

Non-traditional references to my work

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Py6S

A Python interface to the 6S radiative transfer model, developed during my PhD. Published as Wilson, R.T., 2013. Py6S: A Python interface to the 6S radiative transfer model. Computers & Geosciences, 51, pp.166-171.

9 traditional citations (see <http://tinyurl.com/py6scitations>)

Makokha, J.W., Angeyo, H.K., Muthama, J.N., (2015) Retrieval of Aerosol Optical Depth over ecologically stressed East African land surfaces from top of atmosphere radiance utilizing the aerosol free vegetation index, Ethiopian Journal of Environmental Studies & Management, 8(2), p949-965

Py6S was used, but my paper was not cited

Chemin, Y., 2014, *Remote Sensing Raster Processing*, 112pp
Py6S was mentioned, but my paper was not cited

Used by the NERC Airborne Research and Survey Facility for checking their data, and recommended to users, see https://arsf-dan.nerc.ac.uk/trac/wiki/Processing/Py6S_vs_Hyperspectral

Used as the Radiative Transfer Model in the ARCSI atmospheric correction tool (see <http://rsgislib.org/arcsi/tutorial.html>)

RTWTools

Software developed during my undergraduate degree for various tasks including performing spatial statistics in ENVI and vector processing in ArcGIS (see www.rtwilson.com/academic/dissertation and www.rtwtools.rtwilson.com).

Ivits, E., Cherlet, M., Tóth, G., Sommer, S., Mehl, W., Vogt, J. and Micale, F., 2012. Combining satellite derived phenology with climate data for climate change impact assessment. *Global and Planetary Change*, 88, pp.85-97.

Shilling, F.M. and Waetjen, D.P., 2015. Wildlife-vehicle collision hotspots at US highway extents: scale and data source effects. *Nature Conservation*, 11, p.41.

Tweddale, T., Krumins, G. and Cummings, K., 2012. *Multi-state Spatial Database to Assess Threats to Mussels*. Illinois Natural History Survey.
This report for the US Fish and Wildlife Service was prepared by the Illinois Natural History Service and uses RTWTools

Odongo, V.O., Hamm, N.A. and Milton, E.J., 2014. Spatio-temporal assessment of Tuz Gölü, Turkey as a potential radiometric vicarious calibration site. *Remote Sensing*, 6(3), pp.2494-2513

Odongo, V.O., 2010. Uncertainty in reflectance factors measured in the field: Implications for the use of ground targets in remote sensing, MSc thesis, University of Twente, Netherlands

VanHOzone

A Python library to estimate ozone concentrations using the van Heuklon model. Available at <https://github.com/robintw/vanHOzone>, and on PyPI.

Brizon, M., 2015, *Solar Energy Generation Model for High Altitude Long Endurance Platforms*, MSc thesis, Royal Institute of Technology, Stockholm, Sweden

PyProSAIL

A Python interface to the ProSAIL vegetation reflectance model. Available at <https://github.com/robintw/PyProSAIL>, and on PyPI.

Jarocinska, A., et al., 2016, Simulating Trees Reflectance in Primary Forest Using HySpex Images and PROSAIL Model, EARSeL Symposium, Bonn, Germany

CITATION file proposal

A proposal for a way for scientific software authors to encourage citation of their software. Proposed in a blog post at <http://blog.rtwilson.com/encouraging-citation-of-software-introducing-citation-files/>, and re-blogged by the Software Sustainability Institute at <http://www.software.ac.uk/blog/2013-09-02-encouraging-citation-software-introducing-citation-files>

Crick, T., Ishtiaq, S. and Hall, B.A., 2015. Towards "Reproducibility-as-a-Service". *arXiv preprint arXiv:1503.02388*.

Crick, T., Hall, B.A. and Ishtiaq, S., 2014. "Can I Implement Your Algorithm?": A Model for Reproducible Research Software. *arXiv preprint arXiv:1407.5981*.
Cited 12 times

Niemeyer, K.E., Smith, A.M. and Katz, D.S., 2016. The challenge and promise of software citation for credit, identification, discovery, and reuse. *arXiv preprint arXiv:1601.04734*.

Force11 Software Citation Working Group, 2016, *Software Citation Principles*, available at <https://www.force11.org/sites/default/files/shared-documents/software-citation-principles.pdf>

Perez-Riverol, Y., Gatto, L., Wang, R., Sachsenberg, T., Uszkoreit, J., Leprevost, F., Fufezan, C., Ternent, T., Eglén, S.J., Katz, D.S. and Pollard, T.J., 2016. Ten Simple Rules for Taking Advantage of git and GitHub. *bioRxiv*, p.048744.

