

Mass Calibration



Trace elements in Mass (Rubidium, Strontium, Yttrium, Zirconium, and Niobium) are exceedingly useful for geochemical sourcing.

The reference set provided by Bruker were developed to be widely accurate and reliable. However, it may be worthwhile to further tailor your calibrations by removing some standards, or adding your own.

Mass Calibration



This presentation is designed to provide a step-by-step followthrough. If you have any questions, do not hesitate to contact us.

Make sure you only edit a copy of your spreadsheet, keep the original calibrations

Mass Calibration

The image shows a Microsoft Excel spreadsheet titled "OB40Whitewater_Ridge09". The spreadsheet contains a table with columns for sample ID, location, and various elemental concentrations. The data is organized into rows, with the first row being a header for the data. The spreadsheet is displayed in the "PDZ Files" tab, which is highlighted in the bottom tab bar. A callout box with a speech bubble points to the "PDZ Files" tab, containing the text: "Make sure you are on the spreadsheet 'PDZ Files'".

Sample ID	Location	Durati	MgKa1	AlKa1	SiKa1	P Ka1	ZrLa1	NbLa1	MoLa1	S Ka1	MoLb1	AgLa1	SnLa1	SnLb1	TiKa1	V Ka1	CrKa1	MnKa1	FeKa1	CoKa1	NiKa1	CuKa1	ZnKa1	ReLa1	HfLb1	GaKa1	T	
1 T3S2429	1/11/2013 13:34 V:\Instruments\Tracer III-SD\Data_Calibrations\T3S2429\Obsidian T3S2429\Obsidian Cal Data																											
2 Admin	Compton																											
3 Obsidian01	OB40Timber_Butte01	240 289.1266	3165.6	3089.7	3334.8	3217.5	3188.9	3087.3	2893.4	2904.3	2920.8	2841.6	2167.8	1858.7	845.45	643.61	573.9	1482.08844	8809.681429	942.1708789	436.2007992	1088	1183.2	1185.4	488.41	732.51	6	
4 Obsidian02	OB40Guadalupe_Victoria02	240 283.3219	3339.5	3340.9	3312.2	3214.3	3249.9	3141.8	3077.7	3065.3	2970.9	2937.4	2048.2	1779.1	1093	704.94	564.13	1257.27733	9992.250761	995.2686892	404.1251076	1085.1	866.29	863.98	508.94	648.78	6	
5 Obsidian03	OB40Glass_Butttes03	240 272.4557	3047.1	3170.4	3256.1	3128.7	3115.2	3013.7	2986.7	2994.8	2963.6	2710.2	2090.4	1951	1003.7	699.59	580.62	976.257426	14190.33528	1221.083398	1107.6	885.84	886.19	505.38	597.13	5		
6 Obsidian04	OB40Blue_Mountain04	240 238.2482	2862.3	2844.5	2874	2877	2862.7	2772.7	2726.3	2736.8	2647.7	2542.2	1950.8	1492.7	1194.5	793.56	705.95	2968.80476	62350.39645	4353.361264	388.7215824	1038	2030.5	2029.3	493.68	667.87		
7 Obsidian05	OB40West_New_Britain1_05	240 279.192	3259	3216.8	3394.1	3139.1	3165.9	3164	2955.3	2919.6	2834.8	2813.4	1876.6	2090.3	1091.3	693.25	619.47	1301.02752	20462.87538	1686.025953	436.9738751	1062.9	1089	1087.7	455.51	539.14	5	
8 Obsidian06	OB40Big_Southern_Butte06	240 304.7088	3111.3	2981.3	3091.2	2924	2884.2	2887.4	2813	2806.5	2770.2	2627.8	2232.2	1779.9	924.67	587.17	663.77	973.004657	26235.0934	2000.691357	525.2428238	1129.6	3117.4	3099.5	600.36	1009.1	9	
9 Obsidian07	OB40Mono_Craters07	240 273.0119	3172.8	3055.7	3122.2	3089.2	3088.9	3004.2	2841.1	2820.9	2758	2656.3	2029.6	1772.9	824.07	601.47	567.14	917.265891	16993.71857	1405.15348	417.5331023	1098.2	939.76	940.59	482.1	630.27	6	
10 Obsidian08	OB40RS_Hill08	240 314.2223	3201.7	3139.7	3176.4	3069.4	3066.8	2920.1	3007.5	3004.2	2886.6	2788	2150.4	1748.2	814.94	548.25	636.71	1064.07096	16791.8937	1429.488636	456.200995	1161.3	1906.2	1917.2	585.25	951.48	8	
11 Obsidian09	OB40Whitewater_Ridge09	240 268.8923	3107.1	3178.3	3292.3	3052.7	3075.1	3076.8	2816.9	2750.7	2769.1	2768	2043.6	1990.9	1168.2	779.86	600.49	866.933658	16334.51245	1498.592995	426.8745823	1030.5	833.85	837.06	470.48	598.82	5	
12 Obsidian10	OB40Casa_Diablo10	240 259.2099	2996.7	2994.5	3136.6	2928.2	2865	2999.7	2831.5	2806.1	2783.8	2600.2	2203.1	1953.2	1168.3	754.31	578.58	925.186689	19903.09968	1638.054688	422.8371154	1025.8	841.9	857.23	488.98	598.49	5	
13 Obsidian11	OB40Tucker_Hill11	240 276.221	3169.3	3059.1	3293.3	2982.6	2955.1	2934.5	2936.2	2931	2790.9	2731.2	2068.1	1828.9	841.64	603.23	604.41	1113.46099	10030.23779	998.6184808	429.1478862	1041.3	864.87	865.85	477.04	648.55	5	
14 Obsidian12	OB40East_Medicine_lake12	240 258.3353	3023.1	3069.6	3182.7	3059.8	3035.3	2860.2	2846	2840.1	2749.4	2719.4	2195.9	1842.4	1185.4	703.41	612.01	881.748964	22180.81194	1799.685977	399.8822412	1137.8	868.35	862.99	482.85	581.26	5	
