ISO 17714:2007-07 (E)

Meteorology - Air temperature measurements - Test methods for comparing the performanc e of thermometer shields/screens and defining important characteristics

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Terms and definitions 1

3 Field test conditions 2
3.1 Field test site 2
3.2 Respective location of screens 2
3.3 Screens 3
3.4 Thermometers 3
3.5 Additional meteorological variables 3
3.6 Data sampling 4
3.7 Reference values 4
3.8 Quality control 4
3.9 Long-term intercomparison 5
3.10 Typical conditions 5
3.11 Documentation 6

4 Field test methods 6
4.1 Comparability analysis 6
4.2 Global analysis of air temperature 6
4.3 Analysis of extreme values 6
4.4 Statistical analysis of radiation error 7
4.5 Influence of surface albedo 7
4.6 Selection of typical conditions 7

5 Measurement of screen characteristics 8
5.1 Aspiration rate 8
5.2 Internal ventilation factor 8
5.3 Representative height and screen reference point 8
5.4 System response time 8

Annex A (informative) Influence factors 10

Annex B (informative) Examples of useful test-report graphs 13

Bibliography 18