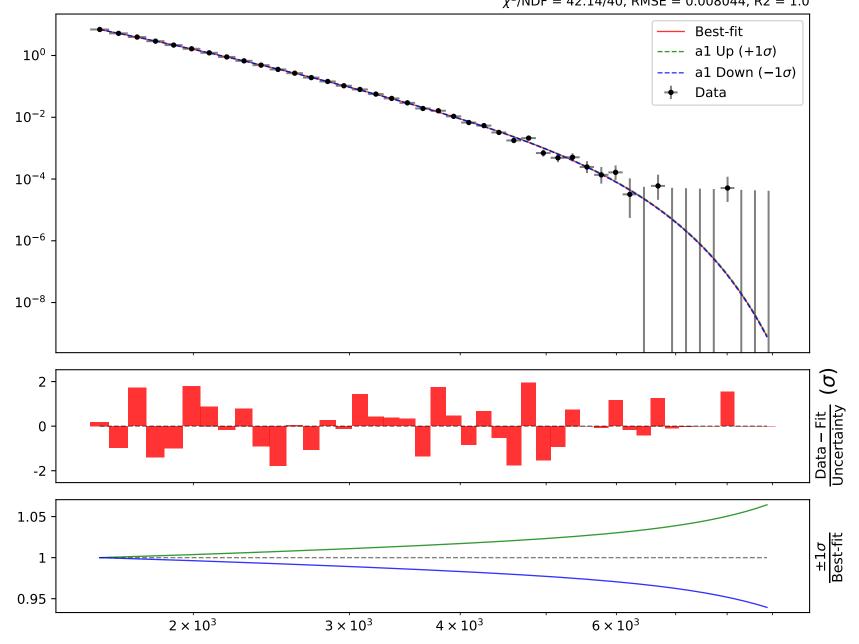


1.0\*((a4\*exp(a1\*((x0 - 1568.5) \* 0.000136221)))\*\*exp(((x0 - 1568.5) \* 0.000136221)\*(a2 + a3\*((x0 - 1568.5) \* 0.000136221))))

 $\begin{array}{l} \textbf{a1} = -\,\textbf{24.634}^{+0.06754(0.274\%)}_{-0.0677(0.275\%)}, \quad \text{a2} = -\,1.20944^{+0.04655(3.85\%)}_{-0.04649(3.84\%)}, \\ \textbf{a3} = 1.14014^{+0.1242(10.9\%)}_{-0.1233(10.8\%)}, \quad \text{a4} = 6.96177^{+0.02131(0.306\%)}_{-0.02128(0.306\%)} \end{array}$ 

## Candidate #13 $\chi^2/NDF = 42.14/40$ , RMSE = 0.008044, R2 = 1.0



```
1.0*((a4*exp(a1*((x0 - 1568.5) * 0.000136221)))**exp(((x0 - 1568.5) * 0.000136221)*(a2 + 1.0*((a4*exp(a1*((x0 - 1568.5) * 0.000136221))))**exp(((x0 - 1568.5) * 0.000136221))))
          a3*((x0 - 1568.5) * 0.000136221))))
          a1 = -24.634^{+0.06754(0.274\%)}_{-0.0677(0.275\%)}, a2 = -1.20944^{+0.04655(3.85\%)}_{-0.04649(3.84\%)},
          a3 = 1.14014^{+0.1242(10.9\%)}_{-0.1233(10.8\%)},
                                                  a4 = 6.96177^{+0.02131(0.306\%)}_{-0.02128(0.306\%)}
                                                                                                                                                                      Candidate #13
                                                                                                                    \chi^2/NDF = 42.14/40, RMSE = 0.008044, R2 = 1.0
  10^1
                                                                                                                                                                   Best-fit
                                                                                                                                                          ---- a2 Up (+1\sigma)
                                                                                                                                                                   a2 Down (-1\sigma)
10^{-1}
                                                                                                                                                                   Data
10<sup>-3</sup>
10^{-5}
10^{-7}
10^{-9}
      2
                                                                                                                                                                                                Data – Fit
Uncertainty
      0
    -2
      2
      1
```

