

Data archivering

Papieren *Tijger* Netwerk

TU Delft Library, 7 juni 2011



Waarom onderzoeksdata?

Risico's huidig onderzoeksdata 'beheer'

- Fysiek verval opslag media;
- Verlies van de beschrijvende (meta) data;
- Niet meer kunnen 'draaien' van software om datasets te kunnen visualiseren/bewerken.

Belangen voor lange termijn toegankelijkheid

- Waarde van data (kostenintensief, valorisatie, longitudinaal);
- Kwaliteit van onderzoek (verificatie, overdracht, kennisdelen).

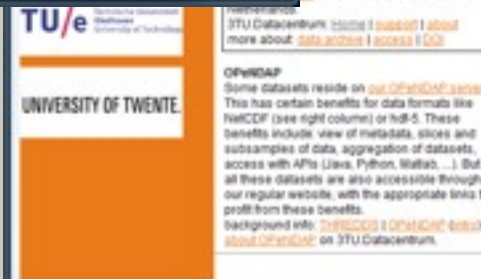
3TU.DC Website & Data browser



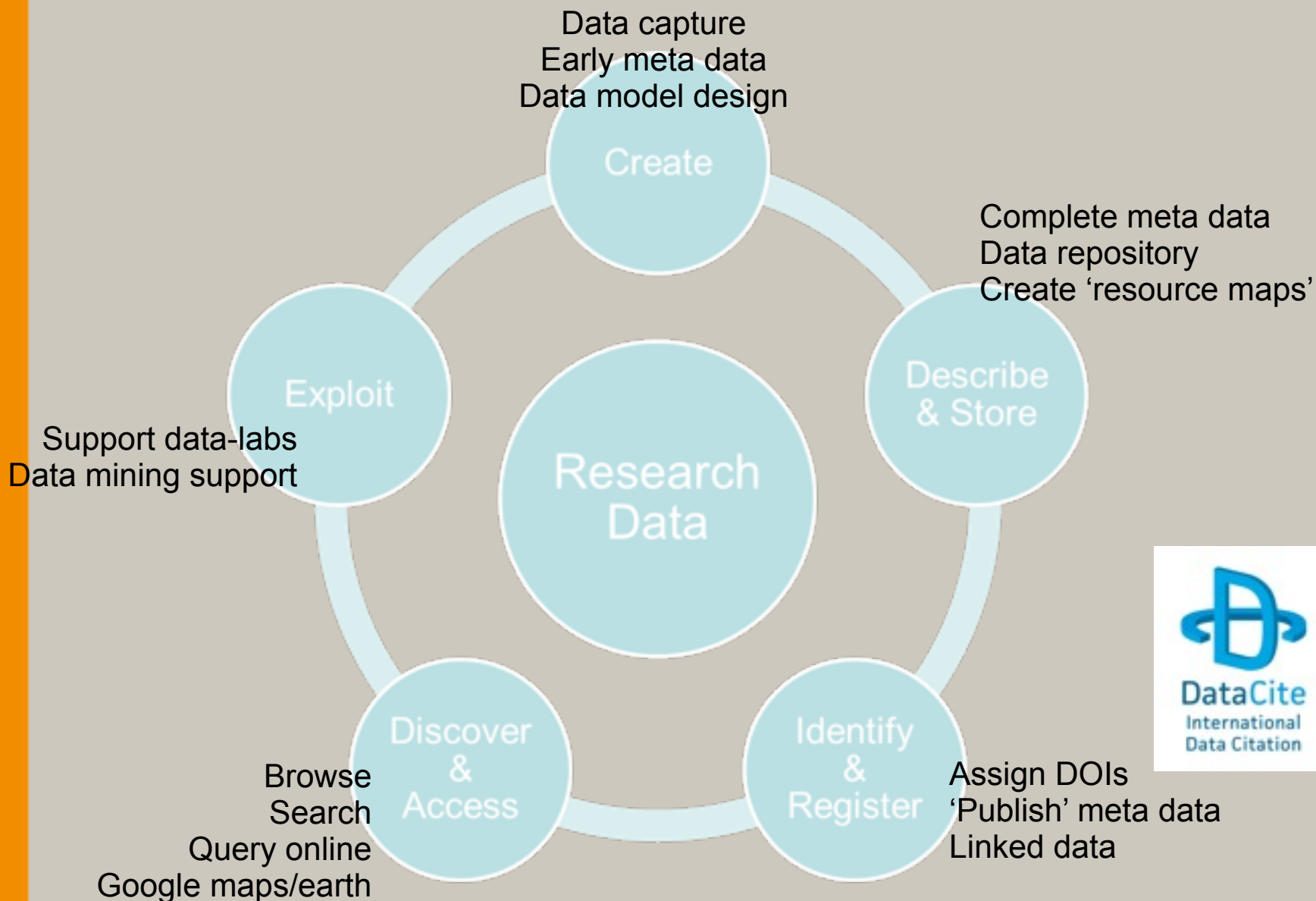
- Informatie
- Nieuwsberichten
- aankondigingen,
- publicaties,
- links and tutorials



- Data sets uploaden, zoeken & downloaden, en 'management'
- Extra functionaliteiten: 'Link' data met Google Maps/Earth, OPeNDAP, ...



Service overview



Enhanced publication

Chemical Engineering Science

11 (2016) 101–110

Evaluation of experimental techniques to validate numerical computations of the hydraulics inside a UV bench-scale reactor

Wols, B.A., Robert, J.A.R., Bekkers, R.F.J.

1419-4398-ba13-c757555

Drinking water treatment

University of Technology

Water Supply Company

Watercycle Research Institute

Wols, B.A.

