

Thruster Report

Magnetic Field: 500 mT
Anode Power: 1057 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
20.9 mN	13.7 %	1418.5 sec	20	2.08	3.7 mN	1.8 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.8 mN	1.1 mN	0.3 mN	0.1 mN	0.8 mN	0.8 mN
DOF	6	6	6	31	4	4

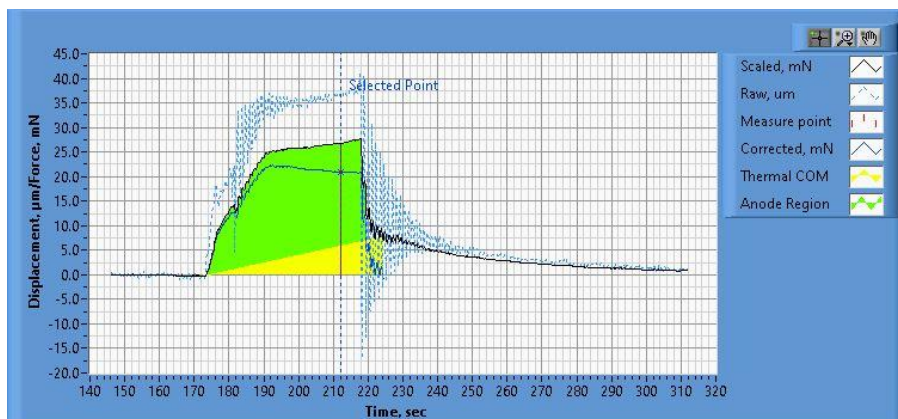


Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.27_00.29.52.csv

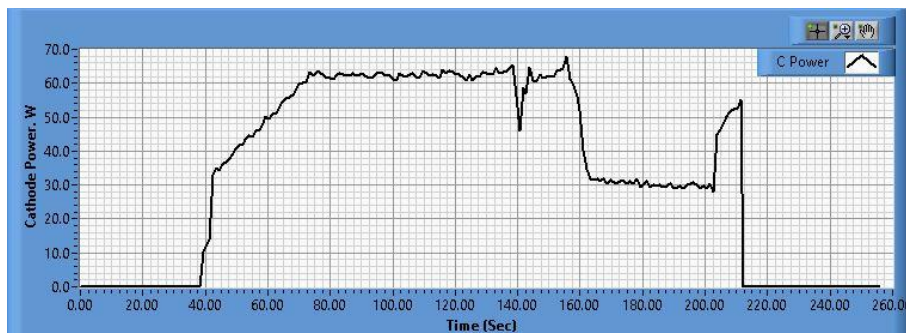
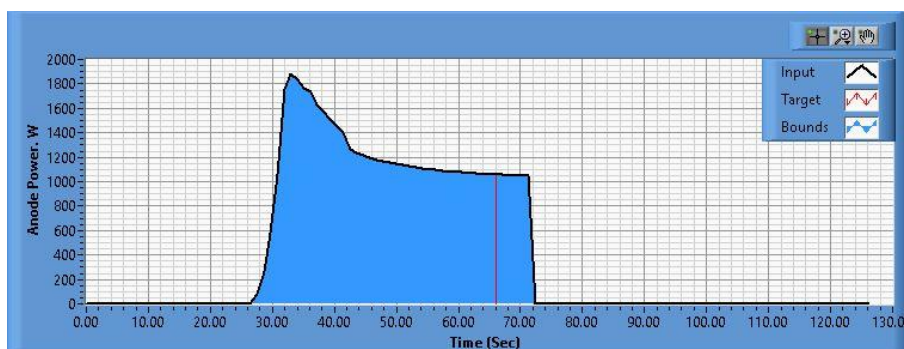


Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.27_00.30.07.csv

**Figure 3. Anode Power Plot**

File Name: PSU A Data 2024.11.27_00.32.18.csv

Pre-Cal. Information

File Name: Magnet_NoFlow_Philtech Data 2024.11.26_19.26.09.csv

Start/Stop times (24 h): 19:26:17 19:30:02

Sensitivity: 1.65 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
0.065 mN	-0.019 mN/s	0.606	1.256 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	22.1 mN	39.9 mN	60.2 mN	80.4 mN	101.1 mN	79.5 mN	59.2 mN	38.7 mN	21.8 mN	1.3 mN

Post-Cal. Information

File Name: Philtech Data 2024.11.27_00.29.52.csv

Start/Stop times (24 h): 00:36:52 00:40:35

Sensitivity: 1.61 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-0.964 mN	0.004 mN/s	0.622	1.237 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	21.3 mN	39.2 mN	59.9 mN	80.2 mN	100.9 mN	78.6 mN	58.9 mN	37.9 mN	21.3 mN	0.3 mN

