

# UAV-ready sensor package

## The Challenge:

- Instrument suitable for in-situ measurements *in a high hazard area – volcanic plumes*
- Provide real time information for plume risk management by local authorities
- No safe access to high hazard areas – either on the ground or using manned aircraft



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## Solution:

- Unbiased isokinetic aerosol sampling from a UAV
- Accompanied by gas measurements (SO<sub>2</sub>, CO<sub>2</sub>, H<sub>2</sub>S)

## STFC's role

- Providing UAV platform and operators
- CFD analysis to optimize isokinetic sampler design
- Build and design of instrument package and inlet

## The Future

- Test flights – looking for opportunities
- Use in Volcanic and other air quality applications
- Exploit the technology (for example see air quality in ports project)

