Analysis Meeting

January 06, 2005

Window Thickness for Exodus

- Measurements completed in December.
- Systematic uncertainty primarily due to incident angle.

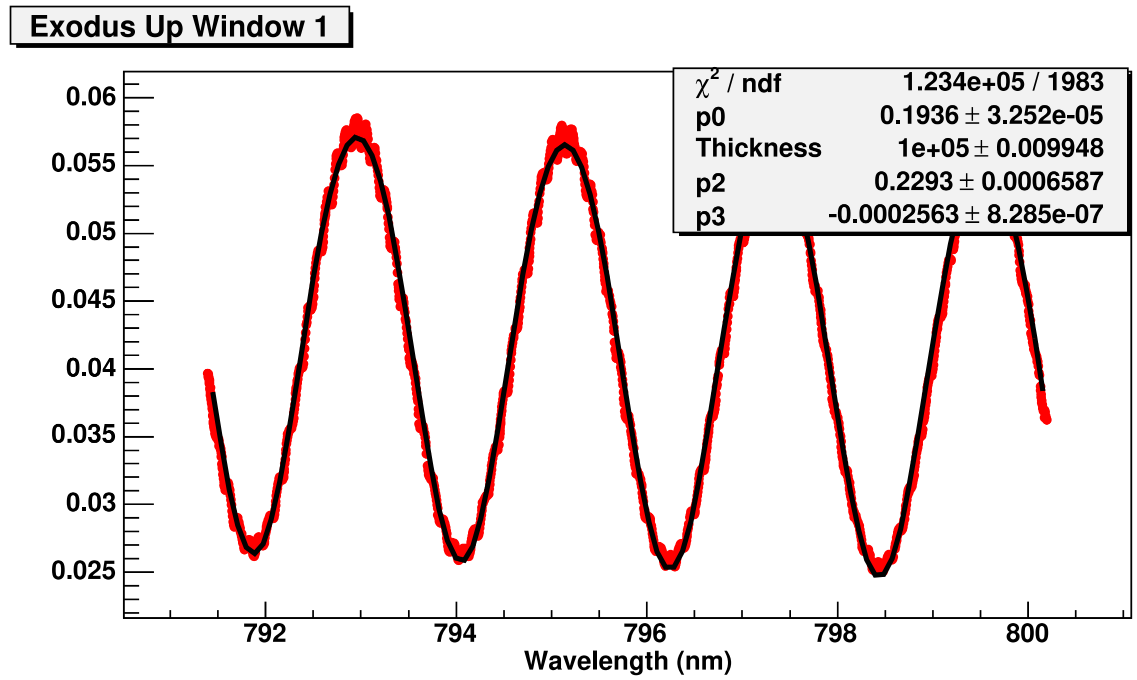
Window	Thickness (μm)	Stat.	Syst.
Upstream 1	99.75	0.026	1.58
Upstream 2	100.80	0.041	1.34
Downstream 1	126.85	0.064	1.66
Downstream 2	127.7	0.092	1.34

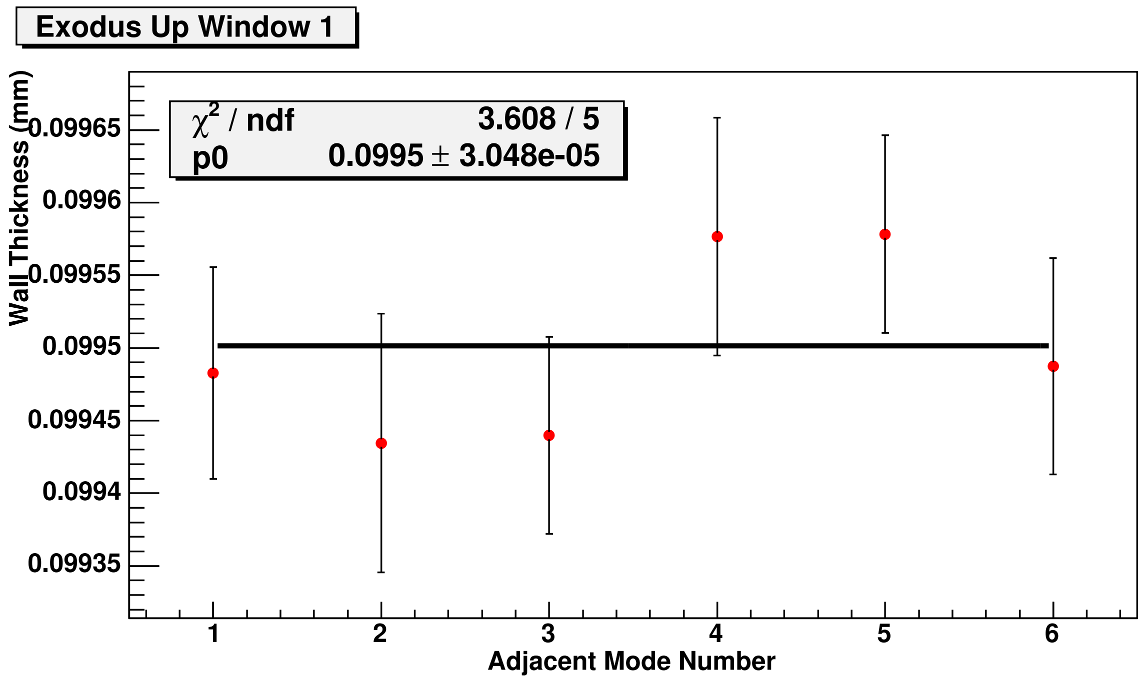
Database Prescription

- Tested module for entire 2.134 GeV momentum range.
  - Module appears to work correctly.
  - Need to check at other energies.
- Discovered an enhanced peak in θ_{tg} spectrum.
  - Traced to cluster of events outside main distribution in the focal plane.
  - Enhanced peak is not seen in optics data.
  - Checking VDCS, and target position dependencies.

To Do:

- Finish testing database module.
- Find cause of enhanced peak in θ_{tg}.


Exodus Up Window 1
χ^2 / ndf 1.234e+05 / 1983
p0 0.1936 ± 3.252e-05
Thickness 1e+05 ± 0.009948
p2 0.2293 ± 0.0006587
p3 -0.0002563 ± 8.285e-07
0.06
0.055
0.05
0.045
0.04
0.035
0.03
0.025
792
794
796
798
800
Wavelength (nm)


Exodus Up Window 1
χ^2 / ndf 3.608 / 5
p0 0.0995 ± 3.048e-05
Wall Thickness (mm)
0.09965
0.0996
0.09955
0.0995
0.09945
0.0994
0.09935
1
2
3
4
5
6
Adjacent Mode Number