

## M L Duldig – Publications (as at May 2007)

### Summary

207 publications (+4 in press): refereed 105 (+4 in press), non-refereed 102 (including 64 Int. Cosmic Ray Conf. papers).

**Sole author** 61 publications: refereed 28, non-refereed 33 (including 6 Int. Cosmic Ray Conf. papers).

**Lead Author (excluding sole author)** 20 publications: refereed 13, non-refereed 7.

### Refereed published papers

#### Theses

Duldig, ML, A Study of the Emission Properties of Compact Objects, *B.Sc. (Hons.) Thesis, University of Tasmania* (1975)

Duldig, ML, Galactic X-ray Sources and their Radio Counterparts, *Ph.D. Thesis, University of Tasmania* (1981)

#### 1977

Thomas RM, Duldig ML and Greenhill JG, Spectral Variability in X-ray Sources, *Nature* **267** 332-333

Hudson RM, Thomas RM and Duldig ML, The 20keV Break in the Diffuse X-ray Background Spectrum, *Proc. ASA* **3** 131-133

Duldig ML, Emery MW, Fenton AG, Fenton KB, Greenhill JG and Thomas RM, Balloon Observations of the X-ray Pulsar Vela XR-1, *Proc. ASA* **3** 117-118

Duldig ML, Greenhill JG, Thomas RM, Haynes RF, Simons LW and Murdin PG, *IAU Circular* **3108**

Duldig ML, A Review of Some Significant Galactic X-ray Sources, *J. ASV* **30** 82-87

#### 1978

Thomas RM, Duldig ML, Haynes RF and Murdin P, Flare Observations of Circinus X-1 at 2 cm Wavelength, *MNRAS* **185** 29p-32p

Thomas RM, Duldig ML, Haynes RF and Murdin PG, *IAU Circular* **3219**

#### 1979

Duldig ML, Thomas RM, Greenhill JG, Haynes RF, Simons LW and Murdin PG, 2 cm Observations of X-ray Sources, *NZ Journal of Science* **22** 519-520

Thomas RM, Duldig ML, Haynes RF, Simons LW, Murdin PG, Hoffman JA, Lewin WHG, Wheaton WA and Doty J, Simultaneous Radio and X-ray Observations of the X-ray Burst Source MXB 1636-53, *MNRAS* **187** 299-302

Duldig ML, Greenhill JG, Thomas RM, Haynes RF, Simons LW and Murdin PG, Radio Identification of 11 X-ray Sources at 2 cm, *MNRAS* **187** 567-580

Haynes RF, Murdin PG, Thomas RM, Duldig ML and Greenhill JG, High Resolution Map of G339.6-0.1 and Its Possible Association with 4U 1642-45, *MNRAS* **188** 13-18

Greenhill JG, Jernigan JG, Murdin PG, Thomas RM, Duldig ML and Haynes RF, X-ray, Optical and Radio Observations of A1710-34, *Nature* **279** 620-621

Greenhill JG, Duldig ML, Emery MW, Fenton AG, Fenton KB, Thomas RM and Watts DJ, Balloon Observations of Several Southern X-ray Sources, *Proc. ASA* **3** 349-350

Duldig ML, Thomas RM, Haynes RF and Murdin P, Observations of the LMC X-1 Region at 2 cm, *MNRAS* **190** 861-864

#### 1980

Duldig ML, Thomas RM and Haynes RF, Comparison of the X-ray Sources Cir X-1, GX 301-2 and 2S 0535-668, *Proc. ASA* **4** 108-111

#### 1983

Lawrence A, Cominsky L, Lewin WHG, Oda M, Ogawara Y, Inoue H, Makishima K, Matsuoka M, Murakami T, Ohashi T, Shibasaki N, Kondo I, Hayakawa S, Kunieda H, Makino F, Masai K, Nagase F,

Tawara Y, Miyamoto S, Tsunemi H, Yamashita K, Dashido T, Oka R, Ohkawa T, Maruyama T, Yokoyama T, Nicholson G, Balonek T, Dent WA, Glass IS, Carter BS, Jones AW, Selby MJ, Roger M, Magro S, Giles AB, Duldig ML, Rao AP, Venugopal VR, Haynes RF, Jauncey DL, Okuda H, Sato S, Kobayashi Y, Jugaku J, Backman D, Pogge R, Hodge PE, Aller HD and van Paradijs J, X-ray, Radio and Infrared Observations of the Rapid Burster (MXB 1730-335) During 1980, *Ap. J.* **267** 301-309

