

Dr S HENLEY - PUBLICATIONS

Extensive list of publications 1970 to present, including many journal and conference papers, and authorship or joint authorship of four volumes:

- 1978 **Statistical Analysis in Geology.** *Benchmark Papers in Geology v.37, 340pp.; authors J.M. Cubitt and S. Henley; Dowden Hutchinson & Ross, Stroudsburg, Pa., USA.*
- 1981 **Nonparametric Geostatistics.** 145pp; author S. Henley: Elsevier Applied Science, London.
- 1995 **Geostatistika v Gorno-Geologicheskoy praktike** (in Russian: "Geostatistics in mining and geological practice"), 188pp; authors Y.E. Kaputin, A.I. Yezhov, and S. Henley; Kola Science Centre, Apatity, Murmansk Oblast, Russia.
- 2003 **Mathematical Geology Special Issue: In Honour of Professor A.B. Vistelius** (editor S. Henley); *Math. Geol. vol.35, no.4.*

FULL LIST OF PUBLICATIONS

- 1970 Geology and Geochemistry of an Area Around Perranporth, Cornwall. PhD thesis, University of Nottingham
- 1970 An Application of Statistical Methods to the Geochemistry of an Area Around Perranporth, Cornwall. *Proc. Ussher Society v.2 p.210-216*
- 1971 Hedenbergite and Sphalerite from the Perran Iron Lode, Cornwall. *Proc. Ussher Society, v.2 p.329-334*
- 1972 Petrogenesis of Quartz Porphyry Dykes in South-West England. *Nature Physical Science v.235 p.95-97*
- 1972 Geochemical Applications of Linear Programming. *BMR Open-file Record 1972/82, Canberra*
- 1972 KWIK5, A computer program for rapid plotting of data maps. *BMR Open-file Record 1972/105, Canberra*
- 1972 A Computer Program for Plotting Perspective Diagrams of Geological Section Data. *BMR Open-file Record 1972/115, Canberra*
- 1972 Nonlinear Mapping and a Related R-Mode Technique for Compression of Multivariate Data. *BMR Open-file Record 1972/124, Canberra*
- 1972 Gypsum in the Perran Iron Lode, Cornwall. *Proc. Ussher Society, v.2 p.435-437*
- 1973 Chemical Analysis of a Spilitic Dyke South of Newquay, Cornwall. *Trans. Royal Geological Society of Cornwall v.20 p.227-229*
- 1973 The Structure of the Perranporth Area, Cornwall. *Proc. Ussher Society, v.2, p.521-524*
- 1974 Geochemistry of Devonian Sediments in the Perranporth Area, Cornwall. *Proc. Ussher Society, v.3. p.128-136*
- 1974 Geochemistry and Petrogenesis of Elvan Dykes in the Perranporth Area, Cornwall. *Proc. Ussher Society, v.3 p.136-145*
- 1976 An R-Mode Nonlinear Mapping Technique. *Computers & Geosciences v.1, p.247-254*
- 1976 Autocorrelation Coefficients from Irregularly Spaced Areal Data. *Computers & Geosciences v.2*
- 1976 The Identification of Discontinuities from Areal Distributed Data. in *Quantitative Techniques for the Analysis of Sediments* (ed. D.F. Merriam), p. 157-168. Pergamon, Oxford.
- 1976 Catastrophe Theory Models in Geology. *Mathematical Geology, v.8 p.649-655*
- 1977 (with K.G.Jeffery, E.M.Gill, and C.J.Fage) Communication of Geological Information among Different Soft Machines. *Computers & Geosciences v.3 p.465-468*
- 1978 (edited, with J.M. Cubitt) Statistical Analysis in Geology. *Benchmark Papers in Geology v.37, 340pp. Dowden Hutchinson & Ross, Stroudsburg, Pa., USA.*
- 1978 (with K.G.Jeffery, E.M.Gill, and C.J.Fage) G-PLOT: Graphics in the Geological Computer. *Computers & Geosciences v.4 p. 33-36*
- 1978 (with others) A Systematic Approach to Modelling of Multidimensional Geoscience Data. in *"Sciences de la Terre et Mesures"; Memoire du BRGM no.91, p.363-368*

