

## .681" Barrel Back Results

### Marballizer

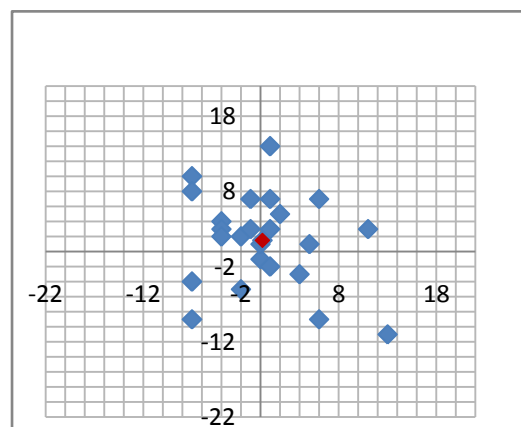
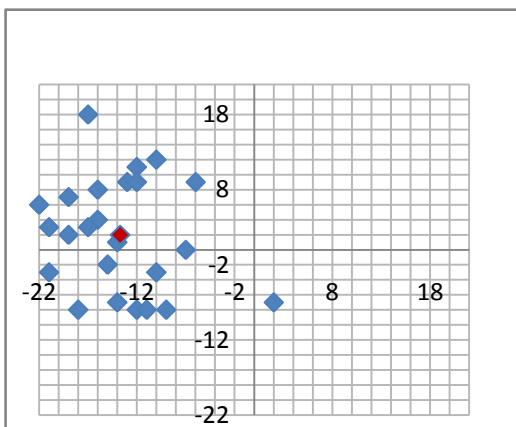
X	Y	Velocity
-14	-7	267
-12	-8	264
-10	-3	273
2	-7	263
-9	-8	279
-7	0	282
-16	4	282
-18	-8	283
-11	-8	277
-19	7	281
-13	9	273
-15	-2	283
-19	2	283
-6	9	284
-10	12	284
-21	3	283
-17	3	267
-22	6	278
-16	8	277
-12	11	275
-12	9	273
-14	1	278
-21	-3	276
-17	18	281

**Mean**    **-13.7083**    **2**        **272.1667**  
**SD**        **5.520548**    **7.518094**    **6.419513**  
**Vector**    **9.327282**

### DXS Bronze

X	Y	Velocity
1	14	271
4	-3	269
-2	2	266
6	-9	263
-7	-9	263
-7	10	276
13	-11	259
-4	4	257
-1	3	264
-4	3	258
-4	2	261
0	-1	263
6	7	256
1	-2	258
1	3	260
-1	7	263
2	5	266
0	1	264
-7	-4	267
11	3	266
-7	8	268
-2	-5	264
5	1	268
1	7	253

**Mean**        **0.208333**        **1.5**    **263.6667**  
**SD**            **5.372872**    **6.178504**    **5.208514**  
**Vector**        **8.187898**



The Mean is red. Marker velocity was not adjusted during testing.

# .685" Barrel Back Results

## Marballizer

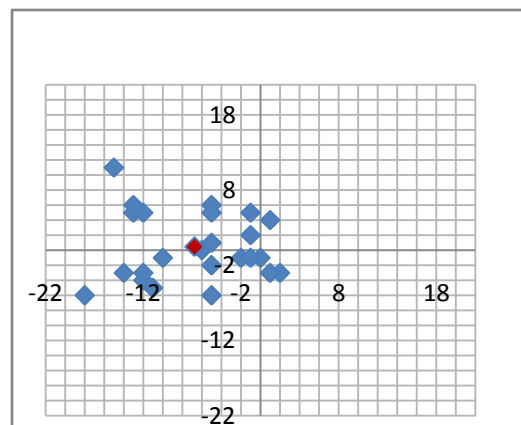
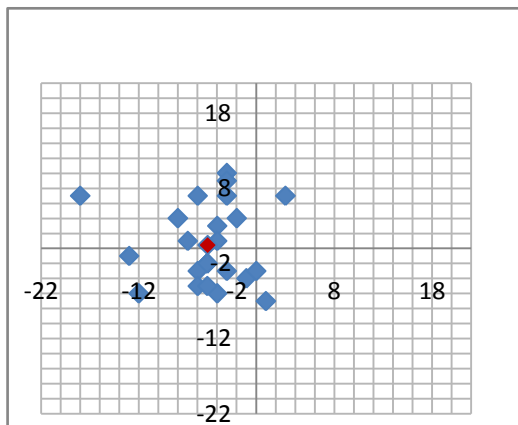
X	Y	Velocity
-5	-2	269
-1	-4	266
-4	3	265
3	7	275
-5	-2	280
-4	-6	271
-12	-6	273
-7	1	273
-3	10	277
-6	7	276
-3	-3	275
-6	-3	260
-6	-5	273
-3	9	275
-8	4	264
-18	7	278
-13	-1	279
-3	7	280
0	-3	259
-4	1	269
-5	-2	268
-2	4	278
1	-7	279
-5	-5	270

<b>Mean</b>	<b>-4.95833</b>	<b>0.458333</b>	<b>272.1667</b>
<b>SD</b>	<b>4.505834</b>	<b>5.283108</b>	<b>6.147935</b>
<b>Vector</b>	<b>6.943613</b>		

## DXS Bronze

X	Y	Velocity
-2	-1	265
0	-1	269
1	4	257
-15	11	259
2	-3	265
-5	6	267
-10	-1	266
-18	-6	264
-12	-4	265
-12	5	262
-5	5	262
-13	5	262
-1	2	263
-1	-1	268
-5	-6	257
-6	0	265
-12	-3	262
-14	-3	263
-1	5	264
-11	-5	263
1	-3	276
-5	-2	261
-13	6	264
-5	1	259

<b>Mean</b>	<b>-6.75</b>	<b>0.458333</b>	<b>263.6667</b>
<b>SD</b>	<b>5.958188</b>	<b>4.501006</b>	<b>4.039658</b>
<b>Vector</b>	<b>7.467199</b>		



The Mean is red. Marker velocity was not adjusted during testing.

