An application for visualization and analysis of the data recorded during drone flights is proposed and implemented. The application displays plots of the recorded quantities, estimates the trajectory and shows the orientation of the drone in time. A file format based on comma separated values and XML description that allows reading of recordings with a dynamic structure is designed. The application is extensible, programmed in Java using the NetBeans Platform. It can be extended to support new types of drones, file types or visualization tools. The application is tested with the recordings of the drone Parrot AR.Drone 2.0. Data can be recorded by a separate application while controlling the drone by the keyboard.