

Esprit Motion Timing

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0.1 Pan left at various speeds while reading out position with an Esprit

In this test the Esprit is caused to pan left in steps of 5, from speeds 10 through 63. While the panning is occurring the pan position is read out.

A typical section of the repeating commands are:

```
:print("Pan left speed 10")
:ptz(pl 10)
:query_pan_position()
:query_pan_position()
:query_pan_position()
:query_pan_position()
```

The “query_pan_position()” commands repeat many times.

The test script for this test step is: `mandr2a.txt`

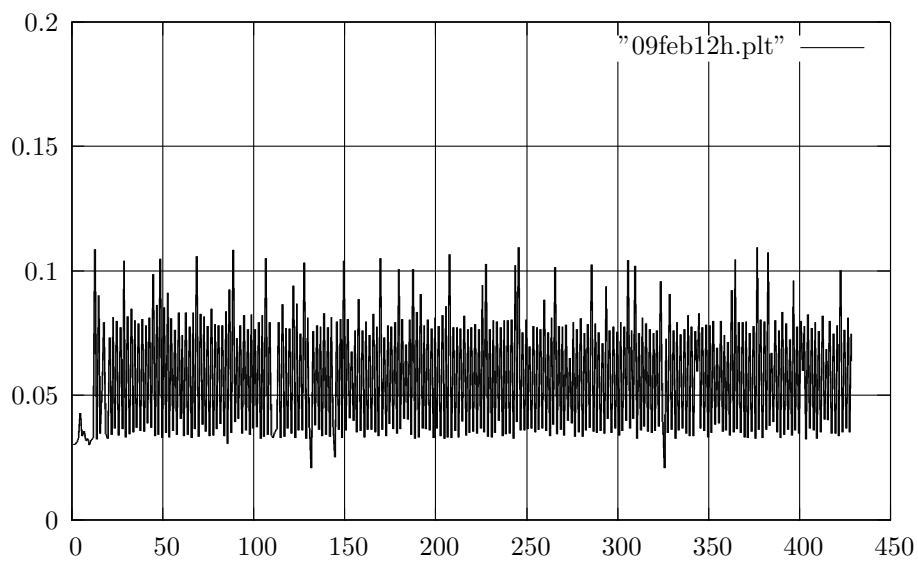


Figure 1: Plotted pan left/readout reply times from an Esprit ES31CBW24

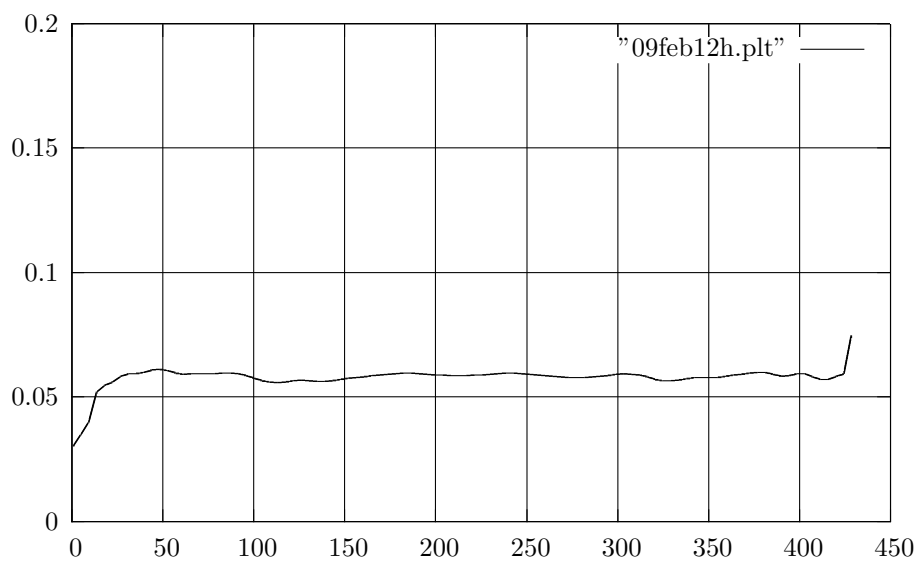


Figure 2: Plotted and smoothed pan left/readout reply times from an Esprit ES31CBW24

```

# $Header: d:/Binder2/AllCmds/RCS/09feb12h.plt,v 1.1
2009-02-12 12:32:14-08 Hamilton Exp Hamilton $
# FTS capture buffer (2/12/2009 12:35:03 PM)
# Event 1 (2/12/2009 12:32:35.837142 PM) through
# Event 5,973 (2/12/2009 12:34:44.631905 PM)
1 0.030341 # ff 01 00 00 00 00 01
2 0.030420 # ff 01 00 45 00 00 46
3 0.031306 # ff 01 01 45 00 00 47
4 0.032998 # ff 01 02 45 00 00 48
5 0.043048 # ff 01 03 45 00 00 49
6 0.033780 # ff 01 04 45 00 00 4a
7 0.035748 # ff 01 05 45 00 00 4b
8 0.031798 # ff 01 00 73 00 00 74
9 0.032712 # ff 01 02 73 00 00 76
10 0.030185 # ff 01 00 6f 00 00 70
11 0.032187 # ff 01 00 0f 00 00 10
12 0.032869 # ff 01 00 4b 00 00 4c
13 0.108817 # ff 01 00 51 00 00 52
14 0.032293 # ff 01 00 07 00 21 29
15 0.090264 # ff 01 00 51 00 00 52
16 0.034578 # ff 01 00 07 00 21 29
17 0.051826 # ff 01 00 51 00 00 52
18 0.079497 # ff 01 00 04 0a 00 0f
19 0.034380 # ff 01 00 51 00 00 52
20 0.032661 # ff 01 00 51 00 00 52
21 0.073213 # ff 01 00 51 00 00 52
22 0.034249 # ff 01 00 51 00 00 52
23 0.081414 # ff 01 00 51 00 00 52
24 0.036753 # ff 01 00 51 00 00 52
25 0.080009 # ff 01 00 51 00 00 52
26 0.033956 # ff 01 00 51 00 00 52
27 0.077396 # ff 01 00 51 00 00 52
28 0.036569 # ff 01 00 51 00 00 52
29 0.104043 # ff 01 00 51 00 00 52
30 0.033055 # ff 01 00 51 00 00 52
31 0.081802 # ff 01 00 51 00 00 52
32 0.034356 # ff 01 00 51 00 00 52
33 0.084876 # ff 01 00 51 00 00 52
34 0.035136 # ff 01 00 51 00 00 52
35 0.080251 # ff 01 00 51 00 00 52
36 0.037036 # ff 01 00 51 00 00 52
37 0.078941 # ff 01 00 51 00 00 52
38 0.035702 # ff 01 00 51 00 00 52
39 0.080838 # ff 01 00 51 00 00 52
40 0.035423 # ff 01 00 51 00 00 52
41 0.078236 # ff 01 00 51 00 00 52
42 0.038705 # ff 01 00 51 00 00 52
43 0.081231 # ff 01 00 51 00 00 52
44 0.036985 # ff 01 00 51 00 00 52
45 0.098699 # ff 01 00 51 00 00 52
46 0.033550 # ff 01 00 51 00 00 52
47 0.086258 # ff 01 00 51 00 00 52
48 0.034201 # ff 01 00 51 00 00 52
49 0.104800 # ff 01 00 51 00 00 52
50 0.032974 # ff 01 00 51 00 00 52
51 0.085242 # ff 01 00 51 00 00 52
52 0.035033 # ff 01 00 04 0f 00 14
53 0.091351 # ff 01 00 51 00 00 52
54 0.033289 # ff 01 00 51 00 00 52
55 0.081101 # ff 01 00 51 00 00 52
56 0.035622 # ff 01 00 51 00 00 52
57 0.076352 # ff 01 00 51 00 00 52
58 0.034182 # ff 01 00 51 00 00 52
59 0.083285 # ff 01 00 51 00 00 52
60 0.040555 # ff 01 00 51 00 00 52
61 0.074303 # ff 01 00 51 00 00 52
62 0.033620 # ff 01 00 51 00 00 52
63 0.083167 # ff 01 00 51 00 00 52
64 0.034199 # ff 01 00 51 00 00 52
65 0.077613 # ff 01 00 51 00 00 52
66 0.032964 # ff 01 00 51 00 00 52
67 0.083345 # ff 01 00 51 00 00 52
68 0.036597 # ff 01 00 51 00 00 52
69 0.105972 # ff 01 00 51 00 00 52
70 0.033445 # ff 01 00 51 00 00 52
71 0.082716 # ff 01 00 51 00 00 52
72 0.038336 # ff 01 00 51 00 00 52
73 0.081846 # ff 01 00 51 00 00 52
74 0.035398 # ff 01 00 51 00 00 52
75 0.077766 # ff 01 00 51 00 00 52
76 0.033679 # ff 01 00 51 00 00 52
77 0.084928 # ff 01 00 51 00 00 52
78 0.033825 # ff 01 00 51 00 00 52
79 0.078783 # ff 01 00 51 00 00 52
80 0.036387 # ff 01 00 51 00 00 52
81 0.078187 # ff 01 00 51 00 00 52
82 0.038546 # ff 01 00 51 00 00 52
83 0.078128 # ff 01 00 51 00 00 52
84 0.033625 # ff 01 00 51 00 00 52
85 0.083839 # ff 01 00 51 00 00 52
86 0.030475 # ff 01 00 04 14 00 19
87 0.092533 # ff 01 00 51 00 00 52
88 0.035085 # ff 01 00 51 00 00 52
89 0.108482 # ff 01 00 51 00 00 52
90 0.039440 # ff 01 00 51 00 00 52
91 0.072953 # ff 01 00 51 00 00 52
92 0.040501 # ff 01 00 51 00 00 52
93 0.078030 # ff 01 00 51 00 00 52
94 0.034668 # ff 01 00 51 00 00 52
95 0.082144 # ff 01 00 51 00 00 52
96 0.035960 # ff 01 00 51 00 00 52
97 0.076700 # ff 01 00 51 00 00 52
98 0.034252 # ff 01 00 51 00 00 52
99 0.082564 # ff 01 00 51 00 00 52
100 0.036763 # ff 01 00 51 00 00 52
101 0.076612 # ff 01 00 51 00 00 52
102 0.037351 # ff 01 00 51 00 00 52
103 0.079433 # ff 01 00 51 00 00 52
104 0.032753 # ff 01 00 51 00 00 52
105 0.082273 # ff 01 00 51 00 00 52
106 0.033441 # ff 01 00 51 00 00 52
107 0.105114 # ff 01 00 51 00 00 52
108 0.034294 # ff 01 00 51 00 00 52
109 0.079514 # ff 01 00 51 00 00 52
110 0.033840 # ff 01 00 51 00 00 52
111 0.032843 # ff 01 00 51 00 00 52
112 0.035226 # ff 01 00 51 00 00 52
113 0.036595 # ff 01 00 51 00 00 52
114 0.079431 # ff 01 00 51 00 00 52
115 0.032975 # ff 01 00 51 00 00 52
116 0.086518 # ff 01 00 51 00 00 52
117 0.033420 # ff 01 00 51 00 00 52
118 0.077172 # ff 01 00 51 00 00 52
119 0.036726 # ff 01 00 51 00 00 52
120 0.076933 # ff 01 00 04 19 00 1e
121 0.034743 # ff 01 00 51 00 00 52
122 0.094020 # ff 01 00 51 00 00 52
123 0.032816 # ff 01 00 51 00 00 52
124 0.086833 # ff 01 00 51 00 00 52
125 0.036074 # ff 01 00 51 00 00 52
126 0.074696 # ff 01 00 51 00 00 52
127 0.035991 # ff 01 00 51 00 00 52
128 0.103420 # ff 01 00 51 00 00 52
129 0.032533 # ff 01 00 51 00 00 52
130 0.081257 # ff 01 00 51 00 00 52
131 0.036909 # ff 01 00 51 00 00 52
132 0.020833 # Bad Data
133 0.075839 # ff 01 00 51 00 00 52
134 0.038115 # ff 01 00 51 00 00 52
135 0.078211 # ff 01 00 51 00 00 52
136 0.036258 # ff 01 00 51 00 00 52
137 0.077543 # ff 01 00 51 00 00 52
138 0.033704 # ff 01 00 51 00 00 52
139 0.083132 # ff 01 00 51 00 00 52

