

打音検査器（PDC-100AI）による
トンネル内壁面の浮き剥離調査報告書

2018.07

1. 概要

2018.07.10に、トンネル内のコンクリート壁面に
打音検査器（PDC-100A1）を使用し、剥離、浮きの状況を調査しました。

2. 調査対象

現在は未使用となっている道路に隣接するトンネル内の壁面

3. 調査方法

打音検査器（PDC-100A1）を2台（2チーム）で測定する。

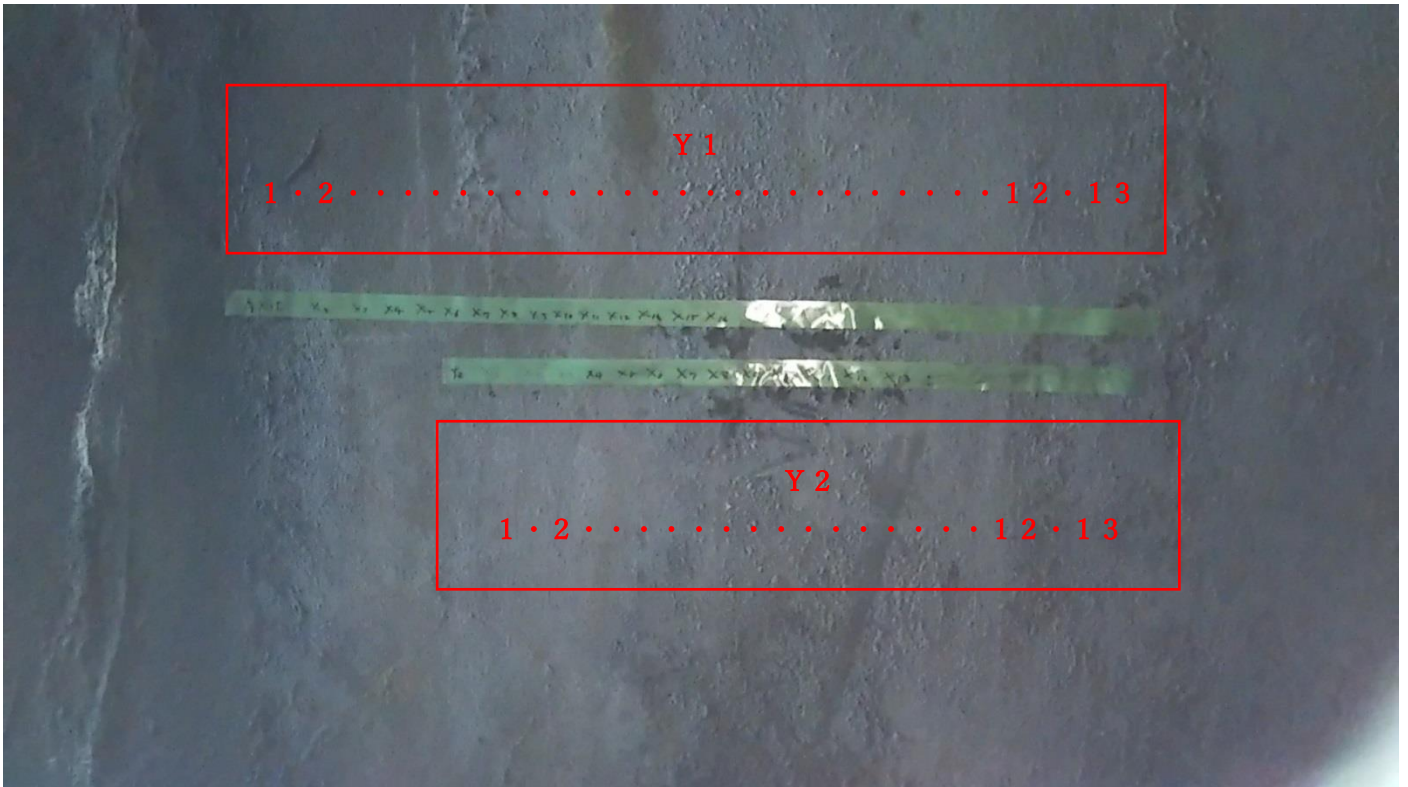
トンネル入り口付近の劣化が見られない部分を正常な部位と定義し、
これを学習データで10件ほど取り込みし、判定基準とする。

点検棒で測定箇所を叩き、その打音をPDC-100A1で判定させる。
判定スコアの2.0未満を正常とし、2.0超の場合はNGとする。

測定点の浮き、剥離の状況を見極めるために、一定間隔で横移動しながら測定し、
劣化の進み具合や範囲の特定につなげる。

特に水漏れや外観上で劣化の見られる箇所を重点的に調査した。

トンネル内 検査位置 上段 Y1/下段 Y2

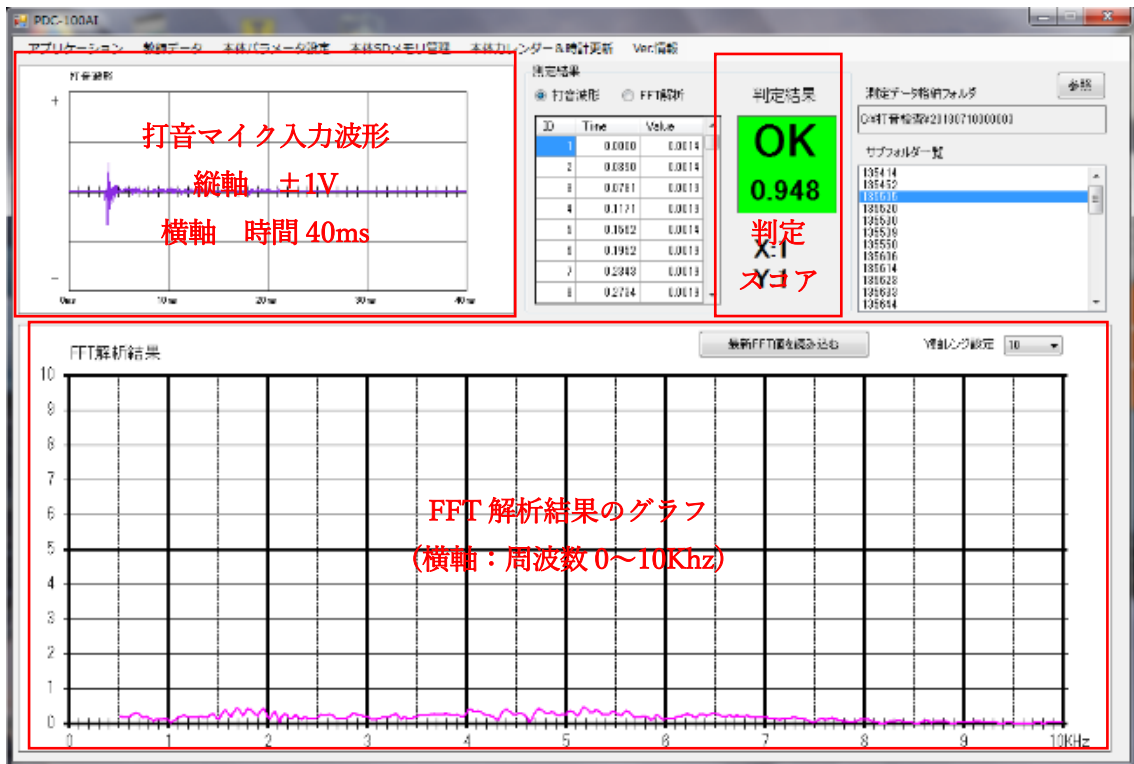


Y1			Y2		
X 位置	SCORE	判定	X 位置	SCORE	判定
1	0.948	OK	1	1.229	OK
2	0.955	OK	2	4.582	NG
3	1.079	OK	3	6.549	NG
4	0.824	OK	4	4.042	NG
5	1.052	OK	5	4.370	NG
6	1.068	OK	6	3.147	NG
7	1.104	OK	7	6.274	NG
8	1.172	OK	8	2.587	OK
9	1.336	OK	9	1.111	OK
10	1.489	OK	10	0.914	OK
11	1.394	OK	11	1.056	OK
12	1.212	OK	12	0.964	OK
13	1.131	OK	13	1.319	OK

