

Thruster Report

Magnetic Field: 1000 mT
Anode Power: 736 W
Anode Current: 6.0 A
Propellant: Argon 2.000 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
19.3 mN	12.7 %	983.6 sec	13	2.11	3.3 mN	1.6 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.7 mN	0.6 mN	0.4 mN	0.4 mN	0.2 mN	1.1 mN
DOF	6	6	6	31	4	4

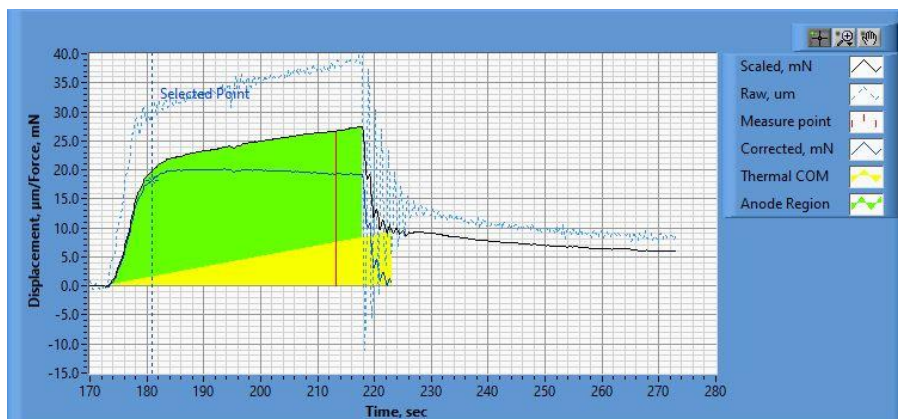


Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.21_13.32.53.csv

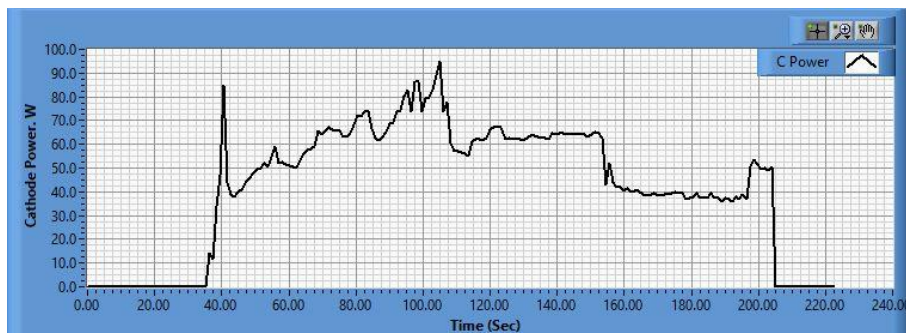
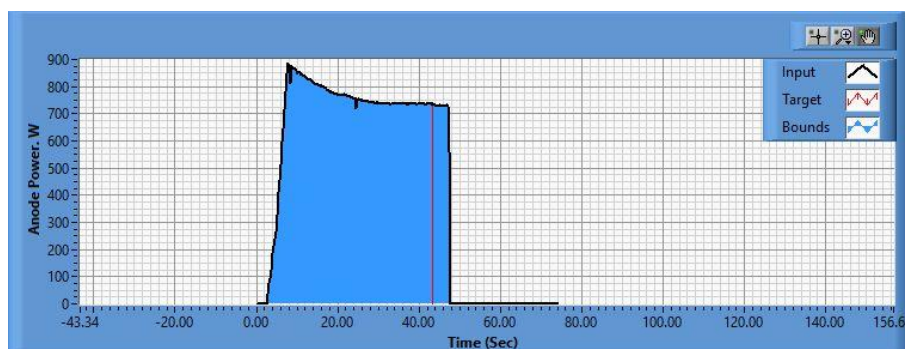


Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.21_13.33.14.csv

**Figure 3. Anode Power Plot**

File Name: PSU A Data 2024.11.21_13.35.43.csv

Pre-Cal. Information

File Name: MagnetOn_Flow_2_0_Philtech Data 2024.11.20_13.22.28.csv

Start/Stop times (24 h): 13:22:50 13:26:34

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

Offset	Drift	Scale Factor	Scale Std.Dev
0.137 mN	0.000 mN/s	0.601	1.019 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
0.0 mN	22.3 mN	40.0 mN	61.1 mN	81.2 mN	101.2 mN	80.4 mN	60.4 mN	39.0 mN	22.1 mN	0.5 mN

Post-Cal. Information

File Name: Philtech Data 2024.11.21_13.32.53.csv

Start/Stop times (24 h): 13:40:10 13:43:49

Sensitivity: 1.72 $\mu\text{m}/\text{mN}$

Offset	Drift	Scale Factor	Scale Std.Dev
-3.258 mN	-0.034 mN/s	0.581	0.962 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	20.3 mN	38.0 mN	60.2 mN	81.2 mN	101.0 mN	80.0 mN	59.6 mN	38.2 mN	20.4 mN	-0.0 mN