Duldig ML, Greenhill JG, Fenton KB, Thomas RM and Watts DJ, Enhanced X-ray Emission Above 50keV in Sco X-1, *Astrophys. Space Sci.* **95** 137-144

Jacklyn, RM and Duldig, ML, A new underground telescope at the Mawson cosmic ray observatory, *Proc. ASA* **5(2)** 262-265

### **1984**

Jacklyn, RM, Duldig, ML and Pomerantz, MA, Cosmic ray intensity waves and the north-south anisotropy, *Proc. ASA* **5(4)** 581-586

### **1985**

Duldig, ML, Jacklyn, RM and Pomerantz, MA, A medium rigidity muon experiment for the South Pole Station, *Proc. ASA* **6(1)** 48-52

### **1986**

Morishita, I, Pomerantz, MA, Jacklyn, RM and Duldig, ML, Atmospheric effects on cosmic ray intensity at the South Pole, *Proc. Phy. Soc. Japan, 1986*, 105

Morishita, I, Pomerantz, MA, Jacklyn, RM and Duldig, ML, A proposed under ice Muon telescope at South Pole, *Proc. Phy. Soc. Japan, 1986*, 105

### **1987**

Duldig, M, Procedure for deriving the Forbush decrease spectrum at shallow underground depths, *Proc. ASA* **7(1)** 92-94

Jacklyn, RM, Duldig, ML and Pomerantz, MA, High-energy cosmic ray intensity waves, *JGR* **92(A8)** 8511-8518

### **1989**

Baker, CP, Duldig, ML and Humble, JE, Extensions to the coupling coefficient calculations for muon telescopes, *Proc. ASA* **8(1)** 55-59

Duldig, ML, Present and future cosmic ray research of the Australian Antarctic Division, In: Conde, M and Beggs, H (Ed.). *ANARE Res. Notes* **69** 48-154

Humble, JE, Duldig, ML, Fenton, KB and Fenton, AG, Cosmic ray enhanced diurnal variations - neutron monitor and underground observations, In: Conde, M. and Beggs, H. (Ed.). *ANARE Res. Notes* **69** 155-168

Pomerantz, MA, Jacklyn, RM and Duldig, ML, High-rigidity cosmic ray intensity waves, *Ant. J. US, 1986 Reviews* **21(5)** 252-253

### **1990**

Baker, CP, Humble, JE and Duldig, ML, Effect of the magnetic field model on cosmic ray coupling coefficient calculations, *J.Geomag. Geoelect.* **42(9)** 1137-1144

Duldig, ML and Humble, JE, Enhanced cosmic ray diurnal variations in Mawson and Hobart neutron monitor and underground data records, *Proc. ASA* **8** 268-273

Humble, JE, Duldig, ML, Smart, DF and Shea, MA, Observations of solar protons up to 15 GV on 29 September 1989 by Australian stations, *EOS* **72** 587

### **1991**

Duldig, M, Cosmic rays from the sun - health risks now apparent, *Arctic Medical Journal* **50(3)** 138-139

Humble, JE, Duldig, ML, Smart, DF and Shea, MA, Detection of 0.5-15 GeV solar protons on 29 September 1989 at Australian stations, *GRL* **18(4)** 737-740

### **1992**

Duldig, ML, High energy particles from Space: Part 1, *Southern Cross, Oct*

Duldig, ML, High energy particles from Space: Part 2, *Southern Cross*, Nov

Duldig, ML, High energy particles from Space: Part 3, *Southern Cross*, Dec

Duldig, ML and Humble, JE, Rigidity dependence of Forbush decreases, *Proc. ASA* **10** 24-26

### 1993

Baker, CP, Humble, JE and Duldig, ML, Heliospheric modulation models of high-energy cosmic rays: theory vs observation at 1 AU. In: Burns, G and Duldig, M (Ed.), *ANARE Res. Notes* **88** 244-263

Burns, G and Duldig, M (Eds), Australian upper atmospheric and space physics research in Antarctica, 1992. *ANARE Res. Notes* **88** 317 pp

Cramp, JL, Duldig, ML and Humble, JE, The cosmic ray diurnal variation near the heliospheric current sheet, In: Burns, G and Duldig, M (Ed.), *ANARE Res. Notes* **88** 225-243