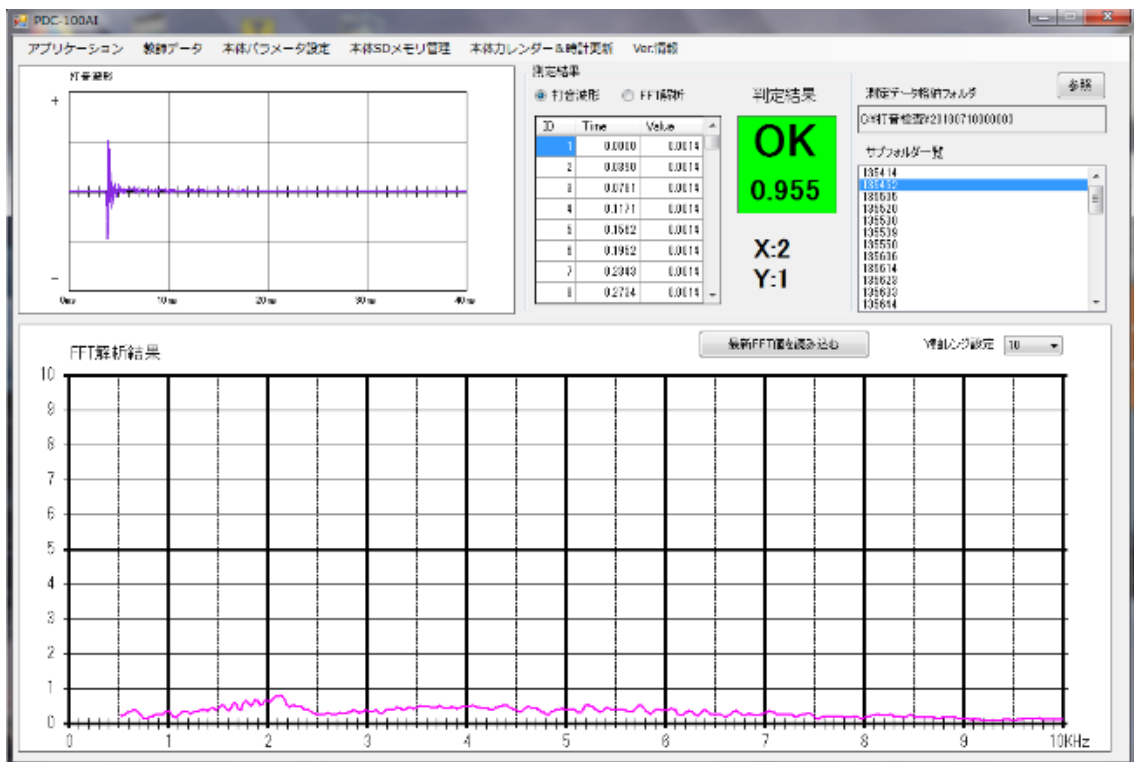
Y1 X1 から X13 まで、ほぼ健全部である。

Y2 X2 から浮き剥離が始まり、X8 まで続いている。その他は健全部と推測される。

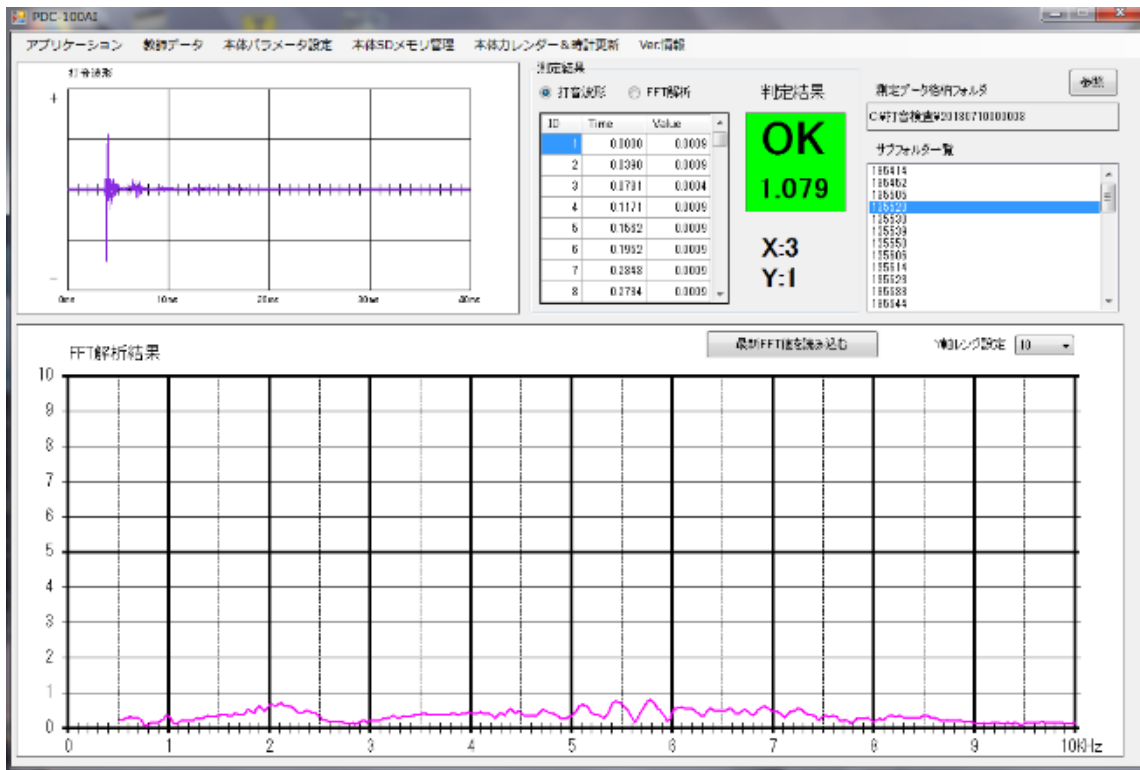
Y1-X1



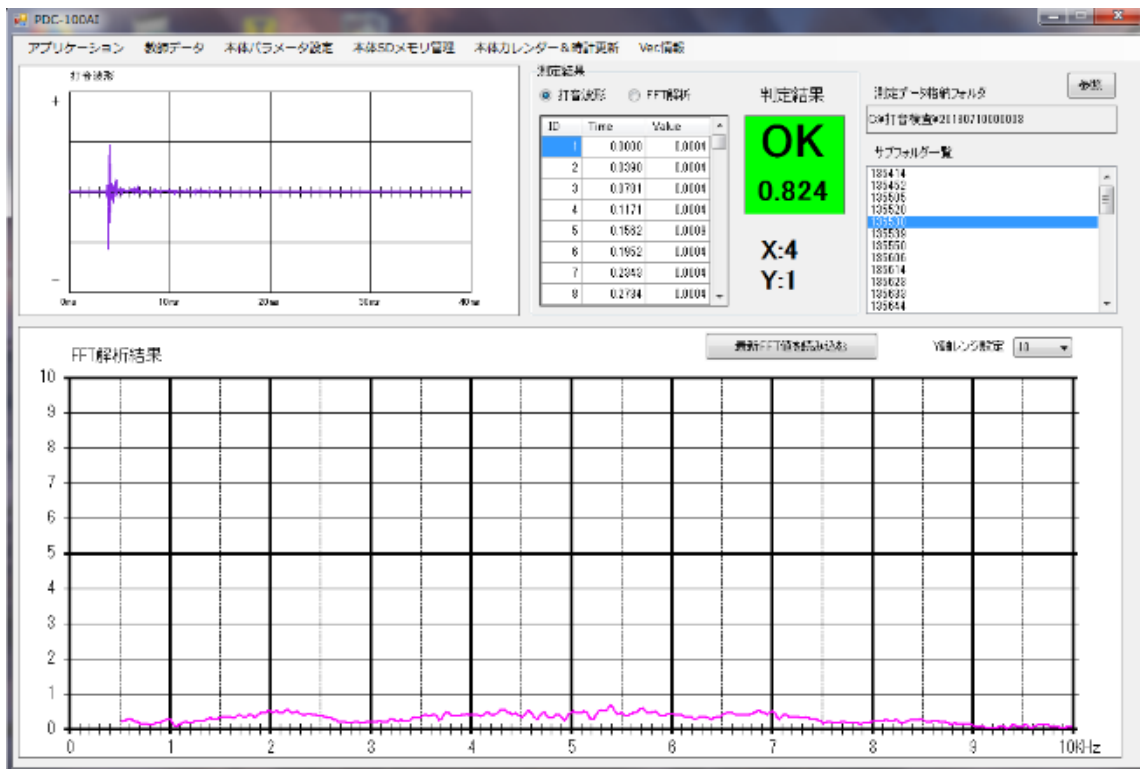
Y1-X2



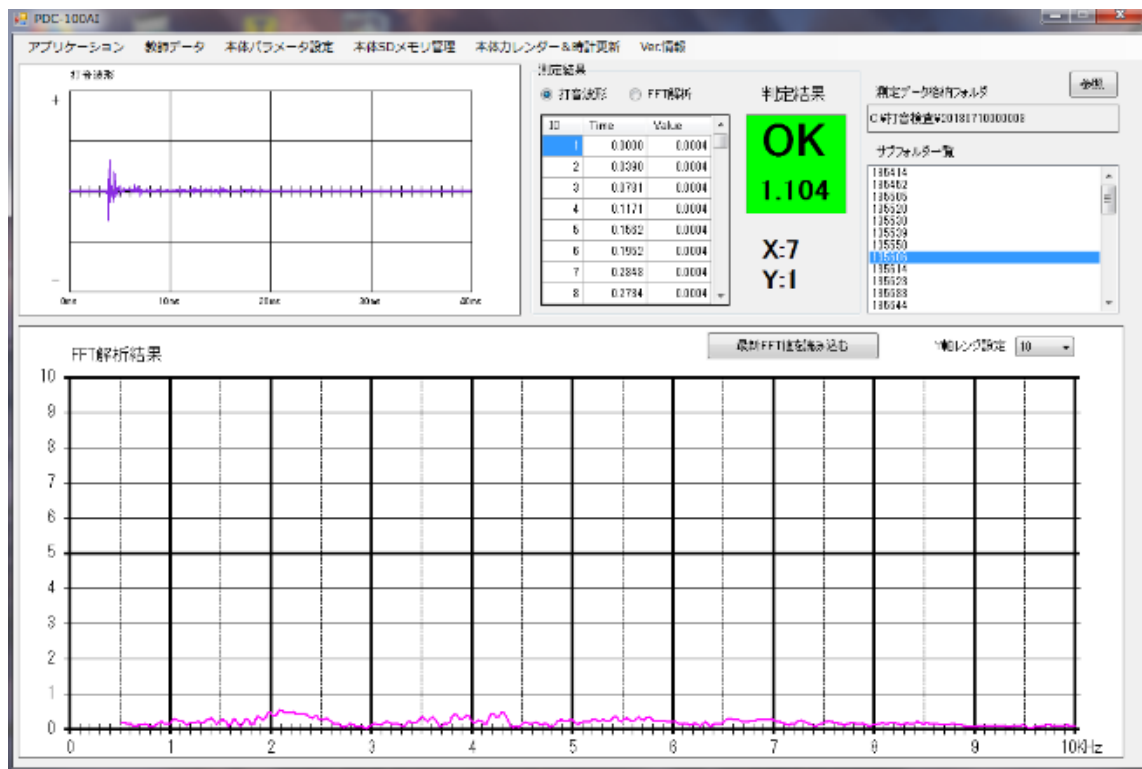
Y1-X3



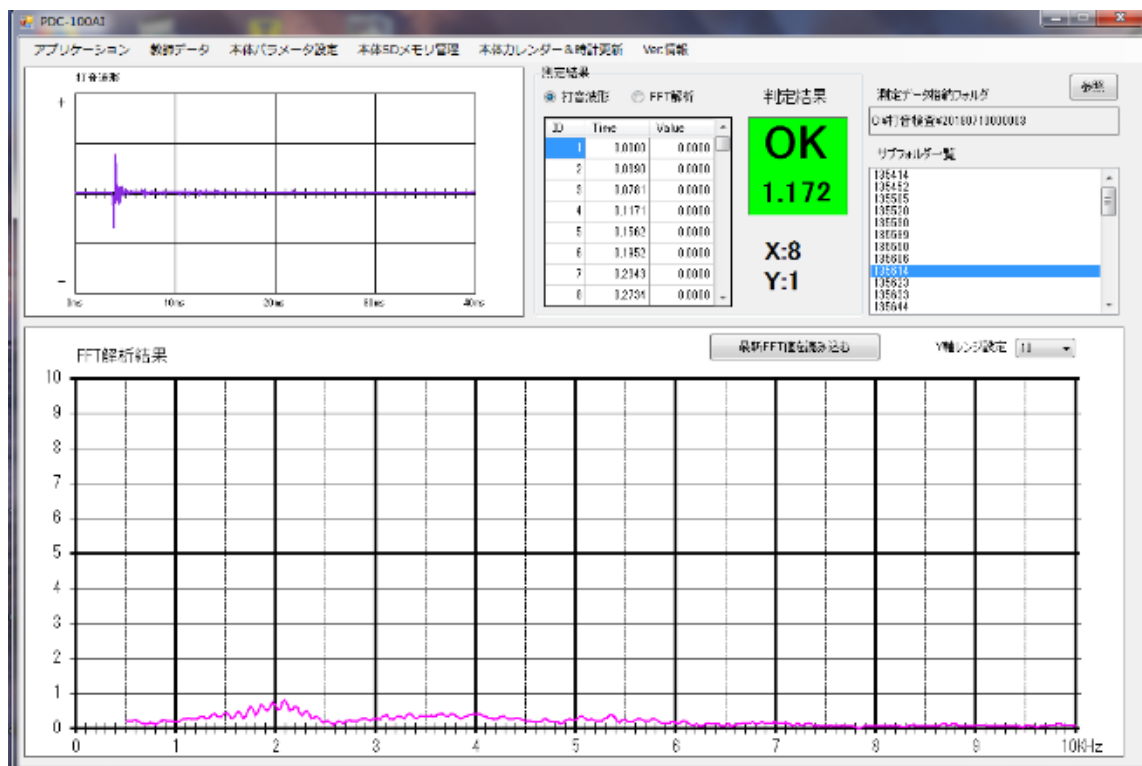
