

4. Error Analysis

Specific Error	Impact on Data and Results	How could you reduce this error?
① did not completely dehydrate	↑ mass of dehydrate / ↓ % H ₂ O in hydrate	cook more thoroughly, multiple trials
② some hydrate was lost by sticking to the stir rod.	↓ mass of dehydrate / ↑ % H ₂ O in hydrate	be more careful w/ stir rod, not much other than that.
③ lost some dehydrate while cooking (blew away)	↓ mass of dehydrate / ↑ % H ₂ O in hydrate	be more careful, use a watch glass to cover.

How might these sources of error interact with each other and what affect would those interactions have on your results?

if ~~the~~ the magnitude of ① equaled the magnitude of ②/③ then the results wouldn't be too bad. otherwise ② & ③ will compound to make it appear that there is a lot more H₂O than there really is.