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Nota di contenuto	Cover; THE WEATHER OBSERVER'S HANDBOOK; Title; Copyright; Dedication; Acknowledgements; Abbreviations, footnotes and references; PART ONE: THE BASICS; 1: Why measure the weather?; About this book; Weather enthusiasts and amateur meteorologists; Professional users; Schools, colleges and universities; Weather-dependent outdoor activity professions and organizations; Topics covered; Geographical coverage; Automatic weather stations; The makers of the observations; The longest-running weather observations in the world; The longest temperature record in the world:1959 to date Uppsala, Sweden - 1722 to date59.847°N, 17.635°E, 25 m above sea level; Padova (Padua), Italy - 1725 to date; 45.402°N, 11.869°E, 20 m above sea level; Stockholm, Sweden - 1756 to date; 59.342°N, 18.055°

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The Radcliffe Meteorological Station, Oxford, England - 1815 to date51.761°N, 1.264°W, 63 m above sea level; The oldest weather records in North America; Central Park, New York - 1869 to date; 40.779°N, 73.969°W, 40 m above sea level; Blue Hill Meteorological Observatory, Massachusetts - 1885 to date; 42.212°N, 71.114°W, 193 m above sea level; Subiaco Abbey, Logan County, Arkansas - 1897 to date; 35.303°N, 93.637°W, 152 m above sea level; Times of change ...; Why are instrumental and observing standards necessary?; The future; Further Reading; References; 2: Choosing a weather station
Step 1: What will the system be used for?Typical uses for AWSs; Advantages of AWSs; Cost-effective deployment; Lower resource costs; Improved sensors; Objective digital data; 'As good or better' record quality; Disadvantages of AWSs; Data loss owing to system failures; Data loss owing to sensor failure; Step 2: Decision factors for AWSs; How good is the exposure where the AWS will be located?; How many weather elements are to be measured using the system?; Will all the sensors be exposed in one place, or will they be sited separately?
Is there a requirement for backup system/s and conventional instruments?Does the system need to be capable of being expanded over time?; What sensors are required - 'standard' (built-in) or specialist sensors?; Will it be cabled or wireless?; Will it be PC-based or have a separate logger?; What degree of automation is sought?; What degree of accuracy and precision is sought?; How often is the information updated?; How robust does the system need to be? What is its desired or expected lifetime?; Is the system 'mission-critical'?
Is climatological continuity/compatibility/parallel running to 'official standards' a requirement?

Sommario/riassunto

The Weather Observer's Handbook provides a comprehensive, practical and independent guide to all aspects of making weather observations. Automatic weather stations today form the mainstay of both amateur and professional weather observing networks around the world and yet - prior to this book - there existed no independent guide to their selection and use. Traditional and modern weather instruments are covered, including how best to choose and to site a weather station, how to get the best out of your equipment, how to store and analyse your records and how to share your observations with other people and across the Internet. From amateur observers looking for help in choosing their first weather instruments on a tight budget to professional observers looking for a comprehensive and up-to-date guide covering World Meteorological Organization recommendations on observing methods and practices, all will welcome this handbook.