

### EOSS-46 Drag Balloons Performance

Here's a quick-look of the drag balloons GPS data compared to the spreadsheet I sent out earlier today. I really did not do the comparison until now, really! The preflight prediction is close to the GPS data, far better than could be expected. We were shooting for 30 m/s (5900 fpm) at 100 kft for one drag balloon, 20 m/s (3900 fpm) for two drag balloons to simulate Mars re-entry. Of course we did not make it to 100 kft this time because the main balloon burst pre-maturely @~93 kft (must be quality control problems with big rubber balloons), but we obviously nailed the drag balloon performance! Below about 63 kft, Mike cut away the drag balloons, and the final descent was on parachute. In fact, it appears the parachute is starting to create extra drag ~65 kft. We are missing some data around 100s as Mike was trying to cut away the main balloon debris, but this is not as critical as it is for parachute descent.