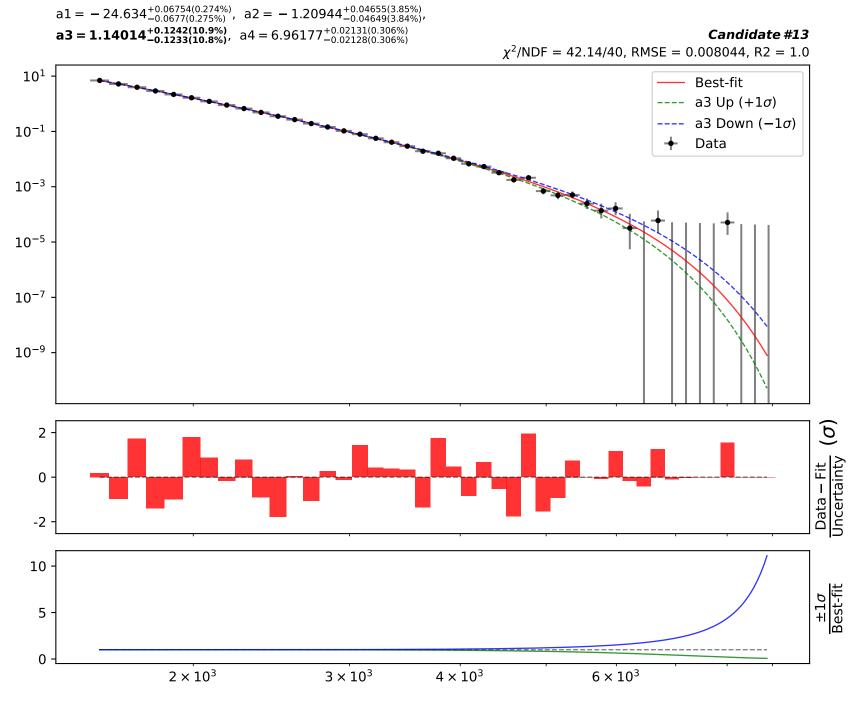
 $4 \times 10^3$ 

 $6 \times 10^{3}$ 

 $2 \times 10^{3}$ 

 $3 \times 10^3$ 

1.0\*((a4\*exp(a1\*((x0 - 1568.5) \* 0.000136221)))\*\*exp(((x0 - 1568.5) \* 0.000136221)\*(a2 + a3\*((x0 - 1568.5) \* 0.000136221))))



```
SymbolFit
           1.0*((a4*exp(a1*((x0 - 1568.5) * 0.000136221)))**exp(((x0 - 1568.5) * 0.000136221)*(a2 + 1.0*((a4*exp(a1*((x0 - 1568.5) * 0.000136221))))**exp(((x0 - 1568.5) * 0.000136221))))
           a3*((x0 - 1568.5) * 0.000136221))))
           a1 = -24.634^{+0.06754(0.274\%)}_{-0.0677(0.275\%)}, \ a2 = -1.20944^{+0.04655(3.85\%)}_{-0.04649(3.84\%)},
                                                   a4 = 6.96177^{+0.02131(0.306\%)}_{-0.02128(0.306\%)}
           a3 = 1.14014^{+0.1242(10.9\%)}_{-0.1233(10.8\%)},
                                                                                                                                                                    Candidate #13
                                                                                                                   \chi^2/NDF = 42.14/40, RMSE = 0.008044, R2 = 1.0
                                                                                                                                                                Best-fit
                                                                                                                                                                a4 Up (+1\sigma)
   10<sup>0</sup>
                                                                                                                                                                a4 Down (-1\sigma)
                                                                                                                                                                Data
 10^{-2}
 10^{-4}
 10^{-6}
 10-8
                                                                                                                                                                                              <u>g</u>
       2
                                                                                                                                                                                             Data – Fit
Uncertainty
       0
     -2
       1
       1
0.998
```

