Publications of James Edward McDonald

Institute of Atmospheric Physics, University of Arizona (compiled by K.T. McDonald, updated March 31, 2025)

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Publications in Refereed Journals

- (with K.E. Penrod and G.L. Maison) The Rate of Descent of Parachutes from Various Altitudes, J. Aeronaut. Sci. 14, 303-310 (1947), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jas_14_303_47.pdf
- 2. Remarks on "Sea Salt in a Tropical Storm", J. Meteor. 8, 362 (1951), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_8_362_51.pdf
- 3. Erroneous Cloud-Physics Applications of Raoult's Law, J. Meteor. 10, 68 (1953), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_10_68_53.pdf
- 4. Remarks on "Atmospheric salt particles and raindrops", J. Meteor. 10, 165 (1953), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_10_165_53.pdf
- 5. Homogeneous Nuclear of Supercooled Water Drops, J. Meteor. 10, 416 (1953), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_10_416_53.pdf
- 6. Remarks on the Development of the Coriolis Principle, Bull. Am. Meteor. Soc. **34**, 192 (1953), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_34_192_53.pdf
- 7. On the Electrical Conductivity of the Lower Stratosphere, Trans. Am. Geophys. Un. 34, 529 (1953), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_tagu_34_529_53.pdf
- 8. (with J.P. Lodge and F. Baer) An Investigation of the Melander Effect, J. Meteor. 11, 318 (1954), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_11_318_54.pdf
- 9. The Shape and Aerodynamics of Large Raindrops, J. Meteor. 11, 478 (1954), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_11_478_54.pdf
- 10. Reply to Mason, J. Meteor. 11, 515 (1954), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_11_515_54.pdf
- 11. Scientific Basis of Weather Modification, Science **124**, 86 (1956), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_science_124_86_56.pdf

- 12. A note on the precision of estimation of missing precipitation data, Trans. Am. Geophys. Union. 38, 657 (1957), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_tagu_38_657_57.pdf
- 13. "Deposition" a proposed antonym for "sublimation", J. Meteor. 15, 245 (1958), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_15_245_58.pdf also in Am. J. Phys. 26, 131 (1958), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_ajp_26_131_58.pdf also in J. Chem. Phys. 28, 170 (1958), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jcp_28_170_58.pdf
- 14. Nomenclature of Phase Transition, J. Chem. Ed. 35, 205 (1958), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jce_35_205_58.pdf also in Quart. J. Roy. Meteor. Soc. 84, 74 (1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_gjrms_84_74_58.pdf
- 15. Mean Upper-Air Data for Selected World Stations, Mon. Weath. Rev. 87, 299 (1959), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_mwr_87_299_59.pdf
- 16. An Analysis of Effects of Nuclear Attacks on Tucson and Phoenix, J. Ariz. Acad. Sci. 1, 41 (1959), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jaas_1_41_59.pdf
- 17. Cloud Photography and Cloud Physics Research, Weather 14, 247 (1959), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_weather_14_247_59.pdf
- Variability Factors in Mountain-Watershed Hydrometeorology in an Arid Region, J. Ariz. Acad. Sci. 1, 89 (1960), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jaas_1_89_60.pdf
- 19. Absorption of Atmospheric Radiation by Water Films and Water Clouds, J. Meteor. 17, 232 (1960), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_17_232_60.pdf
- 20. Direct Absorption of Solar Radiation by Atmospheric Water Vapor, J. Meteor. 17, 319 (1960), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_17_319_60.pdf
- 21. Rates of descent of fallout particles from thermonuclear explosions, J. Meteor. 17, 380 (1960), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_17_380_60.pdf
- 22. (with G.G. Goyer, F. Baer and R.R. Braham, Jr) Effects of Electric Fields on Water-Droplet Coalescence, J. Meteor. 17, 442 (1960), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_17_442_60.pdf
- 23. An Aid to Computation of Terminal Fall Velocities of Spheres, J. Meteor. 17, 463 (1960), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_17_463_60.pdf
- A Note on the Aerodynamic Effects of Internal Circulations in Small Raindrops, J. Meteor. 17, 474 (1960), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_17_474_60.pdf

