



## Acronym List

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S |  
T | U | V | W | X | Y | Z

### M

Acronym	Full name	Comments
<b>M</b>	mega	prefix for 10 to the 6th power
<b>M</b>	Mach	
<b>m</b>	milli	prefix for 10 to the negative 3rd power
<b>M&amp;O</b>	maintenance and operations	
<b>M&amp;S</b>	Materials and Services	
<b>M&amp;V</b>	Magnetism & Volcanoes	
<b>M-ANL</b>	Argonne National Laboratory	
<b>M-PDU</b>	multiplexed protocol data unit	
<b>M3</b>	M cubed	Mesoscale and Microscale Meteorology division, NCAR
<b>MAB</b>	Man and the Biosphere program	United Nations
<b>MAB</b>	Meteorological Applications Branch	NOAA, FSL Forecast Research Division
<b>MAC</b>	Machine Aided Cognition	
<b>MAC</b>	Multiple Access Computer	
<b>MAC</b>	Manager's Advisory Council	NCAR, ATD
<b>MAC</b>	Apple Macintosh Computer	
<b>MAC</b>	medium access control	
<b>MACCM2</b>		

	Middle Atmosphere Community Climate Model, Version 2	
<b>MACCM3</b>	Middle Atmosphere Community Climate Model, Version of CCM3	
<b>machine code</b>		The machine language used for entering text and program instructions onto the recording medium or into storage and which is subsequently used for processing and printout (i.e., computer instruction code)
<b>MACRAT</b>	Middle-Atmosphere Chemistry, Radiation, and Transport program	NCAR, ACD
<b>MADAM</b>	Master Data Acquisition Module	
<b>MADER</b>	Management of Atmospheric Data for Evaluation and Research	
<b>MADIS</b>	Meteorological Assimilation Data Ingest System	
<b>MAF</b>	Mesoscale Analysis Forecasting	
<b>MAG</b>	Magnetosphere Currents/Fields	
<b>MAGE</b>	Marine Aerosol and Gas Exchange Experiment	or Project
<b>MAGE</b>	Marine Gas Emissions	
<b>MAGSAT</b>	Magnetic Field Satellite	
<b>mail reflectors</b>		Mail boxes, that automatically forward their contents to a specified list of recipients. Recipients may be on any of several networks, including commercial

		networks
<b>MALTS</b>	Marine Layer Thickness Study	
<b>MAMOS</b>	Marine Automatic Meteorological Observing Station	USWB
<b>MAMS</b>	Multispectral Atmospheric Mapping Sensor	
<b>MAN</b>	metropolitan area network	
<b>MAP</b>	Mesoscale Alpine Project	
<b>MAP</b>	Metro-Agro-Plex	
<b>MAP</b>	Middle Atmosphere Program	
<b>MAPCON</b>		A routine developed by Unidata for contouring NPS gridded data on a background map from netCDF files
<b>MAPR</b>	Multi-angle Profiling Radar	
<b>MAPS</b>	Measurement of Air Pollution from Satellites	NASA
<b>MAPS</b>	Multiple Aircraft Positioning System	
<b>MAPS</b>	Mesoscale Analysis and Prediction System	
<b>MAPS</b>	millions of actions per second	
<b>MAPS/RUC</b>	MAPS is the research version of the Rapid Update Cycle	NOAA/FSL
<b>MAR</b>	Modernization and Associated Restructing	see MARD
<b>MAR</b>	Marshall Field Site	NCAR, ATD
<b>MARC</b>	Middle Atmosphere Responses to Changes	
<b>MARC</b>	Machine Readable Cataloging	
<b>MARD</b>	Modernization Associated Restructuring Demonstration	An NWS program to test AWIPS components
<b>MARI</b>	Middle Atmosphere Research Initiative	successor to MASI

<b>Mark-IVB</b>		a satellite data system developed by the U.S. Air Force
<b>MARS</b>	Meteorological Airborne Radar Data System	NOAA
<b>marvel</b>		To show or experience great surprise or admiration
<b>MAS</b>	Millimeter-wave Atmospheric Sounder	
<b>MASDIS</b>	Meteorological Assimilation Data Ingest System	
<b>MASER</b>	Microwave Amplification by Stimulated Emission of Radiation	
<b>MASI</b>	Middle Atmosphere Science Initiative	NSF
<b>MASnet</b>	mainframe and server network	formerly the NCAR local network
<b>MASP</b>	Multi-angle Aerosol Spectrometer Probe	
<b>MASSCOMP</b>	Massachusetts Computer Corporation	
<b>MATCH</b>	Model for Atmospheric Chemistry and Transport	
<b>MATCH</b>	McGill University; technical improvements to the large-scale spectral element ocean model (SEOM)	
<b>MATEX</b>	Massive Air Tracer Experiment	New England acid rain
<b>MATR</b>	MOPITT Algorithm Test Radiometer	
<b>MAYPOLE</b>	May Polarization Experiment	
<b>mb</b>	millibar	
<b>Mb</b>	Megabits	
<b>MB</b>	megabytes	Roughly one million bytes; exactly 1,048,576 bytes. See also mb
<b>mb</b>	Millibar	See also MB