Duldig, ML, Possible cosmic ray observations from a multi-national Antarctic station on Dome A, In: Burns, G and Duldig, M (Ed.), *ANARE Res. Notes* **88** 314-317

Duldig, ML, Cramp, JL, Humble, JE, Bieber, JW, Evenson, P, Fenton, KB, Fenton, AG and Bendoricchio, MBM, The ground-level enhancements of 1989 September 29 and October 22, *Proc. ASA* **10** 211-217

Duldig, ML, Humble, JE and Bendoricchio, MBM, The unprecedented sequence of ground level enhancements during the recent solar maximum, In: Burns, G. and Duldig, M. (Ed.), *ANARE Res. Notes* **88** 207-224

Hall, DL, Duldig, ML and Humble, JE, A comparative study of solar modulation processes as recorded by southern latitude cosmic ray telescopes, In: Burns, G. and Duldig, M. (Ed.), *ANARE Res. Notes* **88** 264-278

Humble, JE, Fenton, AG, Fenton, KB, Duldig, ML, Mori, S, Yasue, S, Munakata, K, Chino, K, Furuhashi, M, Shiozaki, Y, Akahane, S, Fujii, Z and Morishita, I, Two hemisphere observations of the north-south sidereal asymmetry at 1 TeV, In: Burns, G and Duldig, M (Ed.), *ANARE Res. Notes* **88** 279-284

### 1994

Aitken, DK, Allen, DA, Ashley, MCB, Burton, MG, Cannon, RD, Carter, BD, DaCosta, GS, Dopita, MA, Duldig, ML, Edwards, PG, Gillingham, PE, Hall, PJ, Hyland, AR, McGregor, PJ, Mould, JR, Norris, RP, Sadler, EM, Smith, CH, Spyromilio, J and Storey, JWV, The scientific potential for astronomy from the Antarctic Plateau. In: Burton, MG (Ed.). *Proc. ASA* **11(2)** 127-150

Cramp, JL, Humble, JE and Duldig, ML, The cosmic ray ground-level enhancement of 24 October 1989, *Proc. ASA* **11(1)** 28-32

Duldig, ML, Observing cosmic ray transient events, *Southern Sky* **3** 18-22

Duldig, ML, Cosmic ray transient variations, *Southern Stars: J. RASNZ* **35(6,7,8)** 214-222

Duldig, ML, Cosmic ray transient variations observed from the Earth, *Proc. ASA* **11(2)** 110-125

Duldig, ML, Ground level enhancements, *Southern Sky* **4** 7-10

Hall, DL, Humble, JE and Duldig, ML, Radial and latitudinal gradients in galactic cosmic rays, *Proc. ASA* **11(2)** 170-174

Hall, DL, Humble, JE and Duldig, ML, Modulation of high-energy cosmic rays in the heliosphere, *JGR* **99(A11)** 21443-1457

### 1995

Burton, MG, Ashley, MCB, Storey, JWV, Dopita, MA, Lancon, AM, Mould, J, Wood, PR, Hall, P and Duldig, M, JACARA's plans, *PASA* **13(1)** 33-34

Hall, DL, Duldig, ML and Humble, JE, The north-south anisotropy and the radial density gradient of galactic cosmic rays at 1 AU, *PASA* **12** 153-158

### 1996

Bieber, JW, Evenson, P, Hall, D, Humble, J and Duldig, M, Neutron monitor observations aboard an icebreaker, *Ant. J. US* **30(5)** 371-372

Duldig, ML, Cosmic ray modulation - a review of Australian research, In: Morris, RJ (Ed.). *ANARE Res. Notes* **95** 3-33

Duldig, ML, Cramp, JL and Humble, JE, Modelling some cosmic ray ground level enhancements, In: Morris, R.J. (Ed.), *ANARE Res. Notes* **95** 34-52

Hall, DL, Duldig, ML and Humble, JE, Combining the analyses of the sidereal and solar diurnal variations of galactic cosmic ray particles, In: Morris, RJ (Ed.), *ANARE Res. Notes* **95** 53-71

Hall, DL, Duldig, ML and Humble, JE, Analyses of sidereal and solar anisotropies in cosmic rays, *Sp. Sci. Rev.* **78** 401-442

