



## **A small study of the effect of Sleep systems when used with different mattresses.**

**Arnhem, Holland, May 2011**

When asked how to use Symmetrisleep with alternating mattresses our response has been that if there are policies in place regarding pressure care that one is perfectly safe to use our stretchy "Velcro" sheets, brackets with pads and our stretchy top sheets (Bamboo or Coolover) as the effectiveness of the mattress will not be compromised.

However, following examination of our Airmantle using FSA pressure monitors, we were pleased with it's performance as a pressure relieving topper. Going further, we then examined the Airmantle in conjunction with static and alternating mattresses to see how they performed together. Our findings suggest that the Airmantle does not reduce the effectiveness of the mattresses studied and in some cases can actually improves performance.

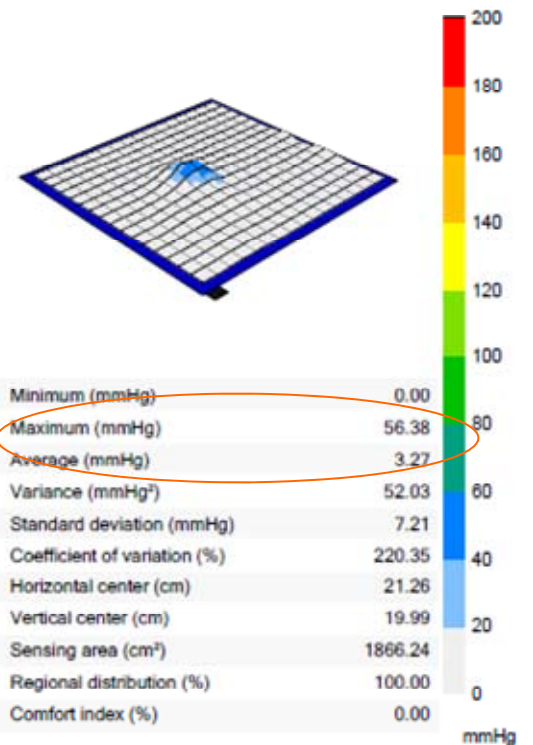
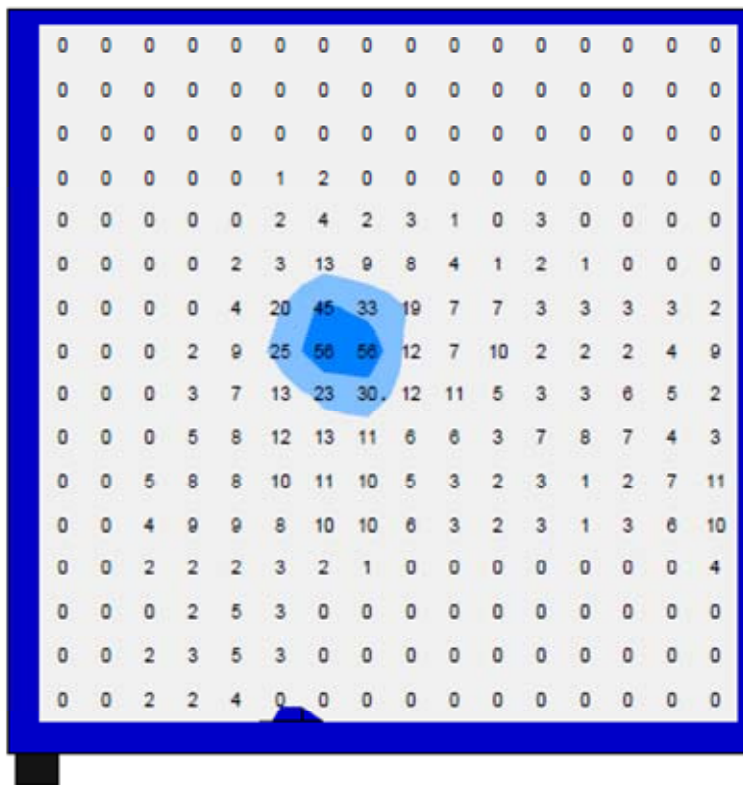
NB: If you are introducing a new interface, of any sort, it is always recommended that you increase the frequency with which you inspect of skin condition until you are satisfied that you have a positive outcome.



