

Filming in the NSF-ICF, a guide to filming in the freezer

TEMPERATURES

The warehouse area around the outside of the freezer is anywhere from about 55°F (13°C) in the winter to about 85°F (30°C) in the summer.

IN THE FREEZER:

- The Dock area is about 35°F (about +2°C)
- The exam room, which is our sampling room, is -10°F (-24°C)
- Main Storage, where the ice is archived is -36°F (-38°C)

THINGS TO BE AWARE OF WHEN FILMING

Lubricant freezes, cables freeze, batteries freeze, fingers freeze, and people freeze. Things frost when coming out of the freezer.

LIGHTING

The lab uses LED lighting for room lights.

For added lighting:

- LED, tungsten and HID work fine, fluorescent will not always start or come up to full brightness (they will be alright if started while still warm but have difficulty if cold soaked).
- NO HOT LIGHTS NEAR THE ICE CORE! You can use them, just not close to the ice core.

SOUND

It is noisy in the exam room because there are several fans circulating the cold air in the freezer. We can't turn the fans off.

Sound Equipment:

The recorder usually works fine, the microphone cables freeze.

Use remote mics if you can.

If you have normal vinyl coated microphone cables, un-wind them and straighten them out before you get into the cold and don't flex them too much in the cold. If you bend them too tightly in the cold, the vinyl insulation cracks and breaks off.

CAMERAS

Unless you have multiple cameras, always plan on working warm to cold. Plan your warm shots first, then progress into the exam room, then do final shots in the main storage.

When a camera comes out of the freezer, it will frost. Even coming from main storage to the exam room they will frost. When in the freezer, don't blow on the lens, it will frost.

How long it takes a camera to warm up depends on how long it was in the cold, usually longer than an hour. Bring a couple of large plastic bags (plastic trash bags work) to put the camera in before you bring it out of the freezer, this will keep dry air around the camera and prevent frosting while warming up. The same applies to the sound gear. If you don't have big bags, we will give you a couple.

Bring several batteries and chargers. Batteries tend to get cold quickly and loose power.

If you have a jacket for the camera, bring it. It's best if you can add hand warmers inside the jacket to help keep the camera warm.

Cameras usually work for long periods in the -10°F (-24°C) exam room. In the -36°F (-38°C) main storage, longevity is camera dependent, some cameras have worked for a couple of hours, some have worked for only 15 to 20 minutes. Usually the lubrication in the lens mechanism begins to freeze and the camera stops functioning properly. If you are using film or tape, the transport mechanism begins to slow down after a while.

If the camera person has fingerless gloves and some thin liner gloves, they should bring them. The camera persons hands usually get pretty cold.

CLOTHING

NSF-ICF does have some Extreme Cold Weather clothing that can be used. We have outer insulated suits, Mickey Mouse (or bunny boots) boots, some hats and some gloves. If you have fleece jackets and pants you should bring them to wear under the suits. Bring your own warm socks.

If you have any questions, please don't hesitate to email or call and we will attempt to answer your questions.

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