

INGRID Cool Down Number 2: 16/11/1999 Engineering Array & Motors Verification

Team Leader: pcm Team members: jolley, kmd

Discipline	Major Components Needed
Optics	None
Detector	Engineering array
Mechanical	INGRID but without the camera barrel
Cryogenics	LN ₂ and CCC
Software	ISP and EPICS control

Cryostat / Discipline	Optics <i>mbrox</i>	Detector <i>pcm</i>	Mechanical <i>kmd/jolley</i>	Cryogenics <i>kmd</i>
Pre-cooling		?? Tests 1-3 of pcm's test document	?? (3.1) Drive all four mechanisms ?? Log motor profiles	?? Log pressure ?? Log temperature
Cooling		?? Tests 4-7 of pcm's test document		?? Log pressure ?? Log temperature
Cold		?? Repeat of tests 10-18 from previous cool down ?? Tests 8-19 of pcm's test document	?? (2.6) Drive all four mechanisms ?? Log motor profiles ?? Preliminary repeatability check	?? Log pressure ?? Log temperature ?? (2.2) Check outgas ?? (2.3) Confirm oper ?? (2.3) Measure hold tank
Warming		?? Test 20 of pcm's test document		?? Log pressure ?? Log temperature
Post-cooling		?? Test 21 of pcm's test document	?? (3.1) Drive all four mechanisms ?? Log motor profiles ?? Make visual inspection of worms	?? Log pressure ?? Log temperature

Schedule of Cool Down Number 2

Day / Date	Operation	Comments
Friday 12 th	Setup and pump down of INGRID	pcm to lead
Friday 12 th	Pre	
Monday 15 th	Cool down	
Tuesday 16 th	Cold	
Saturday 20 th	Warm up	
Monday 22 nd	Warm	