

NOAA/NSSL NAME Supersite (Tesopaco) Data

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Site: Tesopaco, Mexico.

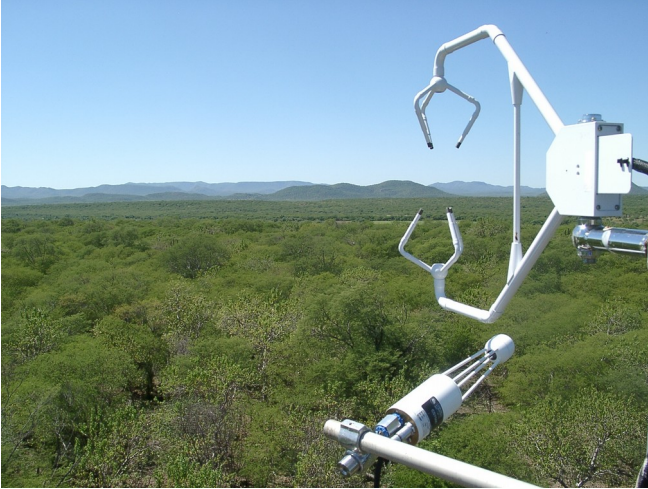
Location: 27 50 40.7 N, 109 17 53 W.

Altitude: 466 msnm.

Tower height: 14.5 m, to platform



Instrumentation:



Vegetation type: Tropical deciduous forest.

Dominant species of trees around tower are: Palo blanco (*Ipomoea arborescens*), Mauto (*Lysiloma divaricata*), Etcho (*Pachycereus pectin-aboriginum*), Huinolo (*Acacia cochliacantha*) and palo Brasil (*Haematoxylum brasiletto*). Into the near stream the dominant species of trees are: Guasima (*Guazuma ulmifolia*), Tepejuage (*Lysiloma watsonii*).

Dry season



Wet season





Sensor

Vaisala HMP45C
 R.M Young Wind monitor
 IRT Everest 4000, FVO 30°
 Thermocouple
 Temperature probe 108-L
 HFT3-L REBS Soil Heat Flux Plate
 Water Content Reflectometer CS615
 LICOR 7500
 CSAT3
 CNR1

Variable

air temperature & relative humidity
 Wind speed, wind direction & STD W. direction
 Surface temperature
 Case surface temperature
 Soil temperature under ground
 Soil heat flux, under ground
 Soil moisture, underground
 CO₂, H₂O
 Winds (u, v, w)
 Net radiation components

Height

15, 6.8, 2.5 m
 6.8, 2.5 m
 7.0 m
 7.0 m
 5, 5, 5, 5 cm
 5, 5, 5, 5 cm
 5, 5, 5, 5 cm
 15 m
 15 m
 11 m

Datalogger CR5000
 Datalogger CR23X
 Multiplexer 16/32

| Column | Variable, height sensor | Units |
|--------|---------------------------|--------------------------------|
| 1 | Year | time |
| 2 | Doy | time |
| 3 | Time | 30 min |
| 4 | T-Ref datalogger | degC |
| 5 | Air temperatura, 6.8 m | degC |
| 6 | Relative Humidity, 6.8 m | Percent |
| 7 | Air temperatura, 2.5 m | degC |
| 8 | Relative Humidity, 2.5 m | Percent |
| 9 | Windspeed, 2.5 m | m s ⁻¹ |
| 10 | Wind direction, 2.5 m | degrees |
| 11 | STD_Wind direction, 2.5 m | degrees |
| 12 | Windspeed, 6.8 m | m s ⁻¹ |
| 13 | Wind direction, 6.8 m | degrees |
| 14 | STD_Wind direction, 6.8 m | degrees |
| 15 | Surface temperatura, 7 m | degC |
| 16 | Soil temperatura, -5 cm | degC |
| 17 | Soil temperatura, -5 cm | degC |
| 18 | Soil temperatura, -5 cm | degC |
| 19 | Soil temperatura, -5 cm | degC |
| 20 | Soil heat flux, -5 cm | W m ⁻² |
| 21 | Soil heat flux, -5 cm | W m ⁻² |
| 22 | Soil heat flux, -5 cm | W m ⁻² |
| 23 | Soil heat flux, -5 cm | W m ⁻² |
| 24 | Period1, -5 cm | ms |
| 25 | period2, -5 cm | ms |
| 26 | Period3, -5 cm | ms |
| 27 | Period4, -5 cm | ms |
| 28 | Period5, -5 cm | ms |
| 29 | Period6, -5 cm | ms |
| 30 | Period7, -5 cm | ms |
| 31 | Soil Moisture1, -5 cm | m ³ m ⁻³ |
| 32 | Soil Moisture2, -5 cm | m ³ m ⁻³ |
| 33 | Soil Moisture3, -5 cm | m ³ m ⁻³ |
| 34 | Soil Moisture4, -5 cm | m ³ m ⁻³ |
| 35 | Soil Moisture5, -5 cm | m ³ m ⁻³ |
| 36 | Soil Moisture6, -5 cm | m ³ m ⁻³ |
| 37 | Soil Moisture7, -5 cm | m ³ m ⁻³ |
| 38 | Rainfall, 15 m | mm |

Meteodata:

Mistake data -6999 or NAN

Fluxdata:

| Column | Variable | Units |
|--------|--------------------------|-------------|
| 1 | Year | time |
| 2 | Date | time |
| 3 | Time | 30 min |
| 4 | Latent heat flux | $W m^{-2}$ |
| 5 | Sensible Heat flux | $W m^{-2}$ |
| 6 | U_star | $m s^{-1}$ |
| 7 | Ux_Avg | $m s^{-1}$ |
| 8 | Uy_Avg | $m s^{-1}$ |
| 9 | Uz_Avg | $m s^{-1}$ |
| 10 | co2_Avg | $mg m^{-3}$ |
| 11 | h2o_Avg | $G m^{-3}$ |
| 12 | Ts_Avg | degC |
| 13 | press_Avg | kPa |
| 14 | tc_ref_Avg | degC |
| 15 | t_hmp_Avg, vaisala 15m | degC |
| 16 | e_Avg, vaisala 15m | kPa |
| 17 | h2o_hmp_Avg, vaisala 15m | $g m^{-3}$ |
| 18 | wnd_dir_compass | degrees |
| 19 | Incoming sol_down | $W m^{-2}$ |
| 20 | Incoming sol_up | $W m^{-2}$ |
| 21 | Long wave_dwn | $W m^{-2}$ |
| 22 | Long wave_up | $W m^{-2}$ |
| 23 | net radiation | $W m^{-2}$ |

Soil sensor position.