 $4 \times 10^3$ 

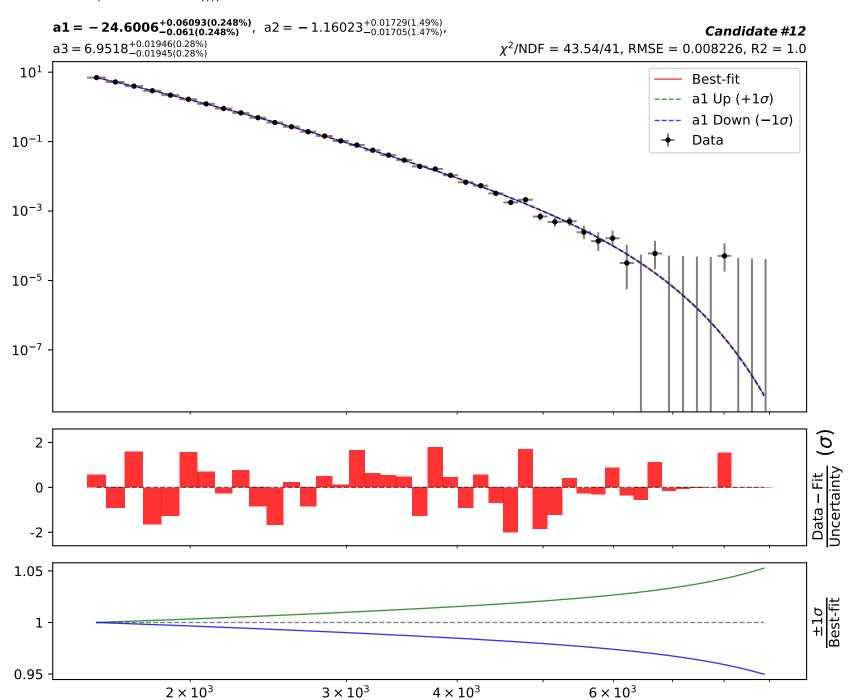
 $6 \times 10^3$ 

 $2 \times 10^3$ 

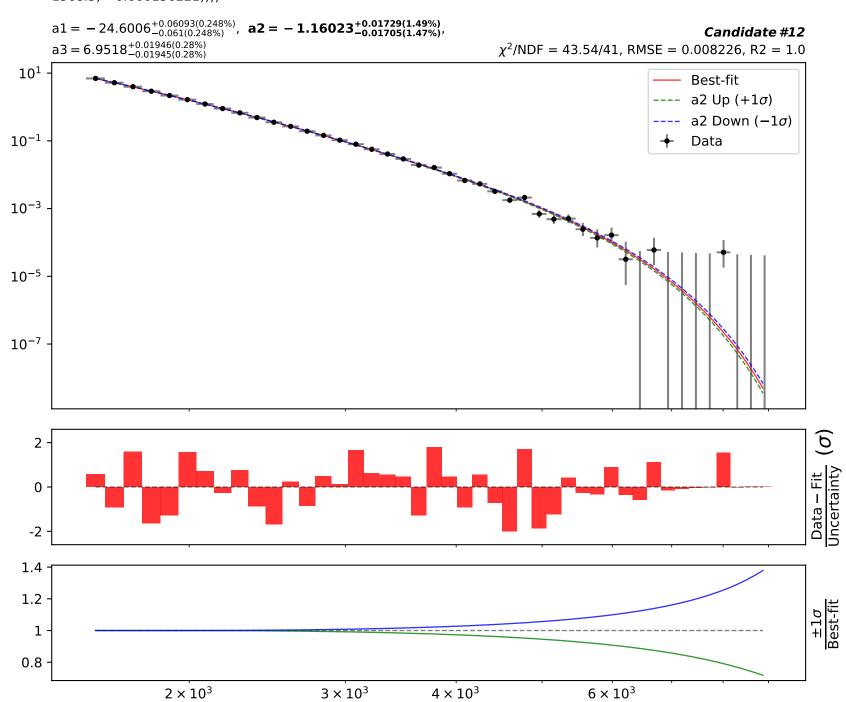
 $3 \times 10^3$ 

Candidate function #12

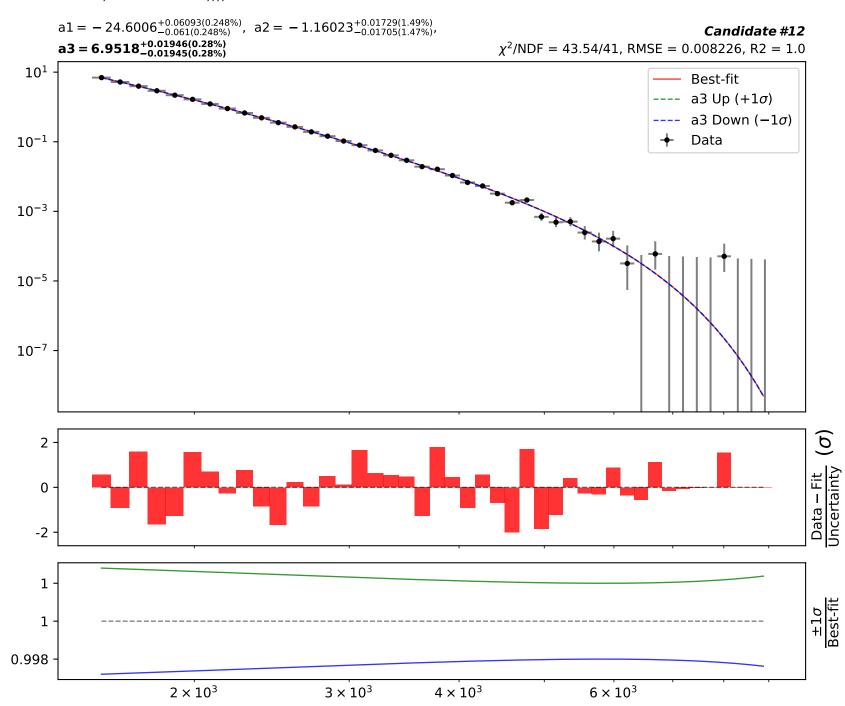
1.0\*((a3\*exp(a1\*((x0 - 1568.5) \* 0.000136221)))\*\*exp(((x0 - 1568.5) \* 0.000136221)\*(a2 + ((x0 - 1568.5) \* 0.000136221))))



