

令和3年度12月第3週報告書

報告書 NO.08 - 2 2021/12/16 来代 勝胤

報告内容

1. 進捗状況
2. 模擬実験結果

1 進捗状況

今週は、引き続き模擬実験を行った。また、その実験結果のデータ処理を行った。

2 模擬実験

2.1 実験結果

先週に引き続き実験を行った。実験結果のまとめを以下の Table.1 及び Fig.1, Fig.2 に示す。

Table 1 Summary of value

Angle [deg]	Drag [V/V]	Lift [V/V]	Sqrt [V/V]
0	-0.648	0.084	0.654
15	-0.662	-0.080	0.667
30	-0.596	-0.246	0.644
45	-0.561	-0.346	0.659
60	-0.365	-0.525	0.639
75	-0.264	-0.587	0.643
90	-0.083	-0.638	0.643
105	0.116	-0.641	0.651
120	0.276	-0.596	0.656
135	0.395	-0.521	0.653
150	0.527	-0.407	0.666
165	0.607	-0.259	0.660
180	0.639	-0.148	0.656
195	0.639	0.095	0.646
210	0.583	0.261	0.639
225	0.543	0.357	0.650
240	0.393	0.507	0.641
255	0.255	0.580	0.633
270	0.077	0.631	0.636
285	-0.117	0.634	0.645
300	-0.282	0.585	0.649
315	-0.423	0.481	0.640
330	-0.512	0.386	0.641
345	-0.609	0.220	0.648
Average	-0.003	-0.007	0.648