15 Obsidian13	OB40Grasshopper_Flat13	240 260.1449	3149.4	3056.2	3135.1	3116.3	3093.4	2973.3	2827.2	2803.3	2696.1	2638.7	2020.1	1993.2	1166.5	693.67	599.46	918.318706	20567.56683	1645.903859	453.205936	1109.6	885.68	889.47	478.89	596.96	5	
16 Obsidian14	OB40Inman_Creek14	240 269.3213	3166.2	3017.2	3173.4	3035.6	2990.3	3033.7	2915.9	2901	2786.8	2646.9	1991.1	1904.3	955.71	686.93	620.91	1195.20671	23630.47219	1968.955381	423.9226794	1013.8	1075.6	1071.2	466.05	638.01	5	
17 Obsidian15	OB40Burns_Green15	240 255.3643	3053.4	2809.8	3040.2	2920.4	2923.6	2877.5	2795	2785.2	2657.7	2572	2073.2	1579.5	1024.2	661.3	679.79	1203.52215	38390.91104	2794.19563	456.5836828	1075.1	1761.3	1766.8	571.67	706.84	6	
18 Obsidian16	OB40La_Joya16	240 252.1802	2921.6	2881.6	3081.2	2964.5	2971.5	2741.7	2779.6	2768.7	2698.8	2647	1996.3	1587.9	984.39	657.98	650.58	1390.21838	41895.31648	3105.414911	444.2245443	1069.1	1896.1	1911.3	512.82	745.46	6	
19 Obsidian17	OB40KES_362_17	240 259.1408	2542.1	2469.4	2575.1	2391.9	2370.8	2354.5	2369.5	2342.5	2208.9	2303.9	1827.2	1576	1439.8	950.77	965.62	3316.61201	119266.1152	7965.558755	496.3412262	1248.7	5134.1	5166.4	763.47	1003.1	9	
20 Obsidian18	OB40KES_276_18	240 268.7859	2769.1	2791.7	2837.9	2650.4	2637.1	2601.7	2579.1	2574.9	2495.3	2435.1	2031.2	1862.7	1567.4	818.25	681.34	1922.87562	47605.74857	3500.090825	443.5691534	1152.9	1797.3	1801.9	522.86	800.49	7	
21 Obsidian19	OB40Mule_Creek19	240 274.5286	3171.9	3136.9	3278.2	3058.5	3039.4	2853.2	2860.4	2861.5	2829.9	2728.7	2134.3	1779.2	911.28	618.69	575.24	1047.49989	14902.78273	1397.565653	426.3548235	1047.7	977.66	979.11	466.04	666.98	5	
22 Obsidian20	OB40Basaltic_Plateau20	241 178.1709	2338.2	2427.8	2428.7	2400.9	2385.6	2263.4	2241.6	2251	2210	2132	1485.6	5538.7	3076.4	1083.3	926.84	2144.38848	132830.2571	9396.75727	705.4709036	1125.9	1189.4	1200.7	375.71	485.69	4	
23 Obsidian21	OB40McDaniel_Tank21	240 261.6528	3082.3	3088.4	3051.1	3095.9	3100.6	2923.6	2834.4	2832																		
24 Obsidian22	OB40Cannonball_22	240 253.5649	2848.5	2791.4	2993.9	2914.2	2878.7	2661.7	2595	2595																		
25 Obsidian23	OB40Witham_Creek23	240 245.1975	3039.6	2898.8	2972.7	2831.4	2863	2744.9	2766.6	2766																		
26 Obsidian24	OB40El_Paraiso24	240 248.6167	3011.3	2964.4	3035.9	2909.7	2903.2	2850.2	2793.6	2793																		
27 Obsidian25	OB40VNN-2_25	240 227.0785	2617.6	2662.4	2853.7	2568	2539.9	2510.2	2502.4	2502																		
28 Obsidian26	OB40Chickahominy26	240 259.2123	3146.1	3107.9	3106.6	3070.8	3033.1	2884.1	2897.3	2897																		
29 Obsidian27	OB40Davis_Creek27	240 273.3394	3199.6	3102.7	3254.4	3022.7	3015.9	2955.1	2975.9	2975																		
30 Obsidian28	OB40Cerro_del_Medio28	240 279.0109	3203.5	3194.9	3213.1	3055	3043.9	2917.9	2911	2911																		
31 Obsidian29	OB40Cougar_Mountain29	240 270.5424	3204.6	3192.7	3308.4	3050.9	3009.4	3067.5	2937.9	2937																		
32 Obsidian30	OB40Pachuca30	240 263.116	2957	3028.9	3076.3	3069.8	3036.7	2889.8	2804.7	2804																		
33 Obsidian31	OB40Polvadera31	240 286.4904	3178.9	3276.6	3310	3168.3	3147.9	3052.2	2987.3	2987																		
34 Obsidian32	OB40San_Leonel32	240 259.9643	3006.7	3028.1	3177.9	2942.7	2920.2	2900	2845.6	2845																		
35 Obsidian33	OB40Zacualtipan33	240 260.8336	3068.6	3115.9	3164.1	3068.1	3066.1	3044.6	2886.6	2886																		
36 Obsidian34	OB40Paredon34	240 270.626	3179.3	3130.7	3290.2	3063.2	3028.3	2873.7	2866.4	2866																		
37 Obsidian35	OB40Archibarca35	240 266.9922	3197.7	3041.4	3235	3011.8	3067.7	2993.2	3005.2	3005																		
38 Obsidian36	OB40Meydan_Tepe36	240 271.824	3165.8	3192.6	3236.3	3050.2	3038.8	3041.2	2969.9	2969																		
39 Obsidian37	OB40Sarikamis37	240 273.2668	3267.6	3281.3	3254.6	3209.4	3207.6	3021.7	3048.4	3048																		
40 Obsidian38	OB40Gregory_Creek38	240 266.1649	3208.6	3109.4	3207.5	3127.2	3137.7	3154.2	3010.6	3010																		
41 Obsidian39	OB40Obsidian_Cliffs39	240 275.8386	3192.8	3167.2	3296.3	3088.7	3048.7	3138.7	2985.8	2985																		
42 Obsidian40	OB40EL_Peceno40	240 268.8491	3158.3	3116.2	3211.2	2934.3	2929.7	3075	2988	2988																		

