

Amateur Observing into the 21st Century- New Technologies, New Opportunities

SATURDAY 19 NOVEMBER 2005

The importance of amateur observers in the nineteenth century – Mr Malcolm Walker, RMetS

Malcolm Walker will speak about the ‘gentlemen amateurs’ of the 19th and early 20th centuries, with particular reference to their roles in the formation and development of the Royal and Scottish Meteorological Societies and their importance in helping the Meteorological Office meet its observational commitments in the early days of the International Meteorological Organization. In the latter part of his talk, he will focus upon the transfer of responsibility for the British Rainfall Organization and weather observations in general to the Meteorological Office.

Commerical applications of private AWS Networks – Mr Alistair Barron, Weather Front

The presentation will give some insight into the diverse use and location of simple Automatic Weather Stations. Weather Front Ltd supply instruments to a broad spectrum of commerce, education and leisure. Their customer base includes many well known names and institutions with installations in the UK and around the globe.

Getting the most out of your AWS – Mr Stephen Burt, Stratfield Mortimer, West Berkshire

The author installed his first AWS in 1993 and it is still going strong today after providing well over one million observations in the meantime. This session will cover how to get the most out of the wide variety of AWS systems, sensors and loggers on the market today, considers the main benefits offered by AWS, and presents suggestions with practical examples on how to manage and analyse the enormous volumes of data generated.

Making observations – instruments, exposure and observing standards – Mr Chris Hall, Met Office

This talk will describe observing standards maintained across the Met Office surface observing networks. These include manned and part-manned synoptic stations, fully automatic weather stations and stations run by voluntary observers recruited to provide

observations meeting climate requirements. The conditions under which observations are made need to be carefully controlled and this is particularly true for observations used for climate purposes where requirements for accuracy and reliability are particularly demanding. The talk will also describe initiatives to augment routine observations by real time reports received from the general public and voluntary observers.

The US citizen weather observer program (CWOP), an internet and ham radio based, international, volunteer collaboration – Dr Tim West,

Meteorologica Ltd

Dr West will present an overview of the goals of CWOP and a brief history of its origins within the Ham Radio and the Internet communities. Also discussed will be the demographics and trends of CWOP membership within the United Kingdom and around the world. Dr West will describe how CWOP's members have used their talents and resources to build a robust and technically advanced infrastructure, with assistance from the National Oceanic and Atmospheric Administration (NOAA). Finally, a few thoughts will be offered on CWOP's future direction.

Running an amateur observing network – the climatological observers link – Dr Roger Brugge

Founded following an early correspondence in 'Weather', the COL organisation has now completed over 35 years of bringing together weather observers and their observations. During that time the technologies available to COL have evolved to the point where a lot of automation is now possible. After introducing the organisation and its' activities, this talk will look both backwards (at the paper-based beginnings) and forwards (to online developments). The speaker is currently the editor of the monthly COL bulletin and has been running his own weather stations for over 30 years.

Discussion, prediction, analysis and investigations through the TORRO web forum – Mr Stuart Robinson, TORRO

Using a case study of the severe thunderstorm event of 18 -20th June 2005, the speaker will illustrate the use of an interactive internet forum in severe weather research. The presentation will describe:

1. Discussions and analysis of preceding synoptic development and updates
2. Issues of Watches and Advisories
3. Final Watches giving special emphasis (e.g. to large hail)
4. Real time posting of storm/other reports, including early notification of severe weather occurring. Also, pooling of membership resources to search for media reports
5. Follow up work, data collection, appeals for information on large hail, extreme

rainfall; made much easier as weather reports on the forum had highlighted the areas of special interest. A very comprehensive site investigation of an extreme rainfall event.

Winter Observing – An American GI’s Perspective – TSgt Asha M Gray, NCOIC, RAF Mildenhall Combat Weather Team

A discussion focused on winter weather observations in East Anglia from the view of an American military forecaster. How we do what we do, the impact of winter weather on operations and all of the great weather support available from English sources to Americans.