

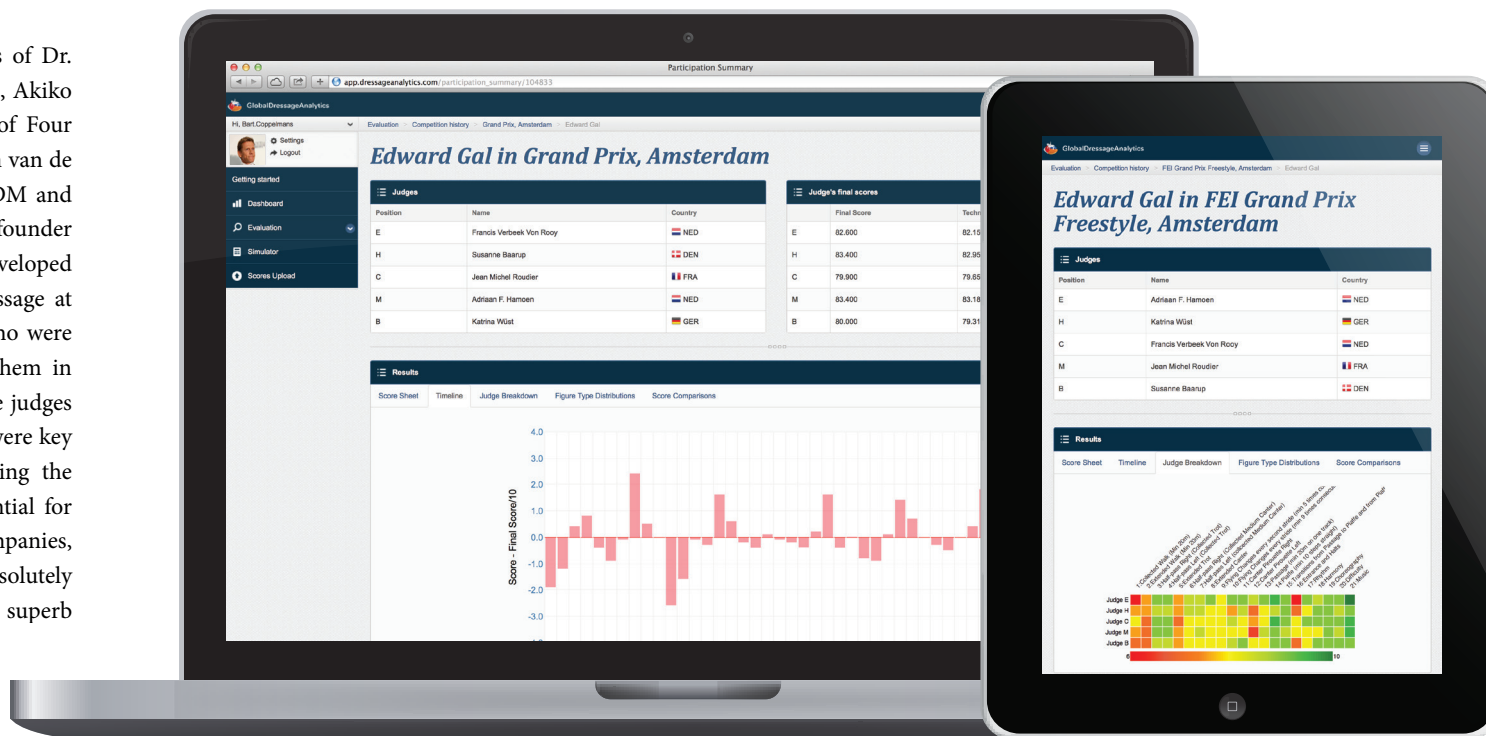
GLOBAL DRESSAGE ANALYTICS

AN EXERCISE IN FUN! COMPARING TOTILAS AND VALEGRO

Global Dressage Analytics (GDA) was co-founded by World Dressage Masters (WDM) in 2009 with a goal to bring science and analysis to the aid of the sport to help inform the decisions that federations, owners, breeders, trainers and riders need to make each day. By building up a database of results across the discipline and developing analytics based on that data GDA is looking for ways to make more objective decisions to improve both the sport and to improve individual performances.

ABOUT GLOBAL DRESSAGE ANALYTICS

The idea for GDA came from the joint visions of Dr. David Stickland a Princeton University Physicist, Akiko Yamazaki and Jerry Yang (founder of Yahoo) of Four Winds Farm (owners of Ravel and Legolas), John van de Laar Managing Director and co-founder of WDM and Anthony Kies, owner of the Exquis stables and founder of WDM. The ideas behind it had been developed along with Eva Salomon then Director of Dressage at the FEI and subsequently with Trond Asmyr who were interested in using these techniques to assist them in planning the future of the sport and to assist the judges in their task. Wayne Channon and Sjef Janssen were key collaborators with David Stickland in developing the ideas and in helping him understand the potential for quantitative analysis. The Dressage Scoring companies, in particular SCG and Hippodata, were absolutely crucial in simplifying access to the data and the superb DressageDirect service run by Claartje van Andel that gets the results of every CDI into mailboxes within hours of each class finishing has been absolutely invaluable.





