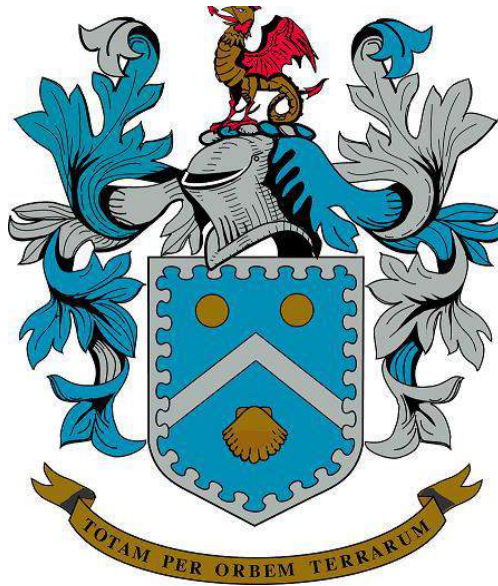


SOCIETY  
OF  
SOUTH AFRICAN GEOGRAPHERS  
(SSAG)



2015-16  
NEWSLETTER

*Newsletter was compiled using the unedited submissions of representatives of each department*

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## Foreword by the president



Dear Geography colleagues

With this first newsletter of 2017, a few thoughts and observations

1. This newsletters covers the time in which we celebrated 100 years of the Geographical society in South Africa. The centenary was celebrated in various ways, of which the highlights surely were the biennial conference hosted for us in fine style by the Stellenbosch Geographers, and the book celebrating the history of academic Geography in South Africa, written by many practicing and retired Geographers, and skillfully edited by Gustav Visser, Ronnie Donaldson and Cecil Seethal.
2. Sadly, we also had to say farewell to Prof Izak van der Merwe, one of the leading figures in Geography at Stellenbosch for many years. An obituary can be found in the SA Geographical Journal in 2017.
3. As part of the centennial celebrations, the Society solicited and funded three special projects, Wiki Walk SA, Geography Beyond Geography Department and the Green Box. These projects investigated aspects of Geographical practice and reality that do not usually occur within the ambit of academic Geography. The projects have been very successful and their outcomes have been reported at the biennial conference, and one paper is still forthcoming. The Wiki walks project has transitioned to an ongoing community engagement project at Unisa. Details of these projects are on the Society website.
4. Going forward to the next century of South African Geography, the University of Mpumalanga, with the youngest Geography department, is leading the way by hosting the 2017 Student conference in Mbombela, taking the next conference to the Mpumalanga Lowveld for the first time. We encourage all departments to send their students.
5. We also encourage Departments to facilitate Honours students to apply for the Jubilee Bursary

6. Finally, the contributions of all members of the Geographical community are necessary for this newsletter. Thank you to all the contributors, and keep up the good work.

Luke Sandham

President: SSAG

## **University of Cape Town: Department of Environmental and Geographical Science**

### **Head of Department: Professor Mike Meadows**

#### **Address:**

Department of Environmental and Geographical Science  
University of Cape Town, Private Bag X3, Rondebosch, 7701  
Telephone: SA (021) 650 2873/4  
Fax: SA (021) 650 3456

### **Permanent Academic Staff**

Dr Babatunde Abiodun (Senior Lecturer - Atmospheric Science, Climatology)  
Dr Pippin Anderson (Senior Lecturer – Ecology and Society, Sustainability)  
Dr Shari Daya (Senior Lecturer – Gender, Modernity)  
Dr Frank Eckardt (Senior Lecturer – Geomorphology, Remote Sensing)  
Professor Bruce Hewitson (NRF SARCHI Chair in Climate Change – Atmospheric Science, Climatology)  
Dr Richard Hill (Senior Lecturer – Environmental Assessment and Management)  
Dr Peter Johnston (Research Officer – Seasonal Forecasting Applications; Climate Change)  
Professor Mike Meadows (Head of Department – Quaternary Environmental Change)  
Ms Philile Mbatha (Lecturer, Marine and Coastal governance, Natural Resources)  
Professor Sophie Oldfield (Political and Economic Geography)  
Professor Sue Parnell (Urban Studies, Historical Geography)  
Dr Zarina Patel (Senior Lecturer – Environmental Governance and Politics)  
Dr Serge Raemaekers (Lecturer – Small-scale Fisheries Governance)  
Professor Maano Ramutsindela (Political Geography, Transnational Regionalism)  
Associate Professor Merle Sowman (Environmental Planning and Management, Coastal and Small-Scale Fisheries Management)  
Ms Anna Steynor (Research Officer; Stakeholder Engagement)  
Dr Kevin Winter (Senior Lecturer – Environmental Management, Water Resources, Monitoring and Evaluation)  
Dr Piotr Wolski (Senior Research Officer – Hydrology)  
Associate Professor Rachel Wynberg (NRF SARCHI Chair in Environmental and Social Dimensions of the Bio-economy – Biodiversity and Social Justice, Commercial Use of Biodiversity, Access and Benefit Sharing, Genetic Resources for Food and Agriculture)  
Dr Gina Ziervogel (Senior Lecturer – Vulnerability and Adaptation)

### **Professional and Support Staff in the Department**

#### *Contract Research Staff*

Dr Olivier Crespo (Agricultural and Water Research Modelling)  
Dr Chris Lennard (Atmospheric Science)  
Ms Kate Sutherland (Research Assistant; Climate Data Analysis)

#### *Administrative and Support Staff*

Mrs Sharon Adams (Administrative Officer)  
Mrs Sharon Barnard (Administrative Assistant)  
Ms Tanya Basadien (Senior Secretary)  
Ms Lisa Coop (Research Assistant)  
Mr Roger Duffett (IT Manager)  
Mr Tony George (Library Assistant)  
Ms Fahdelah Hartley (Senior Secretary)  
Mr Sayed Hess (Technical Assistant)  
Dr Chris Jack (Senior Scientific Technical Officer)  
Ms Vuyokazi Mafanya (Senior Secretary)  
Mr Phillip Mukwenha (IT Assistant)  
Mrs Shaada Reddy (Librarian)  
Mr Nur Toffar (Finance Officer)  
Ms Mathilda Jaci Van Niekerk (Research Assistant)

#### *Postdoctoral Fellows*

Dr Ross Blamey (Atmospheric Science)  
Dr Joseph Daron (Climate Uncertainties and Adaptation)  
Dr Tristan Hauser (Uncertainty Quantification and Statistical Modelling)  
Dr Kelly Kirsten-Sardinha (Palaeo Science)  
Dr Kazeem Oare Okosun (Epidemiological Modelling and Climate Impact)  
Dr Laura Pereira (Bio-Economy/Climate Change)  
Dr Lynne Quick (Palaeo Science)  
Dr Alex Shabala (Climate Modelling and Analysis)  
Dr Modathir Abdalla Zaroug (Climate Change Adaptation)

#### *Honorary Professors*

Professor John Boardman (Soil Erosion, Land Degradation)  
Professor Jonathan Crush (International Migration, Transnationalism)  
Professor Dave Thomas (Arid Zone Geomorphology, Quaternary Science)

#### *Emeritus Staff*

Professor Richard Fuggle

#### **Research Output dated 2016**

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McCusker, B., Moseley, W. and Ramutsindela, M. 2016. *Land Reform in South Africa: An Uneven Transformation*. Lanham: Rowman & Littlefield. (978-1-4422-0716-5).

##### *Edited Books:*

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Meadows, M.E. and Lin, J.-C. (eds). *Geomorphology and Society*. Springer. ISBN: 978-4-431-55998-6 (Print) 978-4-431-56000-5 (Online).

Ramutsindela, M., Miescher, G. and Boehi, M (eds.) 2016. *The Politics of Nature and Science in Southern Africa*. Basel: Basler Afrika Bibliographien. ISBN: 978-3-905758-77-1

Salzmann, N., Huggel, C., Nussbaumer, S.U., Ziervogel, G. (eds.). 2016. *Climate Change Adaptation Strategies – An Upstream-downstream Perspective*. Springer ISBN 978-3-319-40771-5.

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Abiodun, B.J., Omar, S.A., Lennard, C. and Jack, C. 2016. Using regional climate models to simulate extreme rainfall events in the Western Cape, South Africa. *International Journal of Climatology* 36: 689–705.

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## Stellenbosch University: Geography and Environmental Studies

### Head of Department

Name (Title, Surname, Initials)	Area of specialisation	E-mail	Office Telephone Number
Prof R Donaldson	Urban and tourism development	<i>rdonaldson@sun.ac.za</i>	02180823

### Geographers in the Department

Name (Title, Surname, Initials)	Rank/Position	Area of specialisation	E-mail	Office Telephone number
Mrs I Boonzaaier	GIT specialist	GIT	ib@sun.ac.za	021 808 4975
Dr H de Klerk	Senior lecturer	GIS, Spatial analysis, biogeography, species modelling, fire ecology	hdeklerk@sun.ac.za	021 808 9322
De Waal, Jan H Mr	Lecturer	Climate change; Flooding risk assessment; Urban risk research with a particular focus on informal settlements	jannied@gmail.com	021 808 3108
Du Plessis, Danie DJ, Mr	CRUISE - Urban & Regional Planner/Senior Lecturer	Urban planning systems, Urban transformation, Spatial analysis and Modelling of cities and urban systems	ddp@sun.ac.za	021 808 3126
Ferreira, Sanette Prof	Departmental Vice- Chair: Geography	Tourism and regional development, tourism in small towns, Tourism and crime	slaf@sun.ac.za	021 808 3105
Fortune, Gillian T, Ms	Radar-Knowledge Co-ordinator	Research: Loss estimation in severe weather post-event assessments	gillianfortune@sun.ac.za	021 808 9283

Geyer, Manie HS, Prof	CRUISE - Urban & Regional Planner; Director:	Migration; Urban morphology; Urban systems	hsgeyer@sun.ac.za	021 808 3107
Geyer, Herman S, Jnr, Mr	CRUISE - Town & Regional Planner/ Lecturer.	Complexity theory; Urban systems; Economic geography	hsgeyerjr@sun.ac.za	021 808 3107
Harber, Inger, Ms	Project Coordinator	Disaster risk reduction, disaster management	iharber@sun.ac.za	021 808 9284
Holloway, Ailsa J, Dr	Director: Radar	Disaster risk research & related policy advocacy; Disaster risk curriculum and Expertise in inter-national humanitarian assistance	ailsaholloway@sun.ac.za	021 808 9281
Horn, AJ Mrs	CRUISE - Town and Regional Planner/Lecturer,	Urban & regional planning; Development frameworks; Urban growth management / monitoring	anelehorn@sun.ac.za	021 808 9181
Kemp, Jaco, Dr	Lecturer	Earth Observation, Synthetic Aperture Radar, Photogrammetry	jkemp@sun.ac.za	021 808 9147
Mashimbye, E Dr	Lecturer	Remote Sensing, Geoinformatics, Agronomy	ericm@sun.za	021 808 9702
Münch, Zahn, Mrs	Lecturer	GIS; Spatial decision making	zmunch@sun.ac.za	021 808 9101
Pharoah, Robyn, Dr	RADAR - GIS Analyst	Disaster risk reduction and Urban risk	robynpharoah@sun.ac.za	021 808 9492
Poona, Nitesh K, Mr	Lecturer	Remote sensing; Spatial statistics and modelling	poona@sun.ac.za	021 808 9105
Roux, Wilma, Ms	Radar- Admin and financial officer		wmr@sun.ac.za	021 808 9285
Spocter,	Senior lecturer	Public and	mspocter@sun.ac.za	021 808

Manfred Dr		private spaces, small-town geographies, urban social geographies		3095
Stephenson Garth, Mr	GIT specialist CGA	GIT	garth@sun.ac.za	021 808 3112
Van Eeden, A Mrs	CRUISE - Lecturer.	GIS; Municipal economic development	avaneeden@sun.ac.za	021 808 9104
Van Niekerk	Senior Lecturer	GIT, Spatial decision making systems	avn@sun.ac.za	021 808 3100
Visser, G Prof	Vice: Chair	Urban and Tourism	gevisser@sun.ac.za	021 808 3103
Williams, S Dr	Lecturer	Natural Resources, Livelihoods and Governance	samanthawilliams@sun.ac.za	021 808 4975
Willemse, L, Miss	CRUISE - Lecturer.	Statistics, Urban development, Urban open spaces, Quality of life and social sustainability	lodene@sun.ac.za	021 808 9103
Zweig, Trish, Mrs	Radar- Risk Reduction Co-ordinator	Informal settlements; Low cost housing policy; Historical townships admin; Municipal commonage, Urban risk	patriciazweig@sun.ac.za	021 808 9282

### Professional and support staff in the Department

<b>Name (Title, Surname, Initials)</b>	<b>Position</b>	<b>Area of subject specialisation (if applicable)</b>	<b>E-mail</b>	<b>Office Telephone number</b>
Liederman, Catherine Mrs	Secretary		catherine@sun.ac.za	021 808 3218
Regue, Yvette Mrs	Snr Dept Officer	Office Administration/ Post School Education/ HR development	regue@sun.ac.za	021 8083104
Ortell, S Mrs	Postgraduate Program Coordinator		seleneortell@sun.ac.za	021 8083100

## Department News

### Centenary SSAG conference

In 2016 the department hosted the centenary SSAG conference starting off with the student conference on 22 September until the 25<sup>th</sup>. With representation from all but 4 universities, 167 students attended the annual student conference. The conference keynote address was delivered by Prof Abdi Samatar.

The SSAG centenary conference kicked off on Sunday 25 September with a commissioned art exhibition entitled 100 Geographies that featured some of the country's top artists. In attendance at the conference were 220 delegates, mostly from South Africa, but also representation from 13 countries around the world (Canada, England, Ghana, Ireland, Lesotho, Namibia, Netherlands, New Zealand, Nigeria, Norway, Malawi, USA, Zambia). Four esteemed scholars delivered academic key-note addresses: professors Jennifer Robinson, Abdi Samatar, Etienne Nel and Maano Ramutsindela. The main sponsor of the conference, ESRI, hosted a panel keynote session. The 167 oral presentations covered a wide range of sub-disciplinary themes including among many other food security, geographies of enterprise development, health and vulnerability, tourism studies, land and politics of access, literacy and learning, GIS development and techniques, mapping and analysis, corruption, critical environmental dynamics. The most presentations were however located within urban geography and covered issues of urban renewal, housing, governance, informality, mobility, poverty, and spatial planning.

For photos and full conference programme see [www.ssag.co.za](http://www.ssag.co.za)

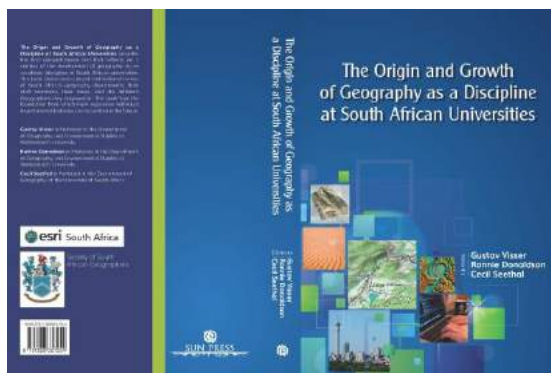


Group photo of conference delegates





100 Geographies art exhibition



Official handover of the edited book that documented the history of geography at tertiary level in South Africa (from left to right: Gustav Visser, Ronnie Donaldson (editors), Kevin Mearns past president SSAG and Cecil Seethal (editor))

### **Inaugural lecture of Prof Gustav Visser**

Prof Gustav Visser presented his inaugural address – Travelling through South African tourism geography: Past, present and future – on Monday, 18 April 2016. He was also awarded a B3 NRF rating in 2016.



### **Obituary: Prof IJ van der Merwe (1941-2016)**



Prof Izak Johannes van der Merwe, a leading human geographer in the Geography and Environmental Studies Department at Stellenbosch University, passed away in November 2016 after losing his battle with cancer.

Van der Merwe was born on 21 March 1941 and completed his matric at Hottentots Holland High School in Somerset West. In 1962, he obtained a BA degree from Stellenbosch University, followed by a BA Honours and a Masters degree, which he attained with cum laude. Ten years after first enrolling at Stellenbosch University (SU), he completed a DPhil, focusing on *The differential development of the intra-urban space of Kimberley* in his thesis.

He joined the Geography Department as junior lecturer in 1966 and for the next 29 years developed an academic career in that environment that saw him rise to the position of professor and serve as Chair (1991-1996) of this department as well as fulfil the role of Director of the Institute for Cartographic Analysis at SU for 15 years. From 1997 to 2002, he was Dean of the Faculty of Arts and Social Science and in 2003, joined the Geography Department again, this time as a Research Fellow.

Over the years, his research and teaching has focused on urbanisation and urban problems in Southern Africa, socio-cultural and language patterns, regionalism and boundaries, and higher education change and structures, however, much of his research was linked to spatialising socio-economic change in the greater Cape Town area. As a leading human geographer in the department for most of the 1970s until the mid-1990s, he also made some unique contributions to South African geographical discourse through language and medical geographies. One of his latest contributions was an investment strategy for effective town development in the Western Cape in 2005.

Van der Merwe has published 53 scientific articles in accredited journals in South Africa and abroad and has authored and co-authored a total of 15 books and atlases and 12 research reports. His first book, the 1983 *Die Stad en Omgewing* (in English, *The city and its Environment*), became a widely used prescribed textbook for students at Afrikaans-speaking universities in the 1980s and 1990s. It was followed by books like the *Social Atlas of the Cape Town Metropolitan area*, *Atlas for Encyclopaedia of the World*, *Economic Atlas of South Africa*, *Language Atlas of South Africa*, *Language in South Africa: Distribution and change*, *Stellenbosch University: Origin of students* and *The Linguistic Atlas of South Africa - Language in space and time*. Over the last 10 years before his retirement, he delivered an average of two academic papers per year at national and international conferences.

He has held a number of professional positions, amongst them serving as editor of the *South African Geographer* (1992 - 1993) and as the first President of the newly formed Society of South African Geographers between 1995 and 1997. In the 1980s, Van der Merwe was a member of the editorial committee of the Israeli academic journal *Geography Research Forum* and a member of the SA Academy of Arts and Science, and in the 1990s was a member of the Development Society for Southern Africa and the Chairman of the Management Board of the Centre for Geographical Analysis at SU. He also served on the 1993 official Task Group of the Negotiation Council on the demarcation of provinces in South Africa which led to the formation of the country's nine post-apartheid provinces, and was a visiting professor at the Institute for Territorial Planning at the University of Ancona in Italy in 1998.

During his illustrious academic career, Van der Merwe was also awarded the Stals Prize from the South African Academy for Science and Arts in 1984 followed by a fellowship from the South African Geographers' Society in 1991. In 2002 he received a C-rating as a researcher from the National Research Foundation.

He was a great mentor, lecturer and supervisor and inspired thousands of geography graduates to think critically about the urban challenges our cities face.

Van der Merwe leaves behind his wife Audrey Erica Rankin and their two sons, Izak Johannes and Rian

## **The 2<sup>nd</sup> Stellenbosch University Synthetic Aperture Radar Symposium (SUNSAR)**

For a second year in a row a highly successful SUNSAR Symposium was hosted by the Dr J Kemp at The Stellenbosch Institute for Advanced Study in South Africa (STIAS). There were approximately 35 delegates who attended. The range of topics dealt with included natural resources, agriculture, geohazards, maritime domain awareness, vegetation and more.



## **New staff members**

Three new staff members were welcomed into the Department. They include, Dr Eric Mashimbye (GIT) (photo left), Dr Samantha Williams (Geography)(photo right) and Ms Inger Harber (Project Coordinator).

Mrs I Boonzaaier has left the Department and is currently working as a consultant.



## **RADAR: USAID contract**

Research Alliance for Disaster and Risk Reduction (RADAR) unit of the department was awarded a multimillion Rand (over R40 million) contract from USAid that spans for a period of 3 years.

## 2016 dated publications:

### Books

1. Barnard, WS. 2016. ENCOUNTERING ADAMASTOR: SOUTH AFRICA'S FOUNDING GEOGRAPHERS IN TIME AND PLACE., Sun media.
2. Marais, L; Nel, E & Donaldson, R. (eds) 2016. The role of secondary cities in South Africa's development. SECONDARY CITIES AND DEVELOPMENT. Routledge: London.
3. Visser, G; Donaldson, R & Seethal, C (eds.) THE ORIGIN AND GROWTH OF GEOGRAPHY AS A DISCIPLINE AT SOUTH AFRICAN UNIVERSITIES. Sun Media: Stellenbosch

### Journal articles

1. Cross, AT; Myers, C; Mitchell, CNA; Cross, SL; Jackson, C; Waina, R; Mucina, L ; Dixon, KW ; Andersen, AN. Ant biodiversity and its environmental predictors in the North Kimberley region of Australia's seasonal tropics. *BIODIVERSITY AND CONSERVATION* 2016; 25 (9): 1727-1759.
2. Jimenez-Alfaro, B; Chytry, M; Mucina, L; Grace, JB; Rejmanek, M. Disentangling vegetation diversity from climate-energy and habitat heterogeneity for explaining animal geographic patterns. *ECOLOGY AND EVOLUTION* 2016; 6 (5): 1515-1526
3. Willner, W., Solomeshch, A., Čarni, A., Bergmeier, E., Ermakov, N., Mucina, L. Description and validation of some European forest syntaxa - A supplement to the EuroVegChecklist. *Hacquetia* 2016; 15 (1): 15-25
4. Daniëls, F.J.A., Elvebakk, A., Matveyeva, N.V., Mucina, L. The Drabo corymbosae-Papaveretea dahliani - A new vegetation class of the High Arctic polar deserts. *Hacquetia*, 2016; 15 (1): 5-13
5. Ottaviani, G; Marcantonio, M; Mucina, L. Soil depth shapes plant functional diversity in granite outcrops vegetation of Southwestern Australia. *PLANT ECOLOGY & DIVERSITY*, 2016; 9 (3):263-276
6. Fuseini, I; Kemp, J. Characterising urban growth in Tamale, Ghana: An analysis of urban governance response in infrastructure and service provision. *HABITAT INTERNATIONAL* 2016; 56 :109-123
7. Isunju, JB; Orach, CG; Kemp, J. Hazards and vulnerabilities among informal wetland communities in Kampala, Uganda. *ENVIRONMENT AND URBANIZATION* 2016; 28 (1): 275-293
8. Isunju, JB; Kemp, J. Spatiotemporal analysis of encroachment on wetlands: a case of Nakivubo wetland in Kampala, Uganda. *ENVIRONMENTAL MONITORING AND ASSESSMENT*, 2016; 188(4) UNSP 203 DOI: 10.1007/s10661-016-5207-5
9. de Klerk, HM; Gilbertson, J; Luck-Vogel, M; Kemp, J; Munch, Z. Using remote sensing in support of environmental management: A framework for selecting products, algorithms and methods. *JOURNAL OF ENVIRONMENTAL MANAGEMENT*, 2016; 182 564-573
10. Muller, SJ; van Niekerk, A. Identification of WorldView-2 spectral and spatial factors in detecting salt accumulation in cultivated fields. *GEODERMA*, 2016; 273: 1-11
11. Muller, SJ; van Niekerk, A. An evaluation of supervised classifiers for indirectly detecting salt-affected areas at irrigation scheme level. *INTERNATIONAL JOURNAL OF APPLIED EARTH OBSERVATION AND GEOINFORMATION*, 2016; 49:138-150
12. Vermeulen, D; van Niekerk, A. Evaluation of a WorldView-2 image for soil salinity monitoring in a moderately affected irrigated area. *JOURNAL OF APPLIED REMOTE SENSING*, 2016; 10 Article Number: 026025 DOI: 10.1117/1.JRS.10.026025



13. Luck, W; van Niekerk, A. Evaluation of a rule-based compositing technique for Landsat-5 TM and Landsat-7 ETM+ images. *INTERNATIONAL JOURNAL OF APPLIED EARTH OBSERVATION AND GEOINFORMATION*, 2016; 47:1-14
14. Poona, NK; van Niekerk, A; Nadel, RL; Ismail, R. Random Forest (RF) Wrappers for Waveband Selection and Classification of Hyperspectral Data. *APPLIED SPECTROSCOPY*, 2016; 70(2): 322-333
15. Verhulp, J; Van Niekerk, A. Effect of inter-image spectral variation on land cover separability in heterogeneous areas. *INTERNATIONAL JOURNAL OF REMOTE SENSING*, 2016; 37(7): 1639-1657
16. van Niekerk, A; du Plessis, D; Boonzaaier, I; Spocter, M ; Ferreira, S; Loots, L ; Donaldson, R. Development of a multi-criteria spatial planning support system for growth potential modelling in the Western Cape, South Africa. *LAND USE POLICY*, 2016; 50: 179-193
17. Ngcofe, L; Van Niekerk, A. Advances in optical earth observation for geological mapping: A Review. *SOUTH AFRICAN JOURNAL OF GEOMATICS*, 2016; 5(1):1-16
18. Poona, NK; van Niekerk, A; Ismail, R. Investigating the Utility of Oblique Tree-based Ensembles for the Classification of Hyperspectral Data. *Sensors*, 2016; 16(11): 1918; doi:[10.3390/s16111918](https://doi.org/10.3390/s16111918)
19. Mohale, M; Geyer H jnr; Geyer H snr. Undervaluations of real estate properties in disadvantaged areas in the City of Johannesburg. *South African Journal of Economics*, 2016; 84
20. Geyer, HS jnr; Geyer, HS. Polarisation reversal in South Africa: How widespread is the trend? *South African Geographical Journal* DOI: 10.1080/03736245.2015.1028986
21. Geyer, H.S Jr; Mohammed, F. Hypersegregation and Class-Based Segregation Processes in Cape Town 2001–2011. *Urban Forum*, 2016; 27(1):35-58
22. Wortman, T; Donaldson, R; van Westen, G. They are stealing my island': Residents' opinions on foreign investment in the residential tourism industry in Tamarin, Mauritius. *SINGAPORE JOURNAL OF TROPICAL GEOGRAPHY*, 2016; 37(2):139-157
23. Donaldson, R; Ferreira, S; Didier, S; Rodary, E., Swanepoel, J. Access to the urban national park in Cape Town: Where urban and natural environment meet. *Habitat International*, 2016; 57:132-142.
24. Donaldson, R. 2016. Donaldson, R. Managing national parks: Counting visitors to the open-access urban national park of Table Mountain. *JOURNAL OF PUBLIC ADMINISTRATION* (in press)
25. Geyer, H; Geyer, P; Geyer, M. The South African functional metropolis: A synthesis. *TOWN AND REGIONAL PLANNING*, 2016; 67 (1):13-26; 2015
26. Wiese, L; Ros, I; Rozanov, A; Boshoff, A; de Clercq, W; Seifert, T. An approach to soil carbon accounting and mapping using vertical distribution functions for known soil types. *GEODERMA*, 2016; 263: 264-273
27. Francioli, AP. Investigating the knowledge and preparedness of proximal residents to a general-emergency event at the Koeberg Nuclear Power Station. *JAMBA-JOURNAL OF DISASTER RISK STUDIES*, 2016; 8(2) DOI: 10.4102/jamba.v8i2.208
28. Welman L; Ferreira SLA. Development of the Greater Saldanha Bay Region: The co-evolution of Saldanha town and its harbour. *Local Economy*, 2016; 31(1-2): 219-234
29. Ferreira, SLA; Van Zyl, Gesilla. Catering for a large number of tourists: The McDonaldisation of casual dining in Kruger National Park. *Geography Bulletin Socio-economic Series*, 2016; 33: 39–53.
30. Chikowore, T; Willemse, L. Identifying the changes in the quality of life of Southern African Development Community (SADC) migrants in South Africa from 2001 to 2011. *South African Geographical Journal*, 2016; 99(1): 86-112

31. Spocter, M. Privatisation of municipal golf courses in small towns in the Western Cape, South Africa. *South African Geographical Journal*, 2016: 1-21. DOI 10.1080/03736245.2016.1208578
32. Spocter, M. Non-metropolitan Gated Retirement Communities in the Western Cape. *Urban Forum*, 2016; 27(2): 211-228
33. Visser, G. South African tourism geographies: progress and prospects. *South African Geographical Journal*, 2016; 98(3): 428-438
34. Ackermann, A; Visser, G. Studentification in Bloemfontein, South Africa. *BULLETIN OF GEOGRAPHY-SOCIO-ECONOMIC SERIES*, 2016; 31: 7-17
35. Zweig, P. Lost in space? Considering young men as drivers of urban informal settlement risk. *Urban Forum*, 2016:1-6. DOI: 10.1007/s12132-016-9292-x
36. Tuoane-Nkasi, M and van Eeden, A. Spatial patterns and correlates of mortality due to selected non-communicable diseases among adults in South Africa, 2011. *GeoJournal*, 2016. 1-30. DOI: 10.1007/s10708-016-9725-z
37. de Waal J; Vogel C. Disaster risk profiling in southern Africa: inventories, impacts and implications. *Journal of Natural Hazards*, 2016; 84(3): 1921-1942
38. van Deventer, H; Cho, MA; Lück-Vogel, M; van Niekerk, L. Using multi-spectral sensors for vegetation mapping. *PositionIT*, 2016: 26-29
39. Lück-Vogel, M., Mbolambi, C; Rautenbach, K; Adams, J; van Niekerk, L. Vegetation mapping in the St Lucia estuary using very high resolution multispectral imagery and LiDAR. 2016, 107: 188-199

## Chapters in Books

1. Van der Merwe, JH; Visser, G; Donaldson, R. Stellenbosch: The birthplace of Geography teaching at South African universities. In: Visser, G; Donaldson, R & Seethal, C (eds.) *THE ORIGIN AND GROWTH OF GEOGRAPHY AS A DISCIPLINE AT SOUTH AFRICAN UNIVERSITIES*. Sun Media: Stellenbosch, 2016: 9-32
2. Visser, G; Barker, C. A brief history of the Department of Geography at the University of the Free State. In: Visser, G; Donaldson, R & Seethal, C (eds.) *THE ORIGIN AND GROWTH OF GEOGRAPHY AS A DISCIPLINE AT SOUTH AFRICAN UNIVERSITIES*. Sun Media: Stellenbosch, 2016: 55-70
3. Smit, H; Donaldson, R. Military Geography at Stellenbosch University's Military Geography Department in Saldanha. In: Visser, G; Donaldson, R & Seethal, C (eds.) *THE ORIGIN AND GROWTH OF GEOGRAPHY AS A DISCIPLINE AT SOUTH AFRICAN UNIVERSITIES*. Sun Media: Stellenbosch, 2016: 245-254
4. Tait, N; Donaldson, R; Hattingh, P; Ramudzu, M. Geography at the iconic "Bush University" of Turfloop: From University of the North to Limpopo University. In: Visser, G; Donaldson, R & Seethal, C (eds.) *THE ORIGIN AND GROWTH OF GEOGRAPHY AS A DISCIPLINE AT SOUTH AFRICAN UNIVERSITIES*. Sun Media: Stellenbosch, 2016: 255-276
5. Donaldson, R; Rule, S; Mearns, K. The rise and demise of Geography at Vista University. In: Visser, G; Donaldson, R & Seethal, C (eds.) *THE ORIGIN AND GROWTH OF GEOGRAPHY AS A DISCIPLINE AT SOUTH AFRICAN UNIVERSITIES*. Sun Media: Stellenbosch, 2016: 419-434
6. Marais, L; Nel, E; Donaldson, R. 2016. Secondary cities in South Africa: national settlement patterns and urban research. In Marais, L; Nel, E & Donaldson, R. 2016. *SECONDARY CITIES AND DEVELOPMENT*. Routledge: London, 2016: 1-26
7. Marais, L; Nel, E; Donaldson, R. 2016. The international literature and context. In: Marais, L; Nel, E & Donaldson, R. 2016. *SECONDARY CITIES AND DEVELOPMENT*. Routledge: London. 2016: 27-48

8. Toerien, D & Donaldson, R.George. In: Marais, L; Nel, E & Donaldson, R. 2016. SECONDARY CITIES AND DEVELOPMENT. Routledge, 2016: 101-124
9. Marais, L; Nel, E & Donaldson, R. 2016. The role of secondary cities in South Africa's development. SECONDARY CITIES AND DEVELOPMENT. Routledge: London. 2016:159-178
10. Schuermans, N; Spoeter, M. Avoiding encounters with poverty: aesthetics, politics and economics in a privileged neighbourhood of Cape Town, South Africa. In: De Backer M, Melgaço L, Varna G, Menichelli F. Order and Conflict in Public Spaces. Routledge, 2016
11. Lück-Vogel, M. Recent developments in remote sensing for coastal and marine applications. In: Barthlett, d., Celliers, L. [Eds.]: Geoinformatics for marine and coastal management, 2nd. Edition, Francis & Taylor, p. 75-97.

