

CURRICULUM VITAE



BERT DE WAELE

PhD (Curtin, Perth, Australia)

Msc / Bsc (Ghent, Belgium)

The British Geological Survey
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Born – 12th September 1968 in Deinze (Belgium)

Nationality – Belgian

Married, father of two children

Current position: Senior Geologist, British Geological Survey, Keyworth, Nottingham, UK

Past positions: Research Fellow, Tectonics SRC, The University of Western Australia (2004-2006)
PhD research (Irumide Belt, Zambia), Curtin University of Technology (2000-2004)
Research Fellow Digital Mapping, Geology Department, University of Ghent (2000)
Project Leader, Mapping / Remote Sensing / GIS Unit, University of Zambia (1998-2000)
Lecturer (Structural Geology / Remote Sensing / GIS), University of Zambia (1995-1998)
Chief Exploration Geologist, Caledonia Mining Ltd, Zambia (1995)
Mapping Geologist, Geological Survey Department / Flemish Technical Assistance (1992-1995)

Education: PhD *The Proterozoic Geological History of the Irumide Belt, Zambia* (Curtin University)
Supervisors: Dr. Ian. C.W. Fitzsimons and Dr. Peter A. Cawood. *Submitted June 2004*

Msc *The Application of Tomography in Sedimentology* (University of Ghent)
Supervisor: Dr. P. Jacobs. *Passed with distinction (1990-1992)*

Bsc University of Ghent. *Passed with distinction*

Additional qualifications and expertise

My main strength lies in tectonics and regional mapping, mainly focused on central and southern Africa; In addition, I completed various short courses on GIS, Remote Sensing, Data Processing and Analysis (geophysical-geochemical), Geochronology (SHRIMP; ID-TIMS), Electron Microprobe and Scanning Electron Microscopy. I am a proficient geochronologist, specialised in U-Pb SHRIMP geochronology. I am proficient in Dutch (native), English and French and have a rudimentary knowledge of Spanish.

STATEMENT OF EXPERIENCE

My regional mapping experience includes mapping parts of quarter degree sheets 1625SE (Sichifulo River area, unpublished), 1231SW (Mupamadzi River area, published) and reconnaissance mapping throughout Zambia. My PhD encompassed the entire Irumide Belt of Zambia, and its tectonic foreland, the Bangweulu Block, and included extensive mapping between 1999 and 2003. My current work focuses on regional geology and tectonics, by integrating field and laboratory work (U-Pb microprobe geochronology, isotope (¹⁴⁷Sm-¹⁴⁴Nd and ⁸⁷Rb-⁸⁶Sr) and whole-rock geochemistry, electron microprobe mineral analyses and Geographic Information Systems). My most recent mapping and field-based research has focused on the Reguibat Shield of Mauritania (2003) and the Irumide and Zambezi belts of Zambia (2004). I have a strong commitment to transfer of knowledge and have taught structural geology, computing in geoscience (GIS - Remote Sensing and DPA (Geosoft)) as well as field classes, mapping projects and theses (Bsc and Honours equivalent) both in French speaking as English speaking environments.

Modified on 20th November 2007

ON-GOING RESEARCH

Archaean and Paleoproterozoic evolution of the Reguibat Shield (Mauritania)

Palaeomagnetism and geochronology of basic dykes

Archaean to Neoproterozoic evolution of the Eastern Ghats, India

Geochronology and structure of nepheline syenites along the Terrane Boundary Shear Zone

Archaean to Neoproterozoic evolution of the Siberian Craton

Geochronology and Palaeomagnetism of mafic and alkaline units in the Siberian Craton

The Archaean evolution of the cryptic Volgo-Uralia Shield

Geochronology of high-grade rock units from deep bore-holes in the Volgo-Uralia Shield

Palaeo-Mesoproterozoic evolution of sedimentary basins on the Congo and São Francisco cratons

Tectono- and lithostratigraphy, and limited geochronology of the Espinhaço, Chapada Diamantina, Chela, Kibaran and Muva successions.

Mesoproterozoic evolution of central and south central Africa

Geochronology of the Kibaran belt (Burundi-Rwanda-E-Congo)

Geochronology, (isotope) geochemistry and metamorphism in the Irumide belt (Zambia)

Mesoproterozoic evolution of the Albany-Fraser Orogen, Western Australia

Geochronology of the northern Fraser Complex

Palaeomagnetism on mafic dykes in the northern Fraser Complex

Late Neoproterozoic/Cambrian global orogenesis and the formation of Gondwana.

Collisional tectonics in the Zambezi belt of Zambia-Zimbabwe

Geochronology of the Hoggar Shield, West Africa

The geological make-up and geochronology of central and northern Madagascar

Mapping at 1:100,000 scale of Proterozoic basement in Madagascar

U-Pb zircon geochronology of Proterozoic units in Madagascar

MAPPING EXPERIENCE

Geological Survey Department of Zambia (1992-1995)

Regional mapping geologist in charge of mapping Mupamadzi River area (QDS 1231 SW) and assisting in mapping 1124SW (West-Lunga area) and 1625SE (Sichifulo River area).