<b>MBA</b>	MB Associates	San Ramon, California
<b>M-BNW</b>	Batelle Northwest	
<b>MBO</b>	Management by Objective	
<b>MBONE</b>	Multicast backBONE	
<b>Mbps</b>	megabits	Millions of bits per second
<b>MBT</b>	Miscellaneous Budget Transactions	
<b>MBY</b>	megabyte	
<b>Mbyte</b>	megabyte	(10 <sup>6</sup> ) per second
<b>MCA</b>	moist convective adjustment	
<b>MCA</b>	moist convective adjustment	
<b>MCA</b>	Micro Channel Architecture	
<b>MCA</b>	Manufacturing Chemists Association	
<b>McBE</b>	McIDAS Broadcast Evaluation	A committee drawn from the sites that first tested the Unidata McIDAS software
<b>MCC</b>	mesoscale convective complex	
<b>MCC</b>	Mission Control Center	
<b>MCCs</b>	mesoscale convective complexes	
<b>McIDAS</b>	Man-computer Interactive Data Access System	A suite of applications, developed at University of WI, Madison's SSEC, for analyzing and displaying meteorological data for research and education. The software can be used with conventional observation, satellite, and grid-point data. Unidata

		distributes two versions of this software: McIDAS-X for UNIX platforms and McIDAS-OS2 for computers running OS/2
<b>MCR</b>	Multichannel Cloud Radiometer	
<b>MCS</b>	mesoscale convective system	
<b>MCTEX</b>	Maritime Continent Thunderstorm Experiment	
<b>MCV</b>	mesoscale cyclonic vortex	
<b>MD</b>	Master Directory	
<b>MD</b>	Modernization Division	NOAA, FSL
<b>MD file</b>		Generalized meteorological data file in a McIDAS database
<b>MDC</b>	Modified Direct Costs	
<b>MDCRS</b>	Meteorological Data Collection and Reporting System	
<b>MDI</b>	Michelson Doppler Imager	
<b>MDM</b>	multiplexer/demultiplexer	
<b>MDR</b>	Manually Digitized Radar	A type of radar image
<b>MDS</b>	Minimum detectable signal	
<b>MDDS</b>	Maintenance Decision Support System	
<b>MECCA</b>	Model Evaluation Consortium for Climate Assessment	EPRI, ENEA, EDF/DER, KEMA, SCE, CRIEPI, NSCEE, and EPA were financial sponsors of MECCA which contracted with UCAR/NCAR to host a dedicated supercomputer in the early 90's.

<b>MECCA</b>	Mesoscale Experiment Center for Control and Analysis	
<b>MEF</b>	Master E-mail Facility	
<b>MEFENET</b>	Department of Energy Network	
<b>MEGAN</b>	Model of the Exchange of Gases between the Atmosphere and Nature	
<b>MELTER</b>	Mesosphere/ Lower Thermosphere Explorer	NASA
<b>MEP</b>	Minority Engineering Program	
<b>MERIS</b>	Medium Resolution Imaging Spectrometer	ESA
<b>MERIT</b>	MERIT, Inc.	A nonprofit consortium of eight Michigan universities that provides funding and sets policy for the Merit Computer Network. Merit, with the University of Michigan, managed NSFNET from inception until 1994
<b>MERT</b>	Medical Emergency Response Team	UCAR
<b>Meso-alpha</b>		200-2000 km range Fronts, Hydrostatic low-pressure (Eta, AVN) systems
<b>Meso-beta</b>		20-200 km range land-water, sea Non-hydrostatic, breezes hydrostatic (MM5, RAMS)
<b>Meso-gamma</b>		2-20 km range Thunderstorm Non-hydrostatic convection, (ARPS) complex terrain flows

