

klog32259

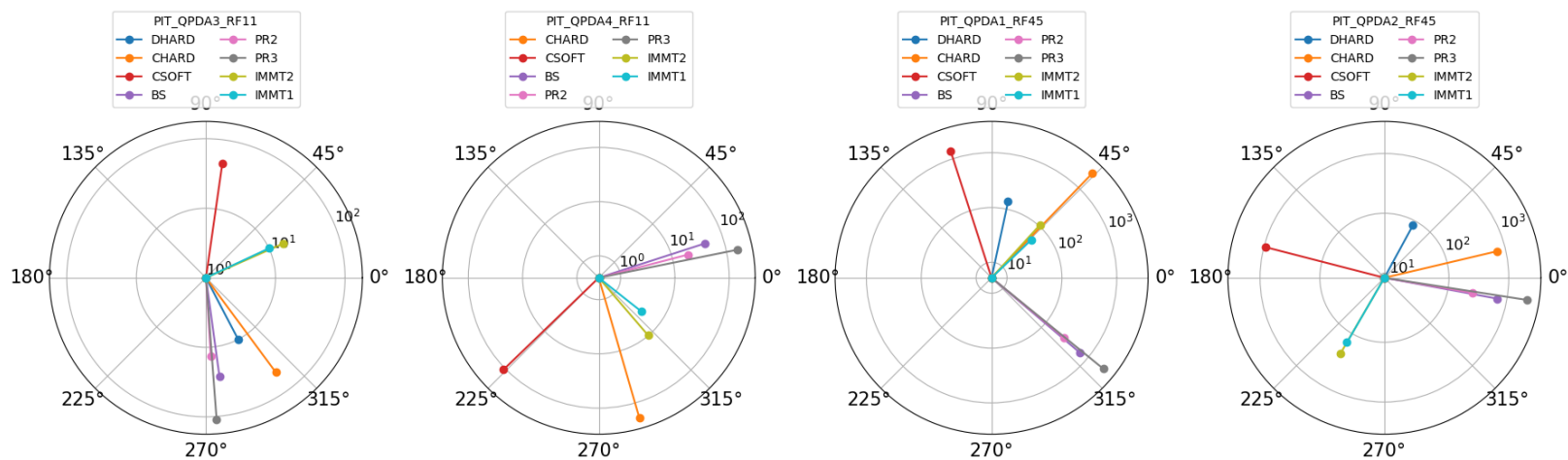
Chiaki Hirose

Cross check

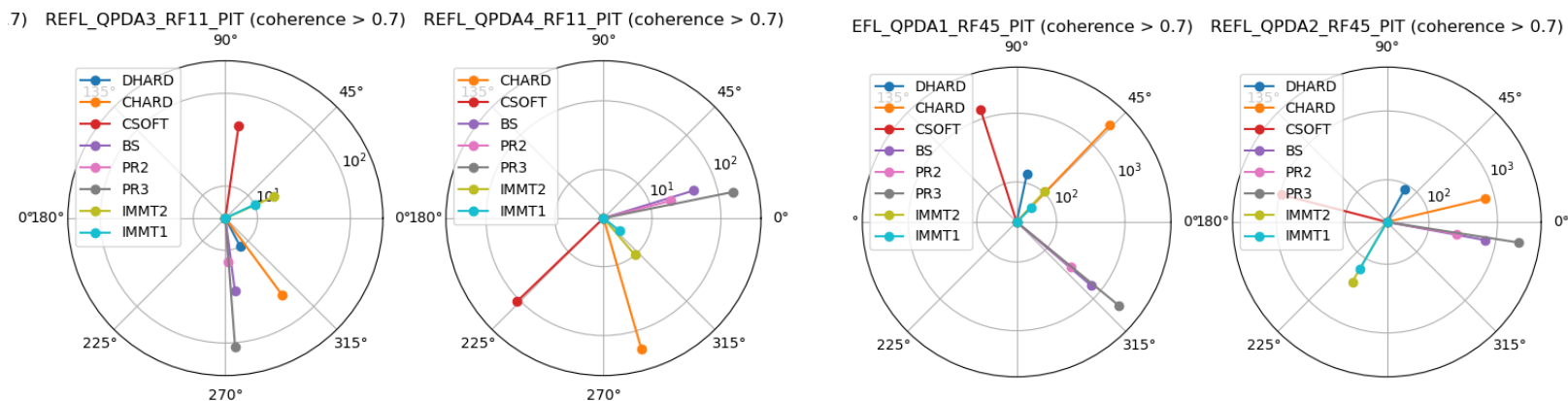
- Plotted by my script vs. Plotted by Ushiba-san's script ([klog31047](#))
→ Plotted results with coherence > 0.7

