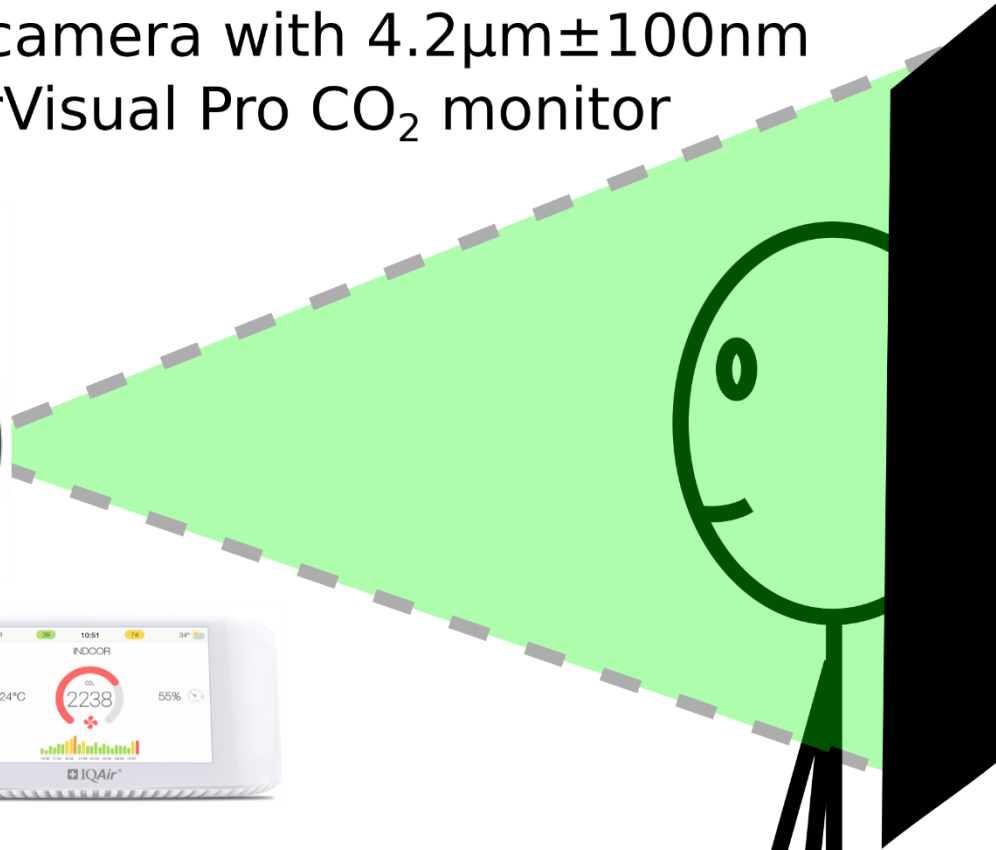


Flow In and Around Rapid- Manufacture Face Masks

Caroline Marshall, Gareth Keevil, Jim McQuaid,
Nikil Kapur, Dave Hodgson, Peter Culmer

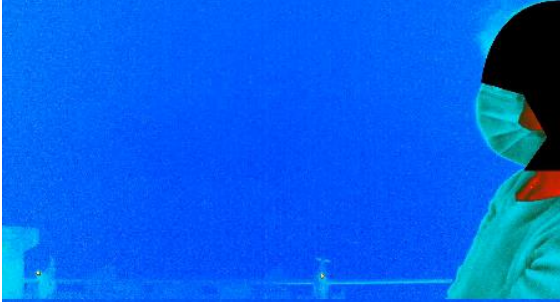


Flir X8500SC camera with $4.2\mu\text{m}\pm 100\text{nm}$ filter, IQAir AirVisual Pro CO₂ monitor

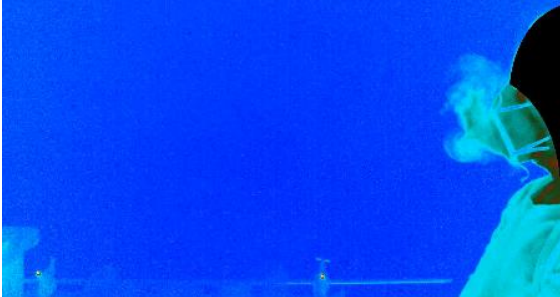




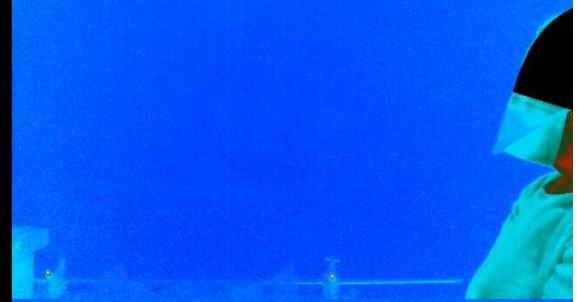
Paper mask



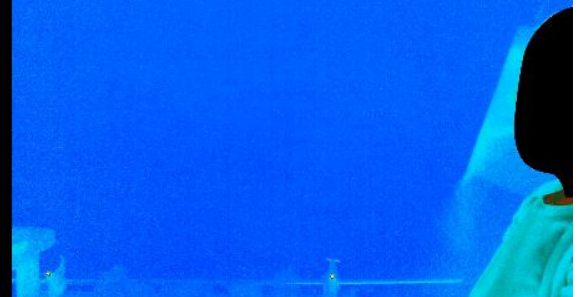
Mayku mask



Duckbill mask



Visor



Duckbill Mask Breathing

In conclusion:

- This setup is well suited to capturing exhalations (for both outreach and for qualitative comparison)
- Masks have weak points at seams and nose bridges...but should be worn properly
- See poster for in-mask flow!