```

140	0.034201 # ff 01 00 51 00 00 52	212	0.077506 # ff 01 00 51 00 00 52
141	0.077405 # ff 01 00 51 00 00 52	213	0.033208 # ff 01 00 51 00 00 52
142	0.033469 # ff 01 00 51 00 00 52	214	0.076907 # ff 01 00 51 00 00 52
143	0.081572 # ff 01 00 51 00 00 52	215	0.039566 # ff 01 00 51 00 00 52
144	0.037314 # ff 01 00 51 00 00 52	216	0.082089 # ff 01 00 51 00 00 52
145	0.025164 # Bad Data	217	0.033938 # ff 01 00 51 00 00 52
146	0.079591 # ff 01 00 51 00 00 52	218	0.076724 # ff 01 00 51 00 00 52
147	0.036229 # ff 01 00 51 00 00 52	219	0.034927 # ff 01 00 51 00 00 52
148	0.080760 # ff 01 00 51 00 00 52	220	0.077285 # ff 01 00 51 00 00 52
149	0.032819 # ff 01 00 51 00 00 52	221	0.035448 # ff 01 00 51 00 00 52
150	0.104175 # ff 01 00 51 00 00 52	222	0.078549 # ff 01 00 51 00 00 52
151	0.035970 # ff 01 00 51 00 00 52	223	0.034770 # ff 01 00 51 00 00 52
152	0.080735 # ff 01 00 51 00 00 52	224	0.076699 # ff 01 00 04 28 00 52
153	0.040761 # ff 01 00 51 00 00 52	225	0.036793 # ff 01 00 51 00 00 52
154	0.067637 # ff 01 00 51 00 00 52	226	0.094229 # ff 01 00 51 00 00 52
155	0.039848 # ff 01 00 51 00 00 52	227	0.035161 # ff 01 00 51 00 00 52
156	0.076040 # ff 01 00 04 1e 00 23	228	0.102926 # ff 01 00 51 00 00 52
157	0.035236 # ff 01 00 51 00 00 52	229	0.033461 # ff 01 00 51 00 00 52
158	0.088784 # ff 01 00 51 00 00 52	230	0.076519 # ff 01 00 51 00 00 52
159	0.035607 # ff 01 00 51 00 00 52	231	0.033158 # ff 01 00 51 00 00 52
160	0.076074 # ff 01 00 51 00 00 52	232	0.080113 # ff 01 00 51 00 00 52
161	0.033133 # ff 01 00 51 00 00 52	233	0.035004 # ff 01 00 51 00 00 52
162	0.079566 # ff 01 00 51 00 00 52	234	0.079565 # ff 01 00 51 00 00 52
163	0.036232 # ff 01 00 51 00 00 52	235	0.039746 # ff 01 00 51 00 00 52
164	0.074227 # ff 01 00 51 00 00 52	236	0.077465 # ff 01 00 51 00 00 52
165	0.036281 # ff 01 00 51 00 00 52	237	0.033627 # ff 01 00 51 00 00 52
166	0.082718 # ff 01 00 51 00 00 52	238	0.080242 # ff 01 00 51 00 00 52
167	0.035136 # ff 01 00 51 00 00 52	239	0.034430 # ff 01 00 51 00 00 52
168	0.077544 # ff 01 00 51 00 00 52	240	0.080083 # ff 01 00 51 00 00 52
169	0.033706 # ff 01 00 51 00 00 52	241	0.034721 # ff 01 00 51 00 00 52
170	0.105139 # ff 01 00 51 00 00 52	242	0.080414 # ff 01 00 51 00 00 52
171	0.036310 # ff 01 00 51 00 00 52	243	0.032533 # ff 01 00 51 00 00 52
172	0.073315 # ff 01 00 51 00 00 52	244	0.102324 # ff 01 00 51 00 00 52
173	0.033753 # ff 01 00 51 00 00 52	245	0.039402 # ff 01 00 51 00 00 52
174	0.078159 # ff 01 00 51 00 00 52	246	0.109541 # ff 01 00 51 00 00 52
175	0.038554 # ff 01 00 51 00 00 52	247	0.035939 # ff 01 00 51 00 00 52
176	0.077662 # ff 01 00 51 00 00 52	248	0.075244 # ff 01 00 51 00 00 52
177	0.036439 # ff 01 00 51 00 00 52	249	0.035969 # ff 01 00 51 00 00 52
178	0.079356 # ff 01 00 51 00 00 52	250	0.080400 # ff 01 00 51 00 00 52
179	0.034695 # ff 01 00 51 00 00 52	251	0.036491 # ff 01 00 51 00 00 52
180	0.100867 # ff 01 00 51 00 00 52	252	0.069769 # ff 01 00 51 00 00 52
181	0.036439 # ff 01 00 51 00 00 52	253	0.036648 # ff 01 00 51 00 00 52
182	0.080604 # ff 01 00 51 00 00 52	254	0.077820 # ff 01 00 51 00 00 52
183	0.040658 # ff 01 00 51 00 00 52	255	0.035241 # ff 01 00 51 00 00 52
184	0.070325 # ff 01 00 51 00 00 52	256	0.077448 # ff 01 00 51 00 00 52
185	0.040263 # ff 01 00 51 00 00 52	257	0.036259 # ff 01 00 51 00 00 52
186	0.080400 # ff 01 00 51 00 00 52	258	0.076673 # ff 01 00 04 2d 00 32
187	0.034204 # ff 01 00 51 00 00 52	259	0.036778 # ff 01 00 51 00 00 52
188	0.100740 # ff 01 00 51 00 00 52	260	0.088401 # ff 01 00 51 00 00 52
189	0.032698 # ff 01 00 51 00 00 52	261	0.035786 # ff 01 00 51 00 00 52
190	0.083549 # ff 01 00 04 23 00 28	262	0.075345 # ff 01 00 51 00 00 52
191	0.033261 # ff 01 00 51 00 00 52	263	0.033781 # ff 01 00 51 00 00 52
192	0.090787 # ff 01 00 51 00 00 52	264	0.081310 # ff 01 00 51 00 00 52
193	0.036810 # ff 01 00 51 00 00 52	265	0.038231 # ff 01 00 51 00 00 52
194	0.078079 # ff 01 00 51 00 00 52	266	0.101549 # ff 01 00 51 00 00 52
195	0.036517 # ff 01 00 51 00 00 52	267	0.034382 # ff 01 00 51 00 00 52
196	0.080446 # ff 01 00 51 00 00 52	268	0.077853 # ff 01 00 51 00 00 52
197	0.035934 # ff 01 00 51 00 00 52	269	0.036288 # ff 01 00 51 00 00 52
198	0.076882 # ff 01 00 51 00 00 52	270	0.077564 # ff 01 00 51 00 00 52
199	0.033019 # ff 01 00 51 00 00 52	271	0.034045 # ff 01 00 51 00 00 52
200	0.081338 # ff 01 00 51 00 00 52	272	0.078473 # ff 01 00 51 00 00 52
201	0.036701 # ff 01 00 51 00 00 52	273	0.039953 # ff 01 00 51 00 00 52
202	0.077963 # ff 01 00 51 00 00 52	274	0.065060 # ff 01 00 51 00 00 52
203	0.033705 # ff 01 00 51 00 00 52	275	0.038893 # ff 01 00 51 00 00 52
204	0.082273 # ff 01 00 51 00 00 52	276	0.079329 # ff 01 00 51 00 00 52
205	0.032713 # ff 01 00 51 00 00 52	277	0.033444 # ff 01 00 51 00 00 52
206	0.085893 # ff 01 00 51 00 00 52	278	0.076701 # ff 01 00 51 00 00 52
207	0.033077 # ff 01 00 51 00 00 52	279	0.035292 # ff 01 00 51 00 00 52
208	0.106600 # ff 01 00 51 00 00 52	280	0.081104 # ff 01 00 51 00 00 52
209	0.032976 # ff 01 00 51 00 00 52	281	0.033314 # ff 01 00 51 00 00 52
210	0.077406 # ff 01 00 51 00 00 52	282	0.075113 # ff 01 00 51 00 00 52
211	0.035741 # ff 01 00 51 00 00 52	283	0.036083 # ff 01 00 51 00 00 52