- 1981 Nonparametric Geostatistics. *145pp. Elsevier Applied Science, London.*
- 1983 (with W.P.C.Stokes) Use of graphics computers in mine planning. *in Surface Mining and Quarrying, IMM, London. p. 323-328*
- 1985 Computer Applications in Underground Mine Design. *87th AGM of Canadian Institution of Mining, paper 181.*
- 1986 Deposit Modelling Techniques and Data Handling. *in Min-ex 2000 proceedings. TransIMM, v.95 p.B80-B81.*
- 1988 The Use of Solid Modelling in Underground Mine Design. *in Computer Applications in the Mineral Industry (ed. Fytas, Collins, & Singhal). p.359-364. Balkema, Rotterdam.*
- 1989 Computer Assisted Evaluation of Quarries. *in Proceedings of APCOM 89: 21st international symposium held in Las Vegas, NV, USA, 27 February - 2 March 1989. Weiss A., (ed). Littleton, Colo.: Society of Mining Engineers, 1989. p.429-441*
- 1989 A software package for short-term production planning in open-pit mines. *TransIMM v.98*
- 1990 Grade Estimation from Ill-Conditioned Data. *in "Prakticheskaya Geostatistika: Trudi Vsesoyuznogo Seminara" (Practical Geostatistics: Proceedings of an All-Union Seminar), Petrozavodsk, USSR p.186-200*
- 1990 Integration of Relational Database and Three-Dimensional Modelling Applications for efficient Mine Design. *in conference proceedings APCOM 90, Proc.22nd international symposium, Berlin: Tech. Univ.Berlin (Kongresse und Tagungen, Heft 51) v.1 p.473-479.*
- 1991 (with J.W.Aucott and P.K.Harvey) Computing for Exploration and Mining in the Developing World - The Roles of Government and Industry. *in Geosciences in development, (Stow & Laming eds), p.57-63. AGID/Balkema, Rotterdam.*
- 1991 An Integrated Approach to Short-Term Production Planning and Stockpile Management in Open-Pit Mines. *in Proceedings of an International Conference on Surface Mining, Mirny, Yakutia, USSR, July 1991.*
- 1992 (with S. Kordestani) Orebody Modelling in a Relational Database Framework. *in 2nd CODATA Conference on Geomathematics and Geostatistics (ed. P.A. Dowd & J.J. Royer). Sciences de la Terre, Ser.Inf., Nancy, p. 477-484.*
- 1992 (with J.W. Aucott) Some alternatives to geostatistics for mining and exploration. *Trans IMM A, v.101 p.A36-A40*
- 1992 The Use of Integrated Software Techniques to Evaluate a Bedded Clay Deposit. *in Case Histories and Methods in Mineral Resources Evaluation. Geological Society of London Special Publication No. 63 p.135-141*
- 1993 Computer Applications in Mining Geology. *Geoscientist v.3 no.2, p.20-21*
- 1993 Obschevropeisky proyekt po razrabotke tipovoy programmi DEEP (in Russian) (European DEEP project for development of data management software). *Gorny Zhurnal (Russian Mining Journal) 6.1993, p.38-39*
- 1994 (with W.P.C. Stokes) Improved geological modelling techniques for mine planning. *In: Application of computers and mathematics in the minerals industries APCOM, 18th international symposium held in London, 26-30 March 1984. London: IMM, 1984. p.265-268.*
- 1994 The database: a prerequisite for large-scale use of artificial intelligence in mining: *Trans IMM A, v. 103 p. A53-A54*
- 1994 Nonparametric interpolation methods to identify pattern in geochemical exploration data (abstract): *Minerals Industry International, No 1019, July 1994 p. 51*
- 1994 Computers in mining: The CIS perspective: *Mining Magazine, p.93-95, February 1994.*
- 1995 (with B.E.Hobbs) Computers in Exploration and Mining to the Year 2000: *in APCOM Proceedings, Aust.IMM, Brisbane, July 1995.*