Y1-X4



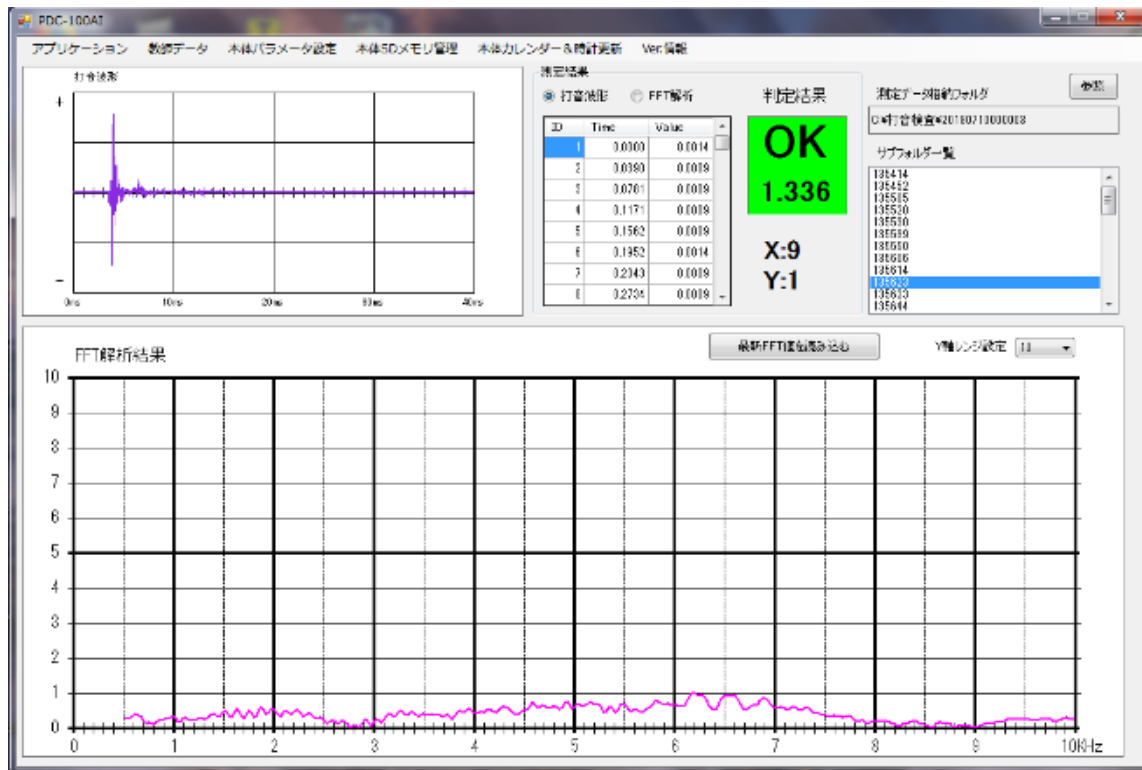
Y1-X7



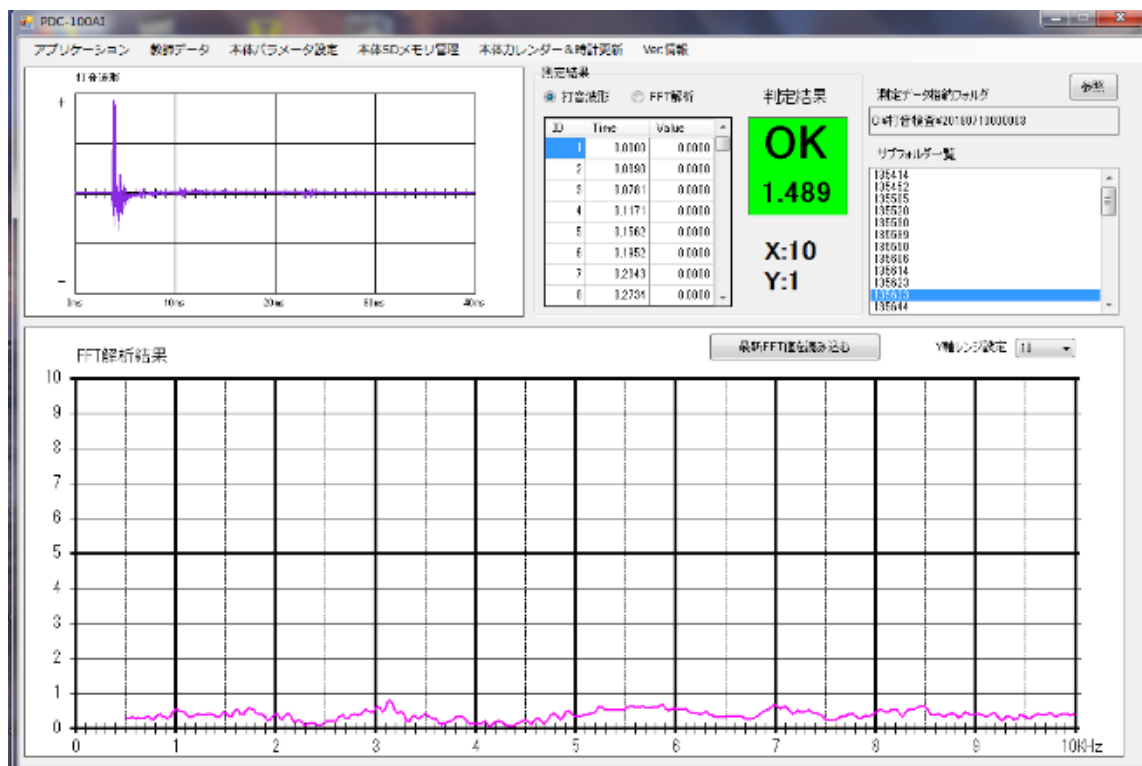
Y1-X8



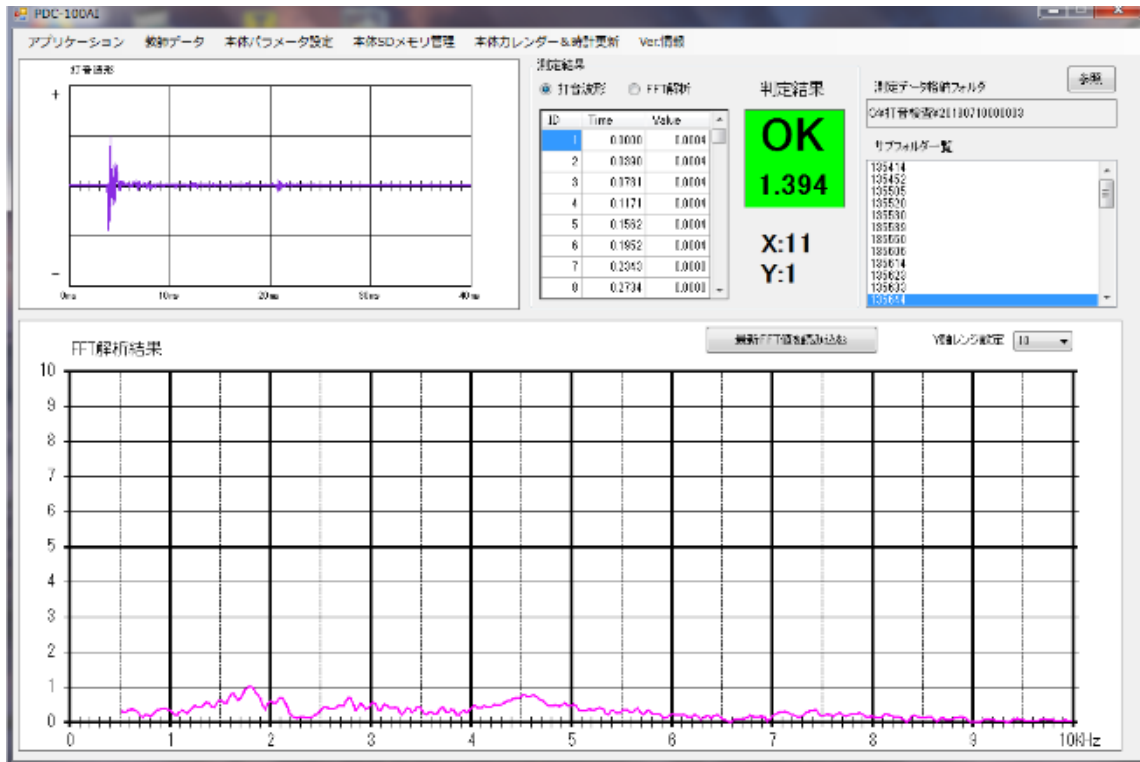
Y1-X9



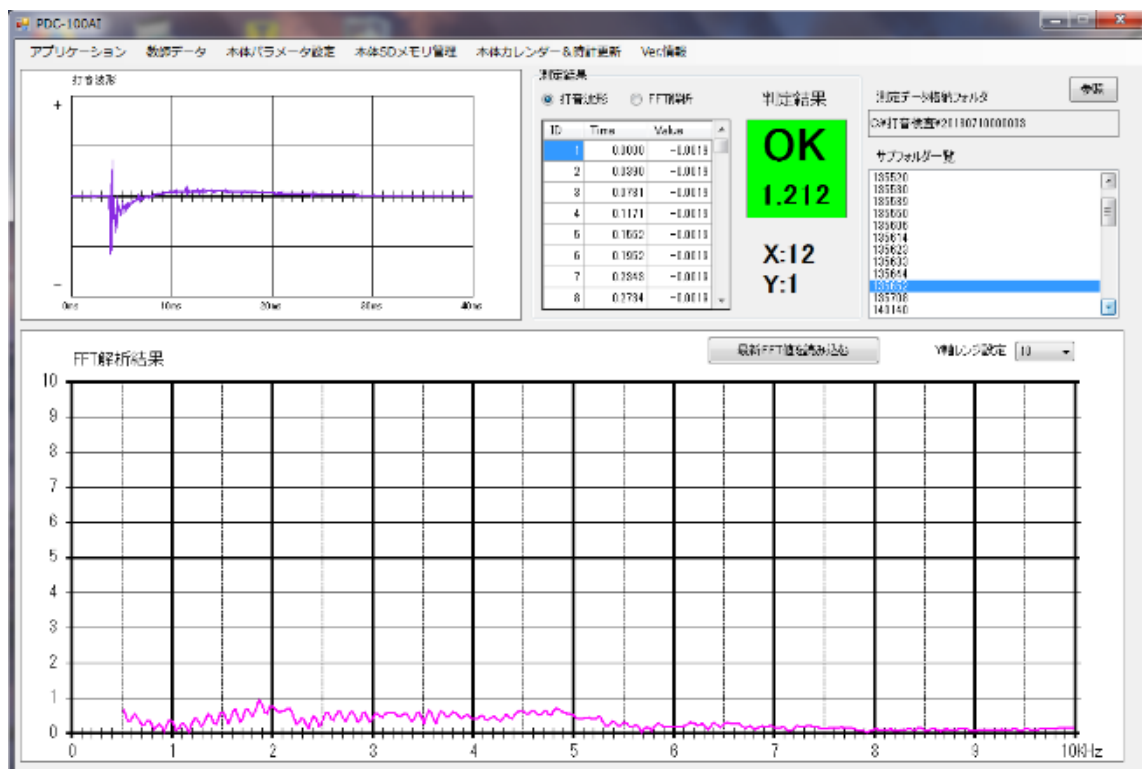
Y1-X10



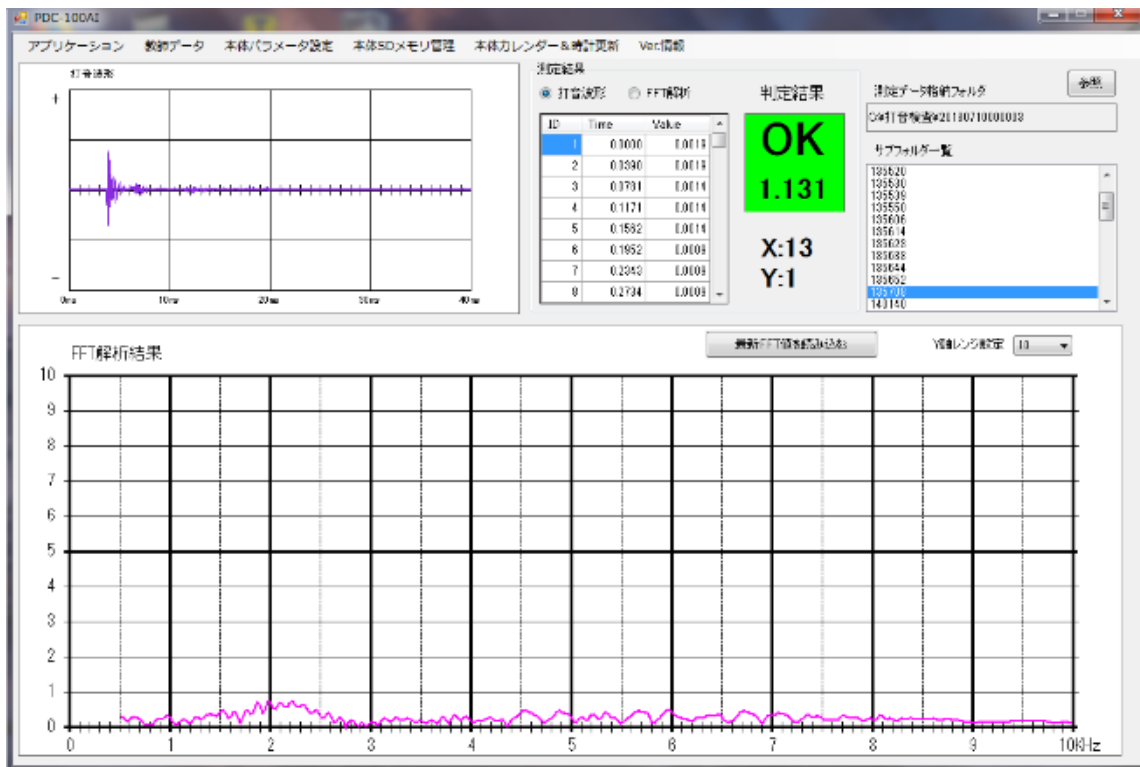
Y1-X11