PIT

2024/12
measurement
plotted by my script

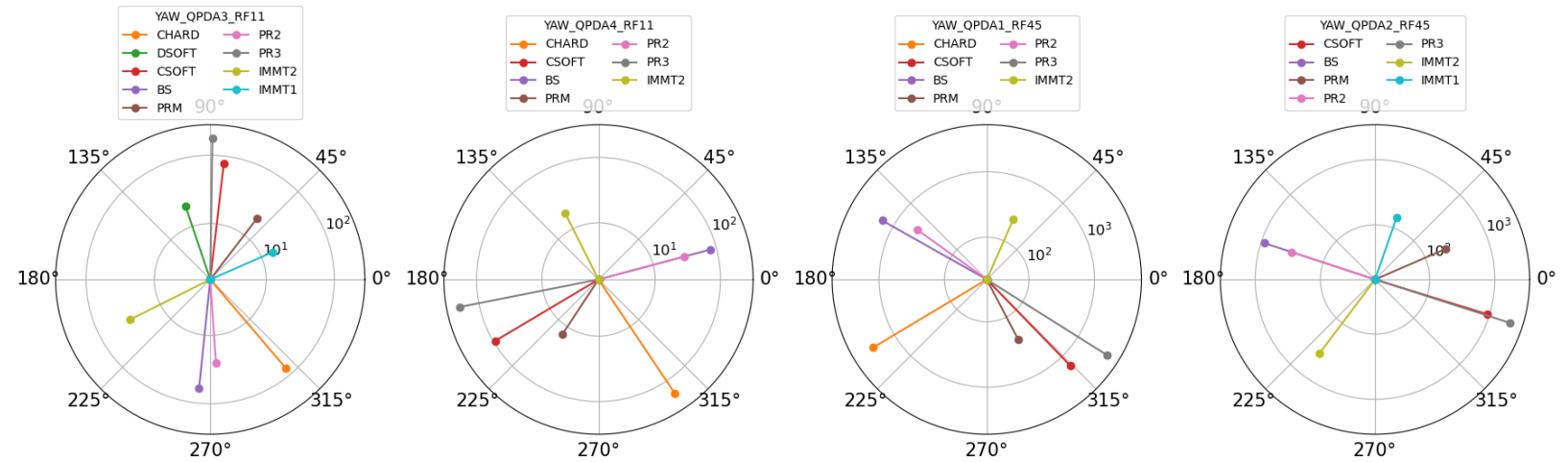


2024/12
measurement
plotted by
Ushiba-san's
script

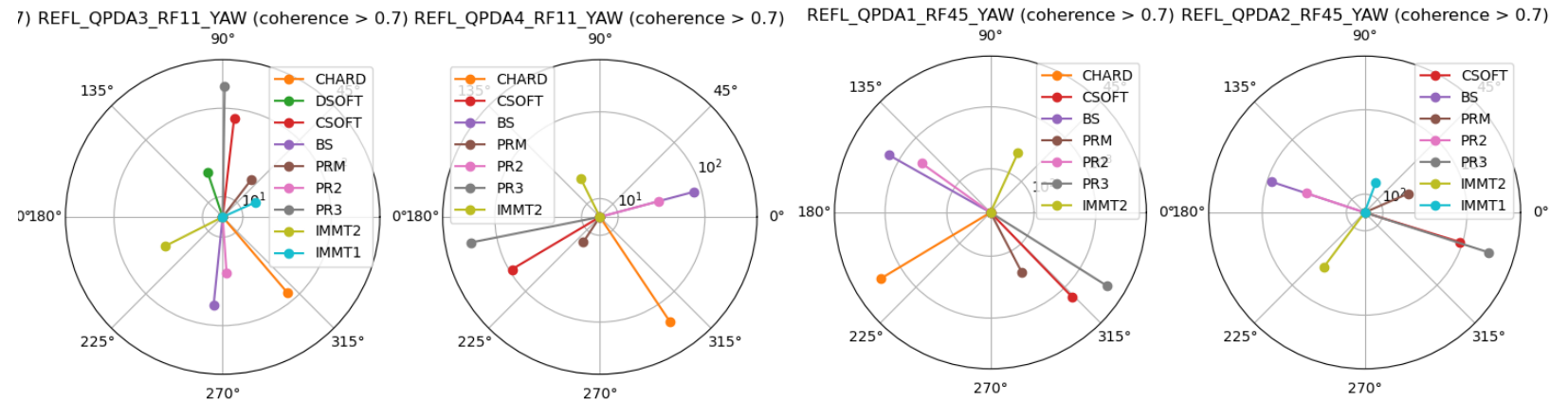


YAW

2024/12
measurement
plotted by my script



2024/12
measurement
plotted by
Ushiba-san's
script

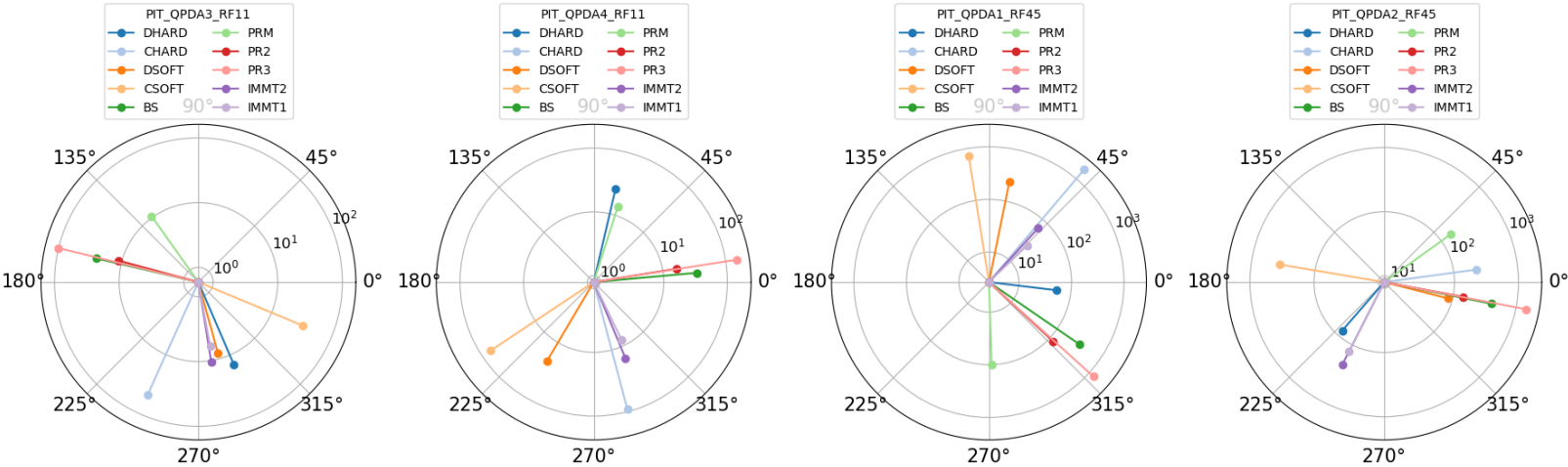


Compared the measurements

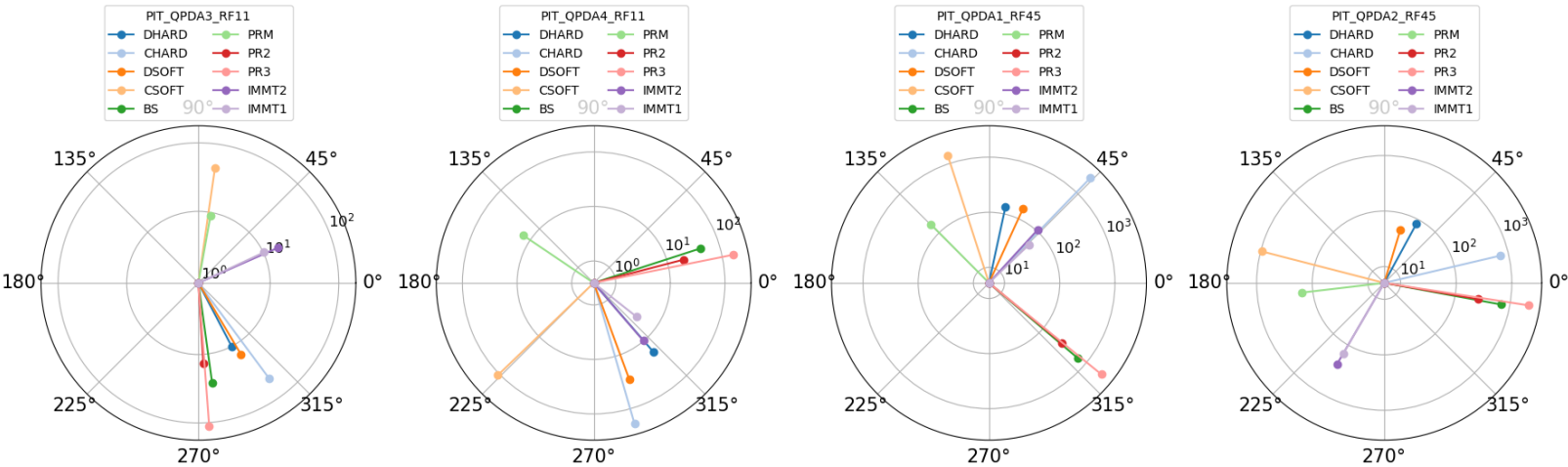
- 24/9/25 and 27 measurement vs. 24/12/25 measurement (in this time)
- p.6 ~p.12 Plotted all degrees of freedom.
- p.13 ~p.17 Plotted results with coherence > 0.7

Plotted all degrees of freedom.

2024/09
measurement



2024/12
measurement



almost same	CHARD, CSOF, BS, PR3,PR2, IMMT2, IMMT1 [Just rotated phase (95.439deg)]	CHARD, BS, PR3,PR2, IMMT2, IMMT1	CSOF, CHARD, BS, PR3,PR2, IMMT2, IMMT1	CHARD, BS, PR3,PR2, IMMT2, IMMT1
Flipped the sign	PRM, DHARD, DSOF	DHARD, DSOF,		PRM, DHARD
larger difference		PRM	PRM, DSOF, DHARD	DSOF

Abs(PIT)