Munakata, K, Yasue, S, Mori, S, Koyama, M, Akahane, S, Fujii, Z, Ueno, H, Humble, JE, Fenton, AG, Fenton, KB and Duldig, ML, Two hemisphere observations of the north-south sidereal asymmetry at 1TeV, *J. Geomag. Geoelect.* **47** 1103-1106

## 1997

Clem, JM, Bieber, JW, Evenson, P, Hall, DL, Humble, JE and Duldig, ML, Contribution of obliquely incident particles to neutron monitor counting rate, *JGR* **102(A12)** 26919-26926

Cramp, JL, Duldig, ML and Humble, JE, The effect of a distorted interplanetary magnetic field configuration on 7-8 December 1982 ground level enhancement, *JGR* **102** 4919-4926

Cramp, JL, Duldig, ML, Flückiger, EO, Humble, JE, Shea, MA and Smart, DF, The October 22, 1989, solar cosmic ray enhancement: an analysis of the anisotropy and spectral characteristics, *JGR* **102(A11)** 24237-24248

Duldig ML, Cosmic Ray Physics and Astronomy, *Aurora* **16(4)** 2-3

Fujimoto, K, Fujii, Z, Munakata, K, Yasue, S, Morishita, I, Humble, JE, Fenton, AG, Fenton, KB and Duldig, ML, Mean free path of cosmic rays in the disturbance region behind IMF-shock, causing forrush decrease at September 9, 1992, *Proc. 25th Int. Cosmic Ray Conf., Durban* **1** 433-436

Hall, DL, Duldig, ML and Humble, JE, Cosmic ray modulation parameters derived from the solar diurnal variation, *Ap. J.* **482** 1038-1049

## 1998

El-Borie, MA, Duldig, ML and Humble, JE, Galactic cosmic ray modulation and the passage of the heliospheric current sheet at Earth, *Planet. Sp. Sci.* **46(4)** 439-448

Hall, DL, Munakata, K, Yasue, S, Mori, S, Kato, C, Koyama, M, Akahane, S, Fujii, Z, Fujimoto, K, Humble, JE, Fenton, AG, Fenton, KB and Duldig, ML, Preliminary analysis of two-hemisphere observations of sidereal anisotropies of galactic cosmic rays, *JGR* **103(A1)** 367-372

Lovell, JL, Duldig, ML and Humble, JE, An extended analysis of the September 1989 cosmic ray ground level enhancement, *JGR* **103(10A)** 23,733-23,742

Munakata, K, Kitawada, T, Yasue, S, Mori, S, Kato, C, Koyama, M, Akahane, S, Hall, DL, Fujii, Z, Fujimoto, K, Humble, JE, Fenton, AG, Fenton, KB and Duldig, ML, Solar semidiurnal anisotropy of galactic cosmic ray intensity observed by the two-hemisphere network of surface-level muon telescopes *JGR* **103(A11)** 26851-26857

## 1999

Hall, DL, Munakata, K, Yasue, S, Mori, S, Kato, C, Koyama, M, Akahane, S, Fujii, Z, Fujimoto, K, Humble, JE, Fenton, AG, Fenton, KB and Duldig, ML, Gaussian analysis of two hemisphere observations of galactic cosmic ray sidereal anisotropies, *JGR* **104** 6737-6749

Hall, DL, Munakata, K, Yasue, S, Mori, S, Kato, C, Koyama, M, Akahane, S, Fujii, Z, Fujimoto, K, Humble, JE, Fenton, AG, Fenton, KB and Duldig, ML, Sidereal Daily Variation of Galactic Cosmic Rays, *ASR.* **23(3)** 483-486

Munakata, K, Kitawada, S, Yasue, S, Mori, S, Kato, C, Koyama, M, Akahane, S, Hall, DL, Fujii, Z, Fujimoto, K, Humble, JE, Fenton, AG, Fenton, KB and Duldig, ML, Enhanced sidereal diurnal variation of galactic cosmic rays observed by the two-hemisphere network of surface level muon telescopes, *JGR* **104** 2511-2519

## 2000

Duldig, ML, (Ed:) 50 Years of Cosmic Ray Research in Tasmania, *ANARE Res. Notes* **102** 227 pp

Duldig, M.L., Heliospheric Modulation: Theory and Underground Observations, *ANARE Res. Notes* **102** 145-162

Duldig, M.L., Future of Heliospheric Modulation Observations, *ANARE Res. Notes* **102** 211-220