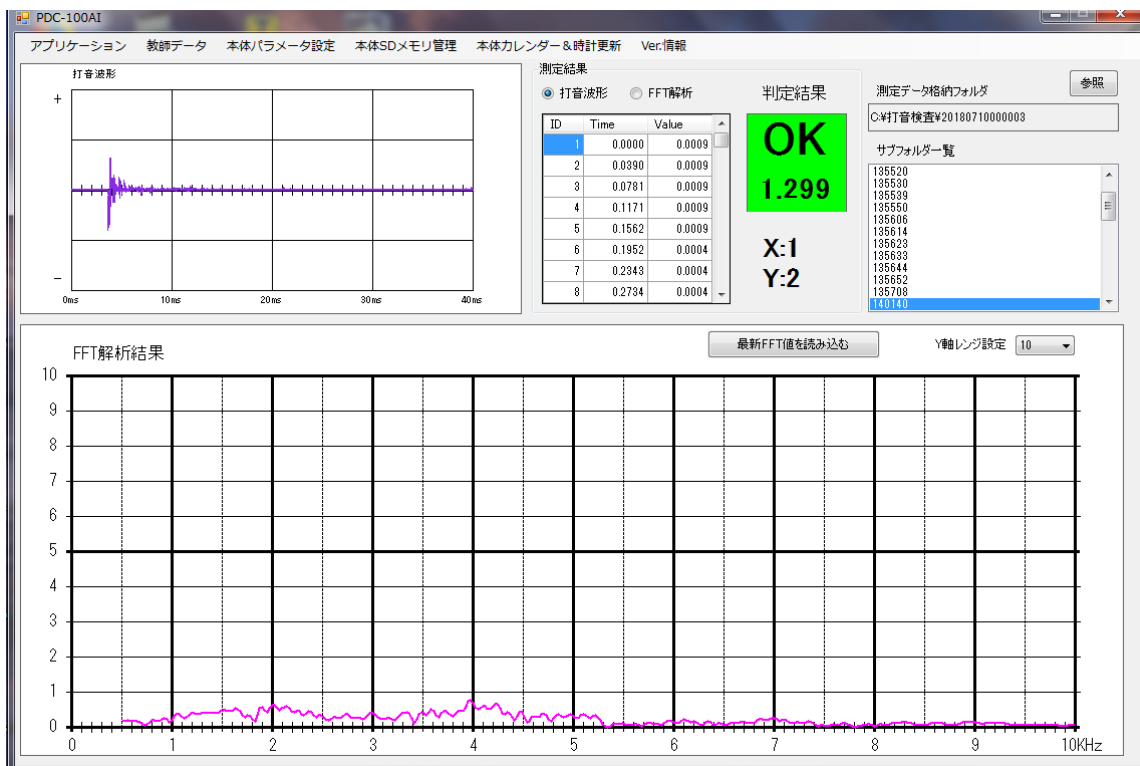
Y1-X12



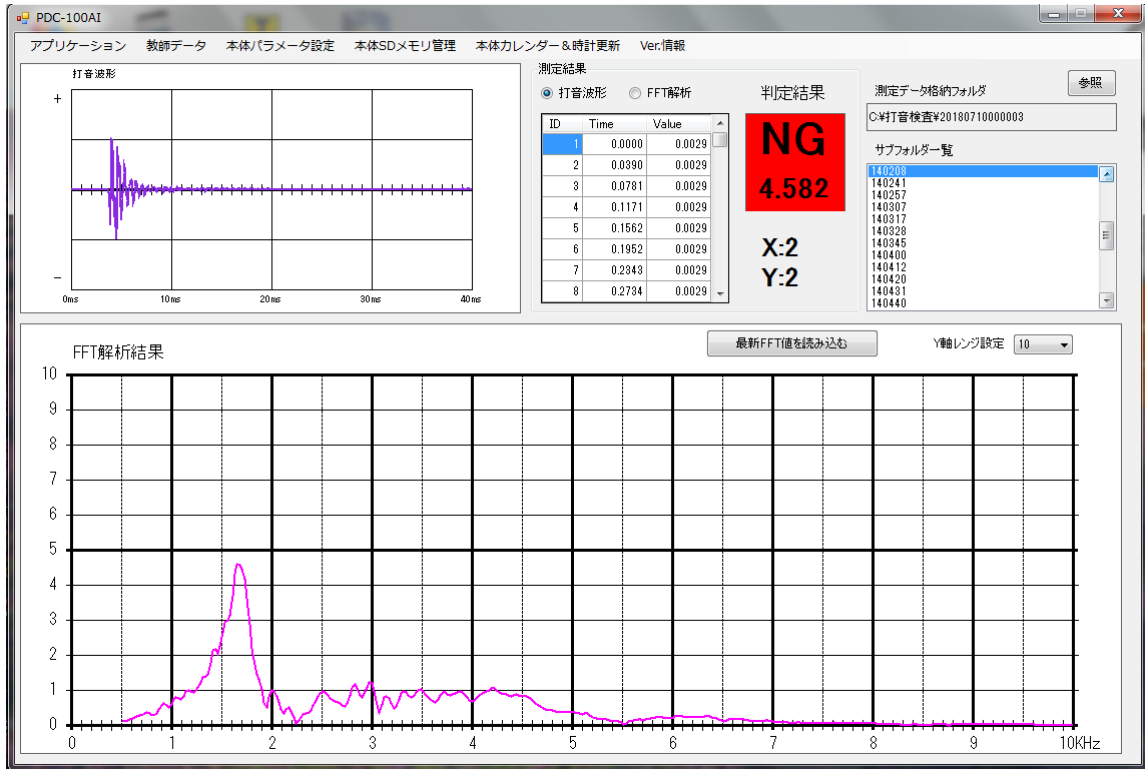
Y1-X13



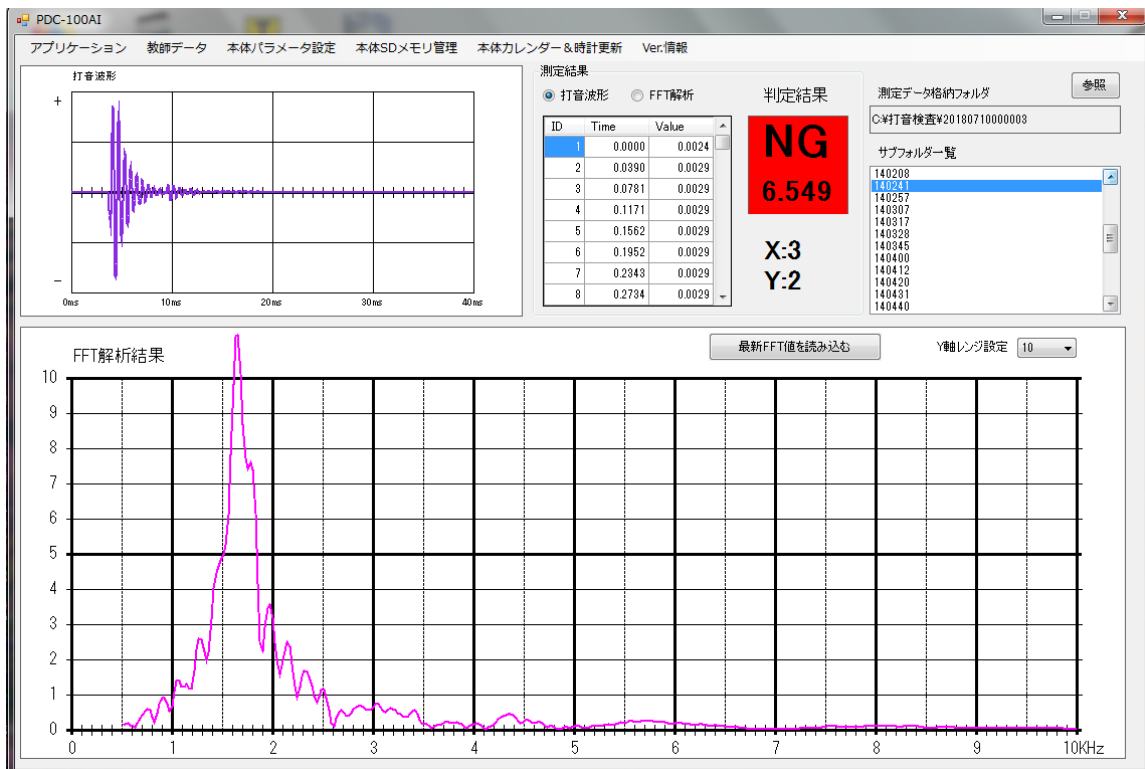
Y2-X1



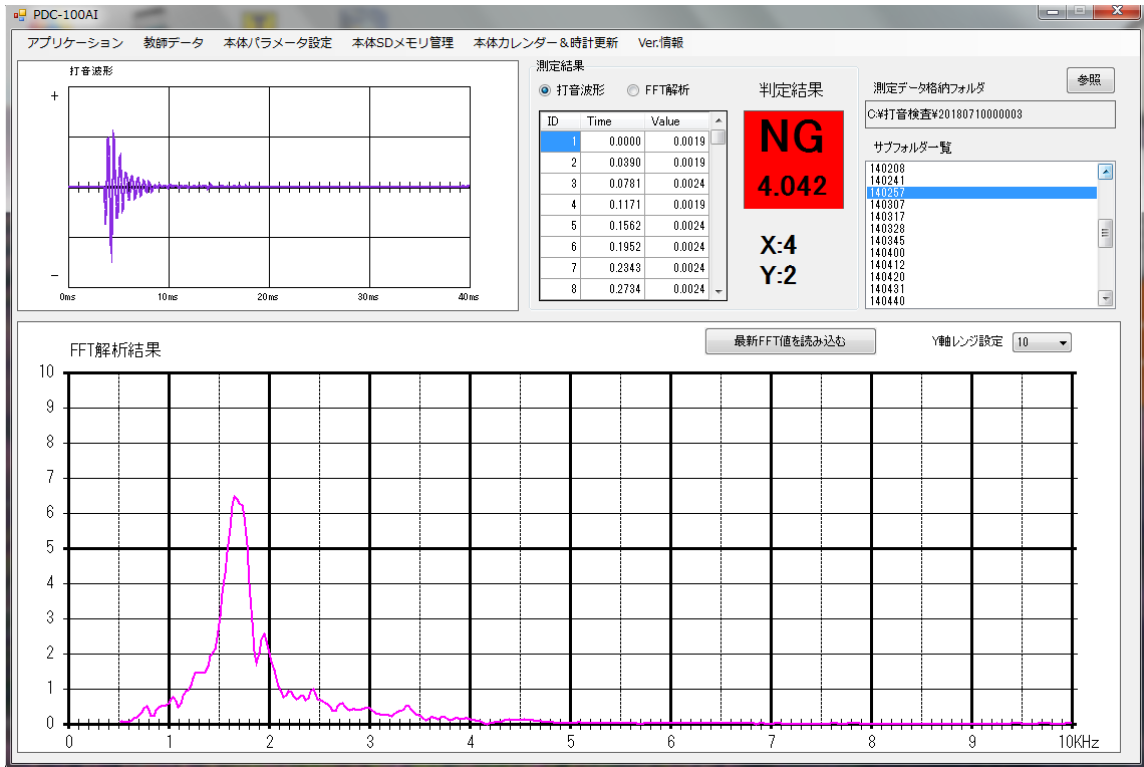
Y2-X2



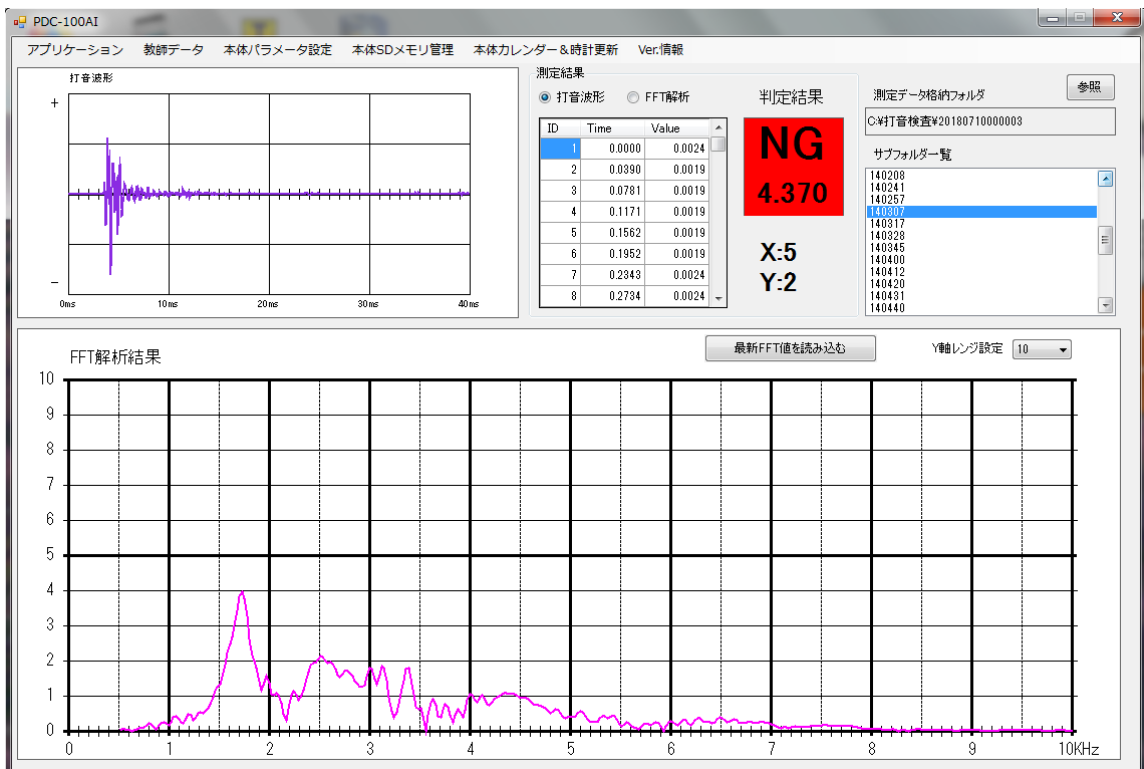
Y2-X3



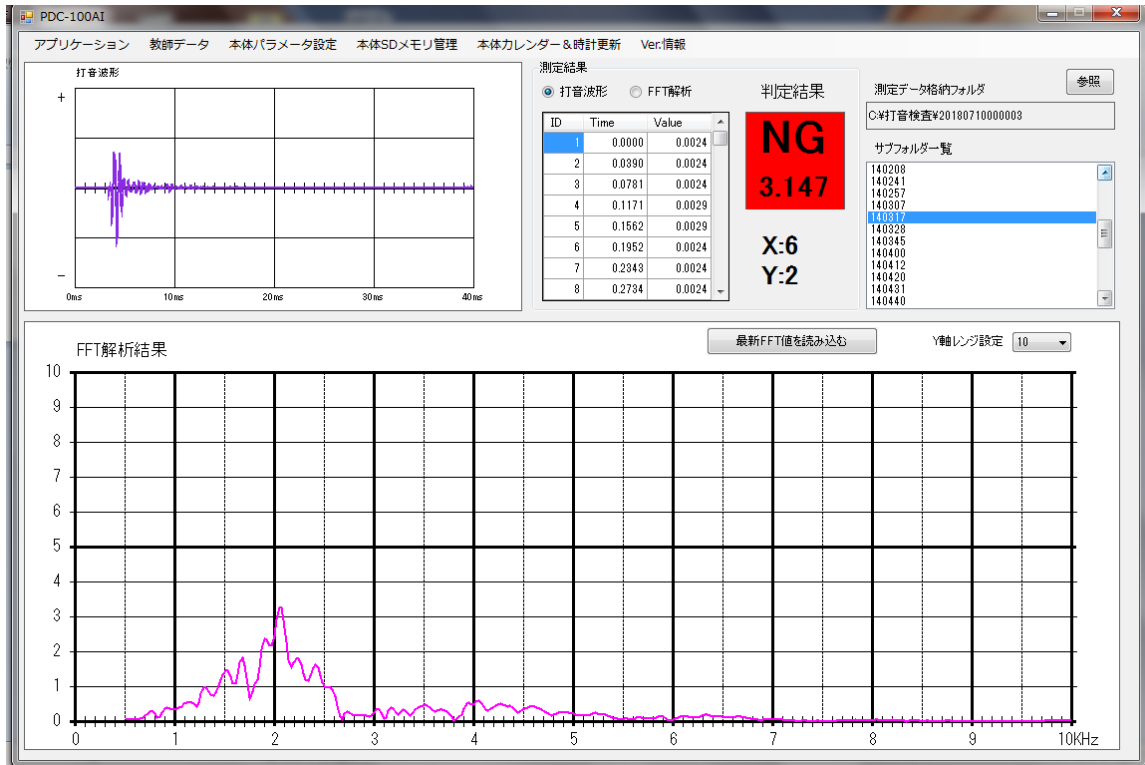
Y2-X4