<b>MesoNet</b>	Mesoscale Network	
<b>mesoscale</b>	C scale	10 to 100 km, mesoconvective elements, GARP usage
<b>Mesoscale models</b>		Mesoscale models are used to simulate sub-grid scale phenomena not resolved by regional-scale models. The mesoscale ranges as defined by Orlandi (1975).
<b>Metadata</b>		Data about (behind) the data (the attributes associated with the data)
<b>METAPPS</b>	Meteorological Applications Task Force	
<b>METAR</b>	meteorological aviation reports	
<b>MeteoAssert</b>	a multimedia presentation of weather phenomena	
<b>METEOR</b>	Multiple Experiment Transporter into Earth Orbit and Return	USSR
<b>METEOSAT</b>	Meteorological Satellite	A European satellite, ESA
<b>METOBS</b>		An MSDOS-based program for extracting marine observations from raw observation files
<b>METROMEX</b>	Metropolitan Meteorological Experiment	1970
<b>MF</b>	medium frequency	300-3,000 KHz
<b>MFD</b>	Master File Directory	
<b>MFE</b>	Magnetic Field Explorer	
<b>MFE</b>	Magnetic Field Experiment	
<b>MFE/magnolia</b>	Magnetic Field Explorer/Magnolia	USA/France



	mission	
<b>MFECC</b>	Magnetic Fusion Energy Computation Center	
<b>MFEM</b>	Magnetic Field Explorer Mission	USA
<b>MFENET</b>	National Magnetic Fusion Energy Network	
<b>M-ISWS</b>	Illinois State Water Survey	
<b>MFLOPS</b>	Megaflops	millions of floating-point operations (10 <sup>6</sup> ) per second
<b>MFM</b>	standard hard drives	
<b>mfp</b>	mean free path	
<b>MGA</b>	Meteorological and Geostrophysical Abstracts	
<b>MHD</b>	magnetohydrodynamic	
<b>MHR</b>	Mile High Radar	
<b>MHS</b>	message handling system	
<b>MHz</b>	Megahertz	unit of frequency: one million cycles per second
<b>MIB</b>	management information base	
<b>MICR</b>	magnetic ink character reader	regarding computer pattern recognition
<b>Micro-scale</b>		2 km Turbulent eddies LES model
<b>Microsoft</b>	Microsoft Corporation	
<b>Microsoft Windows</b>		A window system and user interface software released by Microsoft in 1987 to run on top of MSDOS
<b>MicroVax</b>		A minicomputer manufactured by DEC

<b>MIDI</b>	Musical Instrument Digital Interface	
<b>MIDnet</b>		A regional computer network of midwestern universities; linked to NSFNET; established in 1985
<b>MIESR</b>	Matrix Isolation/Electron Spin Resonance	
<b>MIGS</b>	MASnet Internet gateway server (or system)	
<b>MIP</b>	millions of Instructions per second	
<b>MILNET</b>	Military Network	
<b>MILOX</b>	Mid-Latitude Ecosystem and Photochemical Oxidants	Chameides
<b>MIMD</b>	multiple instruction multiple data	
<b>MIMR</b>	Multiband Imaging Microwave Radiometer	
<b>MIMSA</b>	Minority Institutions in Marine Sciences Association	
<b>MIP</b>	Millions of Instructions per second	
<b>MIPS</b>	Millions of Instructions per second	
<b>MIRA</b>	Management Information Research Associates	NCAR consultant
<b>MIRAGE</b>	Megacity Impacts on Regional and Global Environments	
<b>MIRAGE-Mexico</b>	Megacity Impact on Regional and Global Environments-Mexico campaign	
<b>MISR</b>	Multangle Imaging Spectroradiometer	EOS AM
<b>MIST</b>	Microburst and Severe Thunderstorm Experiment	or Project
<b>MIT</b>	Massachusetts Institute of Technology	
<b>MITI</b>	Ministry of International Trade and Industry	Japan
<b>MIZEX</b>	Marginal Ice Zone Experiment	
<b>MJO</b>	Madden-Julian Oscillation	

<b>MKS</b>	meter-kilogram-second system of measurement	
<b>MKS</b>	unit of force replaced by Newtons	
<b>MKSA</b>	Absolute MKS	used for electromagnetic units in acoustics
<b>ML</b>	Mesa Laboratory	UCAR, NCAR
<b>MLI</b>	Multiple Layer Insulation	
<b>MLM</b>	Time-varying horizontal model of the Lavoice type	See VSM, TDM, and DCM
<b>MLNAC</b>	Mesa Lab Network Access Completion	NCAR
<b>MLO</b>	Mauna Loa Observatory	NOAA
<b>MLOPEX</b>	Mauna Loa Photochemistry Experiment	I, summer of 1988; II, summer of 1991
<b>MLS</b>	Microwave Limb Sounder	NASA/UARS
<b>MLSO</b>	Mauna Loa Solar Observatory	
<b>MLT</b>	magnetic local time	
<b>mM</b>	milli mole	
<b>MMD</b>	mass median diameter	
<b>MM4</b>	mesoscale model, version 4	Pennsylvania State University/NCAR mesoscale (regional) limited-area model
<b>MM5</b>	Fifth-generation Mesoscale Model	
<b>MM90</b>		the parallelized version of MM5
<b>MMAC</b>	Multi-Media Access Center	Cabletron repeater
<b>MMD</b>	mass median diameter	
<b>MMI</b>	Monthly Management Information Report	
<b>MMI</b>	man-made interface	
<b>MMM</b>	Mesoscale and Microscale Meteorology	M cubed (M <sup>3</sup> ) is