284	0.078724 # ff 01 00 51 00 00 52	356	0.038704 # ff 01 00 51 00 00 52
285	0.037039 # ff 01 00 51 00 00 52	357	0.079894 # ff 01 00 51 00 00 52
286	0.102457 # ff 01 00 51 00 00 52	358	0.035560 # ff 01 00 51 00 00 52
287	0.035593 # ff 01 00 51 00 00 52	359	0.074280 # ff 01 00 51 00 00 52
288	0.078838 # ff 01 00 51 00 00 52	360	0.036102 # ff 01 00 51 00 00 52
289	0.034924 # ff 01 00 51 00 00 52	361	0.071590 # ff 01 00 04 3c 00 41
290	0.075346 # ff 01 00 51 00 00 52	362	0.033808 # ff 01 00 51 00 00 52
291	0.035788 # ff 01 00 51 00 00 52	363	0.092402 # ff 01 00 51 00 00 52
292	0.070890 # ff 01 00 04 32 00 37	364	0.035319 # ff 01 00 51 00 00 52
293	0.034766 # ff 01 00 51 00 00 52	365	0.104620 # ff 01 00 51 00 00 52
294	0.093941 # ff 01 00 51 00 00 52	366	0.036495 # ff 01 00 51 00 00 52
295	0.040527 # ff 01 00 51 00 00 52	367	0.079357 # ff 01 00 51 00 00 52
296	0.076179 # ff 01 00 51 00 00 52	368	0.034952 # ff 01 00 51 00 00 52
297	0.035032 # ff 01 00 51 00 00 52	369	0.079331 # ff 01 00 51 00 00 52
298	0.077736 # ff 01 00 51 00 00 52	370	0.033252 # ff 01 00 51 00 00 52
299	0.036856 # ff 01 00 51 00 00 52	371	0.079565 # ff 01 00 51 00 00 52
300	0.075604 # ff 01 00 51 00 00 52	372	0.033003 # ff 01 00 51 00 00 52
301	0.033928 # ff 01 00 51 00 00 52	373	0.075192 # ff 01 00 51 00 00 52
302	0.079401 # ff 01 00 51 00 00 52	374	0.035477 # ff 01 00 51 00 00 52
303	0.035842 # ff 01 00 51 00 00 52	375	0.078003 # ff 01 00 51 00 00 52
304	0.077510 # ff 01 00 51 00 00 52	376	0.032675 # ff 01 00 51 00 00 52
305	0.039860 # ff 01 00 51 00 00 52	377	0.109462 # ff 01 00 51 00 00 52
306	0.104254 # ff 01 00 51 00 00 52	378	0.036241 # ff 01 00 51 00 00 52
307	0.036694 # ff 01 00 51 00 00 52	379	0.080526 # ff 01 00 51 00 00 52
308	0.075971 # ff 01 00 51 00 00 52	380	0.032797 # ff 01 00 51 00 00 52
309	0.040581 # ff 01 00 51 00 00 52	381	0.079566 # ff 01 00 51 00 00 52
310	0.101937 # ff 01 00 51 00 00 52	382	0.036179 # ff 01 00 51 00 00 52
311	0.032550 # ff 01 00 51 00 00 52	383	0.107509 # ff 01 00 51 00 00 52
312	0.075084 # ff 01 00 51 00 00 52	384	0.037831 # ff 01 00 51 00 00 52
313	0.036023 # ff 01 00 51 00 00 52	385	0.067099 # ff 01 00 51 00 00 52
314	0.081129 # ff 01 00 51 00 00 52	386	0.039430 # ff 01 00 51 00 00 52
315	0.037533 # ff 01 00 51 00 00 52	387	0.080163 # ff 01 00 51 00 00 52
316	0.078837 # ff 01 00 51 00 00 52	388	0.035104 # ff 01 00 51 00 00 52
317	0.035527 # ff 01 00 51 00 00 52	389	0.075988 # ff 01 00 51 00 00 52
318	0.076702 # ff 01 00 51 00 00 52	390	0.032815 # ff 01 00 51 00 00 52
319	0.034851 # ff 01 00 51 00 00 52	391	0.083525 # ff 01 00 51 00 00 52
320	0.074999 # ff 01 00 51 00 00 52	392	0.034173 # ff 01 00 51 00 00 52
321	0.035758 # ff 01 00 51 00 00 52	393	0.079045 # ff 01 00 51 00 00 52
322	0.075973 # ff 01 00 51 00 00 52	394	0.036270 # ff 01 00 51 00 00 52
323	0.037637 # ff 01 00 51 00 00 52	395	0.072430 # ff 01 00 04 3f 00 44
324	0.095971 # ff 01 00 51 00 00 52	396	0.034037 # ff 01 00 51 00 00 52
325	0.039277 # ff 01 00 51 00 00 52	397	0.096114 # ff 01 00 51 00 00 52
326	0.020831 # Bad Data	398	0.036023 # ff 01 00 51 00 00 52
327	0.072848 # ff 01 00 04 37 00 3c	399	0.077661 # ff 01 00 51 00 00 52
328	0.034965 # ff 01 00 51 00 00 52	400	0.034746 # ff 01 00 51 00 00 52
329	0.090867 # ff 01 00 51 00 00 52	401	0.080061 # ff 01 00 51 00 00 52
330	0.036180 # ff 01 00 51 00 00 52	402	0.059871 # ff 01 00 51 00 00 52
331	0.076152 # ff 01 00 51 00 00 52	403	0.077898 # ff 01 00 51 00 00 52
332	0.032690 # ff 01 00 51 00 00 52	404	0.032482 # ff 01 00 51 00 00 52
333	0.079539 # ff 01 00 51 00 00 52	405	0.082441 # ff 01 00 51 00 00 52
334	0.035919 # ff 01 00 51 00 00 52	406	0.036699 # ff 01 00 51 00 00 52
335	0.074557 # ff 01 00 51 00 00 52	407	0.077094 # ff 01 00 51 00 00 52
336	0.036803 # ff 01 00 51 00 00 52	408	0.036075 # ff 01 00 51 00 00 52
337	0.076675 # ff 01 00 51 00 00 52	409	0.079329 # ff 01 00 51 00 00 52
338	0.034667 # ff 01 00 51 00 00 52	410	0.032678 # ff 01 00 51 00 00 52
339	0.082167 # ff 01 00 51 00 00 52	411	0.075815 # ff 01 00 51 00 00 52
340	0.033648 # ff 01 00 51 00 00 52	412	0.035285 # ff 01 00 51 00 00 52
341	0.077643 # ff 01 00 51 00 00 52	413	0.082130 # ff 01 00 51 00 00 52
342	0.033719 # ff 01 00 51 00 00 52	414	0.040466 # ff 01 00 51 00 00 52
343	0.075708 # ff 01 00 51 00 00 52	415	0.068521 # ff 01 00 51 00 00 52
344	0.059649 # ff 01 00 51 00 00 52	416	0.040112 # ff 01 00 51 00 00 52
345	0.082951 # ff 01 00 51 00 00 52	417	0.079956 # ff 01 00 51 00 00 52
346	0.036752 # ff 01 00 51 00 00 52	418	0.034721 # ff 01 00 51 00 00 52
347	0.077364 # ff 01 00 51 00 00 52	419	0.074928 # ff 01 00 51 00 00 52
348	0.035788 # ff 01 00 51 00 00 52	420	0.034829 # ff 01 00 51 00 00 52
349	0.078306 # ff 01 00 51 00 00 52	421	0.078228 # ff 01 00 51 00 00 52
350	0.033288 # ff 01 00 51 00 00 52	422	0.033783 # ff 01 00 51 00 00 52
351	0.078081 # ff 01 00 51 00 00 52	423	0.100243 # ff 01 00 51 00 00 52
352	0.035059 # ff 01 00 51 00 00 52	424	0.035214 # ff 01 00 51 00 00 52
353	0.079907 # ff 01 00 51 00 00 52	425	0.076440 # ff 01 00 51 00 00 52
354	0.038236 # ff 01 00 51 00 00 52	426	0.036701 # ff 01 00 51 00 00 52
355	0.069122 # ff 01 00 51 00 00 52	427	0.081205 # ff 01 00 51 00 00 52

```
428      0.035269 # ff 01 00 51 00 00 52
429      0.074730 # ff 01 00 00 00 00 01
# There were a total of      2991 DCE bytes transferred
# The first DCE byte came in at 0.030341 seconds from the
start of data collection
# The last DCE byte was at 128.794763 seconds from the start
of data collection
# There were a total of      2982 DTE bytes transferred
# The first DTE byte came in at 0.000000 seconds from the
start of data collection
# The last DTE byte was at 128.732462 seconds from the start
of data collection
```


0.2 Pan left/tilt down at various speeds while reading out position with an Esprit

In this test the Esprit is caused to pan left in steps of 5, from speeds 10 through 63 and to tilt down at speed 1. While the panning is occurring the pan and tilt positions are read out.

A typical section of the repeating commands are:

```
:print("Pan left speed 10")
:ptz(pl 10, td 1)
:query_pan_position()
:query_tilt_position()
:query_pan_position()
:query_tilt_position()
:query_pan_position()
:query_tilt_position()
:query_pan_position()
:query_tilt_position()
```

The command pair “query_pan_position()/query_tilt_position()” repeat many times. There are some instances of having a sync character (0xFF) in the middle of data. These, though irritating and not statistically significant and there has been no effort at “fixing” them.