Make sure you are on the spreadsheet 'PDZ Files'

Mass Calibration

DO NOT DELETE - but rather, right click and 'Clear Contents', this preserves the important formulas in the spreadsheet

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB			
1	T3S2429	1/11/2013 13:34 V:\Instruments\Tracer III-SD\Data_Calibrations\T3S2429\Obsidian T3S2429\Obsidian Cal Data																													
2	Admin		Durati	Window	MqKa1	AlKa1	SiKa1	P Ka1	ZrLa1	NbLa1	MoLa1	S Ka1	MoLb1	AqLa1	SnLa1	SnLb1	TiKa1	V Ka1	CrKa1	MnKa1	FeKa1	CoKa1	NiKa1	CuKa1	ZnKa1	ReLa1	HfLb1	GaKa1	T		
3	Obsidian01	OB40Timber_Butte01	240	289.1266	3165.6	3089.7	3334.8	3217.5	3188.9	3087.3	2893.4	2904.3	2920.8	2841.6	2167.8	1858.7	845.45	643.61	573.9	1482.08844	8809.681429	942.1708789	436.2007992	1088	1183.2	1185.4	488.41	732.51	6		
4	Obsidian02	OB40Guadalupe_Victoria02	240	283.3219	3339.5	3340.9	3312.2	3214.3	3249.9	3141.8	3077.7	3065.3	2970.9	2937.4	2048.2	1779.1	1093	704.94	564.13	1257.27733	9992.250761	995.2686892	404.1251076	1085.1	866.29	863.98	508.94	648.78	6		
5	Obsidian03	OB40Glass_Buttos03	240	272.4557	3047.1	3170.4	3256.1	3128.7	3115.2	3013.7	2986.7	2994.8	2963.6	2710.2	2090.4	1951	1003.7	699.59	580.62	976.257426	14190.33528	1221.083398	404.6951705	1107.6	885.84	886.19	505.38	597.13	5		
6	Obsidian04	OB40Blue_Mountain04	240	238.2482	2862.3	2844.5	2874	2877	2862.7	2772.7	2726.3	2736.8	2647.7	2542.2	1950.8	1492.7	1194.5	793.56	705.95	2968.80476	62350.39645	4353.361264	388.7215824	1038	2030.5	2029.3	493.68	667.87			
7	Obsidian05	OB40West_New_Britain1_05	240	279.192	3259	3216.8	3394.1	3139.1	3165.9	3164	2955.3	2919.6	2834.8	2813.4	1876.6	2090.3	1091.3	693.25	619.47	1301.02752	20462.87538	1686.025953	436.9738751	1062.9	1089	1087.7	455.51	539.14	5		
8	Obsidian06	OB40Big_Southern_Butte06	240	304.7088	3111.3	2981.3	3091.2	2924	2884.2	2887.4	2813	2806.5	2770.2	2627.8	2232.2	1779.9	924.67	587.17	663.77	973.004657	26235.0934	2000.691357	525.2428238	1129.6	3117.4	3099.5	600.36	1009.1	9		
9	Obsidian07	OB40Mono_Craters07	240	273.0119	3172.8	3055.7	3122.2	3089.2	3088																						
10		Hill08	240	314.2223	3201.7	3139.7	3176.4	3069.4	30																						
11		itewater_Ridge09	240	268.8923	3107.1	3178.3	3292.3	3052.7	30																						
12		sa_Diablo10	240	259.2099	2996.7	2994.5	3136.6	2928.2																							
13	Obsidian11	OB40Tucker_Hill11	240	276.221	3169.3	3059.1	3293.3	2982.6	29																						
14		OB40East_Medicine_lake12	240	258.3353	3023.1	3069.6	3182.7	3059.8	30																						
15		OB40Grasshopper_Flat13	240	260.1449	3149.4	3056.2	3135.1	3116.3	30																						
16		OB40Inman_Creek14	240	269.3213	3166.2	3017.2	3173.4	3035.6	29																						
17		OB40Burns_Green15	240	255.3643	3053.4	2809.8	3040.2	2920.4	29																						
18		OB40La_Joya16	240	252.1802	2921.6	2881.6	3081.2	2964.5	29																						
19		OB40KES_362_17	240	259.1408	2542.1	2469.4	2575.1	2391.9	23																						
20		OB40KES_276_18	240	268.7859	2769.1	2791.7	2837.9	2650.4	26																						
21		OB40Mule_Creek19	240	274.5286	3171.9	3136.9	3278.2	3058.5	30																						
22		OB40Basaltic_Plateau20	241	178.1709	2338.2	2427.8	2428.7	2400.9	23																						
23		OB40McDaniel_Tank21	240	261.6528	3082.3	3088.4	3051.1	3095.9	31																						
24		OB40Cannonball1_22	240	253.5649	2848.5	2791.4	2993.9	2914.2	28																						
25		OB40Witham_Creek23	240	245.1422	2925.1	2857.1	2957.1	2857.1	28																						
26		OB40VNN-2_25	240	227.0785	2617.6	2662.4	2633.7	2306.8	23																						
27		OB40Chickahominy26	240	259.2123	3146.1	3107.9	3106.6	3070.8	30																						
28		OB40Davis_Creek27	240	273.3394	3199.6	3102.7	3254.4	3022.7	30																						
29		OB40Cerro_del_Medio28	240	279.0109	3203.5	3194.9	3213.1	3055	30																						
30		OB40Cougar_Mountain29	240	270.5424	3204.6	3192.7	3308.4	3050.9	30																						
31		OB40Pachuca30	240	263.116	2957	3028.9	3076.3	3069.8	30																						
32		OB40Polvadera31	240	286.4904	3178.9	3276.6	3310	3168.3	31																						
33		OB40San_Leonel32	240	259.9643	3006.7	3028.1	3177.9	2942.7	29																						
34	Obsidian32	OB40San_Leonel32	240	259.9643	3006.7	3028.1	3177.9	2942.7	29																						
35	Obsidian33	OB40Zacualtipan33	240	260.8336	3068.6	3115.9	3164.1	3068.1	30																						
36	Obsidian34	OB40Paredon34	240	270.626	3179.3	3130.7	3290.2	3063.2	30																						
37	Obsidian35	OB40Archibarca35	240	266.9922	3197.7	3041.4	3235	3011.8	30																						
38	Obsidian36	OB40Meydan_Tepe36	240	271.824	3165.8	3192.6	3236.3	3050.2	30																						
39	Obsidian37	OB40Sarikamis37	240	273.2668	3267.6	3281.3	3254.6	3209.4	32																						
40	Obsidian38	OB40Gregory_Creek38	240	266.1649	3208.6	3109.4	3207.5	3127.2	31																						
41	Obsidian39	OB40Obsidian_Cliffs39	240	275.8386	3192.8	3167.2	3296.3	3088.7	30																						
42	Obsidian40	OB40El_Peceno40	240	268.8491	3158.3	3116.2	3211.2	2934.3	29																						

DO NOT DELETE - but rather, right click and 'Clear Contents', this preserves the important formulas in the spreadsheet

Mass Calibration

The screenshot shows the Microsoft Excel interface with the 'Add-Ins' tab selected. The 'S1CalProcess' add-in menu is open, and the 'Insert PDZ' option is highlighted. A callout box points to this option with the following text:

When you have cleared the contents of these cells, then go to 'Add-Ins', 'S1CalProcess', and select 'Insert PDZ'

The spreadsheet background shows a data table with columns for various elements and their corresponding peaks. The visible columns are: Durat, MgKa1, AlKa1, SiKa1, P Ka1, ZrLa1, NbLa1, MoLa1, S Ka1, MoLb1, AgLa1, SnLa1, SnLb1, TiKa1, V Ka1, CrKa1, MnKa1, FeKa1, CoKa1, NiKa1, CuKa1, ZnKa1, ReLa1, HfLb1, GaKa1, and T. The row headers are labeled with letters B through AB.

Mass Calibration

The screenshot shows a software application window titled "S1CalProcess" with a ribbon menu (File, Home, Insert, Page Layout, Formulas, Data, Review, View, Add-Ins). The main area is a spreadsheet with columns labeled with elements and their isotopes: Durati Window, MgKa1, AlKa1, SiKa1, P Ka1, ZrLa1, NbLa1, MoLa1, S Ka1, MoLb1, AgLa1, SnLa1, SnLb1, TiKa1, V Ka1, CrKa1, MnKa1, FeKa1, CoKa1, NiKa1, CuKa1, ZnKa1, ReLa1, HfLb1, GaKa1, T. A dialog box titled "Insert PDZ Files" is open, showing a file explorer view of a folder named "Test Data" containing several .pdz files: C12A 49 1A.pdz, C12A 49 1B.pdz, C12A 49 1C.pdz, C12A 49 1D.pdz, C12A 49 1E.pdz, C12A 49 1F.pdz, C12A 49 1G.pdz, and C39B 7C THIN.pdz. A callout box points to the dialog box with the text: "Navigate to the folder that has the PDZ files you would like to calibrate".

Mass Calibration

The screenshot shows an Excel spreadsheet with the following data in the first few rows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	
1	T3S2429	1/11/2013 13:34	V:\Instruments\Tracer III-SD\Data_Calibrations\T3S2429\Obsidian T3S2429\Obsidian Cal Data\																										
2	Admin		Compton	Durati Window	MgKa1	AlKa1	SiKa1	P Ka1	ZrLa1	NbLa1	MoLa1	S Ka1	MoLb1	AgLa1	SnLa1	SnLb1	TiKa1	V Ka1	CrKa1	MnKa1	FeKa1	CoKa1	NiKa1	CuKa1	ZnKa1	ReLa1	HfLb1	GaKa1	T
3																													

The 'Insert PDZ Files' dialog box is open, showing the following file list:

- Q2.pdz
- Q3 2.pdz
- Q3 3.pdz
- Q38 1.pdz
- Q39.pdz
- Q63 4.pdz
- Q65 6.pdz
- Q95 1.pdz

A callout bubble points to the selected files with the text: "Select all of these files".

