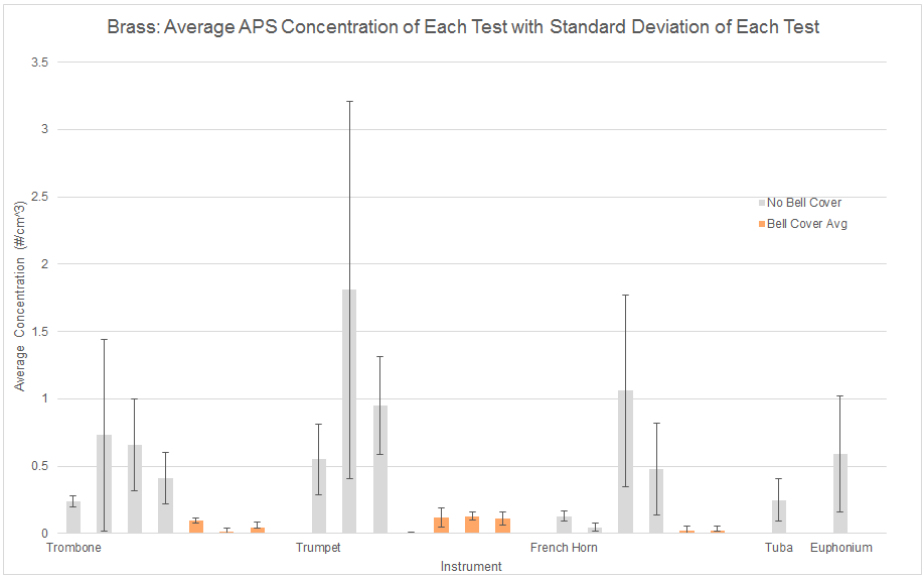
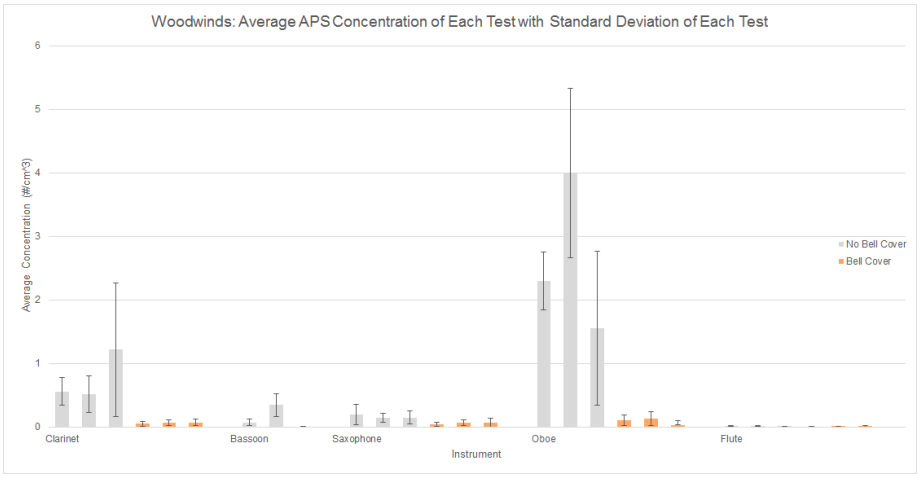
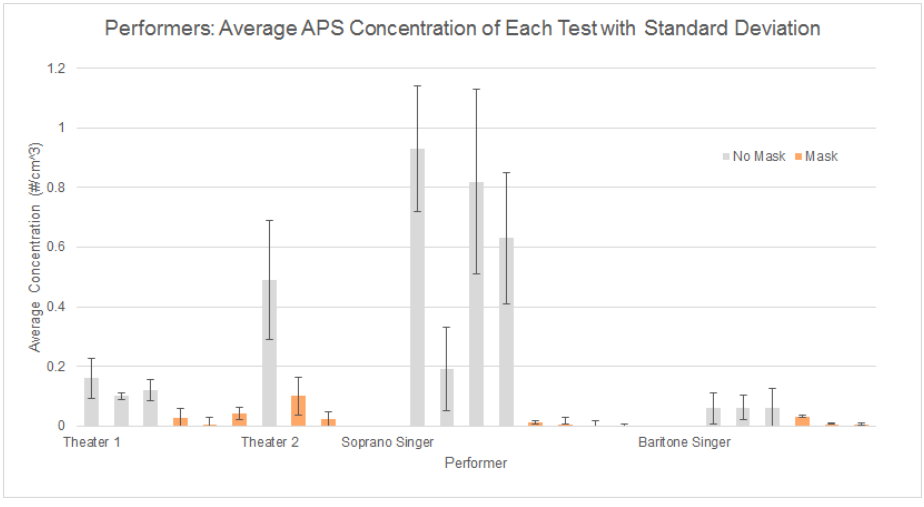
Appendix A

Each bar is the time average of each test. Each test was 4 - 5 minutes in length; the APS averages over 1 minute for each sample, each test is 4 or 5 APS samples. The error bars show the standard deviation of each test.







Appendix B

Sampling performed at the bell does not take into account what is expelled at the keyholes. Bell covers diffuse the air coming out of an instrument bell, causing the plume to not be as concentrated. The samples are also not as concentrated as when playing without a bell cover. The efficiency percentages below are related to the aerosol produced in Appendix A. It is important to identify the reference to the background aerosol levels between Appendix C, to fully understand the depth of the mitigated aerosol release.

Example A: Saxophone has an overall aerosol release of 0.7 pp cm3 unmitigated and an aerosol release of 0.32 pp cm3 (64% reduction) with a bell cover, placing mitigated saxophone just above background levels of aerosol.

Example B: Oboe has an overall aerosol release of 4.00 pp cm3 unmitigated and an aerosol release of 0.5 pp cm3 (96% reduction) with a bell cover, placing mitigated oboe in line with other mitigated instruments and singers.

Instrument	Efficiency Calculated, Sampled at Bell / Mouth
Saxophone	64%
Flute	67%
Baritone Singer*	79%
Theater 1*	80%
Clarinet	87%
Theater 2*	88%
Bassoon	89%
Trombone	89%
Trumpet	92%
French Horn	95%
Oboe	96%
Soprano Singer*	98%

* Measurements taken at the participants' mouth