## Reports

1. Pharoah, R. Strengthening urban resilience in African cities: Understanding and addressing urban risk. Action Aid, 2016: 1-44
2. Pharoah, R., Holloway, A., Fortune, G., Chapman, A., Schaber, E.and Zweig, P. Off the Radar - Synthesis Report High Impact Weather Events in the Western Cape, South Africa 2003 – 2014. Research Alliance for Disaster and Risk Reduction (RADAR), 2016: 1-76
3. Nell JP, Van Niekerk A, Muller SJ, Vermeulen D, Pauw T, Stephenson G, Kemp J 2015. Methodology for monitoring waterlogging and salt accumulation on selected irrigation schemes in South Africa. Report number TT 648/15. South African Water Research Commission, Pretoria, South Africa. P248.

## Projects

1. Centre for Geographical Analysis. 2016. A report on the current status of land and water use in South Africa - project done for WRC.
2. Centres for Geographical Analysis. 2016. Capacity building report - project done for WRC.
3. Centre for Geographical Analysis. 2016. Mapping agriculture and non-agriculture areas for Namibia's Kavango and Erongo regions on three dates using Landsat imagery - project done for SU Department of Economics
4. Centre for Geographical Analysis. 2016. Surveying of Early Childhood Development Centres in Stellenbosch Local Municipal Area - project done for Stellenbosch Local Municipality
5. Centre for Geographical Analysis. 2016. Assistance with historical mapping of disease in banana plantations in Mozambique - project done for SU Department of Plant Pathology
6. Centre for Geographical Analysis. 2016. Identifying possible citrus orchards using winter and summer NDVI values in specific regions in South Africa - project done for SU Department of Plant Pathology
7. Centre for Geographical Analysis. 2016. Crop type mapping from Landsat imagery for Tamil Nadu province, India - project done for Center for Micro Finance, Institute for Financial Management and Research, India
8. Centre for Geographical Analysis. 2016. Deriving a topographical flood hazard index from the 5m Stellenbosch University DEM - project done for Western Cape Government
9. Centre for Geographical Analysis. 2016.Clean and geocode Stellenbosch University personnel home and work address database - project done for SU Department of Logistics



10. Centre for Geographical Analysis. 2016. Using machine learning to project future yield from wine grape vineyards in the Western Cape - project done for Caren Jarman

### **Masters theses completed**

Adesuyi, S. Automating land cover modelling using time series NDVI: A case study in the Berg River catchment area. Supervisor: Mrs Z Münch

Ballim, K. *Detecting informal settlements from high resolution imagery using an object-based image analysis approach*. Supervisor: Mr N Poona.

Mbolambi, C. *Assessment of coastal vegetation degradation using remote sensing in False Bay, South Africa*. Supervisor: Dr M Lück-Vogel.

Venema, J. Retail transformations and consumer preferences in Paarl and Stellenbosch: CBD versus Decentralised Mall. Supervisors: Prof R Donaldson and Dr M Spocter.

Wenger, S. *Evaluation of SFM against traditional stereophotogrammetry and LIDAR techniques for DSM creation in various land cover areas*. Supervisor: Dr J Kemp

### **Conference Presentation in 2015-16:**

<b>Name of presenter (s)</b>	<b>Title of presentation</b>	<b>Format of presentation</b>	<b>Date of conference/workshop</b>	<b>Name of Conference/workshop</b>
Willemse, L	Consumption Expenditure Patterns of Unsustainable RDP Households in South Africa	Oral presentation	3-6 July 2016	South African Planning Institute, Sandton
Du Plessis, DJ	An Application of ISO 37120 Indicators to compare sustainable Development in South African and International Cities	Oral presentation	3-6 July 2016	South African Planning Institute, Sandton
Horn, A	Service Delivery in South African Rural Municipalities	Oral presentation	3-6 July 2016	South African Planning Institute, Sandton
Van Eeden, A and Horn, A	Measuring Urban Sprawl in the Western Cape Province, South Africa: An Urban Sprawl Index for Comparative Purposes	Oral presentation	21-22 July 2016	18 <sup>th</sup> International Conference on Environmental Technology and Management, Zurich

Horn, A	Urban Growth Management in South Africa: Post Apartheid planning set up to fail	Oral presentation	18-21 July 2016	International Planning History Society (IPHS) Conference, Delft, The Netherlands
Van Eeden, A	Evolution of community mapping in public sector urban planning: Cape Town, South Africa	Oral presentation	18-21 July 2016	International Planning History Society (IPHS) Conference, Delft, Netherlands
Geyer, H	Determining incommensurables in the spatial structure of city regions using fractal scaling	Oral presentation	15-20 August 2016	IGU Urban Commission Annual Meeting: Governing Globalizing Cities, Shanghai
Geyer, H Prof	Complex Urban Systems and processes of cities' transformation V	Discussant	15-20 August 2016	IGU Urban Commission Annual Meeting: Governing Globalizing Cities, Shanghai
Geyer, H			21-25 August 2016	IGU, The 33 <sup>rd</sup> International Geographical Congress, Beijing
Du Plessis, DJ	The influence of metropolitan spatial planning policies on economic activity clustering and sub-metropolitan economic performance	Oral presentation	23-26 August 2016	European Regional Science Association: Cities & Regions: Smart, Sustainable, Inclusive. Vienna, Austria
Münch, Z	Using blended learning to teach geospatial techniques	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Horn, A & Van Eeden. A	Measuring urban sprawl in the Western Cape Province, South Africa: an urban sprawl index for comparative purposes	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Geyer, H jnr	Determining the micro-effects of dimensionality on agent mobility in Polycentric City Regions using fractal scaling	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Horn, A	Housing geographies and the Southern city	Session chair	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Spocler, M	Urban renewal and its	Session chair	25-28 August 2016	Society of South African Geographers

	diverse practices			conference, Stellenbosch
Münch, Z	Remote sensing applications	Session chair	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Zweig, P	Awkward conversations in small towns: experimenting with student-led research projects	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Williams, S	Fisheries in transition: Fisher's perceptions of the new South African small-scale fisheries policy (SSFP) and its implementation	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Ferreira, S	The South African economy: are we innovating or closing down	Session chair	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Lombard, A & Ferreira S	The spatial distribution of renewable energy infrastructure in three particular provinces of South Africa	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Van Eeden, A	Participatory GIS as a technique that may strengthen outcomes of public sector urban planning: Cape Town, South Africa	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
De Klerk, H	Using remote sensing in support of environmental management: a framework for selecting products, algorithms and methods	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Du Plessis, DJ	Spatial clustering trends of economic activities in South African cities	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Horn, A	The real (hi)story of spatial planning in Cape Town, South Africa	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Spocter, M	Privatisation of municipal golf courses in small towns in the	Oral presentation	25-28 August 2016	Society of South African Geographers conference,

	Western Cape			Stellenbosch
Williams, S	Land and the politics of conservation	Session chair	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Van Niekerk, A	Lessons learned in developing a 2m resolution digital elevation model of South Africa	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Mashimbye, E	Geographical Information Technology development and techniques	Session chair	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Van Niekerk, A, et al	Developing and verifying an irrigated agriculture map of South Africa using earth observation methods	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
De Waal, J	African regional climatology	Session chair	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
De Klerk, H	GIS application: mapping and analysis	Session chair	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Kemp, J	Growing applications of spaceborne radar imagery for mapping and monitoring South Africa's land and ocean surfaces	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Mashimbye, E	Salinity mapping at catchment scale using terrain attributes	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Münch, Z	Evaluating temporal landscape change through intensity analysis and trend analysis	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Willemse, L	A new lease of life, or not? Determining the changes in the living conditions of SADC migrants in four metropolitan areas from 2001-2011	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch

Visser, G	The South African tourism system: reflections on student research	Oral presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Bordelon, L & Ferreira, S	Reading the Winelands through tourist lenses	Oral Presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Donaldson, R & Lombard, E	Cultural mapping of the creative arts industries in Cape Town	Poster presentation	25-28 August 2016	Society of South African Geographers conference, Stellenbosch
Donaldson, R; Perold, R & Devisch, O	A new conception of architectural practice to nurture solidarity in diversity	Oral Presentation	23-24 November 2016	Nurturing Solidarity in diversity: an interdisciplinary colloquium, Brussels
Visser, G	The origin and growth of geography as discipline at South African universities: Early 1900's to 2016	Oral Presentation	6-8 October 2016	SFB1199 Annual Conference 2016: Spatial Formats- Concepts, Historicity and Approaches towards Typologies, Leipzig, Germany
Spocter, M			15-20 August 2016	IGU Urban Commission Annual Meeting: Governing Globalizing Cities, China
Spocter, M & Cronje, C	Open-plan suburb to fortified suburb: Home fortification in Soneike, Cape Town	Oral Presentation	17-19 March 2016	South African Cities Studies Conference
Spocter, M			23-24 November 2016	Nurturing Solidarity in diversity: an interdisciplinary colloquium, Brussels
Ferreira, S			15-20 August 2016	IGU Urban Commission Annual Meeting: Governing Globalizing Cities, China
Williams, S	Sustainability of Marine ecological systems: linking multilevel governance and livelihoods in the Bequela upwelling system	Oral Presentation	November 2016	Grantees Meeting of the African initiative, Arusha, Tanzania
Poona, N		Oral Presentation	15-26 August 2016	Monitoring for Environment and Security in Africa (MESA), Flood Service,

				Harare, Zimbabwe
Poona, N		Oral Presentation	7-11 November 2016	Monitoring for Environment and Security in Africa (MESA), Flood Service, Pretoria
Van Niekerk	Wide-scale modelling of water and water availability with earth observation	Oral Presentation	1-2 February 2016	TIGER Workshop 2016: Looking After Water for Sustainable Development, Addis Ababa, Ethiopia
Meyer H & Van Niekerk A	Assessing edge and area metrics for image segmentation parameter tuning and evaluation	Oral Presentation	14-18 September 2016	GEOBIA 2016, , Enschede, Netherlands
Gilbertson J & Van Niekerk A	Value of Feature Reduction for Crop Differentiation Using Multi-Temporal Imagery, Machine Learning, and Object-Based Image Analysis	Oral Presentation	14-18 September 2016	GEOBIA 2016, Enschede, Netherlands
Louw G & Van Niekerk A	Object-Based Symmetric Difference for Land Surface Segmentation Scale Parameter Optimisation	Oral Presentation	14-18 September 2016	GEOBIA 2016, Enschede, Netherlands
Van Niekerk A	Keynote: What is the potential of new earth observation (EO) data for monitoring ecosystems at national, regional and local scales? Trilateral workshop between South Africa, Egypt and the UK on Ecosystems Services for Water and Food Security	Keynote Speaker	29 September – 1 October 2016	Stellenbosch, South Africa
Van Niekerk A, Goudriaan R, Jarman C, Pauw T, Stephenson G, Muller J	Mapping irrigated agriculture in South Africa. South African National Committee on Irrigation and Drainage (SANCID)	Oral Presentation	11 October 2016	Rawsonville, South Africa

### Postgraduate Research summary – completed in 2016:

BA Honours = 15 students

BSc Honours = 9 students

MA in Geography and Environmental Studies = 1 student

MSc in Geography and Environmental Studies = 1 student

MSc in Geoinformatics = 3 students

**Curriculum presented:**

Since the Department of Geography and Environmental Studies underwent major expansion during 2009 through two initiatives: a university Overarching Strategic Plan (OSP) focused on GIT and the incorporation of new and externally funded Centre for Urban and Regional Innovation and Statistical Exploration (CRUISE) and in 2011 the incorporation of the Disaster Mitigation for Sustainable Livelihoods Programme (DiMP), the forerunner for RADAR (Research Alliance for Disaster and Risk Reduction) numerous degree programmes have been introduced. Some of these are GIT and Environment and Development at undergraduate level, to Urban and Regional Planning and Disaster Risk Science and Development at masters level. Please visit the departmental website for full details of all these courses: [www.sun.ac.za/geography](http://www.sun.ac.za/geography)

**Student Numbers (2016):**

<b>Level</b>	<b>2016</b>
First year	350
Second year	230
Third year	130
Honours	25
Masters	60
Doctoral	21

## University of the Witwatersrand School of Geography, Archaeology & Environmental Studies

### Head/Chair of Department:

<b>Name (Title, Surname, Initials)</b>	<b>Area of specialisation</b>	<b>E-mail</b>	<b>Office Telephone Number</b>
<b>Prof Ahmed, F.</b>	<b>Remote sensing &amp; GIS</b>	<b><i>Fethi.Ahmed@wits.ac.za</i></b>	<b>011 717 6503</b>

### Information about the Geographers in the Department

<b>Name (Title, Surname, Initials)</b>	<b>Rank/Position</b>	<b>Area of specialisation</b>	<b>E-mail</b>	<b>Office Telephone number</b>
Prof Curtis, CJ	Professor, Head of Geography Division	Water resources, water & air pollution, environmental change, biogeochemical cycles	<i>Christopher.curtis@wits.ac.za</i>	011 717 6505
Dr Adam, E	Lecturer	Remote sensing and GIS, applied environmental science and precision agriculture, especially mapping and monitoring various properties of vegetation	<i>Elhadi.Adam@wits.ac.za</i>	011 717 6532
Prof Grab, S	Professor	historical climate change, climatic & sandstone geomorphology, palaeoenvironmental change, periglacial geomorphology	<i>Stefan.grab@wits.ac.za</i>	011 717 6512
Prof Knight, J	Professor	geosciences, sedimentary systems, responses of landscapes and sedimentary	<i>Jasper.knight@wits.ac.za</i>	011 717 6508



		systems to climatic and environmental changes during the late Pleistocene and Holocene		
Dr Merlo, S	Lecturer	GIS and remote sensing, archaeology	<i>Stefania.merlo@wits.ac.za</i>	011 717 6509
Dr Moolla, R	Lecturer	Atmospheric sciences, environmental health, air quality and pollution (especially VOCs, ozone), waste management and health risk analysis	<i>Raeesa.moolla@wits.ac.za</i>	011 717 6522
Dr Samson, M	Senior Lecturer	Human geography, economic geography, Africa Waste Sector Specialist for Women in Informal Employment, Globalizing and Organizing (WIEGO)	<i>Melanie.samson@wits.ac.za</i>	011 717 6521
Prof Simatele, D	Associate Professor	Environmental impact & risk assessments (EIA/ERA), environmental management systems (EMS), sustainability, climate change adaptation, solid waste management	<i>Danny.simatele@wits.ac.za</i>	011 717 6515
Dr Wafer, A	Lecturer	Human geography, economic and political geography, geographic theory, informality, infrastructure and citizenship	<i>Alex.wafer@wits.ac.za</i>	011 717 6517

## Information about the professional and support staff in the Department

Name (Title, Surname, Initials)	Position	Area of subject specialisation (if applicable)	E-mail	Office Telephone number
Ms Donna Koch	Senior Administrative Officer	n/a	<i>Donna.koch@wits.ac.za</i>	011 717 6503
Mr Thandiswe Nsimbi	Senior Technician	n/a	<i>Thandizwe.nsimbi@wits.ac.za</i>	011 717 6520
Yingisani Chabalala	Senior GIS & Remote Sensing Technician	GIS	<i>yingisani.chabalala@wits.ac.za</i>	011 717 6513
Mrs Khanyo Ngubo	Finance Officer	n/a	<i>khanyo.ngubo@wits.ac.za</i>	011717 6584
Mr Clarence Madithapa	Procurement Officer	n/a	<i>clarence.madithapa@wits.ac.za</i>	011 717 6513
Ms Wendy Phillips	Cartographer	n/a	<i>Wendy.phillips@wits.ac.za</i>	011 717 6504

## Department News

### Ongoing research projects

Geography staff are currently involved in a diverse range of projects across physical, human and environmental geography fields – but many focussing in the broad area of human-environment interactions. Some examples are provided below.

**Fethi Ahmed, Raeesa Moolla and Jennifer Fitchett** are working on a collaborative project with the Egyptian Space Agency (NARSS) exploring air quality over Cairo and Johannesburg.

**Chris Curtis** is the South African PI on the NRF-SANCOOP Bilateral Research Programme (with scientists from NIVA and NILU in Norway) AcidWater – acid deposition, stream acidification and modelling ecological impacts in the Waterberg, Highveld, Cathedral Peak (with SAEON) and South West Cape (2015-2017).

**Stefan Grab** has started a new climate and environmental history project focusing on the Cape region, covering the 17th and 18th centuries. The project is in collaboration with colleagues in the UK and Netherlands and is funded through a Newton Mobility Grant and the Dutch Government.

**Jasper Knight and Elhadi Adam** are working with scientists from the Agricultural Research Council and with partners from three universities in Japan on a joint JSPSNRF project looking at future climate and landuse change and changing water quality of lakes and dams.

**Jasper Knight** has been working with colleagues in Japan and Australia on the impacts on earthquakes and tsunamis on coastal sediment systems. In a study with James Goff (University of New South Wales, Australia) they describe how inappropriate coastal reconstruction following

the 2004 Indian Ocean and 2011 Tohoku-Oki (Japan) tsunamis may hinder long-term coastline recovery and may result in increased vulnerability to future tsunamis.

**Jasper Knight** is completing two 3-year NRF-funded projects on 'Landscape evolution and palaeohydrology of the Drakensberg' and 'River sediment system responses to climate forcing evaluated using partial bleaching of luminescence signal'.

**Jasper Knight** and **Stefania Merlo** are working with European archaeologists on a project funded by the Ministero delgi Affari Esteri (Italy), on 'Archaeology in risk areas: documentation of the remote landscape of the Algerian Sahara'.

**Melanie Samson** is leading a 3-year Department of Science and Technology and South African Council for Scientific and Industrial Research (CSIR) grant for research on "Lessons from Waste Picker Integration Initiatives - Development of Evidence Based Guidelines to Integrate Waste Pickers into South African Municipal Waste Management Systems". 2016-2019 (R1,932,160).

**Danny Simatele** is currently working on two major projects namely: an NRF funded project that investigates the role of the citizenry in environmental management and sustainability using EIAs and EMS as analytical and operational frameworks. Secondly, he is, together with researchers from the Technical University of Mombasa working on an ESRC funded project that is investigating the vulnerability of coastal regions to climate change in East Africa. They describe how changes in oceanic temperatures are affecting the migratory patterns of fish stocks and the associated impacts on costal fishing communities.

**Alex Wafer** is PI for NRF CSUR GRANT #93630 Infrastructures of State and Citizenship in post-apartheid South Africa, and HSGR GRANT #96022 Informal Citizenship (both 2015-2017).

#### 2015-16 dated publications:

Wits Geography Publications 2015	
Category: Journal Article	
Submission Type: DoE Submissible (n=22)	
PUBNO	PUBLICATION
Wits-2016-000305	<b><u>Dangor FE</u></b> , Hoogendoorn G, <b><u>Moolla R (2015)</u></b> Medical tourism by Indian-South Africans to India: an exploratory investigation <i>Bulletin of geography: socio-economic series</i> , 29 pp. 19 - 30.
Wits-2016-001939	Muhire I, <b><u>Ahmed FE (2015)</u></b> Spatio-temporal trend analysis of precipitation data over Rwanda <i>South African Geographical Journal</i> , 97 (1), pp. 50 - 68.
Wits-2016-001940	<b><u>Simatele DM</u></b> , <b><u>Simatele MC (2015)</u></b> Climate variability and urban food security in sub-Saharan Africa: lessons from Zambia using an asset-based adaptation framework

	<i>South African Geographical Journal</i> , 97 (3), pp. 243 - 263.
Wits-2016-001941	<b><u>Simatele DM, Longondio CE (2015)</u></b> Scavenging for solid waste in Kinshasa: A livelihood strategy for the urban poor in the Democratic Republic of Congo <i>HABITAT INTERNATIONAL</i> , 49 (1), pp. 266 - 274.
Wits-2016-001942	<b><u>Simatele DM, Simatele MC (2015)</u></b> Migration as adaptive strategy to climate variability: A study of the Tonga speaking people of Southern Zambia. <i>Disasters</i> 39(4), pp 762 -781
Wits-2016-002026	<b><u>Moolla R, Curtis CJ, Knight J (2015)</u></b> Assessment of occupational exposure to BTEX compounds at a bus diesel-refueling bay: A case study in Johannesburg, South Africa <i>SCIENCE OF THE TOTAL ENVIRONMENT</i> , 537 pp. 51 - 57.
Wits-2016-002030	<b><u>Moolla R, Curtis CJ, Knight J (2015)</u></b> Occupational Exposure of Diesel Station Workers to BTEX Compounds at a Bus Depot <i>International Journal of Environmental Research and Public Health</i> , 12 pp. 4101 - 4115.
Wits-2016-002097	Muhire I, <b><u>Ahmed FE</u></b> , Abutaleb K (2015) Relationships between Rwandan seasonal rainfall anomalies and ENSO events <i>THEORETICAL AND APPLIED CLIMATOLOGY</i> , 122 pp. 271 - 284.
Wits-2016-002125	Harrison S, <b><u>Knight J</u></b> , ROWAN A (2015) The southernmost Quaternary niche glacier system in Great Britain <i>JOURNAL OF QUATERNARY SCIENCE</i> , 30 (4), pp. 325 - 334.
Wits-2016-002126	Mutanga O, <b><u>Adam E</u></b> , Adjorlolo C, Abdel-Rahman E (2015) Evaluating the robustness of models developed from field spectral data in predicting African grass foliar nitrogen concentration using WorldView-2 image as an independent test dataset . <i>International Journal of Applied Earth Observation and Geoinformation</i> , 34 pp. 178 - 187.
Wits-2016-002127	Adelabu S, Mutanga O, <b><u>Adam E (2015)</u></b> Testing the reliability and stability of the internal accuracy assessment of random forest for classifying tree defoliation levels using different validation methods <i>Geocarto International</i> , 30 (7), pp. 810 - 821.
Wits-2016-002128	<b><u>Knight J (2015)</u></b> Ductile and brittle styles of subglacial sediment deformation: An example from western Ireland <i>SEDIMENTARY GEOLOGY</i> , 318 pp. 85 - 96.
Wits-2016-002146	<b><u>Cunningham AC, Evans MY, Knight J (2015)</u></b> Quantifying bleaching for zero-age fluvial sediment: A Bayesian approach <i>RADIATION MEASUREMENTS</i> , 81 pp. 55 - 61.
Wits-2016-002201	Muhire I, <b><u>Ahmed FE</u></b> , Abutaleb K, Kabera G (2015) Impacts of projected changes and variability in climatic data on major food crops yields in Rwanda <i>International Journal of Plant Production</i> , 9 (3), pp. 347 - 371.
Wits-2016-002204	<b><u>Tongwane MI, Piketh SJ, Stevens LB</u></b> , Ramotubei T (2015) Greenhouse gas emissions from road transport in South Africa and Lesotho between 2000 and 2009 <i>TRANSPORTATION RESEARCH PART D-TRANSPORT AND ENVIRONMENT</i> , 37 pp. 1 - 13.

Wits-2016-002205	<b><u>Nash DJ</u></b> , Pribyl K, Klein J, Endfield G, Kniveton D, Adamson G (2015) Tropical cyclone activity over Madagascar during the late nineteenth century <i>INTERNATIONAL JOURNAL OF CLIMATOLOGY</i> , 35 pp. 3249 - 3261.
Wits-2016-002210	<b><u>Fitchett JM, Grab SW, Thompson D I (2015)</u></b> Plant phenology and climate change: Progress in methodological approaches and application <i>PROGRESS IN PHYSICAL GEOGRAPHY</i> , 39 (4), pp. 460 - 482.
Wits-2016-002212	<b><u>Simatele DM</u></b> , Simatele M (2015) Migration as an adaptive strategy to climate variability: a study of the Tonga speaking people of Southern Zambia <i>DISASTERS</i> , 39 (4), pp. 762 - 781.
Wits-2016-002215	<b><u>Craparo A</u></b> , Van Asten P, Läderach L, Jassogne L, <b><u>Grab SW (2015)</u></b> <i>Coffea arabica</i> yields decline in Tanzania due to climate change: Global implications <i>AGRICULTURAL AND FOREST METEOROLOGY</i> , 207 pp. 1 - 10.
Wits-2016-002306	Udeigwe T, Teboh J, <b><u>Eze PN</u></b> , Stietiya M, Kumar V, Hendrix J, Mascagni Jr H, Ying T, Kandakji T (2015) Implications of leading crop production practices on environmental quality and human health <i>JOURNAL OF ENVIRONMENTAL MANAGEMENT</i> , 151 pp. 267 - 279.
Wits-2016-002308	<b><u>Letsie MA, Grab SW (2015)</u></b> Assessment of Social Vulnerability to Natural Hazards in the Mountain Kingdom of Lesotho <i>MOUNTAIN RESEARCH AND DEVELOPMENT</i> , 35 (2), pp. 115 - 125.
Wits-2016-002470	<b><u>Pienaar B, Thompson D I, Erasmus BF, Hill T, Witkowski ET (2015)</u></b> Evidence of climate-induced range shift in <i>Brachystegia</i> (miombo) woodland . <i>SOUTH AFRICAN JOURNAL OF SCIENCE</i> , 111 (7/8), pp. 1 - 9.
<b>Category: Journal Article</b>	
<b>Submission Type: Other (n=5)</b>	
<b>PUBNO</b>	<b>PUBLICATION</b>
Wits-2016-001980	Abutaleb K, Ngie A, Darwish A, Ahmed M, Arafat S, <b><u>Ahmed FE (2015)</u></b> Assessment of Urban Heat Island Using Remotely Sensed Imagery over Greater Cairo, Egypt. <i>Advances in Remote Sensing</i> , 4 pp. 35 - 47.
Wits-2016-002131	<b><u>Knight J (2015)</u></b> Anthropocene futures: People, resources and sustainability <i>The Anthropocene Review</i> , 2 (2), pp. 152 - 158.
Wits-2016-002381	Muhire I, <b><u>Ahmed FE</u></b> , Elbasit M (2015) Spatio-temporal variations of rainfall erosivity in Rwanda . <i>Journal of Soil Science and Environmental Management</i> , 6 (4), pp. 72 - 83.
Wits-2016-002423	Muhire I, Tesfamichael S, <b><u>Ahmed FE</u></b> , Minani E (2015) Spatio-temporal trend analysis of projected temperature over Rwanda. <i>Journal of Environmental Science, Toxicology and Food Technology</i> , 9 (11), pp. 64 - 71.

