

MesoWest Data Variables

This table describes the data variables seen in MesoWest and MesoWest products. Column names mean the following...

MesoWest ID: The variable ID utilized by MesoWest.

Acronym: The variable shortname/acronym utilized by MesoWest, seen on the download page and other products.

Full Name: The variable full name and description utilized by MesoWest.

Units: The primary units of the variable, unless specified in MesoWest products.

QC Min: The MesoWest quality control minimum value, values below this threshold are labeled as **Suspect**.

QC Max: The MesoWest quality control maximum value, values above this threshold are labeled as **Suspect**.

MesoWest Data Table: The MesoWest data table that the variable resides in.

***Note:** Some stations may contain more than one observation of the same variable. In this case, a sensor number will be appended to the end of the variable acronym (e.g. RSS1, TFZ3, etc.).

Click on a column header to sort the table by that column.

MesoWest ID	Acronym	Full Name	Units	QC Min	QC Max	MesoWest Data Table
1	ALTI	Altimeter	inches Hg	25.10	31.90	PRESS
2	PRES	Pressure	Mb	600.00	1080.00	PRESS
3	TMPF	Temperature	Fahrenheit	-75.00	135.00	BASIC
4	DWPF	Dew Point	Fahrenheit	-75.00	95.00	N/A
5	RELH	Relative Humidity	%	0.00	100.00	BASIC
6	SKNT	Wind Speed	Knots	0.00	200.00	BASIC
7	DRCT	Wind Direction	Degrees	0.00	360.00	BASIC
8	GUST	Wind Gust	Knots	0.00	200.00	BASIC
13	SNOW	Snow depth	Inches	0.00	500.00	PRECIP
14	SOLR	Solar Radiation	W/m**2	0.00	1500.00	SOLAR
15	TSOI	Soil Temperature	Fahrenheit	-58.00	185.00	SOIL
20	PREC	Precipitation accumulated	Inches	0.00	300.00	PRECIP
21	PMSL	Sea_level pressure	Mb	850.00	1080.00	PRESS
22	HSUN	Hours of sun	Hours	0.00	24.00	SOLAR
25	TLKE	Water Temperature	Fahrenheit	0.00	135.00	LAKE
26	WNUM	Weather conditions	code	0.00	512000.00	WX
29	CHC3	Cloud_layer_3 height/coverage	code	0.00	8009.00	CLOUD
30	CSYL	Low_cloud symbol	code	0.00	9.00	CLOUD
31	CSYM	Mid_cloud symbol	code	10.00	19.00	CLOUD
32	CSYH	High_cloud symbol	code	20.00	29.00	CLOUD
33	P03D	Pressure Tendency	code	0.00	8999.00	PRESS
35	QFLG	Quality check flag	code	-1.00	9.00	BASIC
37	PSTM	Precipitation storm	Inches	0.00	150.00	PRECIP
38	SSTM	Snowfall	Inches	0.00	150.00	PRECIP
39	P01I	Precipitation 1hr	Inches	0.00	10.00	PRECIP
40	P03I	Precipitation 3hr	Inches	0.00	30.00	PRECIP
41	P05I	Precipitation 5min	Inches	0.00	1.00	PRECIP
42	P10I	Precipitation 10min	Inches	0.00	2.00	PRECIP
43	P15I	Precipitation 15min	Inches	0.00	3.00	PRECIP
44	RNUM	Road sensor number	N/A	1.00	10.00	ROAD
45	TRD	Road Temperature	Fahrenheit	-40.00	150.00	ROAD
46	TFZ	Road_Freezing Temperature	Fahrenheit	0.00	40.00	ROAD
47	RSS	Road_Surface Conditions	code	1.00	100.00	ROAD
48	ALR	unknown	N/A	0.00	100.00	ROAD
49	CHC1	Cloud_layer_1 height/coverage	code	0.00	18009.00	CLOUD
50	CHC2	Cloud_layer_2 height/coverage	code	0.00	8009.00	CLOUD