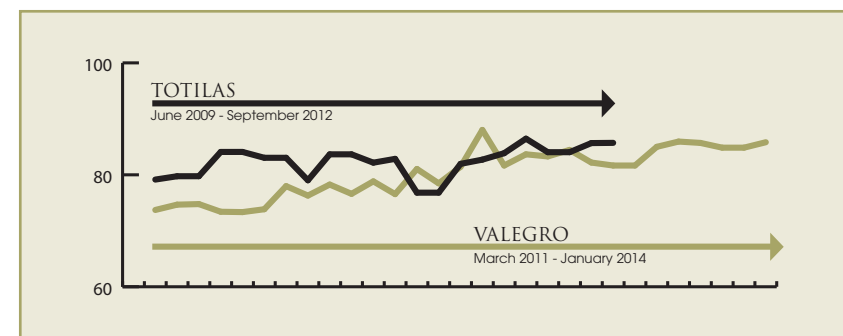
Dressage is of course an Art as much it is a Science, and it is clear that nobody gets into Dressage particularly out of a love for mathematics! But it is also a judged sport and at the end of the day that sport is measured in numbers. So understanding those numbers, understanding what is precise and what is not, what is normal and abnormal, which factors can be identified to have the most influence, these can all assist the various actors in the sport.

Because it is a sport based on visual measurements by human beings, comparing performance to perfection in ways that may evolve with time and with equine athletic ability that certainly evolves with time, we must always treat our conclusions with circumspection, comparing them with our external knowledge and thinking what is best for the sport, the official, the trainer, owner, rider and horse.

AN EXERCISE IN FUN! COMPARING TOTILAS AND VALEGRO.

In the last five years two horses have totally dominated the international scene, Totilas and Valegro, between them they have redefined excellence and of course assured themselves of a big role in the future genetics of the discipline! Totilas was brought to us by one of the most well-established professionals of the era, Edward Gal, while Valegro was the wings on which a new Dressage star Charlotte Dujardin was launched under the guidance of that other master professional Carl Hester. Totilas hit the International scene in June 2009 and hit his pinnacle at the WEG in Lexington, KY on October 1st 2010. Then Edward lost the ride and Totilas has not competed for almost two years. Six months later in March 2011 Charlotte and Valegro hit the ground running and by April 2012 they were performing at and above the same level as Edward and Totilas had. Since then Valegro has taken almost every honor possible. We are now all waiting to see how the couple will perform in the World Cup Final in Lyon this Spring.

So, these couples never met in a dressage arena, but for fun we could study the numbers and imagine how things might have been if they had of done! The last (non-Freestyle) score for Edward and Totilas was 85.7 in the Special at Lexington while the last Grand Prix



Score for Charlotte and Valegro at Amsterdam was 85.8! Amazingly, tantalizingly close.

Both the couples have been to 2 major championships (and of course won everything at each one), Totilas at Windsor (EC) and Lexington(WEG) and Valegro at London(OG) and Herning(EC), so from the figure scores at each of those events we can make a virtual competition to compare their relative strengths! Of course, it is just fun, these were two years or more apart, the judges were not the same at each event, the use of 7 judges and half-points was not yet in place for Totilas. But what you will see is how astonishingly close these two horses were...

To get better statistics we have combined the Grand Prix and Grand Prix Special results from these championship events and then plotted them on the same graph. In this graph we show not the actual scores but the difference between the two horses. Where Totilas scores more than Valegro the bars are above the centerline, when Valegro scores more than Totilas, the bars are below the centerline, and what is shown is the coefficient corrected point difference between the combinations.

Here we see the collected power of Edward and Totilas with their beautiful passage and piaffe as the figure types where they would come out on top, and we see the relaxed yet perfect changes and extended paces of Charlotte and Valegro! On average scores, Valegro would just tip Totilas at the post with an 84.7 compared to an 84.2, but with the new piaffe coefficients for 2014 they would be at 84.7(T) and 84.8(V), far too close to call. But in the last three years Charlotte and Valegro have steadily improved their passage scores by more than 0.7% and the trend is very steady...

Two beautiful horses, two superb riders, as a last fun exercise we could ask what would be perfection today? What if we could take the best figures of these two combinations and put them all together in one ride? Actually the final score of that super-horse would be about 87%, perhaps we will see it one day in a championship from Valegro? Or perhaps we must wait till the next giant hits the arena!