The test script for this test step is: `mandr2b.txt`

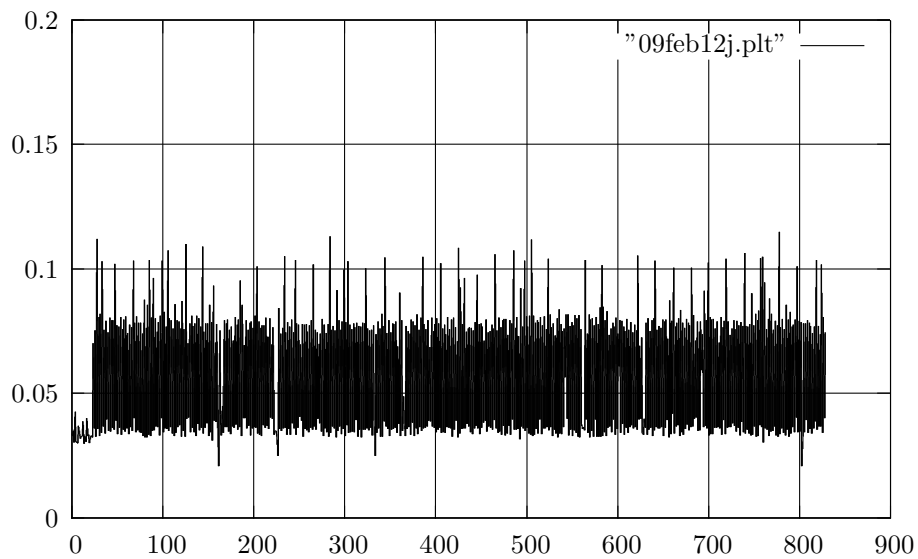


Figure 3: Plotted pan left/tilt down/readout reply times from an Esprit ES31CBW24

