

Thruster Report

Magnetic Field: 750 mT
Anode Power: 628 W
Anode Current: 6.0 A
Propellant: Argon 1.999 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
16.7 mN	11.1 %	853.0 sec	21	2.08	2.7 mN	1.3 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.5 mN	0.6 mN	0.2 mN	0.3 mN	0.6 mN	0.7 mN
DOF	6	6	6	31	4	4

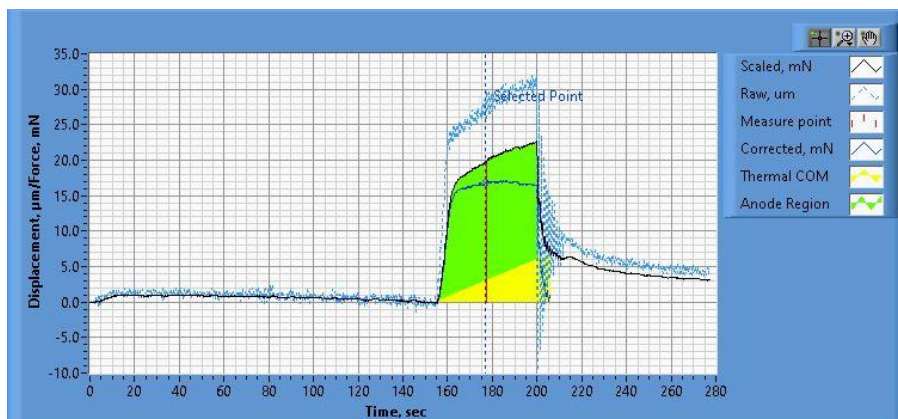


Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.26_15.10.18.csv

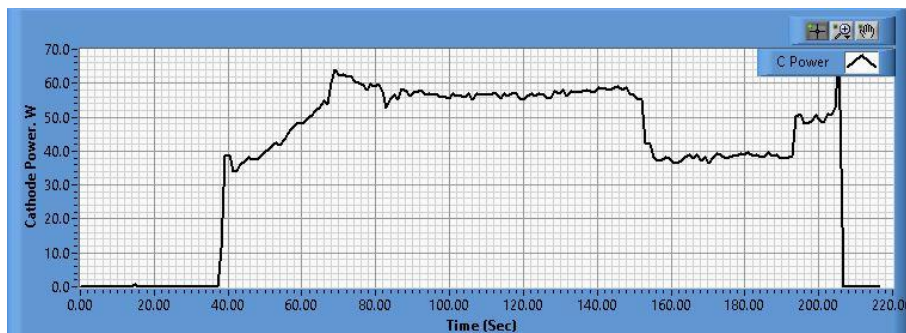
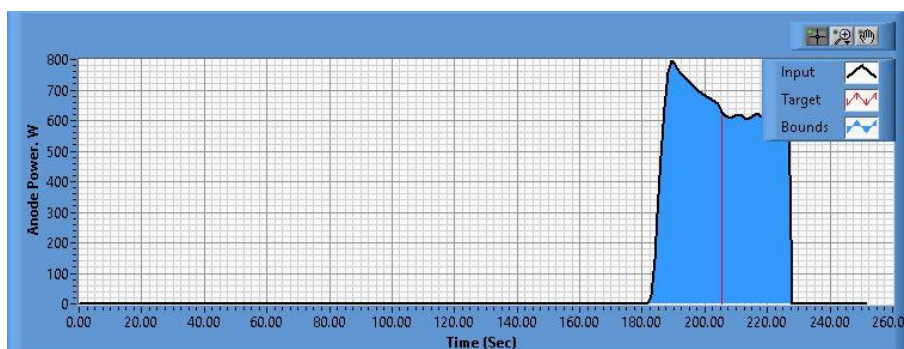


Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.26_15.10.24.csv

**Figure 3. Anode Power Plot**

File Name: PSU A Data 2024.11.26_15.09.50.csv

Pre-Cal. Information

File Name: Magnet_Flow_2_0_Philtech Data 2024.11.22_15.27.11.csv

Start/Stop times (24 h): 15:27:21 15:31:06

Sensitivity: 1.62 $\mu\text{m}/\text{mN}$

Offset	Drift	Scale Factor	Scale Std.Dev
0.798 mN	0.003 mN/s	0.617	0.925 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	20.9 mN	39.2 mN	59.8 mN	80.9 mN	101.1 mN	80.1 mN	59.1 mN	38.7 mN	20.6 mN	1.0 mN

Post-Cal. Information

File Name: Philtech Data 2024.11.26_15.10.18.csv

Start/Stop times (24 h): 15:17:12 15:20:55

Sensitivity: 1.66 $\mu\text{m}/\text{mN}$

Offset	Drift	Scale Factor	Scale Std.Dev
-2.247 mN	-0.018 mN/s	0.602	0.817 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
-0.6 mN	20.5 mN	39.1 mN	59.7 mN	80.4 mN	100.9 mN	79.5 mN	59.3 mN	38.1 mN	20.5 mN	-0.1 mN

