



### Introduction.

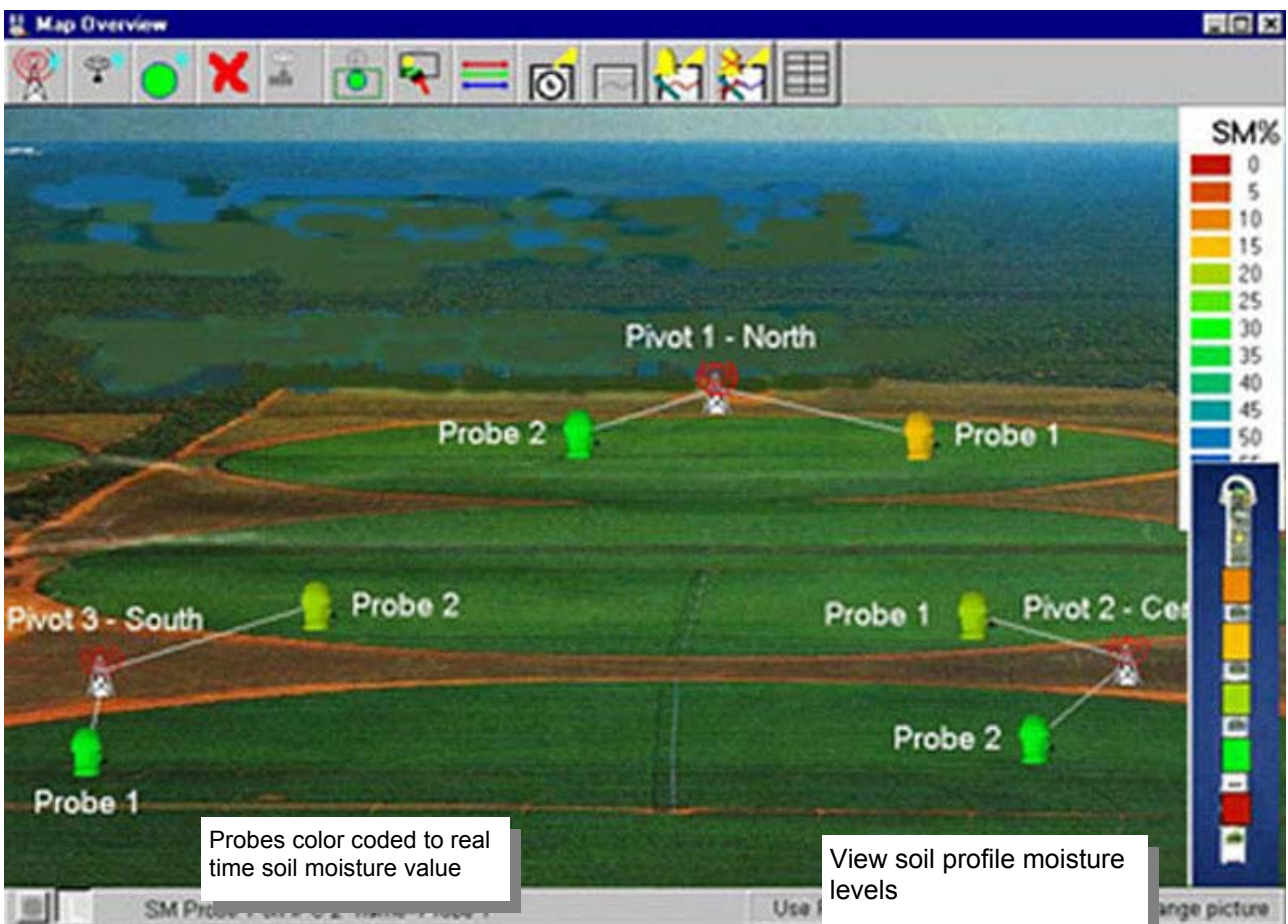
Welcome to our first newsletter for 2003. In addition to our existing customers, I would also like to welcome many new readers to our newsletter who have expressed interest in our products and services over the last few months.

The 2002 year and early 2003 have been extremely busy for us with the development of new telemetry hardware and new data presentation software for our recording systems. A quick update of current activities follows.

### GIS style mapping Software.

We have developed an additional software data presentation module for those systems using the EIT R Tech series data recorder. This module will provide GIS style concepts for data presentation. The module has been specifically designed for presenting soil moisture data in irrigated agriculture.

Map images of a monitoring site can be placed on the workspace using functions in the EIT mapping software toolbox. Sensor icons change colour according to either real time sensor values or data held in the underlying databases. The 'color' of the sensor icon can represent either the maximum, minimum, average, or individual sensor value for the sensor at each monitoring site. This method of data presentation provides a quick, easily comprehended graphical overview of monitoring areas. Trend graphs of historical data can be viewed by clicking on any sensor on the map.



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## SMS Alarm systems

We have continued to enhance the SMS alarm-messaging component of the EIT data recorder. Any EIT R Tech series data recorder fitted with a Wavcom GSM modem can initiate a dial out SMS alarm to your mobile phone. The recorder currently supports ten different alarm functions. These alarms can be assigned to any channel of the data recorder.

The data recorder can be programmed to provide high and low level alarm messaging for each channel. Examples of alarms include alarming for soil moisture, temperature, wind, and pumping functions.



## International business development

Dr Rob Hannah undertook a business mission to Spain and the UK in March this year. Whilst in Spain Rob attended the inaugural Sentek European Distributors Conference where he presented details of EIT products in relation to soil moisture monitoring in irrigated agriculture.

### Spanish projects

We are happy to announce the successful installation and commissioning of our first monitoring system in Spain. This project is a network of seven Sentek EnviroSMART soil probes connected via EIT telemetry to a central data recording station. The data recording system is fitted with a Wavcom GSM modem which allows us direct access to the data recorder and telemetry network from here in Australia via international fax data network. Client access to the site is also via the local Spanish digital phone network.

