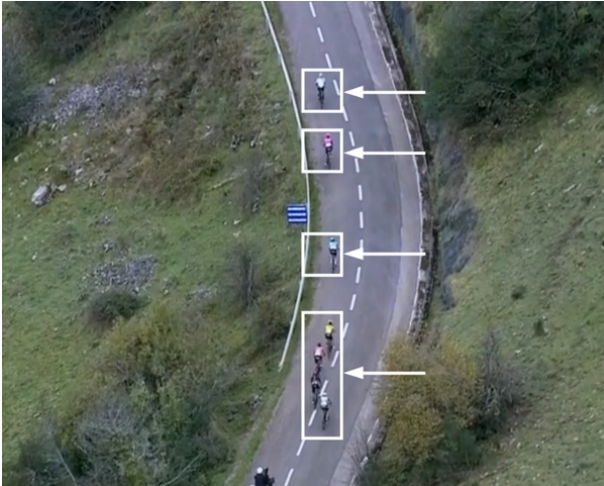


TourVis: Narrative Visualization of Multi-Stage Bicycle Races

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There are many multiple-stage racing competitions in various sports such as swimming, running, or cycling. The wide availability of affordable tracking devices facilitates monitoring the position along with the race of all participants, even for non-professional contests. Getting real-time information of contenders is useful but also unleashes the possibility of creating more complex visualization systems that ease the understanding of the behavior of all participants during a simple stage or throughout the whole competition. In this paper we focus on bicycle races, which are highly popular, especially in Europe, being the Tour de France its

greatest exponent. Current visualizations from TV broadcasting or real-time tracking websites are useful to understand the current stage status, up to a certain extent. Unfortunately, still no current system exists that visualizes a whole multi-stage contest in such a way that users can interactively explore the relevant events of a single stage (e.g. breakaways, groups, virtual leadership $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$), as well as the full competition. In this paper, we present an interactive system that is useful both for aficionados and professionals to visually analyze the development of multi-stage cycling competitions.