

Computational Analysis for Environmental Data

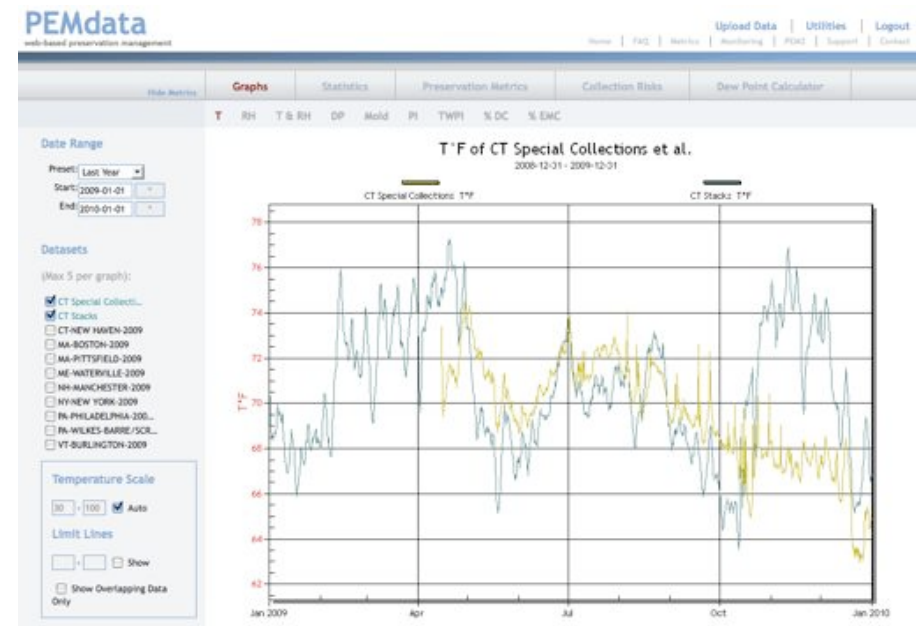
The screenshot shows the PEMdata web application interface. At the top left is the logo "PEMdata" with the tagline "web-based preservation management". Below the logo is a navigation menu with links for Home, FAQ, Metrics, Monitoring, PEM2, Support, and Contact. On the left side, there is a login section with fields for "User Name" (containing "NEH_NewHaven") and "Password", and a "Login" button. Below the login section are links for "Create a New Account", "Guest User", "PEMdata Demo", and "Security and Privacy". The main content area features a "Welcome to PEMdata!" heading, followed by a description of the system and a list of features: "Organize your temperature and humidity data in a central location.", "Graph and interpret the data.", and "Generate reports to share data with institutional and facilities managers." Below this text is a video player titled "IPI's Preservation Management Approach" showing a computer monitor. To the right of the video player is a line graph with a y-axis labeled "FHS %" ranging from -10 to 100.

Yale University
Sterling Memorial Library
New Haven, CT
October 28 – 29, 2010

PEMdata

- Preservation-based analysis website
- Organization, storage and easy access of data
- Preservation information and resources
- Free for PEM, PEM2, DBF

pemdata.org



Upload Location or Outdoor Data

Upload Data

[Return to my data](#)

Upload a Dataset

Upload PEM data, PEM2 data, or Climate Notebook DBF file:

File 1:

File 2:

File 3:

File 4:

Upload an Outdoor Dataset

Upload outdoor data collected by the US National Oceanic and Atmospheric Administration (NOAA):

State:

City:

Location:

Year:

Name Your Datasets

Name Your Datasets

[← Return to my data](#)



It is now easier to assign meaningful location names to your datasets in PEMdata.

Enter a location name in the text box below and PEMdata will remember this name each time you upload data.

Each time you upload data with the same filename or serial number, the website will prompt you to confirm the location name. If you continue with the same name, the new data will be added to that dataset. If you change the name, a new dataset will be created and the serial number will have a new association.