Caledonia Mining Ltd (1995)

In charge of exploration in the Nama prospect. Apart from management this included mapping, sampling and drilling in the prospect.

University of Zambia (1995-2000)

In charge of student mapping projects and geological mapping classes

Curtin University (Perth, Australia) (2000-2004)

PhD research included extensive mapping work in the Irumide Belt and Bangweulu Block of Zambia. I also assisted in mapping classes to the Albany-Fraser Belt and to the Carnarvon Basin (Western Australia)

The British Geological Survey (Keyworth, Nottingham, United Kingdom) (2006-present)

Mapping work concentrates on the central and northern zones of Madagascar (World Bank contract number 175/05 – MEM/SG/DG/UCP/PGRM)

TEACHING EXPERIENCE

Curtin University of Technology 2001-2003

- 3rd year two week field course to the Carnarvon Basin (2001 and 2002)
2nd year one week field course to the Albany-Fraser Orogen (2001 and 2002)
2nd year one week field course on the Yilgarn craton (2002)

University of Zambia 1995-2000

- 3rd year Structural Geology: full academic years 1995 – 1998; 4 hours/week teaching, 4 hours/week lab
3rd year Computers in Geology: full academic years 1995-1998; 4 hours/week teaching, 8 hours/week lab
3rd year Engineering Geology: One semester 1995-1996; 4 hours/week teaching
5th year regional mapping: 6 weeks mapping project; supervised 28 final year mapping projects (1995-2000)
5th year industrial placement: Supervised 4 final year industrial placement projects between 1995-2000
Masters: Supervised one masters project (Simon Nkemba) 1998-2000
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COMMUNITY ACTIVITY

- 2002-2004 Member of the Geological Society of Africa
1997-2000 Elected Chairman of the Geological Society of Zambia (GSZ)
1999 Secretary of UNESCO Programme IGCP 418: The Kibaran of Southwest Africa
Organised the joint IGCP 418-419 field conference in Zambia, comprising a pre-conference fieldtrip through the Irumide belt (12-19 July 1999), conference with oral and poster presentations (19-21 July 1999) and a post-conference fieldtrip through the Zambian Copperbelt (21-26 July 1999). The conference attracted 65 international Earth Scientists.
1999-2001 Active member of the “Partners in Education Programme” of the Geological Society of America
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AWARDS

1. The 2003-2006 Lucien Cahen Prize of the Royal Academy of Overseas Sciences of Belgium
 2. Curtin University of Technology: the 2005 Professor Krishna & Pamela Sappal Prize for the best Higher Degree Research Graduate in Geoscience
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PUBLICATIONS

Highlights

25 papers published (2 national and 22 international — 9 first authored)

6 more in press, accepted or submitted (4 first authored)

22 papers published in last five years 2002/7.

56 abstract presented at conferences

Peer-reviewed papers (published)