Wits-2016-003444	<p><b>Samson M (2015)</b></p> <p>Accumulation by dispossession and the informal economy– Struggles over knowledge, being and waste at a Soweto garbage dump</p> <p><i>ENVIRONMENT AND PLANNING D-SOCIETY &amp; SPACE</i>, 33 (5), pp. 813 - 830.</p>
<b>Category: Chapter in Book (n=7)</b>	
<b>PUBNO</b>	<b>PUBLICATION</b>
Wits-2016-000440	<p><b>Matshedisho KR, Wafer A (2015)</b></p> <p>Hillbrow, Johannesburg. Chapter 4.</p> <p>In S. Vertovec (ed.), <i>Diversities old and new. Migration and socio-spatial patterns in New Yor, Singapore and Johannesburg</i> (pp. 67-83). Hampshire: Palgrave macmillan. 978-1-137-49547-1.</p>
Wits-2016-000838	<p><b>Cawthorn RG, Knight J, McCarthy TS (2015)</b></p> <p>Geomorphological Evolution of the Pilanesberg. Chapter 5.</p> <p>In S. Grab &amp; J. Knight (eds.), <i>Landscapes and Landforms of South Africa</i> (pp. 39-46). Geneva: Springer International Publishing. 978-3-319-03559-8.</p>
Wits-2016-002132	<p><b>Grab SW, Knight J (2015)</b></p> <p>The Drakensberg Escarpment: Mountain Processes at the Edge</p> <p>In S. Grab &amp; J. Knight (eds.), <i>Landscapes and Landforms of South Africa</i> (pp. 47-55). Cham Heidelberg: Springer. 978-3-319-03559-8.</p>
Wits-2016-002133	<p><b>Knight J, Grab SW, Esterhuysen AB (2015)</b></p> <p>Geoheritage and Geotourism in South Africa</p> <p>In S. Grab &amp; J. Knight (eds.), <i>Landscapes and Landforms of South Africa</i> (pp. 165-173). Cham Heidelberg: Springer. 978-3-319-03559-8.</p>
Wits-2016-002135	<p><b>Grab SW, Knight J (2015)</b></p> <p>Landscapes and Landforms of South Africa—An Overview</p> <p>In S. Grab &amp; J. Knight (eds.), <i>Landscapes and Landforms of South Africa</i> (pp. 1-9). Cham Heidelberg: Springer. 978-3-319-03559-8.</p>
Wits-2016-002136	<p>Passmore D, <b>Knight J</b>, Harrison S (2015)</p> <p>Military Geography: Landscapes of the Anglo-Boer War</p> <p>In S. Grab &amp; J. Knight (eds.), <i>Landscapes and Landforms of South Africa</i> (pp. 155-164). Cham Heidelberg: Springer. 978-3-319-03559-8.</p>
Wits-2016-002140	<p><b>Knight J, Grab SW (2015)</b></p> <p>Rocky Shorelines of the Wild Coast</p> <p>In S. Grab &amp; J. Knight (eds.), <i>Landscapes and Landforms of South Africa</i> (pp. 57-63). Cham Heidelberg: Springer. 978-3-319-03559-8.</p>
<b>Category: Conference Contribution (n=1)</b>	
<b>PUBNO</b>	<b>PUBLICATION</b>
Wits-2016-002129	<p><b>Els A, Merlo S, Knight J (2015)</b></p> <p>COMPARISON OF TWO SATELLITE IMAGING PLATFORMS FOR EVALUATING SAND DUNE MIGRATION IN THE UBARI SAND SEA (LIBYAN FAZZAN)</p> <p><i>The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XL-7/W3, 2015 36th International Symposium on Remote Sensing of Environment, 11–15 May 2015, Berlin, Germany: pp 1375-1380</i></p>

## Wits Geography Publications captured to December 2016

Category: Journal Article	
Submission Type: DOE SUBMISSABLE (n=24)	
Publication No.	Publication
WITS-2017-0000007	<b><u>Weir-Smith Gezina</u></b> Changing boundaries: overcoming modifiable areal unit problems related to unemployment data in South Africa <i>SOUTH AFRICAN JOURNAL OF SCIENCE</i> , 2016, 112 (3/4) pp. 1 - 8.
WITS-2017-0000044	<b><u>Stratford Dominic, Merlo Stefania</u></b> , Brown Stephen The development of a new geospatial framework for the palaeoanthropological site of the Sterkfontein Caves, Cradle of Humankind, Gauteng, South Africa <i>JOURNAL OF FIELD ARCHAEOLOGY</i> , 2016, 41 (2) pp. 1 - 11.
WITS-2017-0000929	<b><u>Dirsuweit Teresa, Mohamed Sumayya</u></b> Vertical and horizontal communities of practice: gender and geography in South Africa <i>South African Geographical Journal</i> , 2016, 98 (3) pp. 531 - 541.
WITS-2017-0001307	Mutanga Onesimo, Dube Timothy, <b><u>Ahmed Fath</u></b> Progress in remote sensing: vegetation monitoring in South Africa <i>South African Geographical Journal</i> , 2016, 98 (3) pp. 461 - 471.
WITS-2017-0001308	Mokhele Tholang, Mutanga Onesimo, <b><u>Ahmed Fath</u></b> Development of census output areas with AZTool in South Africa <i>SOUTH AFRICAN JOURNAL OF SCIENCE</i> , 2016, 112 (7/8) pp. 1 - 7.
WITS-2017-0001309	Mzinyane Thamsanqua, Van Aardt Jan, <b><u>Ahmed Fath</u></b> , Gebreslasie Michael Predicting soil nitrogen content using narrow-band indices from Eucalyptus grandis canopies as proxy <i>South African Journal of Plant and Soil</i> , 2016, 33 (1) pp. 23 - 31.
WITS-2017-0001310	Muhire Innocent, <b><u>Ahmed Fath</u></b> Spatiotemporal trends in mean temperatures and aridity index over Rwanda <i>THEORETICAL AND APPLIED CLIMATOLOGY</i> , 2016, 123 pp. 399 - 414.
WITS-2017-0001353	<b><u>Abutaleb Khaled, Ahmed Fath</u></b> Modeling of urban change using remote sensing data and cellular automata technique <i>Arabian Journal of Geosciences</i> , 2016, 9 (N656) pp. 1 - 10.
WITS-2017-0001414	<b><u>Mokotjomela Thabiso</u></b>

	<p>Patterns of granivory in Acacia cyclops stands under biological control at Langebaanweg, South Africa</p> <p><i>Natureza &amp; Conservacao</i>, 2016, 14 pp. 14 - 19.</p>
WITS-2017-0001416	<p><b><u>Knight Jasper</u></b></p> <p>Subglacial processes from drumlins in Clew Bay, western Ireland</p> <p><i>EARTH SURFACE PROCESSES AND LANDFORMS</i>, 2016, 41 pp. 277 - 288.</p>
WITS-2017-0001417	<p><b><u>Eze Peter</u>, <u>Knight Jasper</u>, <u>Evans Mary</u></b></p> <p>Tracing recent environmental changes and pedogenesis using geochemistry and micromorphology of alluvial soils, Sabie-Sand River Basin, South Africa</p> <p><i>GEOMORPHOLOGY</i>, 2016, 268 pp. 312 - 321.</p>
WITS-2017-0001419	<p><b><u>Knight Jasper</u></b>, Goff James R</p> <p>Coastal science for post-tsunami reconstruction</p> <p><i>HOLOCENE</i>, 2016, 26 (8) pp. 1334 - 1340.</p>
WITS-2017-0001420	<p><b><u>Mayet Nasreen</u>, <u>Knight Jasper</u>, <u>Grab Stefan</u></b></p> <p>Spatial and temporal patterns of lightning strikes in the eastern Lesotho Highlands, southern Africa</p> <p><i>South African Geographical Journal</i>, 2016, 98 (2) pp. 321 - 336.</p>
WITS-2017-0001423	<p><b><u>Mokotjomela Thabiso</u></b>, Downs C.T, Esler K, <b><u>Knight Jasper</u></b></p> <p>Seed dispersal effectiveness: A comparison of four bird species feeding on seeds of invasive Acacia cyclops in South Africa</p> <p><i>SOUTH AFRICAN JOURNAL OF BOTANY</i>, 2016, 105 pp. 259 - 263.</p>
WITS-2017-0001424	<p>Goff J, <b><u>Knight Jasper</u></b>, Sugawara Daisuke, Terry James P</p> <p>Anthropogenic disruption to the seismic driving of beach ridge formation: The Sendai coast, Japan</p> <p><i>SCIENCE OF THE TOTAL ENVIRONMENT</i>, 2016, 544 pp. 18 - 23.</p>
WITS-2017-0001471	<p><b><u>Kubanza Nzalalemba</u>, <u>Simatele Danny</u></b></p> <p>Social and environmental injustices in solid waste management in sub-Saharan Africa: a study of Kinshasa, the Democratic Republic of Congo</p> <p><i>Local environment</i>, 2016, 21 (7) pp. 866 - 882.</p>
WITS-2017-0001472	<p><b><u>Musavengane Regis</u>, <u>Simatele Danny</u></b></p> <p>Social capital and the pursuit of ecotourism as a land-use option in land reformed communities: a study of Kwa-Zulu Natal's tribal Areas, South Africa</p> <p><i>African Journal of Hospitality, tourism and Leisure (AJHTL)</i>, 2016, 5 (4) pp. 1 - 21.</p>
WITS-2017-0001483	<p><b><u>Fitchett Jennifer</u>, <u>Grab Stefan</u>, <u>Bamford Marion</u></b>, MACKAY ANSON W</p> <p>A multi-proxy analysis of late Quaternary palaeoenvironments, Sekhokong Range, eastern Lesotho</p> <p><i>JOURNAL OF QUATERNARY SCIENCE</i>, 2016, 31 (7) pp. 788 - 798.</p>
WITS-2017-0001485	<p>Holmes Peter J, <b><u>Grab Stefan</u>, <u>Knight Jasper</u></b></p> <p>South African geomorphology: current status and new</p>



	challenges <i>South African Geographical Journal</i> , 2016, 98 (3) pp. 405 - 416.
WITS-2017-0001486	<b>Fitchett Jennifer, Grab Stefan</b> , Thompson Dave I Temperature and tree age interact to increase mango yields in the Lowveld, South Africa <i>South African Geographical Journal</i> , 2016, 98 (1) pp. 105 - 117.
WITS-2017-0001488	<b>Fitchett Jennifer, Grab Stefan, Bamford Marion, MACKAY A</b> A multi-disciplinary review of late Quaternary: Palaeoclimates and environments for Lesotho <i>SOUTH AFRICAN JOURNAL OF SCIENCE</i> , 2016, 112 (7/8) pp. 1 - 9.
WITS-2017-0001489	Omer Galal, Mutanga Onesimo, Abdel-Rahman Elfatih, <b>Adam Elhadi</b> Empirical Prediction of Leaf Area Index (LAI) of Endangered Tree Species in Intact and Fragmented Indigenous Forests Ecosystems Using WorldView-2 Data and Two Robust Machine Learning Algorithms <i>Remote Sensing</i> , 2016, 8 (324) pp. 1 - 26.
WITS-2017-0001490	<b>Mureriwa Nyasha, Adam Elhadi</b> , Sahu Anshuman, Tesfamichael Solomon Examining the Spectral Separability of <i>Prosopis glandulosa</i> from Co-Existent Species Using Field Spectral Measurement and Guided Regularized Random Forest <i>Remote Sensing</i> , 2016, 8 (144) pp. 1 - 16.
WITS-2017-0001491	Mansour Khalid, Mutanga Onesimo, <b>Adam Elhadi</b> , Abdel-Rahman Elfatih Multispectral remote sensing for mapping grassland degradation using the key indicators of grass species and edaphic factors <i>Geocarto International</i> , 2016, 31 (5) pp. 477 - 491.
<b>Submission Type: NOT ACCREDITED/PENDING VERIFICATION (n=2)</b>	
Publication No.	Publication
WITS-2017-0002027	Hoogendoorn Gijsbert, <b>Grant Bronwyn, Fitchett Jennifer</b> Disjunct perceptions? Climate change threats in two-low lying South African coastal towns <i>Bulletin of geography: socio-economic series</i> , 2016, 31 pp. 59 - 71.
WITS-2017-0002029	<b>Fitchett Jennifer, Grant Bronwyn</b> , Hoogendoorn G Climate change threats to two low-lying South African coastal towns: Risks and perceptions <i>SOUTH AFRICAN JOURNAL OF SCIENCE</i> , 2016, 112 (5/6) pp. 1 - 9.
<b>Category: Chapter In Book</b>	
<b>Submission Type: NOT ACCREDITED/PENDING VERIFICATION (n=1)</b>	
Publication No.	Publication

WITS-2017-0001925	<u><b>Knight Jasper, Stratford Dominic, Grab Stefan</b></u> Landscape-climate-human relations in the Quaternary of southern Africa Chapter 25 In J. Knight & S. Grab (eds.), Quaternary Environmental Change in Southern Africa: Physical and Human Dimensions (pp. 412-431). Cambridge : Cambridge University Press. 978-1-107-05579-7
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### Conference Presentations in 2015-16:

Name of presenter (s)	Title of presentation	Format of presentation	Date of conference/workshop	Name of Conference/workshop
Aobakwe Lenkwe  (Supervisor Prof Chris Curtis, Advisor Sue van Rensburg, SAEON)	Impact of storm events on the transport of solute and macronutrients in mountainous catchments under contrasting land uses at the Cathedral Peak Research Site, Drakensberg	Oral	4-8 September 2015	SAEON GSN Indibano
Aobakwe Lenkwe  (Supervisor Prof Chris Curtis, Advisor Sue van Rensburg, SAEON)	Is there a correlation between the colour of sample water and dissolved organic carbon (DOC) in mountainous catchments under contrasting land uses at the Cathedral Peak Research Site (CPRS), Drakensberg?	Oral	26-30 June 2016	SASAQS 2016
Aobakwe Lenkwe  (Supervisor Prof Chris Curtis,	Is there a relationship between the colour of sample water	Poster	9-13 October 2016	ILTER 1 <sup>st</sup> Open Science Meetign

Advisor Sue van Rensburg, SAEON)	and dissolved organic carbon (DOC) in mountainous catchments under contrasting land uses at the Cathedral Peak Research Site (CPRS), Drakensberg?			
Aobakwe Lenkwe  (Supervisor Prof Chris Curtis, Advisor Sue van Rensburg, SAEON)	Is there a relationship between the colour of sample water and dissolved organic carbon (DOC) in mountainous catchments under contrasting land uses at the Cathedral Peak Research Site (CPRS), Drakensberg?	Oral	5-8 December 2016	3 <sup>rd</sup> National Conference on Global Change
Chris Curtis	Acid rain, critical loads and surface water acidification in South Africa	Oral	28th June-2nd July, 2015	SASAQs 2015 , Champagne Castle, KZN
Kari Austnes	Kari Austnes, <b>Chris J. Curtis, Londiwe Khuzwayo</b> , Stuart J. Piketh. Acid deposition and acidification of waters in South Africa	Oral	October 19-23, 2015	Acid Rain 2015, Rochester, USA
Stuart Piketh	SJ Piketh, T Bigala, G Makatshwa, <b>C Curtis</b> , P Beukes. Deposition of acidifying species in the Waterberg of	Oral	October 19-23, 2015	Acid Rain 2015, Rochester, USA

	South Africa in response to expanding coal-fired power generation.			
Londiwe Khuzwayo	<b>Londiwe Khuzwayo, Chris Curtis, Kari Austnes, Torleif Bækken</b>  Assessing the sensitivity of macroinvertebrates to acid deposition in South African streams	Poster	October 19-23, 2015	Acid Rain 2015, Rochester, USA
Chris Curtis	Critical loads of a neglected ecosystem: Afromontane tarns in the Drakensberg Mountains of South Africa and Lesotho	Poster	October 19-23, 2015	Acid Rain 2015, Rochester, USA
Chris Curtis	Hydrochemistry of headwater streams in the central Magaliesberg Biosphere Reserve.	Oral	26-30 <sup>th</sup> June, 2016	SASAQs 2016, Skukuza
Londiwe Khuzwayo, Chris Curtis	Do seasonal changes in pH affect the distribution of <i>Ephemeroptera</i> (Mayfly) species in the Waterberg headwater streams?	Oral	26-30 <sup>th</sup> June, 2016	SASAQs 2016, Skukuza
Chris Curtis	A Proposed Research Unit at Wits: Centre in Water Research and Development	Oral (invited)	26-27 Sept 2016	NSTF Forum <i>Skills Drought in the Water Sector</i> , Emperors Palace, Johannesburg

	(CiWaRD)			
Chris Curtis	Acid deposition and stream acidification in three regions of South Africa	Oral (invited)	5 <sup>th</sup> October 2016	NACA National Conference- SASOL/ ESKOM Workshop; Atmospheric Deposition Studies in South Africa, Nelspruit
Chris Curtis	From power station emissions to ecological impacts in streams; first results from the AcidWater bilateral NRF-SANCOOP Project	Oral	5-8 December 2016	NRF 3 <sup>rd</sup> National Conference on Global Change, Durban
Devon du Plessis  (Supervisors Profs Chris Curtis & Danny Simatele)	Exploring the Role of Green Space (Parks) in Improving Water Quality of Rivers in Johannesburg	Oral	22-25 Sept 2016	SSAG Student Conference, Stellenbosch
Stefan Grab	Lupini, A., <b>Grab, S.W.</b> “ <i>Building a 19<sup>th</sup> Century climate chronology from the Karoo: 1840-1870</i> ”.		17-22 April 2016	<u>European Geophysical Congress</u> ,Vienna, Austria.
Stefan Grab	Brown, A., <b>Grab, S.W.</b> , Lennard, C. “ <i>Comparison of 19<sup>th</sup> Century ship log wind data and adjoining land-based Royal Observatory data: 1843-1855</i> ”.		17-22 April 2016	<u>European Geophysical Congress</u> ,Vienna, Austria.
Stefan Grab	“ <i>Mountains of Change: Reflections on environmental change in the Drakensberg Alpine Center –</i>		16-17 November 2016	<u>Afromontane Research Unit Colloquium</u> , Golden Gate Highlands National Park, South Africa.

	<i>past and present</i> ".			
Melanie Samson	"Co-Governing Environmental Sustainability with Informal Actors - Insights from Innovations in the Brazilian, Indian, and South African Waste Management Sectors."	Oral (invited)	9 June 2016	South Africa-China Conference on Social Governance, National Institute for the Humanities and Social Science (NIHSS)/ South African BRICS Think Tank (SABTT) & Institute of Sociology at Chinese Academy of Social Sciences (CASS), Cape Town, South Africa.
Melanie Samson	"Don't Waste the Space: How Theorizing Relations Between Space, Waste, and Organizing Contributes to Comparative Analysis of Informal Worker Organizing."	Oral	10-14 July, 2016	Third ISA Forum of International Sociology, Vienna, Austria.
Melanie Samson	"Getting Dirty Dealing with Nationalism – Thinking Alongside Gill Hart and a lot of South African Trash."	Oral	March 29-April 1, 2016	American Association of Geographers Annual Meeting, San Francisco, United States.
Melanie Samson	"Recycling Relations: Reconstituting Social Relations on a Soweto Garbage Dump."	Oral	March 29-April 1, 2016	American Association of Geographers Annual Meeting, San Francisco, United States.
Melanie Samson	"The Social Uses of the Law and Struggles over Waste – Reclaiming the	Oral	June 28-July 1, 2015	South African Sociology Association Congress, University of Johannesburg, Johannesburg, South

	Law and the State in the Informal Economy.”			Africa.
Melanie Samson	“Enclosure, Epistemic Dispossession and Challenging Notions of Disposability”	Oral (invited)	June 22-26, 2015	<i>Antipode</i> Institute for Geographies of Justice, Johannesburg
Alex Wafer	<i>Thinking Geographically – re-visiting the discipline in the South African undergraduate curriculum</i>	Oral	25-29 Sept 2016	SSAG 2016, Stellenbosch
Alex Wafer	<i>Infrastructure and the Materiality of Citizenship in Johannesburg</i>	Oral	30 Aug-02 Sept 2016	RGS/IBG, London
Alex Wafer	<i>Infrastructures of Citizenship</i>	Oral	30 March-02 April 2016	AAG, San Francisco
Alex Wafer	<i>Infrastructure, Informality and Citizenship in Cosmo City</i>	Oral	17 - 19 March 2016	South African Cities Studies Conference, Durban
Jasper Knight	<i>Global sediment systems in the Anthropocene</i>	Keynote oral	27 August – 4 September 2016	International Geological Congress, Cape Town
Jasper Knight	<i>River sediment system responses to climate forcing evaluated using luminescence partial bleaching</i>	Oral	27 August – 4 September 2016	International Geological Congress, Cape Town
Jasper Knight	<i>Environmental significance of bulk geochemistry and metal anomalies: Hirnantian rocks of the Valongo Anticline, northern</i>	Oral	27 August – 4 September 2016	International Geological Congress, Cape Town

	<i>Portugal</i>			
Jasper Knight	<i>Controls on saltmarsh stratigraphy and evolution, northwest Ireland</i>	Oral	27 August – 4 September 2016	International Geological Congress, Cape Town
Jasper Knight	<i>Basalt weathering in the Lesotho Highlands, southern Africa</i>	Oral	27 August – 4 September 2016	International Geological Congress, Cape Town
Jasper Knight	<i>Plant ecology and geomorphology of a low alpine summit in southern Africa</i>	Oral	7-10 September 2016	SEDIBUD meeting, Bulgaria
Jasper Knight	<i>Geomorphology, sediments and luminescence signal analysis of recent floods on the Sabie River, South Africa</i>	Oral	12-15 September 2016	Paleofloods conference, Rapid City, SD, USA
Jasper Knight	<i>Re-evaluating the Last Glacial Maximum in southern Africa</i>	Oral	5-9 December 2016	AQUA symposium, Auckland, New Zealand
Danny Simatele and Eromose Ebhuoma	<i>'Asset adaptation And rural Food security Nexus in a changing climate:A Case study of the Rural Delta State in Nigeria</i>	Oral	10 – 14 August 2016	Ryerson University, Toronto, Ontario, Canada.
Danny Simatele and Smangele Dlamini	<i>What a Management Waste: Unrecognized Informal Solid Waste Recycling in an Emerging African Megacity</i>	Oral	3 – April 6, 2016	Philadelphia, PA, USA
	<i>Unrecognised Informal Solid Waste Recycling In</i>			WIT conference



Danny Simatele and Smangele Dlamini	An Emerging African Megacity: A Study Of Johannesburg, South Africa	Oral	7 – 9 <sup>th</sup> June, 2016	Valencia, Spain
Danny Simatele and Henry Bwikibili Tantoh	CBNRM in sub-Saharan Africa: Problematics of water resource governance in Northwest Cameroon	Oral	27-30 <sup>th</sup> September, 2016	Calgary, Alberta, Canada

### Research Master Dissertations completed in 2015-16:

<i>Student's Name</i>	<i>Title of dissertation</i>	<i>Institution</i>	<i>Qualification</i>	<i>Supervisor</i>	<i>Co-supervisor</i>
Beverley Cindy Barnes	The spatial distribution of haze over the Bojanala district	<i>Wits</i>	<i>MSc Diss.</i>	Stefan Grab	
Michael Richard Benjamin	The use of RADAR and Hydrological modelling for flash flood evaluation and prediction	<i>Wits</i>	<i>MSc Diss.</i>	Roelof Burger	<i>Stefan Grab</i>
Fidelis Chihambakwe	A critical examination of the relationship between urban greenness and sustainable development of urban spaces in UMhlatuze, Kwa-Zulu Natal, South Africa	<i>Wits</i>	<i>MSc Diss.</i>	Jasper Knight	
Lindiwe Dlamini	The perception of clean cookstove technologies in rural Swaziland	<i>Wits</i>	<i>MSc Diss.</i>	Stefan Grab	
Laura Novienyo Abila Dotse	Exploring the relationship between water scarcity on food	<i>Wits</i>	<i>MSc Diss.</i>	Danny Simatele	

	and nutritional security in rural households in the Ngqeleni Location, Eastern Cape				
Nicoletta Maraschin	Faunal distribution in relation to rainfall patterns in the Kalahari Gemsbok National Park: 2004 - 2013	<i>Wits</i>	<i>MSc Diss.</i>	Stefan Grab	
Nyasha Mureriwa	Mapping _Prosopis Glandulosa_(mesquite) invasion in arid environment of South Africa using remote sensing techniques	<i>Wits</i>	<i>MSc Diss.</i>	Elhadi Adam	
Melisha Nagiah	Understanding the value of the Kwa-Thema extension 3 wetland in response to anthropogenic activities	<i>Wits</i>	<i>MSc Diss.</i>	Danny Simatele	
Ravanya Naidoo	A glimpse at the 17th century Cape climate of Southern Africa: documentary based evidence from the Jan van Riebeeck Diaries	<i>Wits</i>	<i>MSc Diss.</i>	Stefan Grab	
Heinrich Paul Portwig	Documentary based evidence for sardine run events, east coast of South Africa: 1946 - 2012	<i>Wits</i>	<i>MSc Diss.</i>	Stefan Grab	
Ike Sephothoma Rampedi	Spatial assessment of environmental fate of acid mine drainage (AMD) contaminants in engineered wetlands along the Varkenslaagte canal	<i>Wits</i>	<i>MSc Diss.</i>	Christopher Curtis	

Dean Robinson	Exploring the value of tourism climate indices for 18 locations in South Africa	<i>Wits</i>	<i>MSc Diss.</i>	Gijsbertus Hoogendoorn	
Siyasanga Sauka	Flood risk assessment of the Crocodile River, Mpumalanga	<i>Wits</i>	<i>MSc Diss.</i>	Jasper Knight	
Tumelo Singo	Pluri-residentiality and the multihouse home: an investigation into second home ownership of the black elite residents of Soweto	<i>Wits</i>	<i>MSc Diss.</i>	Gijsbertus Hoogendoorn	
Amy Jean Trent	Mammal utilisation of artificial water sources in the central Kruger National Park: contemporary seasonal patterns and implications for climate change scenarios	<i>Wits</i>	<i>MSc Diss.</i>	Stefan Grab	

**Master Dissertations of limited scope completed in 2015-16:**

<i>Student's Name</i>	<i>Title of dissertation</i>	<i>Institution</i>	<i>Qualification</i>	<i>Supervisor</i>	<i>Co-supervisor</i>
Mpho Gegana	Comparison of object and pixel-based classifications for land-use and land cover mapping in the mountainous Mokhotlong District of Lesotho using high spatial resolution imagery	<i>Wits</i>	<i>MSc CWRR</i>	Elhadi Adam	

Simbarashe Jombo	Quantifying the impacts of the Land Reform Programme on land use and land cover changes in Chipinge District, Zimbabwe, based on Landsat observations	<i>Wits</i>	<i>MSc CWRR</i>	Elhadi Adam	
Samkelisiwe Khanyile	Towards a digital mine: A spatial database for accessing historical geospatial data on mining and related activities	<i>Wits</i>	<i>MSc CWRR</i>	Stefania Merlo	
Patricia Omo-Okoro	Temporal variation in the allocation of acid mine drainage contaminants in the waters and sediments of the engineered remediation reed beds along the Varkenslaagte stream: an autumn-winter study.	<i>Wits</i>	<i>MSc CWRR</i>	Christopher Curtis	
Mncedisi Jabulani	Detecting Ash Middens using remote sensing	<i>Wits</i>	<i>MSc CWRR</i>	Stefania Merlo	

Siteleki	techniques: a comparative study in Southern Gauteng, South Africa				
Gerald Bancroft Woollatt	Estimating measurement uncertainty for particulate emissions from stationary sources	<i>Wits</i>	<i>MSc CWRR</i>	Stefan Grab	Stuart Piketh
Shuvai Mharakurwa	Assessing availability of wetland ecosystem goods and services: A case study of the Blesbokspruit wetland in Springs, Gauteng Province	<i>Wits</i>	<i>MSc CWRR</i>	Jasper Knight	
Olivia Letlo	Transformation of agricultural land by fragmented legislations within the Ekurhuleni Metropolitan Municipality of Gauteng Province	<i>Wits</i>	<i>MSc CWRR</i>	Danny Simatele	
	Evaluation of the effectiveness of				

Madlome Felix Shonisani	Environmental Impact Assessment in promoting sustainable development in the energy sector of South Africa	<i>Wits</i>	<i>MSc CWRR</i>	Danny Simatele	
Dechuvi Kasemire Rosine	South African transnational mining companies and environmental impact assessments in the Democratic Republic of Congo	<i>Wits</i>	<i>MSc CWRR</i>	Danny Simatele	

**PhD Thesis's completed in 2015-16:**

<i>Student's Name</i>	<i>Title of thesis</i>	<i>Institution</i>	<i>Qualification</i>	<i>Supervisor</i>	<i>Co- supervisor</i>
Shaazia Bhailall	Methane and carbon dioxide emissions from landfills in South Africa	<i>Wits</i>	<i>PhD</i>	Chris Curtis	Stuart Piketh
Steven Broccardo	Airborne DOAS Measurements over the South African Highveld	<i>Wits</i>	<i>PhD</i>	Chris Curtis	Stuart Piketh
Roelof Petrus Burger	The distribution of aerosol and trace gases in the lower troposphere over South Africa	<i>Wits</i>	<i>PhD</i>	Stefan Grab	Stuart Piketh
Jennifer Fitchett	Towards a Multi- Proxy Holocene Palaeoenvironmental	<i>Wits</i>	<i>PhD</i>	Stefan Grab	

	and Palaeoclimatic Reconstruction for Eastern Lesotho				
Nzalalembe Serge Kubanza	Urban Environmental problems: Social and environmental injustices in solid waste management in Kinshasa, the Democratic Republic of Congo	<i>Wits</i>	<i>PhD</i>	Danny Simatele	
Moipone Amelia Mantsebo Letsie	An assessment of place vulnerability to natural hazards in South Western Lesotho ( Quthing and Mophale District)	<i>Wits</i>	<i>PhD</i>	Stefan Grab	
Raeesa Moolla	Modelling Risk Exposure of BTEX Emissions from a Diesel refuelling station in Johannesburg, South Africa	<i>Wits</i>	<i>PhD</i>	Chris Curtis	Jasper Knight
Noah Pauline	Living with climate variability and change: lessons from Tanzania	<i>Wits</i>	<i>PhD</i>	Stefan Grab	

### Curriculum presented:

Undergraduate (NQF levels 5, 6 and 7):

#### GEOG1000 (full year course):

Block 1: Landscapes of Southern Africa (Prof Jasper Knight)

Block 2: Environmental Change (Prof Chris Curtis)

Block 3: Space and Society (Dr Melanie Samson)

Block 4: Atmospheric Science (Dr Raeesa Moolla)

### Second Year – 4 compulsory courses in 2017

GEOG2015 Thinking Geographically: Concepts & Practices in Human Geography (Dr Alex Wafer)

GEOG2013 Geographic Information Systems, Science & Mapping (Dr Stefania Merlo)

GEOG2010 Earth and Atmospheric Processes (Prof Stefan Grab, Dr Raesa Moolla)

GEOG2012 Environmental Governance (Prof Danny Simatele & Prof Jasper Knight)

### Third Year – choose 4 options (1 from each block)

Block 1: GEOG3021 Advanced Atmospheric Science / GEOG3023 Sustainability

Block 2: GEOG3017 GIS and Remote Sensing / GEOG3025 Urban Futures: The political Economy of Population and Scarcity

Block 3: GEOG3024 Environmental Monitoring & Modelling / GEOG3019 Economic Geography

Block 4: GEOG3020 Climate and Environmental Change / GEOG3026 Food: Security, Politics and Culture

### **Postgraduate (NQF level 8):**

**Bachelor of Science with Honours - BScHons**

**Bachelor of Arts with Honours – BAHons**

In the following fields: Geography, Geography & Archaeology

1 year full-time or 2 years part-time

### **Postgraduate (NQF level 9):**

<b>Master of Science - MSc</b>	1 year full-time or 2 years part-time
<b>MSc by coursework and research report</b> in the fields: GIS & Remote Sensing	1 year full-time or 2 years part-time
<b>Master of Science by dissertation - MSc (Dissertation)</b>	1 year full-time or 2 years part-time



**Postgraduate (NQF level 10):**

<b>Doctor of Science - PhD</b>	2 years full-time or 4 years part time
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**Student Numbers (2015-16):**

<b>Level</b>	<b>2015</b>	<b>2016</b>
First year	185	232
Second year	88	94
Third year	77	97
Honours	46	65
Masters	41	
Doctoral	45	

**Any other information not included above, that you would like to include in the newsletter:**

**Post Doctoral Fellows:**

Dr Charles Ntui: Hazard assessment, disaster preparedness, sustainable development.

Dr Kate Strachan: Foraminifera, Holocene sea-level change, environmental change.

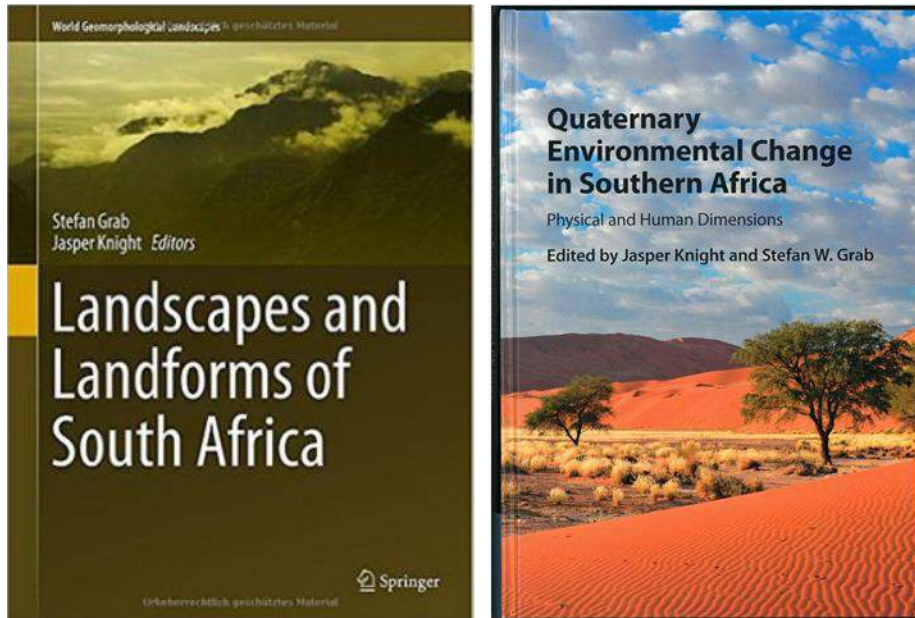
**QS World Rankings**

QS World University Rankings 2016: Wits Geography again in the world's top 100 geography departments.

**University of Hamburg Collaboration**

Prof Ahmed visited the Geography Institute, University of Hamburg during the period 20 to 24 June 2016 as part of the Collaborative Agreement between Wits and Hamburg University. Wits will host 2 students from Hamburg in 2017. SGAES is looking forward to strengthening staff and student academic exchange and forging collaborative research projects between the two universities.

**Books published by Wits Geography staff in 2015-16:**



**The name and contact details of your SSAG person for any further (and future) information: Dr Alex Wafer (alex.wafer@wits.ac.za )**

## NMMU: Department of Geosciences (Geography)

**Head/Chair of Department:** Dr AH de Wit

<b>Name (Title, Surname, Initials)</b>	<b>Area of specialisation</b>	<b>E-mail</b>	<b>Office Telephone Number</b>
Dr de Wit, AH	Environmental management	<i>anton.dewit@nmmu.ac.za</i>	41 4 2498

### **2015-16 dated publications:**

Finca, A., Palmer, A.R., Kakembo, V. (2015). Exploring ground-based methods for the validation of remotely sensed evapotranspiration. *African Journal of Range & Forage Science* 32(1): 41-50.

Kakembo, V., Smith, J. and Kerley, G. 2015. A temporal Analysis of Elephant-induced Thicket Degradation in Addo Elephant National Park, Eastern Cape, South Africa. *Rangeland Ecology & Management*, 68, 461-469.

