DIN ISO 17714:2008-06 (E)

Meteorology - Air temperature measurements - Test methods for com paring the performance of thermometer shields/screens and defining important characteristics (ISO 17714:2007)

Contents

Page

National foreword 2

Introduction 3

1 Scope 5

2 Terms and definitions 5

3 Field test conditions 6
3.1 Field test site 6
3.2 Respective location of screens 6
3.3 Screens 7
3.4 Thermometers 7
3.5 Additional meteorological variables 7
3.6 Data sampling 8
3.7 Reference values 8
3.8 Quality control 8
3.9 Long-term intercomparison 9
3.10 Typical conditions 9
3.11 Documentation 10

4 Field test methods 10
4.1 Comparability analysis 10
4.2 Global analysis of air temperature 10
4.3 Analysis of extreme values 10
4.4 Statistical analysis of radiation error 11
4.5 Influence of surface albedo 11
4.6 Selection of typical conditions 11

5 Measurement of screen characteristics 12
5.1 Aspiration rate 12
5.2 Internal ventilation factor 12
5.3 Representative height and screen reference point 12
5.4 System response time 12

Annex A (informative) Influence factors 14

Annex B (informative) Examples of useful test-report graphs 17

Bibliography 22