

Run 1 (did a non-ice crystal K2SO4 run)									
Static Data									
Size of cold stage:	51 mm								
Height of cold stage:	8 mm								
vacuum pressure (set)	50 Pa								
Z/TILT (distance of detector from stage)	5um								
vacuum current	12kv								
probe current		85							
Additional Comments									
Additional Comments									
Kinetic Data									
Time	Action/observation	Temperature (actual)	Crystal Size						
	1:43 pressurizing chamber	25.9							
	11:50 pressure at 50 pa								
	11:53 took Spectral imaging of crystals (20200722PureK2SO4T0)	22.4							
	11:59 set temp to -34								
	12:04 took Spectral imaging of crystals (20200722PureK2SO4T1)	-34.8							
	12:10 finished spectral image	-34.8							
waiting		-34.8							
	1:15 took Spectral imaging of crystals (20200722PureK2SO4T2)	-34.8							
	12:25 took Spectral imaging of crystals (20200722PureK2SO4T3)	-34.8							
	12:35 took Spectral imaging of crystals (20200722PureK2SO4T4)	-34.8							
	12:45 took Spectral imaging of crystals (20200722PureK2SO4T5)	-34.8							
	12:55 took Spectral imaging of crystals (20200722PureK2SO4T6)	-34.8							
	12:50 set temp to -30								
	1:05 took Spectral imaging of crystals (20200722PureK2SO4T7)	-30.8							
	1:15 took Spectral imaging of crystals (20200722PureK2SO4T8)	-30.8							
	1:25 took Spectral imaging of crystals (20200722PureK2SO4T9)	-30.8							
	1:35 took Spectral imaging of crystals (20200722PureK2SO4T10)	-30.8							
	1:41 experment ended								
Run 1 (Ice crystal with K2SO4 run)									
Static Data									
Size of cold stage:	51 mm								
Height of cold stage:	8 mm								
vacuum pressure (set)	50 Pa								
Z/TILT (distance of detector from stage)	5um								
vacuum current	12kv								
probe current		85							
Additional Comments		copper was cleaned between the two runs to make sure a "fresh" "non-contaminated" batch of K2SO4 was used							
Additional Comments									
Kinetic Data									
Time	Action/observation	Temperature (actual)	Crystal Size						
	2:08 pressurized chamber	26.5							
	2:10 pressure at 120								
	2:12 took "pre" Spectral imaging of crystals (20200722IceK2SO4U01)	26.5							
	2:18 set temp to -34 (pressure is at 60 Pa)								
took 2 pictures		-34.2							
	2:22 set to -33 for slower growth								
	2:24 took Spectral imaging of crystals (20200722IceK2SO4U02)	-33.7							
	2:29 took image	-33.7							
	2:30 set temp to -30								
	2:33 took image (is it abalting?)	-30.7							
	2:35 took Spectral imaging of crystals (20200722IceK2SO4U03)	-30.8							
	2:42 took image	-30.8							
	2:43 took Spectral imaging of crystals (20200722IceK2SO4U04)	-30.8							
	2:51 took image	-30.8							
	2:52 took Spectral imaging of crystals (20200722IceK2SO4U05)	-30.8							
	2:58 took image	-30.8							
	2:59 took Spectral imaging of crystals (20200722IceK2SO4U06)								
observation:	It seems like 1 freeze/thaw cycle is not enough to produce the elemental haze around the cryrstals (not clearly observed in elemental anlayis image) however, look abkc at the K+ levels on ice vs SO42- levels								
	3:05 took image	-30.8							
	3:05 set temp to -34								
	3:08 took image	-34.7							
	3:10 took image	-34.7							
	3:10 set temp to -30								
3;11	set temp to -33								
	3:12 set temp to -30								
	3:14 set temp to -33								
	3:15 took Spectral imaging of crystals (20200722IceK2SO4U07)	-33.7							
	3:20 set temp to -31								
	3:22 took picture	-33.7							
	3:22 took Spectral imaging of crystals (20200722IceK2SO4U08)								
	3:32 took Spectral imaging of crystals (20200722IceK2SO4U09)	-31.7							
	3:38 took image	-31.7							
	3:38 set temp to -33								
	3:40 took Spectral imaging of crystals (20200722IceK2SO4U010)	-33.7							
	3:45 set temp to -30								
	3:50 took image	-30.8							
	3:53 took Spectral imaging of crystals (20200722IceK2SO4U011)	-30.8							
	3:59 took Spectral imaging of crystals (20200722IceK2SO4U012)	-30.8							
	4:06 took Spectral imaging of crystals (20200722IceK2SO4U013)	-30.8							
	4:14 ended experiment								