1.0\*((a3\*exp(a1\*((x0 - 1568.5) \* 0.000136221)))\*\*exp(((x0 - 1568.5) \* 0.000136221)\*(a2 + ((x0 - 1568.5) \* 0.000136221))))



1.0\*((a3\*exp(a1\*((x0 - 1568.5) \* 0.000136221)))\*\*exp(((x0 - 1568.5) \* 0.000136221)\*(a2 + ((x0 - 1568.5) \* 0.000136221))))





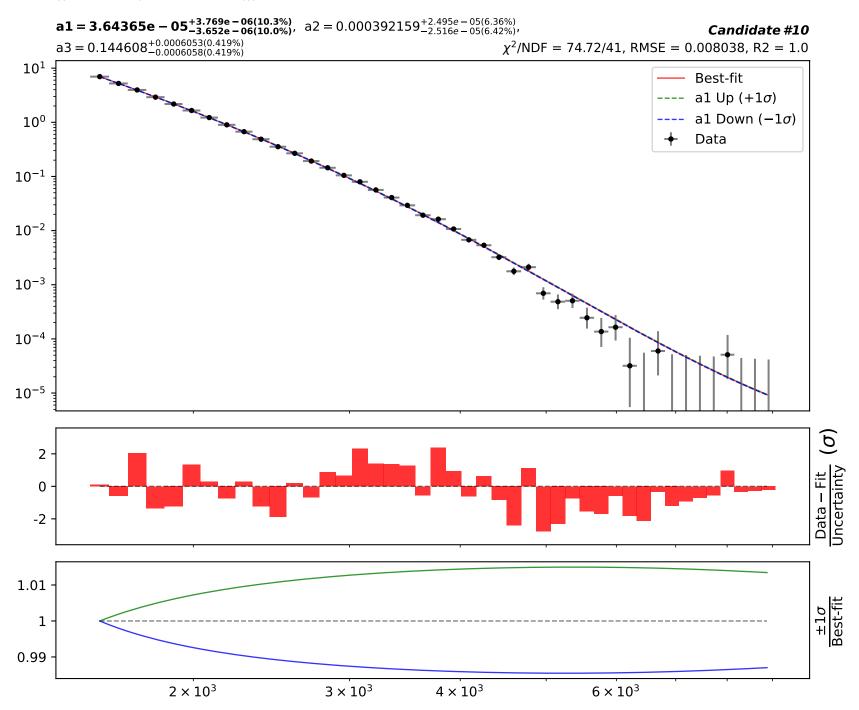
```
1.0*((a4*exp(a1*((x0 - 1568.5) * 0.000136221)))**(a3*exp(a2*((x0 - 1568.5) * 0.000136221))))
        a1 = -24.0, a2 = -0.740798^{+0.02777(3.75\%)}_{-0.02656(3.59\%)},
        \text{a3} = 1.01008^{+0.004897(0.485\%)}_{-0.004891(0.484\%)}\text{,}
                                                a4 = 6.72195^{+0.04373(0.651\%)}_{-0.04338(0.645\%)}
                                                                                                                                                    Candidate #11
                                                                                                      \chi^2/NDF = 186.9/41, RMSE = 0.0213, R2 = 0.9998
 10^{1}
                                                                                                                                                 Best-fit
                                                                                                                                                 a2 Up (+1\sigma)
                                                                                                                                                 a2 Down (-1\sigma)
 10^{0}
                                                                                                                                                 Data
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
     5
                                                                                                                                                                          Data – Fit
Uncertainty
     0
  1.2
     1
  0.8
                                2 \times 10^3
                                                                  3 \times 10^3
                                                                                         4 \times 10^3
                                                                                                                           6 \times 10^3
```

```
1.0*((a4*exp(a1*((x0 - 1568.5) * 0.000136221)))**(a3*exp(a2*((x0 - 1568.5) * 0.000136221))))
        a1 = -24.0, a2 = -0.740798^{+0.02777(3.75\%)}_{-0.02656(3.59\%)},
         \mathbf{a3} = \mathbf{1.01008}^{+0.004897(0.485\%)}_{-0.004891(0.484\%)},
                                                    a4 = 6.72195^{+0.04373(0.651\%)}_{-0.04338(0.645\%)}
                                                                                                                                                      Candidate #11
                                                                                                        \chi^2/NDF = 186.9/41, RMSE = 0.0213, R2 = 0.9998
 10^{1}
                                                                                                                                                   Best-fit
                                                                                                                                                   a3 Up (+1\sigma)
                                                                                                                                                   a3 Down (-1\sigma)
 10^{0}
                                                                                                                                                    Data
10^{-1}
10^{-2}
10^{-3}
10^{-4}
                                                                                                                                                                               <u>g</u>
     5
                                                                                                                                                                             Data – Fit
Uncertainty
     0
    -5
1.05
     1
0.95
                                 2 \times 10^{3}
                                                                   3 \times 10^3
                                                                                           4 \times 10^3
                                                                                                                             6 \times 10^{3}
```