## .687" Barrel Back Results

### Marballizer

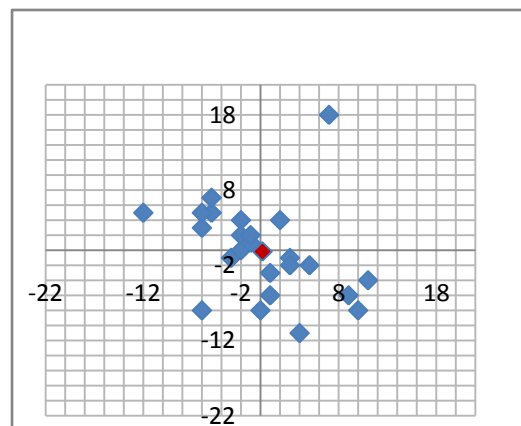
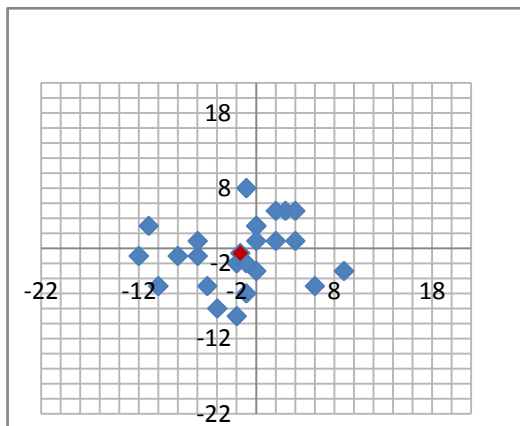
X	Y	Velocity
-2	-2	268
6	-5	273
-12	-1	263
-6	-1	272
-10	-5	273
-6	1	270
-11	3	280
3	5	267
-4	-8	276
-8	-1	270
0	3	266
0	3	273
4	5	278
-1	8	277
2	5	280
-5	-5	268
0	-3	277
4	1	275
9	-3	271
-1	-2	268
2	1	274
-2	-9	289
-1	-6	272
0	1	278

**Mean**    -1.625    -0.625    273.25  
**SD**        5.339048    4.401704    5.643388  
**Vector**    6.919569

### DXS Bronze

X	Y	Velocity
-3	-1	262
1	-6	264
0	-8	266
-2	4	272
10	-8	257
-2	0	264
-2	2	262
11	-4	256
9	-6	267
7	18	268
3	-1	262
4	-11	262
2	4	265
-5	5	266
3	-2	268
-5	7	258
1	-3	264
-1	1	265
-6	3	269
5	-2	248
-1	2	263
-6	-8	258
-6	5	261
-12	5	263

**Mean**        0.208333    -0.16667    262.9167  
**SD**            5.672046    6.315383    5.020971  
**Vector**        8.48859



The Mean is red. Marker velocity was not adjusted during testing.

## .689" Barrel Back Results

### Marballizer

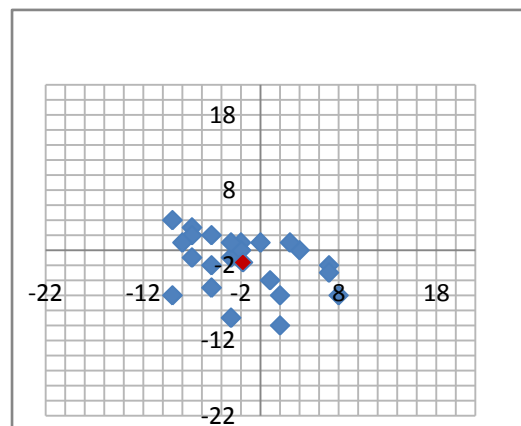
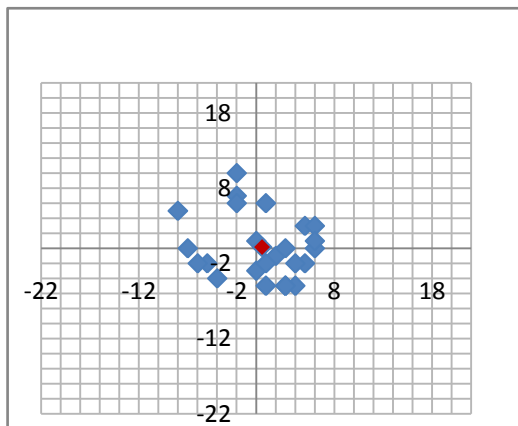
X	Y	Velocity
-7	0	266
3	-5	263
-2	7	272
-2	10	273
1	-5	263
0	-3	286
5	-2	267
-2	6	256
-8	5	279
4	-5	281
-5	-2	270
2	-1	284
5	3	262
-4	-4	276
-6	-2	283
4	-2	265
6	3	277
3	0	271
3	-5	267
6	0	272
0	1	270
6	1	272
1	-2	274
1	6	281

**Mean** 0.583333 0.166667 272.0833  
**SD** 4.262237 4.228955 7.745499  
**Vector** 6.004226

### DXS Bronze

X	Y	Velocity
7	-2	267
2	-6	264
-9	-6	256
-5	-2	268
-2	0	261
4	0	261
-3	-1	261
-3	-9	268
0	1	282
-7	3	262
7	-3	256
1	-4	268
-9	4	262
-2	1	263
-5	-5	266
2	-10	266
-5	2	265
-2	0	269
-7	-1	262
8	-6	267
-7	2	260
-8	1	268
-3	1	274
3	1	267

**Mean** -1.79167 -1.625 265.125  
**SD** 5.132837 3.751087 5.527107  
**Vector** 6.35741



The Mean is red. Marker velocity was not adjusted during testing.

