

Environmental Guidelines for the Storage and Preservation of USGS Science Records Media

This table contains the recommended temperature and relative humidity for storing USGS science records. These guidelines apply to any science records intended to be kept for periods longer than five years. Review media every three to five years and migrate sooner if the storage conditions or environment was compromised to reduce the risk of media instability. These guidelines support the Bureau’s Records Management requirements implicit in the USGS Scientific Records Schedules.¹

RECORDS MEDIA	TEMPERATURE RANGE	RELATIVE HUMIDITY
Paper – including files, maps, charts, drawings, posters ²	50-65°F	30%-50%
Magnetic / Electronic Media – computer tapes, disks, video tapes, audio tapes, optical disks ²	50-65°F	30%-40%
Black-and-White Photographic Media (non-acetate/non-nitrate) – motion and still picture negatives, film, paper prints, x-rays, and microforms ²	50-65°F	30%-40%
Black-and-White Photographic Media (acetate) – motion and still picture negatives, film, x-rays, microforms, diazo, vesicular microfilm ²	0-35°F	30%-40%
Color Photographic Media – motion and still picture negatives, film, slides, prints, digitally produced prints (from ink jet, dye sublimation, electrophotographic, thermal) ²	0-35°F	30%-40%
Paper – Optimum preservation stacks primarily used in libraries ³	35-65°F	30-50% (+/-3%)

Sources:

¹USGS Scientific Records Schedules <https://erosvnpn.cr.usgs.gov/gio/irm/,DanaInfo=internal.usgs.gov+fmref2.html>

²National Archives and Records Administration (NARA) Temperature and Relative Humidity Standards for Archival Records, NARA 1571 Appendix A, February 15, 2002 and email correspondence with Pamela Najjar-Simpson, NARA September 27, 2012.

³National Information Standards Organization (NIST) Environmental Guidelines the Storage of Paper Records, NISO TR01-1995.