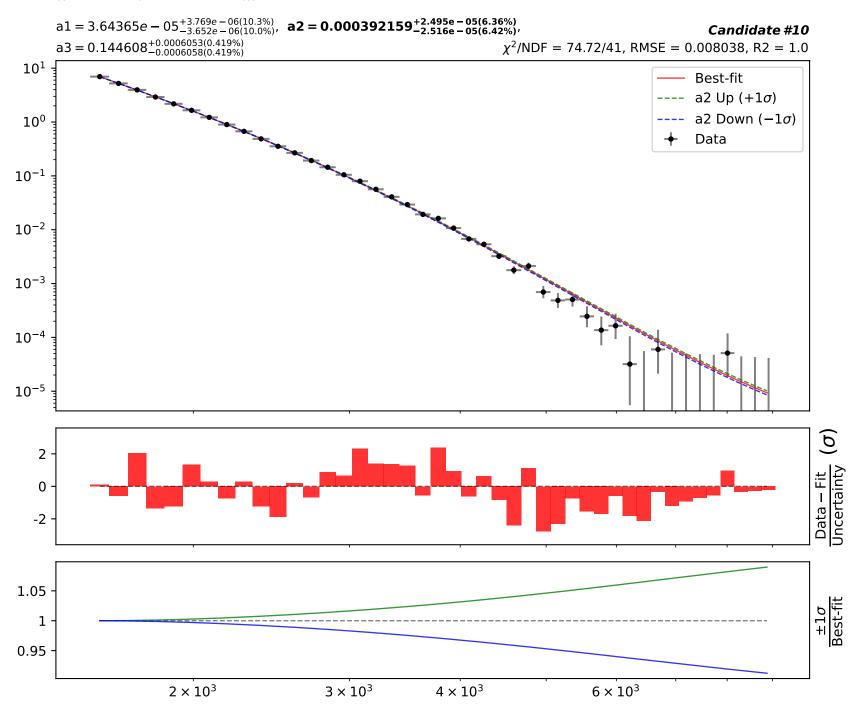
```
1.0*((a4*exp(a1*((x0 - 1568.5) * 0.000136221)))**(a3*exp(a2*((x0 - 1568.5) * 0.000136221))))
          a1 = -24.0, a2 = -0.740798^{+0.02777(3.75\%)}_{-0.02656(3.59\%)},
           \text{a3} = 1.01008^{+0.004897(0.485\%)}_{-0.004891(0.484\%)}\text{,}
                                                     \mathbf{a4} = \mathbf{6.72195}^{+0.04373(0.651\%)}_{-0.04338(0.645\%)}
                                                                                                                                                               Candidate #11
                                                                                                              \chi^2/NDF = 186.9/41, RMSE = 0.0213, R2 = 0.9998
   10^{1}
                                                                                                                                                            Best-fit
                                                                                                                                                            a4 Up (+1\sigma)
                                                                                                                                                            a4 Down (-1\sigma)
   10<sup>0</sup>
                                                                                                                                                            Data
 10^{-1}
 10^{-2}
 10^{-3}
 10^{-4}
       5
                                                                                                                                                                                         <u>6</u>
                                                                                                                                                                                        Data – Fit
Uncertainty
      0
     -5
       1
                                                                                                                                                                                        \pm 1\sigma
Best-fit
       1
0.995
                                    2 \times 10^3
                                                                        3 \times 10^3
                                                                                                 4 \times 10^3
                                                                                                                                     6 \times 10^3
```