Nyamugama, A, Kakembo V. 2015. Estimation and monitoring of aboveground carbon stocks using spatial technology. *S Afr J Sci.* 111(9/10), Art. #2014-0170,

Nyamugama, A and Kakembo V. 2015. Monitoring land cover changes and fragmentation dynamics analysis using spatial technology. Case study of subtropical thicket of Eastern Cape Province South Africa. *South African Journal of Geomatics*, 4(4), 397-413.

Barasa, B., Kakembo, V., Mwololo W. T and Laban, M. 2015: Effects of heterogeneous land use/cover types on river channel morphology in the Solo River catchment, Eastern Uganda, *Geocarto International*, DOI: 10.1080/10106049.2015.1132480.

Zengeni, R., Kakembo, V. and Nkongolo, N. (2016). Historical rainfall variability in selected rainfall stations in Eastern Cape, South Africa. **South African Geographical Journal**, 98, 118–137.

Zengeni, R., Kakembo, V. and Nkongolo, N. (2016). Soil carbon dioxide effluxes from different vegetation environments in semi-arid Eastern Cape, South Africa. *African Journal of Range & Forage Science*, 33(2), 111-118.

Barasa, B., Kakembo, V. and Karl, T (2016). Characterization of artisanal gold mining activities in the tropics and their impact on sediment loading and stream flow in the Okame River catchment, Eastern Uganda. **Environmental Earth Sciences**, 75:1076, 1-13.

Williams-Bruinders, LL. & De Wit, A. (2015) Connecting Sense of Place and Climate Change: Adaptation amongst the vulnerable poor in Port Elizabeth, *Environmental Economics*, Vol 6(4).

Ah Goo, D. & De Wit, A.H. (2015). Sustaining livelihoods: the informal medicinal plant trade in the Nelson Mandela Bay Municipality, Eastern Cape. *South African Geographical Journal*, 97(1): 69-82.

Chanza, N. & De Wit, A.H. (2015). Rediscovering Indigenous Climate Knowledge for Better Responses to Climate Change: Insights from Muzarabani. *International Journal of Climate Change: Impacts and Responses*, 6(3-4): 19-34.

### **Conference Presentation in 2015-16:**

Name of presenter (s)	Title of presentation	Format of presentation	Date of conference/workshop	Name of Conference/workshop
V Kakembo	Understanding socio-political and ecosystem vulnerabilities in smallholder communities: A comparison of the Keiskamma and Mkomazi catchments in South Africa and Tanzania	Oral	25 – 28 September 2016	SSAG Biennial Conference

V Kakembo	Discriminating semi-deciduous and evergreen subtropical forest species using integrated multispectral and field spectroscopy	Oral	24-28 October 2016	International Conference of the African Association of Remote Sensing of the Environment (AARSE2016).
AH de Wit & L Williams	"Shoulds I stay or should I go": climate change adaptation and the sense of place	Oral	17-19 August 2016	IAIAsa National Conference
AH de Wit & J Bisschoff	'Close encounters of the worst kind': challenges for environmental management at the interface between people and the environment – St Francis Bay as case study	Oral	17-19 August 2016	IAIAsa National Conference
AH de Wit & JP Hechter	Local socio-economic impacts of renewable energy projects	Oral	17-19 August 2016	IAIAsa National Conference

### **Research Master Dissertations completed in 2015-16:**

<i>Student's Name</i>	<i>Title of dissertation</i>	<i>Institution</i>	<i>Qualification</i>	<i>Supervisor</i>	<i>Co-supervisor</i>
L Dalindyebo	Towards and industrial ecology for the Nelson Mandela Bay Metropolitan area	NMMU	MSc	Dr AH de Wit	
A Adams	Towards measuring corporate sustainability in the Nelson Mandela Bay automotive manufacturing sector	NMMU	MSc	Dr AH de Wit	
R Dada	Transformative adaptation: developing a framework for supporting climate change adaptation in resource poor communities	NMMU	MSc	Dr AH de Wit	

### **PhD Thesis's completed in 2015-16:**

<i>Student's Name</i>	<i>Title of thesis</i>	<i>Institution</i>	<i>Qualification</i>	<i>Supervisor</i>	<i>Co-supervisor</i>
Sithole, V B.	A multi-scale remote sensing assessment of subtropical	NMMU	PhD	V. Kakembo	

	indigenous forests along the Wild Coast, South Africa.				
Chanza. N.	Indigenous knowledge and climate change: insights from Muzarabani, Zimbabwe	NMMU	PhD	AH de Wit	

**Student Numbers (2015-16):**

<b>Level</b>	<b>2015</b>	<b>2016</b>
First year		118
Second year		70
Third year		66
Honours		32
Masters		5
Doctoral		6

## University of Pretoria: Geography, Geoinformatics and Meteorology

**Head/Chair of Department:** Professor Paul Sumner

Name (Title, Surname, Initials)	Area of specialisation	E-mail	Office Telephone Number
Professor Paul Sumner	Geomorphology	paul.sumner@up.ac.za	+27124203536

### Information about the Geographers in the Department

Name (Title, Surname, Initials)	Rank/Position	Area of specialisation	E-mail	Office Telephone number
Associate Professor Serena COetzee	Director: Centre for Geoinformation Science	Geoinformation Science	<i>Serena.coetzee@up.ac.za</i>	012 420 3823
Dr Daniel Darkey	Senior Lecturer	Geography	<i>Daniel.darkey@up.ac.za</i>	012 420 3710
Dr Liesl Dyson	Senior Lecturer	Meteorology	<i>Liesl.dyson@up.ac.za</i>	012 420 2469
Dr Natalie Haussman	Senior lecturer	Biogeomorphology	<i>Natalie.haussmann@up.ac.za</i>	012 420 4049
Associate Professor Gregory Breetzke	Associate Professor	Geography of crime (GIS)	greg.breetzke@up.ac.za	012 420 4318
Mr Van der Merwe, BJ	Lecturer	Geomorphology	<i>barend.vandermerwe@up.ac.za</i>	012 420 3699
Mr Michael Loubser	Lecturer	Geomorphology	michael.loubser@up.ac.za	N/A
Ingrid Booysen	Senior Cartographer	Geoinformation and mapping		
Dr Nerhene Davis	Lecturer	Human geography	<i>Nerhene.davis@up.ac.za</i>	012 420 2882
Mr Joos Esterhuizen	Lecturer	Geoinformatics (surveying)	<i>Joos.esterhuizen@up.ac.za</i>	012 420 4172
Professor Willem Landman	Professor	Meteorology	<i>Willem.landman@up.ac.za</i>	012 420 3713
Mr Michael Loubser	Lecturer	Geography	<i>Michael.loubser@up.ac.za</i>	
Mr Cilence Munghemezulu	Lecturer	Geoinformatics	<i>Cilence.munghemezulu@up.ac.za</i>	012 420 2170
Ms Victoria Rautenbach	Lecturer	Geography	<i>Victoria.rautenbach@up.ac.za</i>	012 420 3489
Mr Philemon Tsela	Lecturer	Geoinformatics	<i>Philemon.tsela@up.ac.za</i>	012 420 4939
Mr Barend van der Merwe	Lecturer	Geography/ Environmental	<i>Barend.vandermerwe@up.ac.za</i>	012 420 3699

		Science		
Mrs Petronella Tizora	Cartographer	GIS	<i>Petronella.tizora@up.ac.za</i>	012 420 3283
Professor George Djolov	Extraordinary Professor	Meteorology	<i>George.djolov@up.ac.za</i>	
Professor Ludwig Combrinck	Extraordinary Professor	Geoinformatics (Geodesy)	<i>ludwig@hartrao.ac.za</i>	
Mr Antony Cooper	Extraordinary Lecturer	Geoinformatics	<i>Acooper@csir.co.za</i>	
Dr Winifred Jordaan	Extraordinary Lecturer	Meteorology		
Mr AC Kruger	Extraordinary Lecturer	Meteorology		
Dr Renaud Mathieu	Extraordinary Lecturer	Geoinformatics (Remote sensing)	<i>rmathieu@csir.co.za</i>	
Professor Jana Olivier	Extraordinry Professor	Meteorology		
Dr Jane Olwoch	Extraordinary Lecturer	Climate change and environmental health	<i>jolwoch@sansa.org.za</i>	
Dr Peter Schmitz	Extraordinary Lecturer	Geoinformatics	<i>pschmitz@csir.co.za</i>	012 481 3841
Dr ME Shongwe	Extraordinary Lecturer	Meteorology		
Dr Konrad Wessels	Extraordinary Lecturer	Geoinformatics (Remote sensing)	<i>kwessels@csir.co.za</i>	012 841 3100
Dr Caradee Wright	Extraordinary Associate Professor	Public health/Geography	<i>cwright@mrc.ac.za</i>	012 339 8543

#### Information about the professional and support staff in the Department

<b>Name (Title, Surname, Initials)</b>	<b>Position</b>	<b>Area of subject specialisation (if applicable)</b>	<b>E-mail</b>	<b>Office Telephone number</b>
Ms Pretorius, Erika	Senior technical assistant	GIS support	<i>Erika.pretorius@up.ac.za</i>	012 420 3737
Mrs Corne van Aardt	Departmental Coordinator	Administration and Finances	<i>Corne.vanaardt@up.ac.za</i>	012 420 2489
Mrs Lunga Ngcongco	Departmental administration	General and student enquiries	<i>Lunga.ngcongco@up.ac.za</i>	012 420 3536
Mrs Popi Mahlangu	Lab Assistant		<i>Popi.mahlangu@up.ac.za</i>	012 420 2990



## Department News

Over the 2015/16 period the department welcomed Victoria Rautenbach, Petronella Tizora, Lunga Ngconge, Cilence Munghemezulu, Dr Francis Nsubuga, Professor Greg Breetzke and Professor Willem Landman to the department. Professor Coleen Vogel, Professor Hannes Rautenbach, Dr Joel Botai and Robert Maisha left the department and Fritz van der Merwe retired after many years of service. Barend van der Merwe was appointed to a permanent post in 2016. The department now has 15 full time academics (one vacancy) and 5 support staff .

In 2015, the University of Pretoria (UP) Department of Geography, Geoinformatics and Meteorology, with support from Eskom and Sasol, launched the Laboratory for Atmospheric Studies. The laboratory is based in the Department and will be a national centre of excellence that provides infrastructure and world-class education for studies and research in the atmospheric sciences. This laboratory was developed as a result of the Eskom-Sasol research collaboration in pursuit of developing scarce skills in scientific studies.

The International Map Year (2015-2016) was celebrated in the Department by a mini-conference and a Map Exhibition held in November 2015. Another mini-conference in October 2016 showcased GISc in research. Attendants of both events could obtain CPD points with the South African Geomatics Council. Close liaison with the University of Pretoria Centre for Environmental Studies, housed within the Geography building-Zoology Building link, remains a key focus of Masters' programmes and projects.

The department works closely with the South African Weather Service where training and research collaboration continues. The Geoinformatics programmes successfully concluded a PLATO (now Geomatics Council) accreditation in 2017 for the BSc and Honours Geoinformatics programmes. An MoU with Karlsruhe University (Germany) was established and the first staff-honours student exchange took place in 2016. A UP contingent of 20 staff and students attended the thoroughly enjoyable SSAG Centenary conference in Stellenbosch.

### **2015-16 dated publications:**

Beraki, A.F., **Landman, W.A.** and DeWitt, D. (2015). On the comparison between seasonal predictive skill of global circulation models: coupled versus uncoupled. *Journal of Geophysical Research – Atmospheres*, 120, 11151-11172, DOI:10.1002/2015JD023839.

Conway, D., Archer van Garderen, E., Deryng, D., Dorling, S., Krueger, T., **Landman, W.A.**, Lankford, B., Lebek, K., Osborn, T., Ringler, C., Thurlow, J., Zhu T. and Dalin, C. (2015). Climate and southern Africa's water-energy-food nexus. *Nature Climate Change*, 5, 837-846, DOI: 10.1038/NCLIMATE2735.

Engelbrecht, C.J., **Landman, W.A.**, Engelbrecht F.A. and Malherbe, J. (2015). A synoptic decomposition of rainfall over the Cape south coast of South Africa. *Climate Dynamics*, 44(9-10), 2589-2607, DOI 10.1007/s00382-014-2230-5.

Nel, W., Hauptfleisch, A., **Sumner, P.D.**, Boojhawon, R., Rughooputh, S.D.D.V. and Durmea, K.R. (2016). Intra-event characteristics of extreme erosive rainfall on Mauritius. *Physical Geography*, 3–4, 264–275.

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- Fairhurst, U.J., Hattingh, P.S., **Sumner, P.D.** and **Booyesen, I.** (2016). A history of Geography at the University of Pretoria. In Visser, G., Donaldson, R. and Seethal, C. (eds). *The origin and growth of Geography as a discipline at South African Universities*, Sun: Stellenbosch, pp 33-54.
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- Diffey BL, Norval M, Albers PN and **Wright CY**. The influence of HIV infection on the age dependence of squamous cell carcinoma of the skin in South Africa. *S Afr Med J*. Accepted, October 2016.
- Norval M, Coussens AK, Wilkinson RJ, Bornman L, Lucas RM and **Wright CY**. Vitamin D status and its consequences for health in South Africa. *Int J Environ Res Public Health*. Accepted 10 Oct 2016.
- York K, Dlova NC, **Wright CY**, Khumalo NP, Kellett, PE, Kassanje, R and Mosam A. Primary cutaneous malignancies in the Northern Cape province of South Africa: a retrospective histopathological review. *S Afr Med J*. Accepted, August 2016.
- Blesic S, Stratimirovic DI, Ajtic J, **Wright CY** and Allen MW. Novel approach to analysing large data sets of personal sun exposure measurements, *J Exp Science and Env Epidemiology*, 2016, 00, 1-8.
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- Wright CY**, Albers, PN, Oosthuizen, MA and Naidoo, M. 2016. Geographical differences in primary schoolchildren's key sun-related behaviours: an exploratory, feasibility study. *South African Geographical Journal*. 98(2): 199-216. DOI: 10.1080/03736245.2014.978882.
- Wright CY**, Reeder, AI and Albers PN. 2016. Knowledge and practice of sun protection in schools in South Africa where no national sun protection programme exists. *Health Education Research*. DOI. 10.1093/her/cyw005.

#### Conference Presentation in 2015-16:

Name of presenter (s)	Title of presentation	Format of presentation	Date of conference / workshop	Name of Conference/workshop
PD Sumner	Soil erosion on Round Island, Mauritius	Oral presentation	June 2016	IGU Geomorphology and Society Joint Commission

				Symposium, Taiwan
PD Sumner	Rainfall erosivity on Mauritius: an overview	Oral presentation	September 2015	Southern African Association of Geomorphologists (SAAG) Biennial Conference, Sani Pass
Natalie Haussmann	A meta-analysis on soil movement by burrowing	Oral	19 – 20 September 2015	South African Association of Geomorphologists 2015 Biennial Conference
Davis, N.C.	Inclusive business models great expectations and ambiguous outcomes in the South African Land restitution context.	Oral	25-28 Sept 2016	SSAG Centennial Conference 2016
Davis, N.C.	Inclusive Business Models: Ambiguity Emerging	Oral	Johannesburg, Premier Hotel, 7 October 2016.	High Level Parliamentary Round Table Discussion on Land Restitution and Land Administration.
Breetzke, G. D.	Examining neighbourhood-level resilience to crime in New Zealand	Oral	20-23 June 2016	Presentation at the 25 <sup>th</sup> Symposium on Environmental Criminology and Crime Analysis (ECCA)
Breetzke, G. D.	Drones, GIS and crime: Opportunities and challenges	Oral	17-18 November	Drones Conference
Barend van der Merwe	Using geometric morphometrics to quantify barchan shape from satellite imagery	Oral	19-20 Sept 2015	SAAG Conference 2015
Barend van der Merwe	Barchan shape as an aid to process explanation: An historical overview	Oral	25-28 Sept 2016	SSAG Centennial Conference 2016
Hansen, Loubser and Rudolph	Observations on frost mounds in the Jutulssessen, Antarctica	Poster	27/07/2016	SANAP Symposium
<b>Eksteen S, Coetzee SM, Lyew M, Olivares M, Solis P</b>	Geographic Information Science Education at African and Latin American Universities – A	Oral	23-Aug-2015 - 28-Aug-2015.	The 27 <sup>th</sup> International Cartographic Conference (ICC 2015), Rio de Janeiro, Brazil.

	Comparative Review .			
Harvey F, <b>Coetzee SM</b> , Iwaniak A and <b>Cooper AK</b>	Are the data sharing problems with SDIs problems of zombies?	Oral	23-28 August 2015.	Proceedings of the 27 <sup>th</sup> <i>International Cartographic Conference</i> , Rio de Janeiro, Brazil.
Jooste D, <b>Rautenbach V</b> , <b>Coetzee SM</b>	Results of an evaluation of augmented reality mobile development frameworks for addresses in augmented reality	Oral	September 2015	<i>Proceedings of the FOSS4G2015 Conference</i> , Seoul, South Korea
<b>Rautenbach V</b> , <b>Coetzee SM</b> , Schiewe J, Coltekin A	An Assessment of Visual Variables for the Cartographic Design of 3D Informal Settlement Models.	Oral	23-Aug- 2015 - 28-Aug- 2015.	The 27th International Cartographic Conference
<b>Rautenbach V</b> , Coltekin A, <b>Coetzee SM</b>	Exploring the Impact of Visual Complexity Levels in 3D City Models on the Accuracy of Individuals' Orientation and Cognitive Maps	Oral	28-Sep- 2015 - 03- Oct-2015	ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences (GeoVIS'15 Workshop "Rendering and Cognition with Images and Hybrid Visualizations"), La Grande Motte, France
<b>Tizora P</b> , Le Roux A, Mans G, Cooper A	Understanding of land use change to model potential future land use in the Western Cape Province	Oral	4-6 July 2016	SAPI Conference 'Planning Africa 2016'
<b>Tsela P</b> , Combrinck L and Ngcobo B.	Prototyping a thermal monitoring system for the one-metre aperture Lunar Laser Ranger tube assembly based at the Hartebeesthoek Radio Astronomy Observatory	Oral	October 9- 14, 2016	20th International Workshop on Laser Ranging, GFZ Helmholtz Centre, Potsdam, Telegrafenberg
<b>Tsela P</b> , Combrinck L and Ngcobo B.	Progress toward measurement and analysis of temperature distributions of the tube structure of the HartRAO Lunar Laser Ranging optical	Oral	4-10 October 2015, Matjiesfont ein, Western Cape.	2015 Science and Technology Train & Space Geodesy Workshop in Matjiesfontein/ South Africa



	telescope			
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# **Research Master Dissertations completed in 2015-16:**

<i>Student's Name</i>	<i>Title of dissertation</i>	<i>Univ</i>	<i>Qualification</i>	<i>Supervisor</i>	<i>Co-supervisor</i>
A Hauptfleisch	Intra-storm attributes and climatology of extreme erosive events on Mauritius, 2004-2008	UP	MSc	PD Sumner	W Nel (UFH)
D Wilken	Value of classified Class F Fly ash as an ameliorant for degraded surface coal mined soils	UP	MSc	W Truter	PD Sumner
N Mararakanye	A comparative study of gully erosion contributing factors in two tertiary catchments in Mpumalanga, South Africa	UP	MSc	PD Sumner	
Erika Pretorius	Analysis of vegetation structure in a trans-frontier savanna region using in-situ observation and SPOT imagery	UP	MA Geography	n/a	n/a
Adeyemi Adeniyi	Analysis of impervious surfaces and surface temperature over Tshwane metropolitan using in-situ and remotely sensed data	UP	MSc	Joel Botai (GGM) and Abel Ramoelo (CSIR)	
Nondimizo Dlamini	Investigating the characteristics of expansive soils through remote sensing and in situ measurements	UP	MSc	Joel Botai (GGM) and Moses Cho (CSIR).	
Lauren Hankel	Rapid distributed processing of medium velocity geospatial datastreams into contextualised 3D visualisations : evaluating the cloud computing paradigm	UP	MSc	Serena Coetzee (GGM) and Graeme McFerren (CSIR Meraka Institute).	
Quinton Jacobs	Evaluating human-processed forecasts provided to the aviation industry in South Africa	UP	MSc	WA Landman	
Jared Jacobson	Assessing OpenGL for 2D rendering of		MSc	Serena Coetzee	

	geospatial data			(GGM) and Derrick Kourie (Computer Science)	
Noh Tewolde	Evaluating a semantic approach to address data interoperability		MSc	Serena Coetzee	

#### Master Dissertations of limited scope completed in 2015-16:

<i>Student's Name</i>	<i>Title of dissertation</i>	<i>Institution</i>	<i>Qualification</i>	<i>Supervisor</i>	<i>Co-supervisor</i>
M de Bruin	Geomorphological aspects and forensics of rhino poaching.	UP	MA	P Schmidt	PD Sumner
T Bean	Soil erosion phenomena on Round Island, Mauritius	UP	MSc	PD Sumner	R Boojhawon (Mauritius)
Mahlatse Modiba	Assesing the determinants of publis participation in the EIA process	UP	MSc (Environment and Society)	Natalie Haussmann	Nerhene Davis
Julia Amukwa	Documenting and addressing power outages caused by bird nests: sociable weavers in Namibia	UP	MSc (Environment and Society)	Natalie Haussmann	Peter le Roux
Sichimwa , Clement	Co-management of tourism in Zambia: The Case of Mukuni village	UP	MSc (Environmental Ecology)	Nerhene Davis	Felicity Fairer Wessels
Muwandera, Violet	Adaptation to climate variability: Assessing the strategies of smallholder cattle farmers in the Tshwane region.	UP	MSc (Environmental Management)	Nerhene Davis	Coleen Vogel

#### PhD Thesis's completed in 2015-16:

<i>Student's Name</i>	<i>Title of thesis</i>	<i>Institution</i>	<i>Qualification</i>	<i>Supervisor</i>	<i>Co-supervisor</i>
Shepherd Muchuru	Predictability of seasonal rainfall and inflows for water rsource	University of Pretoria	PhD	WA Landman	OJ Botai

	<i>management at Lake Kariba</i>				
<i>Eugene Poolman</i>	<i>A probabilistic impact-focussed early warning system for flash floods in support of disaster management in South Africa</i>	<i>University of Pretoria</i>	<i>PhD</i>	<i>CJdeW Rautenbach</i>	<i>CH Vogel</i>
Christien Engelbrecht	Dynamics of climate variability over the all-year rainfall region of South Africa	<i>University of Pretoria</i>	<i>PhD</i>	<i>WA Landman</i>	
Asmerom Beraki	ECHAM4.5 global circulation model as a seasonal forecasting system for southern Africa: coupled vs. uncoupled	<i>University of Pretoria</i>	<i>PhD</i>	<i>WA Landman</i>	

### Curriculum presented:

The Department of Geography, Geoinformatics and Meteorology (GGM) offers four undergraduate programmes: BSc Meteorology, Geoinformatics, Geography, Environmental Science. Three honours programmes are offered, Meteorology, Geoinformatics, and Geography and Environmental Science (BSocSciHons and BScHons). Masters programmes replicate the honours but with a greater diversity in the environmental field through the Centre for Environmental Studies (CFES). The CFES offers eight programmes two of which are housed in GGM: MA and MSc Environment and Society, and MSc Air Quality Management.

### Student Numbers (2015-16):

Level	2015	2016
First year	516	421
Second year	180	220
Third year	165	180
Honours	40	40
Masters	85	85
Doctoral	30	30

**The name and contact details of your SSAG person for any further (and future) information:**

Dr Caradee Wright, Email: [cwright@mrc.ac.za](mailto:cwright@mrc.ac.za); Tel: 082 677 4037; SAMRC, 1 Soutpansberg Road, Pretoria; Extraordinary Lecturer at University of Pretoria, Department of Geography, Geoinformatics and Meteorology.

## University of the Free State: Geography

Name (Title, Surname, Initials)	Area of specialisation	E-mail	Office Telephone Number
Dr Charles Barker	GIS, Fluvial geomorphology	barkerch@ufs.ac.za	2554

## Bloemfontein

Title, Surname, Name	Rank / Position	Area of specialisation	E-mail	Office Telephone number
Dr Barker Charles	Senior Lecturer	GIS, Fluvial geomorphology	<a href="mailto:barkerch@ufs.ac.za">barkerch@ufs.ac.za</a>	051 401 2554
Ms Kruger Eldalize	Lecturer	Environmental Management	<a href="mailto:krugere@ufs.ac.za">krugere@ufs.ac.za</a>	051 401 2184
Dr le Roux Jay	Senior Lecturer	Physical Geography	<a href="mailto:lerouxjj@ufs.ac.za">lerouxjj@ufs.ac.za</a>	051 401 2185
Dr Massey Ruth	Lecturer	Urban Geography and Climate change	<a href="mailto:masseyrt@ufs.ac.za">masseyrt@ufs.ac.za</a>	051 401 3570
Ms Mehlomakhulu Tobeka	Lecturer	Rural Development	<a href="mailto:mehlomakhulutc@ufs.ac.za">mehlomakhulutc@ufs.ac.za</a>	051 401 2183
Ms Nkooe Ernestina	Lecturer	Urban and Human Geography	<a href="mailto:nkooees@ufs.ac.za">nkooees@ufs.ac.za</a>	051 401 3521
Ms Pretorius Anneri	Junior Lecturer	Environment and Conservation	<a href="mailto:coetzeea1@ufs.ac.za">coetzeea1@ufs.ac.za</a>	051 401 3762
Ms Rudolph Liezel	Lecturer	Physical Geography	<a href="mailto:rudolphem@ufs.ac.za">rudolphem@ufs.ac.za</a>	051 401 9532
Mr van der Walt Adriaan	Junior Lecturer	GIS	<a href="mailto:vanderwalta@ufs.ac.za">vanderwalta@ufs.ac.za</a>	051 401 7104

## Qwa Qwa

Title, Surname, Name	Rank / Position	Area of specialisation	E-mail	Office Telephone number
Dr Adelabu Samuel	Lecturer	GIS, remote sensing	<a href="mailto:adelabusa@ufs.ac.za">adelabusa@ufs.ac.za</a>	058 718 5487
Mr Adjey Alex	Lecturer	Tourism	<a href="mailto:adjeia@ufs.ac.za">adjeia@ufs.ac.za</a>	058 718 5477
Dr Hansen Mellisa	Lecturer	Physical Geography	<a href="mailto:hansenmm@ufs.ac.za">hansenmm@ufs.ac.za</a>	058 718 5473
Mr Mahasa Pululu	Lecturer	Physical Geography	<a href="mailto:mahasaps@ufs.ac.za">mahasaps@ufs.ac.za</a>	058 718 5036
Prof Mukwada Geofrey	Assoc. Prof.	Environmental Sustainability	<a href="mailto:mukwadag@ufs.ac.za">mukwadag@ufs.ac.za</a>	058 718 5476
Ms Naidoo Merle	Lecturer	Environmental Sustainability	<a href="mailto:naidoom2@ufs.ac.za">naidoom2@ufs.ac.za</a>	058 718 5478
Dr Okello Tom	Senior Lecturer	Tourism	<a href="mailto:okellotw@ufs.ac.za">okellotw@ufs.ac.za</a>	058 718 5478
Ms Sekhele Ntebohiseng	Junior Lecturer	Physical Geography	<a href="mailto:sekhelenm@ufs.ac.za">sekhelenm@ufs.ac.za</a>	058 718 5474

## **Department News**

The Geography Department had a busy 2015/2016 with several student and research activities taking place. Various academics and students attended conferences where they presented various research outputs. Dr Ruth Massey and Ms Anneri Pretorius received a grant from the Society of South African Geographers (SSAG) which allowed the Department to engage with local primary schools. Various staff members were selected to sit on editorial boards, be part of scholar programmes and head up associations. Staff members were engaged in internationalisation initiatives and networking. Dr. Samuel Adelabu was appointed as the new Subject Head at the QwaQwa campus. The QwaQwa campus Geography Department also moved into their new building. Dr. Melissa Hansen, Ms Ernestina Nkoe, Ms. Elizabeth Rudolph and Dr Jay le Roux were appointed in the Department. A number of staff members attended the SSAG conference in Stellenbosch.

## **Staff Achievements**

- Dr Ruth Massey was selected as a member of the Vice-Chancellor's Prestige Scholars Programme (PSP).
- Dr Jay le Roux was elected as President of the South African Geomorphological Association of Geomorphologists.
- Dr Ruth Massey won an ESRC-NRF Newton grant for collaborative research (Higher Education) in South Africa (2016 - 2017). Project title: The appropriateness, usefulness and impact of current urban planning curriculum in South African Higher Education. In collaboration with the University of Birmingham in the UK
- Dr Ruth Massey won an Urban Studies Foundation (USF), International Fellowship (2016) and has spent 3 months at the University of Manchester (September to end November 2016)
- Dr. Mukwada was promoted to Associate Professor.

## **Research**

Departmental staff have been busy with various research activities, including those linked to the Afro-Montane Research Institute on the Qwaqwa Campus.

## **Community Service**

The Green Box project - Dr Ruth Massey and Ms Anneri Pretorius received a grant from the Society of South African Geographers (SSAG) to run a project that saw ten under-resourced Bloemfontein schools receive Geography teaching and learning support material (targeting the intermediate phase). The project also provided workshops on Geography teaching. Some money was left over and 20 atlases were bought for a further 20 under-resourced schools in the area.

## **National and International Collaboration**

Dr Massey visited the United Kingdom in 2015 and 2016 to meet with the Overseas Development Initiative (ODI) in London, the Geography Department at the University of Birmingham and the Geography Department at the University of Manchester.

### **2015-16 dated publications:**

#### **Research Articles**

Browning, C. & Roberts, D.L. 2015. Lithostratigraphy of the Witzand formation (Sandveld Group), South Africa. *South African Journal of Geology* 118(3): 317-322.

Chingombe, W., Pedzisai, E., Manatsa, D., Mukwada, G. & Taru, T. 2015. A participatory approach in GIS data collection for flood risk management, Muzarabani district, Zimbabwe. *Arabian Journal of Geosciences* 8(2): 1029-1040.

Dube, T., Mutanga, O., Seutloali, K., Adelabu, S.A. & Shoko, C. 2015. Water quality monitoring in sub-Saharan African lakes: a review of remote sensing applications. *African Journal of Aquatic Science* 40(1): 1-7.

Hall, C., Amelung, B. & Visser, G.E. 2015. Denying bogus skepticism in climate change and tourism research. *Tourism Management* 47: 352-356.

Hall, C., Amelung, B. & Visser, G.E. 2015. No time for smokescreen skepticism: A rejoinder to Shani and Arad. *Tourism Management* 47: 341-347.

Massey, R.T. 2015. Integral Theory: A tool for mapping and understanding conflicting governmentalities in the upgrading of Cape Town's informal settlements. *Urban Forum* 26: 303-319.

Matthews, T., Van Dijk, E., Roberts, D.L. & Smith, R. 2015. An early Pliocene (5.1 Ma) fossil frog community from Langebaanweg, south-western Cape, South Africa. *African Journal of Herpetology* 64(1): 39-53.

Mukwada, G., Taru, T. & Chingombe, W. 2015. Role of Social-Ecological Systems in forest and woodland conservation in Zimbabwean resettlement areas. *Journal of Asian and African studies* 50(3): 276-288.

Roberts, D.L. & Mthembi, P. 2015. Lithostratigraphy of the Graauw Duinen formation (Cenozoic West Coast group), South Africa. *South African Journal of Geology* 118(3): 331-334.

Shoko, C., Dube, T., Sibanda, M. & Adelabu, S.A. 2015. Applying the Surface Energy Balance System (SEBS) remote sensing model to estimate spatial variations in evapotranspiration in Southern Zimbabwe. *Transactions of the Royal Society of South Africa* 70(1): 47-55.