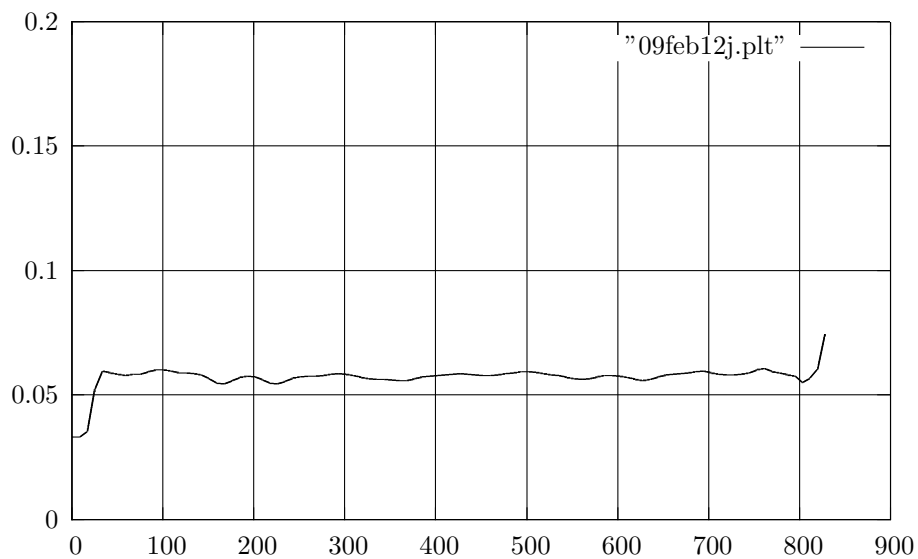


Figure 4: Plotted and smoothed pan left/tilt down/readout reply times from an Esprit ES31CBW24

```

# $Header: d:/Binder2/AllCmds/RCS/09feb12j.plt,v 1.1
2009-02-12 13:04:23-08 Hamilton Exp Hamilton $
# FTS capture buffer (2/12/2009 1:07:06 PM)
# Event 1 (2/12/2009 1:03:38.980689 PM) through
# Event 11,550 (2/12/2009 1:06:47.184812 PM)
1 0.033128 # ff 01 00 00 00 00 01
2 0.035060 # ff 01 00 45 00 00 46
3 0.030346 # ff 01 01 45 00 00 47
4 0.042715 # ff 01 02 45 00 00 48
5 0.030580 # ff 01 03 45 00 00 49
6 0.030450 # ff 01 04 45 00 00 4a
7 0.030095 # ff 01 05 45 00 00 4b
8 0.036934 # ff 01 00 73 00 00 74
9 0.033732 # ff 01 02 73 00 00 76
10 0.031831 # ff 01 00 6f 00 00 70
11 0.033028 # ff 01 00 0f 00 00 10
12 0.032977 # ff 01 00 4b 00 00 4c
13 0.038863 # ff 01 00 51 00 00 52
14 0.029902 # ff 01 00 07 00 21 29
15 0.033003 # ff 01 00 51 00 00 52
16 0.030712 # ff 01 00 07 00 21 29
17 0.039982 # ff 01 00 51 00 00 52
18 0.032819 # ff 01 00 40 00 00 41
19 0.033497 # ff 01 00 00 00 00 01
20 0.030033 # ff 01 00 4d 00 00 4e
21 0.032612 # ff 01 00 14 0a 01 20
22 0.033007 # ff 01 00 51 00 00 52
23 0.032460 # ff 01 00 53 00 00 54
24 0.070250 # ff 01 00 51 00 00 52
25 0.036080 # ff 01 00 53 00 00 54
26 0.075208 # ff 01 00 51 00 00 52
27 0.032565 # ff 01 00 53 00 00 54
28 0.112097 # ff 01 00 51 00 00 52
29 0.035808 # ff 01 00 53 00 00 54
30 0.080616 # ff 01 00 51 00 00 52
31 0.033033 # ff 01 00 53 00 00 54
32 0.082109 # ff 01 00 51 00 00 52
33 0.034151 # ff 01 00 53 00 00 54
34 0.103192 # ff 01 00 51 00 00 52
35 0.036819 # ff 01 00 53 00 00 54
36 0.075512 # ff 01 00 51 00 00 52
37 0.033893 # ff 01 00 53 00 00 54
38 0.079155 # ff 01 00 51 00 00 52
39 0.039661 # ff 01 00 53 00 00 54
40 0.074597 # ff 01 00 51 00 00 52
41 0.034935 # ff 01 00 53 00 00 54
42 0.080377 # ff 01 00 51 00 00 52
43 0.034779 # ff 01 00 53 00 00 54
44 0.079360 # ff 01 00 51 00 00 52
45 0.036270 # ff 01 00 53 00 00 54
46 0.079309 # ff 01 00 51 00 00 52
47 0.035559 # ff 01 00 53 00 00 54
48 0.102159 # ff 01 00 51 00 00 52
49 0.038971 # ff 01 00 53 00 00 54
50 0.077462 # ff 01 00 51 00 00 52
51 0.033626 # ff 01 00 53 00 00 54
52 0.076787 # ff 01 00 51 00 00 52
53 0.036366 # ff 01 00 53 00 00 54
54 0.080638 # ff 01 00 51 00 00 52
55 0.033372 # ff 01 00 53 00 00 54
56 0.075891 # ff 01 00 51 00 00 52
57 0.035428 # ff 01 00 53 00 00 54
58 0.079778 # ff 01 00 51 00 00 52
59 0.034813 # ff 01 00 53 00 00 54
60 0.081086 # ff 01 00 51 00 00 52
61 0.035999 # ff 01 00 53 00 00 54
62 0.074360 # ff 01 00 51 00 00 52
63 0.033578 # ff 01 00 53 00 00 54
64 0.077591 # ff 01 00 51 00 00 52
65 0.036575 # ff 01 00 53 00 00 54
66 0.076597 # ff 01 00 51 00 00 52
67 0.035010 # ff 01 00 53 00 00 54
68 0.103268 # ff 01 00 51 00 00 52
69 0.040145 # ff 01 00 53 00 00 54
70 0.078449 # ff 01 00 51 00 00 52
71 0.034491 # ff 01 00 53 00 00 54
72 0.080926 # ff 01 00 51 00 00 52
73 0.035105 # ff 01 00 53 00 00 54
74 0.078373 # ff 01 00 51 00 00 52
75 0.034516 # ff 01 00 53 00 00 54
76 0.078405 # ff 01 00 51 00 00 52
77 0.034304 # ff 01 00 53 00 00 54
78 0.074064 # ff 01 00 51 00 00 52
79 0.032928 # ff 01 00 53 00 00 54
80 0.087725 # ff 01 00 51 00 00 52
81 0.032356 # ff 01 00 53 00 00 54
82 0.076473 # ff 01 00 51 00 00 52
83 0.032382 # ff 01 00 53 00 00 54
84 0.085558 # ff 01 00 51 00 00 52
85 0.033349 # ff 01 00 53 00 00 54
86 0.103477 # ff 01 00 51 00 00 52
87 0.032948 # ff 01 00 53 00 00 54
88 0.080430 # ff 01 00 14 0f 01 25
89 0.034987 # ff 01 00 51 00 00 52
90 0.096497 # ff 01 00 53 00 00 54
91 0.035307 # ff 01 00 51 00 00 52
92 0.080273 # ff 01 00 53 00 00 54
93 0.036834 # ff 01 00 51 00 00 52
94 0.074886 # ff 01 00 53 00 00 54
95 0.036601 # ff 01 00 51 00 00 52
96 0.078724 # ff 01 00 53 00 00 54
97 0.033137 # ff 01 00 51 00 00 52
98 0.081161 # ff 01 00 53 00 00 54
99 0.040011 # ff 01 00 51 00 00 52
100 0.103269 # ff 01 00 53 00 00 54
101 0.034465 # ff 01 00 51 00 00 52
102 0.082672 # ff 01 00 53 00 00 54
103 0.035982 # ff 01 00 51 00 00 52
104 0.076985 # ff 01 00 53 00 00 54
105 0.035679 # ff 01 00 51 00 00 52
106 0.107460 # ff 01 00 53 00 00 54
107 0.034983 # ff 01 00 51 00 00 52
108 0.080323 # ff 01 00 53 00 00 54
109 0.036598 # ff 01 00 51 00 00 52
110 0.079492 # ff 01 00 53 00 00 54
111 0.033996 # ff 01 00 51 00 00 52
112 0.076009 # ff 01 00 53 00 00 54
113 0.032927 # ff 01 00 51 00 00 52
114 0.085979 # ff 01 00 53 00 00 54
115 0.034154 # ff 01 00 51 00 00 52
116 0.079547 # ff 01 00 53 00 00 54
117 0.036574 # ff 01 00 51 00 00 52
118 0.078945 # ff 01 00 53 00 00 54
119 0.037283 # ff 01 00 51 00 00 52
120 0.076002 # ff 01 00 53 00 00 54
121 0.032732 # ff 01 00 51 00 00 52
122 0.087018 # ff 01 00 53 00 00 54
123 0.034959 # ff 01 00 51 00 00 52
124 0.075817 # ff 01 00 53 00 00 54
125 0.032642 # ff 01 00 51 00 00 52
126 0.109935 # ff 01 00 53 00 00 54
127 0.039964 # ff 01 00 51 00 00 52
128 0.070246 # ff 01 00 53 00 00 54
129 0.040400 # ff 01 00 51 00 00 52
130 0.078243 # ff 01 00 53 00 00 54
131 0.034568 # ff 01 00 51 00 00 52
132 0.081239 # ff 01 00 53 00 00 54
133 0.036339 # ff 01 00 51 00 00 52
134 0.077176 # ff 01 00 53 00 00 54
135 0.034387 # ff 01 00 51 00 00 52
136 0.078113 # ff 01 00 53 00 00 54
137 0.032980 # ff 01 00 51 00 00 52
138 0.081265 # ff 01 00 53 00 00 54
139 0.037713 # ff 01 00 51 00 00 52

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140	0.080088 # ff 01 00 53 00 00 54	212	0.077410 # ff 01 00 53 00 00 54
141	0.035289 # ff 01 00 51 00 00 52	213	0.036170 # ff 01 00 51 00 00 52
142	0.076808 # ff 01 00 53 00 00 54	214	0.080359 # ff 01 00 53 00 00 54
143	0.036132 # ff 01 00 51 00 00 52	215	0.036993 # ff 01 00 51 00 00 52
144	0.109076 # ff 01 00 53 00 00 54	216	0.072799 # ff 01 00 53 00 00 54
145	0.033815 # ff 01 00 51 00 00 52	217	0.035741 # ff 01 00 51 00 00 52
146	0.074935 # ff 01 00 53 00 00 54	218	0.080275 # ff 01 00 53 00 00 54
147	0.036210 # ff 01 00 51 00 00 52	219	0.040299 # ff 01 00 51 00 00 52
148	0.078091 # ff 01 00 53 00 00 54	220	0.069622 # ff 01 00 53 00 00 54
149	0.037930 # ff 01 00 51 00 00 52	221	0.039905 # ff 01 00 51 00 00 52
150	0.078087 # ff 01 00 53 00 00 54	222	0.076654 # ff 01 00 53 00 00 54
151	0.032928 # ff 01 00 51 00 00 52	223	0.033350 # ff 01 00 14 19 01 2f
152	0.085563 # ff 01 00 53 00 00 54	224	0.034887 # ff 01 00 51 00 00 52
153	0.034334 # ff 01 00 51 00 00 52	225	0.035038 # ff 01 00 53 00 00 54
154	0.078788 # ff 01 00 53 00 00 54	226	0.032746 # ff 01 00 51 00 00 52
155	0.031080 # ff 01 00 14 14 01 2a	227	0.025002 # Bad Data
156	0.093194 # ff 01 00 51 00 00 52	228	0.084230 # ff 01 00 53 00 00 54
157	0.039077 # ff 01 00 53 00 00 54	229	0.035637 # ff 01 00 51 00 00 52
158	0.070424 # ff 01 00 51 00 00 52	230	0.074153 # ff 01 00 53 00 00 54
159	0.038684 # ff 01 00 53 00 00 54	231	0.034958 # ff 01 00 51 00 00 52
160	0.077955 # ff 01 00 51 00 00 52	232	0.076263 # ff 01 00 53 00 00 54
161	0.036010 # ff 01 00 53 00 00 54	233	0.035923 # ff 01 00 51 00 00 52
162	0.020824 # Bad Data	234	0.105039 # ff 01 00 53 00 00 54
163	0.075272 # ff 01 00 51 00 00 52	235	0.036156 # ff 01 00 51 00 00 52
164	0.041543 # ff 01 00 53 00 00 54	236	0.074447 # ff 01 00 53 00 00 54
165	0.033267 # ff 01 00 51 00 00 52	237	0.033398 # ff 01 00 51 00 00 52
166	0.045101 # ff 01 00 53 00 00 54	238	0.078683 # ff 01 00 53 00 00 54
167	0.034216 # ff 01 00 51 00 00 52	239	0.035715 # ff 01 00 51 00 00 52
168	0.079546 # ff 01 00 53 00 00 54	240	0.076991 # ff 01 00 53 00 00 54
169	0.036573 # ff 01 00 51 00 00 52	241	0.033502 # ff 01 00 51 00 00 52
170	0.078218 # ff 01 00 53 00 00 54	242	0.079673 # ff 01 00 53 00 00 54
171	0.036575 # ff 01 00 51 00 00 52	243	0.038037 # ff 01 00 51 00 00 52
172	0.079754 # ff 01 00 53 00 00 54	244	0.074622 # ff 01 00 53 00 00 54