## .693" Barrel Back Results

### Marballizer

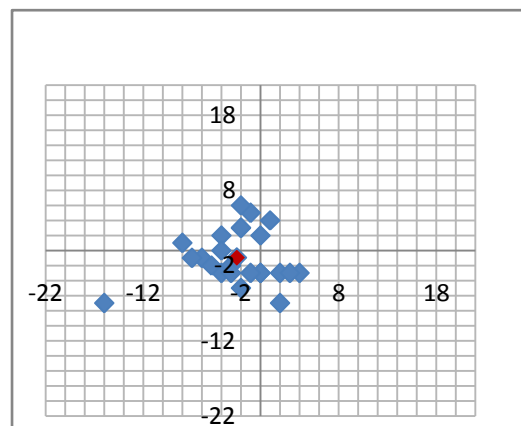
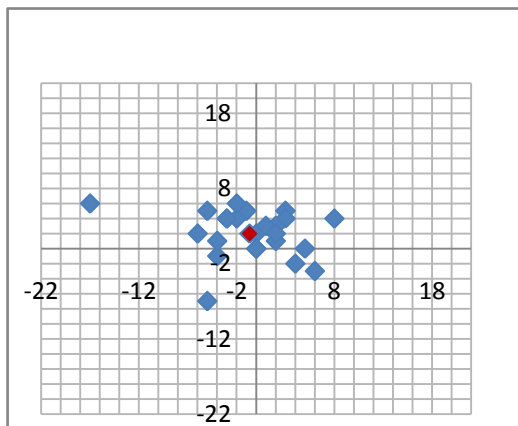
X	Y	Velocity
-3	4	264
-1	5	268
3	5	267
5	0	266
-5	-7	268
8	4	273
-4	-1	263
-4	1	272
-2	4	268
-3	4	268
0	2	266
-17	6	277
0	0	246
6	-3	270
-5	5	276
3	4	264
-2	6	274
2	3	267
1	3	262
0	0	265
2	1	271
2	2	261
-6	2	266
4	-2	264

<b>Mean</b>	<b>-0.66667</b>	<b>2</b>	<b>266.9167</b>
<b>SD</b>	<b>5.087638</b>	<b>3.134659</b>	<b>6.156768</b>
<b>Vector</b>	<b>5.975797</b>		

### DXS Bronze

X	Y	Velocity
-4	2	261
-2	3	262
-4	-3	257
-3	-2	258
-6	-1	270
0	2	250
-2	3	254
-1	5	256
-2	6	258
-16	-7	250
-5	-2	253
0	-3	261
-4	0	250
-7	-1	253
-3	-3	253
4	-3	251
0	-3	252
2	-3	251
-1	-3	255
1	4	249
-2	-5	252
-8	1	259
2	-7	264
3	-3	251

<b>Mean</b>	<b>-2.41667</b>	<b>-0.95833</b>	<b>255.4167</b>
<b>SD</b>	<b>4.210924</b>	<b>3.532202</b>	<b>5.323587</b>
<b>Vector</b>	<b>5.496211</b>		



The Mean is red. Marker velocity was not adjusted during testing.

# .681" Barrel Back Results

## W/ 3" Front (Marballizer)

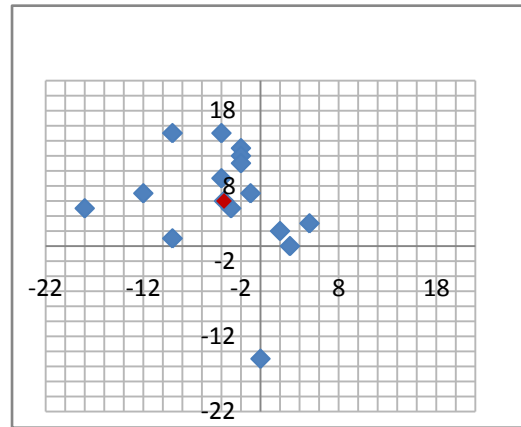
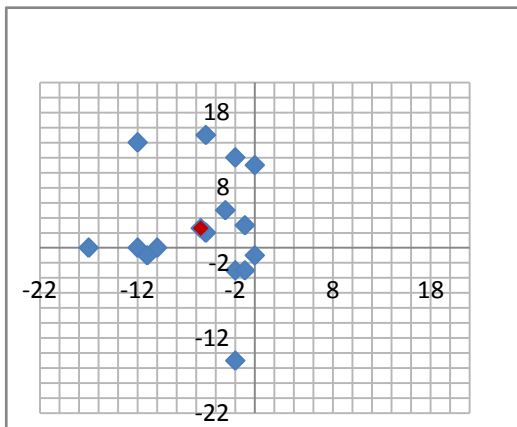
X	Y	Velocity
-12	14	294
0	11	298
-1	3	299
-10	0	296
-12	0	287
-17	0	299
-2	12	288
-3	5	287
-11	-1	294
-5	2	293
-2	-3	297
0	-1	286
-2	-15	284
-5	15	279
-1	-3	291

## W/ 5" Front (Marballizer)

X	Y	Velocity
0	-15	301
-2	13	304
-2	12	298
-12	7	298
-3	5	300
-1	7	301
5	3	288
-4	9	309
3	0	300
-9	15	289
-2	11	297
2	2	303
-9	1	293
-4	15	301
-18	5	310

**Mean**      -5.53333      2.6 291.4667  
**SD**        5.423055    7.872193 6.069439  
**Vector**    9.559338

**Mean**      -3.73333      6 299.4667  
**SD**        6.052941    7.615773 6.186006  
**Vector**    9.728211



The Mean is red. Marker velocity was not adjusted during testing.