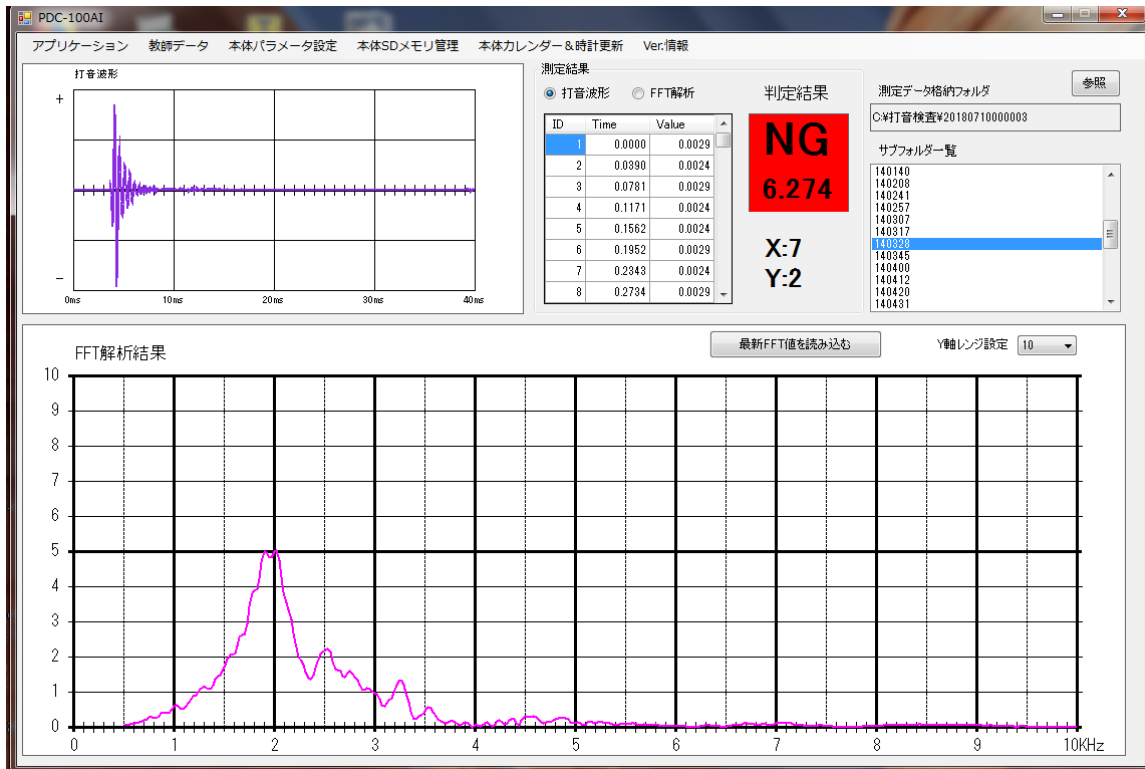
Y2-X5



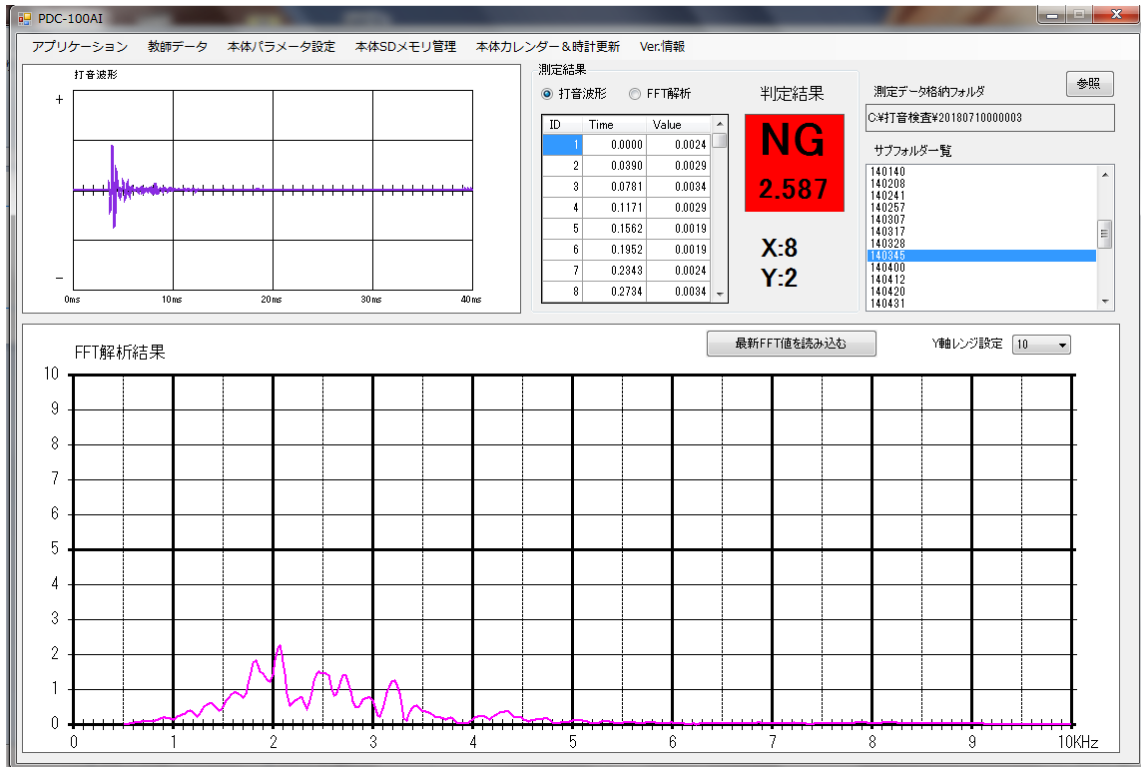
Y2-X6



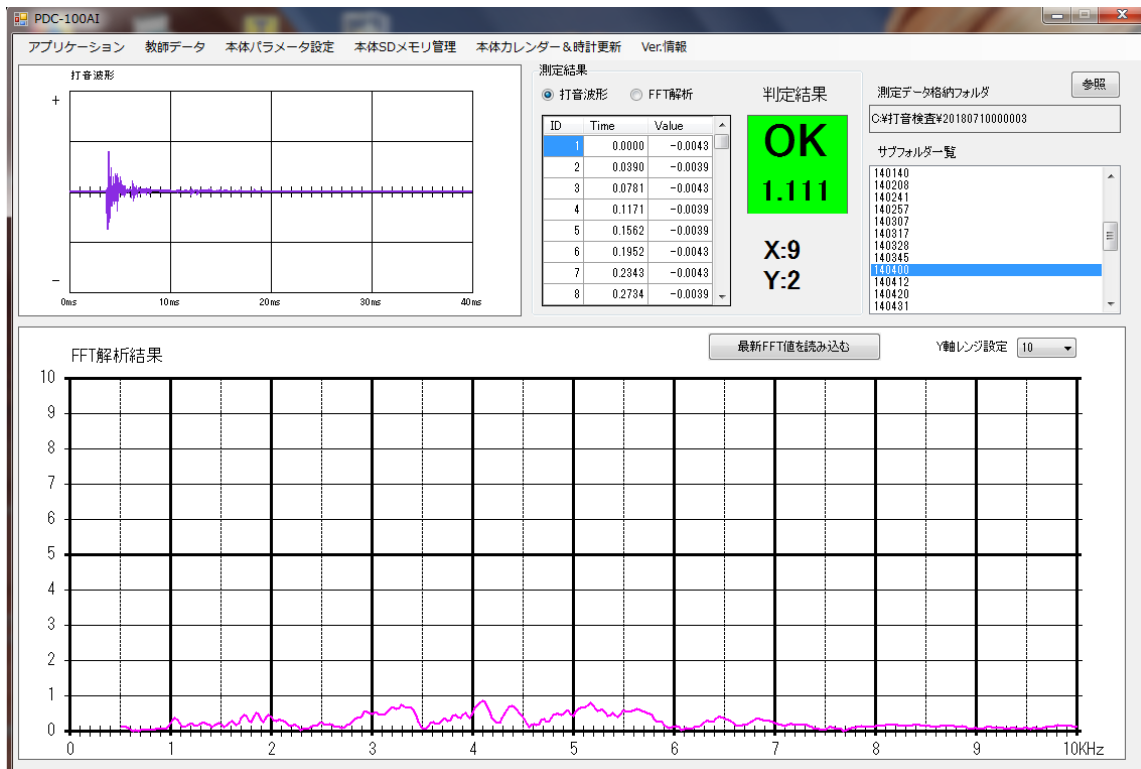
Y2-X7



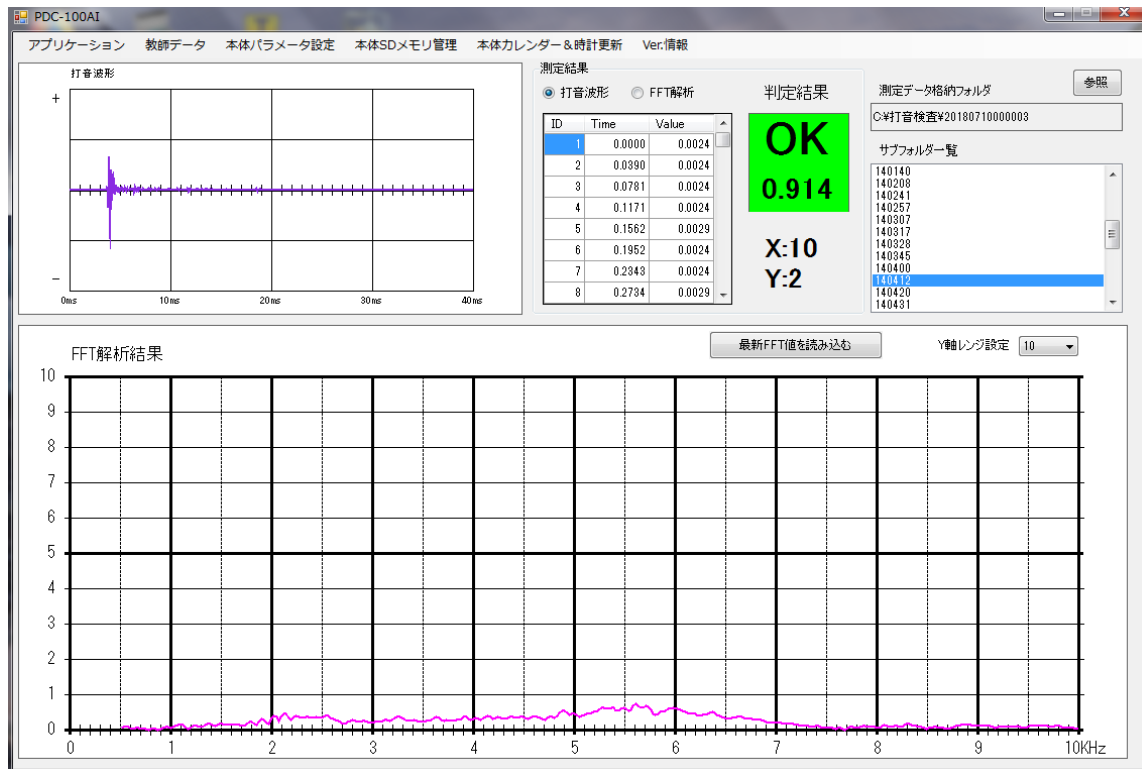
Y2-X8



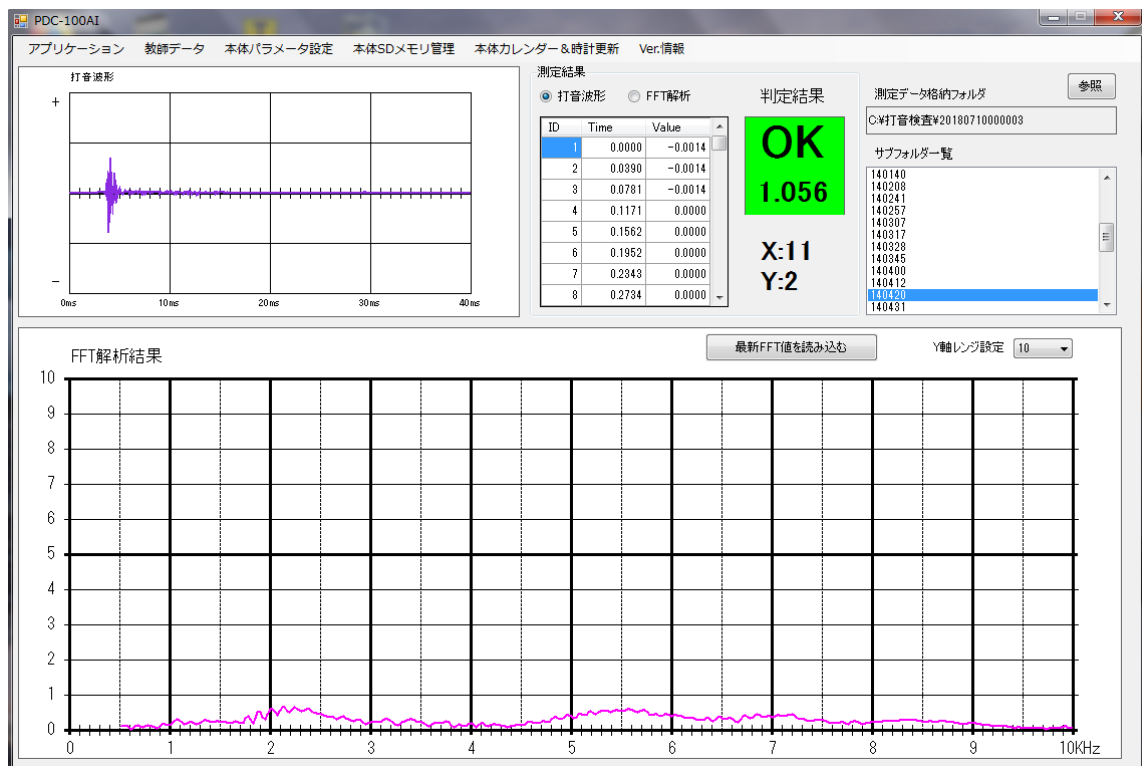
Y2-X9



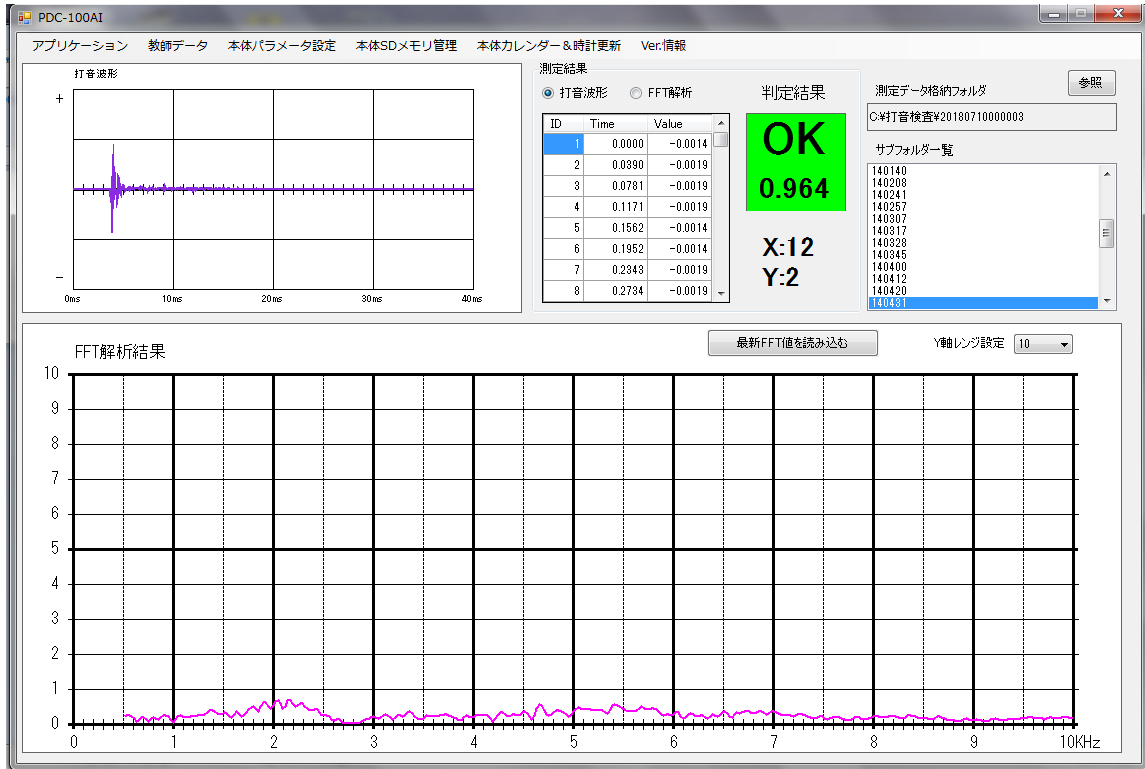