		a division of NCAR
<b>MMOL</b>	Manned Orbital Laboratory	
<b>MMS</b>	Minerals Management Service	DOI
<b>MMS</b>	Microscale Meteorology Section	NCAR, MMM
<b>MMSS</b>	multimission support service	
<b>MNP</b>	Microcom Network Protocol	Class V compresses data for 2x thruput
<b>MNRAS</b>	Monthly Notes of the Royal Astronomical Society	
<b>MO&amp;DSD</b>	Mission Operations and Data Systems Directorate	
<b>MOA</b>	Memorandum of Agreement	
<b>MOA</b>	Memorandum of Agreement	
<b>MOBILHY</b>	Modelisation du Bilan Hydrique	
<b>MOCCA</b>	Mobile Operations Center for Communication and Analysis	
<b>MOCD</b>	magneto-optics compact disk	
<b>MOD (+/or DSI)</b>	Ministry of Defense	DSI-Defense Security Installation, London
<b>MODAC</b>	Meteorological Observation and Data Assimilation Center	
<b>MODCOMP</b>		A machine manufactured by Modular Computer Systems Inc.
<b>MODD</b>	Meteorological and Omega Data Digitizer	GARP
<b>MODE</b>	Mid-Oceanic Dynamics Experiment	Spring 1973, Sargasso Sea
<b>MODE</b>	MODE in cospar papers	
<b>modem</b>	modulater-demodulater	Computer terminal for alphanumeric information

<b>MODIS</b>	Moderate Resolution Imaging Spectroradiometer	
<b>MODIS-T</b>	Moderate Resolution Imaging Spectroradiometer-Tilt	
<b>MODS</b>	Mission Operations and Data Systems	
<b>MOE</b>	Measure of Effectiveness	
<b>mol</b>	mole	
<b>MOL</b>	Manned Orbital Laboratory	
<b>MOLAS</b>	Mono Lake APIPS Study	
<b>MOM</b>	MASnet Operations Monitor	
<b>MOM</b>	mission operations manager	
<b>MONEX</b>	Monsoon Experiment	GARP
<b>MONTBLEX</b>	Monsoon Trough Boundary Layer Experiment	India
<b>MOPITT</b>	Measurements of Pollution in the Troposphere	NCAR, ACD
<b>MOPS</b>	millions of operations (10 <sup>6</sup> ) per second	
<b>MOS</b>	Model Output Statistics	
<b>MOS</b>	Marine Observation Satellite	Japan
<b>MOS</b>	metal-oxide semiconductor	
<b>Mosaic</b>		A software tool designed by NCSA to browse various information servers on the Internet. Mosaic allows a user to view WWW and Gopher documents and to retrieve files from FTP servers, among other capabilities
<b>MOSES</b>	Manned Open Sea Experiment Station	NOAA
<b>MOSES</b>	Meteorological Observing Station, extremely simple	GAMP, name for their automatic observing system

<b>Motif</b>		A software toolkit for the X Window System distributed by the Open Software Foundation
<b>MOU</b>	Memorandum of Understanding	
<b>moulded-draught</b>	draught mean the vertical distance from the moulded base line amidships to a subdivision load water line	
<b>Mountain Waves</b>	See Lee Waves	
<b>MOVIE.BYU</b>	Colored Movie Software produced by Brigham Young University	
<b>MOZART</b>	Model for Ozone and Related Chemical Tracers	NCAR
<b>mp</b>	melting point	
<b>MP</b>	Mono-processing	Job class on the Cray computers
<b>MP</b>	MASnet code for the Xerox 4050 laser printers	
<b>MPA</b>	Maintenance Purchase Award	
<b>MPC</b>	mother-of-pearl clouds	
<b>MPD</b>	Magnetospheric Particles Detectors	
<b>MPDATA</b>	Multidimensional Positive Definite Advection Algorithm	
<b>MPI</b>	Max Planck Institute	
<b>MPI</b>	message passing interface	
<b>MPIF</b>	Message Passing Interface Forum	
<b>MPOA</b>	Multi-Protocol Over ATM	
<b>MPP</b>	massively parallel processor	
<b>MPR</b>	advanced microwave precipitation radiometer	
<b>MPS</b>	radar system	never written out
<b>MPS</b>	Mesoscale Prediction Section	NCAR, MMM
<b>MR</b>	Management Reserve	
<b>MRB</b>	Materials Review Board	