Filename	Dataset Name
P2_01471	<input type="text" value="Library Stacks"/>

Graph Data or Preservation Metrics

PEMdata

web-based preservation management

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Home | FAQ | Metrics | Monitoring | PEM2 | Support | Contact

Risk Metrics

Graphs

Statistics

Preservation Metrics

Collection Risks

Dew Point Calculator

T RH T & RH DP Mold PI TWPI % DC % EMC

Date Range

Preset: All

Start: 2005-02-15

End: 2010-08-26

Datasets

(Max 5 per graph):

- CT Stacks
- CT-NEW HAVEN-2009
- MA-BOSTON-2009
- MA-PITTSFIELD-2009
- ME-WATERVILLE-2009
- NH-MANCHESTER-2009
- NY-NEW YORK-2009
- PA-PHILADELPHIA-200...
- PA-WILKES-BARRE/SCR...
- VT-BURLINGTON-2009

Temperature Scale

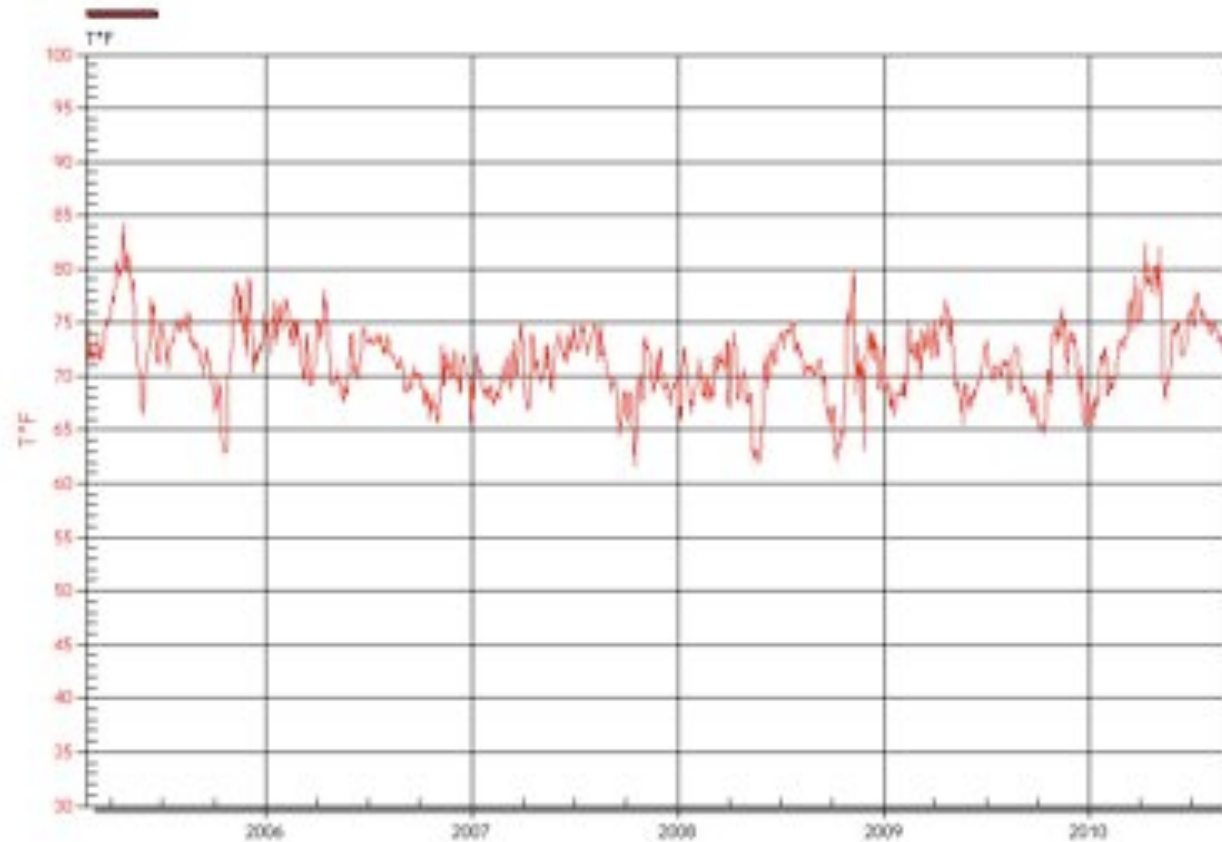
30 - 100 Auto

Limit Lines

- Show

T°F of CT Stacks

2005-02-15 - 2010-08-26



Graph Data or Preservation Metrics

PEMdata

web-based preservation management

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Hide Metrics

Graphs

Statistics

Preservation Metrics

Collection Risks

Dew Point Calculator

T RH T & RH DP Mold **PI** TWPI % DC % EMC

Date Range

Preset: All

Start: 2005-02-15

