

Ground East (EG1)

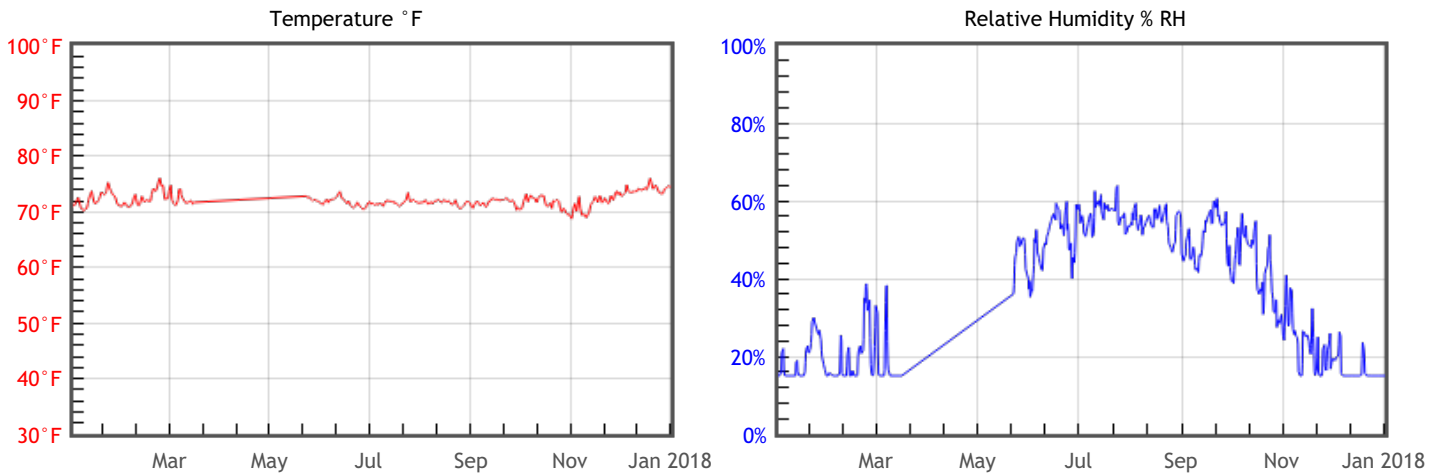
MSU Libraries • Main • General Collections • Ground Level
Michigan State University Libraries

2017-01-01 to 2017-12-30
11 months, 30 days

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 = 1.87 % EMC min = 3.7 % EMC max = 10.4 | 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 = 10.4 | Generally OK, but archeological or salt-encrusted metals may corrode due to extended periods of moderately high levels of humidity. |