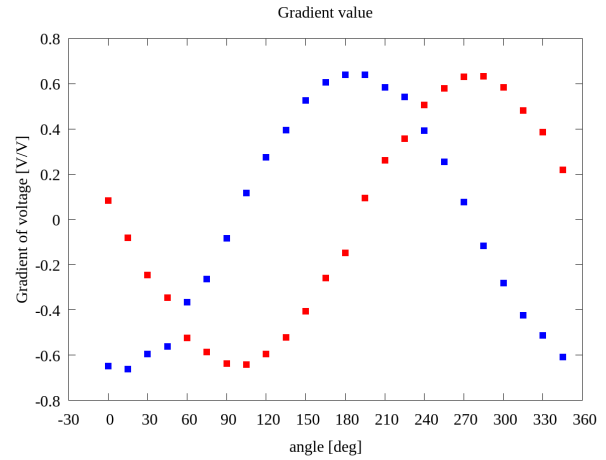


Fig.1 Summary of gradient value

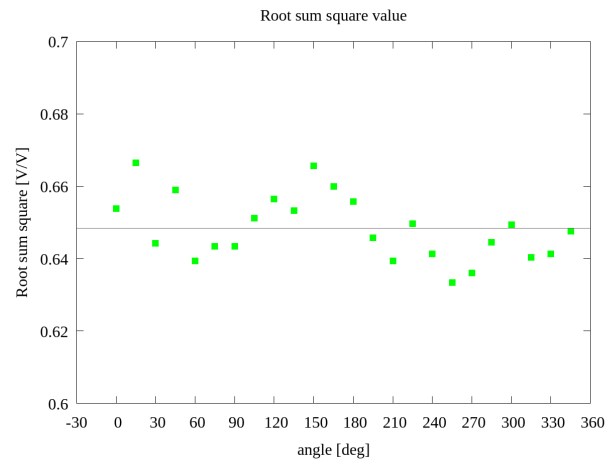


Fig.2 Summary of root sum square value

実験結果から算出した二乗和平方根の分散及び標準偏差を以下の Table.2 に示す。

Table 2

分散	0.000077
標準偏差	0.008776

2.2 各角度における実験結果

また、角度における実験結果を以下の Fig.3 ~ Fig.26 に示す。

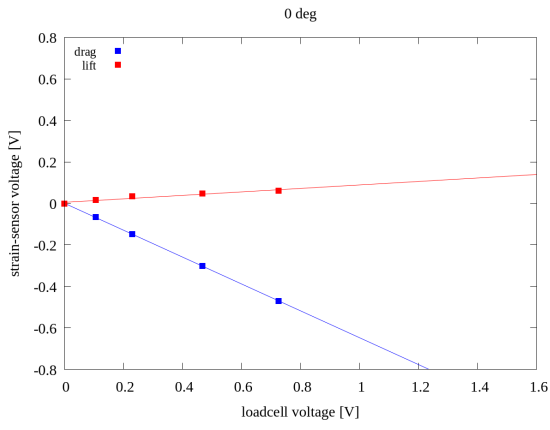