Y2-X10



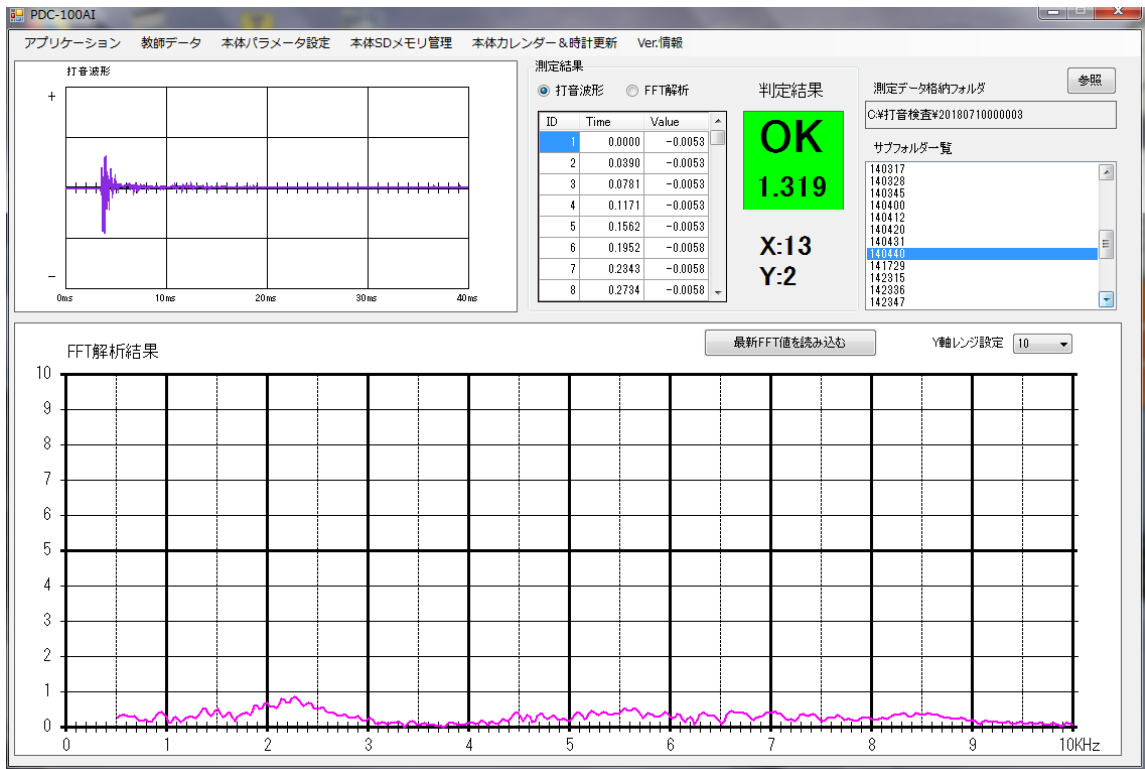
Y2-X11

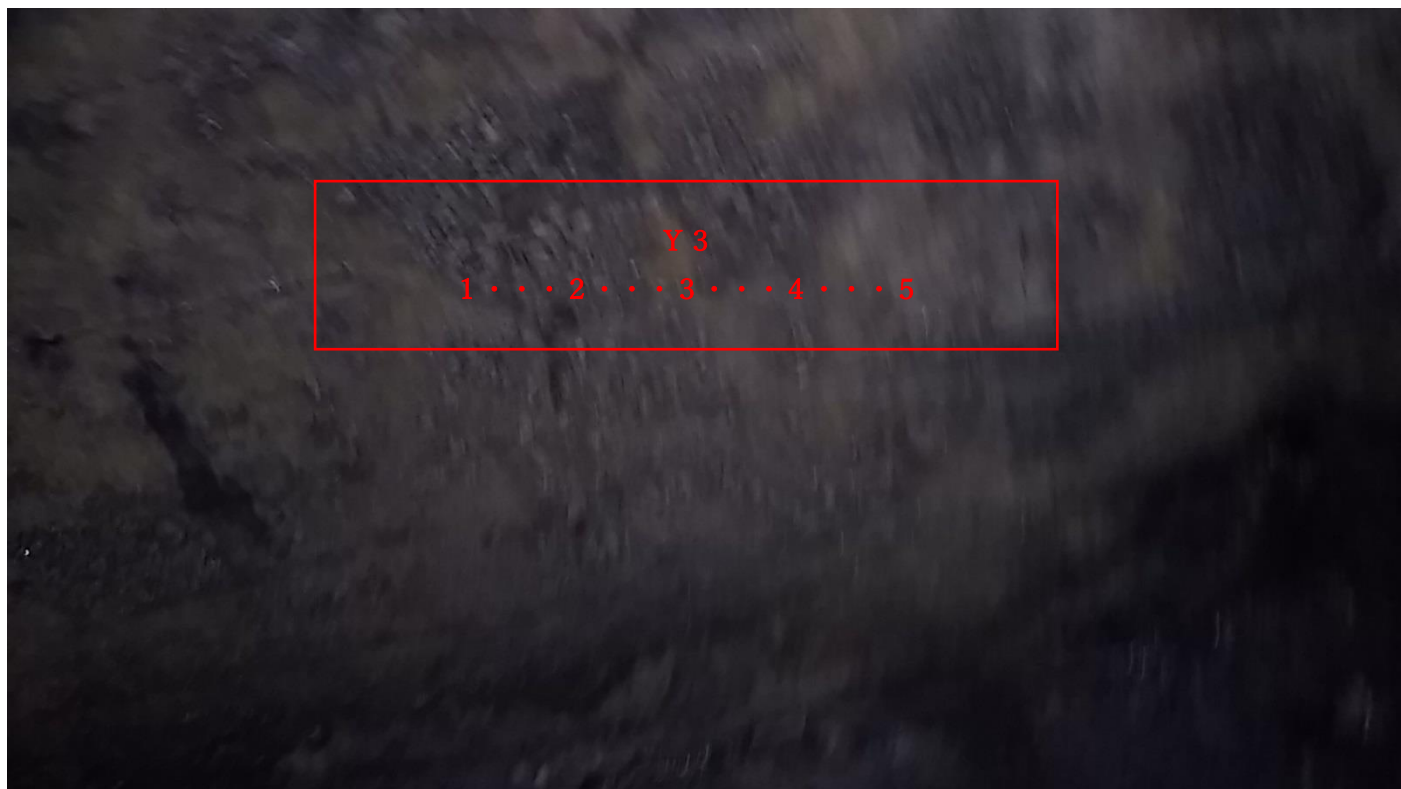


Y2-X12



Y2-X13

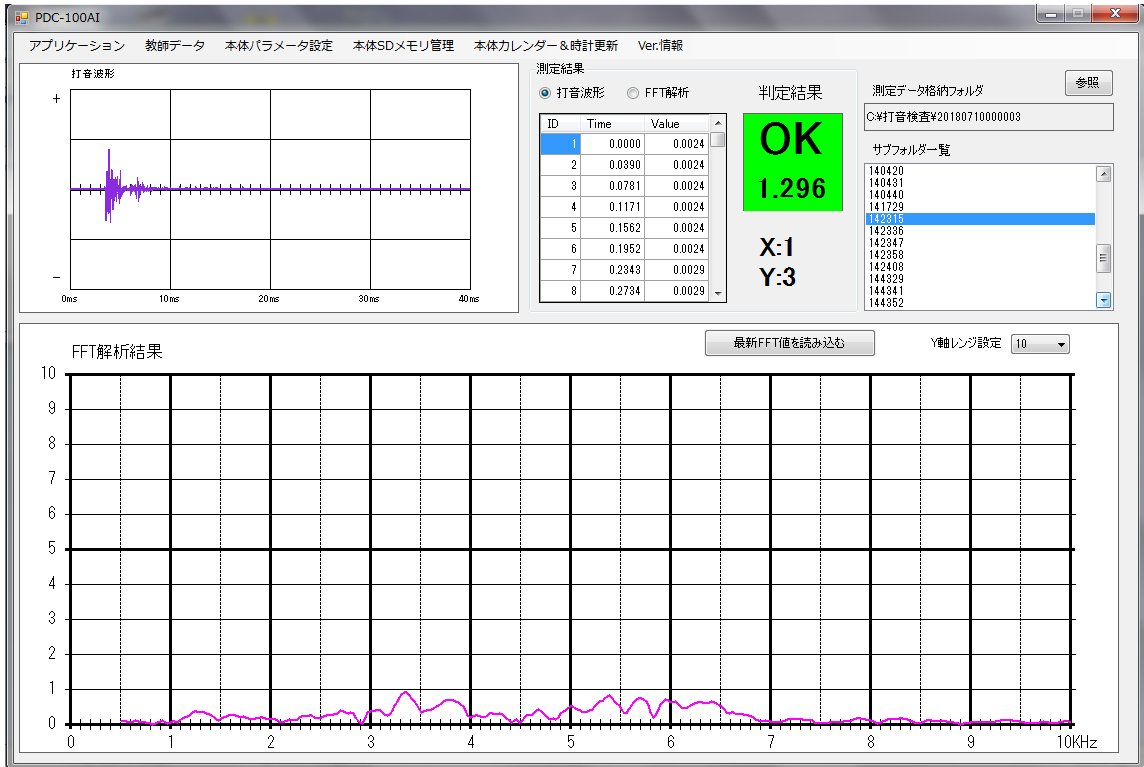




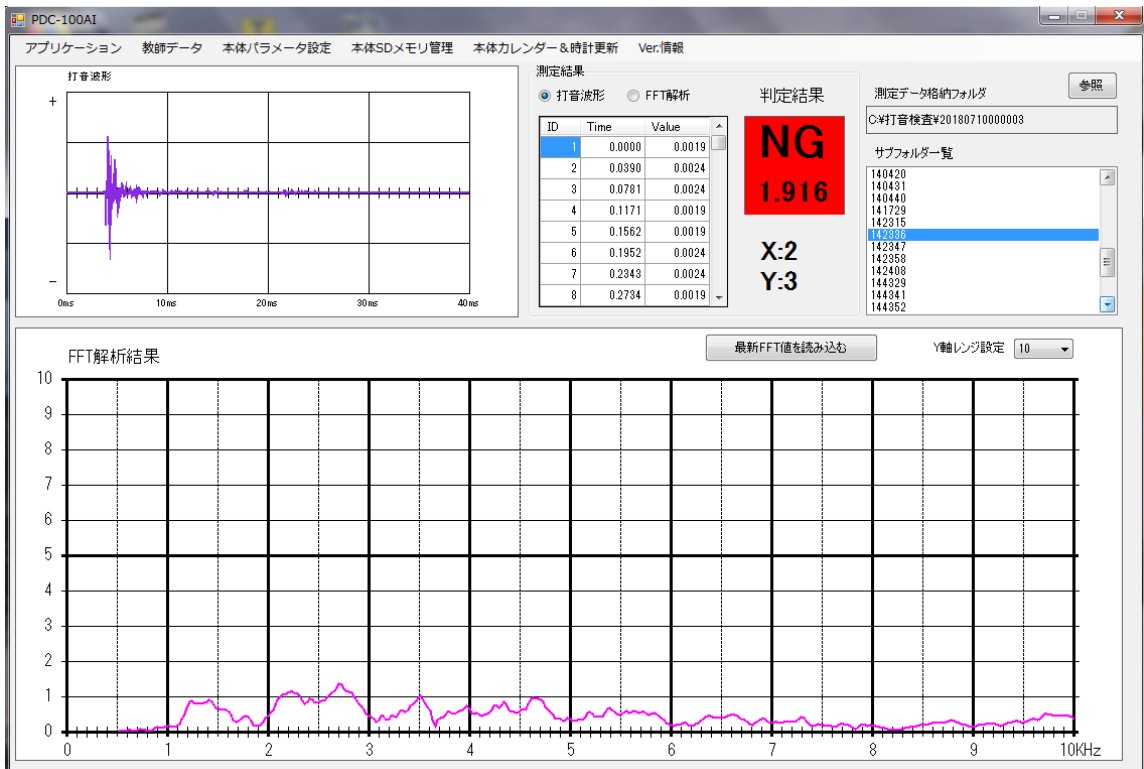
Y3		
X 位置	SCORE	判定
1	1.296	OK
2	1.916	NG
3	1.758	NG
4	2.164	NG
5	1.387	NG