173	0.034593 # ff 01 00 51 00 00 52	245	0.035924 # ff 01 00 51 00 00 52
174	0.075639 # ff 01 00 53 00 00 54	246	0.103657 # ff 01 00 53 00 00 54
175	0.033632 # ff 01 00 51 00 00 52	247	0.033297 # ff 01 00 51 00 00 52
176	0.076917 # ff 01 00 53 00 00 54	248	0.078058 # ff 01 00 53 00 00 54
177	0.036802 # ff 01 00 51 00 00 52	249	0.036131 # ff 01 00 51 00 00 52
178	0.071235 # ff 01 00 53 00 00 54	250	0.077668 # ff 01 00 53 00 00 54
179	0.036159 # ff 01 00 51 00 00 52	251	0.040633 # ff 01 00 51 00 00 52
180	0.080667 # ff 01 00 53 00 00 54	252	0.069621 # ff 01 00 53 00 00 54
181	0.037486 # ff 01 00 51 00 00 52	253	0.039100 # ff 01 00 51 00 00 52
182	0.077512 # ff 01 00 53 00 00 54	254	0.077824 # ff 01 00 53 00 00 54
183	0.035479 # ff 01 00 51 00 00 52	255	0.032564 # ff 01 00 51 00 00 52
184	0.079622 # ff 01 00 53 00 00 54	256	0.077538 # ff 01 00 53 00 00 54
185	0.036522 # ff 01 00 51 00 00 52	257	0.035609 # ff 01 00 51 00 00 52
186	0.095393 # ff 01 00 53 00 00 54	258	0.077777 # ff 01 00 53 00 00 54
187	0.032824 # ff 01 00 51 00 00 52	259	0.035323 # ff 01 00 51 00 00 52
188	0.085507 # ff 01 00 53 00 00 54	260	0.074728 # ff 01 00 53 00 00 54
189	0.039987 # ff 01 00 51 00 00 52	261	0.034430 # ff 01 00 51 00 00 52
190	0.069493 # ff 01 00 53 00 00 54	262	0.077357 # ff 01 00 53 00 00 54
191	0.040008 # ff 01 00 51 00 00 52	263	0.036262 # ff 01 00 51 00 00 52
192	0.079388 # ff 01 00 53 00 00 54	264	0.079516 # ff 01 00 53 00 00 54
193	0.036078 # ff 01 00 51 00 00 52	265	0.035559 # ff 01 00 51 00 00 52
194	0.075676 # ff 01 00 53 00 00 54	266	0.101732 # ff 01 00 53 00 00 54
195	0.036967 # ff 01 00 51 00 00 52	267	0.036887 # ff 01 00 51 00 00 52
196	0.078519 # ff 01 00 53 00 00 54	268	0.075610 # ff 01 00 53 00 00 54
197	0.033075 # ff 01 00 51 00 00 52	269	0.035505 # ff 01 00 51 00 00 52
198	0.078843 # ff 01 00 53 00 00 54	270	0.074443 # ff 01 00 53 00 00 54
199	0.035917 # ff 01 00 51 00 00 52	271	0.039802 # ff 01 00 51 00 00 52
200	0.076309 # ff 01 00 53 00 00 54	272	0.069985 # ff 01 00 53 00 00 54
201	0.036598 # ff 01 00 51 00 00 52	273	0.037992 # ff 01 00 51 00 00 52
202	0.081184 # ff 01 00 53 00 00 54	274	0.073945 # ff 01 00 53 00 00 54
203	0.036237 # ff 01 00 51 00 00 52	275	0.034675 # ff 01 00 51 00 00 52
204	0.100965 # ff 01 00 53 00 00 54	276	0.079882 # ff 01 00 53 00 00 54
205	0.033839 # ff 01 00 51 00 00 52	277	0.032980 # ff 01 00 51 00 00 52
206	0.078922 # ff 01 00 53 00 00 54	278	0.077619 # ff 01 00 53 00 00 54
207	0.033366 # ff 01 00 51 00 00 52	279	0.036028 # ff 01 00 51 00 00 52
208	0.076350 # ff 01 00 53 00 00 54	280	0.074230 # ff 01 00 53 00 00 54
209	0.032926 # ff 01 00 51 00 00 52	281	0.034336 # ff 01 00 51 00 00 52
210	0.077356 # ff 01 00 53 00 00 54	282	0.077930 # ff 01 00 53 00 00 54
211	0.037305 # ff 01 00 51 00 00 52	283	0.032774 # ff 01 00 51 00 00 52

284	0.113201 # ff 01 00 53 00 00 54	356	0.036285 # ff 01 00 53 00 00 54
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287	0.036821 # ff 01 00 51 00 00 52	359	0.068896 # ff 01 00 14 23 01 39
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289	0.035919 # ff 01 00 51 00 00 52	361	0.090439 # ff 01 00 53 00 00 54
290	0.075224 # ff 01 00 53 00 00 54	362	0.032851 # ff 01 00 51 00 00 52
291	0.032381 # ff 01 00 14 1e 01 34	363	0.079419 # ff 01 00 53 00 00 54
292	0.091500 # ff 01 00 51 00 00 52	364	0.035088 # ff 01 00 51 00 00 52
293	0.034960 # ff 01 00 53 00 00 54	365	0.048867 # ff 01 00 53 00 00 54
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295	0.036755 # ff 01 00 53 00 00 54	367	0.032799 # ff 01 00 53 00 00 54
296	0.075560 # ff 01 00 51 00 00 52	368	0.077199 # ff 01 00 51 00 00 52
297	0.033635 # ff 01 00 53 00 00 54	369	0.035820 # ff 01 00 53 00 00 54
298	0.078820 # ff 01 00 51 00 00 52	370	0.074955 # ff 01 00 51 00 00 52
299	0.035692 # ff 01 00 53 00 00 54	371	0.036599 # ff 01 00 53 00 00 54
300	0.099806 # ff 01 00 51 00 00 52	372	0.073912 # ff 01 00 51 00 00 52
301	0.032904 # ff 01 00 53 00 00 54	373	0.033291 # ff 01 00 53 00 00 54
302	0.078554 # ff 01 00 51 00 00 52	374	0.079649 # ff 01 00 51 00 00 52
303	0.037229 # ff 01 00 53 00 00 54	375	0.038294 # ff 01 00 53 00 00 54
304	0.102981 # ff 01 00 51 00 00 52	376	0.078843 # ff 01 00 51 00 00 52
305	0.034204 # ff 01 00 53 00 00 54	377	0.032954 # ff 01 00 53 00 00 54
306	0.077580 # ff 01 00 51 00 00 52	378	0.077392 # ff 01 00 51 00 00 52
307	0.034569 # ff 01 00 53 00 00 54	379	0.035898 # ff 01 00 53 00 00 54
308	0.075717 # ff 01 00 51 00 00 52	380	0.081732 # ff 01 00 51 00 00 52
309	0.034698 # ff 01 00 53 00 00 54	381	0.033788 # ff 01 00 53 00 00 54
310	0.078033 # ff 01 00 51 00 00 52	382	0.075538 # ff 01 00 51 00 00 52
311	0.034438 # ff 01 00 53 00 00 54	383	0.036417 # ff 01 00 53 00 00 54
312	0.076681 # ff 01 00 51 00 00 52	384	0.080549 # ff 01 00 51 00 00 52
313	0.039415 # ff 01 00 53 00 00 54	385	0.034932 # ff 01 00 53 00 00 54
314	0.078450 # ff 01 00 51 00 00 52	386	0.104827 # ff 01 00 51 00 00 52
315	0.032589 # ff 01 00 53 00 00 54	387	0.035996 # ff 01 00 53 00 00 54
316	0.077025 # ff 01 00 51 00 00 52	388	0.077773 # ff 01 00 51 00 00 52
317	0.035584 # ff 01 00 53 00 00 54	389	0.036161 # ff 01 00 53 00 00 54
318	0.076783 # ff 01 00 51 00 00 52	390	0.075872 # ff 01 00 51 00 00 52
319	0.032300 # ff 01 00 53 00 00 54	391	0.036699 # ff 01 00 53 00 00 54
320	0.078326 # ff 01 00 51 00 00 52	392	0.079439 # ff 01 00 51 00 00 52
321	0.035350 # ff 01 00 53 00 00 54	393	0.039072 # ff 01 00 53 00 00 54
322	0.078033 # ff 01 00 51 00 00 52	394	0.068554 # ff 01 00 51 00 00 52
323	0.035585 # ff 01 00 53 00 00 54	395	0.038811 # ff 01 00 53 00 00 54
324	0.100197 # ff 01 00 51 00 00 52	396	0.080377 # ff 01 00 51 00 00 52
325	0.035981 # ff 01 00 53 00 00 54	397	0.036653 # ff 01 00 53 00 00 54
326	0.076158 # ff 01 00 51 00 00 52	398	0.075011 # ff 01 00 51 00 00 52
327	0.035247 # ff 01 00 53 00 00 54	399	0.036311 # ff 01 00 53 00 00 54
328	0.075298 # ff 01 00 51 00 00 52	400	0.077808 # ff 01 00 51 00 00 52
329	0.036183 # ff 01 00 53 00 00 54	401	0.034572 # ff 01 00 53 00 00 54
330	0.075662 # ff 01 00 51 00 00 52	402	0.080299 # ff 01 00 51 00 00 52
331	0.033057 # ff 01 00 53 00 00 54	403	0.035429 # ff 01 00 53 00 00 54
332	0.077384 # ff 01 00 51 00 00 52	404	0.078214 # ff 01 00 51 00 00 52
333	0.039151 # ff 01 00 53 00 00 54	405	0.036366 # ff 01 00 53 00 00 54
334	0.025001 # Bad Data	406	0.102308 # ff 01 00 51 00 00 52
335	0.073686 # ff 01 00 51 00 00 52	407	0.034284 # ff 01 00 53 00 00 54
336	0.034102 # ff 01 00 53 00 00 54	408	0.075976 # ff 01 00 51 00 00 52
337	0.078908 # ff 01 00 51 00 00 52	409	0.034524 # ff 01 00 53 00 00 54
338	0.036024 # ff 01 00 53 00 00 54	410	0.077666 # ff 01 00 51 00 00 52
339	0.076031 # ff 01 00 51 00 00 52	411	0.034126 # ff 01 00 53 00 00 54
340	0.032548 # ff 01 00 53 00 00 54	412	0.073658 # ff 01 00 51 00 00 52
341	0.081887 # ff 01 00 51 00 00 52	413	0.036444 # ff 01 00 53 00 00 54
342	0.032563 # ff 01 00 53 00 00 54	414	0.080716 # ff 01 00 51 00 00 52
343	0.077229 # ff 01 00 51 00 00 52	415	0.036123 # ff 01 00 53 00 00 54
344	0.038867 # ff 01 00 53 00 00 54	416	0.075730 # ff 01 00 51 00 00 52
345	0.104728 # ff 01 00 51 00 00 52	417	0.035990 # ff 01 00 53 00 00 54
346	0.036653 # ff 01 00 53 00 00 54	418	0.079663 # ff 01 00 51 00 00 52
347	0.074215 # ff 01 00 51 00 00 52	419	0.032589 # ff 01 00 53 00 00 54
348	0.035752 # ff 01 00 53 00 00 54	420	0.080380 # ff 01 00 51 00 00 52
349	0.079321 # ff 01 00 51 00 00 52	421	0.035507 # ff 01 00 53 00 00 54
350	0.033007 # ff 01 00 53 00 00 54	422	0.076680 # ff 01 00 51 00 00 52
351	0.074488 # ff 01 00 51 00 00 52	423	0.039076 # ff 01 00 53 00 00 54
352	0.035405 # ff 01 00 53 00 00 54	424	0.070972 # ff 01 00 51 00 00 52