The idea spread via Twitter too, with the #citationfile hashtag:
<https://twitter.com/hashtag/citationfile>

Digitised John Snow cholera data

I digitised the data from John Snow's map of the 1854 London cholera outbreak. The data is available at <http://blog.rtwilson.com/john-snows-cholera-data-in-more-formats/>

Rogers, S., 2013, John Snow's data journalism: the cholera map that changed the world, *The Guardian*, Available at <http://www.theguardian.com/news/datablog/2013/mar/15/john-snow-cholera-map>

Pena, R., Bresson, X. and Vandergheynst, P., 2016. Source Localization on Graphs via L1 Recovery and Spectral Graph Theory. *arXiv preprint arXiv:1603.07584*.

Hullman, J., Krupka, E. and Adar, E., 2010, Evaluating Approaches to Crowdsourced Visual Analytics, *Collective Intelligence*

Aguilar-Moreno, E. and Granell-Canut, C., 2015. *Geobibliotecas*. Editorial UOC, 110pp

Östh, J., Introducing the EquiPop software,

<http://equipop.kultgeog.uu.se/Tutorial/Introducing%20EquiPop.pdf>

Example chosen for demonstrating EquiPop software for KNN clustering of spatial population data

Used in a tutorial for CartoDB by the creators of this web service:

http://docs.cartodb.com/tutorials/conditional_styling/

FreeGISData Website

I have put together a large list of freely-available GIS data sources, with over 300 sources currently listed. The list is available at www.freegisdata.rtwilson.com

Guo, D., Yu, E. and Wang, H., 2016. Will the Tibetan Plateau warming depend on elevation in the future?. *Journal of Geophysical Research: Atmospheres*.

Sidda, N.K., Florczyk, A.J., López-Pellicer, F.J., Babu I. V, D., Béjar, R. and Zarazaga-Soria, F.J., 2014. Expeditious management plan towards digital earth. *International Journal of Digital Earth*, 7(8), pp.635-649.

Chen, C., Zhu, X., Shen, P., Yu, J., Zou, H. and Hu, J., 2015. SOLS: A scheme for outsourced location based service. *Journal of Network and Computer Applications*, 56, pp.158-165.

Keenan, N.J. and Oldfield, S.G., 2012. The Urban Impacts Toolbox: An initial assessment of climate change flood adaptation options for Westport. *Weather and Climate*, 32(2), pp.40-61.

Campbell, J., 2014. Access to Scientific Data in the 21st Century: Rationale and Illustrative Usage Rights Review. *Data Science Journal*, 13 pp.203-230

Deventer, H., Nel, J., Mbona, N., Job, N., Ewart-Smith, J., Snaddon, K. and Maherry, A., 2015. Desktop classification of inland wetlands for systematic conservation planning in data-scarce countries: mapping wetland ecosystem types, disturbance indices and threatened species associations at country-wide scale. *Aquatic Conservation: Marine and Freshwater Ecosystems*.

Bahgat, K., 2015, *Python Geospatial Development Essentials*, Packt Publishing, 192pp

Shrestha, S, Anal A., Salam P., van der Valk, M., 2014, *Managing Water Resources under Climate Uncertainty: Examples from Asia, Europe, Latin America, and Australia*, Springer, 438pp.

Fung, E., Kellaris, G. and Papadias, D., 2015. Combining Differential Privacy and PIR for Efficient Strong Location Privacy. In *Advances in Spatial and Temporal Databases* (pp. 295-312). Springer International Publishing.

Katel, O.N., Schmidt-Vogt, D. and Dendup, N., 2015. Transboundary Water Resources Management in the Context of Global Environmental Change: The Case of Bhutan

Himalaya. In *Managing Water Resources under Climate Uncertainty* (pp. 269-290). Springer International Publishing.

de Kok, J.L., Poelmans, L., Van Esch, L., Uljee, I., Engelen, G. and Veldeman, N., Information System on the Eutrophication of our Coastal Seas (ISECA) D3. 2-Eutrophication problems, causes and potential solutions, and exchange of reusable model building components for the integrated simulation of coastal.

Bittner, C., 2015, Wie gestalte ich eine Karte?. *GeoPraktisch*
A student magazine for the geosciences in Germany

Sánchez, R. and Pérez, A., 2015, Mapeo 2.0, *ecologiaPolítica*, pp.24-27

Campbell, J.J., 2015. Toward a Commons of Geographic Data.
PhD thesis comparing availability and licensing of various geographic data sources

Sáňka, O., Use of Geographic Information System in Environmental Science, PhD thesis, available at http://is.muni.cz/th/106027/prif_d/Thesis_sanka.pdf

Used in the Information Visualisation MOOC run by Indiana University
(<http://ivmooc.cns.iu.edu/>)