- 1995 Project Databases: Standards and Security: in Giles, J.R.A.(ed) *Geological Data Management, Special Publication of the Geological Society of London No. 97*, p.97-101.
- 1995 How to Succeed in Russian Mining: *Mining Magazine*, p. 298-299, May 1995.
- 1995 (with Y.E.Kaputin and A.I.Yezhov) (1995) *Geostatistika v Gorno-Geologicheskoi Praktike (Geostatistics in Mining and Geological Practice)*; Kola Science Centre, Russian Academy of Sciences, Apatity, Murmansk Oblast, 188pp.
- 1996 Mining Software: a hard landing ? *Mining Magazine*, May.1996.
- 1996 (with P.Hornby and K.Smith) Intelligent Data Exchange Based on a Consistent Data Model: *AIME/SME, Penn State University, APCOM 1996*
- 1996 (with A.Ord) Fluid pumping: some exploratory numerical models: *European Geophysical Society Annales Geophysicae, Society Symposia, Solid Earth Geophysics & Natural hazards, Supplement 1 to Vol.14, C180*.
- 1996 Russian technical and economic appraisals: *Mining Magazine*, p.340-346, Dec.1996.
- 1997 (with Bruce Hobbs) The past and future of IT in mining - the impact of new information and communications technology in mining: in *Proceedings of IIR Conference 'Integrated Technology in Mining', Perth, W.Australia*
- 1997 (with Simon Cox) The mining industry, the Internet, and intranets: in *Proceedings of IIR Conference 'Integrated Technology in Mining', Perth, W.Australia*
- 1997 (with D.F. Watson) Geostatistics: a critical review; In: *Information technologies in the minerals industry. Proceedings of the first international conference, held via the Internet, 1-12 December 1997. Panagiotou G.N., Michalakopoulos T.N., eds. Rotterdam: A.A. Balkema, 1998, p.11-28 or paper HS01 on CD-ROM, 12 refs.*
- 1998 Mining software and computing into the next millennium: *APCOM 1998, London*, p.31-46
- 1998 (with A.Ord and J.Walsh) Predictive exploration: modelling the hydrothermal process: *APCOM 1998, London*, p.139-152
- 1998 (with D.F. Watson) Possible alternatives to geostatistics: *APCOM 1998, London*, p.337-354
- 1999 Modelling of spatial data in the presence of discontinuities (abstract): *1999 British Applied Mathematics Colloquium, Bath University*
- 2000 The 3 R's - Resources, Reserves and Reality: in MRE21, ed. Simon Dominy, Cardiff, p.21-27
- 2000 Hello, World ! *Earth Science Computer Applications*, v.15, no.8, p.1-2
- 2000 Whither Mining Software ?: *Earth Science Computer Applications*, v.15, no.9, p.3-4
- 2000 Resources, Reserves and Reality: *Earth Science Computer Applications*, v.15, no.10, p.1-2
- 2000 G-EXEC and the G-Experience: *Earth Science Computer Applications*, v.15, no.11, p.1-3
- 2000 The Russian system of resource/reserves classification: *Earth Science Computer Applications*, v.15, no.12, p.1-2
- 2000 The missing data problem: *Earth Science Computer Applications*, v.16, no.1, p.4-6
- 2000 Drillhole De-Surveying: *Earth Science Computer Applications*, v.16, no.2, p.3-5
- 2000 IP protection - copyright, patents, trademarks, company names, and dot.coms: *Earth Science Computer Applications*, v.16, no.3, p.1-2
- 2000 Models, Models,... 1. Static: *Earth Science Computer Applications*, v.16, no.4, p.1-3
- 2001 Models, Models,... 2. Dynamic: *Earth Science Computer Applications*, v.16, no.5, p.1-2
- 2001 Geo-Data Transfer Standards: *Earth Science Computer Applications*, v.16, no.6, p.1-3
- 2001 Geostatistics - cracks in the foundations ?: *Earth Science Computer Applications*, v.16, no.7, p.1-3
- 2001 Database management Systems and Data Models: *Earth Science Computer Applications*, v.16, no.8, p.1-3
- 2001 Procrustes and the golden fleece: *Earth Science Computer Applications*, v.16, no.9, p.1-3
- 2001 Some thoughts on discontinuities: *Earth Science Computer Applications*, v.16, no.10, p.1-2
- 2001 Random thoughts: *Earth Science Computer Applications*, v.16, no.11, p.1-2
- 2001 E-business in mining: *Mining Magazine*, v.185, no.2, p.72-76
- 2001 The importance of being stationary: *Earth Science Computer Applications*, v.16, no.12, p.1-3
- 2001 What's wrong with indicator kriging ?: *Earth Science Computer Applications*, v.17, no.1, p.1-2
- 2001 Distributions: *Earth Science Computer Applications*, v.17, no.2, p.1-2
- 2001 Measurement scales and geostatistics: *Earth Science Computer Applications*, v.17, no.3, p.1-2