Mass Calibration

1/11/2013 13:34 V:\Instruments\Tracer III-SD\Data_Calibrations\T3S2429\Obsidian T3S2429\Obsidian Cal Data

Compton	Durati	Window	MgKa1	AlKa1	SiKa1	P Ka1	ZrLa1	NbLa1	MoLa1	S Ka1	MoLb1	AgLa1	SnLa1	SnLb1	TiKa1	V Ka1	CrKa1	MnKa1	FeKa1	CoKa1	NiKa1	CuKa1	ZnKa1	ReLa1	HfLb1	GaKa1
C12A 49 1A	180	186.2126	2298	2241.9	2426.9	2252.4	2221.2	2242.3	2246.1	2214.1	2127.3	2026.4	1567.3	1505.1	772.32	499.33	441.56	998.40407	9871.449785	925.1885458	281.2132304	684.71	631.18	635.82	315.81	432.52
C12A 49 1B	181	183.1886	2136.3	2027.4	2050.1	2046.7	2084.3	2000.2	1969.1	1968.7	1881.7	1744.1	1447.1	1508.1	746.32	450.69	395.35	901.530451	9324.401269	833.9738725	291.6396806	641.64	594.05	593.31	307.59	397.52
C12A 49 1C	181	186.3302	2293.3	2162	2296.5	2233.3	2240.5	2193.2	2080.8	2084.9	2012.2	1878	1535.2	1461.2	804.18	462.98	414.19	923.758405	10596.8351	925.0106077	280.4969031	648.63	592.25	597.19	330.67	396.58
C12A 49 1D	181	184.5608	2228.2	2218.2	2334.9	2331.1	2276.8	2166.8	2160.5	2138.4	2023	2016.9	1572.2	1343.5	713.27	484.83	409.79	888.699715	9430.669272	869.7674092	324.0613347	696.81	655.22	658.72	319.74	432.91
C12A 49 1E	181	185.1974	2137.5	2067.3	2206.2	2003.4	1990.6	2042.8	2026.9	2019.7	1889.4	1778.5	1521.6	1317.2	723.11	478	397.89	967.870818	9949.505839	922.5727951	280.2857752	717.9	614.38	625.77	337.16	398.14
C12A 49 1F	181	179.8751	1965.6	1983.3	2024.5	2036.5	1999.6	1808.5	1774.9	1773.5	1749.4	1717.2	1308.6	1291	680.09	441.4	372.82	898.658557	8950.801811	791.3983763	266.3412028	653.97	566.73	569.55	304.66	406.76
C12A 49 1G	181	185.8609	2154.9	2104.3	2159.7	2008.2	1998.1	2022.2	2044.9	2043.2	1972.4	1807.9	1400.8	1403	735.83	475.98	397.86	922.741107	9332.451794	835.6422807	302.2955659	670.31	618.61	619.2	333.43	388.88
C39B 7C THIN	181	160.4449	1364.2	1293.6	1465.9	1364.7	1359.4	1254.3	1239.7	1245.6	1214.7	1180.5	1160.7	1093.7	585.89	338.93	294.4	621.035404	12072.98251	962.6358402	202.7228773	504.35	487.31	480.29	244.96	302.87
C39B 7E	181	179.1836	2273.9	2134	2289.2	2130.9	2134.1	2123.8	2043.4	2050.1	1953.5	1811.5	1481.2	1607.7	772.36	499.63	416.71	875.230497	9060.818404	818.6700482	286.9061709	723.75	614.98	622.27	341.81	343.8
C39B 7F	181	182.279	1901.8	1803.2	1920.1	1725.1	1701.2	1693.3	1668.2	1646.5	1588.6	1604.5	1213.3	1258.3	665.44	394.25	359.79	931.396273	9902.881551	858.9038346	233.1742735	645.15	625.88	624.25	268.45	403.45
C39B 7G	181	186.4289	2208.4	2228.6	2325	2217.5	2200.4	2075.6	2064.2	2073.9	1997.3	1971	1489.7	1518.3	784.25	471.15	418.07	988.381213	9637.38365	899.431182	277.2790474	647.92	598.89	586.89	321.92	409.91
C39B 7H	181	186.3342	2160.8	2122.5	2300.6	2207	2216.3	2094.1	2039.9	2009.4	1970.8	1850.8	1469.3	1480.7	741.99	468.42	461.88	952.972865	9792.649382	890.5895795	305.1041466	659.51	616.43	621.23	311.56	443.48
C39B 7I	181	178.596	2253.1	2098.8	2214.3	2108.1	2103.9	2054.7	2023.6	2021.9	1978	1825.9	1450.8	1409	678.99	476.86	395.3	879.610862	8698.031176	803.8753269	282.7339452	688.68	582.88	579.51	313.85	383.84
C3C 12 2	181	186.0508	2220.4	2181.9	2266	2218.1	2253.3	2270.8	2090	2062.1	1988.2	1932.4	1481.5	1407.7	856.65	465.93	449.05	951.743748	9802.711022	880.7881037	278.7834383	664.32	675.6	678.07	313.37	443.42
C70B 42 1A	181	183.5998	2258.9	2288.3	2250.8	2207	2220.8	2183.7	2120.1	2099.1	2056.9	1924.8	1434.2	1450.7	756.8	449.38	367.56	852.019339	9007.91367	789.0094168	270.3988097	672.53	634.65	641.73	334.09	428.71
C70B 42 1B	181	184.0699	2266.4	2166.9	2264.6	2191.3	2166.6	2087.2	2130.2	2139.5	2136.8	1969.1	1437	1561.2	811.79	489.7	413.13	916.890595	9396.865807	824.3344906	86.0214061	719.22	537.99	544.95	343.1	395.41
C70B 42 1G	181	182.9103	2125.9	2175.5	2174.1	2133.2	2105.9	2019.4	2013.5	1994.3	1868.3	1908.8	1501.9	1316	678.2	442.7	397.59	887.116797	8009.977915	772.280345	86.6338574	661.79	554.22	552.41	339.61	415.06
C86C 15 2	181	179.6281	1999.1	1933.1	2043.3	1893.2	1875.3	1919.1	1869	1851.1	1783.5	1701	1366.6	1365.4	783.68	456.36	398.44	719.846764	13506.37474	1123.91712	44.6283136	623.01	531.53	536.21	305.64	355.21
Q 109 2	181	160.2911	1594.6	1573.7	1636.5	1518	1505.6	1454.4	1504.8	1492.9	1425.3	1381.4	1211.2	866	806.95	491.45	471.01	2060.61477	52397.70276	3625.89887	8.2325274	624.68	2011.8	2015.6	366.87	503.44
Q 112	181	167.1859	1957.7	1887.5	1945	1811.7	1820.3	1787.1	1734.1	1730.6	1614.3	1514.3	1193.6	1192.1	614.7	367.56	311.1	819.258	8192.58	789.0094168	683.6	2200.5	2213.3	446.95	578.89	
Q 113	181	171.9957	1990.3	1835.8	1957.7	1882.7	1918.2	1791.1	1842.7	1837.1	1714.3	1614.3	1193.6	1192.1	614.7	367.56	311.1	819.258	8192.58	789.0094168	706.24	2342.6	2348.5	429.84	619.51	
Q 114	181	170.2857	1835.8	1727.8	1816.2	1711.9	1718.4	1688.9	1639.4	1639.4	1514.3	1414.3	1193.6	1192.1	614.7	367.56	311.1	819.258	8192.58	789.0094168	716.77	2270.6	2286.1	429.69	606.18	
Q 115	181	169.2459	2055.6	1959.5	2075.6	2024.4	2014.3	1939.6	1929.1	1929.1	1814.3	1714.3	1493.6	1492.1	614.7	367.56	311.1	819.258	8192.58	789.0094168	736.77	2212	2234.3	410.14	650.89	
Q2	181	169.2459	2055.6	1959.5	2075.6	2024.4	2014.3	1939.6	1929.1	1929.1	1814.3	1714.3	1493.6	1492.1	614.7	367.56	311.1	819.258	8192.58	789.0094168	680.66	2192.3	2208	414.04	537.41	
Q3 2	181	169.2459	2055.6	1959.5	2075.6	2024.4	2014.3	1939.6	1929.1	1929.1	1814.3	1714.3	1493.6	1492.1	614.7	367.56	311.1	819.258	8192.58	789.0094168	739.7	2137.1	2132.2	429.01	614.07	
Q3 3	181	169.2459	2055.6	1959.5	2075.6	2024.4	2014.3	1939.6	1929.1	1929.1	1814.3	1714.3	1493.6	1492.1	614.7	367.56	311.1	819.258	8192.58	789.0094168	741.07	2130.7	2130.1	416.12	569.39	
Q38 1	181	169.2459	2055.6	1959.5	2075.6	2024.4	2014.3	1939.6	1929.1	1929.1	1814.3	1714.3	1493.6	1492.1	614.7	367.56	311.1	819.258	8192.58	789.0094168	627.64	1912.9	1926.7	358.06	568.94	
Q39	181	169.2459	2055.6	1959.5	2075.6	2024.4	2014.3	1939.6	1929.1	1929.1	1814.3	1714.3	1493.6	1492.1	614.7	367.56	311.1	819.258	8192.58	789.0094168	737.04	2376.1	2387.7	412.15	662.4	
Q63 4	181	169.2459	2055.6	1959.5	2075.6	2024.4	2014.3	1939.6	1929.1	1929.1	1814.3	1714.3	1493.6	1492.1	614.7	367.56	311.1	819.258	8192.58	789.0094168	704.66	1998.2	2013.2	366.71	585.71	
Q65 6	181	169.2459	2055.6	1959.5	2075.6	2024.4	2014.3	1939.6	1929.1	1929.1	1814.3	1714.3	1493.6	1492.1	614.7	367.56	311.1	819.258	8192.58	789.0094168	710.92	2415.5	2429.4	435.34	677.82	
Q95 1	181	169.2459	2055.6	1959.5	2075.6	2024.4	2014.3	1939.6	1929.1	1929.1	1814.3	1714.3	1493.6	1492.1	614.7	367.56	311.1	819.258	8192.58	789.0094168	729.86	2253.1	2278.2	391.2	611.98	

