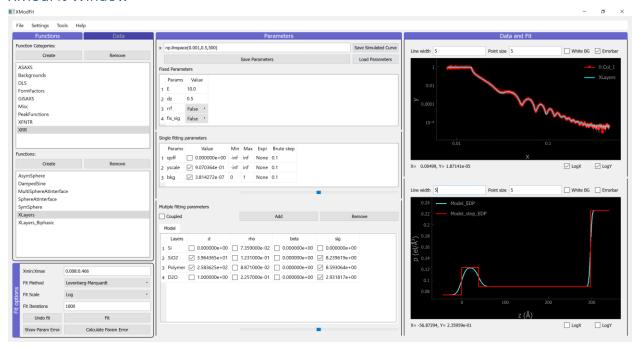
XModFit Neutron Data Fitting

XModFit Window



Parameters after fitting

```
[[Fit Statistics]]
  # fitting method = leastsq
  # function evals = 9
  # data points
                = 408
  # variables
  chi-square
                 = 249.344592
  reduced chi-square = 0.62180696
  Akaike info crit = -186.911983
  Bayesian info crit = -158.833112
[[Variables]]
  qoff:
              0 (fixed)
              0.90703643 + -0.00439622 (0.48\%) (init = 0.9070364)
  yscale:
              3.8143e-07 +/- 3.7956e-08 (9.95%) (init = 3.814267e-07)
                    0 (fixed)
    Model_d_000:
                    39.6436473 +/- 0.61718521 (1.56%) (init = 39.64366)
  __Model_rho_000: 0.07359 (fixed)
  __Model_rho_001: 0.1231 (fixed)
  __Model_beta_000: 0 (fixed)
  __Model_beta_001: 0 (fixed)
   _Model_sig_000: 0 (fixed)
  __Model_sig_001: 8.23961908 +/- 0.35395686 (4.30%) (init = 8.239675)
```

```
__Model_d_002: 258.362545 +/- 0.42498655 (0.16%) (init = 258.3625)
  Model d 003: 1 (fixed)
  __Model_rho_002: 0.08871 (fixed)
  Model rho 003: 0.2257 (fixed)
  __Model_beta_002: 0 (fixed)
  __Model_beta_003: 0 (fixed)
  __Model_sig_002: 8.59306399 +/- 0.49441969 (5.75%) (init = 8.593016)
  __Model_sig_003: 2.93181749 +/- 0.20059020 (6.84%) (init = 2.931807)
[[Correlations]] (unreported correlations are < 0.100)
  C(\_Model_d_001, \_Model_d_002) = -0.912
  C(bkg, __Model_sig_003)
                               = 0.666
  C(yscale, __Model_sig_003)
                                = 0.398
  C(yscale, __Model_d_001)
                                = -0.317
  C(yscale, __Model_d_002)
                                = 0.298
  C(\_Model\_sig\_001, \_Model\_d\_002) = 0.233
  C(__Model_d_001, __Model_sig_001) = -0.202
  C(yscale, __Model_sig_001)
                               = 0.190
  C(\_Model_d_001, \_Model_sig_003) = -0.190
  C(yscale, bkg)
                         = 0.185
 C(__Model_d_001, __Model_sig_002) = -0.182
 C(__Model_d_002, __Model_sig_003) = 0.164
  C(\_Model\_sig\_001, \_Model\_sig\_003) = -0.150
  C(yscale, Model sig 002)
                                = 0.149
 C(\_Model_d_002, \_Model_sig_002) = 0.107
```

Confidence Intervals on fitting parameters using MCMC

Acceptance Fraction (min: mean: max):0.385: 0.447: 0.495

•	•	•	
Parameters	Value(50%)	Left-error(5%)	Right-error(95%)
yscale	0.907091	-0.00965831	0.00950487
bkg	3.83803e-07	-7.09501e-08	8.05596e-08
Model_d_001	39.6443	-1.30747	1.18973
Model_sig_001	8.23102	-0.775802	0.718823
Model_d_002	258.375	-0.899158	0.910343
Model_sig_002	8.61055	-0.950402	1.03529
Model_sig_003	2.92957	-0.411782	0.395478
Insigma	-2.46153	-3.88402	2.62187