Duldig, M.L., Muon Observations, *Sp. Sci. Rev.* **93(1/2)** 207-226

Duldig, M.L. Muon Observations In: Bieber, J.W., Eroshenko, E., Evenson, P., Fluckiger, E.O., Kallenbach, R. (ed.) *Book, "Cosmic Rays and Earth", Space Sciences Series of ISSI* **10**. 207-226

Munakata, K., Bieber, J.W., Yasue, S., Kato, C., Koyama, M., Akahane, S., Fujimoto, K., Fujii, Z., Humble, J.E., Duldig, M.L. Precursors of geomagnetic storms observed by the muon detector network. *JGR* **105 (A12)**. 27457-27468

## 2001

Duldig, M.L. Space Weather *Australian Academy of Technological Sciences and Engineering 2001 Symposium, Looking South - Managing Technology, Opportunities and the Global Environment*

Duldig, M.L. Australian Cosmic Ray Modulation Research *Pub. ASA* **18**. 12-40

## 2002

Deeley, K.M., Duldig, M.L., Humble, J.E. Re-analysis of the cosmic ray ground level enhancement of 4 May 1960. *ASR* **30(4)**. 1049-1052

Duldig, M. Space Weather Forecast Turbulent *Australasian Sci.* **23(2)**. 17-19

Lovell, J.L., Duldig, M.L., Humble, J.E., Shea, M.A., Smart, D.F., Flückiger, E.O. The cosmic ray ground level enhancement of 6 November 1997. *ASR* **30(4)**. 1045-1048

Munakata, K., Miyasaka, H., Sakurai, I., Yasue, S., Kato, C., Akahane, S., Koyama, M., Hall, D.L., Fujii, Z., Fujimoto, K., Sakakibara, S., Humble, J.E., Duldig, M.L. Solar cycle variations of modulation parameters of galactic cosmic-rays in the heliosphere *ASR* **29(10)**. 1527-1532

## 2003

Bieber, J.W., Clem, J., Duldig, M.L., Evenson, P., Humble, J.E., Pyle, R. Cosmic Ray Spectra and the Solar Magnetic Polarity: Preliminary Results from 1994-2002. *Solar Wind Ten: Proceedings of the Tenth International Solar Wind Conference, Pisa, Italy, AIP Conference Proceedings.* **679**. 628-631

Corney, R.C., Burns, G.B., Michael, K., Frank-Kamenetsky, A.V., Troshichev, O.A., Bering, E.A., Papitashvili, V.O., Breed, A.M., Duldig, M.L. The influence of polar-cap convection on the geoelectric field at Vostok, Antarctica *JASTP* **65**. 345-354

Duldig, M.L. Cosmic-ray physics and astronomy In: Marchant, H.J., Lugg, D.J., Quilty, P.G. (ed.) *Australian Antarctic Science The first 50 years of ANARE* 43-71

## 2004

Bieber, J.W., Clem, J.M., Duldig, M.L., Evenson, P.A., Humble, J.E., Pyle, R. Latitude survey observations of neutron monitor multiplicity. *JGR*. **109**. A12106

Kuwabara, T., Munakata, K., Yasue, S., Kato, C., Akahane, S., Koyama, M., Bieber, J.W., Evenson, P., Pyle, R., Fujii, Z., Tokumara, M., Kojima, M., Marubashi, K., Duldig, M.L., Humble, J.E., Silva, M.R., Trivedi, N.B., Gonzalez, W.D., Schuch, N.J. Geometry of an interplanetary CME on October 29, 2003 deduced from cosmic rays. *GRL* **31**. L19803

## 2005

Duldig, M.L. Cosmic Ray Research in Tasmania, Duldig, M.L. (Ed.) *History of Physics in Tasmania 1792 - 1982* 79-83

Getley, I.L., Duldig, M.L., Smart, D.F., Shea, M.A. Radiation dose along North American transcontinental flight paths during quiescent and disturbed geomagnetic conditions. *Space Weather* **3** S01004. 1-6

Lifton, N.A., Bieber, J.W., Clem, J.M., Duldig, M.L., Evenson, P., Humble, J.E., Pyle, R. Addressing solar modulation and long-term uncertainties in scaling secondary cosmic rays for in situ cosmogenic nuclide applications. *Earth & Planet. Sci. Lett.* **239**. 140-161