Before: September's measurement

After: December's measurement

[count/u rad]		'DHARD'	'CHARD'	'DSOFT'	'CSOFT'	'BS'	'PRM'	'PR2'	'PR3'	'IMMT2'	'IMMT1'	'ITMCOMM'	'ETMCOMM'
QPDA3_ RF11	before	14.687	47.804	8.135	33.759	24.906	10.544	11.158	102.104	10.548	5.928		
	after	9.998	48.806	14.714	45.195	26.943	9.013	13.43	112.011	16.574	10.152	37.706	17.675
	After /Before	0.681	1.021	1.809	1.339	1.082	0.855	1.204	1.097	1.571	1.713		
QPDA4_ RF11	before	24.745	91.879	21.902	68.981	33.394	13.97	16.291	148.949	15.574	7.922		
	after	19.0	190.514	30.262	108.818	44.94	14.226	19.886	161.574	9.841	3.955	68.364	136.284
	After /Before	0.768	2.074	1.382	1.578	1.346	1.018	1.221	1.085	0.632	0.499		
QPDA1_ RF45	before	52.849	1681.464	235.368	702.22	325.13	101.114	123.291	1282.387	65.304	26.903		
	after	137.249	2346.48	159.026	1379.836	679.401	165.517	275.346	2200.825	106.059	52.216	908.908	1628.51
	After /Before	2.597	1.395	0.676	1.965	2.09	1.637	2.233	1.716	1.624	1.941		
QPDA2_ RF45	before	80.075	227.711	85.013	358.61	403.995	152.163	143.491	1448.962	221.909	130.371		
	after	83.315	715.223	50.721	938.154	690.952	158.119	262.561	2172.863	245.981	148.18	710.594	215.162
	After /Before	1.04	3.141	0.597	2.616	1.71	1.039	1.83	1.5	1.108	1.137		

Angle(PIT)

Before: September's measurement

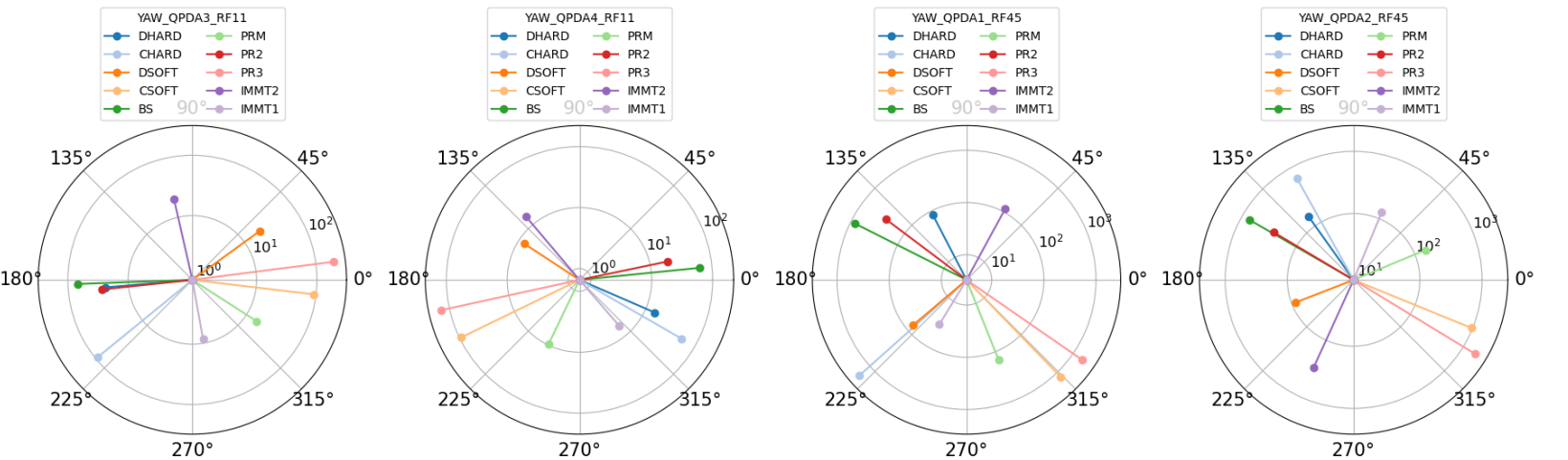
After: December's measurement

[deg]		'DHARD'	'CHARD'	'DSOFT'	'CSOFT'	'BS'	'PRM'	'PR2'	'PR3'	'IMMT2'	'IMMT1'	'ITMCOMM'	'ETMCOMM'
QPDA3_ RF11	before	-66.713	-114.269	-74.636	-22.599	166.932	125.455	164.99	166.379	-80.836	-79.533		
	after	-62.385	-53.546	-59.255	81.837	-82.199	79.793	-86.509	-85.692	23.893	25.056	105.671	14.634
	diff	-4.328	-60.723	-15.381	-104.436	249.131 (-110.869)	45.662	251.499 (-108.50)	252.071 (-107.929)	-104.729	-104.589		
QPDA4_ RF11	before	76.771	-75.127	-120.678	-146.445	5.128	72.257	9.128	8.874	-67.283	-64.185		
	after	-49.189	-73.848	-69.76	-136.042	17.929	145.964	14.548	11.441	-49.406	-38.349	131.553	-107.111
	diff	125.96	-1.279	-50.918	-10.403	-12.801	-73.707	-5.42	-2.567	-17.877	-25.836		
QPDA1_ RF45	before	-6.852	49.73	78.452	99.132	-34.466	-88.131	-42.631	-42.059	47.601	43.825		
	after	77.784	46.055	65.406	107.891	-40.319	134.72	-39.568	-39.173	47.556	43.674	-170.761	67.81
	diff	-84.636	3.675	13.046	-8.759	5.853	-222.851	-3.063	-2.886	0.045	0.151		
QPDA2_ RF45	before	-130.94	7.703	-14.329	170.461	-11.365	35.68	-10.546	-10.819	-116.967	-116.91		
	after	61.513	13.255	73.147	165.546	-10.467	-173.269	-9.786	-8.839	-120.121	-120.042	177.146	115.979
	diff	-192.453	-5.552	-87.476	4.915	-0.898	208.949	-0.76	-1.98	3.154	3.132		