# .685" Barrel Back Results

## W/ 3" Front (Marballizer)

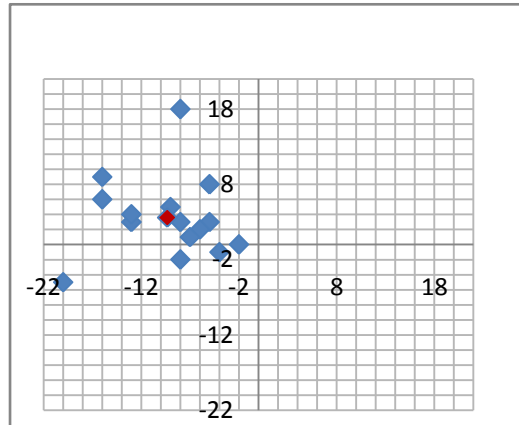
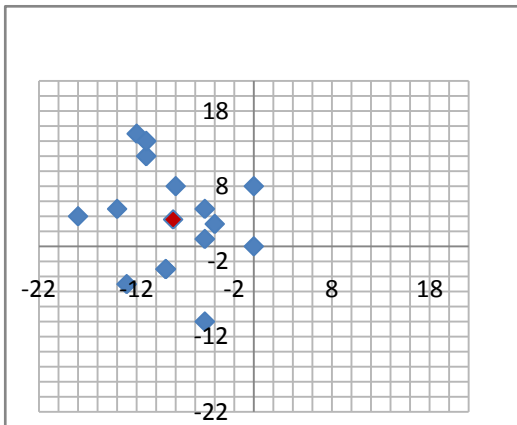
X	Y	Velocity
-18	4	277
-13	-5	279
-5	5	281
-4	3	280
-12	15	281
0	8	277
-14	5	283
-5	1	283
-9	-3	285
-8	8	287
0	0	286
-11	12	296
-9	-3	293
-11	14	283
-5	-10	282

## W/ 5" Front (Marballizer)

X	Y	Velocity
-2	0	297
-5	3	299
-6	2	290
-5	8	306
-8	18	303
-13	3	289
-8	-2	297
-9	5	296
-16	9	304
-4	-1	285
-20	-5	286
-16	6	277
-8	3	286
-7	1	289
-13	4	294

**Mean**      -8.26667      3.6   283.5333  
**SD**        5.119524   7.159409 5.343443  
**Vector**    8.801515

**Mean**      -9.33333      3.6   293.2  
**SD**        5.150127   5.435334 8.134582  
**Vector**    7.487768



The Mean is red. Marker velocity was not adjusted during testing.

## .687" Barrel Back Results

### W/ 3" Front (Marballizer)

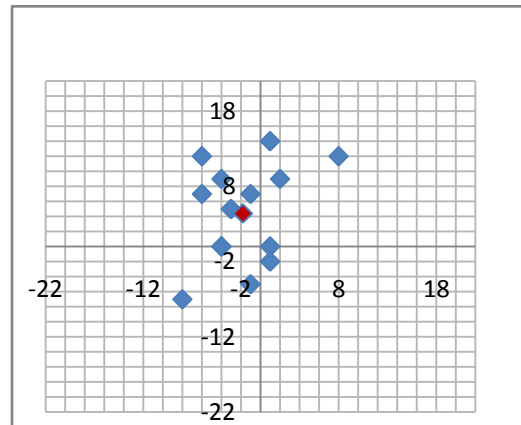
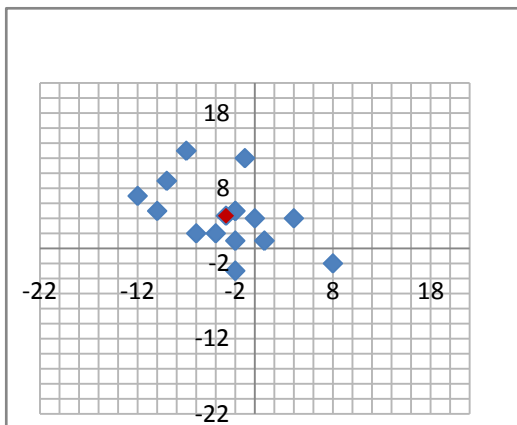
X	Y	Velocity
-10	5	282
-6	2	279
-12	7	283
-2	5	292
1	1	290
8	-2	301
-9	9	289
4	4	298
-2	-3	285
-7	13	289
-4	2	290
-2	5	284
-2	1	293
-1	12	294
0	4	282

### W/ 5" Front (Marballizer)

X	Y	Velocity
-1	7	285
-4	0	296
-8	-7	304
1	0	313
8	12	307
-6	12	294
1	-2	283
-6	7	286
-1	-5	292
-4	0	297
2	9	299
-3	5	307
-4	9	313
-3	5	291
1	14	298

**Mean**      -2.93333    4.333333    289.2143  
**SD**        5.311264    4.561746    6.216338  
**Vector**     7.00136

**Mean**            -1.8            4.4    297.6667  
**SD**            4.021371    6.445375    9.604067  
**Vector**        7.596992



The Mean is red. Marker velocity was not adjusted during testing.