Sibanda, M., Dube, T., Seutloali, K. & Adelabu, S.A. 2015. Operational applications of remote sensing in groundwater mapping across sub-Saharan Africa. *Transactions of the Royal Society of South Africa* 70(2): 173-179.



Visser, G.E. & Hoogendoorn, G. 2015. A decade of second home tourism research in South Africa: Research prospects for the developing world? *South African Geographical Journal* 97(2): 111-122.

Cloete, J. and Massey, R. 2016: Seshego: An unexpected suburb. *South African Geographical Journal*. Published online 13 July 2016. <http://dx.doi.org/10.1080/03736245.2016.1208580>.

Cletah Shoko, Timothy Dube, Mbulisi Sibanda, Samuel Adelabu, Applying the Surface Energy Balance System (SEBS) remote sensing model to estimate spatial variations in evapotranspiration in Southern Zimbabwe. *Transactions of the Royal Society of South Africa*, Vol 70, Issue 1, Pages 47-55, 2015.

M Sibanda, T Dube, K Seutloali, S Adelabu, Operational applications of remote sensing in groundwater mapping across sub-Saharan Africa, *Transactions of the Royal Society of South Africa*, DOI: 10.1080/0035919X.2015.1017024, 2015.

T Dube, O Mutanga, K Seutloali, S Adelabu, C Shoko, Water quality monitoring in sub-Saharan African lakes: a review of remote sensing applications, *African Journal of Aquatic Science*, Volume 40, Issue 1 pp. 1-7, 2015.

Samuel Adelabu, Onesimo Mutanga, Elhadi Adam, Testing the reliability and stability of the internal accuracy assessment of random forest for classifying tree defoliation levels using different validation methods, *Geocarto International*, pp. 1-12 | DOI: 10.1080/10106049.2014.997303, 2015.

Mukwada, G. Chingombe, W and Taru, P. (2016) Strifes of the frontier: An assessment of *Acacia mearnsii* related park-community conflicts in the Golden Gate Highlands National Park. South Africa..*Journal of Integrative Environmental Sciences*. 13 (1): 37-54.

Dube Timothy, Mutanga Onesimo, Cletah Shoko, Adelabu Samuel & Tsitsi Bangira (2016) Satellite remote sensing of forest aboveground biomass: A review *Tropical Ecology*; 57(2): 125-132.

Kamuti, T. 2015. A Critique of the Discourse of the Green Economy Approach in the Wildlife Ranching Sector in South Africa. *Africa Insight*, 45(1): 146–168.

Kamuti, T. 2014. The Fractured State in the Governance of Private Game Farming: The Case of KwaZulu-Natal, South Africa. *Journal for Contemporary African Studies*, 32(2): 190–206

Pretorius, A., Kotzé, E., and Kruger, E. 2016 . Tweeting for environmental awareness: social media's contribution, has been accepted for publication in the *Proceedings of the 2016 SSAG Conference*

Van der Walt, A.J., 2016, 'Omgewingsrapportering deur middle van koerante in Suid-Afrika: 'n Vergelykende studie', *Suid-Afrikaanse Tydskrif vir Natuurwetenskap en Tegnologie* 35(1), a1379. <http://dx.doi.org/10.4102/satnt.v35i1.1379>

Marais, L. and Mehlomakhulu, T, 2016. Seriously ill? Diagnosing the state of medical geography in South Africa. *South African Geographical Journal* 98(3) 493-449

## Chapter in Book

Holmes, P.J. 2015. The western Free State panfield: A landscape of myriad pans and lunettes. In *Landscapes and landforms of South Africa*, edited by S. Grab & J. Knight. Switzerland, Cham: Springer. pp. 139-145.

## Research Reports

Le Roux, J.J., Barker, C.H., Weepener, H., Van den Berg, E. & Pretorius, S. 2015. Sediment yield modelling in the Mzimvubu River catchment. Report commissioned by the Water Research Commission, Pretoria, South Africa. pp. 1-79.

Weepener, H., Le Roux, J.J., Van den Berg, E., Tswai, D. & Nell, J. 2015. Developing methods for converting digitised rivers into a hydrological drainage network. Report commissioned by the Water Research Commission, Pretoria, South Africa. pp. 1-114.

## Conference Presentation in 2015-16:

Name of presenter (s)	Title of presentation	Format of presentation	Date of conference/workshop	Name of Conference/workshop
Anderson, R. & Le Roux, J.J.	The influence of event driven processes on sediment creation from gully erosion in the uMzimvubu River Catchment	Paper	19-20 September 2015	South African Association of Geomorphologists (SAAG) Biannual Conference, Sani Mountain, Lesotho
Baade, J., Glotzbach, C., Rowntree, K., Paape, A., Miller, J. & Le Roux, J.J.	Contemporary and long-term erosion and sediment yield in South Africa	Paper	30 January – 8 February 2015	Inaugural African Quaternary (AFQUA) Conference and Workshop, University of Cape Town, Cape Town, South Africa
Hedding, D., Hansen, C., Nel, W., Loubser, M., Le Roux, J.J. & Meiklejohn, K	Landscape processes in Antarctic ecosystems	Paper	19-20 September 2015	South African Association of Geomorphologists (SAAG) Biannual Conference, Sani Mountain, Lesotho

Le Roux, J.J.	Sediment yield contribution from gully erosion in the Mzimvubu River Catchment.	Paper	19-20 September 2015	South African Association of Geomorphologists (SAAG) Biannual Conference, Sani Mountain, Lesotho
Meiklejohn, K., Nel, W., Hansen, C., Lee, J., Matcher, G., Dwight, R., Scott, D., Kotze, C., Rudolph, L., Ayres, G., Rosenfels, J., Hedding, D., Loubser, M., Van der Merwe, B., Le Roux, J.J. & Davis, J.	Rock mass loss on a nunatak in Western Dronning Maud Land, Antarctica: Implications for periglacial landform development and habitat facilitation	Paper	19-20 September 2015	South African Association of Geomorphologists (SAAG) Biannual Conference, Sani Mountain, Lesotho
Mehlomakhulu T.	Forgotten Places: Setting the context for a forgotten relocation camp	Paper	25-29 September 2016	SSAG, Stellenbosch
Pretorius, S., Weepener, H., Le Roux, J.J. & Sumner, P.	Change detection and multi-temporal analysis of gully erosion in the Tsitsa River Catchment, South Africa, using eCognition software	Paper	15-19 June 2015	35th European Association of Remote Sensing Laboratories (EARSeL) Symposium, Stockholm, Sweden
Molaudzi, D.O., Adelabu S.A, Mokubung, C	Remote Sensing for Monitoring Wildfire Risk Conditions In Protected Areas	Paper	2016	11th International Conference of the African Association of Remote Sensing of the Environment, Kampala, Uganda

**Research Master Dissertations completed in 2015-16:**

<i>Student's Name</i>	<i>Title of dissertation</i>	<i>Institution</i>	<i>Qualification</i>	<i>Supervisor</i>	<i>Co-supervisor</i>
Ingrid Juries	A Spatial Analysis of Female Street Traders in the Bloemfontein Central Business District	University of the Free State	MA	Dr Ruth Massey	N/A

**Master and PhD Thesis's completed in 2015-16:**

<i>Student's Name</i>	<i>Title of thesis</i>	<i>Institution</i>	<i>Qualification</i>	<i>Supervisor</i>	<i>Co-supervisor</i>
Tariro Kamuti	Private Wildlife Governance in a Context of Radical Uncertainty: Dynamics of Game Farming Policy and Practice in KwaZulu-Natal, South Africa	University of the Free State Vrije University Amsterdam	PhD	Prof. M.B. Veenswijk (Vrije University Amsterdam)  Prof. G.E. Visser (University of the Free State)	Prof. S.J. Brooks (University of the Western Cape)  Prof. M.J. Spierenburg (Vrije University Amsterdam)

**Student Numbers (2015-16):**

<b>Level</b>	<b>2015</b>	<b>2016</b>
First year	1 <sup>st</sup> semester: 295 2 <sup>nd</sup> semester: 196	1 <sup>st</sup> semester: 379 2 <sup>nd</sup> semester: 100
Second year	1 <sup>st</sup> semester: 271 2 <sup>nd</sup> semester: 255	1 <sup>st</sup> semester: 175 2 <sup>nd</sup> semester: 124
Third year	1 <sup>st</sup> semester: 242 2 <sup>nd</sup> semester: 229	1 <sup>st</sup> semester: 159 2 <sup>nd</sup> semester: 229
Honours	1 <sup>st</sup> semester: 16 2 <sup>nd</sup> semester: 17	1 <sup>st</sup> semester: 21 2 <sup>nd</sup> semester: 18
Masters	1 <sup>st</sup> semester: 15 2 <sup>nd</sup> semester: 15	1 <sup>st</sup> semester: 7 2 <sup>nd</sup> semester: 6
Doctoral	1 <sup>st</sup> semester: 6 2 <sup>nd</sup> semester: 6	1 <sup>st</sup> semester: 4 2 <sup>nd</sup> semester: 2

**The name and contact details of your SSAG person for any further (and future) information:**

Sandra Brits

BritsS@ufs.ac.za

051 401 2184

## University of South Africa: Geography

<b>Name (Title, Surname, Initials)</b>	<b>Area of specialisation</b>	<b>E-mail</b>	<b>Office Telephone Number</b>
Dr Gunter, AW	Urban Geography	gunteaw@unisa.ac.za	(011) 471 3390

### Geographers in the Department

<b>Name (Title, Surname, Initials)</b>	<b>Rank/Position</b>	<b>Area of specialisation</b>	<b>E-mail</b>	<b>Office Telephone number</b>
Prof Horn, AC	Professor	Urban and Social Geography	hornac@unisa.ac.za	(011) 471 2168
Prof Mini, SE	Professor	Urban studies	minise@unisa.ac.za	(011) 471 2348
Prof Hedding, DW	Associate Professor	Geomorphology	heddidw@unisa.ac.za	(011) 471 2120
Prof Nicolau, MD	Associate Professor	Community asset resource management	nicolamd@unisa.ac.za	(011) 670 6968
Dr Gunter, A	Senior Lecturer	Urban Geography	gunteaw@unisa.ac.za	(011) 471 2520
Mr Pretorius, RW	Senior Lecturer	Teaching and learning in Geography	pretorw@unisa.ac.za	(011) 471 3680
Mr Vlok, AC	Senior Lecturer	Remote sensing/ GIS/ Geographical analysis	vlokac@unisa.ac.za	(011) 471 3120
Dr Du Plessis, A	Senior Lecturer	Hydro Geography	duplea@unisa.ac.za	(011) 471 2877

Dr Dirsuweit, T	Lecturer	Urban Studies, Food Studies and Gender Studies	<a href="mailto:dirsutc@unisa.ac.za">dirsutc@unisa.ac.za</a>	(011) 471 2752
Mr Todani, SJ	Lecturer	Geography of Development and rural studies	<a href="mailto:todansj@unisa.ac.za">todansj@unisa.ac.za</a>	(011) 471 9760
Mr Anderson, R	Lecturer	Geomorphology	<a href="mailto:anderrl@unisa.ac.za">anderrl@unisa.ac.za</a>	(011) 417 3541
Mrs De Jager, AE	Lecturer	Teaching and learning in Geography; Urban geography, services provision, Tourism, quality of life	<a href="mailto:djageae@unisa.ac.za">djageae@unisa.ac.za</a>	(011) 471 2022
Mrs Coetzee, R	Lecturer	Environmental Geography; ODEL within the context of geography and e-learning	<a href="mailto:coetZR@unisa.ac.za">coetZR@unisa.ac.za</a>	(011) 471 3437
Ms Lombard, A	Lecturer	Environmental and Tourism Geography	<a href="mailto:lombae1@unisa.ac.za">lombae1@unisa.ac.za</a>	(011) 471 2352
Ms Nenwiini, SC	Lecturer	Climatology	<a href="mailto:nenwisc@unisa.ac.za">nenwisc@unisa.ac.za</a>	(011) 471 2525
Ms Pienaar, R	Lecturer	Geography of education Physical geography	<a href="mailto:pienar@unisa.ac.za">pienar@unisa.ac.za</a>	(011) 471 2243
Mr Calvert, DR	Junior Lecturer	Geomorphology	<a href="mailto:calvedr@unisa.ac.za">calvedr@unisa.ac.za</a>	(011) 471 2364
Mr Khanye, B	Junior Lecturer	Settlement Geography	<a href="mailto:khanyb@unisa.ac.za">khanyb@unisa.ac.za</a>	(011) 471 2065
Mrs Khotoo, A	Junior Lecturer	Human Geography	<a href="mailto:khotoa@unisa.ac.za">khotoa@unisa.ac.za</a>	(011) 471 2749
Mr	Junior Lecturer	Land and	<a href="mailto:ramasp@unisa.ac.za">ramasp@unisa.ac.za</a>	(011) 471

Ramasunga, P		agrarian reform, livelihoods, renewable energy, human settlement and land use		2106
Mr Tshabalala, S	Junior Lecturer	Transport geography	<a href="mailto:tshabas1@unisa.ac.za">tshabas1@unisa.ac.za</a>	(011) 471 3109
Mr Schoeman, RC	Junior Lecturer	Urban Geography	<a href="mailto:eschoerc@unisa.ac.za">eschoerc@unisa.ac.za</a>	(011) 471 2364
Mr Greyling, C	Junior Lecturer	Geomorphology	<a href="mailto:egreyla1@unisa.ac.za">egreyla1@unisa.ac.za</a>	(011) 471 9464
Ms Mulibana, L	Junior Lecturer	Urban Geography	<a href="mailto:mulibl@unisa.ac.za">mulibl@unisa.ac.za</a>	(011) 471 2288
		<b>Fixed Term Appointments</b>	<b>Fixed Term Appointments</b>	
Prof Seethal, C	Professor	Political Geography	<a href="mailto:seethce@unisa.ac.za">seethce@unisa.ac.za</a>	(011) 471 2121
Mr Manuel, K	Science Foundation	Urban Geography	<a href="mailto:manuek@unisa.ac.za">manuek@unisa.ac.za</a>	(011) 471 2097
Ms Gonsalves, M	Junior Lecturer	Environmental management and physical geography	<a href="mailto:gonsam@unisa.ac.za">gonsam@unisa.ac.za</a>	
Ms Moolman, T	Lecturer	Environmental Education and Tourism geography	<a href="mailto:moolmt@unisa.ac.za">moolmt@unisa.ac.za</a>	(011) 471 2352
Mr Mashimbye, NC	Junior Lecturer	Geomorphology and GIS	<a href="mailto:mashinc@unisa.ac.za">mashinc@unisa.ac.za</a>	(011) 471 2107
Mrs Adams, C	Lecturer	Environmental Geography	<a href="mailto:fordrc@unisa.ac.za">fordrc@unisa.ac.za</a>	(011) 471 3105
Mr Boschhoff, DS	Lecturer	Environmental issues and impacts	<a href="mailto:boshods@unisa.ac.za">boshods@unisa.ac.za</a>	(011) 471 9464



### Information about the professional and support staff in the Department

<b>Name (Title, Surname, Initials)</b>	<b>Position</b>	<b>Area of subject specialisation (if applicable)</b>	<b>E-mail</b>	<b>Office Telephone number</b>
Mr Thenga, L	Administrative assistant		thengla@unisa.ac.za	(011) 471 2520
Ms Kuhlase, S	Administrative assistant		kuhlasv1@unisa.ac.za	(011) 471 3549
Ms Steenkamp, HE	Departmental secretary		steenhe@unisa.ac.za	(011) 471 3689
Ms Lotz, CE	Technical assistant		potgice@unisa.ac.za	(011) 471 3153

### Department News

#### Staff Movements

The Department of Geography at UNISA has continued to grow over the two last years, in 2016, the Department welcomed 5 new members, Lydia Mulibana (UKZN); Carl Greyling (UP); Ruan Schoeman (UJ); Shumi Todani (UV) and Dr Teresa Disruweit (WITS) while Prof Melanie Nicolau was seconded to the position of Director of the School of Environmental Science. We welcomed Prof Seethal to the Department as the Postgraduate Co-ordinator for two years and now wish him a fond farewell and a relaxing retirement. We also saw the departure of Prof Breetzke to the University of Pretoria and Schalk Van Heerden and Jaco Immerman went into other ventures outside of geography academia.

#### Awards and Achievements

Prof David Hedding was awarded a C2 NRF rating and was promoted to the position of Associate Professor.

Prof Elri Liebenburg, an academic associate in the Department, was awarded a B2 NRF rating.

Dr Anja Du Plessis was promoted to the position of Senior Lecturer.

Dr Ashley Gunter and Prof Parvati Raghuram (Open University) were awarded a joint ESRC/NRF Newton Grant to research International Distance Education in Africa to the value of approximately R10 million.

Mrs Anisa Khotso was awarded a UNISA Excellence in Teaching Award for her outstanding contributions to the module GGH3707 in 2015

Ms Shandu Nenwiini and Ms Andrea Lombard have been awarded UNISA AQIP grants to conduct their PhDs full time.

Prof David Hedding was invited to China to co-chair the joint NRF/NSFC workshop on Geoscience, He is also the co-investigator of a R1.17 million NRF grant researching landscape and climate interaction in sub-antarctic environments.

Dr Ashley Gunter was invited for a research fellowship in the Department of Geography at Open University in November and December.

Mr Sabelo Tshabalala was invited to visit India as one of the winners of the outstanding paper presentations from the UNISA postgraduate student symposium.

### **Departmental Activities**

The Department's Community Engagement (CE) activities were ongoing with the organisation and contribution to the annual symposium for post graduate science students of the South African Academy of Science and Arts. The CE project ROOTS Driven Change continued the involvement of the department with the Big Five Community Tourism Forum in Koffiekraal and Brakkuil Village Tours.

In 2016 the Department co-hosted the World Environment Day Colloquium on endangered species entitled 'Go Wild for Life – Zero tolerance for illegal Wildlife Trade'.

### **2015-16 dated publications:**

Breetzke, G.D. and **Hedding, D.W.**, 2016. The changing racial profile of academic staff at South African Higher Education Institutions (HEIs), 2005–2013. *Africa Education Review*, 13(2), pp.147-164.

Bwalya, J. and **Seethal, C.**, 2016. Neighbourhood context and social cohesion in Southernwood, East London, South Africa. *Urban Studies*, 52(1), pp.40-56.

**Dirsuweit, T.** and Mohamed, S., 2016. Vertical and horizontal communities of practice: gender and geography in South Africa. *South African Geographical Journal*, 98(3), pp.531-541.

Gunter, A. and Manuel, K., 2016. A role for housing in development: Using housing as a catalyst for development in South Africa. *Local Economy*, 31(1-2), pp.312-321.

Gunter, A.W., 2016. Monash South Africa: An international degree in a local setting. In: Visser, G., Donaldson, R. and Seethal, C. (eds) *The Origin and Growth of Geography as a Discipline at South African Universities*. Stellenbosch: SUN PRESS, pp.435-444.

Hedding, D.W., 2016. Pronival ramparts: A review. *Progress in Physical Geography*, 40(6), pp.835-855.

Hedding, D.W., 2016. Pronival ramparts: origin and development of terminology. *Erdkunde*, 70(2), pp.141-151.

**Hedding, D.W.**, Nel, W. and **Anderson, R.L.**, 2015. Aeolian processes and landforms in the sub-Antarctic: Preliminary observations from Marion Island. *Polar Research*, 34.

**Hedding, D.W.**, Hansen, C.D., Nel, W., Loubser, M., Roux, J.L. and Meiklejohn, K.I., 2016. Rock mass loss on a nunatak in Western Dronning Maud Land, Antarctica. *Arctic, Antarctic, and Alpine Research*, 48(1), pp.1-8.

Hamann, C. and **Horn, AC**. 2015. Continuity or discontinuity? Evaluating the changing socio-spatial structure of the city of Tshwane, South Africa, *Urban Forum* 26(1), 39-57.

Liebenberg, E., 2016. Mapping for Empire: British military mapping in South Africa, 1806-1914, in Elri Liebenberg, Imre Josef Demhardt en Soetkin Vervust. *History of Military Cartography. International Symposium of the ICA Commission, 2014*. Series: *Lecture Notes in Geoinformation and Cartography*, pp. 301-326.

**Lombard, A.** and Ferreira, S., 2015. The spatial distribution of renewable energy infrastructure in three particular provinces of South Africa. *Bulletin of Geography, Socio-economic Series*, 30, pp.71-85.

Lombard, A. 2015. Using participatory GIS to examine the social perception toward proposed wind energy landscapes, *Journal of Energy in Southern Africa (JESA)*, 26(2), pp.42-52.

Maharaj, B. and **Seethal, C.**, 2016. Transcending Apartheid – Internationalisation and transformation: Geography at the University of Durban-Westville. In: Visser, G., Donaldson, R. and Seethal, C. (eds) *The Origin and Growth of Geography as a Discipline at South African Universities*. Stellenbosch: SUN PRESS, pp.349-370.

Moyo, I. and **Nicolau, M.D.**, 2016. Remittances and development: Zimbabwean migrant teachers in South Africa and their impact on their Zimbabwean families. *African Population Studies*, 30(2), pp.2506-2519.

Moyo, I., **Nicolau, M.D.** and Gumbo, T., 2016. Johannesburg (South Africa) Inner City African Immigrant Traders: Pathways from Poverty? *Urban Forum*, 27(3), pp.329-345.

Nicolau, M.D. and Pretorius, R.W., 2016. University of South Africa (UNISA): Geography at the Africa's largest open distance learning institution. In: Visser, G., Donaldson, R. and Seethal, C. (eds) *The Origin and Growth of Geography as a Discipline at South African Universities*. Stellenbosch: SUN PRESS, pp.215-244.

Pretorius, R.W. and Fairhurst, U.J., 2015. "The role of Geography in multi-inter-trans-disciplinary study programmes for environmental sustainability". Chapter in W. Leal Filho (ed.), *Transformative Approaches to Sustainable Development at Universities: Working across Disciplines*. World Sustainability Series, Springer, Switzerland.

**Pretorius, R.W., Nicolau, M.D., Immelman, J., De Jager, A.E., Nöthling, M. and Du Plessis, A.**, 2015. "Virtual learning environments for transformation to sustainability: A case study from the South". Chapter in W. Leal Filho et al. (eds), *Integrating Sustainability Thinking in Science and Engineering Curricula: Innovative Approaches, Methods and Tools*. World Sustainability Series. Springer, Switzerland.

**Pretorius, R.W., Coetzee, R., de Jager, A.E.**, Van Niekerk, H.J., **Vlok, A.C.**, Hendrick, R.M. and **Potgieter, C.E.**, 2015. "From correspondence to online provisioning in open and distance learning: Greening implications versus practical and organisational imperatives." Chapter in W. Leal Filho et al. (eds.), *Implementing Campus Greening Initiatives: Approaches, Methods and Perspectives*. World Sustainability Series, Springer, Switzerland.

Pretorius, R.W., Hedding, D.W., Nicolau, M.D. and Nkooe, E.S., 2015. "Campus greening in open and distance learning: Curriculum initiatives in the Department of Geography, University of South Africa." Chapter in W. Leal Filho et al. (eds.), *Implementing Campus Greening Initiatives: Approaches, Methods and Perspectives*. World Sustainability Series, Springer, Switzerland.

Pretorius, R., Lombard, A. and Khotoo, A., 2016. Adding value to education for sustainability in Africa with inquiry-based approaches in open and distance learning. *International Journal of Sustainability in Higher Education*, 17(2), pp.167-187.

**Pretorius, R.W.**, Brand, M.E. and Brown, L.R., 2016. Engaging ODL Students with Biodiversity Issues: A South African Case Study on the Role of ESD. In: Castro, P., Azeiteiro, U.M., Bacelar Nicolau, P., Leal Filho, W. and Azul, A.M. (eds) *Biodiversity and Education for Sustainable Development*. Springer International Publishing: Switzerland, pp.289-304.

Sachikonye, M.T., Dalu, T. and **Gunter, A.**, 2016. Sustainable livelihood principles and urban greening in informal settlements in practice: A case of Zandspruit informal settlement, South Africa. *Development Southern Africa*, pp.1-14.

Seethal, C. and Mini, S., 2016. From the South African Native College to the University of Fort Hare: The Geography Department. In: Visser, G., Donaldson, R. and Seethal, C. (eds) *The Origin and Growth of Geography as a Discipline at South African Universities*. Stellenbosch: SUN PRESS, pp.189-214.

Sumner, P., Nel, W., Rughooputh, S., Booijhawon, R., Dhurmea, K., Le Roux, J. and **Anderson, R.**, 2016. Rainfall Erosivity and Soil Erosion Risk Assessment in Tropical Island Environments: A Case Study of Mauritius. In Meadows, M.E. and Lin, J.C. (eds) *Geomorphology and Society*. Springer: Japan, pp. 217-230.

Visser, G., Donaldson, R. and **Seethal, C.**, 2016. Introduction. The Origin and Growth of Geography as a Discipline at South African Universities. In: Visser, G., Donaldson, R. and Seethal, C. (eds) *The Origin and Growth of Geography as a Discipline at South African Universities*. Stellenbosch: SUN PRESS, pp.1-7.

Wubie, M.A., Assen, M. and **Nicolau, M.D.**, 2016. Patterns, causes and consequences of land use/cover dynamics in the Gumara watershed of lake Tana basin, Northwestern Ethiopia. *Environmental Systems Research*, 5(1), p.1.

### Conference Presentation in 2015-16:

Name of presenter(s)	Title of presentation	Format of presentation	Date of conference/workshop	Name of Conference/workshop
Khotoo, A and Pretorius, R	Utilising online learning to include real-world experiences: A case study from Geography	Pecha Kucha	14-16 October 2016	26 <sup>th</sup> ICDE World Conference
Horn, AC	'Racial' desegregation	Paper	10-14 June 2015	Interdisciplinary Social Sciences Conference,

	in the post-apartheid South African school system – pointers for other regions.			Split, Croatia
Horn, AC	Globalisation, glocalisation and changing ethnic patterns: lessons about school desegregation from South Africa	Paper	15-20 August 2016	Meeting of the International Geographical Union Urban Commission, Shanghai, China
<b>Hedding, DW.</b> and Nel, W	The topography of sub-Antarctic Marion Island during the Last Glacial maximum: evidence from bathymetry data	Paper	27-28 July 2016	South African National Antarctic Programme Symposium, University of Pretoria, South Africa
<b>Hedding, DW.</b> , Nguna, A. and Nel, W	Intra-annual variations in aeolian sediment rates at sub-Antarctic Marion Island	Poster	25-28 September 2016	Society of South African Geographers' Biennial Conference, Stellenbosch University, South Africa
Wilson, G. and <b>Pretorius, RW</b>	Utilising work-integrated learning to enhance student participation and engagement in sustainability issues in open and distance learning	Paper	14-16 September 2016	Third World Symposium on Sustainable Development at Universities, Massachusetts Institute of Technology (MIT), Cambridge, USA
<b>Lombard, A.</b> and Ferreira, S	The spatial distribution of renewable	Paper	25-29 September 2016	Society of South African Geographers Biennial conference: Celebrating

	energy infrastructure in three particular provinces of South Africa.			a Century of Geography in South Africa, Stellenbosch
Lombard, A	The geo-economic dissemination of renewable energy infrastructure across rural South Africa	Paper	13-16 September 2015	World Social Science Forum (WSSF), Durban, South Africa
Anderson, R	Gully erosion developments in changing environments: mapping and modelling at a large catchment scale	PhD proposal	14 July 2016	Ntabalenga Laleni Ecological Infrastructure Project (NLEIP) Science Forum, Rhodes University, Grahamstown

#### Research Master Dissertations completed in 2015-16:

Student's Name	Title of dissertation	Institution	Qualification	Supervisor	Co-supervisor
AA Desta (Mr)	Socio-economic impacts of resettlement/ villagization and investment on the indigenous people of Gambella, South West Ethiopia	UNISA	MSc (Geography)	Dr YM Habtemariam	
C Hamann (Mr)	Questioning the existence of the post-apartheid city: Racial-residential segregation patterns in the city of Tshwane metropolitan municipality of South Africa	UNISA	MSc (Geography)	Prof AC Horn	

DA Ramovha (Mrs) (née Selowa)	Social and economic impact of comprehensive rural development programme: a case study of Muyexe Comprehensive Rural Development programme site in the Greater Giyani Local Municipality in Limpopo Province	UNISA	MSc (Geography)	Prof SE Mini	
L Peck (Mrs)	The impacts of weather on aviation operations at OR Tambo international airport, South Africa	UNISA	MSc (Geography)	Dr D Hedding	
RD Sherrif (Mr)	Buying into residential Eco-estates: Perception and reality of "green living" in Eco-estates in South Africa	UNISA	MA (Geography)	Dr AW Gunter	
HH Arnolds (Mr)	The role of cultural heritage festivals: a case study of the ATKV Riedans Competition in South Africa	UNISA	MSc (Geography)	Mrs AE De Jager	
JM Kotane (Mr)	Public services delivery in the Gauteng province: The case of housing development in Braamfischerville, Soweto	UNISA	MSc (Geography)	Prof SE Mini	

**PhD Thesis's completed in 2015-16:**

Student's Name	Title of thesis	Institution	Qualification	Supervisor	Co-supervisor
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LA Tseane-Gumbi (Mrs)	Social and economic impact of BSR of tourism industry: the case of BSR in tourism sector in Western Cape Province	UNISA	PhD (Geography)	Prof SE Mini	
FW Ayichew (Mr)	Effects of rapid motorised road transportation in Ethiopia: Evidences from Addis Ababa	UNISA	PhD (Geography)	Dr AW Gunter	
BD Bogale (Mr)	Socioeconomic Impacts of Road Development in Ethiopia: Case Studies of Weldiya-Mile, Gelagu-Shehedi and Ginchi-Kachise Roads	UNISA	PhD (Geography)	Prof B Woldesmait	

### Short description of the curriculum presented:

Undergraduate (NQF levels 5, 6 and 7):

Geography can be taken as a major for a BA or BSc at **NQF levels 5, 6 and 7**: Undergraduate (NQF levels 5, 6 and 7)

Geography at Unisa is a major in a number of generic degrees at Unisa. In addition, many of the individual Geography modules are compulsory in a variety of vocational programmes. The Department is the coordinator of the multi-inter and trans disciplinary undergraduate degrees in Environmental Management. The Department is privileged to offer one (GGH3708) of the six signature modules offered at Unisa. The purpose of these modules is the address the overall graduateness of the Unisa student.

### Major combinations:

NQF Level: 5: GGH1501, GGH1502, GGH1503 (BSc major students must complete all three modules, while BA major students only need to complete GGH1501 and GGH1502).

NQF Level: 6: Select any FOUR of GGH2601, GGH2602, GGH2603, GGH2604, GGH2605 and GGH2606.

NQF Level: 7: Select any FIVE of GGH301W, GGH302X, GGH303Y, GGH3043, GGH3054, GGH3076 and GGH3708.

NQF Level: 8: HPGGH80, HRGGH81, GGH4802, GGH4804, and GGH4805. Students, who registered prior to 2013, may register for GGH4801 and GGH4803

### Know Your World: Introduction to Geography - GGH1501

Semester module

NQF Level: 5

Credits: 12

**Purpose:** The nature and scope of geography as a science; representation of the earth on maps and map use; sustainable development as a geographical concept; a selection of world spatial patterns and



processes from the following themes: climate, ecosystems and biomes, landforms, minerals and soils, energy and water resources, population, HIV-AIDS, development and wealth, culture, and globalisation. Students registering for this module are required to have regular access to a computer to download or read essential study material from the myUnisa module site and the World Wide Web.

