

Costs and Risks of Continuous Purges for Instruments

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As instruments are built, tested, and launched, they are exposed to environments that have various levels of cleanliness. Often, Scientists and Contamination Control Engineers specify a purge to mitigate the instrument's exposure to a non-clean environment, protect sensitive optics from a specific threat, such as water, or as insurance against things going wrong in a clean environment.

The cost of the purge, in effort, dollars and risk, is often understated when the requirements are being established, and the need for purge is not clearly justifiable.

This paper will more clearly define some of the costs and risks associated with the continuous purging of instruments during the course of building, testing and launching instruments.

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