353	0.078132 # ff 01 00 51 00 00 52	425	0.032510 # ff 01 00 53 00 00 54
354	0.035731 # ff 01 00 53 00 00 54	426	0.108374 # ff 01 00 14 28 01 3e
355	0.077931 # ff 01 00 51 00 00 52	427	0.034055 # ff 01 00 51 00 00 52

428	0.092668	#	ff	01	00	53	00	00	54	500	0.080930	#	ff	01	00	51	00	00	52
429	0.035819	#	ff	01	00	51	00	00	52	501	0.036303	#	ff	01	00	53	00	00	54
430	0.077826	#	ff	01	00	53	00	00	54	502	0.076915	#	ff	01	00	51	00	00	52
431	0.036039	#	ff	01	00	51	00	00	52	503	0.033945	#	ff	01	00	53	00	00	54
432	0.096470	#	ff	01	00	53	00	00	54	504	0.081237	#	ff	01	00	51	00	00	52
433	0.035924	#	ff	01	00	51	00	00	52	505	0.033449	#	ff	01	00	53	00	00	54
434	0.074803	#	ff	01	00	53	00	00	54	506	0.111810	#	ff	01	00	51	00	00	52
435	0.037838	#	ff	01	00	51	00	00	52	507	0.032982	#	ff	01	00	53	00	00	54
436	0.075980	#	ff	01	00	53	00	00	54	508	0.081261	#	ff	01	00	51	00	00	52
437	0.036681	#	ff	01	00	51	00	00	52	509	0.033369	#	ff	01	00	53	00	00	54
438	0.076629	#	ff	01	00	53	00	00	54	510	0.078369	#	ff	01	00	51	00	00	52
439	0.034568	#	ff	01	00	51	00	00	52	511	0.035793	#	ff	01	00	53	00	00	54
440	0.076276	#	ff	01	00	53	00	00	54	512	0.079546	#	ff	01	00	51	00	00	52
441	0.033632	#	ff	01	00	51	00	00	52	513	0.034049	#	ff	01	00	53	00	00	54
442	0.075352	#	ff	01	00	53	00	00	54	514	0.078640	#	ff	01	00	51	00	00	52
443	0.035871	#	ff	01	00	51	00	00	52	515	0.039568	#	ff	01	00	53	00	00	54
444	0.078688	#	ff	01	00	53	00	00	54	516	0.080716	#	ff	01	00	51	00	00	52
445	0.036939	#	ff	01	00	51	00	00	52	517	0.033788	#	ff	01	00	53	00	00	54
446	0.097593	#	ff	01	00	53	00	00	54	518	0.077310	#	ff	01	00	51	00	00	52
447	0.036097	#	ff	01	00	51	00	00	52	519	0.036081	#	ff	01	00	53	00	00	54
448	0.077928	#	ff	01	00	53	00	00	54	520	0.081049	#	ff	01	00	51	00	00	52
449	0.033631	#	ff	01	00	51	00	00	52	521	0.035871	#	ff	01	00	53	00	00	54
450	0.078214	#	ff	01	00	53	00	00	54	522	0.075811	#	ff	01	00	51	00	00	52
451	0.036158	#	ff	01	00	51	00	00	52	523	0.036472	#	ff	01	00	53	00	00	54
452	0.076965	#	ff	01	00	53	00	00	54	524	0.104179	#	ff	01	00	51	00	00	52
453	0.038217	#	ff	01	00	51	00	00	52	525	0.035324	#	ff	01	00	53	00	00	54
454	0.071256	#	ff	01	00	53	00	00	54	526	0.081652	#	ff	01	00	51	00	00	52
455	0.038996	#	ff	01	00	51	00	00	52	527	0.036520	#	ff	01	00	53	00	00	54
456	0.079623	#	ff	01	00	53	00	00	54	528	0.076548	#	ff	01	00	51	00	00	52
457	0.034649	#	ff	01	00	51	00	00	52	529	0.032955	#	ff	01	00	53	00	00	54
458	0.074675	#	ff	01	00	53	00	00	54	530	0.078190	#	ff	01	00	51	00	00	52
459	0.036717	#	ff	01	00	51	00	00	52	531	0.035453	#	ff	01	00	53	00	00	54
460	0.075145	#	ff	01	00	53	00	00	54	532	0.073214	#	ff	01	00	51	00	00	52
461	0.036364	#	ff	01	00	51	00	00	52	533	0.033947	#	ff	01	00	53	00	00	54
462	0.077578	#	ff	01	00	53	00	00	54	534	0.080246	#	ff	01	00	51	00	00	52
463	0.035559	#	ff	01	00	51	00	00	52	535	0.032407	#	ff	01	00	53	00	00	54
464	0.076083	#	ff	01	00	53	00	00	54	536	0.083790	#	ff	01	00	51	00	00	52
465	0.039206	#	ff	01	00	51	00	00	52	537	0.033918	#	ff	01	00	53	00	00	54
466	0.106029	#	ff	01	00	53	00	00	54	538	0.077947	#	ff	01	00	51	00	00	52
467	0.036029	#	ff	01	00	51	00	00	52	539	0.033764	#	ff	01	00	53	00	00	54
468	0.075300	#	ff	01	00	53	00	00	54	540	0.075170	#	ff	01	00	51	00	00	52
469	0.034264	#	ff	01	00	51	00	00	52	541	0.036599	#	ff	01	00	53	00	00	54
470	0.080375	#	ff	01	00	53	00	00	54	542	0.076160	#	ff	01	00	51	00	00	52
471	0.034594	#	ff	01	00	51	00	00	52	543	0.056628	#	ff	01	00	53	00	00	54
472	0.076543	#	ff	01	00	53	00	00	54	544	0.081760	#	ff	01	00	51	00	00	52
473	0.033473	#	ff	01	00	51	00	00	52	545	0.039758	#	ff	01	00	53	00	00	54
474	0.079310	#	ff	01	00	53	00	00	54	546	0.081732	#	ff	01	00	51	00	00	52
475	0.037096	#	ff	01	00	51	00	00	52	547	0.033275	#	ff	01	00	53	00	00	54
476	0.079849	#	ff	01	00	53	00	00	54	548	0.077121	#	ff	01	00	51	00	00	52
477	0.033266	#	ff	01	00	51	00	00	52	549	0.035534	#	ff	01	00	53	00	00	54
478	0.079887	#	ff	01	00	53	00	00	54	550	0.078632	#	ff	01	00	51	00	00	52
479	0.033848	#	ff	01	00	51	00	00	52	551	0.032929	#	ff	01	00	53	00	00	54
480	0.073543	#	ff	01	00	53	00	00	54	552	0.077279	#	ff	01	00	51	00	00	52
481	0.037121	#	ff	01	00	51	00	00	52	553	0.035273	#	ff	01	00	53	00	00	54
482	0.079444	#	ff	01	00	53	00	00	54	554	0.081535	#	ff	01	00	51	00	00	52
483	0.033528	#	ff	01	00	51	00	00	52	555	0.034258	#	ff	01	00	53	00	00	54
484	0.078269	#	ff	01	00	53	00	00	54	556	0.080274	#	ff	01	00	51	00	00	52
485	0.039596	#	ff	01	00	51	00	00	52	557	0.032586	#	ff	01	00	53	00	00	54
486	0.107360	#	ff	01	00	53	00	00	54	558	0.081369	#	ff	01	00	51	00	00	52
487	0.035506	#	ff	01	00	51	00	00	52	559	0.032434	#	ff	01	00	53	00	00	54
488	0.076391	#	ff	01	00	53	00	00	54	560	0.075818	#	ff	01	00	14	32	01	48
489	0.035351	#	ff	01	00	51	00	00	52	561	0.037852	#	ff	01	00	51	00	00	52
490	0.080606	#	ff	01	00	53	00	00	54	562	0.035716	#	ff	01	00	53	00	00	54
491	0.035844	#	ff	01	00	51	00	00	52	563	0.036415	#	ff	01	00	51	00	00	52
492	0.072930	#	ff	01	00	53	00	00	54	564	0.035146	#	ff	01	00	53	00	00	54
493	0.031627	#	ff	01	00	14	2d	01	43	565	0.103532	#	ff	01	00	51	00	00	52
494	0.092382	#	ff	01	00	51	00	00	52	566	0.039466	#	ff	01	00	53	00	00	54
495	0.036728	#	ff	01	00	53	00	00	54	567	0.073928	#	ff	01	00	51	00	00	52
496	0.076991	#	ff	01	00	51	00	00	52	568	0.034097	#	ff	01	00	53	00	00	54
497	0.036035	#	ff	01	00	53	00	00	54	569	0.081834	#	ff	01	00	51	00	00	52
498	0.103217	#	ff	01	00	51	00	00	52	570	0.032304	#	ff	01	00	53	00	00	54
499	0.035011	#	ff	01	00	53	00	00	54	571	0.079818	#	ff	01	00	51	00	00	52

572	0.034881 # ff 01 00 53 00 00 54	644	0.075691 # ff 01 00 51 00 00 52
573	0.080120 # ff 01 00 51 00 00 52	645	0.036053 # ff 01 00 53 00 00 54
574	0.032772 # ff 01 00 53 00 00 54	646	0.077200 # ff 01 00 51 00 00 52
575	0.077360 # ff 01 00 51 00 00 52	647	0.035946 # ff 01 00 53 00 00 54
576	0.039556 # ff 01 00 53 00 00 54	648	0.076365 # ff 01 00 51 00 00 52
577	0.080666 # ff 01 00 51 00 00 52	649	0.036495 # ff 01 00 53 00 00 54
578	0.032537 # ff 01 00 53 00 00 54	650	0.079752 # ff 01 00 51 00 00 52
579	0.077799 # ff 01 00 51 00 00 52	651	0.033029 # ff 01 00 53 00 00 54
580	0.032563 # ff 01 00 53 00 00 54	652	0.078841 # ff 01 00 51 00 00 52
581	0.084468 # ff 01 00 51 00 00 52	653	0.036209 # ff 01 00 53 00 00 54
582	0.032528 # ff 01 00 53 00 00 54	654	0.079571 # ff 01 00 51 00 00 52
583	0.101576 # ff 01 00 51 00 00 52	655	0.039407 # ff 01 00 53 00 00 54
584	0.032981 # ff 01 00 53 00 00 54	656	0.071998 # ff 01 00 51 00 00 52
585	0.084883 # ff 01 00 51 00 00 52	657	0.032335 # ff 01 00 53 00 00 54
586	0.034361 # ff 01 00 53 00 00 54	658	0.087304 # ff 01 00 51 00 00 52
587	0.079454 # ff 01 00 51 00 00 52	659	0.033607 # ff 01 00 53 00 00 54
588	0.032800 # ff 01 00 53 00 00 54	660	0.079131 # ff 01 00 51 00 00 52
589	0.083085 # ff 01 00 51 00 00 52	661	0.041836 # ff 01 00 53 00 00 54
590	0.036211 # ff 01 00 53 00 00 54	662	0.100429 # ff 01 00 51 00 00 52
591	0.073472 # ff 01 00 51 00 00 52	663	0.033996 # ff 01 00 53 00 00 54
592	0.036732 # ff 01 00 53 00 00 54	664	0.076833 # ff 01 00 51 00 00 52
593	0.076065 # ff 01 00 51 00 00 52	665	0.036675 # ff 01 00 53 00 00 54
594	0.034410 # ff 01 00 53 00 00 54	666	0.078393 # ff 01 00 51 00 00 52
595	0.078370 # ff 01 00 51 00 00 52	667	0.037277 # ff 01 00 53 00 00 54
596	0.039671 # ff 01 00 53 00 00 54	668	0.080093 # ff 01 00 51 00 00 52
597	0.076968 # ff 01 00 51 00 00 52	669	0.032956 # ff 01 00 53 00 00 54
598	0.033503 # ff 01 00 53 00 00 54	670	0.083605 # ff 01 00 51 00 00 52
599	0.080572 # ff 01 00 51 00 00 52	671	0.034569 # ff 01 00 53 00 00 54
600	0.035663 # ff 01 00 53 00 00 54	672	0.078503 # ff 01 00 51 00 00 52
601	0.074152 # ff 01 00 51 00 00 52	673	0.033445 # ff 01 00 53 00 00 54
602	0.060819 # ff 01 00 53 00 00 54	674	0.076292 # ff 01 00 51 00 00 52