### **World Issues: A Geographical Perspective - GGH1502**

Semester module

NQF Level: 5

Credits: 12

**Purpose:** Global change and global problems, resource use and exploitation in both the physical and human resource systems; the conservation and sustainable development of the human resource base; techniques used for environmental monitoring. A selection of issues from the following: population problems, poverty, quality of life, urban problems, food, conflict and war, the energy crisis, air pollution, water pollution, land degradation, biodiversity, and the problem of waste. Students registering for this module are required to have regular access to a computer to download or read essential study material from the myUnisa module site.

### **Our Living Earth - GGH1503**

Semester module

NQF Level: 5

Credits: 12

**Purpose:** To gain insight into some of the underlying scientific principles of the world we live in, and its sustainability. Students registering for this module are required to have regular access to a computer and the Internet in order to download or read essential study material from the myUnisa module site.

### **The African Challenge: People and Environment - GGH2601 (GGH201T)**

Semester module

NQF Level: 6

Credits: 12

**Purpose:** The challenge for development against the background of the natural and human environment in Africa. Distribution, growth and diversity of the population; impacts of HIV-AIDS; geopolitical evolution; economic development; urbanization; food production and agriculture; the use and exploitation of land and natural vegetation; climate and drought; desertification. Students registering for this module are required to have regular access to a computer to download or read essential study material from the myUnisa module site.

### **The Geography of Services Provision - GGH2602 (GGH202U)**

Semester module

NQF Level: 6

Credits: 12

**Purpose:** Spatial dimensions of basic services provision; sustainable development; needs assessment; provision and accountability; public participation and conflict management; accessibility; aspects of locational analysis; optimal location of services; South African case studies. Students registering for this module are required to have regular access to a computer to download or read essential study material from the myUnisa module site.

### **The Interpretation of Maps, Aerial Photographs and Satellite Images - GGH2603 (GGH203V)**

Semester module

NQF Level: 6

Credits: 12

**Purpose:** The nature of geographical data; map types; map elements; fundamentals of the use of aerial photographs and satellite images; measurements on maps and aerial photographs; the analysis of point, line and area patterns; the identification and interpretation of topographical features, landscapes and cultural phenomena; thematic mapping; the basics of Geographical Information Systems (GIS). Students registering for this module are required to have regular access to a computer to download or read essential study material from the myUnisa module site.

#### **People and The Natural Environment: Use and Impact (Geography) - GGH2604 (GGH204W)**

Semester module

NQF Level: 6

Credits: 12

**Purpose:** The current environmental dilemma and reasons for it; the development of environmental awareness; use and exploitation of the natural environment by people with reference to the: biosphere, atmosphere, pedosphere, hydrosphere and lithosphere; transformation towards sustainability. Students registering for this module are required to have regular access to a computer to download or read essential study material from the myUnisa module site.

#### **Environmental Politics (Geography) - GGH2605 (GGH205X)**

Semester module

NQF Level: 6

Credits: 12

**Purpose:** The political perspective on the environment, including the following topics and phenomena: appropriate concepts and definitions; political theories and environmental conflict; the role of environmental social movements, nongovernmental organisations, political parties, and the business sector; institutional politics, policy and green administration; environmental politics on the global scale. Students registering for this module are required to have regular access to a computer to download or read essential study material from the myUnisa module site.

#### **Geography of Tourism - GGH2606 (GGH206Y)**

Semester module

NQF Level: 6

Credits: 12

**Purpose:** Global, national and local tourism resources (natural, human and cultural); spatial patterns of tourism resources; spatiotemporal interactions in the tourism system; environmental, economic and socio-cultural impacts of tourism; sustainable tourism development; strategic importance of tourism for South Africa; destination image of South Africa. Students registering for this module are required to have regular access to a computer to download or read essential study material from the myUnisa module site.

#### **State of the Environment in Southern Africa – GGH3701 (GGH301W)**

Semester module

NQF Level: 7

Credits: 12

**Purpose:** Sustainable development in Southern Africa. Geographical phenomena underlying this challenge are climate, vegetation, soil and water resources, people, and the evolution of the politicospatial, social and economic landscapes. Issues which are addressed are: the constraints, problems and management of the natural and human environments, the conservation of Southern Africa's ecological and cultural heritage linked to sustainability and tourism; and problems relating to politicospatial accommodation, regionalisation and local government in South Africa. Students registering for this module are required to have regular access to a computer to download or read essential study material from the myUnisa module site.

### **Spatial Economic Development – GGH3702 (GGH302X)**

Semester module

NQF Level: 7

Credits: 12

**Purpose:** Spatial economic development in South Africa in terms of the following: theories; primary, secondary, tertiary and quaternary activities; uneven spatial development; the infrastructure of transportation and communication; spatiotemporal evolution of the economy; spatial development planning. Students registering for this module are required to have regular access to a computer to download or read essential study material from the myUnisa module site.

### **Introduction to Geographical Information Systems - GGH3703 (GGH303Y)**

Semester module

NQF Level: 7

Credits: 12

**Purpose:** Origin, nature and theoretical foundations of GIS; generic GIS applications; collection, input, storage, retrieval and management of spatial data; data analysis and modeling; output, display and communication of geo-referenced data; spatial decision support systems; applying basic GIS functionalities. Students registering for this module are required to have regular access to a computer to download or read essential study material from the myUnisa module site.

### **Development of Urban Space – GGH3704 (GGH3043)**

Semester module

NQF Level: 7

Credits: 12

**Purpose:** Urban spatial patterns, socio-economic structure of the city; the urban environment; movement in urban space; urban planning and management; local economic development planning; spatial data management for urban development; the marketing of urban areas; current issues in urban areas. Students registering for this module are required to have regular access to a computer to download or read essential study material from the myUnisa module site.

### **Environmental Evaluation and Impact Assessment – GGH3705 (GGH3054)**

Semester module

NQF Level: 7

Credits: 12

**Purpose:** Overview of environmental assessment; South African case studies; approaches to and a framework for environmental evaluation and impact assessment in transitional and developing countries; the role of legislation, politics, stakeholders and interest groups; procedures and techniques for impact assessment; application in terms of practical examples; future perspectives. Students registering for this module are required to have regular access to a computer to download or read essential study material from the myUnisa module site.

### **Ecotourism – GGH3707 (GGH3076)**

Semester module

NQF Level: 7

Credits: 12

Prerequisite: TRT101X (Prerequisite applies to BCom Tourism Management students only.)

**Purpose:** Ecotourism in terms of the following: concepts; sustainable (responsible) tourism; specialist travel markets; resources (also in South Africa); environmental impacts; policy and regulation; planning, development and management of ecotourism destinations; the ecotourism business; communities and ecotourism destinations; ecotourism projects in South Africa. Students registering for this module are

required to have regular access to a computer to download or read essential study material from the myUnisa module site.

### **Environmental Awareness and Responsibility - GGH3708**

Semester module

NQF Level: 7

Credits: 12

**Purpose:** Environmental principles are presented in a generic fashion to encourage the development of a value system in terms of their environmental awareness and responsibility. The module uses a strong interdisciplinary focus and will make use of a variety of global case studies to enable students to understand how human activities impact on the environment. Students must reflect constructively on these impacts, and develop a value system and a sense of responsibility in this regard. Students registering for this module are required to have regular access to a computer and the Internet in order to download or read essential study material from the myUnisa module site and the World Wide Web. This module will be presented online, and no study material will be posted for this module. Formative assessment must be completed online and summative assessment for this module comprises a non-venue based e-portfolio.

Postgraduate (NQF level 8):

### **NQF level 8: Bachelor of Science Honours in Geography**

#### **Geography in action: from problem identification to methodology - HPGGH80**

Year module

NQF Level: 8

Credits: 24

**Purpose:** To develop a student's ability to identify a real life geographical scenario that justifies research and to present an acceptable research proposal on the identified scenario. Students registering for this module are required to have regular access to a computer and the Internet in order to download or read essential study material from the myUnisa module site and the World Wide Web. This module will be presented online, and no study material will be posted for this module. Formative assessment must be completed online and summative assessment for this module comprises a non-venue based e-portfolio.

#### **The geographer as a researcher - HRGGH81**

Year module

NQF Level: 8

Credits: 24

Co-requisite: HPGGH80 (Students are however advised to complete HPGGH80 before they register for HRGGH81.)

**Purpose:** To guide students to, undertake the research on their chosen geographical scenario, and to report on their research findings. Learners can provide personal reflections on how the research experience has contributed to their own sense of citizenship and employability. Students registering for this module are required to have regular access to a computer and the Internet in order to download or read essential study material from the myUnisa module site and the World Wide Web. This module will be presented online, and no study material will be posted for this module. Formative assessment must be completed online and summative assessment for this module comprises a non-venue based e-portfolio.

#### **The geography of everyday living in human settlements - GGH4802**

Year module

NQF Level: 8

Credits: 24

**Purpose:** The purpose of this module is to guide students to explore various factors that impact life in human settlements to enable them to make informed contributions related to everyday living in human

settlements. The module forms part of an honors programme that provides learning experiences and opportunities to develop capacity to investigate various geographical problems related to how resource use and environmental change could impact on quality of life in various contexts. Students registering for this module are required to have regular access to a computer and the Internet in order to download or read essential study material from the myUnisa module site and the World Wide Web. This module will be presented online, and no study material will be posted for this module. Formative assessment must be completed online and summative assessment for this module comprises a non-venue based e-portfolio.

#### **Geographic perspectives of environmental change - GGH4804**

Year module  
NQF Level: 8  
Credits: 24

**Purpose:** In this module, a student's capacity to deal with environmental change from a geographical perspective will be developed. A holistic approach will be followed that acknowledges the spatio-temporal patterns and interrelationships of natural and anthropogenically-induced phenomena. This module contributes to the Honours Program in Geography by elucidating the landscape responses to environmental change and how these responses impact the natural and built environments. Students registering for this module are required to have regular access to a computer and the Internet in order to download or read essential study material from the myUnisa module site and the World Wide Web. This module will be presented online, and no study material will be posted for this module. Formative assessment must be completed online and summative assessment for this module comprises a non-venue based e-portfolio.

#### **The geography of people-resource interactions in the Global South - GGH4805**

Year module  
NQF Level: 8  
Credits: 24

This module guides students in developing their own voice on issues related to the interaction between people and resource use in different regions of the Global South. They should develop the capacity to make informed contributions to future resource use in a variety of local contexts.

The Honours in Geography is supported by this module with its unique regional perspective on resource use and the implications thereof, with a strong focus on people and their roles in different spatiotemporal contexts. Students registering for this module are required to have regular access to a computer and the Internet in order to download or read essential study material from the myUnisa module site and the World Wide Web. This module will be presented online, and no study material will be posted for this module. Formative assessment must be completed online and summative assessment for this module comprises a non-venue based e-portfolio.

Postgraduate (NQF level 9):

NQF Level 9: Master of Science in Geography

NQF level 10 : PhD in Geography  
Full thesis.

### **1. Student Numbers (2015-16):**

<b>Level</b>	<b>2015</b>	<b>2016</b>
First year	6025	5452
Second year	6880	6072

Third year	3428	3212
Honours	181	195
Masters	30	25
Doctoral	38	35

2. **Any other information not included above, that you would like to include in the newsletter:**
3. **The name and contact details of your SSAG person for any further (and future) information:** Dr Ashley Gunter, Email: [gunteaw@unisa.ac.za](mailto:gunteaw@unisa.ac.za), Office Telephone number: (011) 471 3390

## University of Mpumalanga: Geography

### Geographers in the Department

Name (Title, Surname, Initials)	Rank	Area of specialisation	E-mail	Office Telephone number
Prof.PQ Siyongwana	Professor	Human Geography	<a href="mailto:Pakama.siyongwana@ump.ac.za">Pakama.siyongwana@ump.ac.za</a>	0130020228
Dr W. Chingombe	Senior Lecturer	Physical Geography	<a href="mailto:Wisemen.chingombe@ump.ac.za">Wisemen.chingombe@ump.ac.za</a>	0130020221

Department News: Dr Wisemen Chingombe and Prof PQ Siyongwana joined the University of Mpumalanga on the 1<sup>st</sup> June and 1<sup>st</sup> September 2016 respectively.

### 2015-16 dated publications:

**Siyongwana, P.Q.**, Heijne, D., and Tele, A., 2015. The Vulnerability of Low income Communities to Flood Hazards, Missionvale, South Africa, *Journal of Human Ecology*, Volume 52, pp. 104-115.

**Siyongwana P. Q.**, and Chanza N., 2016: Interrogating the post-apartheid socio-economic transformation in Mdantsane, Buffalo City. *GeoJournal*, DOI 10.1007/s10708-016-9714-2.

Mrara, A and **Siyongwana, P.Q.**, 2016 in Visser G, Donaldson, R and Seethal, C editions, *The origin and Growth of Geography as discipline at South African Universities*, Reflections on the Geography Department: Walter Sisulu University (University of Transkei), 371-382.

**W. Chingombe**, E. Pedzisai, D. Manatsa, G. Mukwada & P. Taru. (2015) A participatory approach in GIS data collection for flood risk management, Muzarabani district, Zimbabwe. *Arab J Geosci. Vol. 8 (2)*; 1029-1040. DOI 10.1007/s12517-014-1265-6.

### Conference Presentation in 2015-16:

Name of presenter (s)	Title of presentation	Format of presentation	Date of conference/workshop	Name of Conference/workshop
P.Q Siyongwana	<b>Siyongwana P. Q.</b> , and Chanza N., 2016: Interrogating the post-apartheid socio-economic transformation in Mdantsane, Buffalo City	Oral	25-29 September, 2016	SSAG Conference

### Research Master Dissertations completed in 2015-16:

Student's Name	Title of dissertation	Institution	Qualification	Supervisor	Co-supervisor
Tineyi Herbert Pindura	Water security in the face of climate variability and resources constraints: The case of Nkonkobe municipality in the Eastern Cape, South Africa	University of Fort Hare	MSc	Dr W Chingombe	Dr L Zhou and Dr S Mosweu
Masiza	Monitoring changes in	University of Fort	MSc	Prof H	Dr W



Wonga	vegetation distribution to ascertain the extent of degradation in the grasslands and savannas of Nkonkobe municipality	Hare		Hamandawana	Chingombe
Orbert Manyanye.	Monitoring the growth and sustainability of Alice town in the Eastern Cape Province of South Africa	University of Fort Hare	MSc	Prof H Hamandawana	Dr W Chingombe
Sipho Dikweni	An investigation of long-term impacts of herbivory in vegetation on the Great Fish River Game Reserve, Eastern Cape Province, South Africa: 1982 - 2012	University of Fort Hare	MSc	Prof H Hamandawana	Dr W Chingombe

**2015-16 dated publications:**

**Siyongwana, P.Q.**, Heijne, D., and Tele, A., 2015. The Vulnerability of Low income Communities to Flood Hazards, Missionvale, South Africa, *Journal of Human Ecology*, Volume 52, pp. 104-115.

**Siyongwana P. Q.**, and Chanza N., 2016: Interrogating the post-apartheid socio-economic transformation in Mdantsane, Buffalo City. *GeoJournal*, DOI 10.1007/s10708-016-9714-2.

Mrara, A and **Siyongwana, P.Q.**, 2016 in Visser G, Donaldson, R and Seethal, C editions, *The origin and Growth of Geography as discipline at South African Universities*, Reflections on the Geography Department: Walter Sisulu University (University of Transkei), 371-382.

**W. Chingombe**, E. Pedzisai, D. Manatsa, G. Mukwada & P. Taru. (2015) A participatory approach in GIS data collection for flood risk management, Muzarabani district, Zimbabwe. *Arab J Geosci. Vol. 8* (2); 1029-1040. DOI 10.1007/s12517-014-1265-6.

**Conference Presentation in 2015-16:**

Name of presenter (s)	Title of presentation	Format of presentation	Date of conference/workshop	Name of Conference/workshop
P.Q Siyongwana	<b>Siyongwana P. Q.</b> , and Chanza N., 2016: Interrogating the post-apartheid socio-economic transformation in Mdantsane, Buffalo City	Oral	25-29 September, 2016	SSAG Conference

**Research Master Dissertations completed in 2015-16:**

Student's Name	Title of dissertation	Institution	Qualification	Supervisor	Co-supervisor
Tineyi Herbert Pindura	Water security in the face of climate variability and resources constraints: The case of Nkonkobe municipality in the Eastern Cape, South Africa	University of Fort Hare	MSc	Dr W Chingombe	Dr L Zhou and Dr S Mosweu
Masiza Wonga	Monitoring changes in vegetation distribution to ascertain the extent of degradation in the grasslands and savannas of Nkonkobe municipality	University of Fort Hare	MSc	Prof H Hamandawana	Dr W Chingombe
Orbert Manyanye.	Monitoring the growth and sustainability of Alice town in the Eastern Cape Province of South Africa	University of Fort Hare	MSc	Prof H Hamandawana	Dr W Chingombe

Sipho Dikweni	An investigation of long-term impacts of herbivory in vegetation on the Great Fish River Game Reserve, Eastern Cape Province, South Africa: 1982 - 2012	University of Fort Hare	MSc	Prof H Hamandawana	Dr W Chingombe
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## South Africa Military Academy, Saldanha, Western Cpe Province: Military Geography

Head/Chair of Department: Mr Godwin K .Ayirebi

Name (Title, Surname, Initials)	Area of specialisation	E-mail	Office Telephone Number
South Africa Military Academy	Military Geography	<i>godwin@ma2.sun.ac.zaa</i>	22 702 3109

### Information about the Geographers in the Department

Name (Title, Surname, Initials)	Rank/Position	Area of specialisation	E-mail	Office Telephone number
HAP Smit	Cdr, Lecturer	Environmenta Studies	<i>hennies@ma2.sun.ac.za</i>	022 702 3010
B. Mtshawu	Lecturer	GIS/Remote Sensing	<i>babalwa.mtshawu@ma2.sun.ac.za</i>	022 702 3108
GK Ayirebi	Lecturer	Political Geography & Geo Politics.	<i>godwin@ma2.sun.ac.za</i>	022 702 3109

### Information about the professional and support staff in the Department

Name (Title, Surname, Initials)	Position	Area of subject specialisation (if applicable)	E-mail	Office Telephone number
Maj. L Ncubekezi	Academic Assistant	Environmeental Geopgraphy	<i>a_ncub@ma2.sun.ac.za</i>	
Lt Ramotise	Academic Assistant	GIS/Soil Science	<i>a_ramo@ma2.sun.ac.za</i>	<b>022 702 3158</b>
CO Narrainsammy	Academic Assistant	Physicaal Geography	<i>a_narr@ma2.sun.ac.za</i>	
CO Mkhize	Academic Assistant	Human Geography	<i>a_comfortm@ma2.sun.ac.za</i>	
Capt Davids	Academic Assistant	GIS & Remote Sensing	<i>a_davi@ma2.sun.ac.za</i>	

## **Department News**

Dr Tyrel Flugel resigned from the Department in June 2016.

Collaborative work with University of Namibia 2016 --

Department and Faculty of Military Science to host annual Geo Science Conference in 2017

## **2015-16 dated publications:**

### **Book Chapters:**

- Smit, H.A.P. & Donaldson, R 2016. Military Geography at Stellenbosch University's Military Geography Department in Saldanha. In Visser G, Donaldson, R & Seethal, C. (eds) *The origin and growth of Geography as a discipline at South African Universities*, Stellenbosch, Sun Press.
- Smit, H.A.P. & Mokiri, T.J. 2016. Environmental reporting in the South African Department of Defence and Military Veterans Military. In McDonald, E & Bullard, T. (eds) *Geosciences and Desert Warfare - Past Lessons and Modern Challenges*, New York, Springer.

### **Accredited journal articles**

- H.A.P. Smit, H.B. Magagula & T.J. Flügel 2016. South African Military Geography: Advancing from the trenches. *South African Geographical Journal*, Vol. 98 (3), 417 – 427.
- Cdr Hennie Smit presented at the 10<sup>th</sup> biennial conference of the Society of South African Geographers, Stellenbosch, 25-28 September 2016, with a paper titled
- Cdr Smit co-presented a paper the 7<sup>th</sup> War & Society in Africa conference: "The War for Southern Africa; a quinquagenarial reflection". Stellenbosch, 26 August 2016, with the topic

### 1. Conference Presentation in 2015-16:

Name of presenter (s)	Title of presentation	Format of presentation	Date of conference/workshop	Name of Conference/workshop
H.A.P. Smit	<i>Military environmental literacy in the South African Department of Defence.</i>	Oral presentation	25-28 September 2016	10 <sup>th</sup> Biennial SSAG Conference
T.J. Flügel & H.A.P. Smit	<i>The influence of Angola's physiography on South African military operations during the war.</i>	Oral Presentation	26 August 2016	7 <sup>th</sup> War & Society in Africa Conference
B. Mtshawu	<i>Estimating the distribution of surface soil texturer using Landsat 8 data</i>	Oral Presentation	25-28 September 2016	10 <sup>th</sup> Biennial SSAG Conference
Cpt Davids & Lt Ramotsia		Oral Presentation	22-25 September 2016	Annual SSAG Student Conference

### Short description of the curriculum presented:

#### Undergraduate (NQF levels 5, 6 and 7):

Concepts and Techniques , Mapwork and Analysis, Environmental Viewpoints

:Environmenta Managemeent and Policies to the Military Geographer,

Environmental Instruments

Sub-Sahara African Geography & Development.

GIS and Remote Sensing Techniques, Tools and Analysis.

**Postgrad Postgraduate (NQF level 8)**

Gographical Thought. Foundations and development of Geography and Military Geography

Methodologies and Analytical tools in Geographical Research.

Research in Military Geographical Operations during WAR and Peaceful Times.

**Postgraduate (NQF level 9):**

Research work culminating in the submission of a Thesis on a topic reflecting a problematic Geographic trend or analysis of a Military Geography Question

Postgraduate (NQF level 10): **Student Numbers (2015-16):**

<b>Level</b>	<b>2015</b>	<b>2016</b>
First year	14	11
Second year	19	25
Third year	17	6
Honours	2	7
Masters	3	4
Doctoral		

**The name and contact details of your SSAG person for any further (and future) information: Mr. Godwin Ayirebi(HoD) Tel No 022 702 3109, Fax 022 702 3060. Email :godwin@ma2.sun.ac.za**



## University of Johannesburg: Geography, Environmental Management & Energy Studies

### Head/Chair of Department:

<b>Name (Title, Surname, Initials)</b>	<b>Area of specialisation</b>	<b>E-mail</b>	<b>Office Telephone Number</b>
<b>Dr. IT Rampedi</b>	<b>Geography &amp; Environmental Management</b>	<a href="mailto:isaacr@uj.ac.za">isaacr@uj.ac.za</a>	<b>011-559-2429</b>

### Information about the Geographers in the Department

<b>Name (Title, Surname, Initials)</b>	<b>Rank/Position</b>	<b>Area of specialisation</b>	<b>E-mail</b>	<b>Office Telephone number</b>
Ms Block, EK	Lecturer	Population and Urban Geography; Map Skills	<a href="mailto:eblock@uj.ac.za">eblock@uj.ac.za</a>	011-559-2173
Ms Greenberg, D	Temporary Lecturer	Physical Geography	<a href="mailto:dgreenberg@uj.ac.za">dgreenberg@uj.ac.za</a>	011 559-2428
Mr Gregory, JJ	Temporary Lecturer	Creative Industries, Urban Regeneration	<a href="mailto:jamesg@uj.ac.za">jamesg@uj.ac.za</a>	011-559-2434
Dr Kelso, CJ	Senior Lecturer	Environmental History Climate vulnerability	<a href="mailto:ckelso@uj.ac.za">ckelso@uj.ac.za</a>	011-559-2432
Prof Hoogendoorn, G	Associate Professor	Urban and Tourism Geography	<a href="mailto:ghoogendoorn@uj.ac.za">ghoogendoorn@uj.ac.za</a>	011-559-4628
Prof Kotzé, NJ	Associate Professor	Urban Geography	<a href="mailto:nicok@uj.ac.za">nicok@uj.ac.za</a>	011-559-3810
Prof Ledger, JA	Associate Professor	Energy Studies	<a href="mailto:john.ledger@wol.co.za">john.ledger@wol.co.za</a>	083-650-1553
Mr Kambule, N	Assistant Lecturer	Energy Studies	<a href="mailto:nkambule@uj.ac.za">nkambule@uj.ac.za</a>	011 559-2433
Dr Rampedi, IT	Senior Lecturer	Environmental	<a href="mailto:isaacr@uj.ac.za">isaacr@uj.ac.za</a>	011-559-2429

		Geography		
Prof Rogerson, J	Associate Professor	Urban Geography, Economic Geography	<a href="mailto:jayner@uj.ac.za">jayner@uj.ac.za</a>	011-559-2439
Ms Schoeman, T	Lecturer	Physical Geography, GIS, Cartography, Mapwork, Waste Management	<a href="mailto:theas@uj.ac.za">theas@uj.ac.za</a>	011-559-3226
Thendo Mugwena	Lecturer	Geoinformatics	<a href="mailto:thendom@uj.ac.za">thendom@uj.ac.za</a>	011-559-3645
Mulalo Rabumbulu	Lecturer	Physical Geography	<a href="mailto:mrabumbulu@uj.ac.za">mrabumbulu@uj.ac.za</a>	011-559-3302
Dr Tesfamichael, SG	Senior Lecturer	GIS and Remote Sensing	<a href="mailto:sgtesfamichael@uj.ac.za">sgtesfamichael@uj.ac.za</a>	011-559-3927

#### Information about the professional and support staff in the Department

Name (Title, Surname, Initials)	Position	Area of subject specialisation (if applicable)	E-mail	Office Telephone number
Ms Komane, I	Technician	n/a	<a href="mailto:ikomane@uj.ac.za">ikomane@uj.ac.za</a>	011-559-3736
Ms Scott, MO	Secretary	n/a	<a href="mailto:mscott@uj.ac.za">mscott@uj.ac.za</a>	011-559-2433

#### Department News

- Dr Isaac Rampedi was the Head of Department during 2016.
- Dr Jayne Rogerson received NRF rating and was promoted to Associate Professor.
- Prof. John Ledger retired from his position as Professor of Energy Studies after running the energy studies honours programme since 2010.
- Ms. Thendo Mugwena was appointed as a lecturer in the department.
- Ms. Itumeleng Komane was appointed as technical assistant in the department.
- The department currently has two Post-Doctoral Research Fellows: Dr. Julia Giddy and Dr. A. Ifegbesan.



**Photo:** Left: Miss Shayna-Ann Cuthbertson Right: Mr Arno Booyzen

- In this photo, Mr. Arno Booyzen received the prize for the best honours project in GIS at the SSAG student conference.



- In this photo, Mr. JJ Gregory received the Society of South African Geographers Bronze medal and is being congratulated for the best Masters in Geography.

### **2015 dated publications:**

Abutaleb K. Ngie A., Darwish A., Ahmed M., Arafat S. Ahmed F. 2015. Assessment of Urban Heat Island using Remotely Sensed Imagery over Greater Cairo, Egypt. *Advanced in Remote Sensing*, 2015. 4, 35-47.

Burgoyne C., Kelso C. & Ahmed F. 2015. Human activity and vegetation change around Mkuze Game Reserve, South Africa. *South African Geographical Journal* 98(2), 217-234.

Christian M. Rogerson & Jayne M. Rogerson. 2015. Johannesburg 2030 The Economic Contours of a “Linking Global City”. *American Behavioral Scientist* 59 (3), 346-368.

Clayton A.F., Rogerson J.M. & Rampedi I. 2015. Integrated reporting vs sustainability reporting for corporate responsibility in South Africa. *Bulletin of Geography. Socio-economic series* 29:7-17.

Dangor F., Hoogendoorn G. & Moolla R. 2015. Medical tourism by Indian-South Africans to India: An exploratory investigation. *Bulletin of Geography. Socio-economic series* 29:19-30.

De Vries L. & Kotze N.J. 2015. Managing the parks and open spaces of Johannesburg's inner city. Proceedings – 27<sup>th</sup> Annual SAIMS Conference 2015.

Faheem Dangor, Gijsbert Hoogendoorn, Raeesa Moolla. 2015. Medical tourism by Indian-South Africans to India: an exploratory investigation. *Bulletin of Geography. Socio-economic Series*, 29 19–30.

Foster L, Malherbe W, Ferreira M, and van Vuren JHJ. 2015. Macroinvertebrate variation in endorheic depression wetlands in North West and Mpumalanga provinces, South Africa. *African Journal of Aquatic Science* 40(3).

Hunter C. & Mearns K.F. 2015. Assessing the sustainability reporting of selected tourism companies listed on the Johannesburg Stock Exchange (JSE). *African Journal of Hospitality, Tourism and Leisure*. 4:1.

Kelso C & Vogel C. Diversity to decline-livelihood adaptations of the Namaqua Khoikhoi (1800–1900). *Global Environmental Change* 35, 254–268.

Kotze N.J. 2015. Johannesburg's Rea Vaya bus rapid transit system: Perceptions and reality of service delivery. Proceedings – 27<sup>th</sup> Annual SAIMS Conference 2015.

Greenberg D. Rogerson J.M. 2015. The Serviced Apartment Industry of South Africa: A New Phenomenon in Urban Tourism. *Urban Forum* 26 (4), 467–482.

Maponya P. *et al.* 2015. Determinants of Agricultural Market Participation in the Sarah Baartman District, Eastern Cape of South Africa. *Human Ecology* 50, 1:1-9.

Maponya P. & Mpandeli S. 2015. Indigenous Post-harvest Systems: A Case of Mamone Village in Sekhukhune District, Limpopo Province, South Africa. *Human Ecology* 50, 3:197-203.

Masutha M, Rogerson CM. 2015. Business Incubation for Small Enterprise Development: South African Pathways. *Urban Forum* 26:223-241.

Muhire I., & Ahmed F. 2015. Spatiotemporal trends in mean temperatures and aridity index over Rwanda. *Theoretical and Applied Climatology* 119, 1-2.

Muhire I., Ahmed F, Abutaleb K. & Kabera G. 2015. Impacts of projected changes and variability in climatic data on major food crops yields in Rwanda. *International Journal of Plant Production* 9 (3).

Ntui Charles & Rampedi Isaac. 2015. Hearted Efforts By The Mogogelo Community To Protect Traditional Sites By Means of Public Participation Forums: A Review Report. *International Journal of African Renaissance Studies* 10.

Rogerson C.M. & Collins K.J.E. 2015. Developing beer tourism in South Africa: International perspective. *African Journal of Hospitality, Tourism and Leisure* 4 (1).

Rogerson C.M. & Collins K.J.E. 2015. Developing beer tourism in South Africa: Characteristics and motivations of attendees at craft beer festivals. *African Journal for Physical, Health Education, Recreation and Dance (AJPHERD)*. December 2015, Supplement 1: 76-87.

Rogerson C.M. & Rogerson J.M. 2015. Johannesburg 2030: The Economic Contours of a "Linking Global City". *American Behavioral Scientist* 59 (3) 347-368.

Rogerson J.M. 2015. Wedding tourism in South Africa: An exploratory analysis. *African Journal of Hospitality, Tourism and Leisure* 4 (2).

Rogerson Jayne M. & Mushawemhuka William J. 2015. Transnational entrepreneurship in the Global South: evidence from Southern Africa. *Bulletin of Geography. Socio-economic Series* No. 30:135-146.

Rogerson, Jayne M & Wolfaardt, Zaria. 2015. Wedding tourism in South Africa: an exploratory analysis. *African Journal of Hospitality, Tourism and Leisure* Vol. 4 (2) - (2015) ISSN: 2223-814X.

Taiwo O.J. Ahmed F. 2015. Geographical Analysis of voter apathy in presidential elections between 1999 and 2011 in Nigeria. *African Geographical Review*. <http://dx.doi.org/10.1080/9376>.