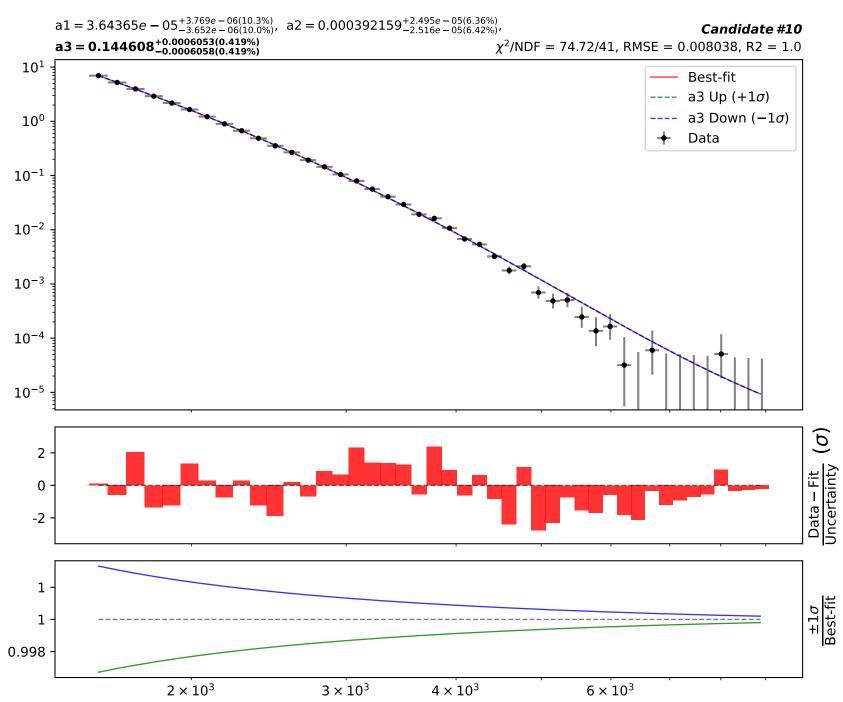
1.0\*((a1 + a2\*((x0 - 1568.5) \* 0.000136221))\*\*(2\*tanh(((x0 - 1568.5) \* 0.000136221)))/tanh(a3 + ((x0 - 1568.5) \* 0.000136221)))



1.0\*((a1 + a2\*((x0 - 1568.5) \* 0.000136221))\*\*(2\*tanh(((x0 - 1568.5) \* 0.000136221)))/tanh(a3 + ((x0 - 1568.5) \* 0.000136221)))



1.0\*((a1 + a2\*((x0 - 1568.5) \* 0.000136221))\*\*(2\*tanh(((x0 - 1568.5) \* 0.000136221)))/tanh(a3 + ((x0 - 1568.5) \* 0.000136221)))

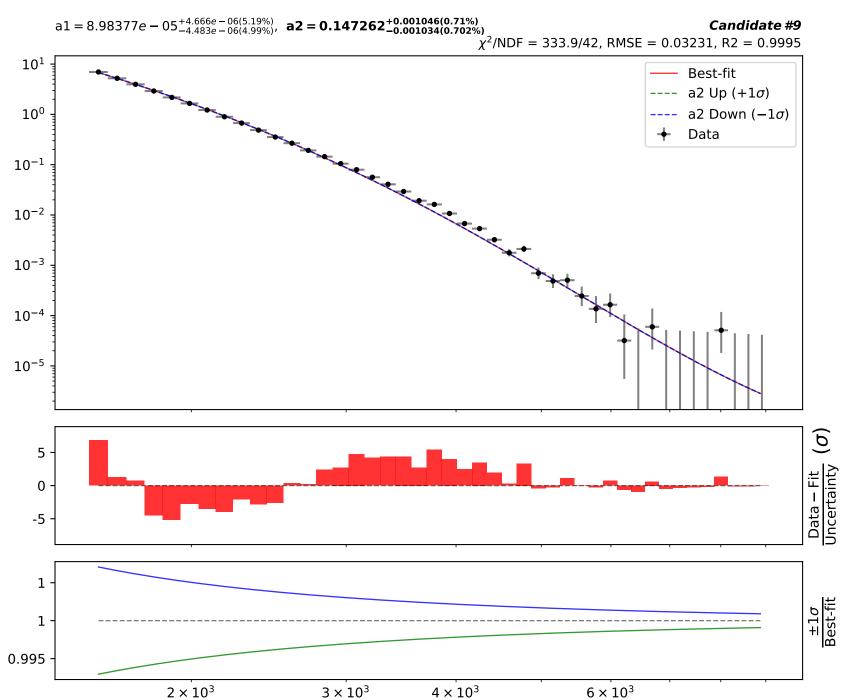




1.0\*((a1\*exp(((x0 - 1568.5) \* 0.000136221)))\*\*(2\*tanh(((x0 - 1568.5) \* 0.000136221)))/(a2 + ((x0 - 1568.5) \* 0.000136221)))