Information collected over the telemetry network is stored in a EIT R Tech series data recorder. Soil moisture data is automatically exported to a Sentek database and irrigation scheduling undertaken using Sentek ES 4.1 Version software



The installation was undertaken by INTA (Aguilas Murcia -Spain). Seniors Leif Jensen and Javier Lopez of Innovaciones Tecnicas Agrícolas coordinated the project. Photo courtesy Javier Lopez.



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## Chinese visit

We were pleased to host a recent visit from Ms Jane Li and Mr. Zhai Song from Aozuo Ecology Instrumentation Ltd, Beijing. Jane and Zhai visited Australia to specifically view world-leading technologies used in irrigated agriculture. Whilst in Australia I had the pleasure of accompanying Jane and Zhai on a visit of soil moisture monitoring installations in South Australian vineyards. We particularly wish to thank Dave Williams of Yandilla Park Services, Adelaide for coordinating and sponsoring our field trip.

Installations visited use EIT data recording and telemetry systems for data collection and Sentek EnviroSMART technologies for soil moisture measurements.

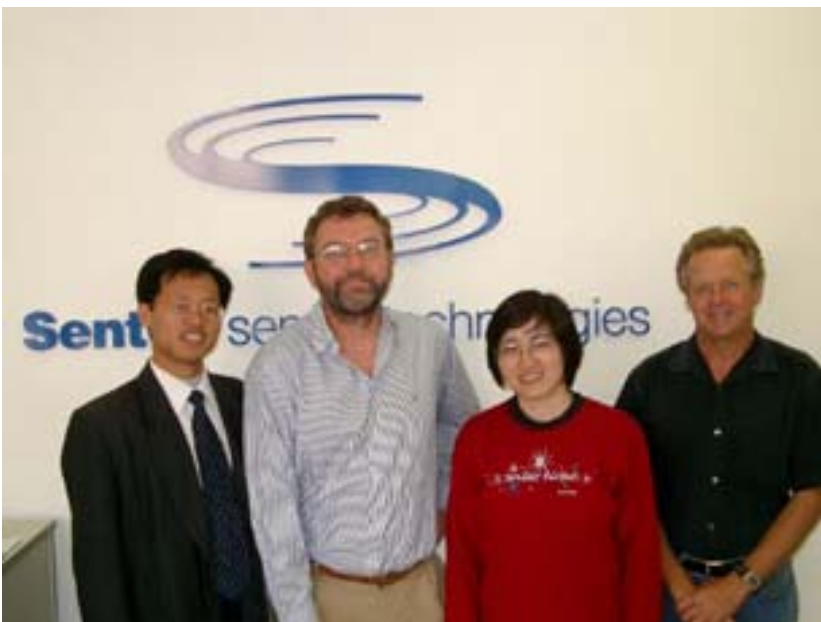
Yandilla Park Services provides design, installation, maintenance and consulting services to agriculture in South Australia.

### Visit to Sentek Technologies (Adelaide)

Whilst in Adelaide Jane and Zhai visited Sentek headquarters to meet staff, view soil moisture measurement technologies and latest software developments for irrigation management. On behalf on Jane and Zhai I would like to thank Sentek staff for their very generous time and hospitality



Peter Keynes ( Yandilla Park Services ) explains soil moisture monitoring network. Soil profile data is transmitted at 10 minute intervals to EIT base station fitted with GSM ( mobile phone ) modem. Sentek software is then used for decision support and irrigation scheduling.



L to R. Mr. Zhai Song ( Aozuo ), Peter Buss ( Sentek ), Col Peak (EIT), Ms Jane Li ( Managing Director – Aozuo )



BRL Hardy Wines – South Australia..  
Soil moisture monitoring system.

Designed and installed by Yandilla Park Services

Base station and receiver antenna collecting data from nine Sentek soil probes fitted with EIT data transmitters.

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## **Effluent Irrigation Trial Mullumbimby, New South Wales**

In association with Southern Cross University, we have installed a small soil moisture monitoring system at Mullumbimby in Northern New South Wales. Project coordinators Dr Keith Bolton (SCU) and Ms Amelia Balson (Byron Shire Council) are undertaking the trial to investigate sub-surface movement of secondary treated effluent and the fate of nutrients under different management conditions.



## **Waterwise Course**

In March this year we presented an overview of EIT telemetry and data recording technologies at the Waterwise Course conducted by NSW Agriculture at the township of Scone. The presentation included a demonstration on the use of soil moisture probes including Streat Aquaflex straps and Sentek EnviroSMART soil profile probes

## **Irrigation Association Australia - Dubbo, NSW. 6<sup>th</sup> and 7<sup>th</sup> May.**

We will be attending the Irrigation Association of Australia annual conference to be held in Dubbo, New South Wales and welcome you to visit to our display.

## **Cotton Trade Show. Moree 28<sup>th</sup>, 29<sup>th</sup> May 2003.**

Mr. Pat Menkens of Menkens Irrigation (Bundaberg, Queensland) will be representing us at the annual Cotton Trade Show held in Moree each year. Pat will have EIT telemetry products for monitoring soil moisture in cotton on display. Pat has a vast range of experience with the Sentek soil moisture monitoring technologies and is highly regarded throughout the irrigated cotton industry.

**Staff news.** We wish to welcome Glen Gibbs to our staff. Glen joins our team to assist with design, service and repairs of our radio technologies. Glen has an extensive 20 years experience specialising in electronics and radio systems and holds technical qualifications in electronics. He is also a very keen fisherman so we look forward to tall tales of fishing exploits.

## **Contact Information**

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