## Conference Presentation in 2016:

Name of presenter (s)	Title of presentation	Format of presentation	Date of conference/workshop	Name of Conference/workshop
Prof Gijsbert Hoogendoorn	Co-construction of knowledge through participatory action research: methods used in the People-First Tourism project.	Conference Paper	14-17 June 2016	Travel and Tourism Research Association annual international conference, Vail, United States of America
Prof Gijsbert Hoogendoorn	American tourists experiences of weather in Southern Africa	Conference Paper	25-28 September 2016	Society of South African Geographers Conference, Stellenbosch
Prof Gijsbert Hoogendoorn	Tourism and climate change: a review of adaptation for South Africa.	Conference Paper	25-28 September 2016	Society of South African Geographers Conference, Stellenbosch
Prof Gijsbert Hoogendoorn	Instagrammers and the Johannesburg inner-city.	Conference Paper	25-28 September 2016	Society of South African Geographers Conference, Stellenbosch
Prof Jayne Rogerson	The greening of South African property	Conference paper	23-27 May 2016	International Conference for Academic Disciplines, Harvard, Boston
Prof Jayne Rogerson	Kicking sand in the face of Apartheid	Conference paper	1-4 June 2016	Canadian Association of Geographers Conference, Halifax
Prof Jayne Rogerson	Capital city tourism: The case of Pretoria South Africa	Conference paper	22-25 August 2016	International Geographical Union Conference, Beijing
Prof Jayne Rogerson	The matric vac festival: A South African youth tourism phenomenon	Conference paper	21-23 September 2016	Tourism Educators South Africa conference, Cape Town
Prof Jayne Rogerson	Tourism planning of the past: Apartheid on the beaches of South Africa	Conference paper	25-28 September 2016	Society of South African Geographers Conference, Stellenbosch
Prof Nico Kotze	South African tourism advertisements in magazines: a changing	Conference Paper	September 2016	SAIMS Conference, Pretoria

	phenomenon in magazines			
Prof Nico Kotze	Urban poultry farming in Jos, Nigeria	Conference Paper	Septemberr 2016	SSAG Conference, Stellenbosch
Dr Clare Kelso	Environmental history and vunerabilty: lessons from the past	Conference Paper	Septemberr 2016	SSAG Conference, Stellenbosch
Dr Clare Kelso	Life history; an alternative methodology for vulnerability research	Conference Paper	Septemberr 2016	SSAG Conference, Stellenbosch
Dr Isaac Rampedi	Reviewing EIA & EMP quality of selected environmental impact statements for effective decision-making	Conference Paper	17 <sup>th</sup> August 2016	Environmental Crimes Conference
Dr Solomon Tesfamichael	Wetland assessment using unmanned aerial vehicle photogrammetry	Conference Paper	July 2016	Conference of the International Archives of Photogrammetry, Remote Sensing and Spatial information and Spatial Information Sciences
Dr Solomon Tesfamichael	Assessing the potential of remote sensing to discriminate invasive Seriphium plumosium from grass	Conference Paper	August 2016	Geoinformatics Indaba, Emperors Palace, Kempton Park
Dr Solomon Tesfamichael	Unmanned Aerial Vehicle Photogrammetry for producing accurate high-resolution irthophotos, point clouds and surface models for mapping wetlands.	Conference Paper	August 2016	Geoinformatics Indaba, Emperors Palace, Kempton Park
Dr Solomon Tesfamichael (Students)	Vegetation canopy height and canopy cover estimation using SAR,	Conference Paper	September 2016	SSAG Conference, Stellenbosch
Dr Solomon Tesfamichael	Retrieval of narrow-range LAI of intensively managed Eucalyptus grandis plantations using airborne lidar data  Assessing selected water quality parameters in the Hartebeespoort dam	Conference Papers	October 2016	International Conference Of The African Association Of Remote Sensing Of The Environment, Kampala, Uganda.

	using landsat imagery  The utility of field spectrometer and random forest to differentiate seriphium plumosum from other landcover types			
Thendo Mugwena	Using remote sensing to identify and map vegetation ecotones	Conference Paper	September 2016	SSAG Conference, Stellenbosch
Thendo Mugwena	Monitoring for environment and security in Africa (MESA) National training for drought service	Workshop	7-10 November 2016	ARC Roodeplaat Dam , Pretoria
Mulalo Rabumbulu	Paleo-depositional environment reconstruction of the western Free State panfield, South Africa	Conference Paper	Septemberr 2016	SSAG Conference, Stellenbosch
Thea Schoeman	Household recycling behaviour in Johannesburg	Conference Paper	Septemberr 2016	SSAG Conference, Stellenbosch
Liz Block	Research on Soweto	Conference Paper	Septemberr 2016	SSAG Conference, Stellenbosch

### Research Master Dissertations completed in 2016:

<i>Student's Name</i>	<i>Title of dissertation</i>	<i>Institution</i>	<i>Qualification</i>	<i>Supervisor</i>	<i>Co-supervisor</i>
Gregory, James Jenkins	Creative industries in Johanessburg: Geography, operational characteristics and linkages to urban regeneration	UJ	MA Geography	Prof CM Rogerson	NA
Harmer, Devin Lawrence	Matric rage, South Africa's Youth Festival: Establishment and Organization	UJ	MA Geography	Prof JM Rogerson	NA
Monama Tshegofatso Elia	An evaluation of urban heat island in Tshwane Metropolitan Area using remote	UJ	MSc Geography	Prof F Ahmed	NA



	sensing				
Masekameni Masilu Daniel	Performance evaluation and emission characterisation of domestic coal combustion in optimized braziers ( <i>imbaulus</i> )	UJ	M Phil Energy Studies	Prof HJ Annegarn	NA

### Master Dissertations of limited scope completed in 2016:

<i>Student's Name</i>	<i>Title of dissertation</i>	<i>Institution</i>	<i>Qualification</i>	<i>Supervisor</i>	<i>Co-supervisor</i>
Ismail Sameera	Retrofitting of hotels: the Protea Hospitality Group of hotels within Gauteng, South Africa	UJ	MA Environmental Management	Dr. JM Rogerson	NA
Jardine Janavi Melissa	A case study on the historical water quality trends pertaining to the Jukskei River in the Gauteng Province, South Africa	UJ	MSc Environmental Management	Dr. IT Rampedi	NA
Kesi Mohloka John	Assessing challenges and opportunities for adopting biogas technology by Red Meat Abattoirs: a case study of the Sedibeng And Fezile Dabi District Municipalities in south Africa	UJ	MSc Environmental Management	Dr. IT Rampedi	Prof O Aoyi (VUT)
Manzini Lungile Glodine	Greenhouse gas emissions assessment for electricity generation from coal: The case of ESKOM power station	UJ	MSc Environmental Management	Mrs T Schoeman	Mrs K Chiloane (Eskom)
Tafirei Respinah	An integrative approach towards setting conservation priority for cycad species at a global scale	UJ	MSc Environmental Management	Dr. K Yessoufou (UNISA)	Dr. IT Rampedi
Dubula Bambo	Characterizing selected invasive alien plants in the kliprivierberg nature	UJ	MSc Environmental Management	Dr SG Tesfamichael	Dr. IT Rampedi

	reserve using field based spectroradiometer data				
Mokobodi Makoena Refilwe	Classifying and assessing the water quality of wetlands impacted by ESKOM's Matla Power station in the Mpumalanga province	UJ	MSc Environmental Management	Dr IT Rampedi	

#### PhD Thesis's completed in 2014-15:

<i>Student's Name</i>	<i>Title of thesis</i>	<i>Institution</i>	<i>Qualification</i>	<i>Supervisor</i>	<i>Co-supervisor</i>
Ngie Adeline	An investigation into the potential application of multi and hyperspectral remote sensing for the spectral characterisation of maize cultivars, quantification of some stress factors and yield prediction in the free state province of South Africa	UJ	PhD Environmental Management	Prof F Ahmed	NA

#### Curriculum presented:

Undergraduate (NQF levels 5, 6 and 7):

- Introduction to Human Geography (1A)
- Climatology and Geomorphology (1B)
- Pedography and Biogeography (2A)
- Economic and Population Geography (2B)
- Geo-Informatics (3A)
- Urban Geography and the South African City (3B)

Postgraduate (NQF level 8):

- Ethics, Justice and the South African Environment

- Energy Studies
- Geographic Information Systems (GIS)
- Geography Philosophy and Methodology
- Geomorphology
- Strategic Environmental Planning
- Tourism Geography
- Urban Geography

Postgraduate (NQF level 9):

- Environmental Management 1: The Biosphere and Environmental Studies
- Environmental Management 2: Techniques, Analyses and Skills
- Masters dissertation in geography

Postgraduate (NQF level 10):

- PhD Thesis

#### **Student Numbers (2015-16):**

<b>Level</b>	<b>2015</b>	<b>2016</b>
Extended First year		
Geography FET	GGR1A1E 2015 – 15  GR1AFET 2015 – 75	GGR1A1E 2016 – 14  GR1AFET 2016 – 134
First year	245	160
Second year	198	156
Third year	88	96
Honours	16	22
Masters		11
Doctoral		8

**The name and contact details of your SSAG person for any further (and future) information: Prof Jayne Rogerson**

## North-West University, Potchefstroom Campus: Geography and Environmental Management

**Website** (<http://natural-sciences.nwu.ac.za/school-geo-spatial-sciences/about-us>)

Head/Chair of Department:

Name (Title, Surname, Initials)	Area of specialisation	E-mail	Office Telephone Number
Dr Jan-Albert Wessels	Environmental Control Officers; Post-decision compliance and enforcement in EIA	<a href="mailto:janalbert.wessels@nwu.ac.za">janalbert.wessels@nwu.ac.za</a>	018 299 1477

### 1. Information about the Geographers in the Department

Name (Title, Surname, Initials)	Rank/Position	Area of specialisation	E-mail	Office Telephone number
Dr. Roelof Burger	Lecturer	GIS and climate modelling	<a href="mailto:Roelof.burger@nwu.ac.za">Roelof.burger@nwu.ac.za</a>	018 299 4269
Dr. Dirk Cilliers	Lecturer	GIS, Biogeography and Strategic Environmental Planning	<a href="mailto:Dirk.cilliers@nwu.ac.za">Dirk.cilliers@nwu.ac.za</a>	018 299 1589
Mr Theuns de Klerk	Senior lecturer	GIS	<a href="mailto:Theuns.deklerk@nwu.ac.za">Theuns.deklerk@nwu.ac.za</a>	018 299 1583
Prof Stuart Piketh	Professor and Director School of Geo and Spatial Sciences	Climatology and climate modelling	<a href="mailto:Stuart.piketh@nwu.ac.za">Stuart.piketh@nwu.ac.za</a>	018 299 1582
Mr. Manna Stander.	Lecturer	Human Geography	<a href="mailto:Manna.Stander@nwu.ac.za">Manna.Stander@nwu.ac.za</a>	018 299 1587
Ms Carli Steenkamp	Lecturer	EIA and Environmental Planning	<a href="mailto:Carli.steenkamp@nwu.ac.za">Carli.steenkamp@nwu.ac.za</a>	018 299 1523
Associate Prof Luke Sandham	Associate Professor	EIA effectiveness in South Africa	<a href="mailto:Luke.sandham@nwu.ac.za">Luke.sandham@nwu.ac.za</a>	018 299 1585
Dr Jan-Albert Wessels	Senior Lecturer	Environmental Control Officers; Post-decision	<a href="mailto:janalbert.wessels@nwu.ac.za">janalbert.wessels@nwu.ac.za</a>	018 299 1477

		compliance and enforcement in EIA		
Dr Joseph Adesina	Temporary appointment	Aerosols Climatology Air quality	<a href="mailto:Joseph.Adesina@nwu.ac.za">Joseph.Adesina@nwu.ac.za</a>	018-299-1511
<b>Associate members in the Research Unit for Environmental Science and Management</b>				
Prof Harold Annegarn	Professor	Air pollution		
Prof Francois Retief	Professor;	Environmental Assessment	<a href="mailto:Francois.retief@nwu.ac.za">Francois.retief@nwu.ac.za</a>	018 299 1586
Prof Angus Morrison-Saunders	Extraordinary professor, visiting from Murdoch University, Perth	Environmental and Sustainability Assessment	<a href="mailto:A.Morrison-Saunders@murdoch.edu.au">A.Morrison-Saunders@murdoch.edu.au</a>	
Dr Jenny Pope	Extraordinary senior lecturer, visiting from Integral Sustainability, Perth	Environmental and Sustainability Assessment	<a href="mailto:jenny@integral-sustainability.net">jenny@integral-sustainability.net</a>	
Dr Alan Bond,	Extraordinary fellow, visiting from University of East Anglia	Environmental and Sustainability Assessment	<a href="mailto:alan.bond@uea.ac.uk">alan.bond@uea.ac.uk</a>	

Information about the professional and support staff in the Department

<b>Name (Title, Surname, Initials)</b>	<b>Position</b>	<b>Area of subject specialisation (if applicable)</b>	<b>E-mail</b>	<b>Office Telephone number</b>
Ms Vernice Botha	Secretary	Administrative support	<a href="mailto:Vernice.swarts@nwu.ac.za">Vernice.swarts@nwu.ac.za</a>	018-299-1511
Mr Gustav Havenga	GIS assistant	GIS support	<a href="mailto:gustavhavenga@gmail.com">gustavhavenga@gmail.com</a>	018-299-1511

## Department News

Two staff members earned PhDs in 2016:

Dr Dirk Cilliers in April 2016 at NWU and Dr Roelof Burger in November 2016 at Wits. Both of them also promoted to senior lecturer with effect from January 2017.

## **2015-16 dated publications:**

### **Peer reviewed articles**

**Adesina, A. J.**, Kumar, K. R., Sivakumar, V. and Piketh S. J. (2016). Intercomparison and assessment of long-term (2004–2013) multiple satellite aerosol products over two contrasting sites in South Africa *Journal of Atmospheric and Solar-Terrestrial Physics* 148 (2016) 82–95 doi.org/10.1016/j.jastp.2016.09.001

Alberts, R., Wessels, J.A., Morrison-Saunders, A., McHenry, M.P., Sequira, A., Mtegha, H., Doepel, D. (2016). Complexities with extractive industries regulation on the African continent: What has 'best practice' legislation delivered in South Africa? The Extractive Industries and Society (in Press). Available at <http://www.sciencedirect.com/science/article/pii/S2214790X16301010>.

Cilliers, D. P., & Retief, F. (2016). The extent and status of environmental management frameworks (EMFs) in South Africa, 2006–2015. *South African Geographical Journal*, 1-18.

Evans, S. W., Baker, E. M., Baker, N. E., & Cilliers, D. (2016). Current distribution and population size of the Blue Swallow *Hirundo atrocaerulea* in the southern Tanzanian highlands. *Ostrich*, 87(1), 37-46.

Fleischmann, E. M., van der Westhuizen, C. P., & Cilliers, D. (2015). Interactive-GIS-Tutor (IGIST) integration: Creating a digital space gateway within a textbook-bound South African Geography class. *International Journal of Education and Development using Information and Communication Technology*, 11(2), 23

Jaars, K., van Zyl, P. G., Beukes, J. P., Hellén, H., Vakkari, V., Josipovic, M., Venter, A. D., Räsänen, M., Knoetze, L., Cilliers, D. P., Siebert, S. J., Kulmala, M., Rinne, J., Guenther, A., Laakso, L., and Hakola, H.: Measurements of biogenic volatile organic compounds at a grazed savannah-grassland-agriculture landscape in South Africa, *Atmos. Chem. Phys. Discuss.*, doi:10.5194/acp-2016-471, in review, 2016

Language, B., Piketh, S.J., Burger, R.P. , 2016 . Correcting respirable photometric particulate measurements using a gravimetric sampling method. *Clean Air J.* 26, 10 – 14.

Language, B., Piketh, S. J., Wernecke, B. Burger, R.P. , 2016 : Household Air Pollution in South African Low-Income Settlements: A Case Study, *WIT Transactions on Ecology and the Environment*, 207, pp. 227-236. (ISBN: 978-1-78466-129-8).

Morwal, S.B., Narkhedkar, S.G., Padmakumari, B., Maheshkumar, R.S., Kothawale, D.R., Dani, K.K., Burger, R.P. , Brintjes, R.T., Kulkarni, J.R., 2016 . Cloud characteristics over the rain-shadow region of North Central peninsular India during monsoon withdrawal and post-withdrawal periods. *Clim. Dyn.* 46, 495-514.

Pretorius, I., Piketh, S.J., Burger, R.P. , 2016 : Emissions management and health exposure: Are all power stations equal? *Air Quality, Atmosphere and Health*, First Online: 18 November 2016. DOI: 10.1007/s11869-016-0444-x

Resmi, E., Malap, N., Kulkarni, J.R., Murugavel, P., Nair, S., Burger, R.P. , Prabha, T.V, 2016 . Diurnal cycle of convection during the CAIPEEX 2011 experiment. *Theor. Appl. Climatol.*

Sandham LA & Retief FP, 2016. The contribution of Geography to Environmental Assessment (EA) practice and research. *South African Geographical Journal.* 98 (3): 450-460. <http://dx.doi.org/10.1080/03736245.2016.1208585>

Morrison-Saunders, A., McHenry, M.P., Wessels, J.A., Rita Sequeira, A, Mtegha, H., & Doepel, D. Planning for artisanal and small-scale mining during EIA: Exploring the potential. (2015). *The Extractive Industries and Society*, 2015/8/12. Elsevier.

Wessels, J., Retief, F. and Morrison-Saunders, A. (2015) 'Appraising the value of independent EIA follow-up verifiers', *Environmental Impact Assessment Review*, vol 50, pp178-189 DOI: 10.1016/j.eiar.2014.10.004

### **Book chapters**

Retief, F.P. & Cilliers, D.P. (2015) 'The interface between environmental management and land use management: complexities, challenges and opportunities' in Du Plessis (Ed.) *Environmental Law and Local Government in South Africa* (ISBN: 9781 48510 0508)

Retief, F.P. & Cilliers, D.P. (2015) 'Integration of sustainability with integrated development planning (IDP) – a key challenge for local government' in Du Plessis (Ed.) *Environmental Law and Local Government in South Africa* (ISBN: 9781 48510 0508)

Schoeman, C.B., Cilliers, D.P., Retief, F.P. 2016. 'Environmental management and land use management in South Africa: Complexities, challenges and opportunities for integrated strategic planning in developing countries'. In C.B. Schoeman (Ed.) *Transportation Land Use and Integration: applications in developing countries*

Sandham LA and Van Brakel J. 2016. Geography at Potchefstroom University for Christian Higher Education and the North-West University, pp 95-116. In Visser, G; Donaldson, R & Seethal, C (eds.) *The Origin and Growth of Geography as a Discipline at South African Universities: Early 1900s to 2016*. Sun Media: Stellenbosch. ISBN 978-1-928357-25-4

Wessels, J.A. (2015). Green building. In 'Environmental Law and Local Government in South Africa'. du Plessis, A (ed), *JUTA*, In print. ISBN: 9781485100508.

Wessels, J.A. (2015). Green procurement. In 'Environmental Law and Local Government in South Africa'. du Plessis, A (ed), *JUTA*, In print. ISBN: 9781485100508.

### **Conference Presentations in 2015-16:**

<b>Name of presenter (s)</b>	<b>Title of presentation</b>	<b>Format of presentation</b>	<b>Date of conference/workshop</b>	<b>Name of Conference/workshop</b>
Wessels, JA, Morrison-Saunders, A., and Retief, F.P	Understanding independent Environmental Control Officers in EIA follow-up: learning from major South African energy construction projects.	Paper presented	20 April May 2015	Annual Meeting of the International Association for Impact Assessment
Steenkamp,	Showcasing excellence: the	Paper	20 April 2015	Annual Meeting of the

<b>Name of presenter (s)</b>	<b>Title of presentation</b>	<b>Format of presentation</b>	<b>Date of conference/workshop</b>	<b>Name of Conference/workshop</b>
C.S. and Retief, F.P	IAIAsa Premium Awards	presented		International Association for Impact Assessment, Florence, Italy
Fourie, A. and Wessels, J.A.	A critical investigation into the future of independent Environmental Control Officers in South African EIA follow-up.	Paper presented	13 August 2015	Annual Meeting of the International Association for Impact Assessment - South African affiliate
Wessels, J.A. and Mostert, R.C.M.	Investigating the need for regulating the South African Environmental Control Officer Industry.	Paper presented	13 August 2015	Annual Meeting of the International Association for Impact Assessment - South African affiliate
Sehaole, T.P., Wessels, J.A., and Morrison-Saunders, A.	Investigating South African Environmental Practitioners' perceptions on the integration of specialist studies in EIA reports.	Poster (Best poster award)	12-14 August 2015	IAIA conference (South African chapter)
Wessels, J.A	Learning from 20 years' evolutionary changes to ISO14001-based Environmental Management Systems.	Paper presented	26 September 2016	SSAG Centennial Conference. Stellenbosch, South Africa
Wessels, J.A., Longueville, A.	Conceptualising an EIA-LCA-EMS-IR nexus for supporting integrated corporate reporting and thinking.	Paper presented	22 August 2016	IAIA conference (South African chapter)
Cilliers, D.P., Fleischman, E. and Van der Westhuizen, C.	Interactive-GIS-Tutor (I-GIS-T): Facilitating GIS learning in FET-phase Geography	Paper presented	25-28 September	SSAG Centennial Conference. Stellenbosch, South Africa
Cilliers, D.P.	A nexus thinking approach towards the management of resources in South	Paper presented	30 August – 2 September	Royal Geographical Society, annual



<b>Name of presenter (s)</b>	<b>Title of presentation</b>	<b>Format of presentation</b>	<b>Date of conference/workshop</b>	<b>Name of Conference/workshop</b>
	Africa: the case of environmental management frameworks (EMFs)			international conference
Cilliers, D.P. and Retief, F.P.	The value of EMF as a strategic environmental management tool	Paper presented	22 August 2016	IAIA conference (South African chapter)
Cilliers, D.P.	Implementing bioregional plans: lessons learned from environmental management frameworks (EMFs)	Paper presented	7 – 10 June	13th National Biodiversity Planning Forum
Jaars, K., Beukes, J.P., et al., Cilliers, D.P., et al.	Ambient concentrations of BVOCs at a South African grazed grass-savannah ecosystem	Poster presented	26-30 September	International Global Atmospheric Chemistry (IGAC) Project 2016 Science Conference
Frisby, A.W., Siebert, S.J., Cilliers, D.P.	Redefining the Griqualand West Centre of Endemism	Paper presented	28 October	13th Annual Kimberley Biodiversity Research Symposium, McGregor Museum, Kimberley
Knoetze, L., Siebert, S.J., Cilliers, D.P., et al.	Socio-economic correlates of alien tree invasions across land-uses of the Tlokwe City Municipality	Paper presented	7 – 9 November	Workshop on Non-native species in urban environments: patterns, processes, impacts and challenges, Centre of Excellence for Invasion Biology (CIB)
Andriessen M, Siebert SJ, Van den Berg J, Cilliers D.P.	Spatial distribution of wild and weedy relatives of Brassica napus in northern South Africa (Brassicaceae)	Paper presented	11 – 14 January	41st Annual Congress of the South African Association of Botanists
Frisby AW, Siebert SJ, Cilliers D, Van Wyk AE.	Redefining the Griqualand West Centre of plant endemism	Paper presented	11 – 14 January	41st Annual Congress of the South African Association of Botanists
Havenga, H., Burger, R.P. ,	Synoptic classification of severe hailstorms over the	Poster presentation	6 - 8 September 2016	GEWEX Convection - Permitting Climate

<b>Name of presenter (s)</b>	<b>Title of presentation</b>	<b>Format of presentation</b>	<b>Date of conference/workshop</b>	<b>Name of Conference/workshop</b>
Prein, A., Bruyere, C., Piketh, S.J.	South-African Highveld.	n		Modeling Workshop.
Havenga, H., Burger, R.P. , Piketh, S.J., Bruyere, C.	Synoptic analysis of the 28 November 2013 Severe Hailstorm.	Poster presentation	10 - 15 September 2016	41st National Weather Association Annual Meeting, Norfolk, VA
Language, B., Piketh, S. J., Burger, R. P.	Indoor air quality in South Africa: A case study in a small, isolated low-income settlement	Oral presentation	4 - 8 July 2016	Indoor Air Conference Proceedings, Ghent, Belgium.
Burger, R. P. and Piketh S. J.	Empirical characterization of residential solid fuel burning in South Africa.	Oral presentation	26 - 30 September 2016	International Global Atmosphere Chemistry Project (IGAC) Conferences 2016 Science Conference. Breckenridge, CO, USA
Belelie, M.D., Piketh, S.J., Burger, R.P. , Venter, A.D., Keir, J.N.	Mercury emissions from the power sector in South Africa	Oral presentation	6 - 7 October 2016	National Association for Clean Air Annual Conference. Nelspruit, South Africa
Borduas, N., et al., Burger, R.P. , Piketh, S.J.	Understanding ground-level ozone pollution in the city of Johannesburg from 2004-2011	Oral presentation	6 - 7 October 2016	National Association for Clean Air Annual Conference. Nelspruit, South Africa
Garland, R.M., Pauw, C.J., Naidoo, M., Burger, R.P. , Piketh, S.J., Et al.	Estimating Air Pollution Impacts From O#setting Projects: Case study of the Kwazamokuhle pilot project	Oral presentation	6 - 7 October 2016	National Association for Clean Air Annual Conference. Nelspruit, South Africa
Lindeque, F., Burger, R.P. , Piketh, S.J.	Health impact assessment of interventions to reduce residential solid fuel burning: challenges and considerations	Oral presentation	6 - 7 October 2016	National Association for Clean Air Annual Conference. Nelspruit, South Africa
Maseko, B.,	Characterizing lightning nox	Oral	6 - 7 October	National Association for

<b>Name of presenter (s)</b>	<b>Title of presentation</b>	<b>Format of presentation</b>	<b>Date of conference/workshop</b>	<b>Name of Conference/workshop</b>
Feig, G., Burger, R.P. , de Coning, E.	production over South Africa.	presentation	2016	Clean Air Annual Conference. Nelspruit, South Africa
Nkosi, N.C., Burger, R.P. , Piketh, S.J.	Quantifying emissions of Ne particulate matter from domestic burning in low-income South African townships.	Oral presentation	6 - 7 October 2016	National Association for Clean Air Annual Conference. Nelspruit, South Africa
Werneck, B., Piketh, S.J., Burger, R.P. , Pauw, C., Snyman, H.	Personal exposure to particulate matter in indoor and outdoor micro-environments in Kwadela, Mpumalanga	Oral presentation	6 - 7 October 2016	National Association for Clean Air Annual Conference. Nelspruit, South Africa
Belelie, M.D., Piketh, S.J., Burger, R.P. , Venter, A.D.	Emissions of mercury from the power sector in South Africa	Oral presentation	26 – 27 September 2016	National Laboratory Association Conference Annual Conference. Centurion, South Africa
Piketh, S.J., Burger, R.P.	Characterizing ambient air quality in dense, low-income areas in South Africa	Oral presentation	25-28 September 2016	SSAG Centennial Conference. Stellenbosch, South Africa
Lindeque, L.F., Burger, R.P. , Piketh, S.J.	The Health and economic benefits of interventions to reduce solid fuel burning on the Highveld	Oral presentation	25-28 September 2016	SSAG Centennial Conference. Stellenbosch, South Africa
Nkosi, N.C., Piketh, S.J., Burger, R.P.	Quantifying emissions of #ne particulate matter from domestic burning of solid fuels in South African townships: A case study in KwaDela	Oral presentation	26 – 27 September 2016	National Laboratory Association Conference Annual Conference. Centurion, South Africa
Makgoale, T.E., Garland, R.M., Burger, R.P. , et. al.	The sensitivity of simulated temperatures in climate models to aerosols over southern Africa.	Oral presentation	31 October - 2 November 2016	South African Society for Atmospheric Sciences, Cape Town, South Africa
Havenga, H., Burger, R.P., Piketh, S.J.,	Evaluating WRF's dBZ diagnostic feature on the 28 November 2013 hailstorm	Oral presentation	31 October - 2 November 2016	South African Society for Atmospheric Sciences, Cape Town,

<b>Name of presenter (s)</b>	<b>Title of presentation</b>	<b>Format of presentation</b>	<b>Date of conference/workshop</b>	<b>Name of Conference/workshop</b>
Bruyere, C.	over the South-African Highveld.			South Africa
De Witt, M., Pope, J. & Steenkamp, C. 2016.	A critical analysis of the conceptualisation and planning of biodiversity offsets in South Africa: implications for implementation	Paper presented	17 - 19 August 2016.	IAIAsa Annual Conference, Port Elizabeth, South Africa,
Steenkamp, C. & Havenga, G.	The Performance of EIA Screening in South Africa	Paper presented	25 – 28 September 2016.	The Society of South African Geographers (SSAG) centennial conference, Stellenbosch, South Africa
Stander, J.H.	Arts festivals in the South African Context: what we know and what we don't	Paper presented	28 September 2016	The Society of South African Geographers (SSAG) centennial conference, Stellenbosch, South Africa
Stander, J.H., Pretorius, W.M. & Sandham, L.A.	Vaalharts: Environmental aspects of agricultural land and water use practices	Paper presented	26 September 2016	The Society of South African Geographers (SSAG) centennial conference, Stellenbosch, South Africa
J.A. Adesina, S. J. Piketh, P. Formenti, G. Maggs-Köling, B. N. Holben M. G. Sorokin	Inferring aerosol properties and radiative forcing over gobabeb, namibia using ground based remote sensing	Poster Presented	6 September 2016	European aerosol conference, Tours, France
Joseph A. Adesina and Stuart J. Piketh	Seasonal variation of major aerosol types over skukuza as inferred from sunphotometer measurements	Oral presentation	6 October 2016	National Association for Clean Air conference 2016 Nelspruit SA

**Research Masters Dissertations completed in 2015-16:**

Student's Name	Title of dissertation	Institution	Qualification	Supervisor	Co-supervisor
Alers, A	Appraising the success of South Africa EIA follow-up in terms of the international Best Practice Principles	NWU	MSc	L A Sandham	
Janse van Rensburg, D	Investigating Western Australia's rehabilitation fund as a fiscal policy solution for South African abandoned mines.	NWU	MSc	Dr. J.A. Wessels	
Moodie, E.	The benefits of using ferrochrome slag as waste aggregate in South Africa.	NWU	MSc	Dr. J.A. Wessels	
Van Loggerenberg, J	Spatial and temporal variability of rainfall intensity over the Mooi River catchment	NWU	MSc	S J Piketh	R P Burger
Van den Berg, B	Source apportionment of ambient particulate matter in Kwadela, Mpumalanga	NWU	MSc	S J Piketh	R P Burger

**Masters Dissertations of limited scope completed in 2015-16:**

Student's Name	Title of dissertation	Institution	Qualification	Supervisor	Co-supervisor
Muller, I.	Using the resilience assessment approach to evaluate social-ecological systems at the North-West University (Vaal Campus).	NWU	Masters in Environmental Management	Dr. J.A. Wessels	Prof J. Tempelhoff
Ndlovu, N.M.	Compliance Monitoring in EIA Context: Critical Assessment of Compliance to Environmental Authorizations in Mpumalanga Province.	NWU	Masters in Environmental Management	Dr. J.A. Wessels	
Stoltz, D.P.	Assessing dolomite risk management plans' potential to guide town-planning decisions.	NWU	Masters in Environmental Management	Dr. J.A. Wessels	
Smuts, A.	Investigating the relationship between the characteristics of Environmental Management	NWU	Masters in Environmental Management	Dr. J.A. Wessels	Prof A. Morrison-Saunders

	Systems and International Cyanide Management Code.				
Hill, L.P.	Investigating the state of and drivers for sustainability reporting and the assurance thereof in South Africa.	NWU	Masters in Environmental Management	Dr. J.A. Wessels	
De Witt, M.	A critical analysis of biodiversity offsets in South Africa	NWU	Masters in Environmental Management	Ms. Carli Steenkamp	Dr. Jenny Pope
Hariram, M.	A critical evaluation of the extent to which sustainability was considered in the Medupi Power Station Environmental Impact Assessment	NWU	Masters in Environmental Management	Ms. Carli Steenkamp	Dr. Jenny Pope
Ratshibvumo, T.	An investigation into the incorporation of sustainability principles in Environmental Management Programme and Social and Labour Plan for a gold mine, South Africa	NWU	Masters in Environmental Management	Ms. Carli Steenkamp	Dr. Jenny Pope
Smit, L.	Determining the barriers to the uptake of environmentally friendly technologies-the case study of electronic signatures	NWU	Masters in Environmental Management	Ms. Carli Steenkamp	Dr. Jenny Pope

#### **PhD Thesis's completed in 2015-16:**

Student's Name	Title of thesis	Institution	Qualification	Supervisor	Co-supervisor
Pretorius, I	Impacts and control of coal-fired power station emissions in South Africa	NWU	PhD	S J Piketh	R P Burger
Burger, R P	The Distribution of Aerosol and Trace Gases in the Lower Troposphere over South Africa	Wits	PhD	S J Piketh	S Grab

#### **Short description of the curriculum presented:**

##### **Undergraduate (NQF levels 5, 6 and 7):**

Geography can be taken in a BSc programme with various other majors including: *Geology, Zoology, Botany, Computer Science and Tourism.*

Geography is a sub-major in the Urban and Regional Planning curriculum (B Art et Scien). Geography can also be taken in B Social Sciences and B A programmes with a number of other majors including Psychology, Public Management, History, and Philosophy.