Fig.3 0 deg

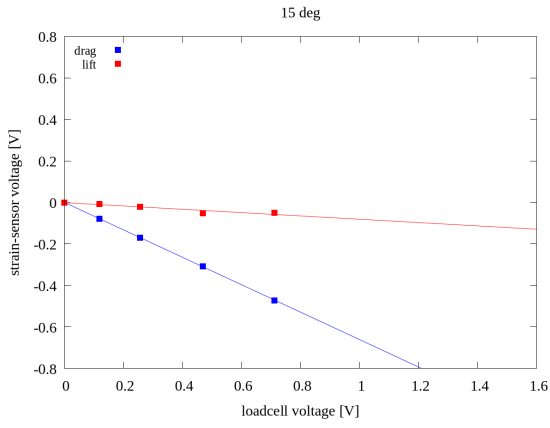


Fig.4 15 deg

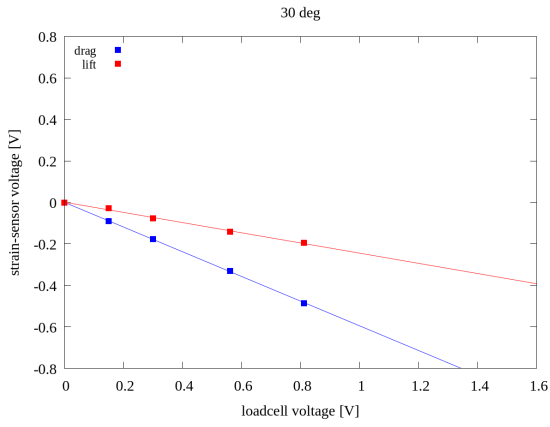


Fig.5 30 deg

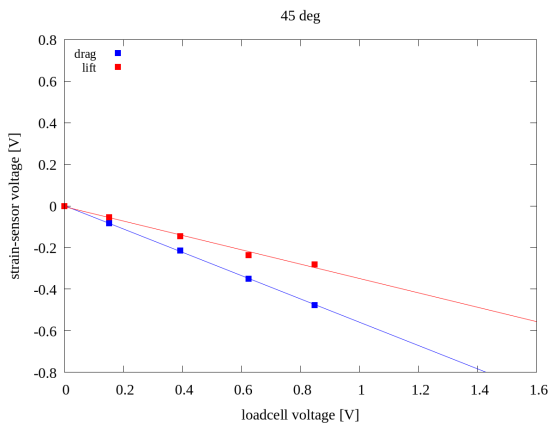


Fig.6 45 deg

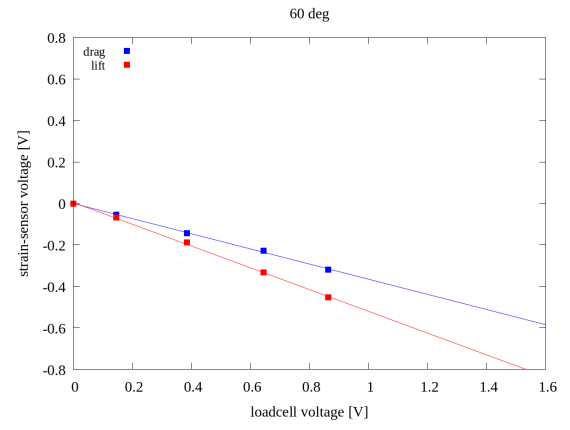


Fig.7 60 deg

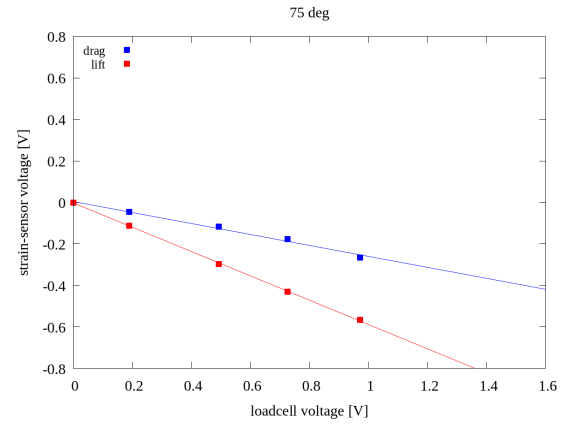


Fig.8 75 deg

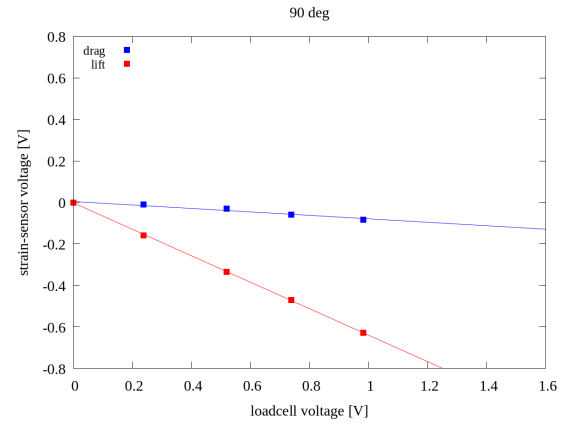