2010-06-20

2010-04-01

Datasets used in the PhD theses on UV systems and UV systems

netCDF

doi:10.4121/uuid:c1ac7344-1419-4398-ba13-c757555

uuid:c1ac7344-1419-4398-ba13-c757555

TU Delft Institutional Repository

CFD in drinking water treatment

Attachments

Wols_BA_UW.pdf (23.2 MB)

Cite or link the publication

Author: Wols, B.A.

Promotor: Van Dijk, J.C. - UUT/Research

Faculty: Civil Engineering and Geotechnical Engineering

Department: Sanitary Engineering

Type: Dissertation

Date: 2010-06-21

Publisher: Delft University of Technology

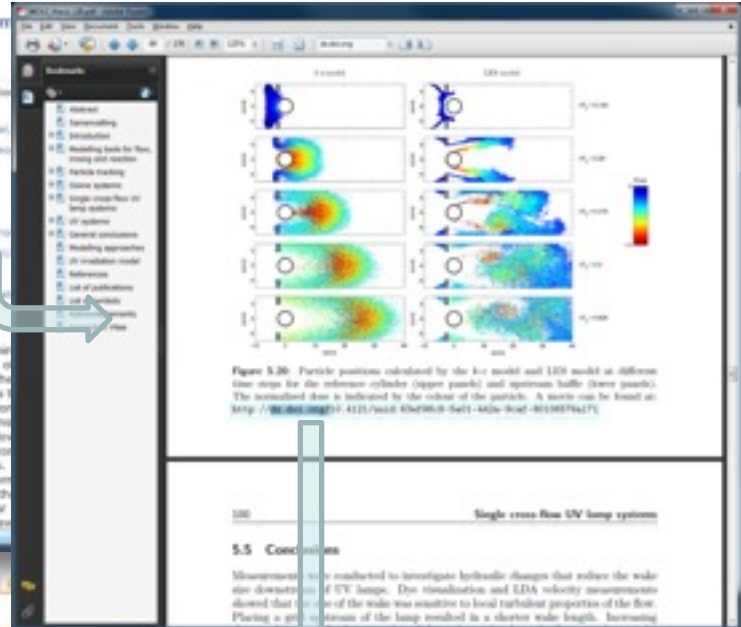
ReferenceURL: <http://dspace.org/>

ISSN: 9789048670130

Keywords: CFD - drinking water treatment, hydrodynamics, UV systems

Rights: (c) 2010 Wols, B.A.

Hydrodynamic processes largely determine the performance of UV disinfection systems. A lack of detailed design of these systems, a lack of suboptimal designs of these systems, the energy consumption or use of chemicals in UV disinfection systems, computational fluid dynamics (CFD) can be used to predict the performance of treatment systems. In drinking water engineering, computational fluid dynamics (CFD) is used to predict the performance of treatment systems. CFD in drinking water treatment [dissertation, Wols, B.A., 2010]



OPENDAP Dataset Access Form

Tested on Netscape 4.01 and Internet Explorer 5.01

Action: [Get ASCII](#) [Get Binary](#) [Show Help](#)

Data URL: http://opendap.tue.nl/1419-4398-ba13-c757555/Drinking_water/D46_UV_reactor_dmgp

Global Attributes:

URL: "CFD data of a CFD UV reactor, Wing-shaped UV lamp (W-shaped lamp)"

URL: "2008 Watercycle Research Institute, Delft University of Technology"

PERSONAL: "Wols, B.A., Robert, J.A.R., Bekkers, R.F.J."

Variables:

0: Array of 32 bit Integers [x_node = 0..17852]

1: Array of 32 bit Floats [x_node = 0..17852][x_dim = 0..2]

2: Array of 32 bit Integers [x_dim = 0..12450][x_dim_dim = 0..2]

3: Array of 32 bit Integers [x_dim = 0..12450][x_dim_dim = 0..2]

- Evaluation of experimental techniques to validate numerical computations of the hydraulics inside a UV bench-scale reactor (article, 2010)
 - Evaluation of different disinfection calculation methods using computational fluid dynamics (article, 2010)
 - A systematic approach for the design of UV reactors using computational fluid dynamics (article, 2010)
 - Residence Time Distributions in Ozone Contactors (article, 2008)
 - CFD in drinking water treatment [dissertation, Wols, B.A., 2010]
 - CFD in drinking water treatment - movies 1
 - CFD in drinking water treatment - movies 2
 - CFD in drinking water treatment - movies 3
 - CFD in drinking water treatment - movies 4
 - CFD in drinking water treatment - movies 5
 - CFD in drinking water treatment - movies 6
- DATA
- OPENDAP (text/html+application/x-netcdf)
- For more information on the netCDF data format see the [netCDF website](#)



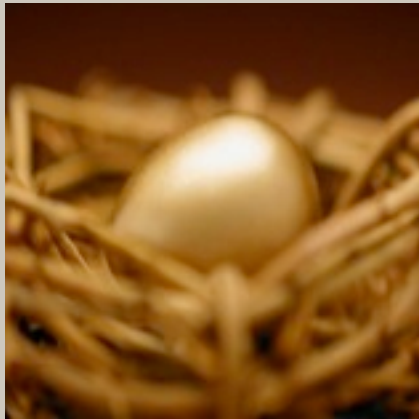
Subsets:

- CH4_ozone_system

Toegevoegde waarde

- Secure research data
 - Cite/Claim (DOIs via DataCite NL)
 - Quality Assurance (support)
 - Data exchange
 - Data visibility
-

voor dataproductenten



- Support EU projects, CoE's: MSP
 - Extra show window / etalage
 - Relation with non-academic research, society
 - Prepare for paradigm shift
 - Enable verification
-

voor organisaties