Graphs



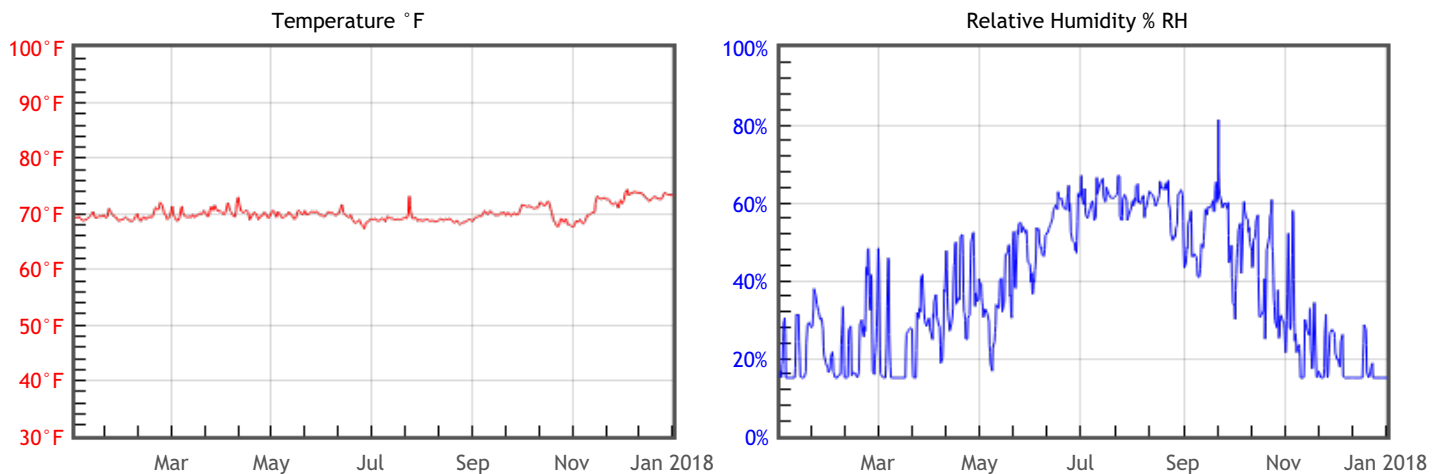
Statistics

| Temperature | | Relative Humidity | | Dew Point | |
|-------------|------|-------------------|----|--------------|------|
| T °F Mean | 72.1 | %RH Mean | 34 | DP °F Mean | 39 |
| T °F Median | 72 | %RH Median | 30 | DP °F Median | 38 |
| T °F Stdev | 1.3 | %RH Stdev | 17 | DP °F Stdev | 13.4 |
| T °F Min | 68.6 | %RH Min | 15 | DP °F Min | 19.3 |
| T °F Max | 76.1 | %RH Max | 70 | DP °F Max | 62.9 |

Preservation Environment Evaluation

| Type of Decay | Risks & Metrics | Evaluation & General Comments |
|--|--|--|
| Natural Aging Chemical decay of organic materials | OK TWPI = 50 | 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 = 2.03 % EMC min = 3.9 % EMC max = 11.2 | 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 = 0.03 | Minimal risk of mold growth. |
| Metal Corrosion Corrosion of metal components or objects | RISK % EMC max = 11.2 | Heightened risk of metal corrosion due to extended periods of high levels of humidity. |

Graphs



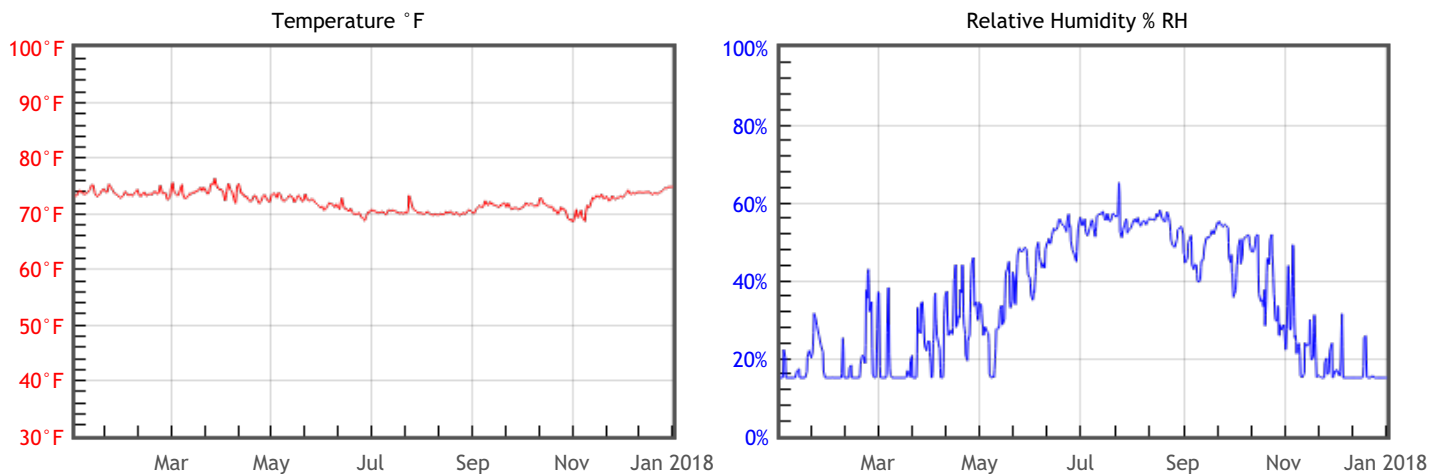
Statistics

| Temperature | | Relative Humidity | | Dew Point | |
|-------------|------|-------------------|----|--------------|------|
| T °F Mean | 70.3 | %RH Mean | 36 | DP °F Mean | 39.1 |
| T °F Median | 69.8 | %RH Median | 32 | DP °F Median | 38.9 |
| T °F Stdev | 1.6 | %RH Stdev | 17 | DP °F Stdev | 12.7 |
| T °F Min | 67.3 | %RH Min | 15 | DP °F Min | 19.1 |
| T °F Max | 74.4 | %RH Max | 81 | DP °F Max | 65 |