- 25. (with C.R. Green) A Comparison of Rank-Difference and Product-Moment Correlation of Precipitation Data, J. Geophys. Res. 65, 333 (1960), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jgr_65_333_60.pdf
- 26. (with C.R. Green) Effects of Inhomogeneity and Record Length on Estimates of Correlation and Variability of Precipitation Data, J. Geophys. Res. 65, 2375 (1960), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jgr_65_2375_60.pdf
- 27. Remarks on Correlation Methods in Geophysics, Tellus 12, 176-183 (1960), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_tellus_12_176_60.pdf
- 28. Comments on "An Airborne Cloud-Drop-Size Distribution Meter", J. Meteor. 18, 423 (1961), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_18_423_61.pdf
- 29. On Radar Detection of Non-spherical Ice Particles, J. Meteor. 18, 695 (1961), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jm_18_695_61.pdf
- 30. An Analysis of Civil Defense Hazards Being Created by Emplacement of Intercontinental Ballistic Missiles near Tucson, J. Ariz. Acad. Sci. 2, 3 (1961), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jaas_2_3_61.pdf
- 31. What is a "Meteorological Engineer"?, Bull. Am. Meteor. Soc. 42, 122 (1961), http://http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_42_122_61.pdf
- 32. On the Ratio of Evaporation to Precipitation, Bull. Am. Meteor. Soc. 42, 185 (1961), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_42_185_61.pdf
- 33. An Historical Note on an Early Cloud-Modification Experiment, Bull. Am. Meteor. Soc. 42 195 (1961), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_42_195_61.pdf
- 34. Mean Atmospheric Residence Times for Particulate Air Pollutants, Bull. Am. Meteor. Soc. 42 664 (1961), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_42_664_61.pdf
- 35. The Surface Chemistry of Ice Nucleation, Bull. Am. Meteor. Soc. 42, 723-725 (1961), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_42_723_61.pdf
- 36. Airlight Simulation Experiments, J. Atmos. Sci. 19, 114 (1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jas_19_114_62.pdf
- 37. (with H.D. Orville) Effect of Momentum-Exchange on the Fall Velocity of an Accreting Hydrometer, J. Atmos. Sci. 19, 278 (1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jas_19_278_62.pdf
- 38. Large-sphere limit of the radar back-scattering coefficient, Quart. J. Roy. Meteor. Soc. 88, 183-186 (1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_qjrms_88_183_62.pdf

- 39. The evaporation-precipitation fallacy, Weather 17, 168-177 (1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_weather_17_168_62.pdf
- 40. A gigantic horizontal cloudbow, Weather 17, 243-245 (1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_weather_17_243_62.pdf
- 41. Collection and Washout of Airborne Pollens and Spores by Raindrops, Science 135, 435 (1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_science_135_435_62.pdf
- 42. A Note on Anomalous Adiabatic Cooling Rates in Clouds, J. Atmos. Sci. 19, 309 (1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jas_19_309_62.pdf
- 43. Visibility Reduction due to Jet-Exhaust Carbon Particle, J. Appl. Meteor. 1, 391 (1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jam_1_391_62.pdf
- 44. Homogenous Nucleation of Vapor Condensation. I. Thermodynamic Aspects, Am. J. Phys. **30**, 870 (1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_ajp_30_870_62.pdf
- 45. Some Models of Interest in Meteorological Thermodynamics, Bull. Am. Meteor. Soc. 43, 292 (1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_43_292_62.pdf
- 46. Intermolecular Attractions and Saturation Vapor Pressure, J. Atmos. Sci. 20, 178 (1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jas_20_178_63.pdf
- 47. Accuracy of Numerical Evaluations of the Pseudoadiabatic Cooling Rate, J. Atmos. Sci. 20, 240 (1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jas_20_240_63.pdf
- 48. The Saturation Adjustment in Numerical Modeling of Fog, J. Atmos. Sci. 20, 476 (1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jas_20_476_63.pdf
- 49. Stratospheric Cloud over Northern Arizona, Science 140, 292 (1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_science_140_292_63.pdf
- 50. Status of Investigation of the Northern Arizona Stratospheric Cloud of February 28, 1963, http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_630228.pdf
- 51. Homogenous Nucleation of Vapor Condensation. II. Kinematic Aspects, Am. J. Phys. 31, 31 (1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_ajp_31_31_63.pdf
- 52. Caustic of the Primary Rainbow, Am. J. Phys. **31**, 282 (1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_ajp_31_282_63.pdf
- 53. Rain washout of partially wettable insoluble particles, J. Geophys. Res. **68**, 4993 (1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jgr_68_4993_63.pdf
- 54. Use of the Electrostatic Analogy in Studies of Ice Crystal Growth, Z. Angew. Math. Phys. 14, 610 (1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_zamp_14_610_63.pdf