Y3 X2 辺りから NG 判定出るも、明確な浮き打音は確認できず

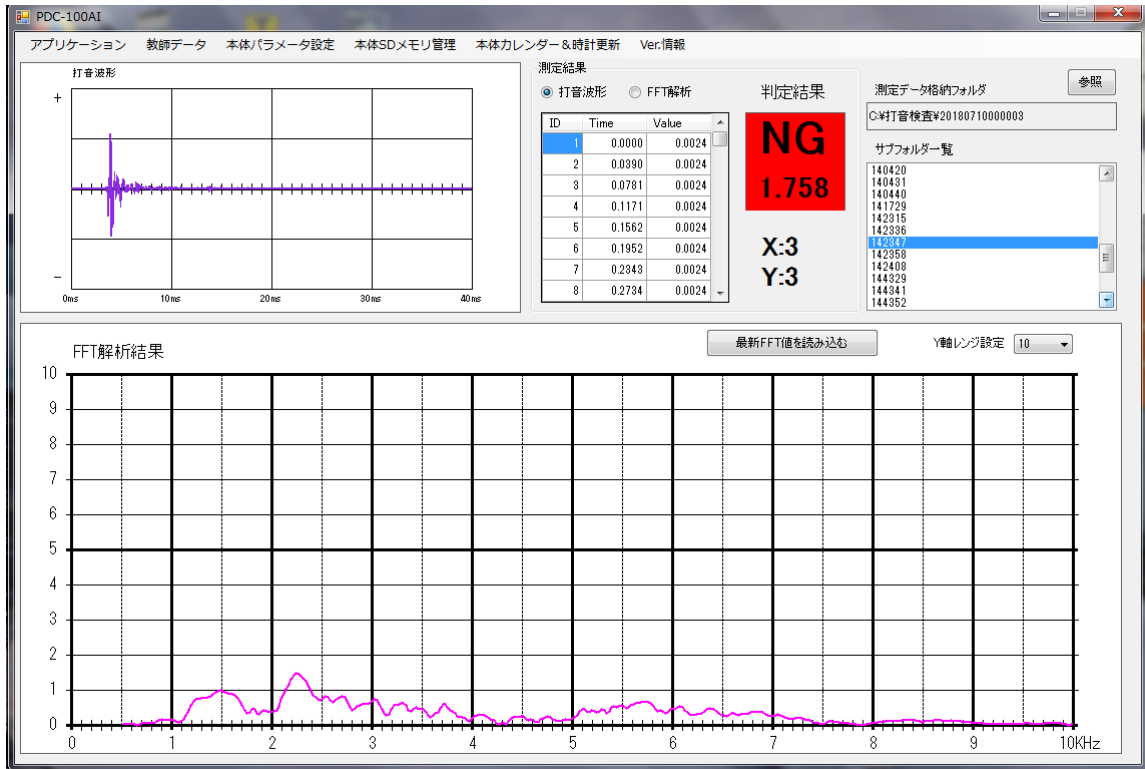
Y3-X1



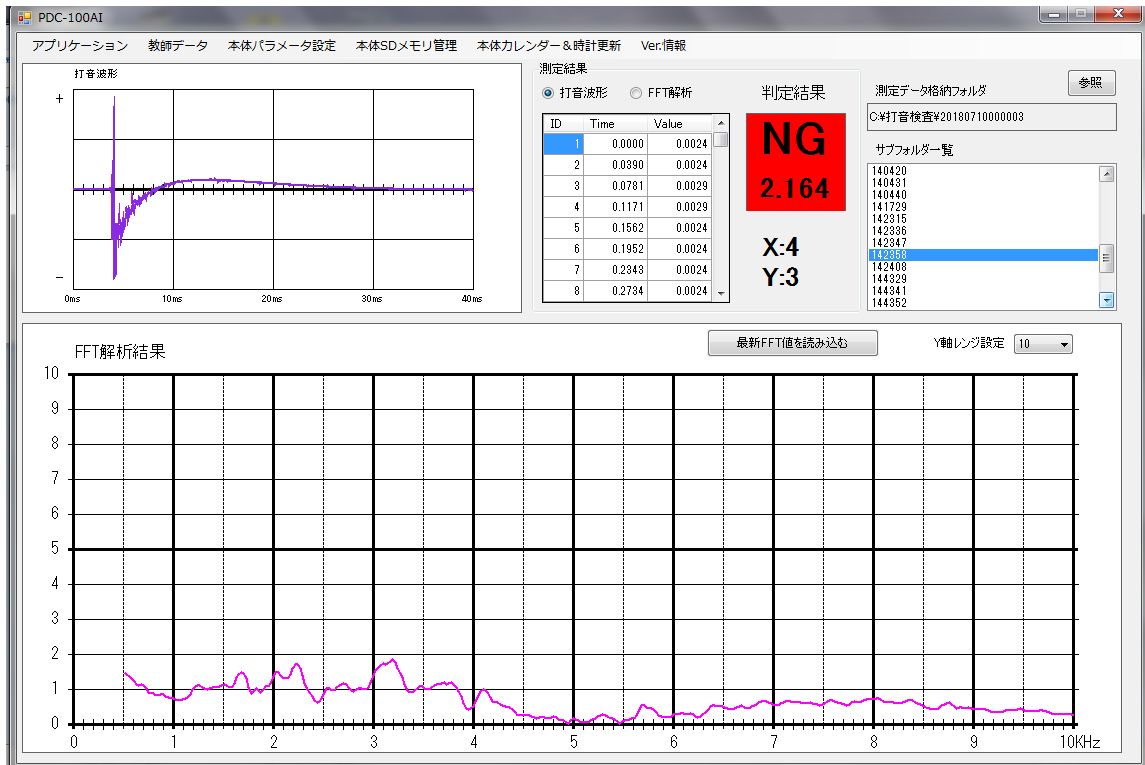
Y3-X2



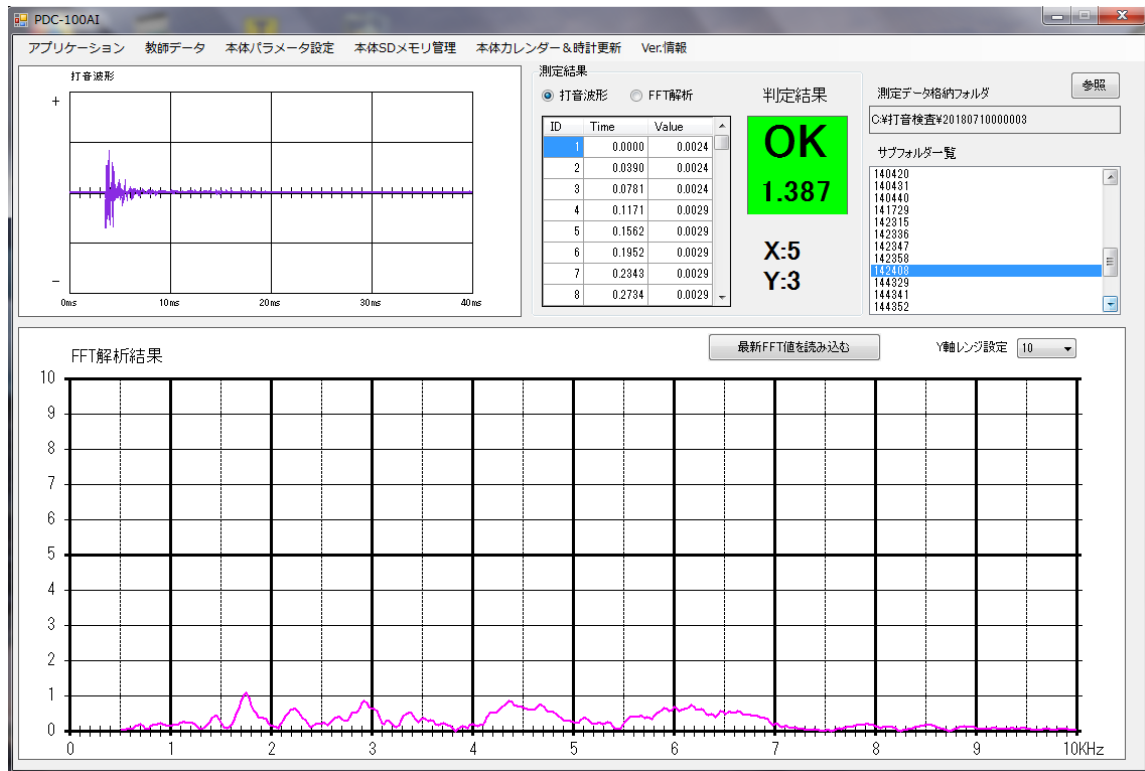
Y3-X3

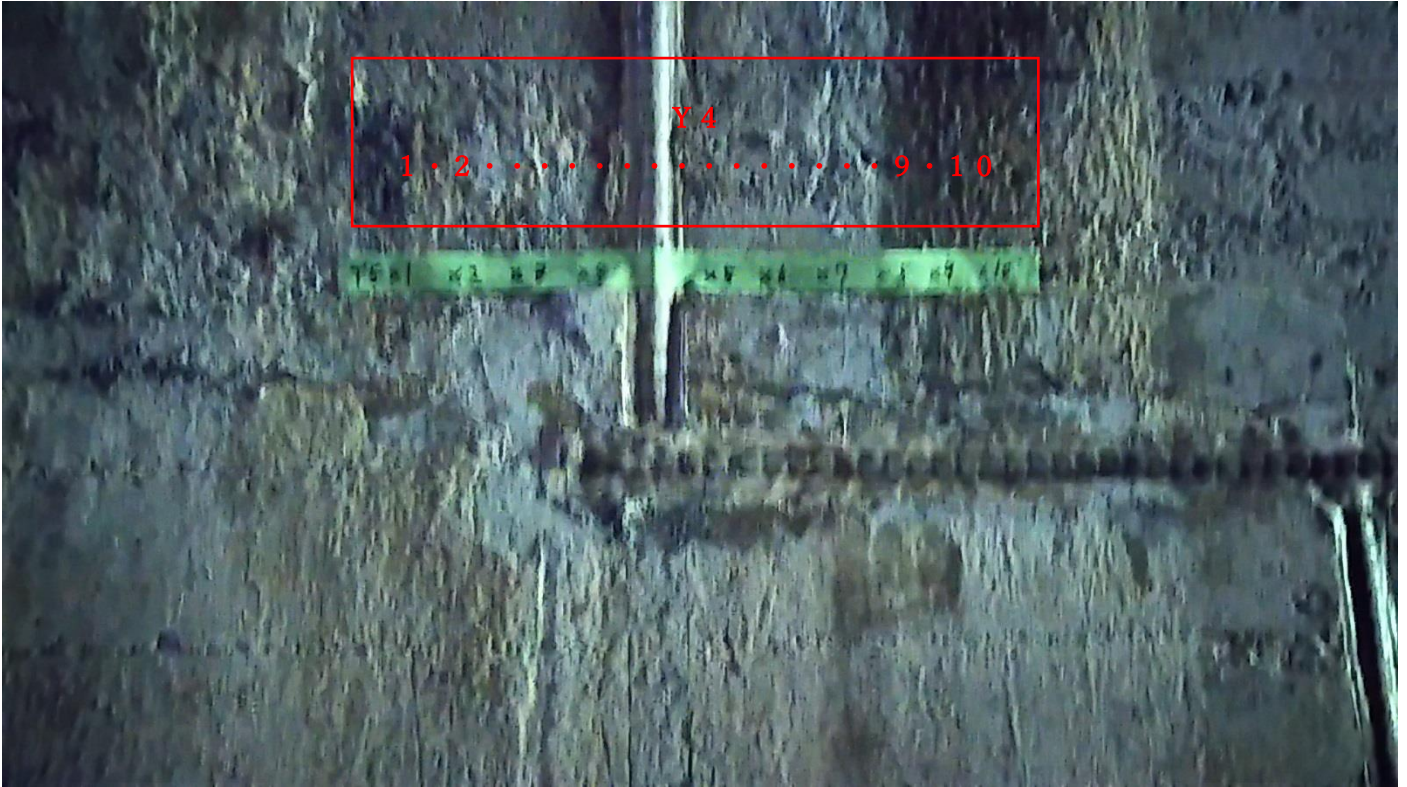


Y3-X4



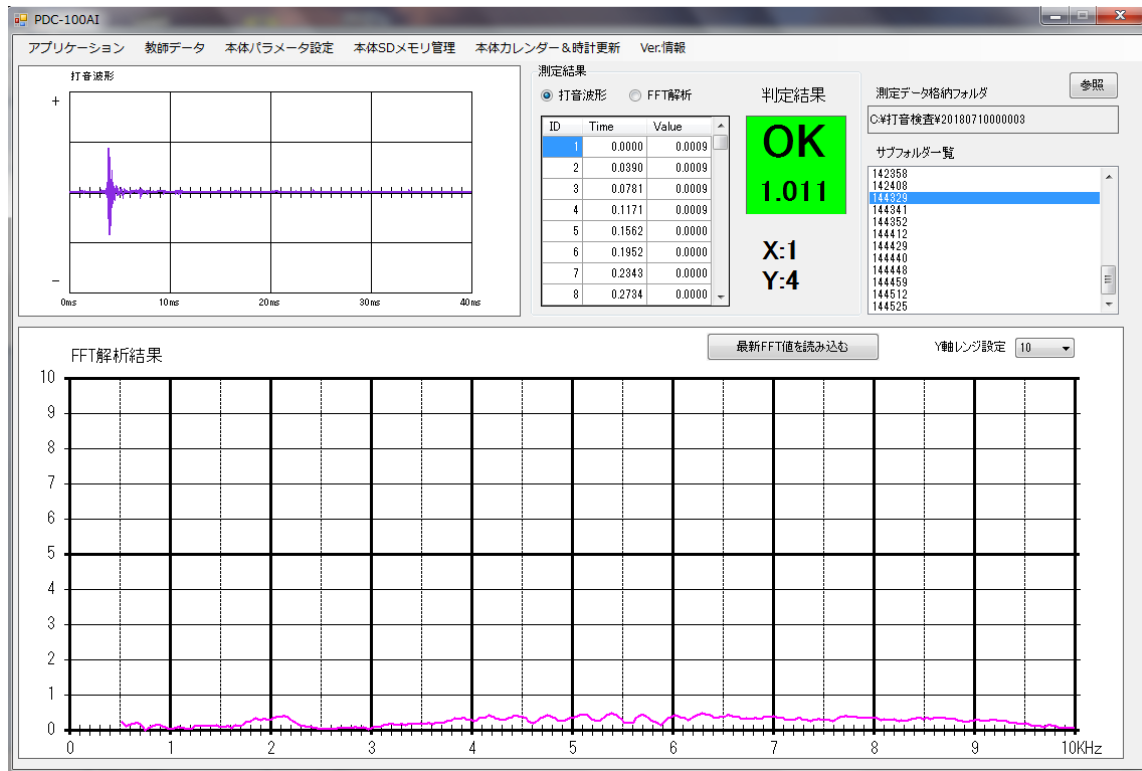
Y3-X5



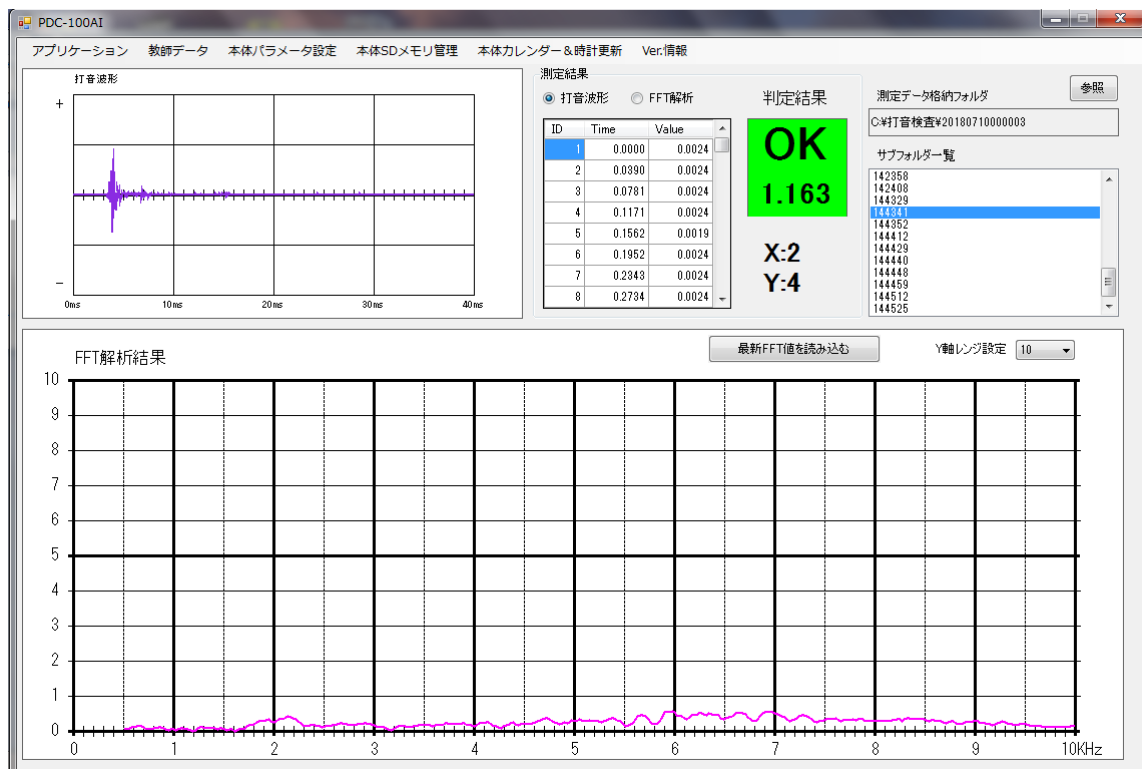


Y4		
X 位置	SCORE	判定
1	1.011	OK
2	1.163	OK
3	1.673	OK
4	7.168	NG
5	10.851	NG
6	3.623	NG
7	7.069	NG
8	1.251	OK
9	1.108	OK
10	1.309	OK

