Plum Island Ecosystem Metadata Report
(PIE)

Woods Hole, Massachusetts

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Research Area Information

Plum Island Ecosystem

Research Area Information

Harvest URL - Option 1

http://ecosystems.mbl.edu/PIE/data/MON/PIEClimDBHY.txt

Site URL

http://ecosystems.mbl.edu/PIE/

Site north bounding coordinate (decimal degree) 42.83

Site west bounding coordinate (decimal degree) 71.22

Site south bounding coordinate (decimal degree) 42.50

Site east bounding coordinate (decimal degree) 70.75

Site Climate URL

http://ecosystems.mbl.edu/pie/data/MON/MON.htm

Site Watershed URL

http://ecosystems.mbl.edu/pie/data/wat/WAT.htm

Site Map URL

http://ecosystems.mbl.edu/pie/data/MAP/MAP.htm

USGS Harvest URL

http://gce-lter.marsci.uga.edu/harvest/usgs/pie_lter.txt

Meteorlogical Stations

Governor Dummer

Meteorological Station

Latitude (decimal degrees) 42.75148419

Longitude (decimal degrees) 70.9024065

Elevation (meters; a.m.s.l.) .....Site is 3 meters above MSL

Begin Date..... March 27, 2000

Topography

Flat field, approximately 600 meters away from the marsh of the Parker River.

Surface

grass

Area Description

The station is located on a grass flat near some soccer and lacrosse fields on the Governor Dummer Academy campus. There are structures near by, approximately 20 meters away (garage, hockey rink, storage barn).

Air Temperature

Begin Date..... March 27, 2000

Data Logger Sampling Interval..... 5 seconds

Summary Interval .....15 minute

Data Accuracy (degree celsius) ...+/- 1% accuracy over - 40 to 60 °C temperature range

Instrument Height (meters) .....3 meters

Instrumentation Description

Vaisala HMP45C temperature and humidity sensor with solar radiation shield.

Methods Description

The weather station is solar powered using a Solarex MSX-20 20 watt solar module including a 12V charger and regulator and 12 AH lead acid battery. The system was supplied by Campbell Scientific Inc., contact Doug Bryson, 435-750-9549. The data logger is supplied by Campbell Scientific CR10X-1M data logger with 1 megabyte memory storage module and PC208W Windows data logging software. The enclosure and tower is a Campbell Scientific ENC 12/14 (12” X 14” weather proof enclosure), CM10 (10’ tripod, grounding kit and CM10 guy wire kit.

Minimum QC Threshold (degree celsius) .....-40

Maximum QC Threshold (degree celsius) 60

Precipitation

Begin Date..... March 27, 2000

Data Logger Sampling Interval..... 5 seconds

Summary Interval .....15 minute

Data Accuracy (millimeters) .....+/- 1% accuracy up to 25.4mm/hr

Instrument Height (meters) .....1.4 meters above ground

Instrumentation Description

Texas Electronic TE525WS-L, 8" rain gage with CS705 precipitation adapter for snow fall.

Methods Description

The weather station is solar powered using a Solarex MSX-20 20 watt solar module including a 12V charger and regulator and 12 AH lead acid battery. The system was supplied by Campbell Scientific Inc., contact Doug Bryson, 435-750-9549. The data logger is supplied by Campbell Scientific CR10X-1M data logger with 1 megabyte memory storage module and PC208W Windows data logging software. The enclosure and tower is a Campbell Scientific ENC 12/14 (12" X 14" weather proof enclosure), CM10 (10' tripod, grounding kit and CM10 guy wire kit.

Maximum QC Threshold (millimeters) 200

Boston Logan International Airport, Boston, MA

Meteorological Station

Latitude (decimal degrees) 42.3670

Longitude (decimal degrees) .....-71.0167

Elevation (meters; a.m.s.l.) 6.1

Begin Date..... January 1, 1920

End Date..... Present

Topography

Field

Surface

grass

Area Description

This meteorologiccal station is located at Boston Logan International Airport, Boston, Ma. Summary of the day data has been downloaded from the National Cli-

mate Data Center for Boston Logan Airport station WBAN = 14739 and COOP ID = 190770

Precipitation

Begin Date ..... January 1, 1920
End Date ..... present
Summary Interval ..... daily
Maximum QC Threshold (millimeters) 200

Watershed

Gauging Stations

Ipswich River at South Middleton MA (USGS)

Hydrologic Gauging Station

Latitude (decimal degrees) 42.5694
Longitude (decimal degrees) 71.0275
Elevation (meters; a.m.s.l.) 13.7069
Begin Date 19380601
End Date ..... present
Watershed Area (hectares) 11525.4
Weir Description

Water stage recorder and concrete control.

Precipitation

Begin Date ..... November 3, 2001
End Date ..... Present
Summary Interval ..... Daily
Methods Description

Precipitation data is provided by the U.S. Geological Survey and is denoted as PROVISIONAL DATA only.

Maximum QC Threshold (millimeters) 200

Stream Discharge

Begin Date 19380601
End Date ..... present
Summary Interval ..... daily
Minimum QC Threshold (liters per second) 0.1
Maximum QC Threshold (liters per second) 40000

Ipswich River near Ipswich MA (USGS)

Hydrologic Gauging Station

Latitude (decimal degrees) 42.6597
Longitude (decimal degrees) 70.8942
Elevation (meters; a.m.s.l.) 6.2880
Begin Date..... 19300601
End Date..... present
Watershed Area (hectares) 32374.8
Weir Description

Water stage recorder and concrete control.

Precipitation

Begin Date..... November 3, 2001
End Date..... Present
Data Logger Sampling Interval..... Daily
Summary Interval .....Daily
Methods Description

Precipitation data is provided by the U.S. Geological Survey and is denoted as PROVISIONAL DATA only.

Maximum QC Threshold (millimeters) 200

Stream Discharge

Begin Date..... 19461001
End Date..... present
Summary Interval ..... daily
Minimum QC Threshold (liters per second) 0.1
Maximum QC Threshold (liters per second) 130000

Parker River at Byefield MA (USGS)

Hydrologic Gauging Station

Latitude (decimal degrees) 42.7528
Longitude (decimal degrees) 70.9461
Elevation (meters; a.m.s.l.) 7.1506

Begin Date..... 19451001
End Date..... present
Watershed Area (hectares) 5516.7
Weir Description

Water stage recorder and concrete control.

Precipitation

Begin Date..... November 3, 2001
End Date..... Present
Data Logger Sampling Interval..... Daily
Summary Interval .....Daily
Methods Description

Precipitation data is provided by the U.S. Geological Survey and is denoted as PROVISIONAL DATA only.

Maximum QC Threshold (millimeters) 200

Stream Discharge

Begin Date..... 19451001
End Date..... present
Data Logger Sampling Interval..... 15 minute
Summary Interval .....15 minute
Minimum QC Threshold (liters per second) 0.1
Maximum QC Threshold (liters per second) 26000