You should now have a list of PDZ file names

Each column contains the area (1σ) within each element K-alpha line

Mass Calibration

The image shows a screenshot of an Excel spreadsheet. The spreadsheet has a grid with columns labeled A through AH and rows numbered 1 through 55. The active cell is Q55. The formula bar shows the path: `V:\Instruments\Tracer III-SD\Data_Calibrations\T3S2429\Obsidian T3S2429\Obsidian Cal Data!`. The spreadsheet contains data for various elements: MnKa1, FeKa1, ZnKa1, GaKa1, ThLa1, RbKa1, SrKa1, Y Ka1, ZrKa1, NbKa1, and RhKa1. At the bottom of the spreadsheet, there are several tabs: Duplex, AlCheckSTD, QA-Summary, S1 Tracer QA Report, ChemTests, Assay Check, Alloy, PDAFCSheet, PDZFiles, GISort, and GIChem. The 'ChemTests' tab is currently selected. Two callout boxes are overlaid on the spreadsheet. The first callout box, located on the left side, contains the text: 'Navigate next to the 'ChemTests' tab at the bottom'. The second callout box, located on the right side, contains the text: 'If there is data here, you can select it all and 'Clear Contents''. The Windows taskbar is visible at the bottom of the screen, showing the Start button, taskbar icons for Explorer, Chrome, Firefox, Excel, and PowerPoint, and the system tray with the date and time: 4:46 PM, 4/18/2013.

Navigate next to the 'ChemTests' tab at the bottom

If there is data here, you can select it all and 'Clear Contents'

Mass Calibration

The screenshot shows an Excel spreadsheet with the following data in column F:

Row	Sample Name
2	C12A 49 1A
3	C12A 49 1B
4	C12A 49 1C
5	C12A 49 1D
6	C12A 49 1E
7	C12A 49 1F
8	C12A 49 1G
9	C39B 7C THIN
10	C39B 7E
11	C39B 7F
12	C39B 7G
13	C39B 7H
14	C39B 7I
15	C3C 12 2
16	C70B 42 1A
17	C70B 42 1B
18	C70B 42 1G
19	C86C 15 2
20	Q 109 2
21	Q 112
22	Q 113
23	Q 114
24	Q 115
25	Q2
26	Q3 2
27	Q3 3
28	Q38 1
29	Q39
30	Q63 4
31	Q65 6
32	Q95 1

A callout box contains the text: "Paste the names of your PDZ files in column 'F' below the first row".

Mass Calibration

The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH		
1	V:\Instruments\Tracer III-SD\Data_Calibrations\T3S2429\Obsidian T3S2429\Obsidian Cal Data\																				MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1					
2						C12A 49 1A	GL1																													
3						C12A 49 1B																														
4						C12A 49 1C																														
5						C12A 49 1D																														
6						C12A 49 1E																														
7						C12A 49 1F																														
8						C12A 49 1G																														
9						C39B 7C THIN																														
10						C39B 7E																														
11						C39B 7F																														
12						C39B 7G																														
13						C39B 7H																														
14						C39B 7I																														
15						C3C 12 2																														
16						C70B 42 1A																														
17						C70B 42 1B																														
18						C70B 42 1G																														
19						C86C 15 2																														
20						Q 109 2																														
21						Q 112																														
22						Q 113																														
23						Q 114																														
24						Q 115																														
25						Q2																														
26						Q3 2																														
27						Q3 3																														
28						Q38 1																														
29						Q39																														
30						Q63 4																														
31						Q65 6																														
32						Q95 1																														

Next, enter the name of the .CFZ file you will use to calibrate your data

Mass Calibration

The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH		
1	V:\Instruments\Tracer III-SD\Data_Calibrations\T3S2429\Obsidian T3S2429\Obsidian Cal Data																				MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1					
2					C12A 49 1A		GL1																													
3					C12A 49 1B		GL1																													
4					C12A 49 1C		GL1																													
5					C12A 49 1D		GL1																													
6					C12A 49 1E		GL1																													
7					C12A 49 1F		GL1																													
8					C12A 49 1G		GL1																													
9					C39B 7C THIN		GL1																													
10					C39B 7E		GL1																													
11					C39B 7F		GL1																													
12					C39B 7G		GL1																													
13					C39B 7H		GL1																													
14					C39B 7I		GL1																													
15					C3C 12 2		GL1																													
16					C70B 42 1A		GL1																													
17					C70B 42 1B		GL1																													
18					C70B 42 1G		GL1																													
19					C86C 15 2		GL1																													
20					Q 109 2		GL1																													
21					Q 112		GL1																													
22					Q 113		GL1																													
23					Q 114		GL1																													
24					Q 115		GL1																													
25					Q2		GL1																													
26					Q3 2		GL1																													
27					Q3 3		GL1																													
28					Q38 1		GL1																													
29					Q39		GL1																													
30					Q63 4		GL1																													
31					Q65 6		GL1																													
32					Q95 1		GL1																													

A callout box with a pointer to column G contains the text: "Paste these values in the next column (G) for each PDZ file name".

The bottom status bar shows: "Select destination and press ENTER or choose Paste", "Count: 31", "80%", and the date "4/18/2013".