**Postgraduate (NQF level 8):**

***B Sc Honours in Environmental Sciences: Geography and Environmental Management (N648P).***

This programme is focused on three themes i.e. Environmental management, GIS and Remote sensing, and Air pollution.

***Bachelor of Science Honours in Environmental Sciences: Waste Management (N649P)***

This programme is focused on two main themes i.e. Environmental management, and Solid waste management.

**Postgraduate (NQF level 9):**

MSc in Geography and Environmental Management (N829P)

Master of Environmental Management (N824P)

**Postgraduate (NQF level 10):**

PhD in Geography and Environmental Management (N909P)

**Student Numbers (2015-16):**

<b>Level</b>	<b>2016</b>
First year	245
Second year	126
Third year	118
Honours	14
Masters	50
Doctoral	7

The name and contact details of your SSAG person for any further (and future) information: Prof Luke Sandham; [Luke.sandham@nwu.ac.za](mailto:Luke.sandham@nwu.ac.za)

## University of KwaZulu Natal- PMB Geography SSAG report items 2016

### Publications

#### John Odindi

1. Ojoyi MM., **Odindi J.**, Mutanga O. & Abdel-Rahman EM. (2016). Analysing fragmentation in vulnerable biodiversity hotspots in Tanzania from 1975 to 2012 using remote sensing and fragstats. *Nature Conservation*, 16: 19–37.
2. **Odindi, J.**, Mutanga, O., Rouget, M. & Hlanguza, N. (2016). Mapping alien and indigenous vegetation in the KwaZulu-Natal Sandstone Sourveld using remotely sensed data. *Bothalia - African Biodiversity and Conservation* 46(1): 1-9.
3. Kiala, K., **Odindi, J.**, Mutanga, O., Peerbhay, K. (2016). Comparison of partial least squares and support vector regressions for predicting leaf area index on a tropical grassland using hyperspectral data. *Journal of Applied Remote Sensing* 10(3), 036015.
4. Cockburn, J., Rouget, M., Slotow, R., Roberts, D., Boon, R., Douwes, E., O'Donoghue, S., Downs, C., Mukherjee, S., Musakwa, W., Mutanga, O., Mwabvu, T., **Odindi, J.**, Odindo, A., Proches, S., Ramdhani, S., Ray-Mukherjee, J., Sershen, N., Schoeman, M., Smit, A., Wale, E. and Willows-Munro, S. (2016). How to build science-action partnerships for local land-use planning and management: lessons from Durban, South Africa. *Ecology and Society* 21(1): 1-28.
5. Ojoyi, M., Mutanga, O., **Odindi, J.** and Abdel-Rahman, E. M. (2016). Application of topo-edaphic factors and remotely sensed vegetation indices to enhance biomass estimation in a heterogeneous landscape in the Eastern Arc Mountains of Tanzania. *Geocarto International*, 31(1): 1-21.
6. **Mutanga, O.**, Dube, T., & Ahmed, F. (2016). Progress in remote sensing: vegetation monitoring in South Africa. *South African Geographical Journal*, 98, 461-471
7. Chemura, A., & **Mutanga, O.** (2016). Developing detailed age-specific thematic maps for coffee (*Coffea arabica* L.) in heterogeneous agricultural landscapes using random forests applied on Landsat 8 multispectral sensor. *Geocarto International*, 1-18
8. Cockburn, J., Rouget, M., Slotow, R., Roberts, D., Boon, R., Douwes, E., O'Donoghue, S., Downs, C., **Mutanga, O.**, Mukherjee, S., & Musakwa, W. (2016). How to build science-action partnerships



for local land-use planning and management: lessons from Durban, South Africa. *Ecology and Society*, 21(1). DOI:10.5751/ES-08109-210128

9. Dube, T., Gara, T.W., **Mutanga, O.**, Sibanda, M., Shoko, C., Murwira, A., Masocha, M., Ndaimani, H., & Hatendi, C.M. (2016). Estimating forest standing biomass in savanna woodlands as an indicator of forest productivity using the new generation WorldView-2 sensor. *Geocarto International*, 1-11
10. Dube, T., & **Mutanga, O.** (2016). The impact of integrating WorldView-2 sensor and environmental variables in estimating plantation forest species aboveground biomass and carbon stocks in uMgeni Catchment, South Africa. *ISPRS Journal of Photogrammetry and Remote Sensing*, 119, 415-425
11. Agjee, NH, Ismail, R., & **Mutanga, O.** (2016). Identifying relevant hyperspectral bands using Boruta: a temporal analysis of water hyacinth biocontrol. *Journal of Applied Remote Sensing*, 10, 042002-042002
12. Kiala, Z., Odindi, J., **Mutanga, O.**, & Peerbhay, K. (2016). Comparison of partial least squares and support vector regressions for predicting leaf area index on a tropical grassland using hyperspectral data. *Journal of Applied Remote Sensing*, 10, 036015-036015
13. Lottering, R., & **Mutanga, O.** (2016). Optimising the spatial resolution of WorldView-2 pan-sharpened imagery for predicting levels of *Gonipterus scutellatus* defoliation in KwaZulu-Natal, South Africa. *ISPRS Journal of Photogrammetry and Remote Sensing*, 112, 13-22
14. Lottering, R., **Mutanga, O.**, & Peerbhay, K. (2016). Detecting and mapping levels of *Gonipterus scutellatus* induced vegetation defoliation and leaf area index using spatially optimized vegetation indices. *Geocarto International*, 1-35
15. Mansour, K., **Mutanga, O.**, Adam, E., & Abdel-Rahman, E.M. (2016). Multispectral remote sensing for mapping grassland degradation using the key indicators of grass species and edaphic factors. *Geocarto International*, 31, 477-491
16. Matongera, T.N., **Mutanga, O.**, Dube, T., & Lottering, R.T. (2016). Detection and mapping of bracken fern weeds using multispectral remotely sensed data: a review of progress and challenges. *Geocarto International*, 1-16
17. Odindi, J., **Mutanga, O.**, Rouget, M., & Hlanguza, N. (2016). Mapping alien and indigenous vegetation in the KwaZulu-Natal Sandstone Sourveld using remotely sensed data. *Bothalia*, 46, 9 pages

18. Ojoyi, M., **Mutanga, O.**, Odindi, J., & Abdel-Rahman, E.M. (2016). Application of topo-edaphic factors and remotely sensed vegetation indices to enhance biomass estimation in a heterogeneous landscape in the eastern Arc Mountains of Tanzania. *Geocarto International*, 31, 1-21
  
19. Omer, G., **Mutanga, O.**, Abdel-Rahman, E.M., & Adam, E. (2016). Empirical Prediction of Leaf Area Index (LAI) of Endangered Tree Species in Intact and Fragmented Indigenous Forests Ecosystems Using WorldView-2 Data and Two Robust Machine Learning Algorithms. *Remote Sensing*, 8, 324
  
20. Peerbhay, K., **Mutanga, O.**, Lottering, R., Bangamwabo, V., & Ismail, R. (2016a). Detecting bugweed (*Solanum mauritianum*) abundance in plantation forestry using multisource remote sensing. *ISPRS Journal of Photogrammetry and Remote Sensing*, 121, 167-176
  
21. Peerbhay, K., **Mutanga, O.**, Lottering, R., & Ismail, R. (2016b). Mapping *Solanum mauritianum* plant invasions using WorldView-2 imagery and unsupervised random forests. *Remote Sensing of Environment*, 182, 39-48
  
22. Peerbhay, K.Y., **Mutanga, O.**, & Ismail, R. (2016c). The identification and remote detection of alien invasive plants in commercial forests: An Overview. *South African Journal of Geomatics*, 5, 49-67
  
23. Shoko, C., Mutanga, O., & Dube, T. (2016). Progress in the remote sensing of C3 and C4 grass species aboveground biomass over time and space. *ISPRS Journal of Photogrammetry and Remote Sensing*, 120, 13-24
  
24. Sibanda, M., **Mutanga, O.**, & Rouget, M. (2016a). Comparing the spectral settings of the new generation broad and narrow band sensors in estimating biomass of native grasses grown under different management practices. *GIScience & Remote Sensing*, 53, 614-633
  
25. Adjorlolo, C., Mashiyi, N., Mangara, P., & Mutanga, O. (2016). Trends in seasonal composition of plant functional types: retrieving fraction of winter-green grass cover in the Drakensberg Mountains using long-term satellite observations (Platform). In, *51st Annual Congress of the Grassland Society of Southern Africa*
  
26. Sibanda, M., **Mutanga, O.**, & Rouget, M. (2016b). Discriminating Rangeland Management Practices Using Simulated HypsIRI, Landsat 8 OLI, Sentinel 2 MSI, and VENμS Spectral Data. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 9, 3957-396

27. S.L.Nkomo, **Desai,S.A.** ,Peerbhay, K. 2016.Assessing the conditions of rural road networks in South Africa using visual observation and field-based manual measurement: A case study of four rural communities in KwaZulu-Natal. *Review of Social Sciences*, Vol1 (2):42-55.
  
28. Kusena Winmore, **Desai Sumaiya. A**, Beckedhal Heinz, Chemura Abel. 2016. Assessing Public Participation in Water Conservation and Water Demand Management in Water Stressed Urban Areas: Insights from the City of Gweru, Zimbabwe. *Review of Social Sciences*, Vol 1(08):30-43
  
29. S.J. Sewell, **Dr. S.A Desai**. 2016.The impacts of undeveloped roads on the livelihoods of rural women: Case study of Nyamana community. *Review of Social Sciences*, Vol 01(08), 15-29.
  
30. **Nel, A.** (2016). A Critical Reflection on Social Equity in Ugandan Carbon Forestry. *THE CARBON FIX: Forest Carbon, Social Justice, and Environmental Governance*. Stephanie Paladino and Shirley Fiske, (eds). Ney York: Routledge
  
31. Hlahla, S., Goebel, A. & **Hill, T.**, 2016: Green Economy: a Strategy to Alleviate Urban Poverty and Safeguard the Environment? KwaZulu-Natal, South Africa. *Urban Forum*, 27 (1), 113-127.
  
32. Jorgenson, P.W, **Trotter, D.C.**, & **Hill, TR**, 2016: [Ecosystem services assessments in local municipal decision making in South Africa: justification for the use of a business-based approach](#). *Journal of Environmental Planning and Management*, 59 (2), 263-279.
  
33. Strachan, K.L., **Finch, J.M.**, **Hill, T.R.** & Barnett, R.L., Morris, C.D., & Frenzel. P., 2016: Environmental controls on the distribution of salt-marsh foraminifera from the southern coastline of South Africa. *Journal of Biogeography*, 43, 887-898.
  
34. Humphries, B.D., Ramesh, T., **Hill, TR** & Downs, C.T., 2016: Habitat Use and Home Range of Black-Backed Jackals (*Canis mesomelas*) on Farmlands in the Midlands of KwaZulu-Natal, South Africa. *African Zoology*, 51 (1), 37-45.
  
35. Gandiwa, P., **Finch, J.M.** & **Hill, TR** 2016: Vegetation structure and composition in the semi-arid Mapungubwe Cultural Landscape. *Global Journal of Environmental Science and Management*, 2 (3), 235-248.
  
36. Singh, S., Dent, M. & **Hill, T.** 2016: Perceptions, outcomes and attitudes experienced by scholars on stream bio-monitoring through the implementation of the mini-SASS method, using a social learning lens: KwaZulu-Natal, South Africa. *Journal of Geography Education for southern Africa*, 2, 8-24

37. Birkett, C.K., **Hill, T.R.**, Zuma, K.D., Everson, T.M., 2016: Bringing Rain to the Land: Rainfall Simulation as a Participatory Teaching Aid to Understanding Erosion. *Journal of Environmental Protection*, 7, 1305 – 1316

### **Graduated students 2016**

Dr J. Odindi

1. Kiala, Z. Z. S. (MSC 2016 ) The use of multi-temporal hyperspectral data in modelling leaf area index on a tropical grassland.
2. Kganyago, M. L. (MSC 2016) An evaluation of hyperspectral and multispectral data for mapping invasive species in an African savanna.
3. Rajah, P. (MSC 2016) Varietal discrimination and optimal yield prediction of the common dry bean (*Phaseolus vulgaris* L.) grown under different watering regimes using multi-temporal hyperspectral data.

Prof Onimiso Mutanga

4. **Heidi van Deventer (PhD 2016)** Remote Sensing of Wetland Tree Species in the iSimangalios Wetland Park, KwaZulu-Natal, South Africa **(White)**
5. **Tholang Mokhele (PhD 2016)** Development of Census output areas in South Africa **(Black African)**
6. **Timothy Dube (PhD 2016)** Optical Remote Sensing of aboveground biomass and carbon stocks in Resource-constrained African Environments **(Black African)**
7. **Nomcebo Hlanguza (MSc 2016)** Mapping the remnant KwaZulu–Natal Sandstone sourveld grass patches in the Ethgekwini municipality using high resolution multispectral sensor. **(Black African)**
8. **Zola Kiala (MSc Distinction 2016)** The use of multi-temporal hyperspectral data in modelling leaf area index on a tropical grassland **(Black African)**
9. **Azwifaneli Davula (MSc 2016)** Assessment of vegetation productivity in the uMfolozi catchment using leaf area index (LAI) derived from SPOT 6 remote sensing imagery **(Black African)**

**Dr. S. Desai**

10. Thakur, S.S. Hons 2016 The factors influencing adequate rural health care provision. The case study of Stratford Farm, Dundee, KwaZulu-Natal..

**Dr. R. Lottering**

11. Towards a deeper understanding of the social perceptions of the youth population of Southern Africa surrounding conservation and rhinoceros poaching in particular. (Laing, B.A. – 952015070).

12. Sherece Chetty (Hons 2016) Does the ISO 14001 standard improve environmental performance and corporate image? A case study of companies within industry

**Prof T. Hill**

13. K. Strachan (PhD, 2016): *Sea-level reconstruction using Foraminifera for the coastline of South Africa* (co-supervisor: Dr J M Finch, UKZN)
14. A Webster (MSc, 2016): *Black Wattle: Asset or liability? Invasive species co-management, Matatiele, Eastern Cape*
15. C. Muller (MSc, 2016): Mapping and distribution modelling of the Critically Endangered Orchid *Disa barbata* (L.f) Sw. (co-supervisor: Dr B Bytebier, Biological Sciences)

**Dr. A. Nel**

16. S. Shezi (Hons, 2016). *Decolonizing UKZN: Political Movement or Political Moment*.
17. G. Tshabalala (Hons, 2016) – Toyi-Toyi against Fracking in KZN
18. V. Mbhele (Hons, 2016)– Street and Landfill Waste Picker livelihood differentiation in Umsundizi Municipality, KZN.

**Miss D. Trotter**

19. Manogrie Chetty (Msc 2016): "Methodologies used for determining impact significance and the implications for EIA effectiveness in South Africa: case studies from KwaZulu-Natal".
20. Lynton Dedekind (Msc 2016) "Investigating livestock dynamics in relation to livestock water productivity in smallholder mixed crop-livestock systems: a case study of Ntshiqo in the Eastern Cape"
21. Sinethemba Charity Cele (Msc 2016) "Exploring post-authorisation follow up and EIA effectiveness in South Africa: case studies from KwaZulu-Natal"

**Conferences:**

Dr S. Desai

1. Presentation at Society of South African Geographers (SSAG) Student Conference 2016 between the 22 – 25th September of this year. My master's student (H.Kunene) presented a poster.
2. Presentation at BRICS Countries International Conference on Indigenous Knowledge Systems for Sustainable Food Security and Environmental Governance for Climate Change Adaptation (13-14 September 2016) at the Moses Mabhida Conference Centre in Durban, South Africa. My master's student (S.E.Pillay) presented her research.

Dr J. Odindi

3. Odindi, J. (2016). Participated in the Climate Change and Its Impacts: Connecting Variability and Knowledge in a Global System program at the Brown International Advanced Research Institute (BIARI) at the Watson Institute for International and Public Affairs, Brown University, Rhode Island, US. June 4-18.

4. Odindi, J. and Mutanga, O. (2016). Urban Land-Cover Types, Thermal Characteristics and Implication to Climate Change in three South African Coastal Cities using Remotely Sensed Data 11 Conference of the Association of African Remote Sensing of the Environment, 24-28 October, 2016, Kampala, Uganda

Dr A. Nel

5. Political Ecology Network (POLLEN) Conference (2016). Green Violence in Uganda. Conference at Wageningen University, Netherlands
6. Nel, A. (2016). Anarchy in the Forest. Society of South African Geographers (SSAG) Conference, University of Stellenbosch, South Africa.

## University of the Witwatersrand, Johannesburg. School of Education.



### University of the Witwatersrand, Johannesburg. School of Education.

Faculty of Humanities, Division of Social & Economic Sciences,  
Department of Geography.

The Geography team from the Wits School of Education are a highly motivated group of teacher educators who value quality teaching and are making a contribution to knowledge of the subject and its teaching through their research. The team comprises academic staff: Mr Clinton David van der Merwe (HOD); Dr Paul Goldschagg; Dr Lee Rusznyak; and Ms Muofhe Thenga. Geography and Social Science are taught to undergraduate student teachers (prospective primary and secondary school teachers) in both the Bachelor of Education (BEd) and Postgraduate Certificate of Education (PGCE) programmes. Students who specialise in Geography and Social Science study academic modules in environmental resources and their management, settlement, population studies, development, political geography, Earth sciences, hazards and disaster management, applied climatology, and mapwork, remote sensing and GIS. Students also complete pedagogy modules where they learn principles of teaching Social Science and Geography. Students are prepared for classroom practice with strong knowledge bases in content knowledge, pedagogical content knowledge, and 24 weeks in supervised and assessed teaching practice in a diverse set of classroom contexts.



Left to Right: Clinton van der Merwe; Muofhe Thenga; Lee Rusznyak; and Paul Goldschagg.

## **Research**

The team adopts a research-led approach to their teaching, and all staff are actively involved in contributing to knowledge production through research, either in the form of journal publications or in postgraduate research degrees. Our recent publication output has steadily increased, with **30 publications** in various national and international journals (and book chapters) since 2012.

## **Postgraduate Studies and Supervision**

In recent years, the department has successfully supervised two PhD students and an MSc student to successful completion of their postgraduate studies in fields of geography, the teaching of geography and environmental management.

Dr Joseph Seabi (PhD, 2014) – *Chronic Aircraft Noise Exposure Effects on Children's Learning and Development*, University of the Witwatersrand, Johannesburg. Supervised by Dr Paul Goldschagg, co-supervised by Prof Kate Cockcroft.

Dr Ludo Mphatiwe (PhD, 2015) *An investigation into the topic specific pedagogical content knowledge of Botswana Social Science teachers: The case of water resources and their management*, University of the Witwatersrand, Johannesburg. Supervised by Dr Lee Rusznyak, co-supervised with Prof. Marissa Rollnick.



Hope Masilo (MSc., 2016): *Heritage Tourism in South Africa: the case of Lilies Leaf Farm and the Hector Pieterson Memorial and Museum*, University of the Witwatersrand, Johannesburg. Supervised by Clinton van der Merwe, co-supervised with Dr Gijsbert Hoogendoorn (School of Geography, Archaeology and Environmental Studies from 2012 to 2014) and then co-supervised with Dr Cheryl Chamberlain (GAES) in 2015.

### **In Progress...**

Clinton van der Merwe has submitted his PhD on “The organisation, Geography, and Local Economic Developmental Impacts of Heritage Tourism in South Africa”, which is currently under examination.

Ms Muofhe Thenga is working on her PhD proposal in the area of education for sustainable development.

### **Research interests**

The team of geographers has particular research interests in education for sustainable development, environmental management, heritage tourism and geographical knowledge for teachers.

### **Awards**

Lee is the recipient of the 2016 Faculty of Humanities Individual Teaching & Learning Award for Undergraduate Teaching. Clinton was a recipient of the NRF Thuthuka Award (2013 to 2015) and the NRF Sabbatical Support Grant (2016).

### **Service to the Profession**

Clinton currently serves as one of the DBE NSC Geography 12 (Paper 1) Examiners, and is a Ministerial Appointment to the South African Geographical Names Council (SAGNC). He has been part of the team to launch the *Journal of Geography Education for Southern Africa* (JoGESA) – see the Southern African Geography Teachers' Association (SAGTA): [www.sagta.org.za](http://www.sagta.org.za). Muofhe has served as one of the DBE NSC Geography Paper 1 & 2 examiners from 2008 to 2013.

**Website:** <https://www.wits.ac.za/education/divisions/social-and-economic-sciences/>

## University of Zululand: Geography and Environmental studies

**Acting Head of Department:** Amos Mthembu

### Information about the Geographers in the Department

<b>Name (Title, Surname, Initials)</b>	<b>Rank/Position</b>	<b>Area of specialisation</b>	<b>E-mail</b>	<b>Office Telephone number</b>
Dr NB Mbatha	Lecturer	Atmospheric Physics and Chemistry	<i>MbathaNB@unizulu.ac.za</i>	035 9026400
Dr I Moyo	Lecturer	Migration, Urban Geography and Tourism  Borders and Borderlands  Regional Development	<i>Moyol@unizulu.ac.za</i>	035 9026340
Mr Mthembu, A.T.	Lecturer	Demographics and Community Health; Cultural and Physical Environments	<i>mthembua@unizulu.ac.za</i>	035 9026329
Mrs Ndimande, N.P.	Lecturer	Rural Geography and Environmental Management	<i>ndimanden@unizulu.ac.za</i>	035 9026330
Mr Xulu, S.	Lecturer	Environmental Management, Atmospheric Science and GIS	<i>sifisoxulu@gmail.com</i>	035 9026331
Mr M Maya	Lecturer	Environmental Management and GIS	<i>MayaM@unizulu.ac.za</i>	035 9026762
Prof Jury, M.R.	Research Fellow	Atmospheric Science	<i>mark.jury@upr.edu</i>	

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## 2. Information about the professional and support staff in the Department

Name (Title, Surname, Initials)	Position	Area of subject specialisation (if applicable)	E-mail	Office Telephone number
Mrs Khumalo, D.	Secretary		<i>khumalod@unizulu.ac.za</i>	035 902 6318

### Department News

The Department of Geography welcomed three staff members, Dr NB Mbatha, Dr I Moyo and Mr M Maya.

### 2015-16 dated publications:

1. Jury, M R, 2015, Maritime Continent winter circulation as a predictor of ENSO influence on Ethiopia summer rainfall, Science Research Essays, 10, 559-569
2. Jury, M R, 2015, Influence of Indian Ocean zonal circulation on variability of Ethiopia highlands vegetation, Science Research Essays, 10, 600-609
3. Jury, M R, 2015, Climatic determinants of March-May rainfall variability over southeast Ethiopia, Climate Research, 66, 201-210
4. Jury, M R, 2015, Climatic trends in Puerto Rico observed and projected since 1980, Climate Research, 66, 113-123.
5. Jury, M R, 2015, Summer climate of Madagascar and monsoon pulsing of its vortex, Meteorol Atmos Physics, 128, 117-129
6. Jury, M R, 2015, Passive suppression of South African rainfall by the Agulhas Current, Earth Interactions, 19, 1-14
7. Jury, M.R., 2015, Inter-annual rainfall variability in the eastern Antilles and coupling with the regional and intra-seasonal circulation, Theor Appl Climatol, doi:10.1007/s00704-015-1612-x
8. Jury, M.R., 2015 Marine climate influences on inter-annual variability of tropical cyclones in the eastern Caribbean, J. Geophys. Res. doi:10.1002/2014JC010591

9. Jury, M.R. 2015, Characterizing surface water deficits in the upper Limpopo valley, *Water SA*, 42, 63-71.
10. Chikoore H, Vermeulen J and Jury M R, 2015, Tropical cyclones in the Mozambique Channel: January to March 2012, *J Natural Hazards*, 77, 2081-2095.
11. Jury, M.R., 2015, Delayed impacts of tropical cyclones Irene 2011 and Isaac 2012 in the Caribbean Antilles, *J Appl Meteor Climatol*, 54, 933–943.
12. Tafangenyasha, C., Mthembu, A.T., Kavhu, B., Vingi, K., Chikoore, H., Ndimande, N., Xulu, S. and Gwensa, N. (2016): Re-analysis of engineering the stabilization and restoration of supercritical hardpans in the Umfolozi catchment, South Africa. *International Journal of Agricultural Research and Review* Vol. 4(2): 432-439.
13. Nshimbi, C.C. and Moyo, I. , (2016),"Visible and invisible bordering practices", *World Journal of Science, Technology and Sustainable Development*, Vol. 13 Iss 4 pp. 300 - 314
14. Moyo, I. and Nicolau, M.D. (2016) Remittances and development: Zimbabwean teachers in South Africa and their impact on their Zimbabwean families, *African Population Studies*, Vol. 30(2): 2506-2519.
15. Ndimande, N. and Magi, L. (2016). The Department of Geography and Environmental Studies: A story of growth and change. In: G. Visser, R. Donaldson and C. Seethal, ed., *The origin and growth of Geography as a discipline at the South African Universities*, 1st ed. Stellenbosch: Sun Press, p.299.
16. Moyo, I, Nicolau, M.D and Gumbo, T. 2016. *Johannesburg (South Africa) inner city immigrant traders: pathways from poverty?* *Urban Forum*, 27 (3):329-345 DOI 10.1007/s12132-016-9277-9.
17. Moyo, I. 2016. *The Beitbridge-Mussina interface: towards flexible citizenship, sovereignty and territoriality at the border*. *Journal of Borderlands Studies*. DOI 10.1080/08865655.2016.1188666.
18. Lucas Vaz Peres, Hassan Bencherif, Nkanyiso Mbatha, André Passaglia Schuch et al. (2016) Measurements of the Total Ozone Column using a Brewer Spectrophotometer and TOMS and OMI Satellite Instruments over the Southern Space Observatory in Brazil. *Annales Geophysicae*, (accepted for publication).

### **Conference Presentation in 2015-16:**

Name of presenter (s)	Title of presentation	Format of presentation	Date of conference/workshop	Name of Conference/workshop
Dr NB Mbatha	Stratosphere-troposphere exchange climatology over Southern Africa using ERA-Interim data set and AIRS/Aqua satellite data	Oral	25 - 28 September 2016	The Society of South African Geographers 10th Biennial Conference
Dr I Moyo	Migration and citizenship in Post-apartheid South Africa: perspectives on social cohesion	Oral	21-25 August, 2016	33rd International Geographical Congress
Dr I Moyo	Grass roots non-state actors, border interactions and regional integration: the case of the Southern African region and SADC	Oral	21-25 August, 2016	33rd International Geographical Congress
Mr Mthembu, A.T.	Traditional health care services in Umkhanyakude District Municipality: An alternative option of health care	Oral	25 - 28 September 2016	The Society of South African Geographers 10th Biennial Conference
Mrs Ndimande, N.P.	Rural governance and space production in the City of UMhlathuze, South Africa	Oral	25 - 28 September 2016	The Society of South African Geographers 10th Biennial Conference
Dr NB Mbatha	Stratosphere-troposphere exchange climatology over Southern Africa using ERA-Interim data set and AIRS/Aqua satellite data	Oral	01-2 October 2016	South African Society for Atmospheric Science
Dr I Moyo	Respondent: Revisiting the migration regimes within the East African Community, (EAC), SADC and COMESA	Oral	8 September 2017	South African Institute of International Affairs (SAIIA) Policy Dialogue Revisiting the Migration Regimes within the EAC, SADC and COMESA, held at the University of Witwatersrand, Johannesburg, South Africa on 8 September 2016. <a href="http://www.saiia.org">www.saiia.org</a> .

## **Curriculum presented:**

### **Undergraduate (NQF levels 5, 6 and 7):**

#### Geography 1 (SGES100)

- Earth Science
- Atmospheric Science
- Environmental Management
- Cultural Environment
- Tourism

#### Geography 2 (SGES200)

- Global Landforms
- Cartography and Thematic Mapping
- Demographics and Community Health
- Sustainable Development
- Hydrometeorology

#### Geography 3 (SGES300)

- Urban Geography
- Recreation Geography
- Land Use and Resource Management
- Environmental Management
- Environmental Research
- Atmospheric processes and pollution
- Climate dynamics, weather variability and prediction

### **Postgraduate (NQF level 8):**

Bachelor of Bachelor of Arts (Honours) – BA Hons

Science (Honours) – BSc Hons

### **Postgraduate (NQF level 9):**

Master of Arts – MA

Master of Science – MSc

**Postgraduate (NQF level 10):**

Doctor of Science – PhD

**Student Numbers (2015-16):**

Level	2015	2016
First year	548	520
Second year	366	241
Third year	184	130
Honours	15	11
Masters	3	3
Doctoral	2	2

**Any other information not included above, that you would like to include in the newsletter:**

- (a) Ndimande, N.P. attended a “ Writing for Publication Workshop” hosted by the University of Pretoria on the 12<sup>th</sup> to 14<sup>th</sup> June at Waterberg, in Limpopo. This workshop is part of the Towards SA places of Power” project led by Prof Alan Mabin. The main aim was to discuss the structure and the contents of the book to be published in 2017-2018. I am expected to write a chapter.
- (b) 2. Xulu, S. attended a workshop on GIS at the University of Stellenbosch. 23<sup>rd</sup> to 26 February 2016.
- (c) In June 2016, Miss Senamile Mnguni, an environmental consultant, was invited to share her expertise and experience on Integrated Environmental Management to honours students. She delivered a 3 hour lecture which consisted of discussion and practical activities on some of her most important projects. The main aim was to give students an idea of the significance of the legislation and how environmental policies are used to assess project impacts.
- (d) Dr N Mbatha visited the University of Reunion Island, France, from the 17<sup>th</sup> to the 27<sup>th</sup> of November 2016. During the first week, he performed research activities with the atmospheric science researchers he is collaborating with at that University. During the second week, he attended the French-South Africa GDIR atmospheric research project meeting, and also presented his research progress there. This bilateral relationship bring atmospheric science researcher from Reunion Island and South Africa together in order to perform atmospheric science research the Southern Hemisphere.