- 55. Early Developments in the Theory of the Saturated Adiabatic Process, Bull. Am. Meteor. Soc. 44, 203-211 (1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_44_203_63.pdf
- 56. James Espy and the Beginnings of Cloud Thermodynamics, Bull. Am. Meteor. Soc. 44, 634-641 (1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_44_634_63.pdf
- 57. Meridional Alignment of Tropical Cirrus Clouds, Nature **201**, 1316 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_nature_201_1316_64.pdf
- 58. On a Criterion Governing the Mode of Cloud Formation in Planetary Atmospheres, J. Atmos. Sci. 21, 76 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jas_21_76_64.pdf
- 59. Cloud Nucleation on Insoluble Particles, J. Atmos. Sci. 21, 109 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jas_21_109_64.pdf
- 60. A Thermodynamic Relation in the Theory of Homogenous Nucleation of Supercooled Droplets, J. Atmos. Sci. 21, 225 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jas_21_225_64.pdf
- 61. Pollen Wettability as a Factor in Washout by Raindrops, Science 143, 1180 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_science_143_1180_64.pdf
- 62. (with B.M. Herman) On a point of terminology in the optics of the rainbow, Bull. Am. Meteor. Soc. 45, 279-280 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_45_279_64.pdf
- 63. Atmospheric exclusion limits for clouds of water and other substances, J. Geophys. Res. **69**, 3669 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jgr_69_3669_64.pdf
- 64. Raindrop Spatter-Spots, Weather 19, 177-179 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_weather_19_177_64.pdf
- 65. Reply to Moyer, J. Geophys. Res. **70**, 248 (1965), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jgr_70_248_65.pdf
- 66. Saturation Vapor Pressures over Supercooled Water, J. Geophys. Res. **70**, 1553 (1965), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_jgr_70_1553_65.pdf
- 67. Maxwellian Interpretation of the Laplacian, Am. J. Phys. **33**, 706 (1965), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_ajp_33_706_65.pdf

Chapters of Books

- 68. Paleoclimatology, Chap. 12 of Geochronology, U. Ariz. Phys. Sci. Bull. Series 26, No. 2, p. 196 (April 1958), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_uapsb_26_2_196_55.pdf
- 69. The Physics of Cloud Modification, Adv. in Geophys. 5, 233-303 (1958), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_ag_5_233_58.pdf
- 70. Evaluation of Weather Modification Field Tests, in Weather Modification, Science and Public Policy, ed. by R.G. Fleagle (U. Wash. Press, 1969), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_wmspp_69.pdf

Publications in Popular Journals

- 71. The Coriolis Effect, Sci. Am. 186, 72-76 (May 1952), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_sa_186_5_72_52.pdf reprinted in New Worlds of Modern Science, ed. by L. Engel (Dell, 1956), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_nwms_88_56.pdf
- 72. Letter, Sky and Telescope 11, 158 (May 1952), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_st_11_158_52.pdf
- 73. The Earth's Electricity, Sci. Am. 188, 32-37 (Apr. 1953), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_sa_188_4_32_53.pdf
- 74. The Shape of Raindrops, Sci. Am. 190, 64-68 (Feb. 1954), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_sa_190_2_64_54.pdf
- 75. Collected Fragments of a Whilom Aeropoet, Weather 12, 107 (1957), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_weather_12_107_57.pdf
- 76. The Great Aurora of September 22-23, Sky and Telescope 17, 14 (Nov. 1957), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_st_17_11_14_57.pdf
- 77. Letter, Sky and Telescope 18, 179 (Feb. 1958), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_st_18_2_179_58.pdf
- 78. "It rained everywhere but here! The thunderstorm encirclement illusion, Weatherwise 174, 158 (Aug. 1959),
 http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_weatherwise_12_158_59.pdf
- 79. (with C.E. Brooks and M.G Wurtele) Contribution to *The Glossary of Meteorology*, ed. by R.E. Husckle (American Meteorological Society, Boston, 1959).
- 80. Cities into Targets, The Nation 190, 436 (1960), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_nation_190_436_60.pdf
- 81. The Ice-Fall Problem, Weatherwise 13, 110 (June 1960), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_weatherwise_13_110_60.pdf
- 82. Should We Know All the Facts about Civil Defense?, Point West 4, 24 (Feb. 1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_pw_4_2_24_62.pdf
- 83. An Aid to Study of the Heavens, Sky and Telescope 22, 134 (Mar. 1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_st_22_134_62.pdf
- 84. Tucson and the Titans, Arizona Frontiers 1, 9 (Nov. 1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_af_1_5_9_61.pdf
- 85. Cloud-Ring in the Upper Stratosphere, Weatherwise 16, 99 (June 1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_weatherwise_16_99_63.pdf

