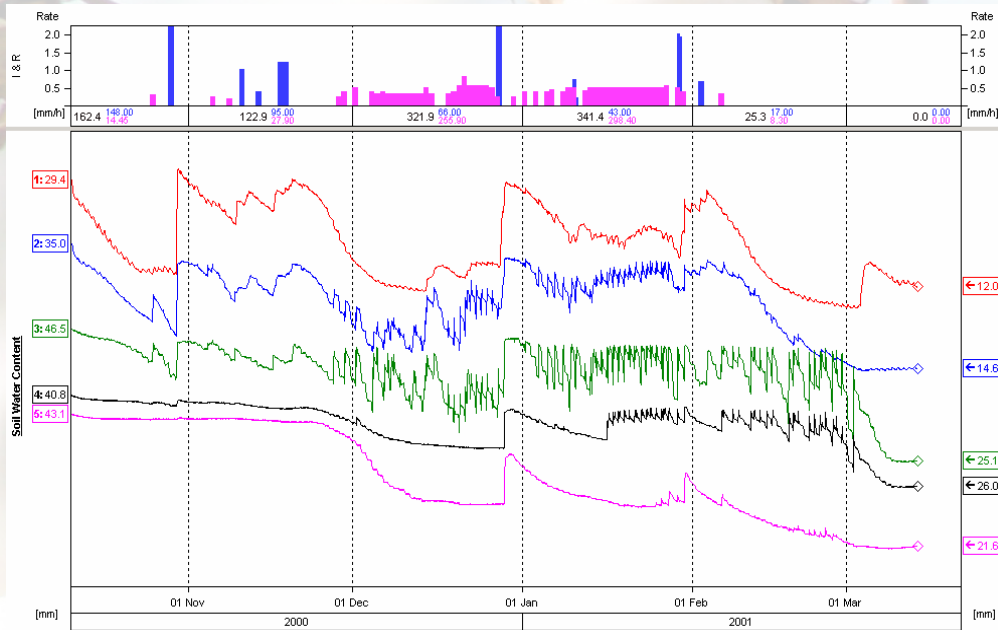


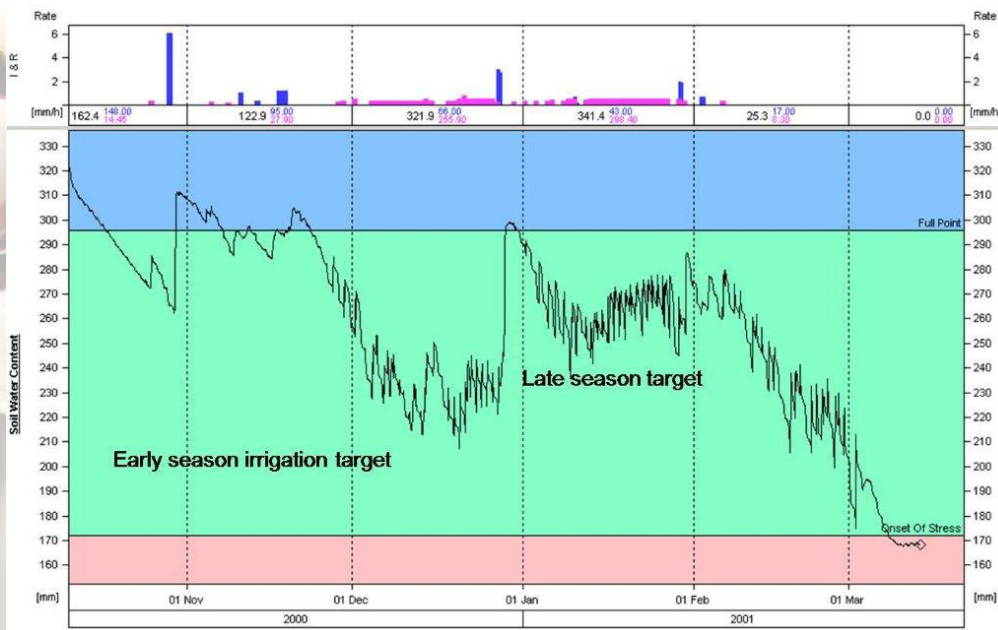
In this example of irrigation management in a cotton crop, the high resolution data of EnviroSCAN probes was used to optimize water efficiency.

Effective irrigation management in cotton is critical to achieve optimum quality and yields. Crop water stress due to too much water can have three times the impact on yields than water stress due to insufficient moisture.

**In this cotton crop, sub-surface trickle rrigations were matched to specifically meet the dynamic soil water conditions and crop requirements.**



**Changing soil moisture displayed in Sentek's IrriMAX software**



Water was applied using subsurface irrigation, with the drip line located at a depth of 25 cm below the ground surface.

Starting with a full profile in October, only five small irrigations were required before 1 December.

From that point until 10 December supplementary irrigations combined with the moisture available at 50- 80cm depths supplied all the plants requirements. When the water at 80cm was used up, irrigations were increased to supply all the plant's needs.

The dry soil profile meant that when rain fell in late December, it was all captured in the profile with no leaching below the root zone. The same principle was then applied to the end of the season.

**This strategy resulted in optimum yield, quality and water-use efficiency for the site. Being able to effectively measure the soil water dynamics using the Sentek EnviroSCAN probe was fundamental to achieving these results.**