1. Pedreira, A.J. and **De Waele, B.** 2008. Contemporaneous evolution of the Palaeo/Mesoproterozoic sedimentary basins of the São Francisco - Congo Craton. **Special Publication, Geological Society of London**, Gondwana XII : Western Gondwana – the Ties that Bind. Vol.294: 33-48 (TSRC#380)
2. **De Waele, B.**; Johnson, S.P.; Pisarevsky, S.A. 2008. Palaeoproterozoic to Neoproterozoic growth and evolution of the eastern Congo Craton: its role in the Rodinia puzzle. **Precambrian Research** 160, 127-141(TSRC#363)
3. Li, Z.X.; Bogdanova, S.V.; Collins, A.S.; Davidson, A.; **De Waele, B.**; Ernst, R.E.; Fitzsimons, I.C.W.; Fuck, R.A.; Gladkochub, D.P.; Jacobs, J.; Karlstrom, K.E.; Lu, S.; Natapov, L.M.; Pease, V.; Pisarevsky, S.A.; Thrane, K.; Vernikovsky, V. 2008. Assembly, configuration and break-up history of Rodinia: A synthesis. **Precambrian Research** 160, 179-210 (TSRC#387)
4. Johnson, S.P.; **De Waele, B.**; Tembo, F.; Katongo, C.; Tani, K.; Chang, Q.; Iizuka, T. and Dunkley, D. 2007. Geochemistry, geochronology and isotopic evolution of the Chewore-Rufunsa terrane, Southern Irumide Belt: A Mesoproterozoic, continental-margin-arc. **Journal of Petrology** 48, 1411-1441.
5. Abdallah, N., Liégeois, J.P., **De Waele, B.**, Fezaa, N. and Ouabadi, A. 2007. The Temaguessine Fe-cordierite orbicular granite (Central Hoggar, Algeria): U-Pb SHRIMP age, origin and geodynamical consequences for the late Pan-African magmatism of the Tuareg shield. **Journal of African Earth Sciences** 49, 153-178.
6. **De Waele, B.** and Fitzsimons, I. C. W. 2007. The nature and timing of Palaeoproterozoic sedimentation at the southeastern margin of the Congo Craton. **Precambrian Research** 159, 95-116.
7. Biswal, T.K.; **De Waele, B.** and Ahuja, H. 2007 Timing and dynamics of the juxtaposition of the Eastern Ghats Mobile Belt against the Bhandara Craton, India: A structural and zircon U-Pb SHRIMP study of the fold-thrust belt and associated nepheline syenite. **Tectonics**
8. Johnson, S. P.; **De Waele, B.**; Tembo, F.; Evans, D.; Iizuka, T. and Tani, K. 2007. Geochronology of the Zambezi Supracrustal sequence, southern Zambia: A record of Neoproterozoic divergent processes along the southern margin of the Congo Craton. **Journal of Geology** 115, 355-374 (TSRC#360)
9. Johnson, S.P., **De Waele, B.** and Liyungu, A.K. 2006. U-Pb SHRIMP geochronology of granitoid rocks in eastern Zambia: terrane subdivision of the Mesoproterozoic Southern Irumide Belt. **Tectonics** 25, TC6004, doi:10.1029/2006TC001977.
10. Pisarevsky, S.A.; Gladkochub, D.P.; Donskaya, T.A. and **De Waele, B.** 2006. Palaeomagnetism and geochronology of mafic dykes in the south-west Baikal Lake, south Siberia, Russia: the first precisely dated Early Permian palaeomagnetic pole from the Siberian Craton. **Geophysical Journal International**. doi: 10.1111/j.1365-246X.2006.03160.x.
11. Cutten, H.; Johnson, S. P. and **De Waele, B.** 2006. Protolith ages and timing of metasomatism related to the formation of whiteschist at Mautia Hill, Tanzania: Implications for the timing of assembly of Gondwana. **Journal of Geology** 114 (6), pp. 683-698 (TSRC#346)
12. **De Waele, B.**; Liégeois, J-P.; Nemchin, A.A. and Tembo, F. 2006. Isotopic and geochemical evidence of Proterozoic episodic crustal reworking within the Irumide Belt of south-central Africa: the southern metacratonic boundary of an Archaean Bangweulu Craton. **Precambrian Research** (TSRC#362)
13. **De Waele, B.**, Kampunzu, A.B., Mapani, B., Tembo, F., 2006. The Irumide belt of Zambia. **Journal of African Earth Sciences**.
14. Johnson, S.P., Rivers, T. and **De Waele, B.** 2005. A Review of the Mesoproterozoic to early Palaeozoic magmatic and tectonothermal history of south-central Africa: implications for Rodinia and Gondwana. **Journal of the Geological Society of London** 162, 433-450.
15. Katongo, C., Köller, F., Klötzli, U., Koeberl, C., Tembo, F., **De Waele, B.** 2004. Petrography, geochemistry and geochronology of key granitoid rocks in the Neoproterozoic-Paleozoic Lufilian -

- Zambezi belt, Zambia: implications for the tectonic setting and regional correlation. *Journal of African Earth Sciences* 40, 219-244.
16. Key, R. M., **De Waele, B.**, Liyungi, A.K. 2004. A multi-element baseline geochemical database from the western extension of the central Africa Copperbelt in NW Zambia. *Transactions of the Institute of Mining and Metallurgy, section B: Applied Earth Sciences* 113, B205-226.
 17. Sikazwe, O.N. and **De Waele, B.** 2004. Assessment of the quality and reserves of bat guano at Chipongwe and Kapongo caves near Lusaka as fertiliser material. *UNZA Journal of Science and Technology*, Special Edition June 2004. pp. 32-42.
 18. Cox, R., Coleman, D.S., Chokel, C.B., DeOreo, S.B., Wooden, J.L., Collins, A.S., **De Waele, B.**, Kröner A., 2004. Proterozoic tectonostratigraphy and paleogeography of central Madagascar derived from detrital zircon U-Pb age populations. *Journal of Geology*, 114, 379-399.
 19. **De Waele, B.**, Wingate, M.T.D., Mapani, B., Fitzsimons, I.C.W., 2003. Untying the Kibaran knot: A reassessment of Mesoproterozoic correlations in southern Africa based on SHRIMP U-Pb data from the Irumide belt. *Geology*, 31: 509-512.
 20. Johnson, S.P., Cutten, H.N.C., Muhongo, S., **De Waele, B.**, 2003. Neoproterozoic magmatism and metamorphism of the western granulites in the central domain of the Mozambique belt, Tanzania: U-Pb SHRIMP geochronology and PT estimates. *Tectonophysics*, 375: 125-145.
 21. **De Waele, B.**, Mapani, B., 2002. Geology and correlation of the central Irumide belt. *Journal of African Earth Sciences*, 35: 385-397.
 22. **De Waele, B.**, Simasiku, S., 2002. An overview of the refractory mineral potential of Zambia. *International Geology Reviews*, 44: 254-263.
 23. Tembo, F., **De Waele, B.**, Nkemba, S., 2002. Syn- to post-orogenic granitoid magmatism in the Irumide belt of Zambia: Geochemical evidence. *Africa Geoscience Review*, 9: 1-17.
 24. **De Waele, B.**, Tembo, F., Key, R.M., 2000. Towards a better understanding of the Mesoproterozoic Irumide belt of Zambia: Report on a geotraverse across the belt. *Episodes*, 23: 126-130.
 25. **De Waele, B.**, 1997. Geology and stratigraphy of the Mupamadzi river area and correlation with the adjoining areas within the Irumide belt. *Zambian Journal of Applied Earth Sciences*, 11: 34-48.
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Peer-reviewed papers (submitted, accepted and in press)