51	P06I	Precipitation 6hr	Inches	0.00	30.00	PRECIP
52	P24I	Precipitation 24hr	Inches	0.00	45.00	PRECIP
53	VSBY	Visibility	Statute miles	0.00	200.00	WX
56	RMK	Remarks	text			RAWOB
57	RAW	Raw observation	text			RAWOB
58	HI6	6 Hr High Temperature	Fahrenheit	-75.00	135.00	MISC
59	LO6	6 Hr Low Temperature	Fahrenheit	-75.00	135.00	MISC
60	PEAK	Peak_Wind Speed	Knots	0.00	200.00	MISC
61	FT	Fuel Temperature	Fahrenheit	-40.00	140.00	FUEL
62	FM	Fuel Moisture	% (gm/100gm)	0.00	100.00	FUEL
63	CIG	Ceiling	feet	0.00	40000.00	CLOUD
66	PCHA	Pressure change	code			PRESS
67	PACM	Precipitation smoothed	Inches	0.00	300.00	PRECIP
68	TIR	IR_Soil Temperature	Fahrenheit	-75.00	135.00	SOIL
69	TIC	Temperature in_case	Fahrenheit	-75.00	135.00	SOIL
70	MSOI	Soil Moisture	%	0.00	100.00	SOIL
71	VOLT	Battery voltage	volts	0.00	50.00	BATTERY
72	ITIM	Data Insert Date/Time	minutes	0.00	16000000.00	TIME
73	UTIM	Data Update Date/Time	minutes	0.00	16000000.00	TIME
74	SACM	Snow smoothed	Inches	0.00	500.00	PRECIP
75	PREM	Precipitation manual	Inches	0.00	150.00	PRECIP
76	P01M	Precipitation 1hr manual	Inches	0.00	10.00	PRECIP
77	P03M	Precipitation 3hr manual	Inches	0.00	30.00	PRECIP
78	P05M	Precipitation 5min manual	Inches	0.00	1.00	PRECIP
79	P10M	Precipitation 10min manual	Inches	0.00	2.00	PRECIP
80	P15M	Precipitation 15min manual	Inches	0.00	3.00	PRECIP
81	P06M	Precipitation 6hr manual	Inches	0.00	30.00	PRECIP
82	P24M	Precipitation 24hr manual	Inches	0.00	45.00	PRECIP
83	SNOM	Snow manual	Inches	0.00	500.00	PRECIP
84	SINT	Snow interval	Inches	0.00	150.00	PRECIP
85	TSRD	Road Subsurface Temperature	Fahrenheit	-40.00	150.00	SOIL
86	TLRW	Water Temperature	Fahrenheit	0.00	135.00	LAKE
87	EVAP	Evapotranspiration	inches	0.00	5.00	SOIL
88	WEQS	Snow water equivalent	inches	0.00	100.00	PRECIP
89	P30I	Precipitation 30 min	Inches	0.00	5.00	PRECIP
91	ALLV	All variables	N/A			N/A
92	PWVP	Precipitable water vapor	Inches	0.00	5.00	PRECIP
93	HI24	24 Hr High Temperature	Fahrenheit	-75.00	135.00	MISC
94	LO24	24 Hr Low Temperature	Fahrenheit	-75.00	135.00	MISC
95	PDIR	Peak_Wind Direction	Degrees	0.00	360.00	MISC
96	RNWG	Precipitation (weighing_gauge)	Inches	0.00	150.00	PRECIP
97	NETR	Net Radiation	W/m**2	-500.00	1000.00	SOLAR
98	P15H	1500 m Pressure	Mb	700.00	1000.00	N/A
99	TWBF	Wet bulb temperature	Fahrenheit	-75.00	135.00	N/A
100	STEN	Soil Moisture tension	centibars	0.00	300.00	SOIL
101	T2M	Air_Temperature at_2_meters	Fahrenheit	-75.00	135.00	SOIL
102	T10M	Air_Temperature at_10_meters	Fahrenheit	-75.00	135.00	SOIL
103	P1MI	Precipitation 1min	Inches	0.00	0.50	PRECIP
104	T18I	18_Inch Soil_Temperature	Fahrenheit	-58.00	185.00	SOIL
106	T20I	20_Inch Soil_Temperature	Fahrenheit	-58.00	185.00	SOIL
107	T182	18_Inch Soil_Temperature2	Fahrenheit	-58.00	185.00	SOIL
108	MPRS	Pressure	Mb	600.00	1080.00	MBASIC
109	MTMP	Temperature	Fahrenheit	-75.00	135.00	MBASIC