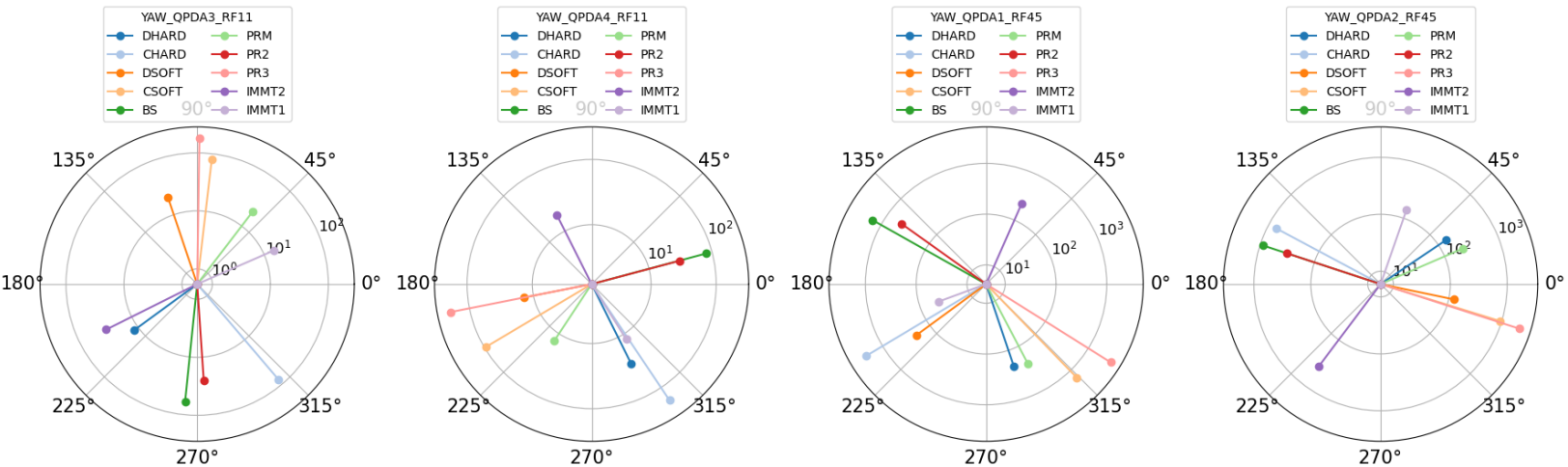
- QPD3_RF11 was rotated demodulation phase -95deg in [klog31210](#).
- -36deg<angle<36deg

YAW

2024/09
measurement



2024/12
measurement



Almost same	CHARD, CSOFT, BS, PR3,PR2, IMMT2, IMMT1, PRM, DSOF [Just rotated phase]	CHARD, BS, PRM,PR3,PR2, IMMT2, IMMT1, CSOFT	CSOFT, CHARD, BS, PRM, PR3,PR2, IMMT2, IMMT1	CHARD, CSOFT, BS, PRM, PR3,PR2, IMMT2, IMMT1
Flipped the sign			DHARD	DSOFT, DHARD
larger difference	DHARD	DHARD , DSOF		

Abs(YAW)

Before: September's measurement

After: December's measurement

[count/u rad]		'DHARD'	'CHARD'	'DSOFT'	'CSOFT'	'BS'	'PRM'	'PR2'	'PR3'	'IMMT2'	'IMMT1'	'ITMCOMM'	'ETMCOMM'
QPDA3_ RF11	before	23.899	92.96	20.349	90.564	69.922	16.006	27.293	195.696	20.127	8.61		
	after	11.885	78.125	20.357	78.788	59.735	20.143	25.226	176.889	31.067	15.12	66.454	5.463
	After /Before	0.497	0.84	1	0.87	0.854	1.258	0.924	0.904	1.544	1.756		
QPDA4_ RF11	before	14.409	56.506	7.829	94.912	62.135	9.713	19.317	139.713	15.022	6.495		
	after	28.186	171.394	14.019	93.049	80.413	13.593	30.681	199.19	18.46	12.278	96.853	12.955
	After /Before	1.956	3.033	1.791	0.98	1.294	1.399	1.588	1.426	1.229	1.89		
QPDA1_ RF45	before	85.017	1876.326	71.405	1294.035	820.226	149.048	284.215	1638.182	115.115	32.93		
	after	218.98	2360.466	213.548	1552.683	1544.642	243.728	460.731	3296.664	226.216	41.979	1546.578	83.868
	After /Before	2.576	1.258	2.991	1.2	1.883	1.635	1.621	2.012	1.965	1.275		
QPDA2_ RF45	before	155.312	632.111	85.796	957.809	739.128	151.917	266.303	1637.74	307.188	129.344		
	after	142.096	712.316	121.307	921.24	892.411	219.795	327.388	2163.632	384.398	145.201	789.507	59.451
	After /Before	0.915	1.127	1.414	0.962	1.207	1.447	1.229	1.321	1.251	1.123		