1. **De Waele, B.** and Pisarevsky, S.A. **submitted**. Geochronology, palaeomagnetism and magnetic fabric of metamorphic rocks in the NE Fraser Belt, Western Australia. *Australian Journal of Earth Sciences*
 2. **De Waele, B.**, Fletcher, I.R.; Rasmussen, B.; Pisarevsky, S.A., Emanetoullah, O.L., Bellal, A.O. and Wilkinson, A. **in progress**. The age and preliminary palaeomagnetism of mafic dykes in northern Mauritania. *Journal of African Earth Sciences*
 3. **De Waele, B.**, Johnson, S.P., Fitzsimons, I.C.W., Nkemba, S. **in progress**. Temporal and geothermobarometric constraints from the Mesoproterozoic Irumide Belt. *Journal of Metamorphic Geology*
 4. **De Waele, B.**; Fitzsimons, I.C.W.; Wingate, M.T.D.; Tembo, F.; Mapani, B. and Belousova, E.A. **submitted**. The Geochronological framework of the Irumide Belt of Zambia: A prolonged crustal history along the margin of the Bangweulu Craton. *American Journal of Science*.
 5. Gladkochub D.P., Mazukabzov A.M., Donskaya T.V., **De Waele B.**, Stanevich A.M., Pisarevsky S.A. (submitted) Structural position, age and composition of the volcanics considered to be a lower part of the Riphean passive continental margin of the Siberian craton. *Russian Geology and Geophysics*.
 6. Donskaya T.V., Bibikova E.V., Gladkochub D.P., Mazukabzov A.M., Bayanova T.B., **De Waele B.**, Didenko A.N., Bukharov A.A., Kirnozova T.I. (submitted) Petrogenesis and age of felsic volcanics of the North-Baikal volcanic-plutonic belt. *Petrology*.
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Unpublished or published reports and theses

1. **De Waele, B.**, 2005. The Proterozoic geological history of the Irumide belt, Zambia. PhD Thesis, *Curtin University of Technology, Perth*, Australia, 463p. Unpublished
2. **De Waele, B.**, Johnson, S. P., Nkemba, S., and Tembo, F. 2005. High-temperature, low-pressure tectono-thermal evolution of the Irumide Belt, central Southern Africa: lithosphere delamination during arc-accretion. *Frontier Research on Earth Evolution Report 2002-2004*, V2. 9p.

3. **De Waele, B.**, 1991. Toepassingen van computergestuurde tomografie in de sedimentologie. Msc Thesis, *University of Ghent*, Belgium, 121 p. Unpublished.
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Published maps and geological reports

1. Feybesse, J-L, Sidibé, Y.T., Konaté, C.M, Lacomme, A., Zammit, C., Guerrot, C., Liégeois, J-P, **De Waele, B.** 2006. BRGM, CPG, DNGM. Notice explicative de la Carte géologique de la République du Mali à 1/200 000, Feuille n° NC-29-XVII, Tienko. – Bamako (MALI) : Ministère des Mines, de l'Énergie et de l'Eau, 2006.
2. Feybesse, J-L, Sidibé, Y.T., Konaté, C.M, Lacomme, A., Zammit, C., Guerrot, C., Liégeois, J-P, **De Waele, B.** 2006. BRGM, CPG, DNGM. Notice explicative de la Carte géologique de la République du Mali à 1/200 000, Feuille n° ND-29-XVIII, Tingréla. – Bamako (MALI) : Ministère des Mines, de l'Énergie et de l'Eau, 2006.
3. Van de Velde, P., **De Waele, B.**, 1998. The geology of the Mupamadzi river area; explanation of degree sheet 1231, SW quarter., Report and geological maps, *Geological Survey Department of Zambia*, Lusaka, rep. 105.