Fig.9 90 deg

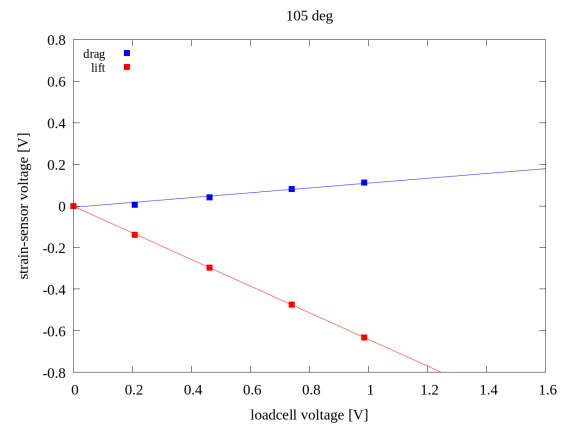


Fig.10 105 deg

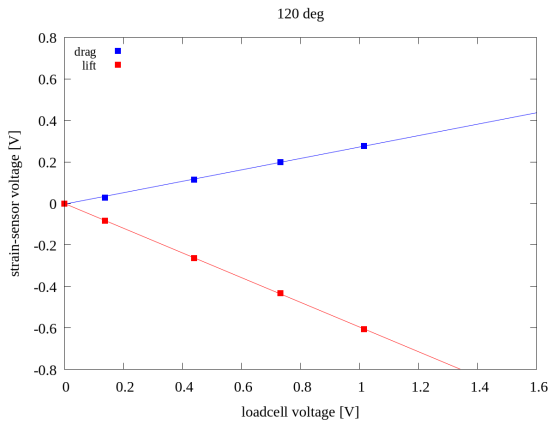


Fig.11 120 deg

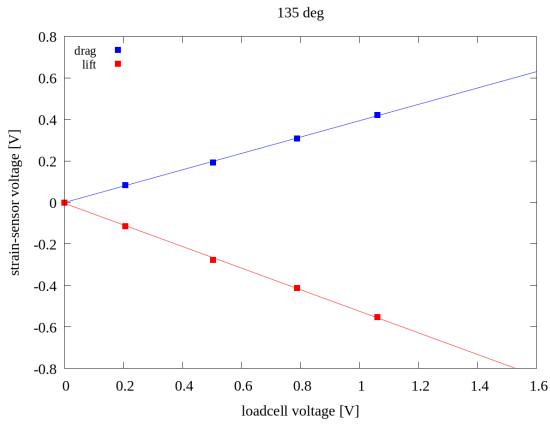


Fig.12 135 deg

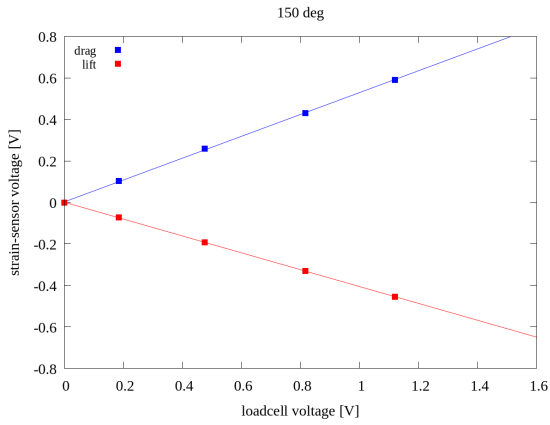


Fig.13 150 deg

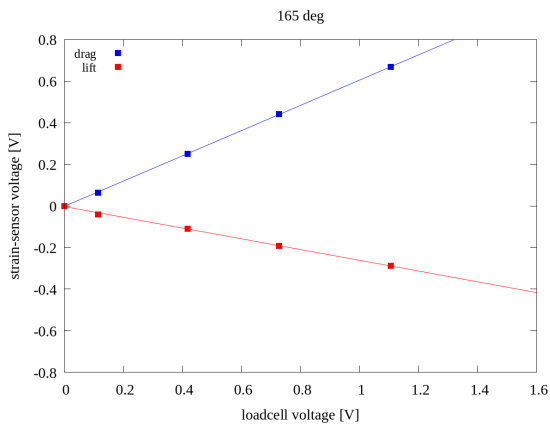


Fig.14 165 deg

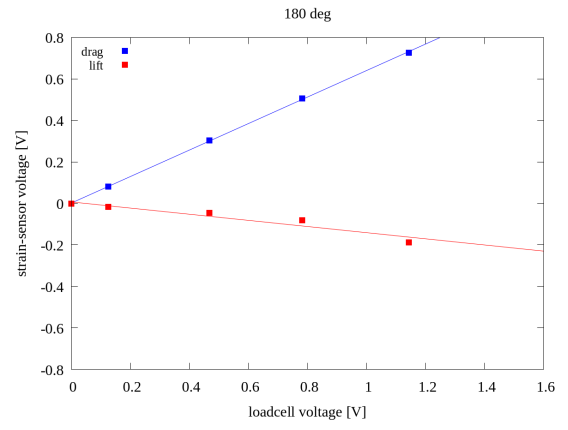