# .689" Barrel Back Results

## W/ 3" Front (Marballizer)

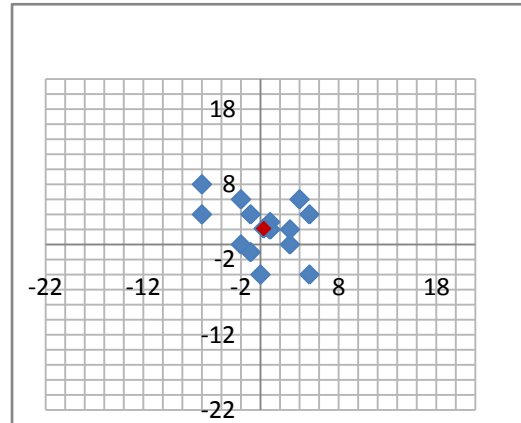
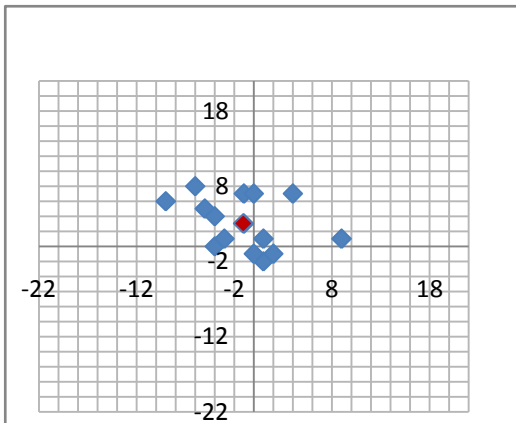
X	Y	Velocity
9	1	283
1	-2	282
1	1	284
-9	6	288
2	-1	288
0	-1	282
-4	0	290
-6	8	282
-1	7	286
-3	1	288
0	7	289
4	7	291
-5	5	289
-4	4	297
-1	3	277

## W/ 5" Front (Marballizer)

X	Y	Velocity
-2	0	298
-1	4	292
1	2	297
-2	6	289
3	0	305
0	-4	287
-1	-1	306
1	3	276
3	2	301
-6	8	299
5	-4	289
-6	4	298
1	2	294
5	4	303
4	6	292

**Mean**      -1.06667    3.066667    286.4  
**SD**         4.399134    3.432339    4.866797  
**Vector**     5.579725

**Mean**        0.333333    2.133333    295.0667  
**SD**         3.457222    3.481926    7.905393  
**Vector**     4.906749



The Mean is red. Marker velocity was not adjusted during testing.

# .693" Barrel Back Results

## W/ 3" Front (Marballizer)

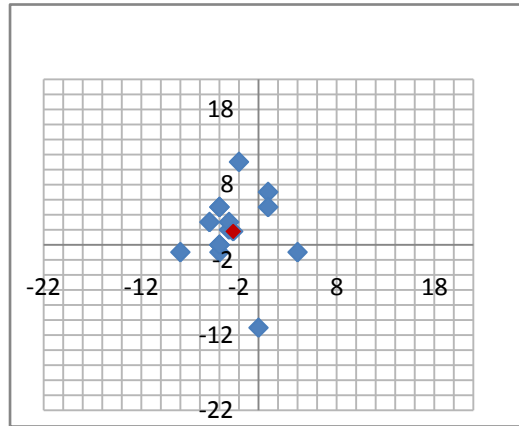
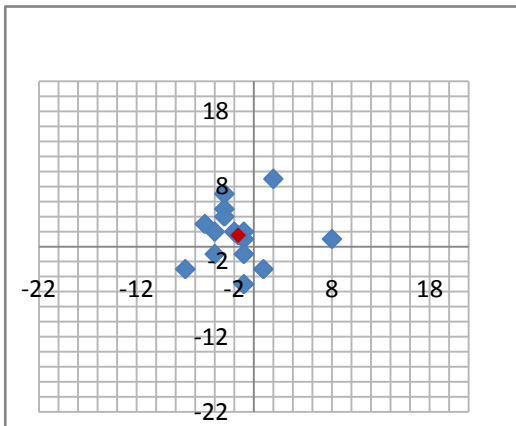
X	Y	Velocity
-1	1	275
-4	2	283
-3	5	283
-1	-5	274
-3	4	271
-4	-1	272
-3	7	283
-5	3	272
-1	2	282
-1	-1	274
1	-3	275
-2	2	266
-7	-3	289
8	1	274
2	9	277

## W/ 5" Front (Marballizer)

X	Y	Velocity
-3	2	279
-4	0	277
-4	5	271
0	-11	276
-4	0	301
1	7	286
1	5	287
-3	3	267
-8	-1	279
-4	5	282
-4	-1	282
-4	0	283
4	-1	288
-5	3	268
-2	11	290

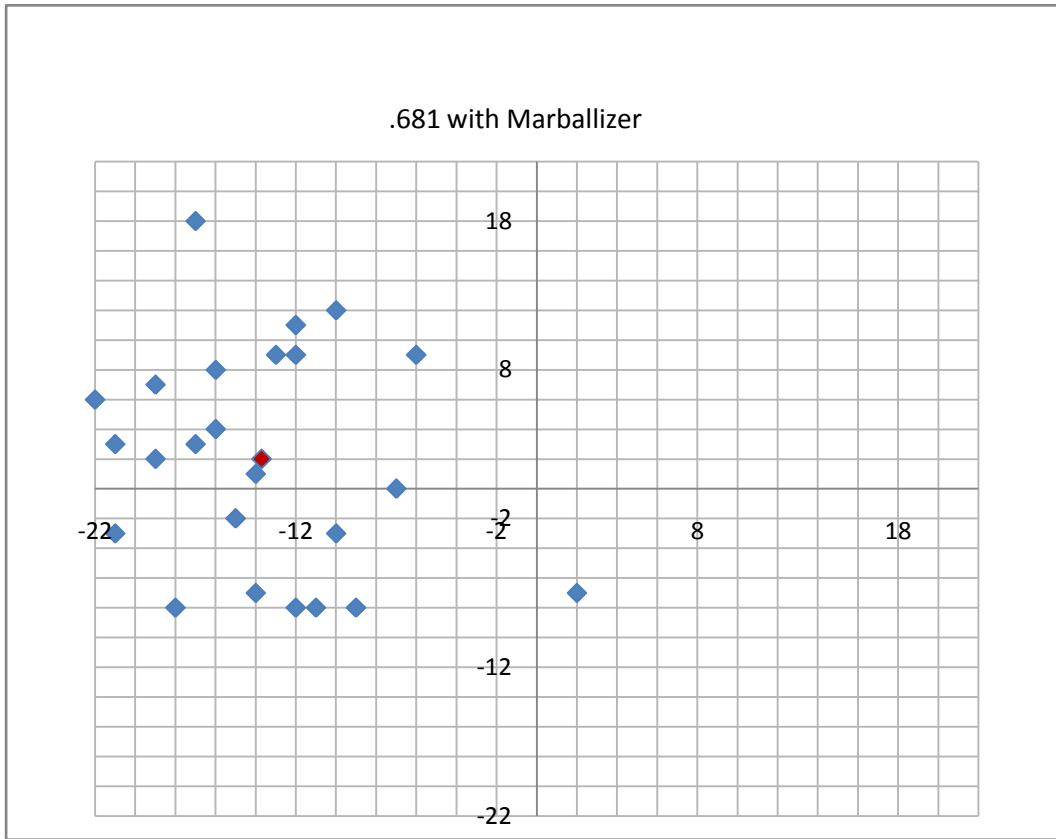
**Mean**            -1.6   1.533333   276.6667  
**SD**                3.50102   3.814758   6.078847  
**Vector**           5.177791