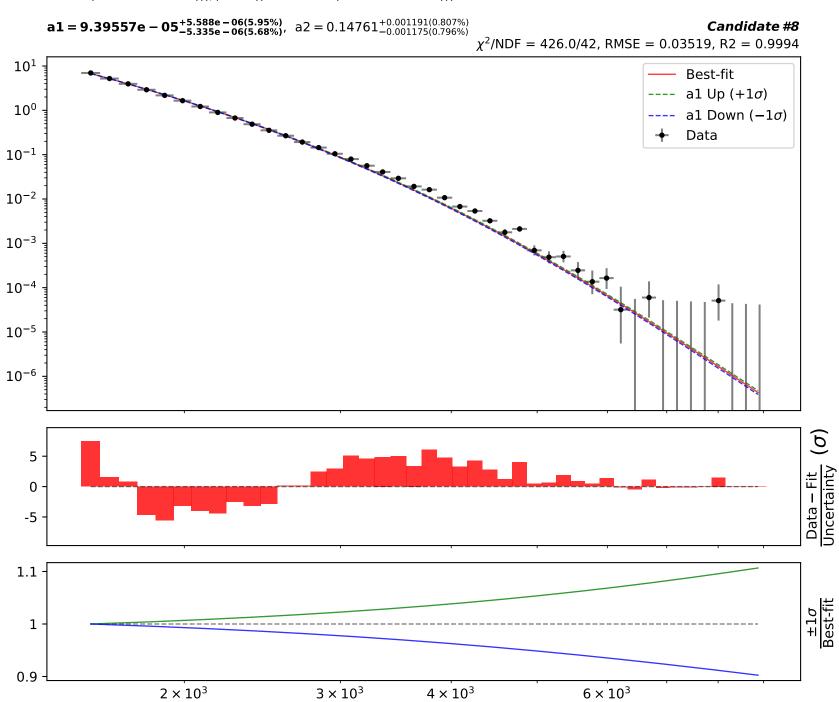


1.0\*((a1\*exp(((x0 - 1568.5) \* 0.000136221)))\*\*(2\*tanh(((x0 - 1568.5) \* 0.000136221)))/(a2 + ((x0 - 1568.5) \* 0.000136221)))

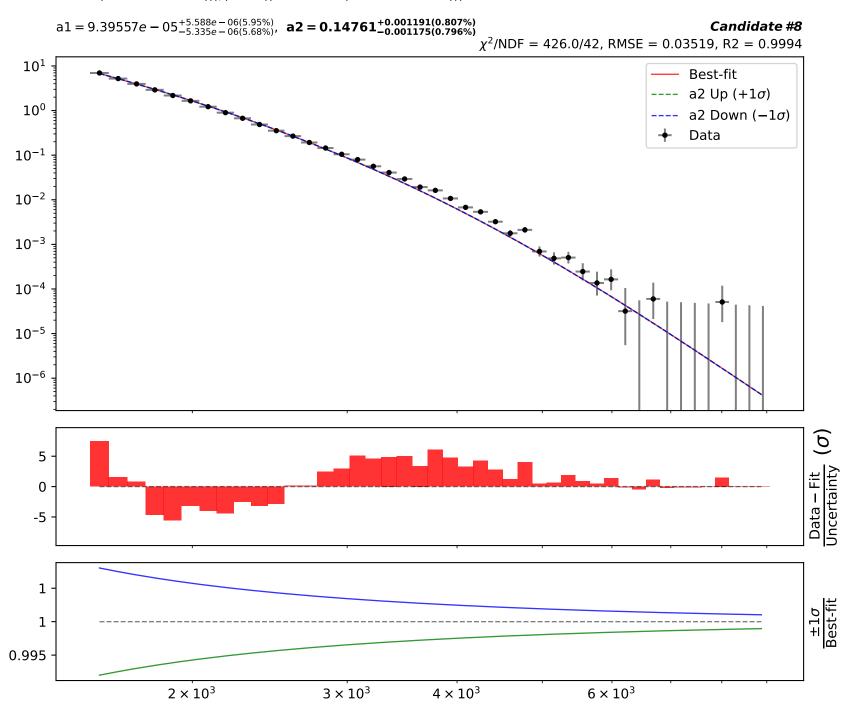




1.0\*((a1\*exp(((x0 - 1568.5) \* 0.000136221)))\*\*(((x0 - 1568.5) \* 0.000136221) + tanh(((x0 - 1568.5) \* 0.000136221)))/(a2 + ((x0 - 1568.5) \* 0.000136221)))



1.0\*((a1\*exp(((x0 - 1568.5) \* 0.000136221)))\*\*(((x0 - 1568.5) \* 0.000136221) + tanh(((x0 - 1568.5) \* 0.000136221)))/(a2 + ((x0 - 1568.5) \* 0.000136221)))