Unpublished courses

1. Using Geosoft OASIS Montaj and CHIMERA. *Office Mauritanien de Recherches Géologiques*. 35p.
 2. MG319 : Applications of computers in Geology. *University of Zambia*. 91p.
 3. GG332 : An introduction to Structural Geology and Field Mapping. *University of Zambia*. 144p.
 4. Using Arcview GIS. *University of Zambia*. 60p.
 5. Data Processing and Analysis (DPA): An introduction to Geosoft OASIS Montaj. *University of Zambia*. 101p.
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Presented abstracts

1. **De Waele, B.**, Key, R.M., Pitfield, P.E.J., Thomas, R.J., Tucker, R.D., Rafahatelo, J-M, Rabarimanana, M.H., Randriamananjara, T. and Ralison, A.V. 2007. The chronology of Central and North Madagascar. Abstracts Volume International Symposium on Precambrian Chronology and Tectonic Evolution, 17-19 August, Beijing, China. 1p.
2. **De Waele, B.** and Pisarevsky, S.A. 2007. Geochronology, palaeomagnetism and magnetic fabric of metamorphic rocks in the NE Fraser Belt, Western Australia. Abstracts Volume International Symposium on Precambrian Chronology and Tectonic Evolution, 17-19 August, Beijing, China. 1p.
3. Abdallah, N.; Ouabadi, A.; Liégeois, J-P.; Fezaa, N.; **De Waele, B.** 2006. Les granitoïdes panafricains liés à la shear-zone de l'Ounane (Egéré-Aleksod terrane): géochimie et géochronologie. Abstract IGCP 485: The boundaries of the West African Craton, Alger-Tamanrasset, 2006.
4. Fezaa, N.; Ouabadi, A.; Liégeois, J-P.; Abdallah, N.; **De Waele, B.**; Bruguier, O. 2006. Le Terrane de Djanet: Géochronologie et géochimie de ses granites et sediments; lien avec le metacraton Saharien. Abstract IGCP 485: The boundaries of the West African Craton, Alger-Tamanrasset, 2006.
5. Pedreira, A.J. and **De Waele, B.** 2006. Evolução paralela das bacias sedimentares paleo/mesoproterozóicas da Península São Francisco e Cráton do Congo. Abstracts Volume do XLIII Congresso Brasileiro de Geologia, 3-8 September 2006, Aracaju, Brazil. ST02:AO-380.
6. Bogdanova, S.V., **De Waele, B.**, Bibikova, E.V., Postnikov, A.V., and Popova, L.P., 2006, New data on the age of the crystalline basement of the Volga-Ural oil and gas province, in Muslimov, R.K., and Larochkina, I.A., (eds)., Hydrocarbon potential of the basement of young and old platforms: Kazan, Tatarstan, Russia, Kazan State University, pp. 40-42.
7. **De Waele, B.**; Liégeois, J-P., Johnson, S.P., Nemchin, A.A. and Tembo, F. 2006. Recurrent reworking in the Irumide Belt of Zambia. 21st Colloquium on African Geology, Maputo, 03-05 July 2006. 3p.
8. Johnson, S.P.; **De Waele, B.** and Tembo, F. 2006. The Southern Irumide Belt of Zambia. 21st Colloquium on African Geology, Maputo, 03-05 July 2006. 3p.
9. Johnson, S. P.; **De Waele, B.**; Evans, D.; Tembo, F. and Banda, W. 2006. A record of Neoproterozoic divergent processes along the southern Congo Craton margin. 21st Colloquium on African Geology, Maputo, 03-05 July 2006. 3p.
10. Tack, L.; Fernandez-Alonso, M.; **De Waele, B.**; Tahon, A.; Dewaele, S.; Baudet, D. and Cutten, H. 2006. The Northeastern Kibaran Belt (NKB): A long-lived Proterozoic intraplate history. 21st Colloquium on African Geology, Maputo, 03-05 July 2006. 3p.