End: 2010-08-26

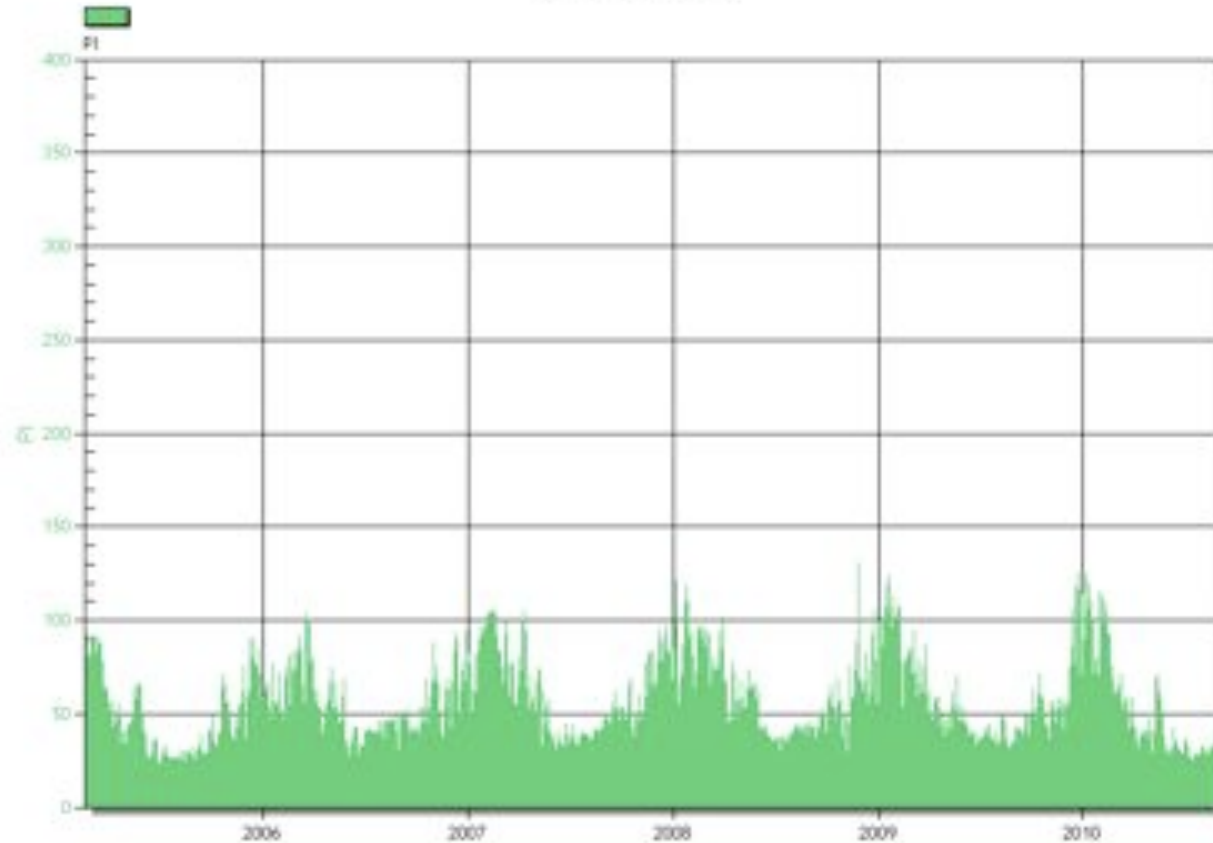
Datasets

(Max 5 per graph):

- CT Stacks
- CT-NEW HAVEN-2009
- MA-BOSTON-2009
- MA-PITTSFIELD-2009
- ME-WATERVILLE-2009
- NH-MANCHESTER-2009
- NY-NEW YORK-2009
- PA-PHILADELPHIA-200...
- PA-WILKES-BARRE/SCR...
- VT-BURLINGTON-2009

PI of CT Stacks

2005-02-15 - 2010-08-25



Statistics of Data or Metrics

PEMdata
web-based preservation management

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Hide Metrics | Graphs | **Statistics** | Preservation Metrics | Collection Risks | Dew Point Calculator

T RH **T & RH** DP Mold PI TWPI % DC % EMC

Date Range

Preset: All

Start: 2005-02-15

End: 2010-08-26

Datasets

(Max 5 per graph):

- CT Stacks
- CT-NEW HAVEN-2009
- MA-BOSTON-2009
- MA-PITTSFIELD-2009
- ME-WATERVILLE-2009
- NH-MANCHESTER-2009
- NY-NEW YORK-2009
- PA-PHILADELPHIA-200...
- PA-WILKES-BARRE/SCR...
- VT-BURLINGTON-2009

Dataset	Date Range		T°F				% RH			
	Start	End	Min	Max	Mean	Median	Min	Max	Mean	Median
CT Stacks	2005-02-15	2010-08-26	61.2	84.7	71.2	71.2	12	69	35.4	35

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Statistics of Data with Limits

