additional tips: what you **should** do:

6. Be **honest and modest**: papers focusing on research difficulties often get much more citations than papers focusing only on successes.



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CFD simulation of the atmospheric boundary layer: wall function problems

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10 additional tips: what you **should** do:

7. Do not start writing sentence by sentence. **Start with structure with items/bullets:** title, state of the art, knowledge gap, objective, methodology, results, conclusions. One sentence per item.

Title:

Abstract:

- State of the art:
- Knowledge gap:
- Objective:
- Methodology:
- Results:
- Conclusion:

10 additional tips: what you **should** do:

7. Do not start writing sentence by sentence. **Start with structure with items/bullets:** title, state of the art, knowledge gap, objective, methodology, results, conclusions. One sentence per item.

Introduction:

- State of the art (literature review)
- Knowledge gap
- Objective

...

...

10 additional tips: what you **should** do:

8. **Become a reviewer** as early in your career as possible. Learn from good and poor papers.
9. Always be **polite and respectful** to reviewers and editors.
10. **Also cite your own work, when relevant**, in your future publications. If you yourself do not respect your own work, you cannot expect others to respect it.



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Conclusion



The higher purpose

“It's not the honors and the prizes and the fancy outsides of life which ultimately nourish our souls. It's the knowing that we can be trusted, that we never have to fear the truth, that the bedrock of our very being is good stuff.”

(Rogers 2001)

Probably the single most important thing...

Quality is everything. A great paper does not happen by accident.



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Thank you