**[www.symmetrikit.com](http://www.symmetrikit.com)**

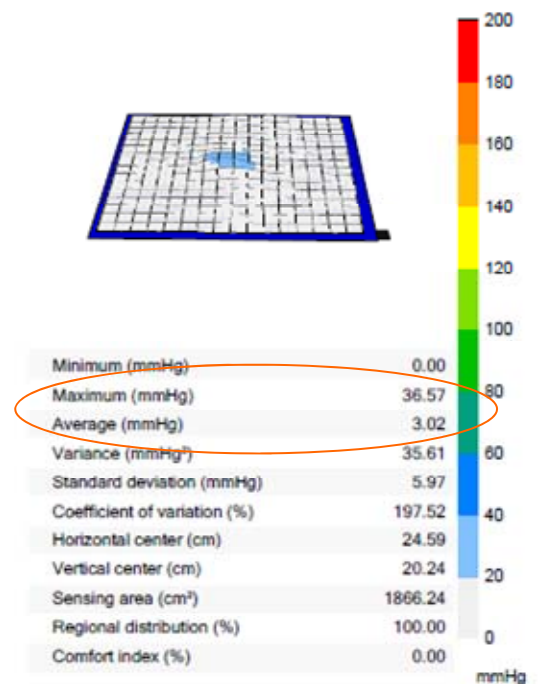
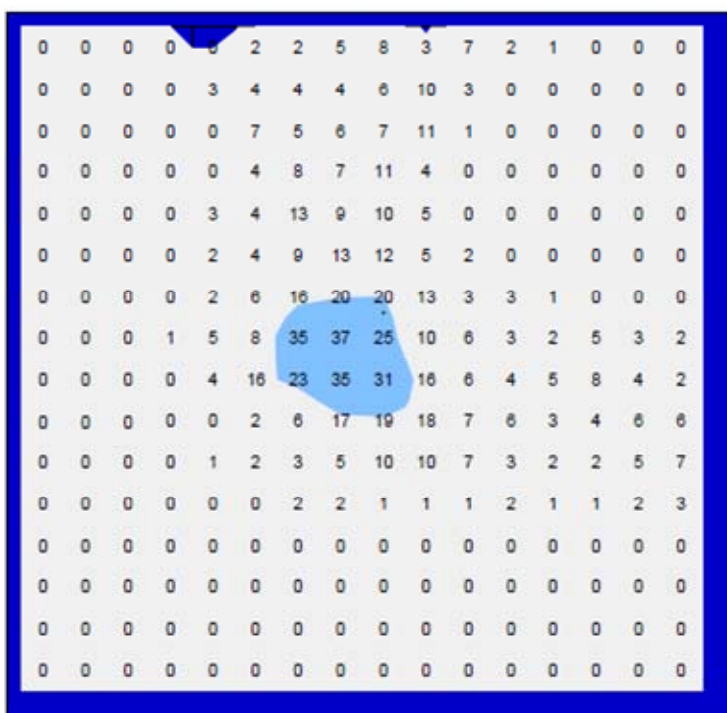
Side lying on a Hill Rom Primo alternating mattress– measuring under the hip, no Airmantle in place..

28 April 2011 11:46:48.687



Side lying on a Hill Rom Primo alternating mattress– measuring under the hip, with Airmantle in place.

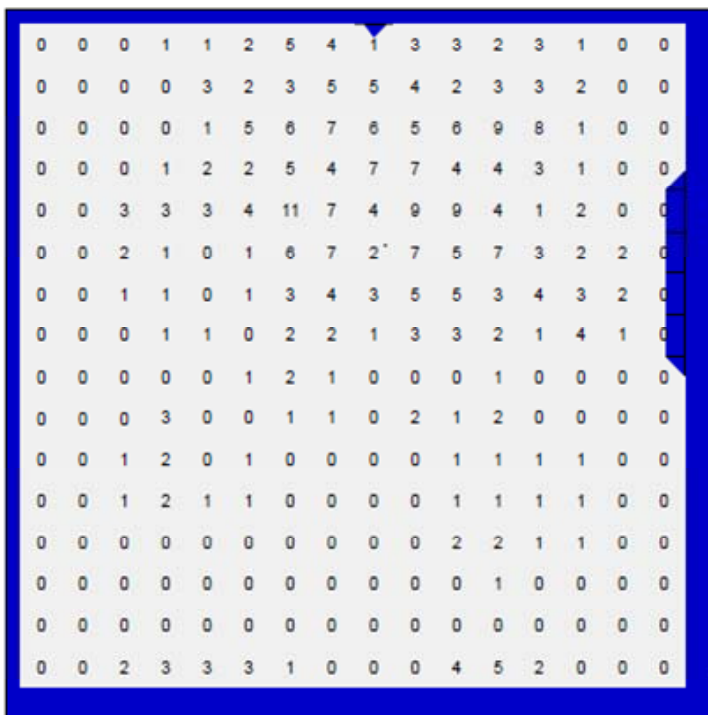
28 April 2011 11:57:01.796



So, a good result. The Airmantle does not have a negative impact, indeed it has a positive effect, reducing average and point pressures.