110	MRH	Relative Humidity	%	0.00	100.00	MBASIC
111	MSKT	Wind Speed	Knots	0.00	200.00	MBASIC
112	MDIR	Wind Direction	Degrees	0.00	360.00	MBASIC
113	MGST	Wind Gust	Knots	0.00	250.00	MBASIC
114	MLAT	Latitude	Degrees	-90.00	90.00	MBASIC
115	MLON	Longitude	Degrees	-180.00	180.00	MBASIC
116	MELV	Elevation	Feet	-300.00	30000.00	MBASIC
117	PLDR	Platform True_Direction	Degrees	0.00	360.00	WAVE
118	PSWD	Primary_Swell Wave_Direction	Degrees	0.00	360.00	WAVE
119	PSWP	Primary_Swell Wave_Period	Seconds	0.00	99.00	WAVE
120	PSWH	Primary_Swell Wave_Height	Feet	0.00	33.63	WAVE
121	SSWD	Secondary_Swell Wave_Direction	Degrees	0.00	360.00	WAVE
122	SSWP	Secondary_Swell Wave_Period	Seconds	0.00	99.00	WAVE
123	SSWH	Secondary_Swell Wave_Height	Feet	0.00	33.63	WAVE
124	TIDN	Tide Indicator	code	0.00	10.00	WAVE
125	TIDP	Tide Departure	Feet	0.00	100.00	WAVE
126	PLSP	Platform True_Speed	Knots	0.00	125.00	WAVE
127	WPER	Wave Period	Seconds	0.00	99.00	WAVE
128	WHGT	Wave Height	Feet	0.00	33.63	WAVE
129	TGND	Surface Temperature	Fahrenheit	-58.00	185.00	SOIL
130	NETS	Net Shortwave Radiation	W/m**2	-500.00	1000.00	SOIL
131	NETL	Net Longwave Radiation	W/m**2	-500.00	1000.00	SOIL
132	TSNC	Sonic Temperature	Fahrenheit	-75.00	135.00	SOIL
133	WSNC	Vertical_Velocity	m/s	-2.00	2.00	SOIL
134	USTD	Zonal_Wind Standard_Deviation	m/s	0.00	5.00	SOIL
135	VSTD	Meridional_Wind Standard_Deviation	m/s	0.00	5.00	SOIL
136	WSTD	Vertical_Wind Standard_Deviation	m/s	0.00	5.00	SOIL
137	TSTD	Temperature Standard_Deviation	Centigrade	0.00	5.00	SOIL
138	HFLX	Vertical Heat_Flux	m/s C	-2.00	2.00	SOIL
139	USTR	Friction Velocity	m/s	0.00	5.00	SOIL
140	WRAT	SIGW/USTR	nondimensional	0.00	5.00	SOIL
141	OTOT	Sonic_Obs Total	nondimensional	0.00	5000.00	SOIL
142	WARN	Sonic Warnings	nondimensional	0.00	5000.00	SOIL
143	MSTD	Moisture Standard_Deviation	g/m**3	0.00	5.00	SOIL
144	MFLX	Vertical Moisture_Flux	m/s g/m**3	-1.00	1.00	SOIL
145	MDWP	Dew Point	Fahrenheit	-75.00	135.00	MBASIC
146	MTVR	Virtual Temperature	Fahrenheit	-75.00	135.00	MBASIC
147	MGPH	Geopotential Height	Feet	-300.00	30000.00	MBASIC
148	SPDS	Sonic_Wind Speed	Knots	0.00	200.00	SOIL
149	DIRS	Sonic_Wind Direction	Degrees	0.00	360.00	SOIL
150	OUTS	Outgoing Shortwave Radiation	W/m**2	0.00	1000.00	SOIL
151	CSLR	Clear Sky Solar Radiation	W/m**2	0.00	1500.00	SOIL
152	ESNR	Estimated Snowfall_Rate	in/hr	0.00	10.00	PRECIP
153	IFRC	Grip_1 Ice_Friction_Code	N/A	0.00	1.00	SOIL
154	GRIP	Grip_2 Level_of_Grip	N/A	0.00	1.00	SOIL
155	TSO2	Soil Temperature_2	Fahrenheit	-58.00	185.00	SOIL
156	MSO2	Soil Moisture_2	%	0.00	100.00	SOIL
157	TSO3	Soil Temperature_3	Fahrenheit	-58.00	185.00	SOIL
158	TSO4	Soil Temperature_4	Fahrenheit	-58.00	185.00	SOIL
159	SPAR	Photosynthetically Active Radiation	umol/m**2 s	0.00	2500.00	SOIL
160	PM25	PM_2.5 Concentration	ug/m3	0.00	200.00	AQ
161	FLOW	Air_Flow Rate	liters/min	0.00	100.00	AQ
162	INRH	Internal Relative_Humidity	%	0.00	100.00	AQ

163	ITMP	Air_Flow Temperature	Fahrenheit	-75.00	135.00	AQ
164	OZNE	Ozone Concentration	ppb	0.00	500.00	AQ
165	P00Z	Precipitation_since 00_UTC	Inches	0.00	45.00	PRECIP
166	BLKC	Black Carbon Concentration	ug/m3	0.00	200.00	AQ
167	PMID	Precipitation_since local_midnight	Inches	0.00	45.00	PRECIP
168	PMCN	Particulate Concentration	ug/m3	0.00	10000.00	AQ
169	FILT	Filter Percentage	%	0.00	100.00	AQ
170	ERRR	Sensor Error Code	code	0.00	1000.00	SOIL
171	ECON	Electric Conductivity	dS/m	0.00	10.00	SOIL
172	PERM	Permittivity	N/A	0.00	100.00	SOIL
173	SLVL	Surface Level	Inches	-100.00	100.00	SOIL
174	INLW	Incoming Longwave Radiation	W/m**2	0.00	1500.00	SOIL
175	OUTL	Outgoing Longwave Radiation	W/m**2	0.00	1500.00	SOIL
176	DABL	Derived Aerosol Boundary Layer Depth	feet	0.00	40000.00	SOIL

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