

Thruster Report

Magnetic Field: 1000 mT
Anode Power: 1159 W
Anode Current: 8.0 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
23.7 mN	16.2 %	1612.9 sec	19	2.09	3.7 mN	1.8 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.8 mN	1.2 mN	0.5 mN	0.3 mN	0.5 mN	0.6 mN
DOF	6	6	6	31	4	4

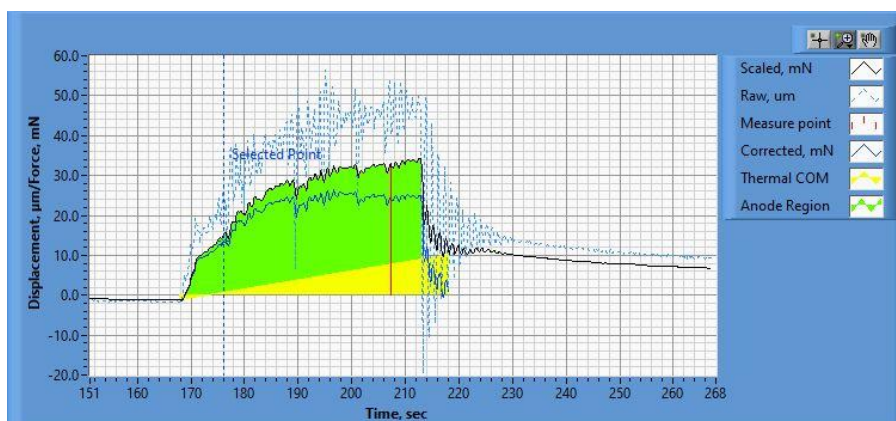


Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.13_16.51.58.csv

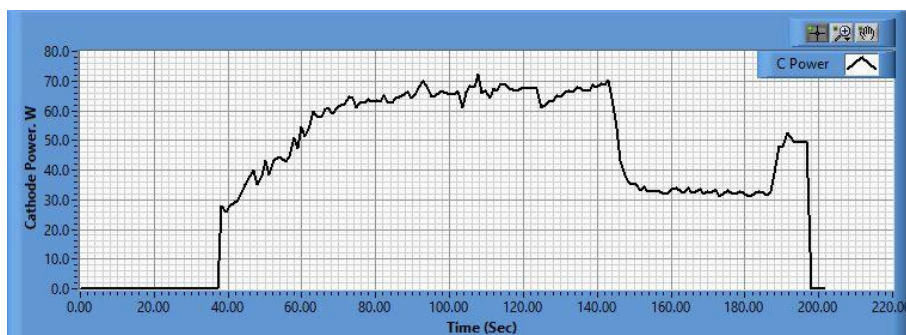
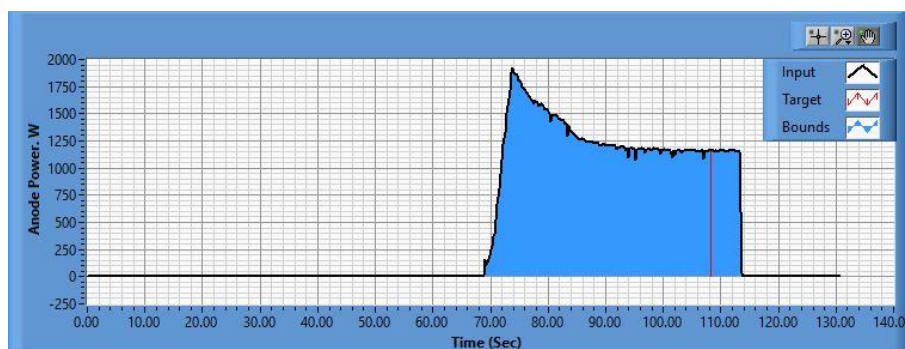


Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.13_16.52.23.csv

**Figure 3. Anode Power Plot**

File Name: PSU A Data 2024.11.13_16.53.37.csv

Pre-Cal. Information

File Name: MagnetOn_Flow15_Philtech Data 2024.11.08_13.55.45.csv

Start/Stop times (24 h): 13:55:51 13:59:37

Sensitivity: 1.64 $\mu\text{m}/\text{mN}$

Offset	Drift	Scale Factor	Scale Std.Dev
0.430 mN	-0.001 mN/s	0.611	1.422 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
-1.2 mN	20.9 mN	38.7 mN	59.7 mN	80.1 mN	101.0 mN	77.6 mN	57.9 mN	36.3 mN	19.6 mN	-0.7 mN

Post-Cal. Information

File Name: Philtech Data 2024.11.13_16.51.58.csv

Start/Stop times (24 h): 16:59:03 17:02:46

Sensitivity: 1.68 $\mu\text{m}/\text{mN}$

Offset	Drift	Scale Factor	Scale Std.Dev
-4.673 mN	-0.020 mN/s	0.594	1.361 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
-0.4 mN	20.5 mN	37.3 mN	59.2 mN	80.6 mN	100.9 mN	79.1 mN	58.3 mN	36.9 mN	20.2 mN	-0.0 mN