Fig.15 180 deg

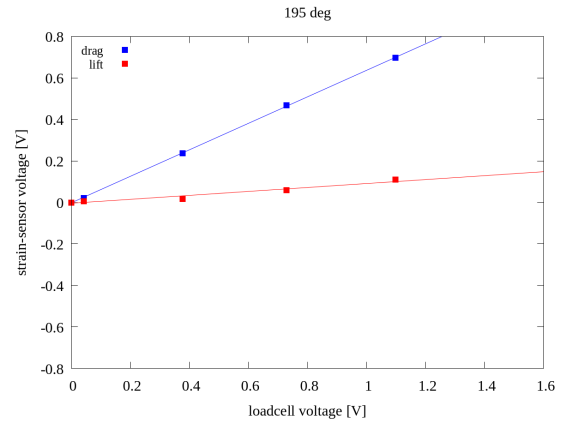


Fig.16 195 deg

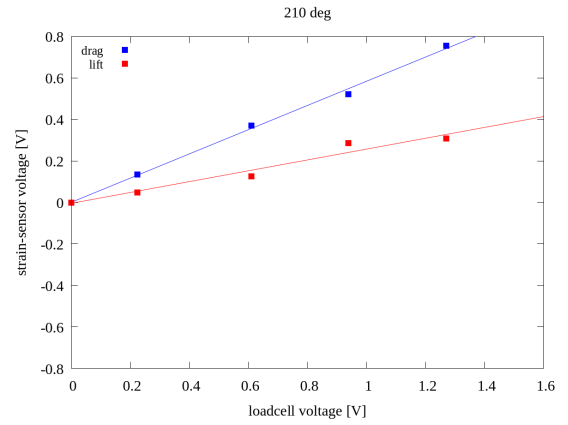


Fig.17 210 deg

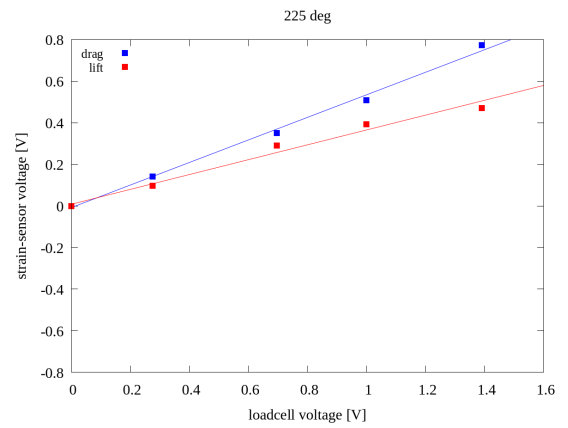


Fig.18 225 deg

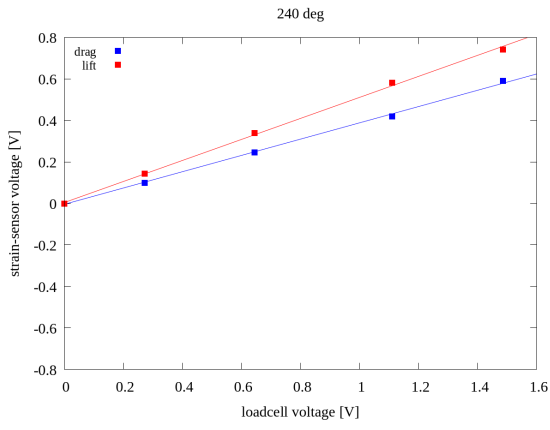


Fig.19 240 deg

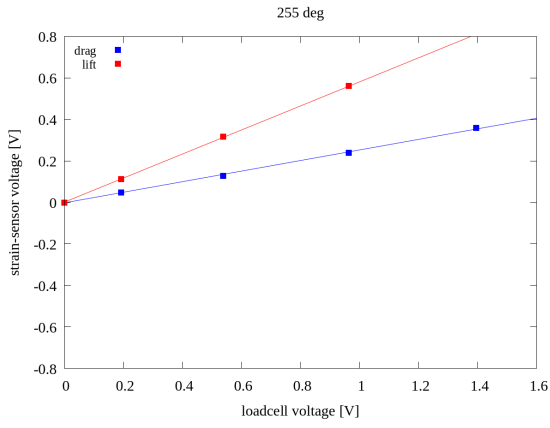


Fig.20 255 deg