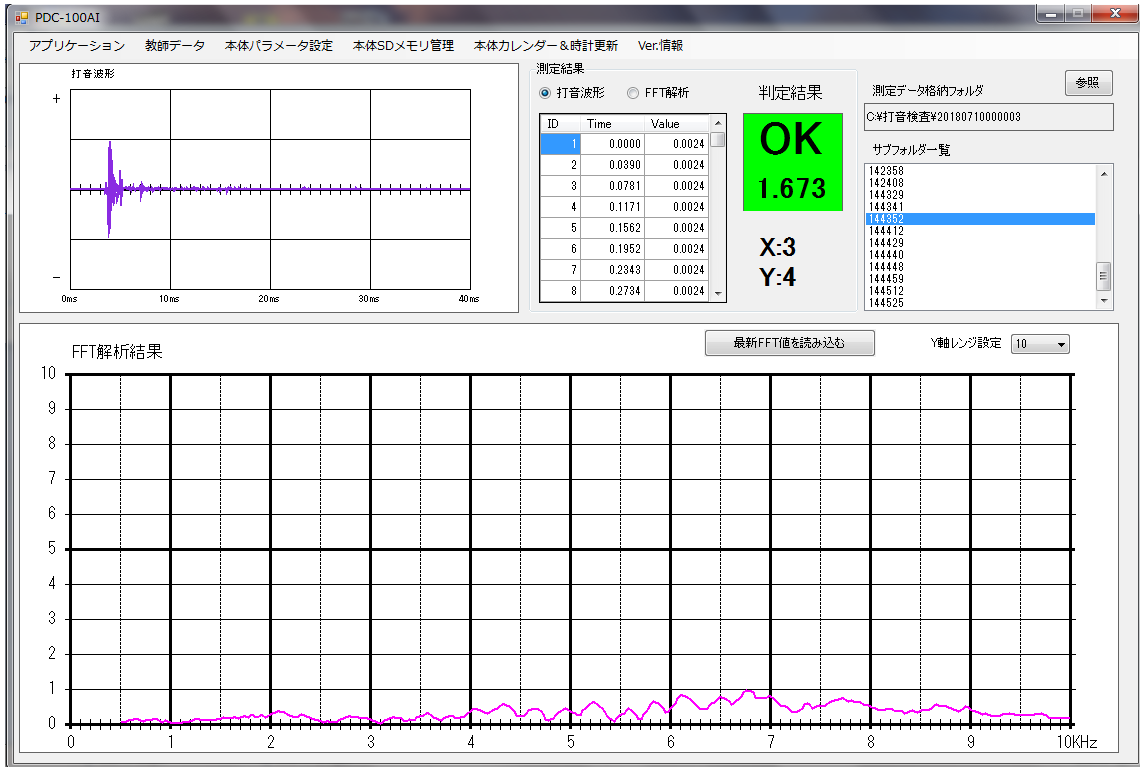
Y4-X1



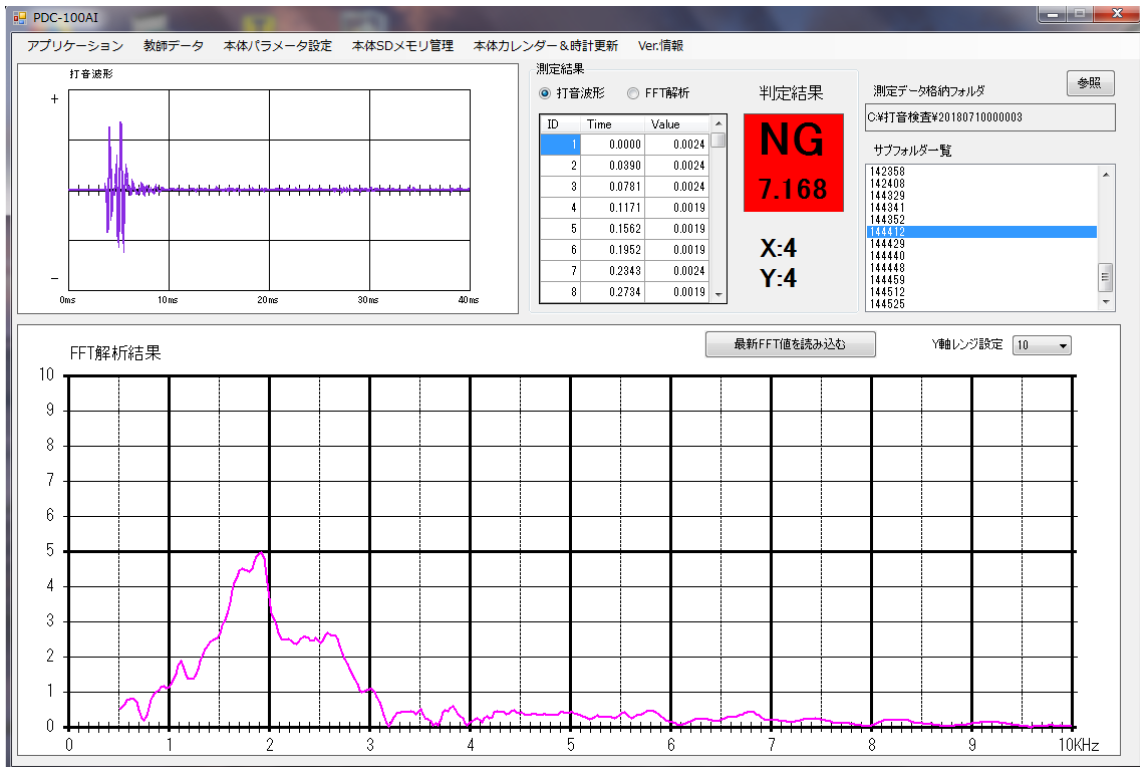
Y4-X2



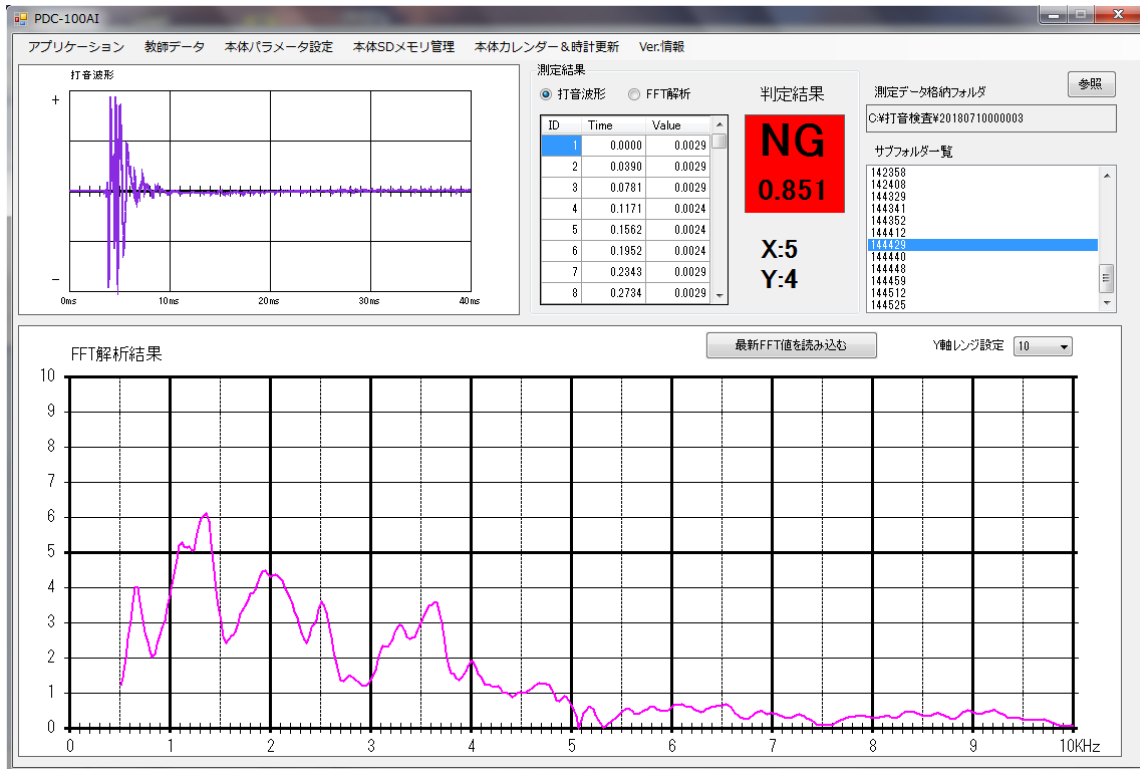
Y4-X3



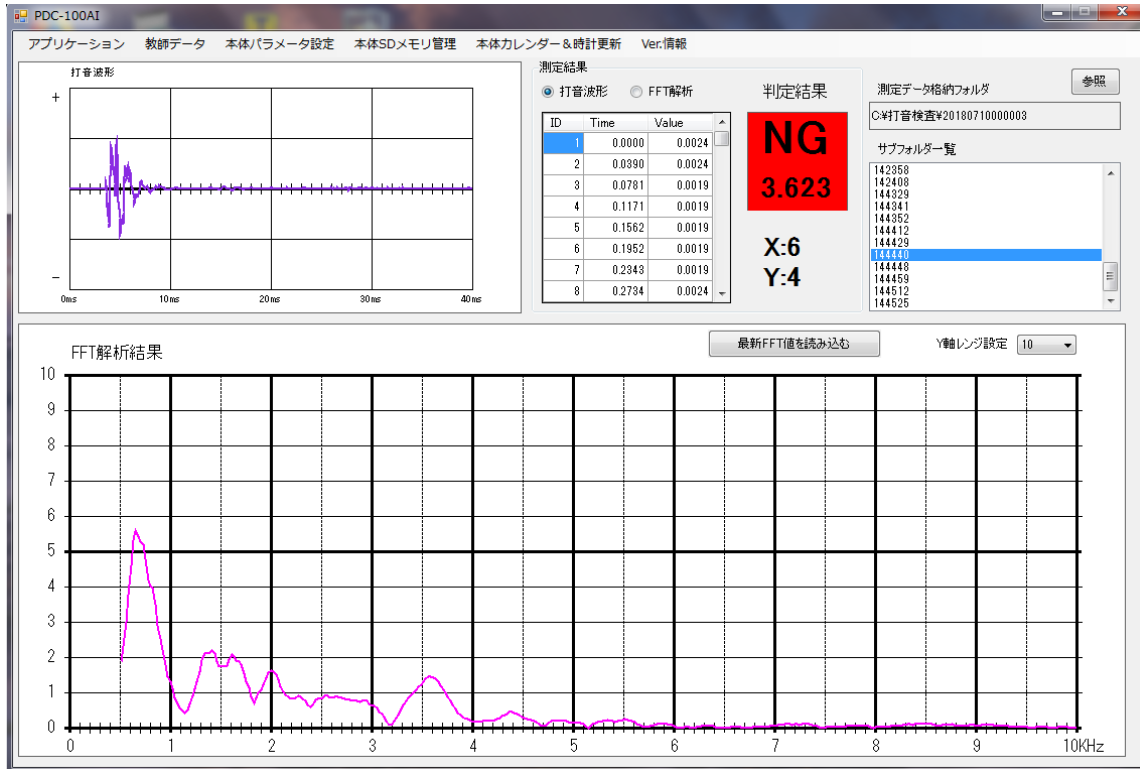
Y4-X4



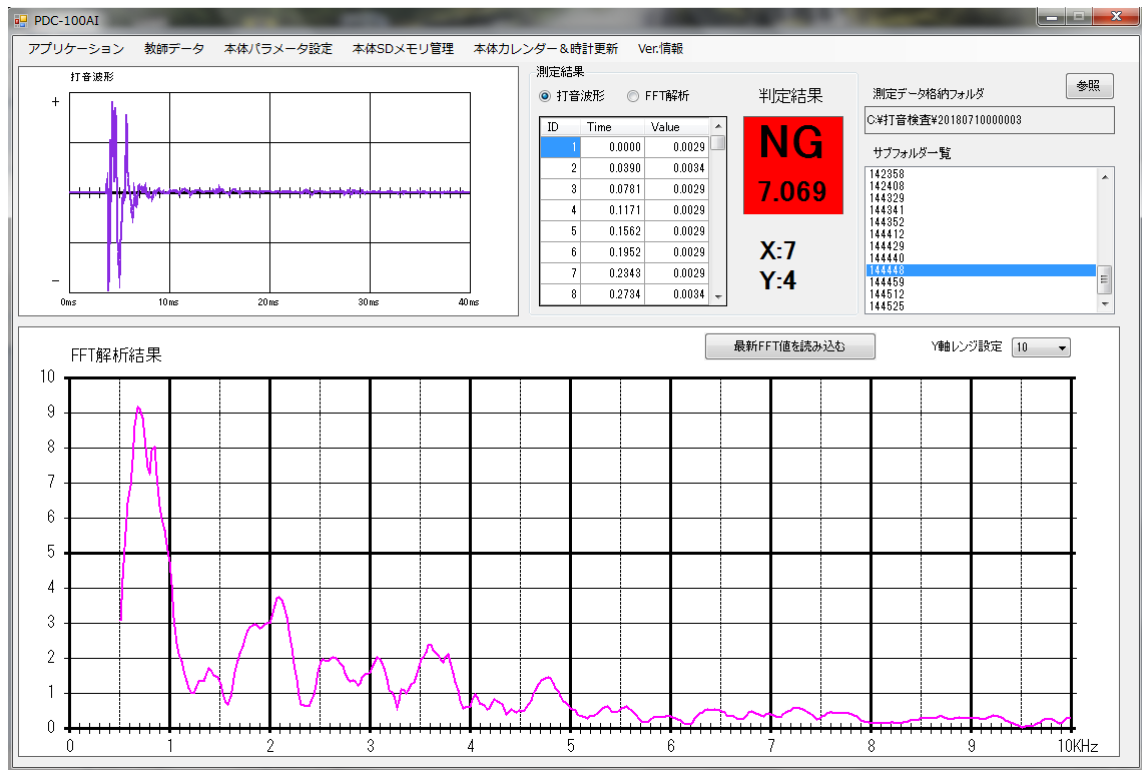
Y4-X5



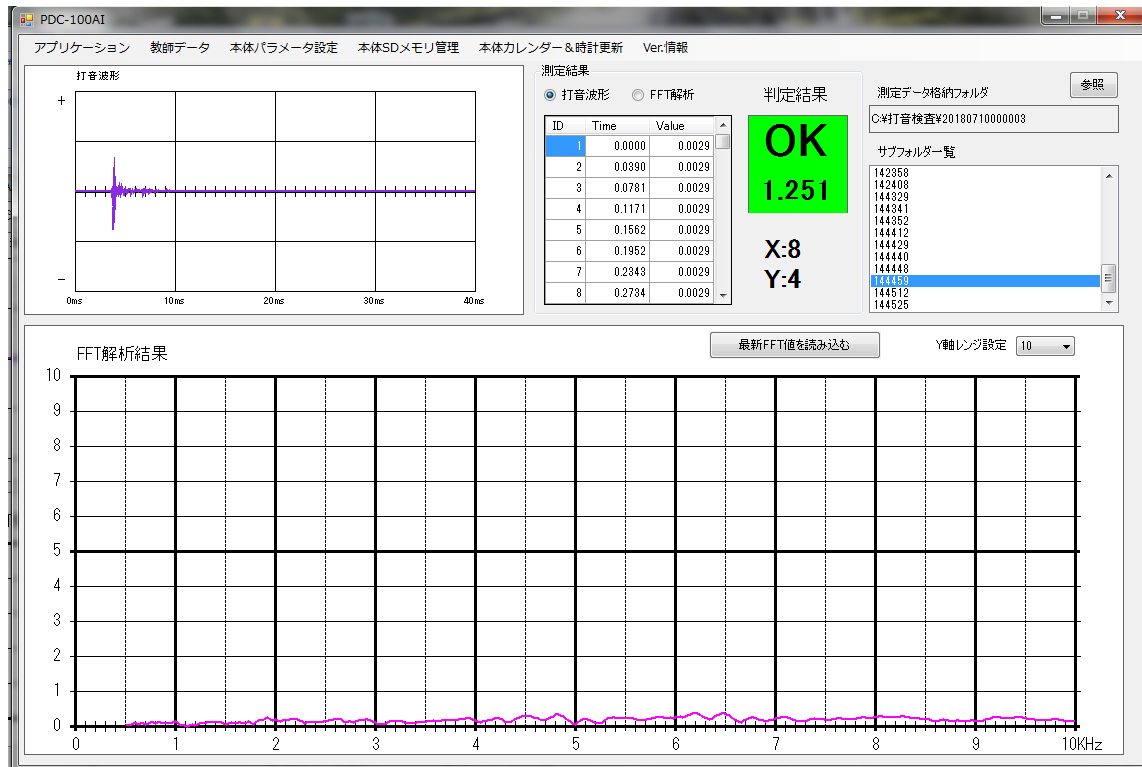
Y4-X6



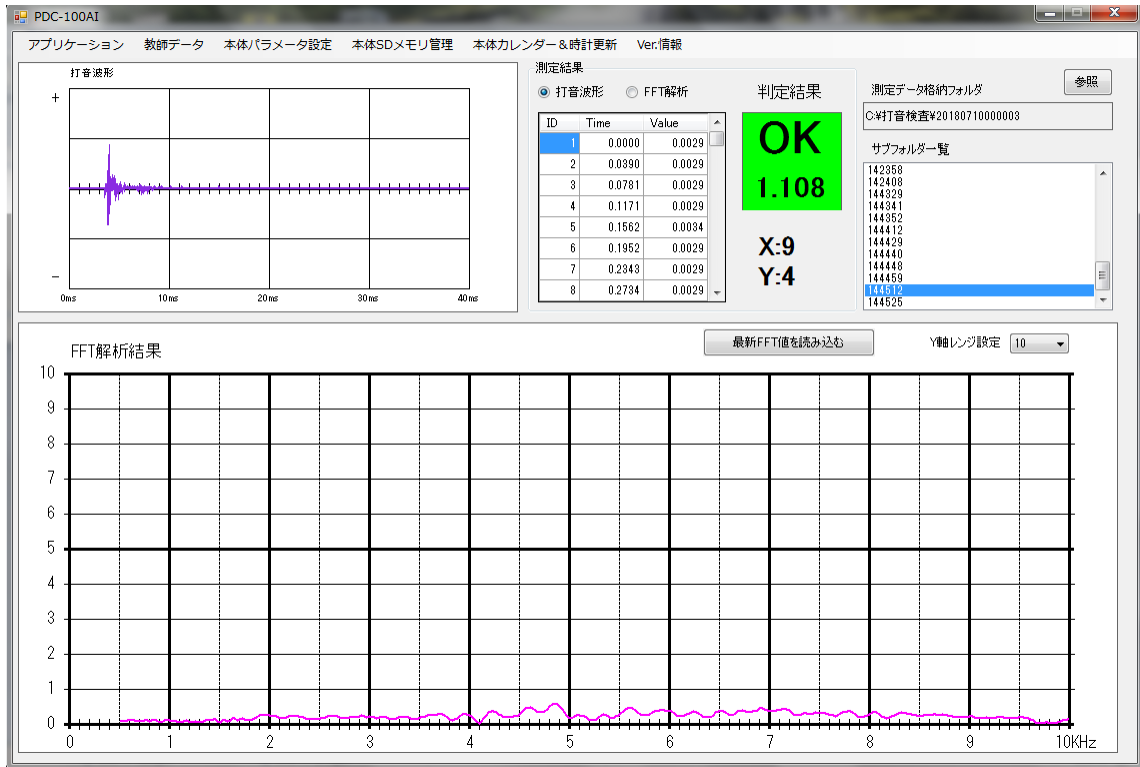
Y4-X7



Y4-X8



Y4-X9



Y4-X10