11. Fernandez-Alonso, M.; Tack, L.; **De Waele, B.**; Cutten, H.; Baudet, D. and Tahon, A. 2006. The NE Kibaran Belt (NKB): New uniform stratigraphies and GIS-compiled geological map. 21st Colloquium on African Geology, Maputo, 03-05 July 2006. 3p.
12. Bulambo, J-P; **De Waele, B.**; Kampunzu, A.B.; Tembo, F. 2006. SHRIMP U-Pb geochronology of the Choma – Kalomo block (Zambia) and geological implications. 21st Colloquium on African Geology, Maputo, 03-05 July 2006. 3p.
13. Stern, R.A.; Fletcher, I.R.; Rasmussen, B.; McNaughton, N.J. and **De Waele, B.** 2006. Nano-geochronology? 16th Annual VM Goldschmidt Conference 2006, Melbourne 27 August-01 September 2006. 1p.
14. Cutten, H.N.C.; Johnson, S.P. and **De Waele, B.** 2006. Geodynamics of the Gondwana collision in Eastern Africa. Australian Earth Sciences Convention 2006, 2-6 July 2006, Melbourne.
15. **De Waele, B.**, Johnson, S.P., Fitzsimons, I.C.W., Mapani, B.S.E. and Tembo, F. 2005. Does the record of punctuated magmatism and late Mesoproterozoic tectonism along the southern margin of the Congo Craton support a continent-spanning “Kibaran” event during the formation of Rodinia? Gondwana 12, 6-11 November 2005, Mendoza, Argentina. p. 132.
16. Pedreira, A.J. and **De Waele, B.** 2005. The Palaeo/Mesoproterozoic sedimentary basins of the São-Francisco-Congo Craton: evolution and correlation. Gondwana 12, 6-11 November 2005, Mendoza, Argentina. p. 282.
17. Cutten, H.N.C., **De Waele, B.** and Johnson, S.P. 2005. The Mozambique Belt, eastern Africa: tectonic history in a regional setting. Gondwana 12, 6-11 November 2005, Mendoza, Argentina. p. 117.
18. **De Waele, B.** and Liégeois, J.P., 2005. Episodic crustal recycling in the metacratonic Irumide Belt: Geochemical and isotopic evidence., Supercontinents and Earth Evolution Symposium, Fremantle, Western Australia, 26-30 Sept., 2005. p.85.
19. Bogdanova, S., **De Waele, B.**, Bibikova, E. and Postnikov, A., 2005. Volgo-Uralia: SHRIMP evidence of strong Palaeoproterozoic reworking of Neoproterozoic crust., Supercontinents and Earth Evolution Symposium, Fremantle, Western Australia, 26-30 Sept., 2005. p.118.
20. Johnson, S.P., **De Waele, B.**, Tani, K. and Tembo, F., 2005. Mesoproterozoic supra-subduction magmatism in the southern Irumide Belt, central southern Africa: implications for the Congo Craton in Rodinia reconstructions., Supercontinents and Earth Evolution Symposium, Fremantle, Western Australia, 26-30 Sept., 2005. pp.83-84.
21. Li, Z.X., Bogdanova, S., Pisarevsky, S.A. and **De Waele, B.**, 2005. A synthesis of the assembly and break-up history of Rodinia: results of IGCP 440, Supercontinents and Earth Evolution Symposium, Fremantle, Western Australia, 26-30 Sept., 2005. p.94.
22. Wingate, M.T.D., Pisarevsky, S.A. and **De Waele, B.** 2004. Paleomagnetism of the 765 Ma Luakela Volcanics in NW Zambia and Implications for Neoproterozoic Positions of the Congo Craton. AGU fall meeting, December 2004.
23. **De Waele, B.**, Fitzsimons, I.C.W., Wingate, M.T.D., Mapani, B., Tembo, F., 2004. A U-Pb SHRIMP geochronological database for the Irumide belt of Zambia: from Palaeoproterozoic sedimentation to late Mesoproterozoic magmatism. 32nd International Geological Congress, Florence, Italy.
24. **De Waele, B.**, Fitzsimons, I.C.W., 2004. The age and detrital fingerprint of the Muva Supergroup of Zambia: Molassic deposition to the southwest of the Ubendian belt. Geoscience Africa 2004, Johannesburg, South Africa.
25. Johnson, S.P., Oliver, G.J.H., Tembo, F., De Waele, B. and Rivers, T., 2004. Mesoproterozoic supra-subduction magmatism and accretionary tectonics in the southern Irumide Belt, central southern Africa. Geoscience Africa 2004, Johannesburg, South Africa.
26. Mapani, B.S., Rivers, T., Tembo, F., **De Waele, B.** and Katongo, C., 2004. Growth of the Irumide terranes and slices of Archean age in eastern Zambia. Geoscience Africa 2004, Johannesburg, South Africa.
27. Bulambo, M., **De Waele, B.**, Kampunzu, A.B., Tembo, F., 2004. SHRIMP U-Pb geochronology of the Choma-Kalomo block (Zambia) and geological implications, 20th Colloquium of African Geology, 2-7th June, 2004, Orléans, France. p.96.
28. Cutten, H., **De Waele, B.**, Fernandez-Alonso, M., Tack, L., 2004. Age constraints for basin evolution and sedimentation in the "Northeastern Kibaran Belt", 20th Colloquium of African Geology, 2-7th June, 2004, Orléans, France. p.123.
29. Mapani, B.S.E., Rivers, T., Tembo, F., **De Waele, B.** and Katongo, C. 2004. Terrane Subdivision of the Irumide Orogen in Zambia: A testable tectonic hypothesis. 20th Colloquium of African Geology, 2-7th June, 2004, Orléans, France. p.278.
30. **De Waele, B.**, Fitzsimons, I.C.W., Nemchin, A., 2004. Palaeoproterozoic to Mesoproterozoic deposition, magmatism, and metamorphism at the southeastern margin of the Congo craton: the geological history of the Irumide belt. 20th Colloquium of African Geology, 2-7th June, 2004, Orléans, France. p.127.
31. Fitzsimons, I.C.W., **De Waele, B.** 2004. Precambrian crustal lineaments in Africa: Using precise U-Pb geochronology to test correlations across shear zones. Continental Tectonics: Geological Society of

London discussion meeting in memory and celebration of the life and work of Mike Coward, 27-28th May 2004, London.