Angle(YAW)

Before: September's measurement

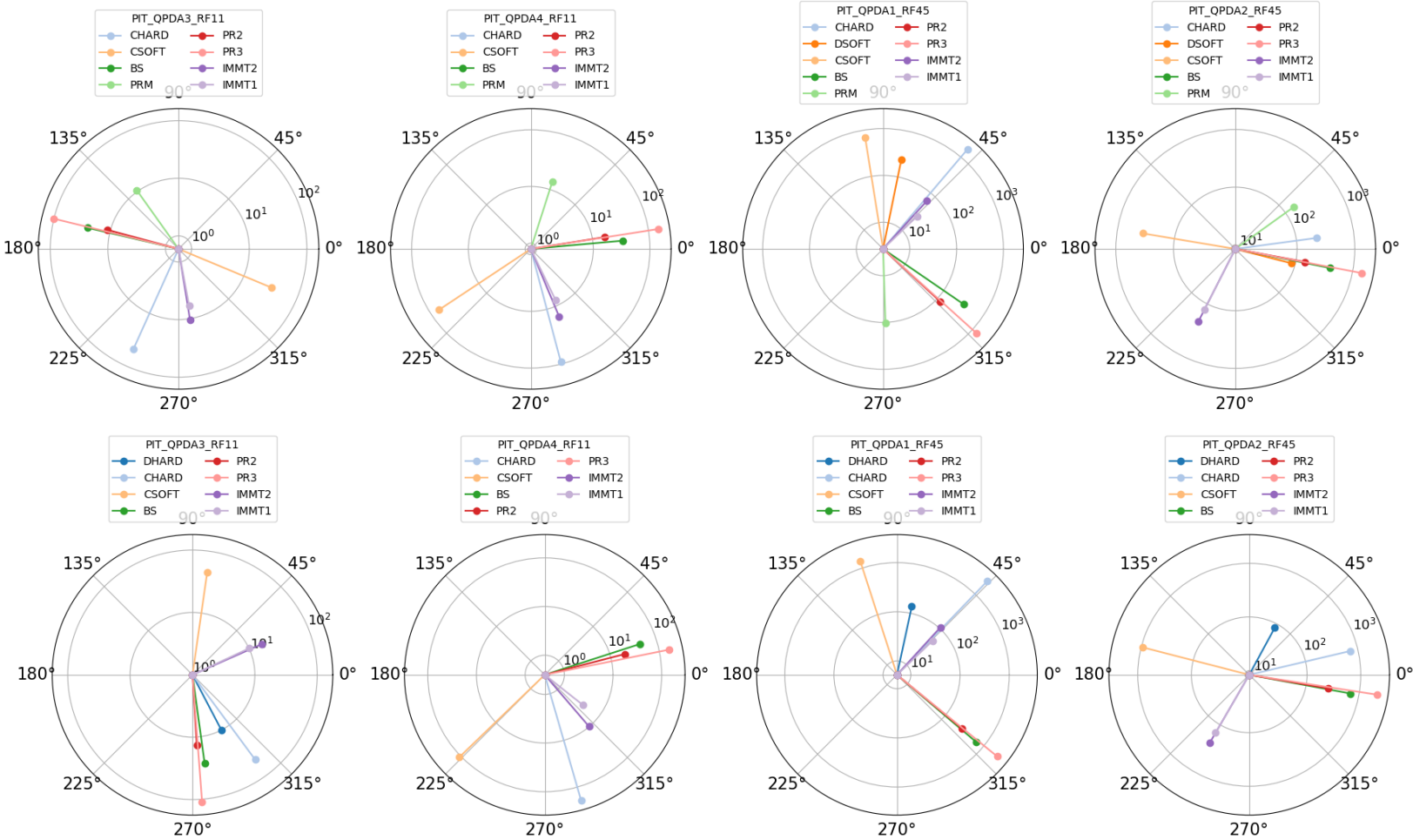
After: December's measurement

[deg]		'DHARD'	'CHARD'	'DSOFT'	'CSOFT'	'BS'	'PRM'	'PR2'	'PR3'	'IMMT2'	'IMMT1'	'ITMCOMM'	'ETMCOMM'
QPD3_R11	before	-175.091	-140.791	35.929	-6.794	-177.968	-32.717	-173.959	7.316	102.857	-79.787]		
	after	-143.838	-49.545	108.639	83.32	-95.87	52.531	-86.109	89.113	-153.455	23.66	-71.659	-50.438
	diff	-31.253	-91.246	-72.71	-90.114	-82.098	-85.248	-87.85	-81.797	256.312 (-103.688)	-103.447		
QPD4_R11	before	-23.421	-29.908	146.799	-154.077	5.715	-115.679	11.792	-167.663	130.206	-49.066]		
	after	-63.599	-56.155	-168.781	-149.279	14.963	-123.411	14.847	-168.794	116.728	-57.937	-31.212	-117.819
	diff	40.178	26.247	315.58	-4.798	-9.248	7.732	-3.055	1.131	13.478	8.871		
QPD1_R45	before	125.434	119.205	-158.742	-22.199	150.076	22.535	149.259	-31.332	-114.535	67.401]		
	after	-71.381	-149.107	-143.792	-45.878	150.602	-62.315	144.517	-32.13	66.166	-159.788	-171.087	-122.244
	diff	188.815	10.819	4.012	0.013	2.637	-5.809	-1.419	-2.523	-4.729	38.381		
QPD2_R45	before	125.434	119.205	-158.742	-22.199	150.076	22.535	149.259	-31.332	-114.535	67.401]		
	after	33.938	151.922	-11.795	-17.189	161.819	23.409	161.816	-17.797	-126.945	70.775	154.249	124.642
	diff	91.496	-32.717	-146.947	-5.01	-11.743	-0.874	-12.557	-13.535	12.41	-3.374		

- QPD3_RF11 was rotated demodulation phase -95deg in [klog31210](#).
- -36deg<angle<36deg

