Thruster Report

Magnetic Field: **750 mT**
Anode Power: **1312 W**
Anode Current: **10.0 A**
Propellant: **Argon 1.499 mg/s**

Thruster Details: Nagoya magnet, LaB6 cathode, 1 mm orifice, copper anode, 80 mm internal diameter.

Thrust	Thrust Eff.	ISP	Total DOF	Coverage Factor	Exp. Uncertainty	Std. Uncertainty
27.5 mN	19.3 %	1871.2 sec	30	2.07	2.7 mN	1.3 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.5 mN	0.7 mN	0.2 mN	0.7 mN	0.6 mN	0.1 mN
DOF	6	6	6	31	4	4

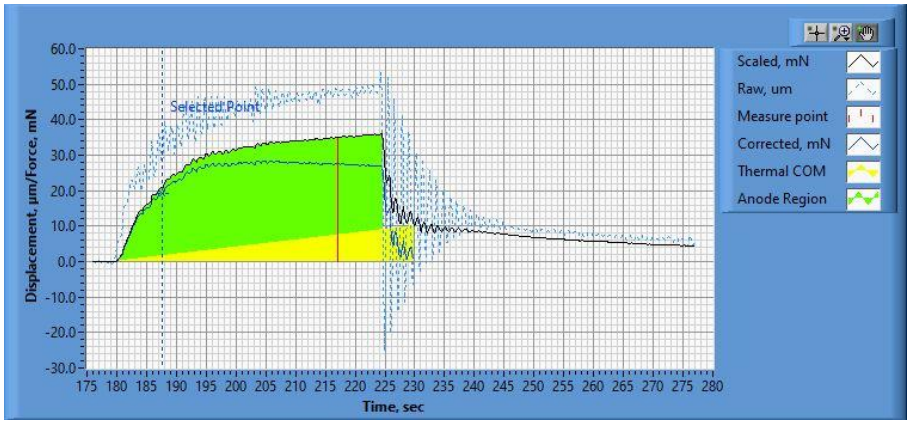

Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.22_21.54.12.csv

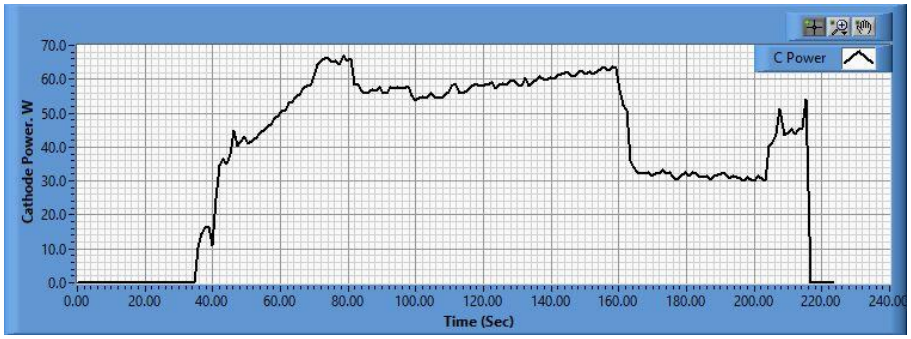

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.22_21.54.32.csv

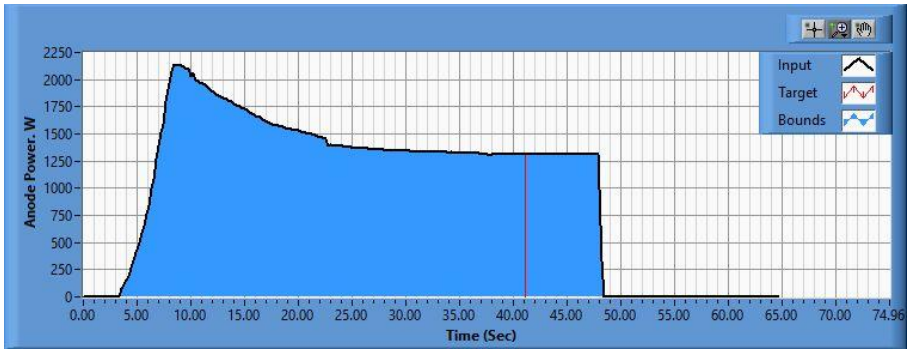

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.11.22_21.57.08.csv

Pre-Cal. Information

File Name: Magnet_Flow_1_5_Philtech Data 2024.11.22_15.22.48.csv

Start/Stop times (24 h): 15:22:54 15:26:39
Sensitivity: 1.61 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
0.250 mN	0.000 mN/s	0.621	0.968 mN

Plateau values:

Weight 0	Weight 1	Weight 2	Weight 3	Weight 4	Weight 5	Weight 4	Weight 3	Weight 2	Weight 1	Weight 0
-0.3 mN	20.7 mN	39.0 mN	59.4 mN	80.6 mN	100.9 mN	80.1 mN	59.0 mN	38.7 mN	20.6 mN	1.1 mN

Post-Cal. Information

File Name: Philtech Data 2024.11.22_21.54.12.csv

Start/Stop times (24 h): 22:01:14 22:04:58
Sensitivity: 1.64 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-2.277 mN	-0.003 mN/s	0.611	1.062 mN

Plateau values:

Weight 0	Weight 1	Weight 2	Weight 3	Weight 4	Weight 5	Weight 4	Weight 3	Weight 2	Weight 1	Weight 0
-0.1 mN	20.2 mN	38.0 mN	59.5 mN	80.0 mN	101.0 mN	79.5 mN	58.7 mN	37.6 mN	20.2 mN	0.1 mN