Mass Calibration

The screenshot shows an Excel spreadsheet with the 'S1CalProcess' add-in menu open. The menu is located under the 'Add-Ins' tab and contains the following items:

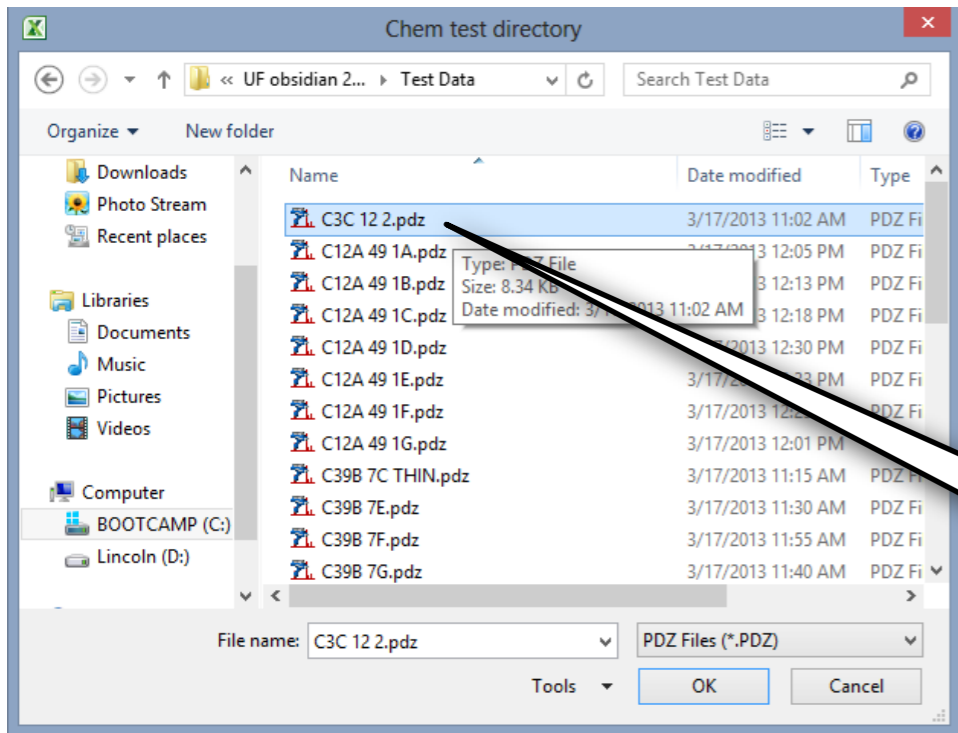
- Read PDZ Files
- Insert PDZ
- Add/Remove Sort Files
- Add/Remove Chemistry Files
- Add/Remove Elements
- Create Sort File
- Copy to new Sort Sheet
- Modify Sort to Chemistry
- Update FP to CFZ
- Create Chem File
- Copy to new Chem Sheet
- Chem Test** (highlighted)
- Sort Check
- Chem Check
- Build PDA Image
- Add-in Version

The spreadsheet data is as follows:

	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH
																MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1			
19																													
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21																													
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55																													

Next, go to 'Add-Ins', 'S1CalProcess', and select 'Chem Test'

Mass Calibration



Navigate to the folder that contains the PDZ files you would like to calibrate, and select one

	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH
									MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1			
22		Q 113		GL1																		
23		Q 114		GL1																		
24		Q 115		GL1																		
25		Q2		GL1																		
26		Q3 2		GL1																		
27		Q3 3		GL1																		
28		Q38 1		GL1																		
29		Q39		GL1																		
30		Q63 4		GL1																		
31		Q65 6		GL1																		
32		Q95 1		GL1																		
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Ready Calculate Duplex AlCheckSTD QA-Summary S1 Tracer QA Report ChemTests Assay Check Alloy PDAFCSheet PDZFiles GISort GIChem

80%

4:48 PM 4/18/2013

Mass Calibration

The image shows a screenshot of an Excel spreadsheet titled "S1CalProcess". The spreadsheet contains a table of calibration data for various elements. The columns represent different elements, and the rows represent different calibration standards. A callout box points to rows 21 through 32, indicating that these rows contain the elements used for calibration.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH																	
1	V:\Instruments\Tracer III-SD\Data_Calibrations\T3S2429\Obsidian T3S2429\Obsidian Cal Data																				MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1																				
2	C12A 49 1A	GL1	180.5	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							667.4	6230.4	33.747	17.704	8.5562	143.15	138.23	19.185	109.27	7.9421	0																				
3	C12A 49 1B	GL1	180.68	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							624.37	6230.8	33.595	17.234	10.483	142.97	135.47	18.922	108.14	8.3201	0																				
4	C12A 49 1C	GL1	180.51	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							616.44	6835.4	31.268	14.514	9.0372	138.63	141.67	19.271	106.37	9.1278	0																				
5	C12A 49 1D	GL1	180.5	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							570.03	6032	37.962	16.864	10.992	139.07	134.49	18.749	106.98	9.2711	0																				
6	C12A 49 1E	GL1	180.65	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							694.46	6643	36.515	18.297	11.064	149.33	148.93	20.054	113.66	11.055	0																				
7	C12A 49 1F	GL1	180.69	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							662.39	6244.1	33.149	18.407	9.9548	143.65	139.18	19.74	112.03	8.163	0																				
8	C12A 49 1G	GL1	180.65	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							636.92	6175.9	35.997	14.584	11.098	145.71	140.88	18.182	106.12	9.6039	0																				
9	C39B 7C THIN	GL1	180.88	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							502.89	10329	40.482	25.895	8.762	112.91	167.14	20.985	177.24	10.161	0																				
10	C39B 7E	GL1	180.56	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							592.69	6033.5	35.978	12.27	8.8426	132.32	133.64	19.057	106.25	9.0195	0																				
11	C39B 7F	GL1	180.69	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							724.49	7063.3	44.249	21.977	10.241	157.21	154.74	19.391	115.03	11.144	0																				
12	C39B 7G	GL1	180.51	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							693.15	6303.5	32.467	14.508	10.296	138.64	137.81	19.695	104.66	8.5373	0																				
13	C39B 7H	GL1	180.54	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							663.27	6440.1	35.421	19.353	11.255	144.74	140.89	18.429	109.72	10.299	0																				
14	C39B 7I	GL1	180.55	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							607.35	5861.7	32.386	15.616	10.401	131.08	128.07	18.309	104.31	9.4839	0																				
15	C3C 12 2	GL1	180.51	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							647.09	6350.6	41.873	17.642	10.085	140.45	138.89	17.846	106.26	8.3068	0																				
16	C70B 42 1A	GL1	180.5	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							567.48	5993.4	38.566	16.039	11.032	138.61	133.85	17.781	105.96	8.2788	0																				
17	C70B 42 1B	GL1	180.5	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							617.88	6134.1	24.342	14.823	8.7927	136.6	133.29	19.831	104.32	9.6784	0																				
18	C70B 42 1G	GL1	180.59	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							615.79	5418.8	28.307	17.76	9.9101	139.16	124.79	20.187	90.175	8.1707	0																				
19	C86C 15 2	GL1	180.69	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							440.06	9223.4	28.818	16.564	6.2149	98.042	141.95	16.708	161.57	8.9505	0																				
20	Q 109 2	GL1	180.75	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							1897.3	38643	324.18	23.278	31.671	222.54	2.0426	175.13	1850.4	347.24	0																				
21	Q 112	GL1	180.65	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							1775.4	37114	316.59	21.45	32.752	212.76	2.6119	176.54	1815.7	338.41	0																				
22	Q 113	GL1	180.58	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							1878.1	38010	331.12	22.989	33.242	225.8	3.643	181.35	1877.3	344.65	0																				
23	Q 114	GL1	180.67	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							1853.8	39147	330.12	24.361	36.193	222.67	3.1163	185.72	1917.5	357.21	0																				
24	Q 115	GL1	180.5	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							1876.4	36205	291.44	24.635	23.465	161.63	2.7988	143.09	1439.8	247.73	0																				
25	Q2	GL1	180.69	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							1913.5	39791	338.81	24.468	32.031	231.55	3.0901	183.46	1943.5	357.61	0																				
26	Q3 2	GL1	180.63	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							1874.9	38751	303	23.235	35.087	230.08	1.7806	178.94	1880.6	344.22	0																				
27	Q3 3	GL1	180.69	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							1765.8	38268	316.84	21.789	31.14	219.89	2.1012	177.63	1843	337.72	0																				
28	Q38 1	GL1	180.69	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							1834.4	37729	311.01	26.467	33.372	219.25	3.3457	178.78	1835.9	339.6	0																				
29	Q39	GL1	180.5	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							1824.7	39275	322	23.179	34.233	231.95	1.3592	185.91	1937	352.88	0																				
30	Q63 4	GL1	180.69	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							1937.4	40819	321.5	25.809	37.188	227.29	3.3941	184.28	1947.2	357.53	0																				
31	Q65 6	GL1	180.58	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							1909.7	39316	340.65	26.159	39.876	230.61	1.8993	189.29	1955.3	364.9	0																				
32	Q95 1	GL1	180.68	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1							1845.2	38450	332.45	23.43	35.014	223.93	1.6999	179.82	1858.5	350.04	0																				

