## **Antique Cars and Train Chase: Relative Motion**

The Tracker file shows a clip of a YouTube video of "Antique Cars Chasing the Train back to Strasburg": <a href="http://www.youtube.com/watch?v=nY1SfnkLQ6U">http://www.youtube.com/watch?v=nY1SfnkLQ6U</a>



The clip in the Tracker file records frames at about 25-26 seconds in the original video. At 25 seconds in the original movie, the yellow car is even with the train (and video camera). Using the data from this Tracker file find the following:

- Speed of the train relative to the ground
- Speed of the car relative to the ground
- Speed of the car relative to the train
- How far apart the person filming and the yellow car were at the beginning of the original YouTube video (25 seconds earlier).