32. **De Waele, B.**, Fitzsimons, I.C.W., Wingate, M.T.D., Mapani, B., 2003. The tectonothermal history of the Irumide belt of Zambia. Regional significance of new geochronological constraints. In: H. Li, S. Zhang (Eds.), Assembly and breakup of Rodinia, south China field symposium. Chengdu Institute of Geology and Mineral Resources, China Geological Survey, Hangzhou. China.
33. **De Waele, B.**, Nemchin, A.A., Kampunzu, A.B., 2003. The Bangweulu block of northern Zambia: where is the pre-Ubendian crust? In: H. Li, S. Zhang (Eds.), Assembly and breakup of Rodinia, south China field symposium. Chengdu Institute of Geology and Mineral Resources, China Geological Survey, Hangzhou. China, pp. 19-21.
34. Key, R.M., **De Waele, B.**, 2003. A multi-element baseline geochemical database from the western extension of the Central Africa Copperbelt in NW Zambia, 6th International Symposium on Environmental Geochemistry, University of Edinburgh, Edinburgh, Scotland.
35. Cox, R.A., Rivers, T., Mapani, B., Tembo, D., **De Waele, B.**, 2002. New U-Pb data for the Irumide belt: LAM-ICP-MS results for Luangwa Terrane. In: Geological Survey of Namibia (Ed.), 11th IAGOD Quadrennial Symposium and Geocongress, Windhoek, Namibia, pp. 3.
36. **De Waele, B.**, Tembo, F., 2002. Petrochemistry of Magmatic Rocks in the Irumide belt: Indications on the Evolution and Tectonic Setting of the belt. In: Geological Survey of Namibia (Ed.), 11th IAGOD Quadrennial Symposium and Geocongress. Geological Survey of Namibia, Windhoek, Namibia, pp. 10.
37. **De Waele, B.**, Wingate, M.T.D., Mapani, B., 2002. Geochronological constraints on granitoid magmatism and deformation in the SW Irumide belt, Zambia. In: Geological Survey of Namibia (Ed.), 11th IAGOD Quadrennial Symposium and Geocongress. Geological Survey of Namibia, Windhoek, Namibia, pp. 3.
38. Tembo, F., Rivers, T., Mapani, B., **De Waele, B.**, Katongo, C., 2002. Terrane mapping of the Irumide Orogen in eastern Zambia: Reconnaissance geochemistry of the meta-igneous rocks. In: Geological Survey of Namibia (Ed.), 11th IAGOD Quadrennial Symposium and Geocongress. Geological Survey of Namibia, Windhoek, Namibia, pp. 9.
39. **De Waele, B.**, Tembo, F., Wingate, M.T.D., 2001. A review of the geochronology of the Irumide belt, Zambia. In: K.F. Cassidy, J.M. Dunphy, M.J. Van Kranendonk (Eds.), 4th International Archaean Symposium. AGSO - Geoscience Australia, Perth, pp. 303-305.
40. **De Waele, B.**, Tembo, F., Wingate, M.T.D., 2001. Characterisation of syn- and post-collisional granite magmatism, and metavolcanics in the Irumide belt, Zambia. In: S. McCourt, A. Bisnath (Eds.), Abstract volume 4th annual fieldmeeting IGCP 418. University of Durban-Westville, Durban, South Africa, pp. 1.
41. Tembo, F., **De Waele, B.**, 2001. Extensional and compressional magmatism in the Mesoproterozoic Irumide belt of Zambia: A record of rifting, continental rupture and collision. In: M. Santosh, S. Biju-Sekhar, K.P. Shabeer (Eds.), Rodinia, Gondwana and Asia conference. Gondwana Research, Tokyo, Japan, pp. 808.
42. **De Waele, B.**, Nkemba, S., Jacobs, P., 2000. Digital mapping of rapidly developing high-density areas using aerial photographs: An example for Chazanga and Kanyama compounds, Lusaka, Zambia. In: R. Goossens, B.M. De Vliegheer (Eds.), 1st Workshop of the EARSeL special interest group on Remote Sensing for Developing Countries. European Association of Remote Sensing Laboratories, Ghent, Belgium, pp. 349-356.
43. **De Waele, B.**, Tembo, F., 2000. Geochemical and petrological characteristics of granitic rocks in the Serenje area, central Irumide belt, Zambia. In: Journal of African Earth Sciences (Ed.), 27th Earth Science Congress of the Geological Society of South Africa. Elsevier, Cape Town, South Africa, pp. 16.
44. Nkemba, S., Nyambe, I.A., **De Waele, B.**, 2000. Applications of Geographic Information Systems (GIS), digital data processing and remote sensing techniques in mineral exploration in the Solwezi Domes area, northwestern Zambia, 28th International Symposium on Remote Sensing of Environment, Cape Town, South Africa.
45. Nkemba, S., Nyambe, I.A., **De Waele, B.**, 2000. Use of satellite imagery and aerial photograph data in mapping of pegmatites and structures in the Kamena -Masola area, Serenje district, central Zambia, 28th International Symposium on Remote Sensing of Environment, Cape Town, South Africa.
46. Nkhuwa, D.C.W., Nkemba, S., **De Waele, B.**, 2000. Digital lineament mapping using aerial photographs and Landsat TM imagery in environmental geological studies in Lusaka. In: R. Goossens, B.M. De Vliegheer (Eds.), 1st Workshop of the EARSeL special interest group on Remote Sensing for Developing Countries. European Association of Remote Sensing Laboratories, Ghent, Belgium, pp. 225-236.
47. Tembo, F., **De Waele, B.**, John, T., Katongo, C., 2000. Geochemical characteristics of metabasites from the Chongwe area, southern Irumide belt, Zambia. In: A.F.M. Kisters, R.J. Thomas (Eds.), Geocongress 2000, 27th Earth Science Congress of the Geological Society of South Africa. Journal of African Earth Sciences, Cape Town, South Africa, pp. 78.
48. **De Waele, B.**, Tembo, F., 1999. A review of geochronological data on the Irumide orogeny Zambia. In: B. De Waele, F. Tembo, R.M. Key (Eds.), International Conference IGCP 418 - Evolution of the Kibaran Belt. Geological Society of Zambia, Kitwe, Zambia, pp. 9.