<b>MRF</b>	Medium-Range Forecast	A forecasting model run by the NMC
<b>MRF</b>	Meteorological Rocket Facility	Wallops Island
<b>MRI</b>	Meteorological Research, Inc.	Altadena, California
<b>MRI</b>	Meteorological Research Institute	of the JMA, Japanese Meteorological Association
<b>MRI</b>	Minority Research Initiation	
<b>MRI</b>	Mesoscale Research Initiative	
<b>MRIR</b>	Medium Resolution Infrared Radiometer	Nimbus
<b>MRIS</b>	Media Relations & Information Services	NCAR
<b>MRN</b>	Meteorological Rocket Network	IRIG, USAF
<b>MRS</b>	Mesoscale Research Section	AAP, now a part of MMM, NCAR
<b>MS</b>	MASnet code for the Mass Storage System	
<b>MS</b>	the company Microsoft	
<b>MSC</b>	Manned Spaceflight Center	Now Lyndon B Johnson Space Center in Houston
<b>MSCP</b>	mass store control processor	NCAR
<b>MSD</b>	mass storage device	
<b>MSDOS</b>	Microsoft Disk Operating System	The operating system developed by Microsoft Corporation for running personal computers
<b>MSE</b>	mean square error	
<b>MSF</b>	Magnetic Flux Structures	
<b>MSFC</b>	Marshall Space Flight Center	NASA
<b>MSFE</b>	Mechanisms of Soil Formation and Evolution	

<b>MSI</b>	Measurements, Standards, and Intercomparisons	NCAR/ACD Group
<b>MSI</b>	Maximum Strategy, Inc	
<b>MSIS</b>	mass spectrometer and incoherent scatter	
<b>MSISR</b>	Millstone Hill incoherent scatter radar	
<b>MSL</b>	mean sea level	
<b>MSLP</b>	Mean sea-level pressure	
<b>MSOCC</b>	Multisatellite Operations Control Center	
<b>MSP</b>	Minneapolis, Minnesota	
<b>M-SRI</b>	Stanford Resource Institute	
<b>MSS</b>	Multi-spectral Scanner	LANDSAT
<b>MSS</b>	mass storage system	NCAR
<b>MST</b>	mesospheric/stratospheric/tropospheric	
<b>MSU</b>	microwave sounding unit	
<b>MSU</b>	mass storage unit	
<b>MT</b>	Magnetic Tape	
<b>MTA</b>	message transfer agent	
<b>MTBF</b>	mean time between failure	
<b>MTC</b>	Main Trunk Circuit	GARP
<b>MTEM</b>	Magnetosphere-Thermosphere Explorer Mission	USA
<b>MTF</b>	Mississippi Test Facility	NASA
<b>MTI</b>	moving target indicator	
<b>MTL</b>	message transfer layer	
<b>MTM</b>	Mechanical Test Model	
<b>MTTF</b>	Mean Time to Failure	
<b>MTTR</b>	mean time to repair	
<b>M-UCSD</b>	University of California at San Diego	
<b>MUG</b>	McIDAS Users Group	
<b>multicast</b>		A packet with a special destination address that multiple nodes



		on the network may be willing to receive.
<b>multimedia</b>		Means of conveying information via a combination of mechanisms, including but not limited to text, images, video, and sound.
<b>multitasking</b>		The capability of running two or more programs simultaneously; describes operating systems.
<b>MUSE</b>	monitor of ultraviolet solar energy	
<b>M&amp;V</b>	Magmatism & Volcanoes	
<b>MVS</b>	Multiple Virtual Storage	A mainframe operating system that is not supported by Unidata, but whose initials may be confused with the VMS
<b>MVS/XA</b>	Multiple Virtual Systems/Extended Architecture	Operating system on the Mass Storage Control Processor, NCAR
<b>MW</b>	Microwave	
<b>Mw</b>	Megawords	
<b>MWG</b>	Meteorological Working Group	IRIG, USAF
<b>MWISP</b>	Mt. Washington Winter Icing and Storms Project	UCAR, NCAR, RAP
<b>MWO</b>	Mt. Washington Observatory	
<b>Mwords</b>	megawords	million words
<b>MWP</b>	MicroWave Profiler	

<b>Mx</b>	maxwell	
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