

GREGORY D. MCCURDY
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Education

M.S.	1989	Utah State University	Plant, Soils, and Biometeorology
B.S.	1985	Brigham Young University	Physics and Mathematics
A.D.	1982	Ricks College, Rexburg, Idaho	Arts and Sciences

Professional Interests

Gregory (Greg) McCurdy's interest is in the ongoing installation, assembly, programming, operation and maintenance of a variety of data systems. These systems include environments such as UNIX, LINUX, DOS and WINDOWS using Basic, Pascal, Fortran, Assembly, C, PERL, C-shell, and Python. His primary interests include weather and climate information sources such as RAWS, NWS, SNOTEL, AGRIMET, NVDOE, MCIDAS and ALERT. He is experienced with DROT (DOMSAT Receive Only Terminal), which receives weather platform messages transmitted via GOES satellite. He is also experienced in telephone, cell phone, radio and internet methods of data telemetry. His climate center efforts include converting the distribution of data to internet transmission, including system configuration and installation of LDM-IDD software to receive climate information. He constructed the climate center's WWW home page, and converted the RAWS data ingestor to the ASCADS data system to provide data transmission error correction and retrieval of all RAWS climate data. He is also responsible for the collection and analysis of Sierra Nevada weather station data, the changeover of Difax data from satellite feed to internet feeds, and the establishing processes to print the desired forecast maps and to provide network access to satellite imagery.

Greg's background includes deployment and installation of weather observing and research instrumentation. Past projects have included design and development of atmospheric radiation and energy balance monitoring platforms. His expertise include operation and maintenance of long-term Bowen-ratio ET (evapotranspiration) station and meteorological/climatological monitoring networks. His experience includes use of Campbell Scientific dataloggers with temperature sensors (thermistor and thermocouple), humidity sensors, wind sensors, pressure sensors (atmospheric and hydrologic), precipitation measuring devices (tipping, weighing and pressure displacement), soil moisture sensors (blocks, TDR and heat dissipation), linearity sensors for flow or displacement, O₂ and CO₂ sensors, a variety of atmospheric radiation sensors (longwave and shortwave, silicon and thermopile based), and gamma radiation sensors (pressurized ion chambers). Applications have been primarily agricultural or environmental, but have also included test chambers and space applications.

Professional Experience

2006 – present	Associate Research Scientist-Climate Applications Programmer, DRI, Department of Atmospheric Sciences, Western Regional Climate Center
1994 - 2006	Assistant Research Scientist-Climate Applications Programmer, DRI, Department of Atmospheric Sciences, Western Regional Climate Center
1986-1994	Staff Assistant field technician and programmer, Utah Climate Center, Utah State University

Publications

Engelbrecht, J. P., Kavouras, I. G., Shafer, D. S., Campbell, D. E., Campbell, S. A., McCurdy, G. D., Kohl, S. D., Nikolich, G., Sheetz, L. H., Gertler, A. W., 2015: Chemical Variability of PM10 and PM2.5 in Southwestern Rural Nevada, USA, *Water Air Soil Pollut.*, 226:217, 1-13.

Technical Reports

Miller, J. J., Mizell, S. A., Nikolich, G., McCurdy, G. D., Campbell, S. A., 2016: Monitoring Potential Transport of Radioactive Contaminants in Shallow Ephemeral Channels at the Smoky Site: Multiple Year Report

Miller, J. J., Mizell, S. A., Nikolich, G., McCurdy, G. D., Campbell, S. A., 2016: NNSS Soils Monitoring: Plutonium Valley: Multiple Year Report

Mizell, S. A., Nikolich, G., McCurdy, G. D., Shadel, C. A., Miller, J. J., 2016: Project 57 Air Monitoring Report: October 1, 2013, through December 31, 2014, DRI, DRI Report 45264; DOE 000939-27, Published

Brown, T. J., McCurdy, G. D., 2015: RAWS Data Archive. Annual Performance Report, April 2015, 3 pp.

Lyles, B. F., McCurdy, G. D., Healey, J. M., Campbell, S. A., 2015: 2014 Annual Report Timber Mountain Environmental Monitoring Station, DOE/NV/0000939-LTR2015-24, Published

Nikolich, G., Shadel, C. A., Chapman, J. B., Mizell, S. A., McCurdy, G. D., Etyemezian, V. R., Miller, J. J., 2015: Tonopah Test Range Air Monitoring: CY2014 Meteorological, Radiological, and Airborne Particulate Observations, DOE/NV/0000939-26.