**Mean**            -2.6        1.8   281.0667  
**SD**                2.971291   4.945416   8.907995  
**Vector**           5.769377

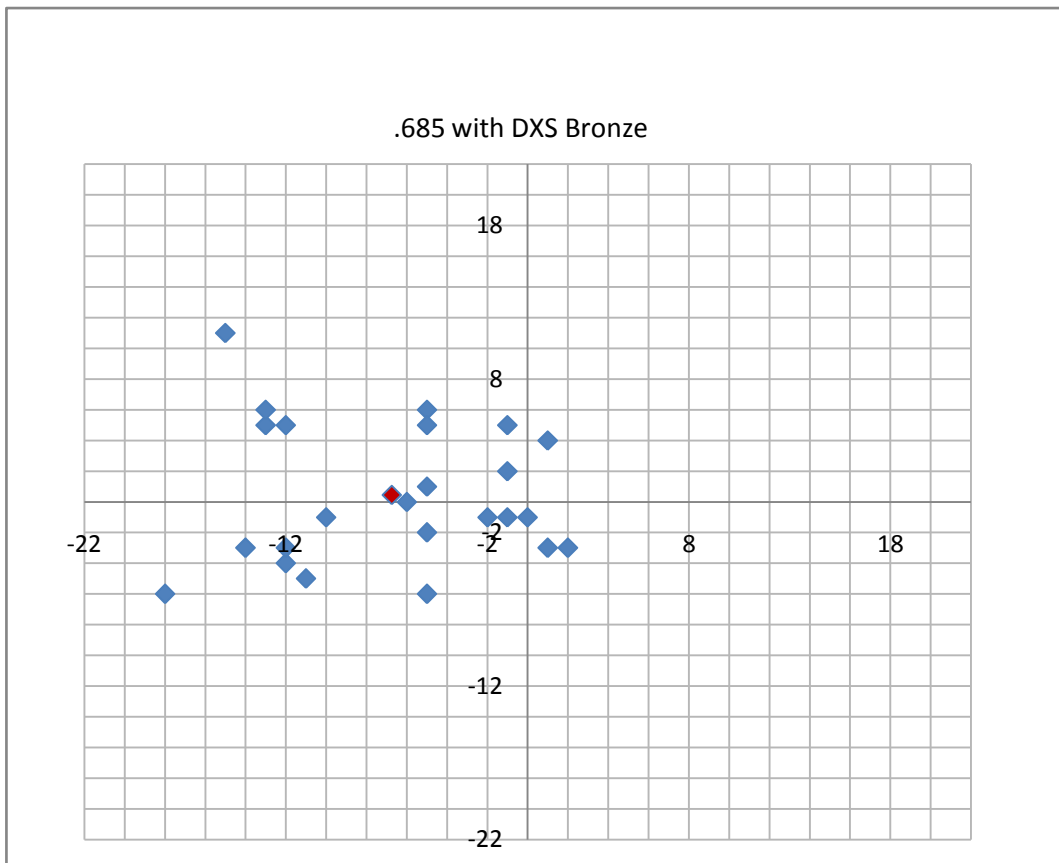
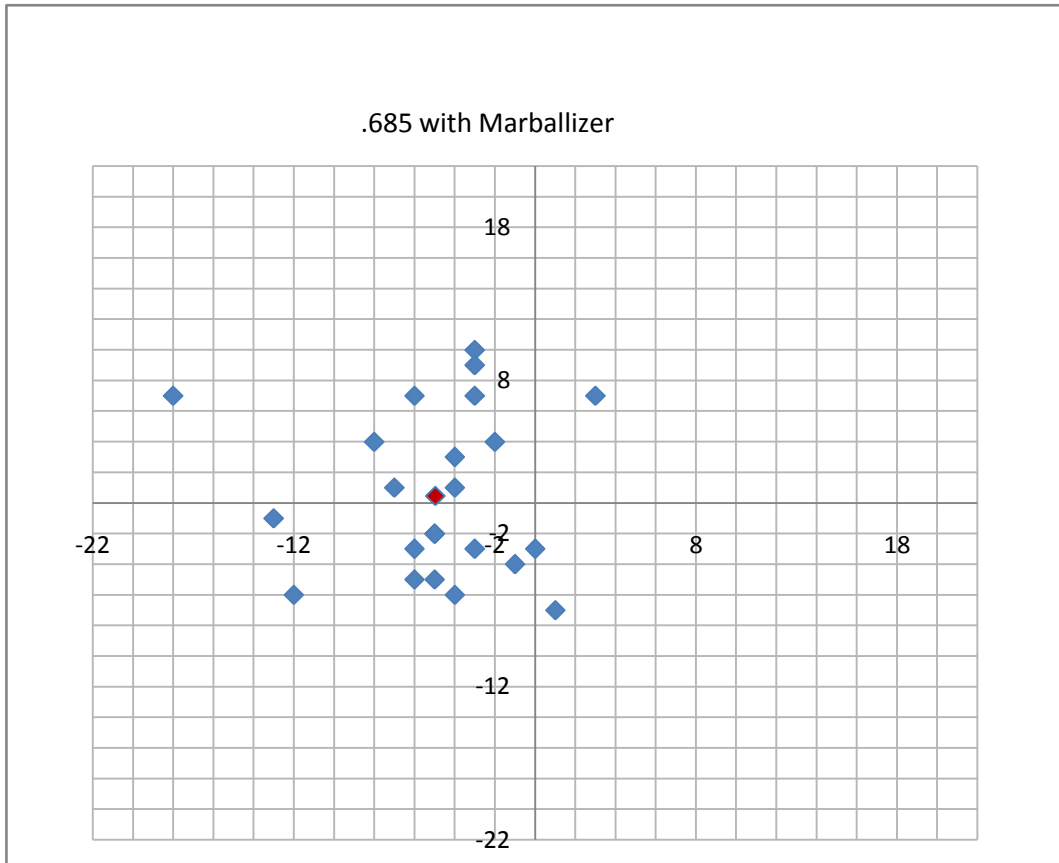


