

Instructions for Filling 2MASS with LN2

1. Lift LN2 dewar on top of blue adjustable cart and wheel it close to the instrument. Make sure the cart is roughly level with the instrument fill port.



2. Hook up yellow rubber hose to LN2 tank. It should already be hooked to the instrument, but if not hook up to the LN2 fill port.



3. Take off small silver clamp that is on the yellow hose.



4. Hook up the N2 clear hose to the venting port on the LN2 dewar.





5. Open the LN2 dewar to start filling 2MASS.
6. Open the small venting valve on the dewar, on this dewar its the small gold valve right next to where the clear hose attaches.
7. Turn on the N2 by the pier by turning the grey handle to open the cannister. This doesn't have to be open all the way. Adjust how much pressure is coming out by turning the gold handle on the gauge. Note clockwise turns the pressure up.



8. Watch the LN2 dewar very carefully, and adjust the gold handle on the N2 as needed so the pressure read out on the LN2 dewar maintains at 9 psi. Note in the picture below it's reading at ~5 psi.



9. On the north end of the room, there is a table and on it is a blue binder. Open the binder and record everything but the end time. The dome temp can be found on the wall by the door.





2MASS Dewar Fill Times

Date	Start Time	End Time	Dome Temp	Initials
2/21	8:02	8:03	41°	DS
4/13/18	10:57	11:04	29°	DS
4/14/18	8:44 _{pm}	8:51	28°	DS
4/14/18	6:38 _{pm}	6:42 _{pm}	40°	DS
4/15/18	4:37 _{pm}		51°	PM
4/16/18	3:06 _{pm}	3:21 _{pm}	50°	SB
4/17/18	3:19 _{pm}	3:32 _{pm}	44°	SB
4/18/18	2:00	2:09	46°	SB
4/18/18	18:35	18:55	46°	PM



10. When 2MASS is full LN2 will come out of a port on the camera, this is normal. Turn off the flow of N2 by closing the grey knob on the N2 container all the way and back off the gold valve.
11. Close the small gold valve on the LN2 dewar next to where the clear hose attaches and detach the clear hose from the LN2 dewar.
12. Turn off the flow of LN2 by closing the handle on top of the dewar.
13. Record the end time in the blue binder.
14. Make sure it's filled every 24 hours.
15. Put silver clamp back on yellow hose after it's thawed out enough. Detach the hose from the dewar end.
16. Clean up dome so things are out of the way for use that night.





If Dewar is Taking a Long Time to Fill

1. Are you out of LN2? Pick up the dewar and shake it to guesstimate how much is in there.
2. Is there an ice plug? If it's taken ~45 minutes and the dewar is still not full, you might have an ice plug. If you suspect there is an ice plug, call someone in MtnOps for assistance.

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