

### **An example of successful collaborative efforts: 1ES2344+514**

Almost right after the current observing shift began a pair of the 1ES2344+514 runs had been taken. As 1ES2344+514 is my “old friend”, I observed it with HEGRA long time ago (e.g., see, Konopelko, Kettler, HEGRA, 26 ICRC, Utah), I looked at the data runs with Vegas. It became evident that a weak signal was developing, even though the statistical significance of the excess was rather low, at the level of 2.5sigma or so. I posted my results to the “Analysis&Calibration” elog, which is, I believe, an appropriate place for such kind of messages. Right after that Jamie managed to analyze the same pair of runs with EventDisplay and confirmed a 3sigma excess. It is really great to have at least two analysis packages, which can be effectively used for any immediate cross-check, if needed. Jamie quickly contacted Henric, myself to get our input regarding future plans etc. I was arguing that we better take about one hour or so per night in order, first, to confirm the detection, and secondly, for further monitoring this source. I am very glad that this strategy was finally accepted and we’ve got plenty of nice data during passed days! After a couple of days or so, when it became clear that the significance, using both Wobble mode and Ring Background mode analysis, is exceeding 5sigma level I posted an email to the “Blazar group elog” claiming a solid gamma-ray source detection. By now we clearly see the signal at the level of 9sigma. In the meantime, Jamie, using EventDisplay, and Piere, using GrISU, has confirmed these results. On Thursday I reported on my results to the Blazar working group at the regular telecon. The Blazar group made a decision on continuing the observations using a strategy of taking 2-3 runs per observing night, as Henric summarized it in his follow-up email. That means that by the end of the current shift we might have a nice result on the 1ES2344+514 spectrum.

The general strategy of the VERITAS collaboration is that every collaboration member is able to take a look at any data. I believe that there is no, and should not be, any a priori prescribed source to any of the VERITAS member, as our research is, and must be a collaborative effort, I believe.

During last time I spent a lot of time on developing analysis tools (Vegas), and actually helping others to do analysis with Vegas. It is great that the Vegas analysis package is in a rather good shape by now. That was again a nice collaborative effort of many people! I am willing to work on the analysis of the 1ES2344+514, because in addition to what I said above; this is the object of my long-standing scientific interest; using the Vegas tools I am able to proceed with this paper rather fast and effective, I guess, that is what collaboration might need these days. This paper may open a window to a number of follow-up papers on multi-wavelength observations etc.

It is nice to state here that we have got another interesting physics result with VERITAS!