The Mean is red. Marker velocity was not adjusted during testing.

# Comparison Scatterplots

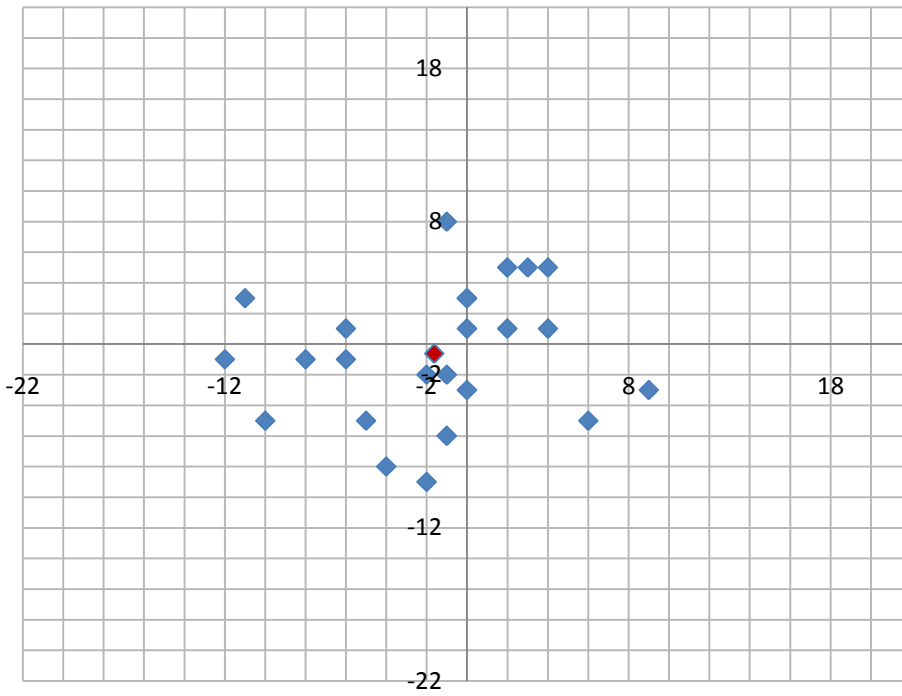


# Comparison Scatterplots

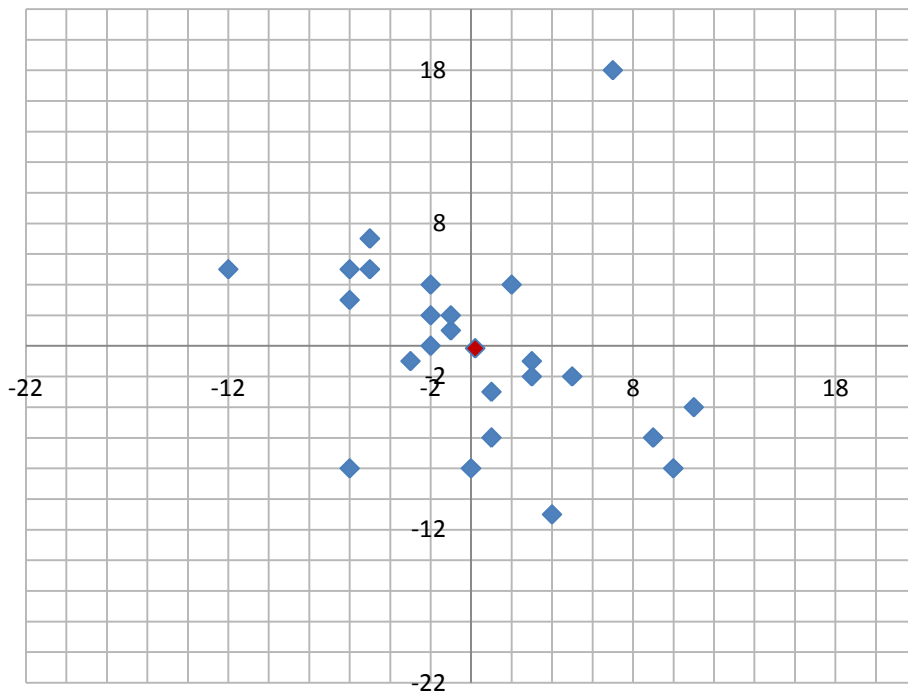