Supine lying on a Hill Rom Primo alternating mattress- measuring under the buttocks, no Airmantle in place..

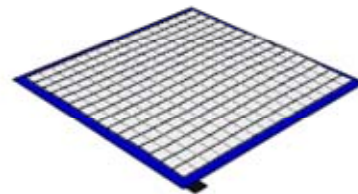
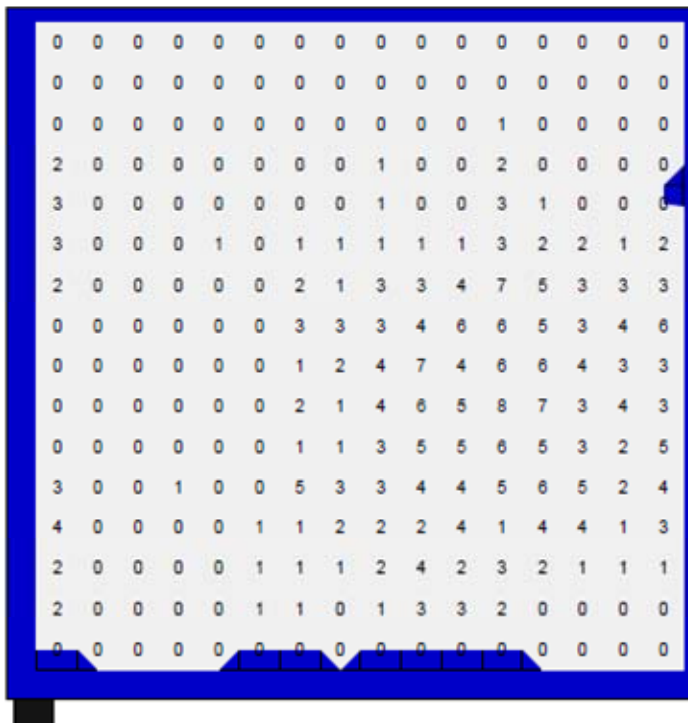
28 April 2011 11:45:10.015



Minimum (mmHg)	0.00
Maximum (mmHg)	10.90
Average (mmHg)	1.44
Variance (mmHg <sup>2</sup> )	4.36
Standard deviation (mmHg)	2.09
Coefficient of variation (%)	144.74
Horizontal center (cm)	28.87
Vertical center (cm)	19.48
Sensing area (cm <sup>2</sup> )	1866.24
Regional distribution (%)	100.00
Comfort index (%)	0.00

Supine lying on a Hill Rom Primo alternating mattress- measuring under the buttocks, Airmantle in place..

28 April 2011 11:56:09.842

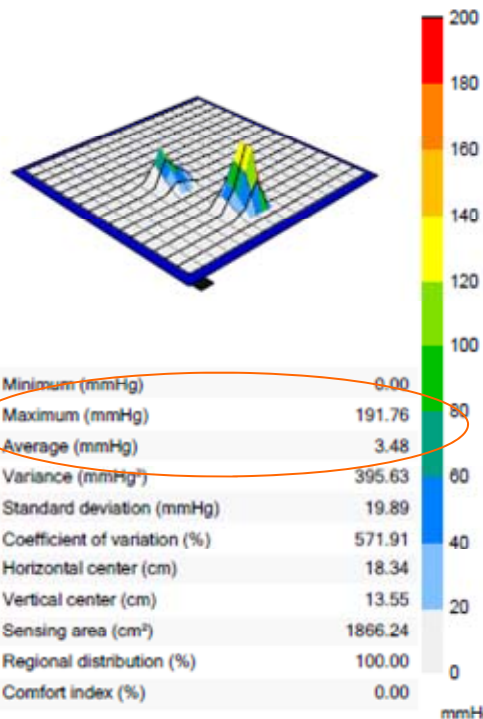
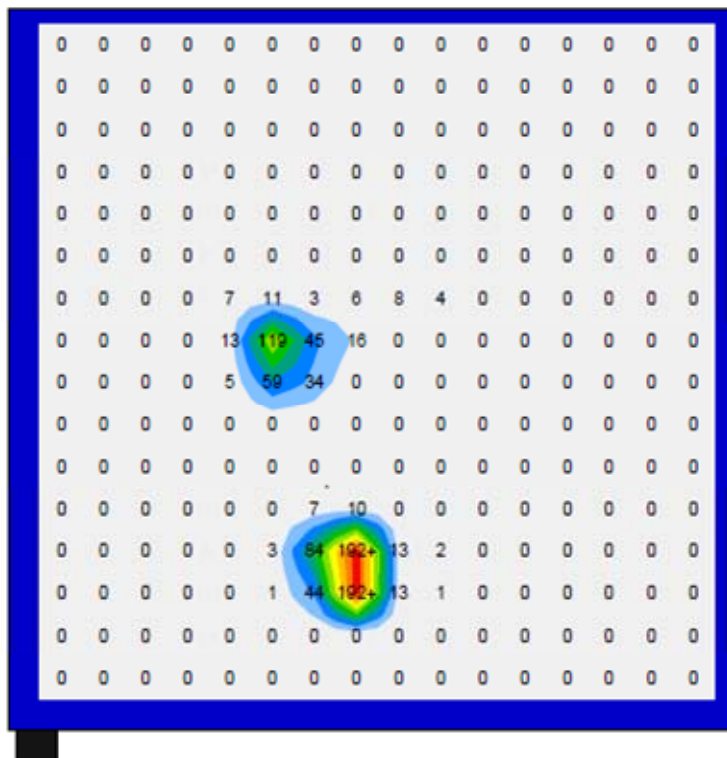