PEMdata
web-based preservation management

Home | FAQ | Metrics | Monitoring | PC2 | Support | Contact

Upload Data | Utilities | Logout

Hide Metrics | Graphs | **Statistics** | Preservation Metrics | Collection Risks | Dew Point Calculator

T RH T & RH DP Mold PI TWPI % DC % EMC

Date Range

Preset: All

Start: 2005-02-15

End: 2010-08-26

Datasets

(Max 5 per graph):

- CT Stacks
- CT-NEW HAVEN-2009
- MA-BOSTON-2009
- MA-PITTSFIELD-2009
- ME-WATERVILLE-2009
- NH-MANCHESTER-2009
- NY-NEW YORK-2009
- PA-PHILADELPHIA-200...
- PA-WELLES-BARRE/SCR...
- VT-BURLINGTON-2009

Limit Lines

60 - 70 Show

Dataset	Date Range		T°F				T°F Limits		
	Start	End	Min	Max	Mean	Median	<60	[60,70]	>70
CT Stacks	2005-02-15	2010-08-25	61.2	84.7	71.2	71.2	0%	39%	61%

Small | Print | Full Screen

Overview and Preservation Metrics

PEMdata
web-based preservation management

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Hide Metrics | Graphs | Statistics | **Preservation Metrics** | Collection Risks | Dew Point Calculator

Preservation Quality Analysis - Based on observed environmental conditions, but independent of the collections within the space.

Date Range

Preset: All

Start: 2005-02-15

End: 2010-08-26

Datasets

(Max 5 per graph):

- CT Stacks
- CT-NEW HAVEN-2009
- MA-BOSTON-2009
- MA-PITTSFIELD-2009
- ME-WATERVILLE-2009
- NH-MANCHESTER-2009
- NY-NEW YORK-2009
- PA-PHILADELPHIA-200...
- PA-WILKES-BARRIE/SCR...
- VT-BURLINGTON-2009

Dataset	CT Stacks
Risk Summary	
Natural Aging	OK
Mechanical Damage	RISK
Mold Growth	Good
Metal Corrosion	RISK
Preservation Metrics	
TWPI	49
IRRF	0
% DC Max	1.91
% EMC Min	3.7
EMC Max	10.5
EMC Mean	6.94
Data Overview	
Start	2005-02-15
End	2010-08-25
T°F _{max}	71.2
% RH _{max}	35.4
DP°F _{max}	40.8

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Compare and Contrast Locations

Risk Matrix

Graphs

Statistics

Preservation Metrics

Collection Risks

Dew Point Calculator

Preservation Quality Analysis - Based on observed environmental conditions, but independent of the collections within the space.

Date Range

Preset: **All**

Start: 2005-02-15

End: 2010-08-26

Datasets

(Max 5 per graph):

- CT Special Collect...
- CT Stacks
- CT-NEW HAMEN-2009
- MA-BOSTON-2009
- MA-PITTSFIELD-2009
- ME-WATERVILLE-2009
- NH-MANCHESTER-2009
- NY-NEW YORK-2009
- PA-PHILADELPHIA-200...
- PA-WILKES-BARRE/SCR...
- VT-BURLINGTON-2009

Dataset	CT Special Collections	CT Stacks
Risk Summary		
Natural Aging	OK	OK
Mechanical Damage	OK	RISK
Mold Growth	Good	Good
Metal Corrosion	RISK	RISK
Preservation Metrics		
TWPI	48	49
MRF	0.01	0
% DC Max	1.42	1.91
% EMC Min	5.9	3.7
EMC Max	11	10.5
EMC Mean	8.02	6.94
Data Overview		
Start	2009-04-15	2005-02-15
End	2010-04-15	2010-08-25
T°F _{mean}	69.1	71.2
% RH _{mean}	41.9	35.4
DP°F _{mean}	44.2	40.8

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View Outdoor Data

PEMdata

web-based preservation management

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[Hide Metrics](#)

Graphs

[Statistics](#)

[Preservation Metrics](#)

[Collection Risks](#)

[Dew Point Calculator](#)

T RH **T & RH** DP Mold PI TWPI % DC % EMC

Date Range

Preset:
Start:
End:

Datasets

(Max 3 per graph):

- CT Special Collecti...
- CT Stacks
- CT-NEW HAVEN-2009
- MA-BOSTON-2009
- MA-PITTSFIELD-2009
- ME-WATERVILLE-2009
- NH-MANCHESTER-2009
- NY-NEW YORK-2009
- PA-PHILADELPHIA-200...
- PA-WILKES-BARRE/SCR...
- VT-BURLINGTON-2009