# Comparison Scatterplots

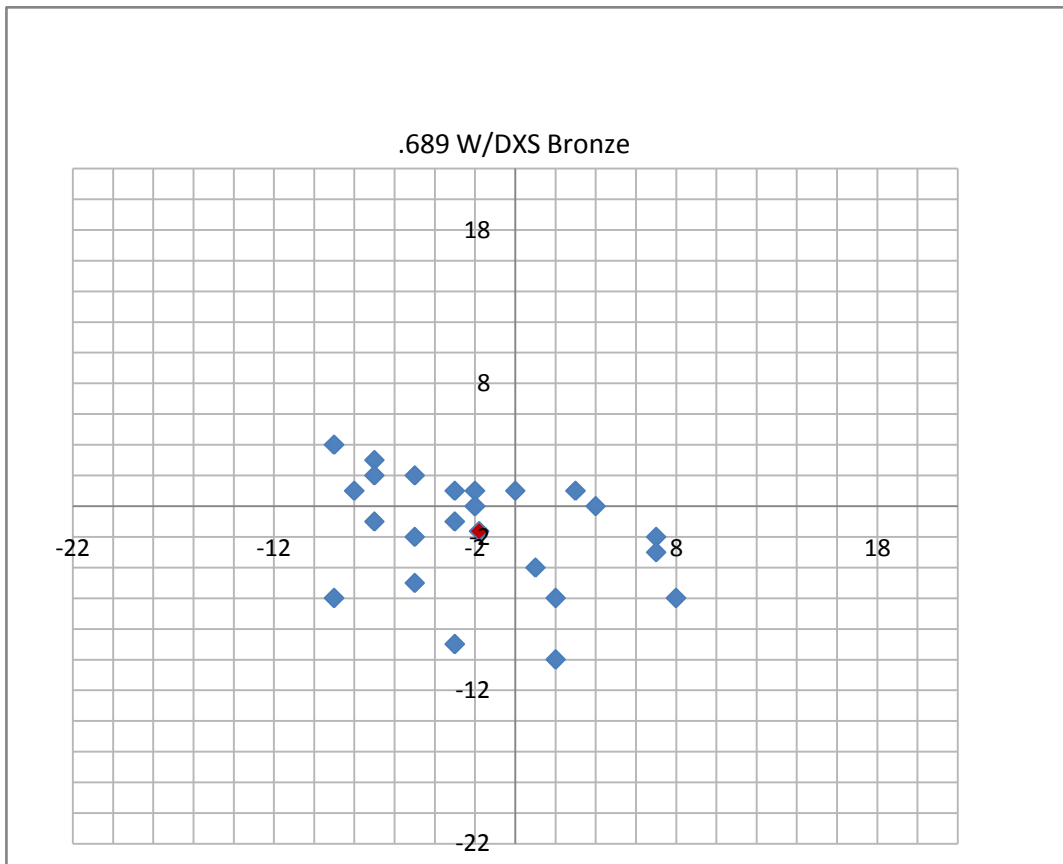
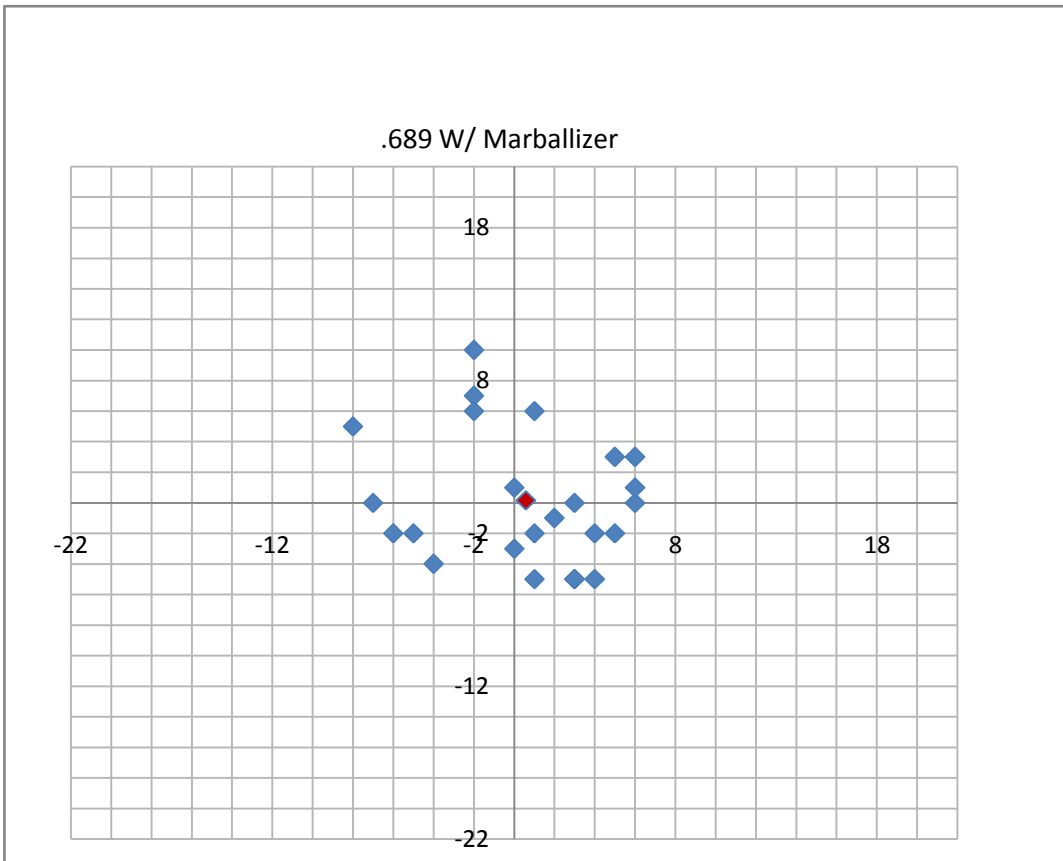
.687 W/ Marballizer



.687 W/ DXS Barozze



# Comparison Scatterplots



# Comparison Scatterplots