Miller, J. J., Mizell, S. A., McCurdy, G. D., 2014: Project 57 Air Monitoring Annual Report - Fiscal Year 2013 (October 1, 2012 to September 30, 2013).

Mizell, S. A., Etyemezian, V. R., McCurdy, G. D., Nikolich, G., Shadel, C. A., Miller, J. J., 2014: Radiological and Environmental Monitoring at the Clean Slates I and III Sites, Tonopah Test Range, Nevada, with Emphasis on the Implications for Off-site Transport.

Mizell, S. A., Nikolich, G., Shadel, C. A., McCurdy, G. D., Etyemezian, V. R., Miller, J. J., 2014: Tonopah Test Range Air Monitoring : CY2013 Meteorological, Radiological, and Airborne Particulate Observations.

Miller, J. J., Mizell, S. A., McCurdy, G. D., 2013: Project 57 Air Monitoring.

Miller, J. J., Mizell, S. A., McCurdy, G. D., Campbell, S. A., 2013: Monitoring Potential Transport of Radioactive Contaminants in Shallow Ephemeral Channels: FY2012.

Miller, J. J., Mizell, S. A., Nikolich, G., McCurdy, G. D., Campbell, S. A., 2013: NNSS soils monitoring: Plutonium Valley (CAU 366) FY2012.

Miller, J. J., Nikolich, G., Mizell, S. A., McCurdy, G. D., Shadel, C. A., 2013: Tonopah Test Range Air Monitoring: CY2012 Meteorological, Radiological, and Airborne Particulate Observations.

Lyles, B. F., McCurdy, G. D., Chapman, J. B., Miller, J. J., 2012: Timber Mountain Precipitation Monitoring Station.

Chapman, J. B., Shafer, D. S., McCurdy, G. D., Lyles, B. F., 2010: Timber Mountain Precipitation Monitoring Station: Letter Report No. 1.

Shafer, D. S., McGraw, D. S., Karr, L. H., McCurdy, G. D., Kluesner, T. L., Gray, K. J., Tappen, J. J., 2010: Comparison of ambient radon concentrations in air in the northern Mojave Desert from continuous and integrating instruments.

Conference Presentations and Proceedings

- Brown, T. J., Fearon, M. G., McCurdy, G. D., 2016: Assessing the Quality of Wind Observations Using a Regional Scale Model. American Meteorological Society Annual Meeting, American Meteorological Society Annual Meeting: New Orleans, LA, January 12, 2016
- Miller, J. J., Mizell, S. A., McCurdy, G. D., Nikolich, G., Etyemezian, V. R., Chapman, J. B., 2015: Fate and Transport of Contaminants at Soils Sites - 15512, Waste Management '15: Phoenix, AZ, 15512.
- Brown, T. J., Redmond, K. T., Breckner, M. A., Daudert, B., McCurdy, G. D., Oakley, N. S., Simeral, D. B., 2014: The Role of a Regional Climate Center in Complex Terrain, American Meteorological Society 16th Conference on Mountain Meteorology: San Diego, CA, August 18, 2014.
- Brown, T. J., Redmond, K. T., Wall, T. U., Simeral, D. B., Oakley, N. S., McCurdy, G. D., Breckner, M. A., Wolff, A. J., Daudert, B., 2014: Providing Western Region Climate Services: Perspectives from the Western Regional Climate Center, 2014 American Geophysical Union Annual Meeting: San Francisco, CA, December 15, 2014.
- Jena, U., McCurdy, G. D., Warren, A., Hoekman, S.K., Quinn, J., Seefeldt, L., 2014: Hydrothermal Liquefaction of Oleaginous Microbial Biomass in Binary Solvents, Poster presentation at the 4th International Conference on Algal Biomass, Biofuels and Bioproducts: Santa Fe, NM, June 15, 2014.
- Shafer, D. S., Hartwell, W. T., McCurdy, G. D., Breckner, M. A., 2011: A Demonstration Program for Providing Early Warning Information to Remote Communities in the Great Basin, U.S.A., 4th International Perspective on Water Resources and the Environment: Singapore.
- Shafer, D. S., J., T. J., McCurdy, G. D., Karr, L. H., Hinckley, A., Campbell, S. A., 2010: Remote radon monitoring: a systems integration approach, Waste Management Symposia 2010: Phoenix, Arizona.