Mass Calibration

The screenshot shows an Excel spreadsheet with the following data structure:

Sample	GL1	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1
C12A 49 1A	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	667.4	6230.4	33.747	17.704	8.5562	143.15	138.23	19.185	109.27	7.9421	0
C12A 49 1B	180.68	180.68	180.68	180.68	180.68	180.68	180.68	180.68	180.68	180.68	180.68	180.68	624.37	6230.8	33.595	17.234	10.483	142.97	135.47	18.922	108.14	8.3201	0
C12A 49 1C	180.51	180.51	180.51	180.51	180.51	180.51	180.51	180.51	180.51	180.51	180.51	180.51	616.44	6835.4	31.268	14.514	9.0372	138.63	141.67	19.271	106.37	9.1278	0
C12A 49 1D	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	570.03	6032	37.962	16.864	10.992	139.07	134.49	18.749	106.98	9.2711	0
C12A 49 1E	180.65	180.65	180.65	180.65	180.65	180.65	180.65	180.65	180.65	180.65	180.65	180.65	694.46	6643	36.515	18.297	11.064	149.33	148.93	20.054	113.66	11.055	0
C12A 49 1F	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	662.39	6244.1	33.149	18.407	9.9548	143.65	139.18	19.74	112.03	8.163	0
C12A 49 1G	180.65	180.65	180.65	180.65	180.65	180.65	180.65	180.65	180.65	180.65	180.65	180.65	636.92	6175.9	35.997	14.584	11.098	145.71	140.88	18.182	106.12	9.6039	0
C39B 7C THIN	180.88	180.88	180.88	180.88	180.88	180.88	180.88	180.88	180.88	180.88	180.88	180.88	502.89	10329	40.482	25.895	8.762	112.91	167.14	20.985	177.24	10.161	0
C39B 7E	180.56	180.56	180.56	180.56	180.56	180.56	180.56	180.56	180.56	180.56	180.56	180.56	592.69	6033.5	35.978	12.27	8.8426	132.32	133.64	19.057	106.25	9.0195	0
C39B 7F	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	724.49	7063.3	44.249	21.977	10.241	157.21	154.74	19.391	115.03	11.144	0
C39B 7G	180.51	180.51	180.51	180.51	180.51	180.51	180.51	180.51	180.51	180.51	180.51	180.51	693.15	6303.5	32.467	14.508	10.296	138.64	137.81	19.695	104.66	8.5373	0
C39B 7H	180.54	180.54	180.54	180.54	180.54	180.54	180.54	180.54	180.54	180.54	180.54	180.54	663.27	6440.1	35.421	19.353	11.255	144.74	140.89	18.429	109.72	10.299	0
C39B 7I	180.55	180.55	180.55	180.55	180.55	180.55	180.55	180.55	180.55	180.55	180.55	180.55	607.35	5861.7	32.386	15.616	10.401	131.08	128.07	18.309	104.31	9.4839	0
C3C 12 2	180.51	180.51	180.51	180.51	180.51	180.51	180.51	180.51	180.51	180.51	180.51	180.51	647.09	6350.6	41.873	17.642	10.085	140.45	138.89	17.846	107.26	8.3068	0
C70B 42 1A	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	567.48	5993.4	38.566	16.039	11.032	138.61	133.85	17.781	105.96	8.2788	0
C70B 42 1B	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	617.88	6134.1	24.342	14.823	8.7927	136.6	133.29	19.831	104.32	9.6784	0
C70B 42 1G	180.59	180.59	180.59	180.59	180.59	180.59	180.59	180.59	180.59	180.59	180.59	180.59	615.79	5418.8	28.307	17.76	9.9101	139.16	124.79	20.187	90.175	8.1707	0
C86C 15 2	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	440.06	9223.4	28.818	16.564	6.2149	98.042	141.95	16.708	161.57	8.9505	0
Q 109 2	180.75	180.75	180.75	180.75	180.75	180.75	180.75	180.75	180.75	180.75	180.75	180.75	1897.3	38643	324.18	23.278	31.671	222.54	2.0426	175.13	1850.4	347.24	0
Q 112	180.65	180.65	180.65	180.65	180.65	180.65	180.65	180.65	180.65	180.65	180.65	180.65	1775.4	37114	316.59	21.45	32.752	212.76	2.6119	176.54	1815.7	338.41	0
Q 113	180.58	180.58	180.58	180.58	180.58	180.58	180.58	180.58	180.58	180.58	180.58	180.58	1878.1	38010	331.12	22.989	33.242	225.8	3.643	181.35	1877.3	344.65	0
Q 114	180.67	180.67	180.67	180.67	180.67	180.67	180.67	180.67	180.67	180.67	180.67	180.67	1853.8	39147	330.12	24.361	36.193	222.67	3.1163	185.72	1917.5	357.21	0
Q 115	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	1876.4	36205	291.44	24.635	23.466	161.63	2.7988	143.09	1439.8	247.73	0
Q2	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	1913.5	39791	338.81	24.468	32.07	231.55	3.0901	183.46	1943.5	357.61	0
Q3 2	180.63	180.63	180.63	180.63	180.63	180.63	180.63	180.63	180.63	180.63	180.63	180.63	1874.9	38751	303	23.235	35.07	230.08	1.7806	178.94	1880.6	344.22	0
Q3 3	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	1765.8	38268	316.84	21.789	31.1	219.89	2.1012	177.63	1843	337.72	0
Q38 1	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	1834.4	37729	311.01	26.467	33.3	219.25	3.3457	178.78	1835.9	339.6	0
Q39	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	1824.7	39275	322	23.179	34.2	231.95	1.3592	185.91	1937	352.88	0
Q63 4	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	180.69	1937.4	40819	321.5	25.809	37.1	227.29	3.3941	184.28	1947.2	357.53	0
Q65 6	180.58	180.58	180.58	180.58	180.58	180.58	180.58	180.58	180.58	180.58	180.58	180.58	1909.7	39316	340.65	26.159	39.1	230.61	1.8993	189.29	1955.3	364.9	0
Q95 1	180.68	180.68	180.68	180.68	180.68	180.68	180.68	180.68	180.68	180.68	180.68	180.68	1845.2	38450	332.45	23.43	35.1	223.93	1.6999	179.82	1858.5	350.04	0

Here, you have the weight % or ppm data, depending on the .CFZ file you used

Mass Calibration

The screenshot displays an Excel spreadsheet titled "S1CalProcess" with a menu bar including File, Home, Insert, Page Layout, Formulas, Data, Review, View, and Add-Ins. The active cell is F2, containing the formula "C12A 49 1A". The spreadsheet contains a table of calibration data with columns labeled with elements and their isotopes (e.g., MnKa1, FeKa1, ZnKa1, GaKa1, ThLa1, RbKa1, SrKa1, Y Ka1, ZrKa1, NbKa1, RhKa1) and rows representing different samples (e.g., C12A 49 1A, C12A 49 1B, C12A 49 1C, C12A 49 1D, C12A 49 1E, C12A 49 1F, C12A 49 1G, C39B 7C THIN, C39B 7E, C39B 7F, C39B 7G, C39B 7H, C39B 7I, C3C 12 2, C70B 42 1A, C70B 42 1B, C70B 42 1G, C86C 15 2, Q 109 2, Q 112, Q 113, Q 114, Q 115, Q2, Q3 2, Q3 3, Q38 1, Q39, Q63 4, Q65 6, Q95 1). A context menu is open over the first few rows, with the "Copy" option selected. A callout box points to the "Copy" option with the text: "To better organize this data, select your PDZ file names and copy them".

