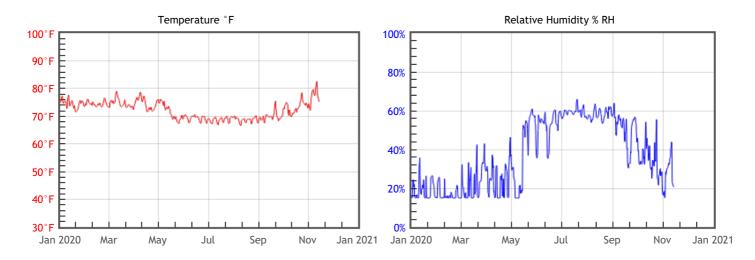
Maps Locked Room

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 = 44	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 = 1.95 % EMC min = 3.9 % EMC max = 10.8	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 = 10.8	Heightened risk of metal corrosion due to extended periods of high levels of humidity.

Graphs



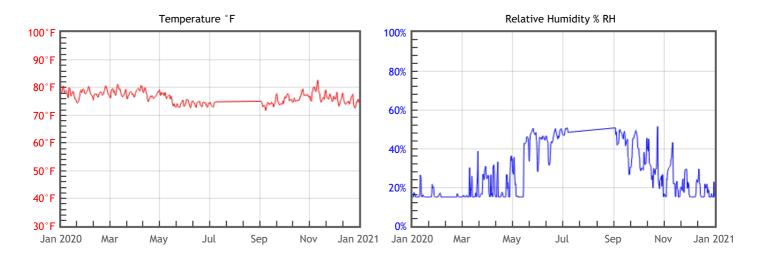
Statistics

Temperature		Relative H	Relative Humidity		Dew Point	
T°F Mean	72.2	%RH Mean	37	DP°F Mean	41.7	
T°F Median	72.5	%RH Median	34	DP°F Median	43.8	
T°F Stdev	3.1	%RH Stdev	17	DP°F Stdev	11.8	
T°F Min	66.6	%RH Min	15	DP°F Min	20.8	
T°F Max	82.9	%RH Max	68	DP°F Max	62.4	

Preservation Environment Evaluation

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	OK TWPI = 45	Generally OK, but fast decaying organic materials such as acidic paper, color photographs and cellulosic plastics will be at elevated risk due to the cumulative effects of temperature and humidity
Mechanical Damage Physical damage to hygroscopic materials	RISK % DC = 1.69 % EMC min = 3.5 % EMC max = 9.5	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 = 9.5	Generally OK, but archeological or salt-encrusted metals may corrode due to extended periods of moderately high levels of humidity.

Graphs



Statistics

Temperature		Relative H	Relative Humidity		Dew Point	
T°F Mean	76.4	%RH Mean	27	DP°F Mean	37.3	
T°F Median	76.5	%RH Median	23	DP°F Median	36	
T°F Stdev	2.1	%RH Stdev	13	DP°F Stdev	11	
T°F Min	71.7	%RH Min	15	DP°F Min	22.2	
T°F Max	82.9	%RH Max	55	DP°F Max	61.8	

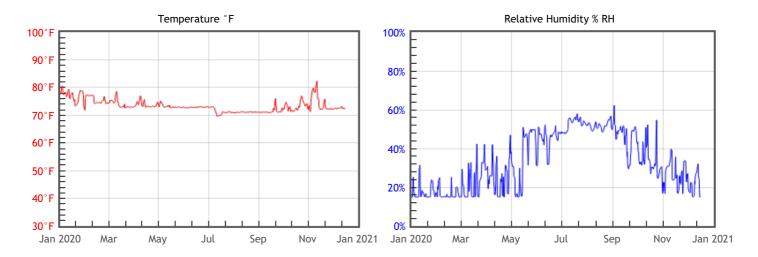
Maps Reading Room

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	OK TWPI = 45	Generally OK, but fast decaying organic materials such as acidic paper, color photographs and cellulosic plastics will be at elevated risk due to the cumulative effects of temperature and humidity
Mechanical Damage Physical damage to hygroscopic materials	RISK % DC = 1.68 % EMC min = 3.9 % EMC max = 9.9	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 = 9.9	Generally OK, but archeological or salt-encrusted metals may corrode due to extended periods of moderately high levels of humidity.

Graphs



Statistics

Temperature		Relative H	Relative Humidity		Dew Point	
T°F Mean	73.4	%RH Mean	33	DP°F Mean	40.5	
T°F Median	72.9	%RH Median	31	DP°F Median	41.8	
T°F Stdev	2.3	%RH Stdev	14	DP°F Stdev	11.1	
T°F Min	69.3	%RH Min	15	DP°F Min	21.5	
T°F Max	82.5	%RH Max	62	DP°F Max	61.7	