603	0.079413 # ff 01 00 51 00 00 52	675	0.035847 # ff 01 00 53 00 00 54
604	0.034257 # ff 01 00 53 00 00 54	676	0.079962 # ff 01 00 51 00 00 52
605	0.079258 # ff 01 00 51 00 00 52	677	0.037432 # ff 01 00 53 00 00 54
606	0.037905 # ff 01 00 53 00 00 54	678	0.078504 # ff 01 00 51 00 00 52
607	0.076782 # ff 01 00 51 00 00 52	679	0.035195 # ff 01 00 53 00 00 54
608	0.033319 # ff 01 00 53 00 00 54	680	0.077383 # ff 01 00 51 00 00 52
609	0.075110 # ff 01 00 51 00 00 52	681	0.036378 # ff 01 00 53 00 00 54
610	0.036234 # ff 01 00 53 00 00 54	682	0.100585 # ff 01 00 51 00 00 52
611	0.080037 # ff 01 00 51 00 00 52	683	0.036669 # ff 01 00 53 00 00 54
612	0.034255 # ff 01 00 53 00 00 54	684	0.081598 # ff 01 00 51 00 00 52
613	0.075462 # ff 01 00 51 00 00 52	685	0.039804 # ff 01 00 53 00 00 54
614	0.036419 # ff 01 00 53 00 00 54	686	0.071314 # ff 01 00 51 00 00 52
615	0.078553 # ff 01 00 51 00 00 52	687	0.040453 # ff 01 00 53 00 00 54
616	0.037329 # ff 01 00 53 00 00 54	688	0.078820 # ff 01 00 51 00 00 52
617	0.074553 # ff 01 00 51 00 00 52	689	0.034908 # ff 01 00 53 00 00 54
618	0.035897 # ff 01 00 53 00 00 54	690	0.074909 # ff 01 00 51 00 00 52
619	0.077676 # ff 01 00 51 00 00 52	691	0.035193 # ff 01 00 53 00 00 54
620	0.036601 # ff 01 00 53 00 00 54	692	0.078974 # ff 01 00 51 00 00 52
621	0.075355 # ff 01 00 51 00 00 52	693	0.059439 # ff 01 00 53 00 00 54
622	0.035481 # ff 01 00 53 00 00 54	694	0.073764 # ff 01 00 14 3c 01 52
623	0.105327 # ff 01 00 51 00 00 52	695	0.036601 # ff 01 00 51 00 00 52
624	0.039598 # ff 01 00 53 00 00 54	696	0.091239 # ff 01 00 53 00 00 54
625	0.069248 # ff 01 00 51 00 00 52	697	0.037017 # ff 01 00 51 00 00 52
626	0.039856 # ff 01 00 53 00 00 54	698	0.079520 # ff 01 00 53 00 00 54
627	0.072562 # ff 01 00 14 37 01 4d	699	0.036003 # ff 01 00 51 00 00 52
628	0.034236 # ff 01 00 51 00 00 52	700	0.102619 # ff 01 00 53 00 00 54
629	0.033435 # ff 01 00 53 00 00 54	701	0.033147 # ff 01 00 51 00 00 52
630	0.039754 # ff 01 00 51 00 00 52	702	0.080818 # ff 01 00 53 00 00 54
631	0.036339 # ff 01 00 53 00 00 54	703	0.033759 # ff 01 00 51 00 00 52
632	0.078373 # ff 01 00 51 00 00 52	704	0.079648 # ff 01 00 53 00 00 54
633	0.033292 # ff 01 00 53 00 00 54	705	0.033653 # ff 01 00 51 00 00 52
634	0.080275 # ff 01 00 51 00 00 52	706	0.079987 # ff 01 00 53 00 00 54
635	0.035350 # ff 01 00 53 00 00 54	707	0.036262 # ff 01 00 51 00 00 52
636	0.075169 # ff 01 00 51 00 00 52	708	0.076132 # ff 01 00 53 00 00 54
637	0.036309 # ff 01 00 53 00 00 54	709	0.036313 # ff 01 00 51 00 00 52
638	0.079446 # ff 01 00 51 00 00 52	710	0.078816 # ff 01 00 53 00 00 54
639	0.032979 # ff 01 00 53 00 00 54	711	0.036548 # ff 01 00 51 00 00 52
640	0.080170 # ff 01 00 51 00 00 52	712	0.070458 # ff 01 00 53 00 00 54
641	0.035220 # ff 01 00 53 00 00 54	713	0.035870 # ff 01 00 51 00 00 52
642	0.103271 # ff 01 00 51 00 00 52	714	0.080632 # ff 01 00 53 00 00 54
643	0.036547 # ff 01 00 53 00 00 54	715	0.033422 # ff 01 00 51 00 00 52

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716 0.076620 # ff 01 00 53 00 00 54
717 0.039385 # ff 01 00 51 00 00 52
718 0.079233 # ff 01 00 53 00 00 54
719 0.033623 # ff 01 00 51 00 00 52
720 0.104180 # ff 01 00 53 00 00 54
721 0.036132 # ff 01 00 51 00 00 52
722 0.079004 # ff 01 00 53 00 00 54
723 0.036405 # ff 01 00 51 00 00 52
724 0.073423 # ff 01 00 53 00 00 54
725 0.036472 # ff 01 00 51 00 00 52
726 0.076162 # ff 01 00 53 00 00 54
727 0.038086 # ff 01 00 51 00 00 52
728 0.079503 # ff 01 00 53 00 00 54
729 0.036966 # ff 01 00 51 00 00 52
730 0.075845 # ff 01 00 53 00 00 54
731 0.034774 # ff 01 00 51 00 00 52
732 0.079156 # ff 01 00 53 00 00 54
733 0.036260 # ff 01 00 51 00 00 52
734 0.077331 # ff 01 00 53 00 00 54
735 0.033241 # ff 01 00 51 00 00 52
736 0.078689 # ff 01 00 53 00 00 54
737 0.038632 # ff 01 00 51 00 00 52
738 0.077108 # ff 01 00 53 00 00 54
739 0.034544 # ff 01 00 51 00 00 52
740 0.106393 # ff 01 00 53 00 00 54
741 0.033943 # ff 01 00 51 00 00 52
742 0.077066 # ff 01 00 53 00 00 54
743 0.035455 # ff 01 00 51 00 00 52
744 0.076783 # ff 01 00 53 00 00 54
745 0.033998 # ff 01 00 51 00 00 52
746 0.077793 # ff 01 00 53 00 00 54
747 0.033162 # ff 01 00 51 00 00 52
748 0.090144 # ff 01 00 53 00 00 54
749 0.033449 # ff 01 00 51 00 00 52
750 0.077280 # ff 01 00 53 00 00 54
751 0.036783 # ff 01 00 51 00 00 52
752 0.082125 # ff 01 00 53 00 00 54
753 0.032675 # ff 01 00 51 00 00 52
754 0.079518 # ff 01 00 53 00 00 54
755 0.032825 # ff 01 00 51 00 00 52
756 0.083413 # ff 01 00 53 00 00 54
757 0.037278 # ff 01 00 51 00 00 52
758 0.104388 # ff 01 00 53 00 00 54
759 0.036496 # ff 01 00 51 00 00 52
760 0.104985 # ff 01 00 53 00 00 54
761 0.030455 # ff 01 00 14 3f 01 55
762 0.094524 # ff 01 00 51 00 00 52
763 0.036107 # ff 01 00 53 00 00 54
764 0.075866 # ff 01 00 51 00 00 52
765 0.035403 # ff 01 00 53 00 00 54
766 0.080012 # ff 01 00 51 00 00 52
767 0.032957 # ff 01 00 53 00 00 54
768 0.088062 # ff 01 00 51 00 00 52
769 0.034620 # ff 01 00 53 00 00 54
770 0.081917 # ff 01 00 51 00 00 52
771 0.034907 # ff 01 00 53 00 00 54
772 0.075588 # ff 01 00 51 00 00 52
773 0.036809 # ff 01 00 53 00 00 54
774 0.079100 # ff 01 00 51 00 00 52
775 0.033190 # ff 01 00 53 00 00 54
776 0.077355 # ff 01 00 51 00 00 52
777 0.032540 # ff 01 00 53 00 00 54
778 0.114856 # ff 01 00 51 00 00 52
779 0.033710 # ff 01 00 53 00 00 54
780 0.076636 # ff 01 00 51 00 00 52
781 0.035924 # ff 01 00 53 00 00 54
782 0.080049 # ff 01 00 51 00 00 52
783 0.034282 # ff 01 00 53 00 00 54
784 0.075795 # ff 01 00 51 00 00 52
785 0.033136 # ff 01 00 53 00 00 54
786 0.085484 # ff 01 00 51 00 00 52
787 0.035531 # ff 01 00 53 00 00 54

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788 0.079648 # ff 01 00 51 00 00 52
789 0.032639 # ff 01 00 53 00 00 54
790 0.082688 # ff 01 00 51 00 00 52
791 0.033815 # ff 01 00 53 00 00 54
792 0.076979 # ff 01 00 51 00 00 52
793 0.036445 # ff 01 00 53 00 00 54
794 0.077696 # ff 01 00 51 00 00 52
795 0.034346 # ff 01 00 53 00 00 54
796 0.079673 # ff 01 00 51 00 00 52
797 0.040272 # ff 01 00 53 00 00 54
798 0.100976 # ff 01 00 51 00 00 52
799 0.034466 # ff 01 00 53 00 00 54
800 0.079249 # ff 01 00 51 00 00 52
801 0.034787 # ff 01 00 53 00 00 54
802 0.078789 # ff 01 00 51 00 00 52
803 0.020833 # Bad Data
804 0.032723 # ff 01 00 53 00 00 54
805 0.078086 # ff 01 00 51 00 00 52
806 0.034539 # ff 01 00 53 00 00 54
807 0.078189 # ff 01 00 51 00 00 52
808 0.039331 # ff 01 00 53 00 00 54
809 0.079545 # ff 01 00 51 00 00 52
810 0.034160 # ff 01 00 53 00 00 54
811 0.078483 # ff 01 00 51 00 00 52
812 0.035846 # ff 01 00 53 00 00 54
813 0.077004 # ff 01 00 51 00 00 52
814 0.033945 # ff 01 00 53 00 00 54
815 0.074259 # ff 01 00 51 00 00 52
816 0.036029 # ff 01 00 53 00 00 54
817 0.076914 # ff 01 00 51 00 00 52
818 0.038814 # ff 01 00 53 00 00 54
819 0.103554 # ff 01 00 51 00 00 52
820 0.035428 # ff 01 00 53 00 00 54
821 0.077173 # ff 01 00 51 00 00 52
822 0.036782 # ff 01 00 53 00 00 54
823 0.073815 # ff 01 00 51 00 00 52
824 0.036731 # ff 01 00 53 00 00 54
825 0.101811 # ff 01 00 51 00 00 52
826 0.034202 # ff 01 00 53 00 00 54
827 0.080683 # ff 01 00 51 00 00 52
828 0.040011 # ff 01 00 53 00 00 54
829 0.074657 # ff 01 00 00 00 00 01
# There were a total of      5775 DCE bytes transferred
# The first DCE byte came in at 0.033128 seconds from the
start of data collection
# The last DCE byte was at 188.204123 seconds from the start
of data collection
# There were a total of      5775 DTE bytes transferred
# The first DTE byte came in at 0.000000 seconds from the
start of data collection
# The last DTE byte was at 188.142219 seconds from the start
of data collection

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