49. Krishna, R., **De Waele, B.**, Mapani, B., Chanda, M., 1999. Geotechnical studies of spillway at Kafue Gorge dam: A case study, International Conference on Rock Engineering Techniques for Site Characterisation, Bangalore, India.
 50. Nkemba, S., **De Waele, B.**, Nyambe, I.A., 1999. Pegmatites and structural mapping using multiple source remotely sensed data in the Kamena-Masola area, Serenje District, Central Zambia. In: B. De Waele, F. Tembo, R.M. Key (Eds.), International Conference IGCP 418 - Evolution of the Kibaran Belt. Geological Society of Zambia, Kitwe, Zambia, pp. 16.
 51. **De Waele, B.**, Mapani, B., 1998. Geology, stratigraphy and correlation of the Irumide belt, Mkushi-Mpika Block, Conference on the Role of a National Geological Survey in Sustainable Development. Geological Survey Department of Botswana, Gaborone, Botswana, pp. 132-133.
 52. Nkemba, S., **De Waele, B.**, Nyambe, I.A., 1998. Applications of Geographic Information Systems (G.I.S.), digital data processing and remote sensing techniques in mineral exploration. In: GEODESA-ESAMRDC (Ed.), Workshop on Digital Information in Mineral Exploration, Dar Es Salaam, Tanzania, pp. 26.
 53. **De Waele, B.**, Sikazwe, O., 1997. Guano - A phosphate resource in Zambia? In Africa. pp 7. In: UNU-INRA (Ed.), International Conference on Phosphate Resources and Food Security in Africa. United Nations University, Lusaka, Zambia, pp. 7.
 54. **De Waele, B.**, Liyungu, A.K., 1996. Implications for the occurrence of an unusual amphibole in the Muva of the central Irumide belt. Field meeting IGCP 363 - Palaeoproterozoic of Sub-Equatorial Africa, Lusaka, Zambia, Geological Society of Zambia.
 55. **De Waele, B.**, Mapani, B., 1996. Geology and stratigraphy of the Irumide belt, Mkushi-Mpika block. In: F. Kamona, F. Tembo, B.S.E. Mapani (Eds.), Field meeting IGCP 363 - Palaeoproterozoic of Sub-Equatorial Africa. Geological Society of Zambia, Lusaka, Zambia.
 56. Mapani, B., Tembo, F., **De Waele, B.**, 1996. Mid-crustal shearing and the development of migmatites in the Kariba-Siavonga area, southern Zambia. In: F. Kamona, F. Tembo, B.S.E. Mapani (Eds.), Field meeting IGCP 363 - Palaeoproterozoic of Sub-Equatorial Africa. Geological Society of Zambia, Lusaka, Zambia
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