Preservation Environment Evaluation

| Type of Decay | Risks & Metrics | Evaluation & General Comments |
|--|--|--|
| Natural Aging Chemical decay of organic materials | OK TWPI = 49 | 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 = 1.83 % EMC min = 3.7 % EMC max = 10.2 | 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 = 10.2 | Generally OK, but archeological or salt-encrusted metals may corrode due to extended periods of moderately high levels of humidity. |

Graphs



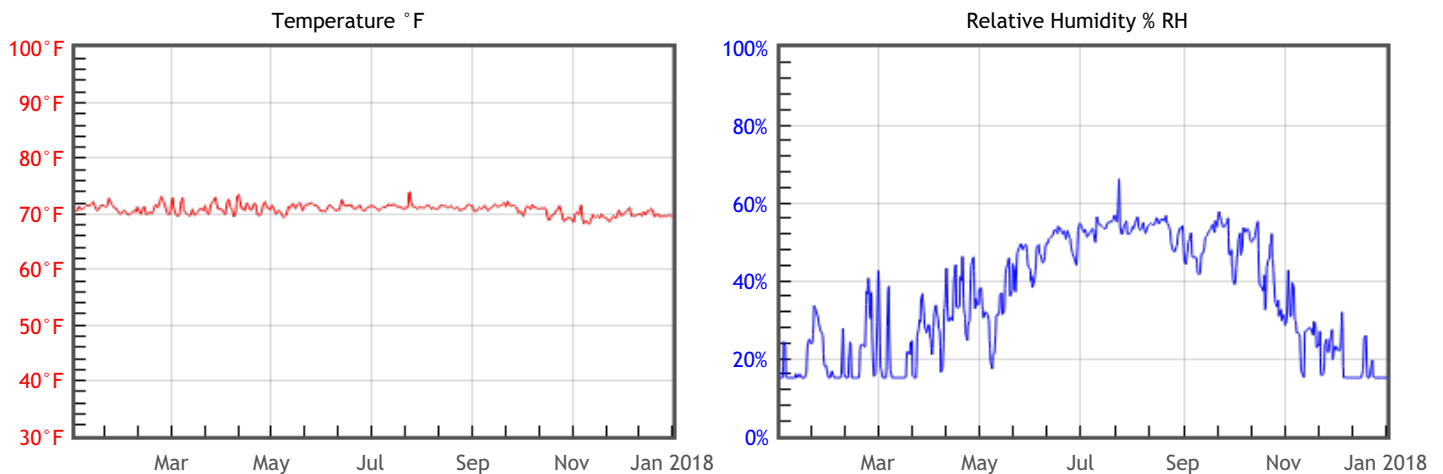
Statistics

| Temperature | | Relative Humidity | | Dew Point | |
|-------------|------|-------------------|----|--------------|------|
| T °F Mean | 72.3 | %RH Mean | 32 | DP °F Mean | 38.1 |
| T °F Median | 72.6 | %RH Median | 28 | DP °F Median | 37.7 |
| T °F Stdev | 1.7 | %RH Stdev | 16 | DP °F Stdev | 12.2 |
| T °F Min | 68.5 | %RH Min | 15 | DP °F Min | 21 |
| T °F Max | 76.5 | %RH Max | 69 | DP °F Max | 61.9 |

Preservation Environment Evaluation

| Type of Decay | Risks & Metrics | Evaluation & General Comments |
|--|--|--|
| Natural Aging Chemical decay of organic materials | OK TWPI = 51 | 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 = 1.71 % EMC min = 3.9 % EMC max = 10 | 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 = 10 | 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 | 70.6 | %RH Mean | 34 | DP °F Mean | 38.3 |
| T °F Median | 70.7 | %RH Median | 31 | DP °F Median | 38.5 |
| T °F Stdev | 1 | %RH Stdev | 15 | DP °F Stdev | 12.7 |
| T °F Min | 68.1 | %RH Min | 15 | DP °F Min | 18.7 |
| T °F Max | 75.2 | %RH Max | 71 | DP °F Max | 62.9 |