

# ISO/TR 19815:2018-07 (E)

## Information and documentation - Management of the environmental conditions for archive and library collections

---

<b>Contents</b>		<b>Page</b>
Foreword .....		v
Introduction .....		vi
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	General .....	6
5	Management of environment for optimization of preservation and sustainability .....	8
6	Temperature .....	10
7	Relative humidity .....	11
8	Climate and its consequences for collections .....	13
8.1	General .....	13
8.2	Seasonal climates .....	15
9	Insects and other pests .....	15
10	Pollution .....	15
11	Light .....	16
12	Setting temperature and relative humidity specification .....	18
13	Psychrometrics .....	22
14	Good practices for sustainability .....	27
14.1	General .....	27
14.2	Arnamagnæan Institute archive, Copenhagen, Denmark .....	28
14.3	Territorial archives, St Martin, West Indies .....	28
14.4	Japanese Imperial Archives, Tokyo .....	28
14.5	Jersey Archive, Jersey, Channel Islands .....	28
14.6	Norwegian National Library, Mo i Rana .....	29
14.7	Central State Archive of Saxony, Dresden, Germany .....	29
14.8	National Library of Singapore .....	29
14.9	Archives départementales du Nord, Lille, France .....	29
14.10	School library, Gando, Burkina Faso .....	29
15	Educational and assessment tools .....	29
15.1	General .....	29
15.1.1	Overview .....	29
15.1.2	Isoperm .....	30
15.1.3	Preservation index (PI) and time weighted preservation index (TWPI) .....	30
15.2	Environmental management tools and assessments .....	31
15.2.1	General .....	31

15.2.2	Fundamental microclimate concepts .....	31
15.2.3	Air exchange between an enclosure and its surroundings .....	31
15.2.4	Calculator for atmospheric moisture .....	32
15.2.5	Calculator for energy use in museums .....	32
15.2.6	Calculator for conservation heating .....	32
15.2.7	Calculator for dehumidification energy load .....	32
Annex A (informative) Energy economy .....		33
Annex B (informative) Impact of temperature .....		38
Annex C (informative) Impact of relative humidity .....		40
Annex D (informative) Material damage associated with temperature and relative humidity .....		43
Annex E (informative) Sources of pollutants and their impact on materials significant to archive or library collections .....		46
Annex F (informative) Interactions between temperature, RH, light and pollution .....		50
Bibliography .....		51