86. The Big City Atom, Frontier 14, 5 (Sept. 1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_frontier_14_9_5_63.pdf

Letters to Editors

- 87. Annual and Seasonal Persistence of Precipitation in Arizona, Bull. Am. Meteor. Soc. 41, 106 (1960), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_41_106_60.pdf
- 88. "Backlash", Science 133, 1271 (1961), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_science_133_1271_61.pdf
- 89. The Evaporation-Precipitation Fallacy, Weather 17, 216 (1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_weather_17_216_62.pdf
- 90. Jets, Meteors, Missiles, or Rockets?, Science 141, 1136 (1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_science_141_1136_63.pdf
- 91. Atmospheric Jet Streams, Science 143, 489 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_science_143_489_64.pdf
- 92. Moondoggle, Science 144, 1086 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_science_144_1086_64.pdf
- 93. Evolution in Arizona, Science **151**, 632 (1966), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_science_151_632_66.pdf

Book Reviews

- 94. Physical Meteorology, by J.C. Johnson, Bull. Am. Meteor. Soc. **36**, 40 (1955), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_36_40_55.pdf
- 95. A Concise Dictionary of Science, by F. Gaynor, Bull. Am. Meteor. Soc. 41, 93 (1960), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_41_93_60.pdf
- 96. The Mechanics of Aerosols, by N.A. Fuchs, Bull. Am. Meteor. Soc. 42, 221 (1961), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_42_221_61.pdf
- 97. Fluids Dynamic Drag, by S.F. Hoerner, Bull. Am. Meteor. Soc. 42, 302 (1961), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_42_302_61.pdf
- 98. Aerodynamic Capture of Particles, by E.G. Richardson, Bull. Am. Meteor. Soc. 43, 113 (1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_43_113_62.pdf
- 99. Thinking about the Unthinkable, by H. Kahn, The Progressive, 26, 44 (Oct. 1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_progressive_26_44_oct_62.pdf
- 100. Kill and Overkill, by R.E. Lapp, The Nation 195, 379 (1962), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_nation_195_379_62.pdf
- 101. Evaporation and Droplet Growth in Gaseous Media, by N.A. Fuchs, Bull. Am. Meteor. Soc. 44, 103 (1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_44_103_63.pdf
- 102. The Microbiology of the Atmosphere, by P.H. Gregory, Bull. Am. Meteor. Soc. 44, 267 (1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_44_267_63.pdf
- 103. Clouds, Rain and Rainmaking, by B.J. Mason, Trans. Am. Geophys. Un. 44, 153 (1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_tagu_44_154_53.pdf
- 104. Air Chemistry and Radioactivity, by C.E. Junge, Trans. Am. Geophys. Un. 44, 1019 (1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_tagu_44_1019_63.pdf
- 105. Strategy for Survival, by T.L. Martin and D.C. Latham, The Progressive, 27, 46 (Oct. 1963), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_progressive_27_46_oct_63.pdf
- 106. The Atomic Age, ed. by M. Grodzins and E. Rabinowitch, The Progressive, 28, 40 (Apr. 1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_progressive_28_10_40_64.pdf
- 107. An Introduction to Fluid Mechanics and Heat Transfer, by J.M. Kay, Am. J. Phys. 32, 389 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_ajp_32_389_64.pdf
- 108. Mathematics and the Physical World, by M. Kline, Am. J. Phys. **32**, 716 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_ajp_32_716_64.pdf