To better organize this data,
select your PDZ file names and
copy them

Mass Calibration

The screenshot shows an Excel spreadsheet with the following data structure:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH																		
1	V:\Instruments\Tracer III-SD\Data_Calibrations\T3S2429\Obsidian T3S2429\Obsidian Cal Data																				MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1																					
2						C12A 49 1A	GL1	180.5	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C12A 49 1A	667.4	6230.4	33.747	17.704	8.5562	143.15	138.23	19.185	109.27	7.9421	0																					
3						C12A 49 1B	GL1	180.68	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C12A 49 1B	624.37	6230.8	33.595	17.234	10.483	142.97	135.47	18.922	108.14	8.3201	0																					
4						C12A 49 1C	GL1	180.51	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C12A 49 1C	616.44	6835.4	31.268	14.514	9.0372	138.63	141.67	19.271	106.37	9.1278	0																					
5						C12A 49 1D	GL1	180.5	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C12A 49 1D	570.03	6032	37.962	16.864	10.992	139.07	134.49	18.749	106.98	9.2711	0																					
6						C12A 49 1E	GL1	180.65	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C12A 49 1E	694.46	6643	36.515	18.297	11.064	149.33	148.93	20.054	113.66	11.055	0																					
7						C12A 49 1F	GL1	180.69	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C12A 49 1F	662.39	6244.1	33.149	18.407	9.9548	143.65	139.18	19.74	112.03	8.163	0																					
8						C12A 49 1G	GL1	180.65	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C12A 49 1G	636.92	6175.9	35.997	14.584	11.098	145.71	140.88	18.182	106.12	9.6039	0																					
9						C39B 7C THIN	GL1	180.88	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C39B 7C THIN	502.89	10329	40.482	25.895	8.762	112.91	167.14	20.985	177.24	10.161	0																					
10						C39B 7E	GL1	180.56	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C39B 7E	592.69	6033.5	35.978	12.27	8.8426	132.32	133.64	19.057	106.25	9.0195	0																					
11						C39B 7F	GL1	180.69	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C39B 7F	724.49	7063.3	44.249	21.977	10.241	157.21	154.74	19.391	115.03	11.144	0																					
12						C39B 7G	GL1	180.51	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C39B 7G	693.15	6303.5	32.467	14.508	10.296	138.64	137.81	19.695	104.66	8.5373	0																					
13						C39B 7H	GL1	180.54	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C39B 7H	663.27	6440.1	35.421	19.353	11.255	144.74	140.89	18.429	109.72	10.299	0																					
14						C39B 7I	GL1	180.55	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C39B 7I	607.35	5861.7	32.386	15.616	10.401	131.08	128.07	18.309	104.31	9.4839	0																					
15						C3C 12 2	GL1	180.51	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C3C 12 2	647.09	6350.6	41.873	17.642	10.085	140.45	138.89	17.846	106.26	8.3068	0																					
16						C70B 42 1A	GL1	180.5	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C70B 42 1A	567.48	5993.4	38.566	16.039	11.032	138.61	133.85	17.781	105.96	8.2788	0																					
17						C70B 42 1B	GL1	180.5	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C70B 42 1B	617.88	6134.1	24.342	14.823	8.7927	136.6	133.29	19.831	104.32	9.6784	0																					
18						C70B 42 1G	GL1	180.59	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C70B 42 1G	615.79	5418.8	28.307	17.76	9.9101	139.16	124.79	20.187	90.175	8.1707	0																					
19						C86C 15 2	GL1	180.69	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	C86C 15 2	440.06	9223.4	28.818	16.564	6.2149	98.042	141.95	16.708	161.57	8.9505	0																					
20						Q 109 2	GL1	180.75	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	Q 109 2	1897.3	38643	324.18	23.278	31.671	222.54	2.0426	175.13	1850.4	347.24	0																					
21						Q 112	GL1	180.65	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	Q 112	1775.4	37114	316.59	21.45	32.752	212.76	2.6119	176.54	1815.7	338.41	0																					
22						Q 113	GL1	180.58	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	Q 113	1878.1	38010	331.12	22.989	33.242	225.8	3.643	181.35	1877.3	344.65	0																					
23						Q 114	GL1	180.67	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	Q 114	1853.8	39147	330.12	24.361	36.193	222.67	3.1163	185.72	1917.5	357.21	0																					
24						Q 115	GL1	180.5	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	Q 115	1876.4	36205	291.44	24.635	23.465	161.63	2.7988	143.09	1439.8	247.73	0																					
25						Q2	GL1	180.69	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	Q2	1913.5	39791	338.81	24.468	32.031	231.55	3.0901	183.46	1943.5	357.61	0																					
26						Q3 2	GL1	180.63	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	Q3 2	1874.9	38751	303	23.235	35.087	230.08	1.7806	178.94	1880.6	344.22	0																					
27						Q3 3	GL1	180.69	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	Q3 3	1765.8	38268	316.84	21.789	31.14	219.89	2.1012	177.63	1843	337.72	0																					
28						Q38 1	GL1	180.69	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	Q38 1	1834.4	37729	311.01	26.467	33.372	219.25	3.3457	178.78	1835.9	339.6	0																					
29						Q39	GL1	180.5	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	Q39	1824.7	39275	322	23.179	34.233	231.95	1.3592	185.91	1937	352.88	0																					
30						Q63 4	GL1	180.69	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	Q63 4	1937.4	40819	321.5	25.809	37.188	227.29	3.3941	184.28	1947.2	357.53	0																					
31						Q65 6	GL1	180.58	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	Q65 6	1909.7	39316	340.65	26.159	39.876	230.61	1.8993	189.29	1955.3	364.9	0																					
32						Q95 1	GL1	180.68	MnKa1	FeKa1	ZnKa1	GaKa1	ThLa1	RbKa1	SrKa1	Y Ka1	ZrKa1	NbKa1	RhKa1	Q95 1	1845.2	38450	332.45	23.43	35.014	223.93	1.6999	179.82	1858.5	350.04	0																					

Paste your PDZ file names in the column to the left of your calibrated data

Mass Calibration

The screenshot displays an Excel spreadsheet with a context menu open over a row of data. The spreadsheet columns are labeled with element names (Mn, Fe, Zn, Ga, Th, Rb, Sr, Y, Zr, Nb, Rh) and their corresponding isotopes (e.g., MnKa1, FeKa1, ZnKa1, etc.). The data rows include sample identifiers like C12A 49 1A through C12A 49 1G, C39B 7C THIN, C39B 7E through C39B 7I, and Q39, Q63 4, Q65 6, Q95 1. The context menu shows options like Cut, Copy, Paste Options, Paste Special, Insert, Delete, Clear Contents, Filter, Sort, Insert Comment, Format Cells, Pick From Drop-down List, Define Name, and Hyperlink. Two callout boxes are present: one pointing to a row with the text 'Select and copy one of these rows' and another pointing to the element names in the first column with the text 'To the left of your calibrated data are the element names in each row'.

Select and copy one of these rows

To the left of your calibrated data are the element names in each row

