Temperature and Relative Humidity Guidelines for Storage and Preservation of Geospatial Data

This table contains the recommended temperature and relative humidity for storing geospatial data. These guidelines apply to any data to be retained for periods longer than five years. At the five-year point, it is recommended to migrate all electronic records to a newer media.

RECORDS MEDIUM	TEMPERATURE	RELATIVE
	RANGE	HUMIDITY
Paper – including files, maps, charts, drawings, posters ¹	50-65°F	30%-50%
Magnetic / Electronic Media – computer tapes, disks, video	50-65°F	30%-40%
tapes, audio tapes, optical disks ¹		
Black-and-White Photographic Media (polyester base	50-65°F	30%-40%
primarily from the 1960s onward) – non-acetate/non-nitrate		
motion and still picture negatives, film, paper prints, x-rays,		
and microforms ¹		
Black-and-White Photographic Media – (acetate base primarily	0-35°F	30%-40%
from the 1920s-1960s) acetate motion and still picture		
negatives, film, x-rays, microforms, diazo, vesicular microfilm ¹		
Color Photographic Media – Color still and motion picture	0-35°F	30%-40%
negatives, film, slides, prints, digitally produced prints (from		
ink jet, dye sublimation, electrophotographic, thermal) ¹		

Sources:

¹National 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 Najar-Simpson, NARA September 27, 2012.