Munakata, K., Kuwabara, T., Bieber, J.W., Evenson, P., Pyle, R., Yasue, S., Kato, C., Fujii, Z., Duldig, M.L., Humble, J.E., Silva, M.R., Trivedi, N.B., Gonzalez, W.D., Schuch, N.J. CME-geometry and cosmic-ray anisotropy observed by a prototype muon detector network. *ASR* **36**. 2357-2362

## 2006

Bombardieri, D.J., Duldig, M.L., Michael, K.J., Humble, J.E. Relativistic proton production during the 2000 July 14 solar event: The case for multiple source mechanisms. *Ap.J.* **644**. 565-574

Burns, G.B., Tinsley, B.A., Klekociuk, A.R., Troshichev, O.A., Frank-Kamenetsky, A.V., Duldig, M.L., Bering, E.A., Clem, J.M. Antarctic polar plateau vertical electric field variations across heliocentric current sheet crossings. *JASTP* **68**. 639-654

Duldig, M. Antarctic cosmic ray astronomy. Engvold, O. (ed.) *Highlights of Astronomy* **13**. 947-948

Duldig, M. Cosmic rays track the rotation of the Milky Way. *Science* **314**. 429-430

Getley, I.L., Green, A.R., Bennett, L.G.I., Lewis, B.J., Duldig, M.L. Measurement and modeling of high latitude flights in the southern hemisphere. *Advances in Geosciences* **2**. 311-319

Getley, I.L., Duldig, M.L. Ultra long range aircraft operations and space weather. *Advances in Geosciences* **2**. 287-301

Ip, W.-H., Duldig, M.L. (Eds) *Advances in Geosciences, Volume 2: Solar Terrestrial* 368 pp.

Kuwabara, T., Bieber, J., Clem, J., Evenson, P., Pyle, R., Munakata, K., Yasue, S., Kato, C., Akahane, S., Koyama, M., Fujii, Z., Duldig, M., Humble, J.E., Silva, M.R., Trivedi, N.B., Gonzalez, W.D., Schuch, N.J. Real-time cosmic ray monitoring system for space weather. *Space Weather* **4**. S08001, doi:10.1029/2005SW000204

## In Press

### 2007

Bombardieri, D.J., Michael, K.J., Duldig, M.L., Humble, J.E. Relativistic Proton Production during the 15 April 2001 Solar Event. *Ap.J.*

Hippler, R., Mengel, A., Jansen, F., Bartling, G., Göhler, W., Munakata, K., Yasue, S., Kato, C., Duldig, M.L. MuSTANg – Muon Spaceweather Telescope for Anisotropies at Greifswald, *Atmos. Chem. Phys. (Discuss.)*

Ip, W.-H., Duldig, M.L. (Eds) *Advances in Geosciences, Volume 8: Solar Terrestrial*

Sabbah, I., Duldig, M.L. Solar Polarity dependence of Cosmic Ray Power Spectra Observed with Mawson Underground Muon Telescopes *Solar Phys.*

## Un-refereed published papers

### 1979

Duldig ML, Thomas RM, Greenhill JG, Haynes RF, Simons LW and Murdin PG, Radio Variability of X-ray Sources, *Proc. IAU Colloquium No. 46*, University of Waikato, NZ 432-441

Greenhill JG, Fenton AG, Fenton KB, Thomas RM, Duldig ML, Emery MW, Cook DJ, Phillips J, Hudson RM, Middleton E and Salmon G, A Large Area Proportional Counter for Balloon-borne X-ray Astronomy, *Proc. 16th Int. Cosmic Ray Conf., Kyoto*, **11** 8-13

### 1983

Jacklyn RM and Duldig, ML, Further evidence for a bi-directional anisotropy of galactic origin observed at moderate depths underground, *Proc. 18th Int. Cosmic Ray Conf., Bangalore*, **3** 391-394

### 1984

Jacklyn, RM, Duldig, ML and Pomerantz, MA, Anisotropic and isotropic intensity waves, *Proc. Int. Symp. on Cosmic Ray Modulation in the Heliosphere, Morioka* 7

Murakami, K, Fujii, Z, Yamada, T, Sakakibara, S, Fujimoto, K, Ueno, H, Nagashima, K, Fenton, AG, Fenton, KB, Humble, JE, Bolton, K, Jacklyn, RM and Duldig, ML, Co-operative observations of air showers in Tasmania looking for anisotropies of  $10^{13}$ - $10^{14}$  eV primaries (COALA Project), *Proc. Int. Symp. on Cosmic Ray Modulation in the Heliosphere, Morioka* 322