Temperature Scale

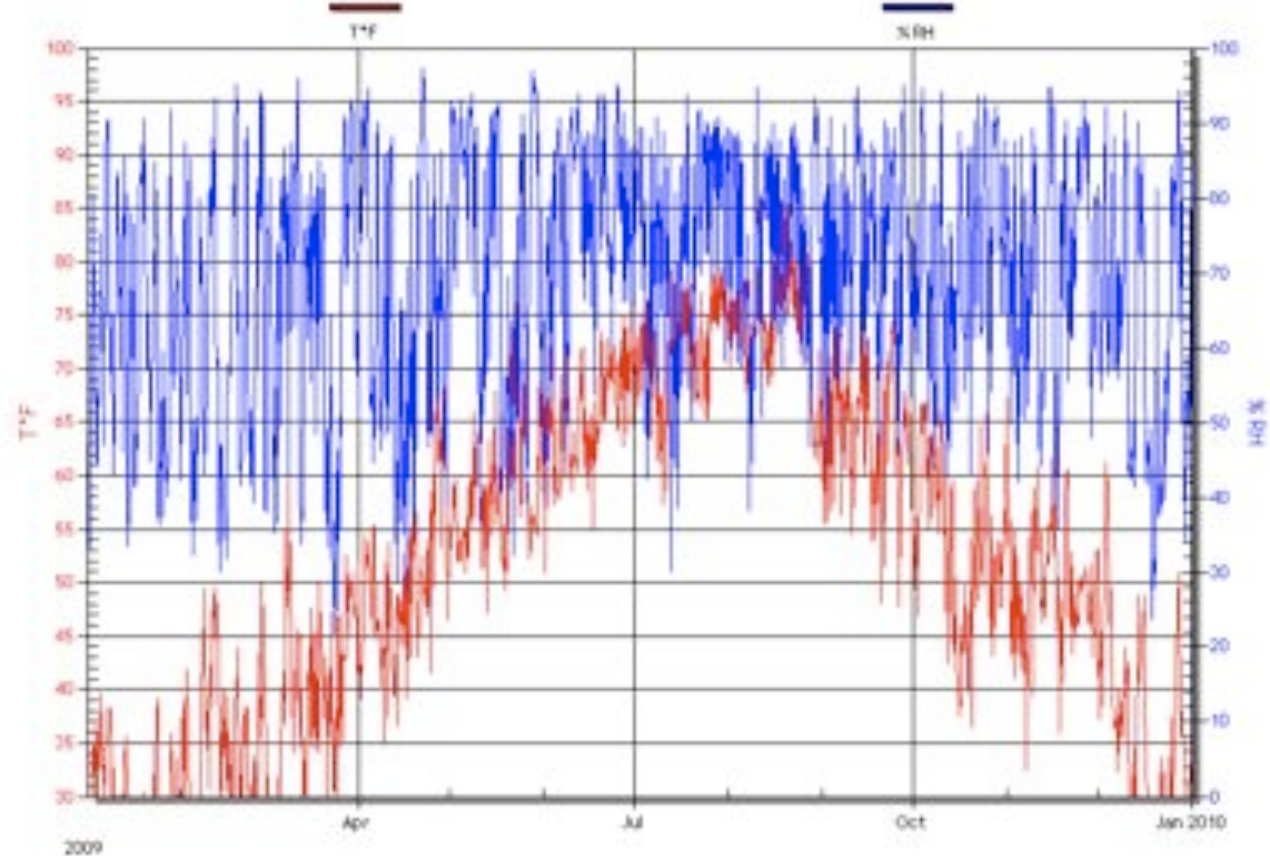
- Auto

RH Scale

- Auto

T°F and % RH of CT-NEW HAVEN-2009

2009-01-01 - 2009-12-31



Compare Indoor and Outdoor DP

Date Range

Preset: Last Year
Start: 2009-01-01
End: 2010-01-01

Datasets

(Max 5 per graph):

- CT Special Collect...
- CT Stacks
- CT-NEW HAVEN-2009
- MA-BOSTON-2009
- MA-PITTSFIELD-2009
- NE-WATERVILLE-2009
- NH-MANCHESTER-2009
- NY-NEW YORK-2009
- PA-PHILADELPHIA-200...
- PA-WILKES-BARRE/SCR...
- VT-BURLINGTON-2009

Temperature Scale

30 - 100 Auto

Limit Lines

- Show

Show Overlapping Data Only

DP°F of CT Stacks et al.

2009-12-31 - 2009-12-31