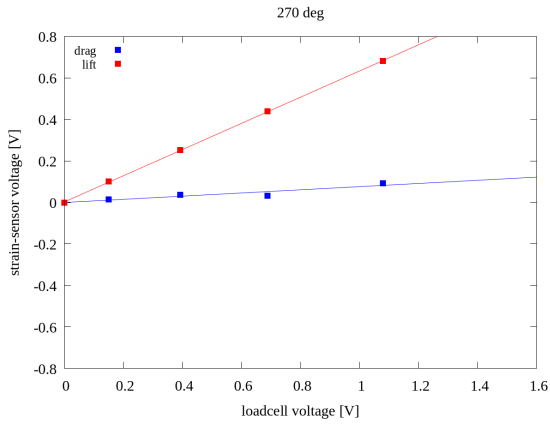


Fig.21 270 deg

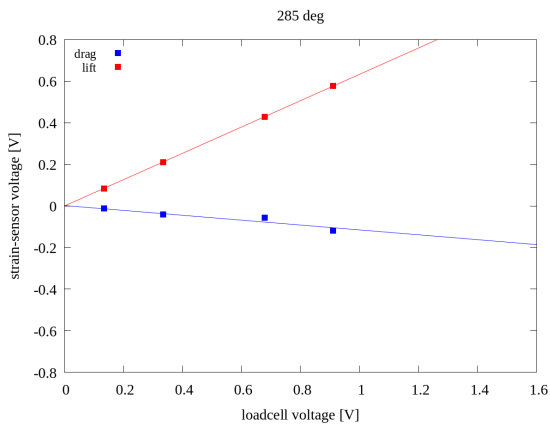


Fig.22 285 deg

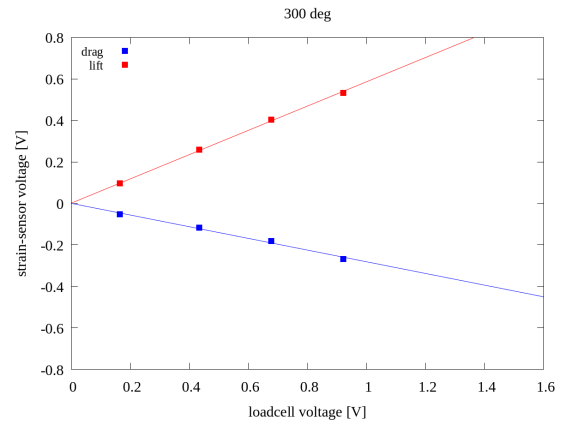


Fig.23 300 deg

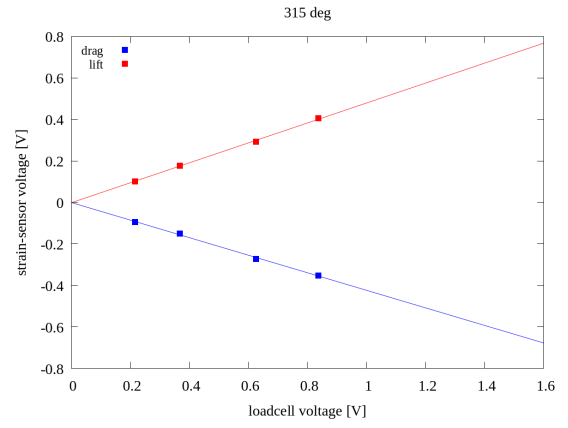


Fig.24 315 deg

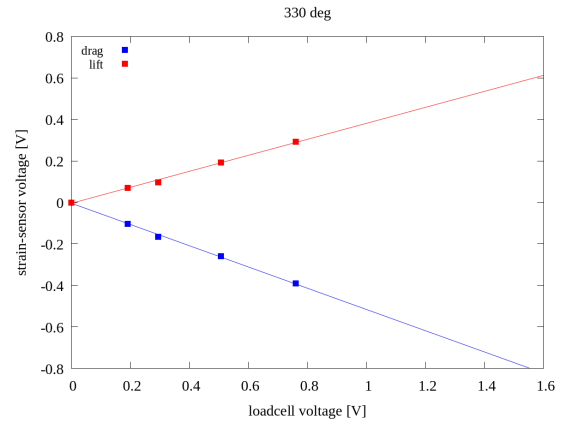


Fig.25 330 deg

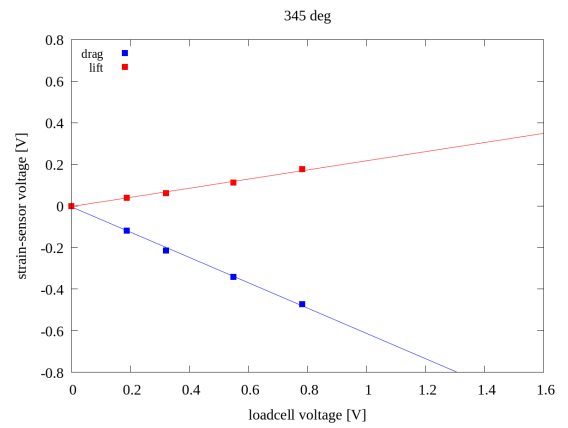


Fig.26 345 deg