- 2002 Programming languages: *Earth Science Computer Applications*, v.17,no.4,p.1-2
- 2002 The true nugget effect?: *Earth Science Computer Applications*, v.17,no.5,p.1-2
- 2002 Bias is Good: *Earth Science Computer Applications*, v.17,no.6,p.1-2
- 2002 Storage media: *Earth Science Computer Applications*, v.17,no.7,p.1-2
- 2002 XML and databases: *Earth Science Computer Applications*, v.17,no.8,p.1-3
- 2002 Copyleft: the great giveaway: *Earth Science Computer Applications*, v.17,no.9,p.1-4
- 2002 The relational database and geological inference: *Earth Science Computer Applications*, v.17,no.10,p.1-2
- 2002 Geological reasoning: *Earth Science Computer Applications*, v.17,no.11,p.1-3
- 2002 Professional accreditation for resource/reserve modelling: *Earth Science Computer Applications*, v.17,no.12, p.1-2
- 2002 'Real' Geology and computer models: *Earth Science Computer Applications*, v.18,no.1,p.1-2
- 2002 Where's the next killer application? *Earth Science Computer Applications*, v.18,no.2,p.1-2
- 2002 Parkinson's Law: *Earth Science Computer Applications*, v.18,no.3,p.1-2
- 2002 The man who wasn't there: *Earth Science Computer Applications*, v.18,no.4,p.1-3
- 2003 Maybe - Just maybe: the problem of partially missing data: *Earth Science Computer Applications*, v.18,no.5,p.1-2
- 2003 Spatial and Temporal Databases:*Earth Science Computer Applications*, v.18,no.6,p.1-2
- 2003 Mumbo Jumbo: *Earth Science Computer Applications*, v.18,no.7,p.1-2
- 2003 Mumbo Jumbo (of the Mumbo Jumbo kind): *Earth Science Computer Applications*, v.18,no.9,p.1-2
- 2003 Core Loss: *Earth Science Computer Applications*, v.18,no.11-12,p.2-3
- 2003 (editor) Special Issue: In honour of Professor A.B.Vistelius: *Mathematical Geology*, v.35, no.4.
- 2003 (with V.N.Deck). On the scientific heritage of Prof. A.B.Vistelius: *Mathematical Geology*, v.35, no.4, p.363-380
- 2004 (with M. Doyle) Resource Reporting at Las Cruces: A Case Study: *IMMM conference*, London, April 2004
- 2004 Russian Mineral Reporting. *Mining Journal*, 20 Aug.2004, p.18-21
- 2004 Smith, I.F.,Laxton,J.,Howcroft,J.,Robson,P., and Henley,S., The geoscience spatial framework data model - the core of the digital geoscience spatial model. *Poster 269-11, 32nd International Geological Congress*, Florence, August 2004.
- 2005 (with M. Doyle) Reporting Bias as a Result of Core Loss at Las Cruces: A Case Study: *Natural Resources Research*, Vol. 14, No.1, pp. 19-30.
- 2005 The Man Who Wasn't There: the problem of partially missing data: *Computers & Geosciences* v. 31, no.6, pp. 780-785
- 2005 Hatton, W. and Henley, S., Recent developments in multi-dimensional geoscience modelling - the British Geological Survey's Digital GeoSpatial Model 2005 and beyond: *IAMG 2005 conference, Toronto, Aug.2005*
- 2006 The problem of missing data in geoscience databases: *Computers & Geosciences*, v.32, no.9, pp1368-1377.
- 2009 A poly-Gaussian regression model to locate and quantify multiple anomalies in 3D geochemical exploration data (authors A. I. Burago, V. A. Burago, N. G. Vlasov and S. Henley): *Applied Earth Science (Trans. Inst. Min. Metall. B)*, Vol 118, No 2, p.77-84
- 2009 Global Heating: Action Required - Now. Book review of *The Vanishing Face of Gaia: A Final Warning*, by James Lovelock: *Science in Parliament*, v.66 no.2, p.40-41.
- 2010 Relational database, nulls, and the closed world assumption, submitted to *Information Systems*.
- 2010 Ecton Mine – from Copper-Bottomed Ships to A-Level Chemistry: *Science in Parliament*, 2010 Whit, p.36-37.
- 2013 Generalised Moving Statistics For Soil Contamination Studies and Geochemical Exploration: submitted to *Applied Earth Science (Trans. Inst. Min. Metall. B)*.