Plotted results with coherence > 0.7

2024/09
measurement

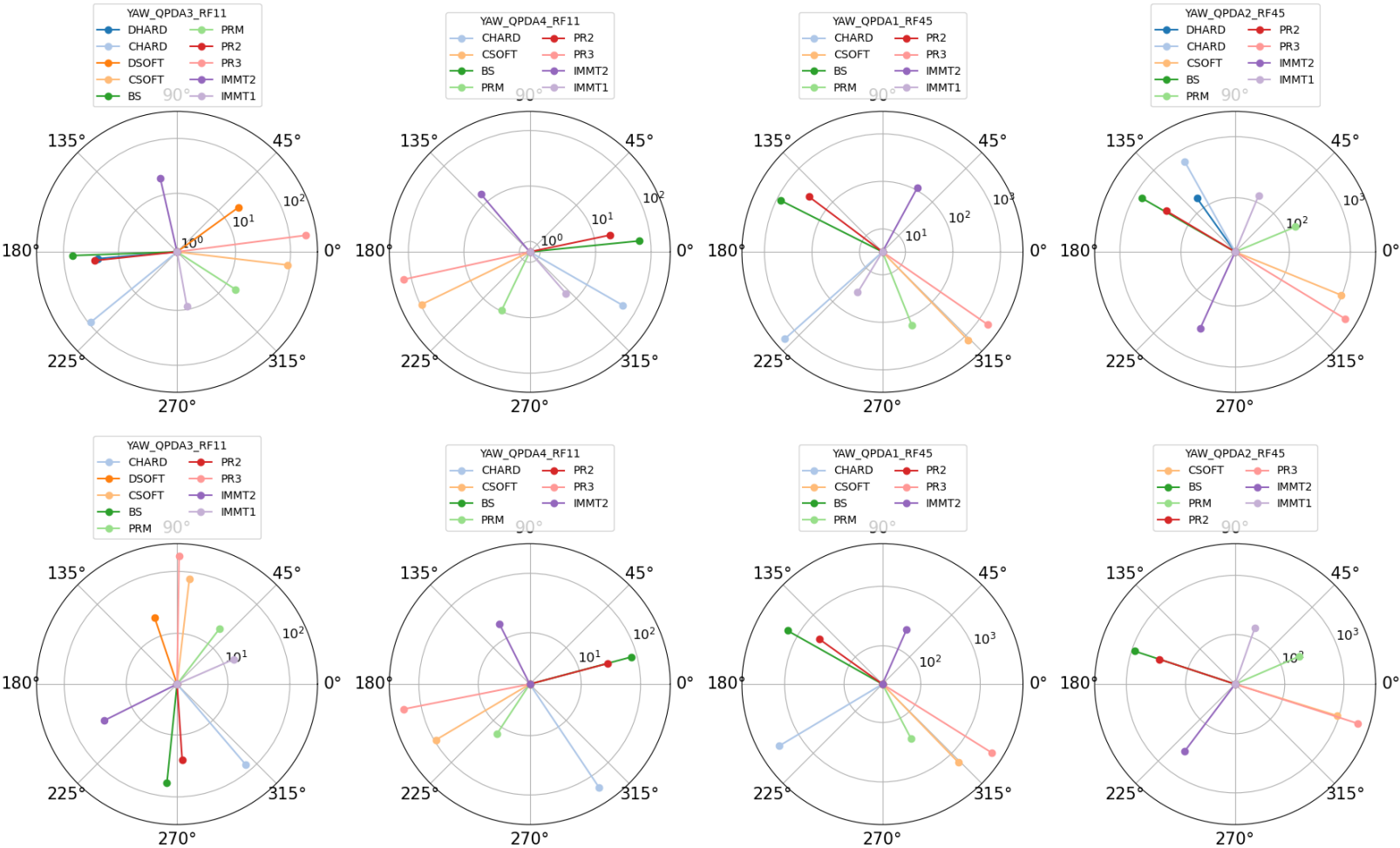


2024/12
measurement

Both were plotted and almost same	CHARD, CSOFT, BS, PR3,PR2, IMMT2, IMMT1 [Just rotated phase (95.439deg)]	• CHARD, CSOFT, BS, PR3,PR2, IMMT2, IMMT1	• CSOFT, CHARD, BS, PR3,PR2, IMMT2, IMMT1	• CHARD,CSOFT, BS, PR3,PR2, IMMT2, IMMT1
Both not plotted.	DSOFT	DHARD,DSOFT	DSOFT	PRM, DHARD
Either was plotted.	DHARD, PRM	PRM	PRM, DHARD	DSOFT

YAW

2024/09
measurement



2024/12
measurement

Both were plotted and almost same	CHARD, DSOFTE, CSOFT, BS, PRM , PR3,PR2, IMMT2, IMMT1 [Just rotated phase]	CHARD, CSOFT, BS, PRM,PR3,PR2, IMMT2	CSOFT, CHARD, BS, PRM, PR3,PR2, IMMT2	CSOFT, BS, PRM, PR3,PR2, IMMT2, IMMT1
Both not plotted.		DHARD , DSOFTE	DHARD,DSOFTE	DSOFTE,
Either was plotted.	DHARD	IMMT1	IMMT1	DHARD, CHARD 15

Abs(PIT)

Both plotted.

Before: September's measurement

After: December's measurement

[count/urad]		'DHARD'	'CHARD'	'DSOFT'	'CSOFT'	'BS'	'PRM'	'PR2'	'PR3'	'IMMT2'	'IMMT1'
QPDA3_R F11	before	14.687	47.804	8.135	33.759	24.906	10.544	11.158	102.104	10.548	5.928
	after	9.998	48.806	14.714	45.195	26.943	9.013	13.43	112.011	16.574	10.152
	After /Before	0.681	1.021	1.809	1.339	1.082	0.855	1.204	1.097	1.571	1.713
QPDA4_R F11	before	24.745	91.879	21.902	68.981	33.394	13.97	16.291	148.949	15.574	7.922
	after	19.0	190.514	30.262	108.818	44.94	14.226	19.886	161.574	9.841	3.955
	After /Before	0.768	2.074	1.382	1.578	1.346	1.018	1.221	1.085	0.632	0.499
QPDA1_R F45	before	52.849	1681.464	235.368	702.22	325.13	101.114	123.291	1282.387	65.304	26.903