- 109. An Introduction to Atmospheric Physics, by R.G. Fleagle and J.A. Businger, Trans. Am. Geophys. Un. 45, 323 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_tagu_45_323_64.pdf
- 110. Environmental Radioactivity, by M. Eisenbud, Trans. Am. Geophys. Un. 45, 456 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_tagu_45_456_64.pdf
- 111. The Physics of Rainclouds, by N.H. Fletcher, Science 143, 236 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_science_143_236_64.pdf
- 112. Aerodynamics, by J.E. Allen, Science **144**, 707 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_science_144_707_64.pdf
- 113. The Mechanics of Aerosols, by N.A. Fuchs, Science **146**, 1033 (1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_science_146_1033_64.pdf
- 114. Weather, by P.D. Thompson, R. O'Brien, and the Editors of Life, and Weather Eyes in the Sky: America's Meteorological Satellites by J.G. Vaeth, Science 149, 739 (1965), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_science_149_739_65.pdf
- 115. Problems of Atmospheric and Space Electricity, ed. by S.C. Coroniti, Science 149, 1085 (1965), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_science_149_1085_65.pdf
- 116. Thermodynamics of Clouds, by L. Dufour and R. Defay, Bull. Am. Meteor. Soc. 46, 674 (1965), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_46_674_65.pdf
- 117. Physics of the Earth's Upper Atmosphere, ed. by C.O. Hines et al., Bull. Am. Meteor. Soc. 46, 803 (1965), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bams_46_803_65.pdf
- 118. Cosmic Rays, by B. Rossi, Am. Sci. **53**, 380A (1965), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_as_53_380a_65.pdf

Conference Contributions

- 119. Measurement, Analysis, and Interpretation of Turbulent Temperature Fluctuations, Int. Symp. Atmos. Turb. Bound. Layer (MIT, June 1951), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_grp_19_263_51.pdf
- 120. (with A.R. Kassander and L.L. Sims) Observations of Freezing Nuclei over the Southwestern U.S., Proc. Conf. Cloud Phys. Precip. Part. (Woods Hole, 1955), p. 392, http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_ccppp_392_55.pdf
- 121. Increasing Rain Artificially, Proc. Conf. Water for Texas 2, 23 (1956), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_pcwt_2_23_56.pdf

Technical Reports

- 122. Summer Air Mass Instability and Its Synoptic Representation, Master's Thesis (MIT, Feb. 12, 1945), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_masters_thesis_45.pdf
- 123. Radiation-Errors and Lag-Errors in the Measurement of Turbulent Temperature Fluctuations, Ph.D. Thesis (Iowa State University, 1952), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_phd_thesis_51.pdf
- 124. (with A.H. Woodcock) Sea Salt Nuclei Studies, Woods Hole Oceanographic Inst. Rep. 52-75 (Sep. 1952), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_whoi52-75.pdf
- 125. Theoretical Cloud Physics Studies, Office of Naval Research project 082083 (Jan. 13, 1953), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_onr082093_53.pdf
- 126. (with A.R. Kassander) Lag Effects in the Measurement of Turbulent Temperature Fluctuations, Iowa State College Dept. Phys. Rep. No. 1 (Feb. 1, 1952).
- 127. (with A.R. Kassander and L.L. Sims) Observations of Freezing Nuclei over the Southwestern U.S., Inst. Atmos. Phys. Sci. Rep. No. 3 (Nov. 1,1956), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_iap3.pdf
- 128. Variability of Precipitation in an Arid region: A Survey of Characteristics for Arizona, Inst. Atm. Phys. Tech. Rep. No. 1 (Dec. 31, 1956), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_iap1.pdf
- 129. A Critical Evaluation of Correlation Methods in Climatology and Hydrology, Inst. Atmos. Phys. Sci. Rep. No. 4 (Jan. 25, 1957), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_iap4.pdf
- 130. Cloudiness over the Southwestern United States and Its Relation to Astronomical Observing, Inst. Atmos. Phys. Sci. Rep. No. 7 (Feb. 24, 1958), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_iap7.pdf
- 131. Meteorological Aspects of Nuclear Reactor Hazards at Bodega Bay, (June, 1964), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_bodega_bay.pdf
- 132. Relationship of skin cancer incidence to thickness of ozone layer, statement submitted to hearings before the House Subcommittee on Transportation Appropriations (Mar. 2, 1971), Cong. Rec. 117, 7252 (1971), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_cr_117_7251_71.pdf
- 133. A Variational Derivation of Young's Equation for the Contact Angle (draft, Mar. 22, 1971), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_032271.pdf

