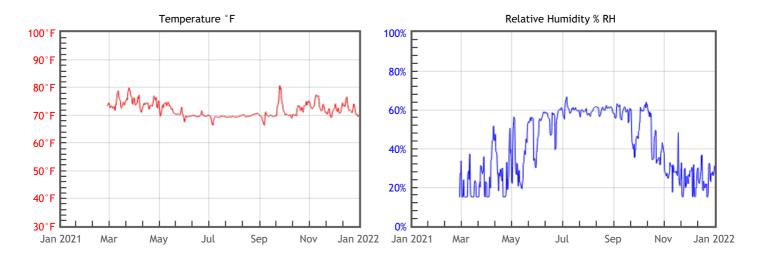
# Maps Locked Room

MSU Libraries • Main • Collections of Distinction • Maps Michigan State University Libraries

### **Preservation Environment Evaluation**

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	RISK TWPI = 40	Accelerated rate of chemical decay in all organic materials due to the cumulative effects of temperature and humidity, with especially high risk for fast decaying organic materials such as acidic paper, color photographs and cellulosic plastics.
Mechanical Damage Physical damage to hygroscopic materials	RISK  % DC = 1.8  % EMC min = 4.6  % EMC max = 11	Heightened risk of physical damage to any hygroscopic material, such as paintings, rare books, furniture, paper, leather, film, or color photos, due to extremely low or high levels of humidity, and / or excessive humidity fluctuation.
Mold Risk  Mold growth in area or on collection objects	GOOD MRF = 0	Minimal risk of mold growth.
Metal Corrosion Corrosion of metal components or objects	RISK  % EMC max = 11	Heightened risk of metal corrosion due to extended periods of high levels of humidity.

# Graphs



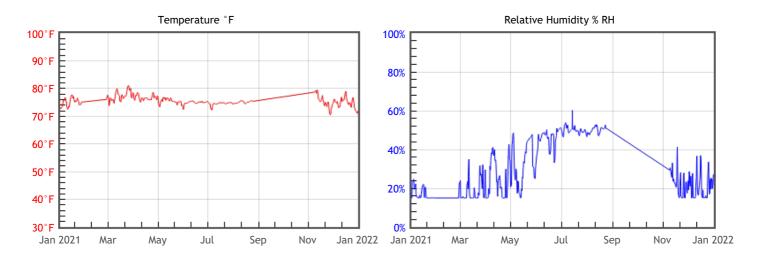
#### **Statistics**

Temperature		Relative H	Relative Humidity		Dew Point	
T°F Mean	71.8	%RH Mean	42	DP°F Mean	44.8	
T°F Median	70.9	%RH Median	42	DP°F Median	48.8	
T°F Stdev	2.6	%RH Stdev	17	DP°F Stdev	11	
T°F Min	66.2	%RH Min	15	DP°F Min	19.6	
T°F Max	81.1	%RH Max	72	DP°F Max	61.2	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				

#### **Preservation Environment Evaluation**

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	RISK TWPI = 43	Accelerated rate of chemical decay in all organic materials due to the cumulative effects of temperature and humidity, with especially high risk for fast decaying organic materials such as acidic paper, color photographs and cellulosic plastics.
Mechanical Damage Physical damage to hygroscopic materials	RISK  % DC = 1.59 % EMC min = 3.5 % EMC max = 9.2	Heightened risk of physical damage to any hygroscopic material, such as paintings, rare books, furniture, paper, leather, film, or color photos, due to extremely low or high levels of humidity, and / or excessive humidity fluctuation.
Mold Risk  Mold growth in area or on collection objects	GOOD  MRF = 0	Minimal risk of mold growth.
Metal Corrosion Corrosion of metal components or objects	OK % EMC max = 9.2	Generally OK, but archeological or salt-encrusted metals may corrode due to extended periods of moderately high levels of humidity.

# Graphs



#### **Statistics**

Temperature		Relative Humidity		Dew Point	
T°F Mean	75.5	%RH Mean	31	DP°F Mean	40.4
T°F Median	75.3	%RH Median	27	DP°F Median	40.3
T°F Stdev	1.6	%RH Stdev	14	DP°F Stdev	12.3
T°F Min	70.3	%RH Min	15	DP°F Min	20.7
T°F Max	81.2	%RH Max	60	DP°F Max	60.5

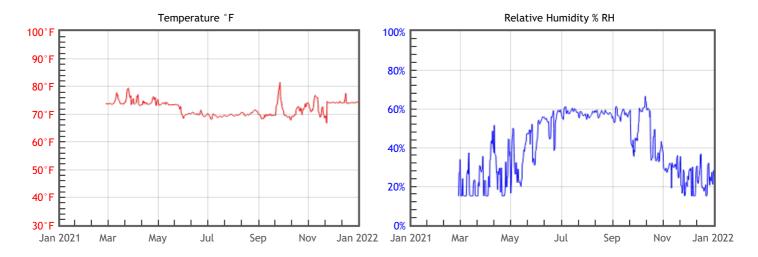
# **Maps Reading Room**

MSU Libraries • Main • Collections of Distinction • Maps Michigan State University Libraries

### **Preservation Environment Evaluation**

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	RISK TWPI = 41	Accelerated rate of chemical decay in all organic materials due to the cumulative effects of temperature and humidity, with especially high risk for fast decaying organic materials such as acidic paper, color photographs and cellulosic plastics.
Mechanical Damage Physical damage to hygroscopic materials	RISK  % DC = 1.68 % EMC min = 4.6 % EMC max = 10.6	Heightened risk of physical damage to any hygroscopic material, such as paintings, rare books, furniture, paper, leather, film, or color photos, due to extremely low or high levels of humidity, and / or excessive humidity fluctuation.
Mold Risk  Mold growth in area or on collection objects	GOOD MRF = 0	Minimal risk of mold growth.
Metal Corrosion Corrosion of metal components or objects	RISK  % EMC max = 10.6	Heightened risk of metal corrosion due to extended periods of high levels of humidity.

# Graphs



#### **Statistics**

Temperature		Relative H	Relative Humidity		Dew Point	
T°F Mean	72.1	%RH Mean	40	DP°F Mean	44.4	
T°F Median	72.1	%RH Median	40	DP°F Median	48.2	
T°F Stdev	2.6	%RH Stdev	16	DP°F Stdev	10.5	
T°F Min	66.5	%RH Min	15	DP°F Min	21.6	
T°F Max	81.6	%RH Max	72	DP°F Max	60.8	