## 1985

Duldig, ML, Jacklyn, RM and Pomerantz, MA, Isotropic intensity waves and features of their occurrence, *Proc. 19th Int. Cosmic Ray Conf., La Jolla* **5** 5-8

Jacklyn, RM and Duldig, ML, The sidereal semi-diurnal variation observed at high zenith angles at Mawson 1968-1984, and the polarity of the solar main field, *Proc. 19th Int. Cosmic Ray Conference, La Jolla* **5** 44-47

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Duldig, ML, Further observations of isotropic intensity waves, *Proc. 20th Int. Cosmic Ray Conf., Moscow* **4** 75-78

Duldig, ML, Forbush decreases in the presence of isotropic intensity waves, *Proc. 20<sup>th</sup> Int. Cosmic Ray Conf., Moscow* **4** 71-74

Duldig, ML, Cosmic ray underground data from Mawson, January 1984 to December 1984, *Australian Antarctic Division Publication*

Duldig, ML, Cosmic ray underground data from Mawson, January 1985 to December 1985, *Australian Antarctic Division Publication*

Jacklyn, RM and Duldig, ML, The determination of the accidental rate in the output of a 2-tray gas counter telescope, *Proc. 20th Int. Cosmic Ray Conf., Moscow* **4** 380-383

## 1988

Duldig, ML, Cosmic ray underground data from Mawson, January 1986 to December 1986, *Australian Antarctic Division Publication*

Duldig, ML, Cosmic ray underground data from Mawson, January 1987 to December 1987, *Australian Antarctic Division Publication*

## 1989

Duldig, ML, Cosmic ray underground data from Mawson, January 1988 to December 1988, *Australian Antarctic Division Publication*

## 1990

Baker, CP, Duldig, ML and Humble, JE, Coupling coefficient sensitivity and new calculations for high zenith Muon telescopes, *Proc. 21st Int. Cosmic Ray Conf., Adelaide* **7** 112-115

Duldig, ML, The Mawson automatic cosmic ray observatory (MACRO), *Proc. 21st Int. Cosmic Ray Conf., Adelaide* **7** 288-291

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Duldig, ML, Baker, CP and Humble, JE, Intensity waves and the neutral sheet structure, *Proc. 21st Int. Cosmic Ray Conf., Adelaide* **6** 291-294

Fenton, AG, Fenton, KB, Humble, JE, Bolton, K, Jacklyn, RM, Duldig, ML, Murakami, K, Fujii, Z, Yamada, T, Sakakibara, S, Fujimoto, K, Ueno, H and Nagashima, K, Sidereal anisotropy of cosmic rays with median energy 70 TeV observed at Liawenee, Tasmania, *Proc 21st Int. Cosmic Ray Conf., Adelaide* **3** 177-179

Humble, JE, Duldig, ML, Fenton, AG and Fenton, KB, Australian observations of the 16 August 1989 ground level event. *Proc 21st Int. Cosmic Ray Conf., Adelaide* **5** 164-166

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Baker, CP, Humble, JE and Duldig, ML, Are shocks important in the modulation of high energy cosmic rays?, *Proc. 22nd Int. Cosmic Ray Conf., Dublin* **3** 541-544

Duldig, ML, Solar diurnal and semi-diurnal variations observed underground at Mawson, *Proc. 22nd Int. Cosmic Ray Conf., Dublin* **3** 437-440

Duldig, ML Underground observations of the sidereal diurnal variation at Mawson, *Proc. 22nd Int. Cosmic Ray Conf., Dublin* **3** 422-425

Duldig, ML, Cosmic ray underground data from Mawson, January 1990 - December 1990, *Australian Antarctic Division Publication*

Humble, JE, Baker, CP, Duldig, ML, Fenton, AG and Fenton, KB, A southern survey with a transportable neutron monitor, *Proc. 22nd Int. Cosmic Ray Conf., Dublin 3* 684-688

Humble, JE, Duldig, ML, Smart, DF and Shea, MA, The 29 September 1989 solar cosmic ray event as observed by Australian stations, *Proc. 22nd Int. Cosmic Ray Conf., Dublin 3* 109-112

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