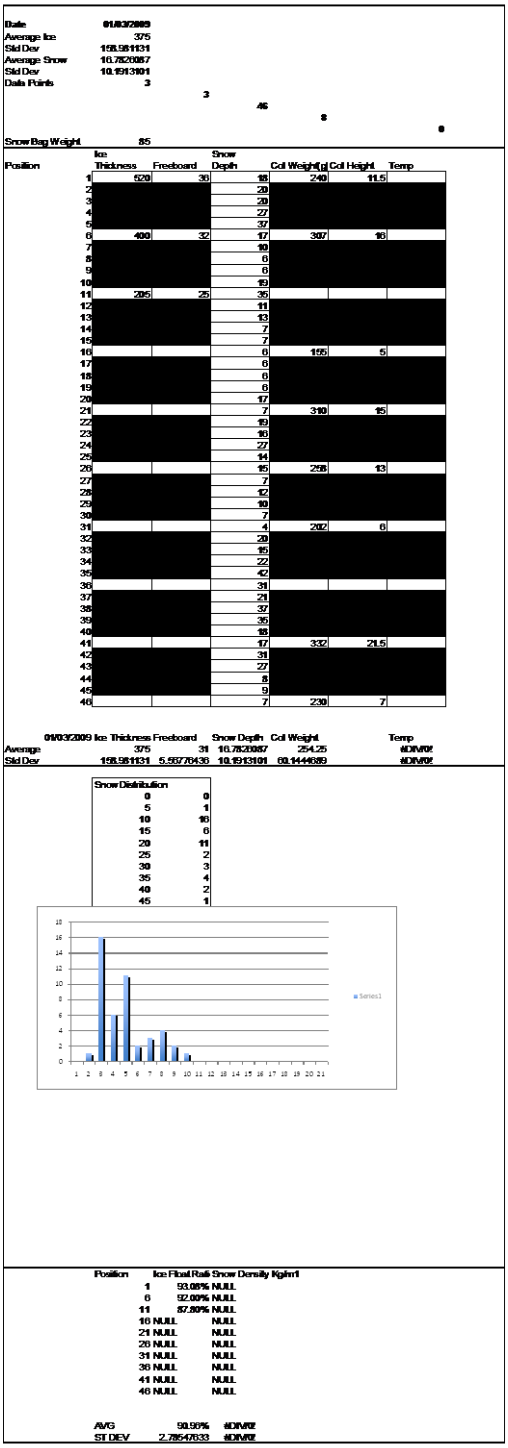
arctic survey education

Understanding the **Full Ice and Snow Data** section of the spreadsheet



Date	01/03/2009
Average Ice	375
Std Dev	158.581131
Average Snow	10.7520087
Std Dev	10.1913101
Data Points	3

Snow Bag Weight 85

Position	Ice Thickness	Freeboard	Snow Depth	Col Weight(g	Col Height	Temp
1	520	30	18	240	11.5	
2			20			
3			28			
4			27			
5			37			
6	400	32	17	307	16	
7			10			
8			6			
9			6			
10			19			
11	295	25	35			
12			11			
13			13			
14			7			
15			7			
16			6	155	5	
17			6			
18			6			
19			6			
20			17			
21			7	310	15	
22			19			
23			16			
24			27			
25			14			
26			15	255	13	
27			7			
28			12			
29			10			
30			7			
31			4	202	8	
32			20			
33			15			
34			22			
35			42			
36			31			
37			21			
38			37			
39			35			
40			18			
41			17	332	21.5	
42			31			
43			27			
44			8			
45			9			
46			7	230	7	

01/03/2009	Ice Thickness	Freeboard	Snow Depth	Col Weight	Temp
Average	375	31	10.7520087	254.25	#DIV/0!
Std Dev	158.581131	5.55776435	10.1913101	69.1444689	#DIV/0!

Snow Distribution	
0	0
5	1
10	18
15	6
20	11
25	2
30	3
35	4
40	2
45	1

Position	Ice Float Ratio	Snow Density Kg/m3
1	93.08%	NULL
6	92.00%	NULL
11	87.80%	NULL
16	NULL	NULL
21	NULL	NULL
26	NULL	NULL
31	NULL	NULL
36	NULL	NULL
41	NULL	NULL
46	NULL	NULL
AVG	90.96%	#DIV/0!
ST DEV	2.78547633	#DIV/0!

Section 1: Summary of the averages and standard deviation of the day's measurements.

Also lists how many measurements (or Data Points) have been taken from that day.

Section 2: Lists the measurement data from the 46 positions along the daily measurement line.

The first column lists Ice thickness, followed by ice freeboard.

The next column shows the snow thickness, measured at all 46 positions.

The column weight and column height are used to calculate snow density.

The final column shows snow temperature, measured a couple of inches below the surface.

At the bottom of each column are averages and standard deviation for the data in each column.

Section 3: Shows a histogram of the distribution of snow thickness.

Section 4: Shows the percentage of ice under the surface of the water. This can be used to calculate ice density.

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