Publications and Statements on Unidentified Flying Objects

- 134. Talks on Anomalous Aerial Phenomena (Oct. 1966 Mar. 1968), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_talks_66-68.pdf
- 135. The Problem of Unidentified Flying Objects, summary of a talk presented to the Am. Meteor. Soc. (Washington, DC, Oct. 19, 1966), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_ams_101966.pdf
- 136. Comments on Australian radio regarding his tour of Australia (Feb. 1967), http://kirkmcd.princeton.edu/JEMcDonald/australia_feb67.mp4
- 137. UFOs: Greatest Scientific Problem of Our Times?, presented at the annual meeting of the Am. Soc. Newspaper Eds. (Washington, DC, Apr. 22, 1967), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_asne_67.pdf
- 138. International Scientific Aspects of the Problem of Unidentified Flying Objects, presented to the Group of Outer Space Affairs of the United Nations (New York, June 7, 1967), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_un_060767.pdf
- 139. Unidentified Flying Objects: Greatest Scientific Problem of Our Times, coempendium of several papers by NICAP (1967), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_nicap_67.pdf
- 140. UFOs: Extraterrestrial Probes? Aeronautics and Astronautics 5(8), 19 (1967), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_aa_5_8_19_67.pdf
- 141. Science, Technology, and UFOs, presented at a General Seminar of the United Aircraft Research Laboratories (East Hartford, CT, Jan. 26, 1968), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_uarl_012668.pdf
- 142. UFOs An International Scientific Problem, Astronautics Symposium, Canadian Aeronautics and Space Institute (Montreal, Mar. 12, 1968), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_031268.pdf
- 143. Are UFOs Extraterrestrial Surveillance Craft? American Institute of Aeronautics and Astronautics (Los Angeles, Mar. 26, 1968), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_aiaa_032668.pdf
- 144. A Need for an International Study of UFOs, Flying Saucer Review (London) 14(2), 11 (1968), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_fsr_14_2_11_68.pdf
- 145. Statement on Unidentified Flying Objects, submitted to House Committee on Science and Astronautics (Washington, DC, July 29, 1968), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_hcsa_68.pdf http://files.ncas.org/ufosymposium/mcdonald.html
 - http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_680729.pdf

- 146. UFOs and the Condon Report, prepared for the Medical Students Colloquium of the Arizona College of Medicine (Tucson, AZ, Jan. 30, 1969), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_acm_013069.pdf
- 147. UFOs and the Condon Report A Scientist's Critique, presented to the Dupont Chapter of The Scientific Research Society of America (RESA, Wilmington, DE, Feb. 12, 1969), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_resa_021269.pdf
- 148. UFOs A Challenge to Observation, presented to the Symposium on Meteorological Observations and Instrumentation (Washington, DC, Feb. 13, 1969), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_smoi_021369.pdf
- 149. UFOs and the Condon Report: A Dissenting View, presented at the Pacific Missile Range Section, Am. Inst. Aero. Astro. (Pt. Mugu, CA, Feb. 18, 1969), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_021869.pdf
- 150. The Dissenting View, Engineering Opportunites (April, 33, 1969), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_eo_april_33_69.pdf
- 151. UFOs Unsolved: A Scientific Challenge, NICAP (Washington, DC, June, 10, 1969), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_nicap_061069.pdf
- 152. Review of The Condon Report, Scientific Study of Unidentified Flying Objects, Icarus 11, 443 (1969), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_icarus_11_443_69.pdf
- 153. Science in Default: Twenty-Two Years of Inadequate UFO Investigations, presented at the 136th meeting of the Am. Assoc. Adv. Sci. (Boston, Dec. 27, 1969), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_aaas_69.pdf http://kirkmcd.princeton.edu/JEMcDonald/science_in_default_aass69.mp4
- 154. UFOs over Lakenheath in 1956, Flying Saucer Review (London) 16(2), 9 (1970), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_fsr_16_2_9_70.pdf
- 155. The 1957 Gulf Coast B-47 Incident, Flying Saucer Review (London) 16(3), 2 (1970), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_fsr_16_3_2_70.pdf
- 156. The Kirtland Airfield UFO, Flying Saucer Review (London) **16**(5), 6 (1970), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_fsr_16_5_6_70.pdf
- 157. Meteorological Factors in Unidentified Radar Returns, presented at the 14th Radar Meteor. Conf. (Tucson, Nov. 1970),
 http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_rmc_1170.pdf
 http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_amsrms_70.pdf (in French!)
- 158. Letter to the Hon. Silvio Conte (Mar. 8, 1971), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_030871.pdf