	after	137.249	2346.48	159.026	1379.836	679.401	165.517	275.346	2200.825	106.059	52.216
	After /Before	2.597	1.395	0.676	1.965	2.09	1.637	2.233	1.716	1.624	1.941
QPDA2_R F45	before	80.075	227.711	85.013	358.61	403.995	152.163	143.491	1448.962	221.909	130.371
	after	83.315	715.223	50.721	938.154	690.952	158.119	262.561	2172.863	245.981	148.18
	After /Before	1.04	3.141	0.597	2.616	1.71	1.039	1.83	1.5	1.108	1.137

Abs(YAW)

Both plotted.

Before: September's measurement

After: December's measurement

[count/u rad]		'DHARD'	'CHARD'	'DSOFT'	'CSOFT'	'BS'	'PRM'	'PR2'	'PR3'	'IMMT2'	'IMMT1'
QPDA3_ RF11	before	23.899	92.96	20.349	90.564	69.922	16.006	27.293	195.696	20.127	8.61
	after	11.885	78.125	20.357	78.788	59.735	20.143	25.226	176.889	31.067	15.12
	After /Before	0.497	0.84	1	0.87	0.854	1.258	0.924	0.904	1.544	1.756
QPDA4_ RF11	before	14.409	56.506	7.829	94.912	62.135	9.713	19.317	139.713	15.022	6.495
	after	28.186	171.394	14.019	93.049	80.413	13.593	30.681	199.19	18.46	12.278
	After /Before	1.956	3.033	1.791	0.98	1.294	1.399	1.588	1.426	1.229	1.89
QPDA1_ RF45	before	85.017	1876.326	71.405	1294.035	820.226	149.048	284.215	1638.182	115.115	32.93
	after	218.98	2360.466	213.548	1552.683	1544.642	243.728	460.731	3296.664	226.216	41.979
	After /Before	2.576	1.258	2.991	1.2	1.883	1.635	1.621	2.012	1.965	1.275
QPDA2_ RF45	before	155.312	632.111	85.796	957.809	739.128	151.917	266.303	1637.74	307.188	129.344
	after	142.096	712.316	121.307	921.24	892.411	219.795	327.388	2163.632	384.398	145.201
	After /Before	0.915	1.127	1.414	0.962	1.207	1.447	1.229	1.321	1.251	1.123