Minimum (mmHg)	0.00
Maximum (mmHg)	8.31
Average (mmHg)	1.32
Variance (mmHg <sup>2</sup> )	3.51
Standard deviation (mmHg)	1.87
Coefficient of variation (%)	141.67
Horizontal center (cm)	28.42
Vertical center (cm)	17.70
Sensing area (cm <sup>2</sup> )	1866.24
Regional distribution (%)	100.00
Comfort index (%)	0.00

So, another good result. The Airmantle has a positive effect. Both have such low figures that they do not show on the FSA image, so you need to study the MmHg figure in the chart.

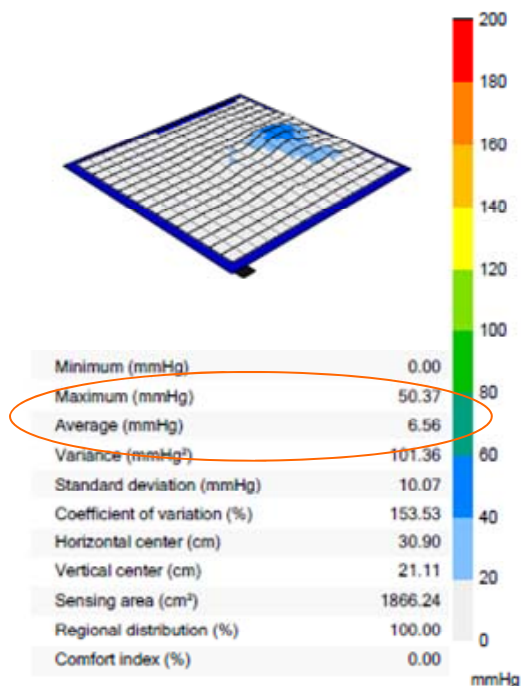
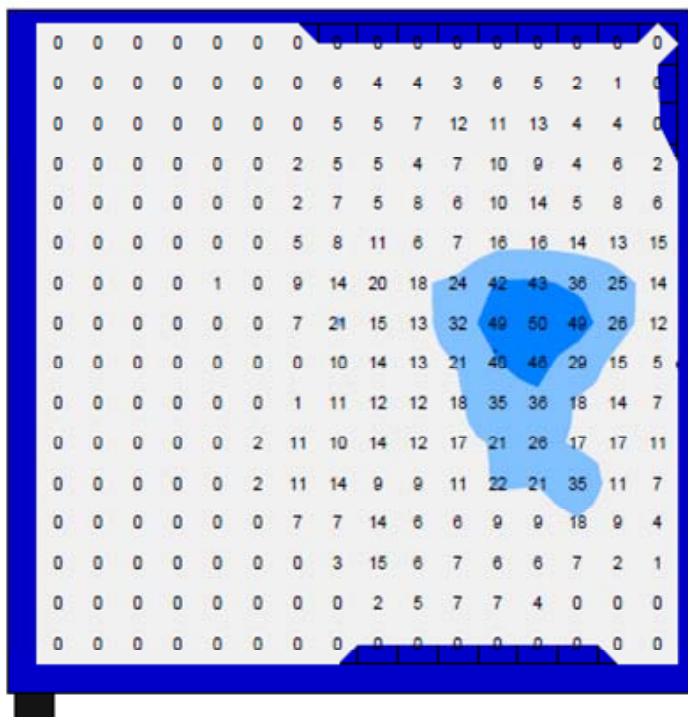
Supine lying –on static air mattress measuring under the heels, no Airmantle in place.

28 April 2011 11:14:19.546



Supine lying on static air mattress - measuring under the heels, with Airmantle in place.

28 April 2011 11:12:57.031



So, a good result. The Airmantle has a positive effect.