- 159. UFO Encounter 1. Sample Case Selected by the UFO Subcommittee of the AIAA, Aeronautics and Astronautics 9(7), 66 (1971), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_aa_9_7_66_71.pdf
- 160. Papers on Unidentified Flying Objects and Related Phenomena (1958-1971),
 University of Arizona Special Collection MS412 (previously MS328)

 http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_arizona_archives_Ms328.pdf

 http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_arizona_archives_ms412.pdf

 http://sabio.library.arizona.edu.ezproxy1.library.arizona.edu/search~S9/X?SEARCH=%28James%20McDonald%29&searchscope=9&SORT=D&m=p&b=schttp://www.azarchivesonline.org/xtf/view?docId=ead/uoa/UAMS412.xml;query=;brand=default
- 161. ETH: The ExtraTerrestrial Hypothesis, Audio recording (date uncertain), WorldCat 129644203, http://www.worldcat.org/
- 162. Quotations assembled over many years, http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_quotes.pdf
- 163. Archive of audio recordings, http://wolfdigitalmedia.com/ufo/jamesmcdonaldarchive.htm

Publications about James McDonald

- Some newspaper articles about James McDonald are at http://kirkmcd.princeton.edu/Family/James
- 164. James McDonald, A Cloud Physicist (NY Times, July 7, 1971), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_nytimes_710716.pdf
- 165. L.J. Battan, A.R. Kassander, Jr, P.S. Martin and C. Steelink, Memorial Resolution:

 James Edward McDonald (1971),

 http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_memorial.pdf
- 166. L.J. Battan, Obituary of James E. McDonald, Bull. Am. Meteor. Soc. **52**, 735 (1971), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_obituary_bams_71.pdf
- 167. P.E. McCarthy, Politicking and Paradigm Shifting: James E. McDonald and the UFO Case Study, Ph.D. disseration (U. Hawaii, Dec. 1975), http://files.ncas.org/mccarthy/index.html
- 168. UFOs and Science: The Collected Writings of Dr. James E. McDonald, ed. by V. Vaughn (One Reed Publications, 1995), http://www.onereed.com/books/ufobook.php
- 169. A. Druffel, Firestorm: Dr. James E. McDonald's Fight for UFO Science, 2nd ed. (Granite Publishing, 2003), http://kirkmcd.princeton.edu/JEMcDonald/druffel_firestorm.pdf http://kirkmcd.princeton.edu/JEMcDonald/xcon_2004.mp4
- 170. Wikipedia biography: http://en.wikipedia.org/wiki/James_E._McDonald
- 171. Some aspects of James E. McDonald's UFO research can be traced at the Project Bluebook website: http://www.bluebookarchive.org/default.aspx
- 172. D. Ouse, Forgotten Duluthian: James E. McDonald, UFO Researcher, Zenith City online (Dec. 6, 2012), http://kirkmcd.princeton.edu/JEMcDonald/mcdonald_zenith_city_120612.pdf http://zenithcity.com/forgotten-duluthian-james-e-mcdonald-ufo-researcher/
- 173. J.K. Gillin, Looking Up: Professor James E. McDonald 1955-1970, Senior Thesis (U. Arizona, June 2013),

 http://kirkmcd.princeton.edu/JEMcDonald/gillin_senior_thesis_jem_0613.pdf
- 174. K. Reagan, UA Professor Created Own 'X-Files', Arizona Public Media online (July 3, 2013), http://kirkmcd.princeton.edu/JEMcDonald/apm_070313.pdf
 https://originals.azpm.org/p/uaplus-stories/2013/7/3/25213-ua-professor-created-own-x-files/http://kirkmcd.princeton.edu/JEMcDonald/ufo_files.mp4
- 175. A. Foster, Audio reveals creepy details of UFO mystery, news.com.au (Aug. 8, 2018), http://kirkmcd.princeton.edu/JEMcDonald/foster_news.com.au_080818.pdf http://kirkmcd.princeton.edu/JEMcDonald/westall_ufo.mp4