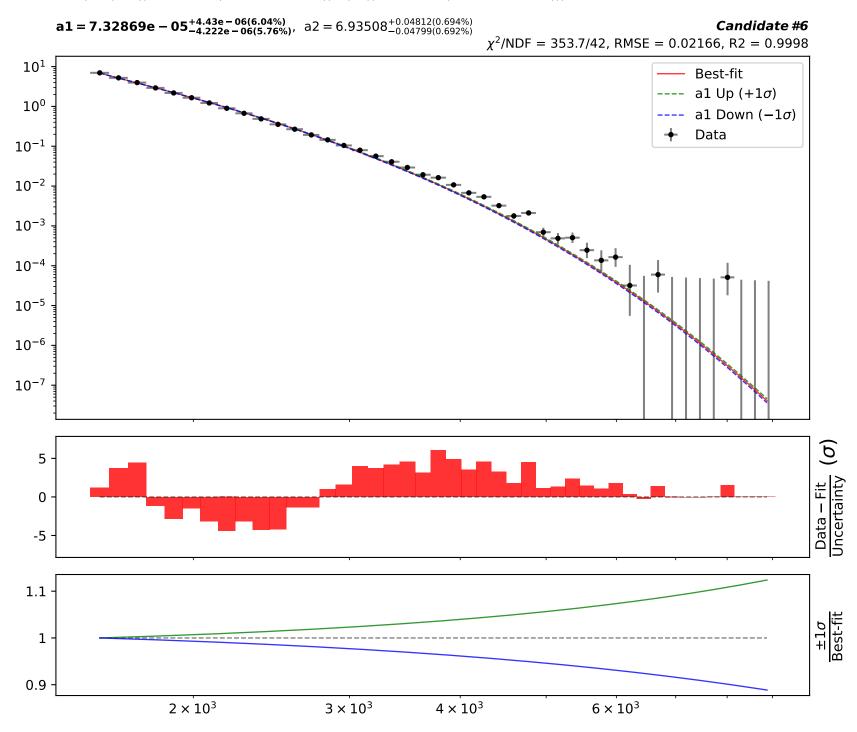




 $a1 = 0.000103071^{+6.66e - 06(6.46\%)}_{-6.338e - 06(6.15\%)}$ ,  $a2 = 0.148^{+0.001284(0.868\%)}_{-0.001267(0.856\%)}$ Candidate #7  $\chi^2/NDF = 488.7/42$ , RMSE = 0.03834, R2 = 0.9993  $10^{1}$ Best-fit al Up  $(+1\sigma)$  $10^{0}$ al Down  $(-1\sigma)$ Data  $10^{-1}$  $10^{-2}$  $10^{-3}$  $10^{-4}$ 10<sup>-5</sup>  $10^{-6}$ 10 *∂* Data – Fit Uncertainty 0 -10 1.1 1 0.9  $2 \times 10^3$  $3 \times 10^3$  $4 \times 10^3$  $6 \times 10^3$ 

 $a1 = 0.000103071^{+6.66e - 06(6.46\%)}_{-6.338e - 06(6.15\%)},$  $a2 = 0.148^{+0.001284(0.868\%)}_{-0.001267(0.856\%)}$ Candidate #7  $\chi^2$ /NDF = 488.7/42, RMSE = 0.03834, R2 = 0.9993  $10^{1}$ Best-fit a2 Up  $(+1\sigma)$  $10^{0}$ a2 Down  $(-1\sigma)$ Data  $10^{-1}$  $10^{-2}$  $10^{-3}$  $10^{-4}$  $10^{-5}$  $10^{-6}$ 10 *∂* Data – Fit Uncertainty 0 -10 1 1 0.995  $2 \times 10^3$  $3 \times 10^3$  $4 \times 10^3$  $6 \times 10^3$ 





 $4 \times 10^3$ 

 $6 \times 10^3$ 

 $2 \times 10^3$ 

 $3 \times 10^3$ 



 $a1 = 0.000112318^{+9.236e - 06(8.22\%)}_{-8.666e - 06(7.72\%)}, a2 = 0.148636^{+0.001613(1.08\%)}_{-0.001585(1.07\%)}$ Candidate #5  $\chi^2/NDF = 747.9/42$ , RMSE = 0.04364, R2 = 0.9991  $10^{1}$ Best-fit ---- a1 Up  $(+1\sigma)$ al Down  $(-1\sigma)$ Data  $10^{-1}$ 10-3  $10^{-5}$  $10^{-7}$  $\widehat{\mathcal{Q}}$ 10 Data – Fit Uncertainty 0 -10 1.1 1 0.9  $2 \times 10^3$  $3 \times 10^3$  $4 \times 10^3$  $6 \times 10^3$ 

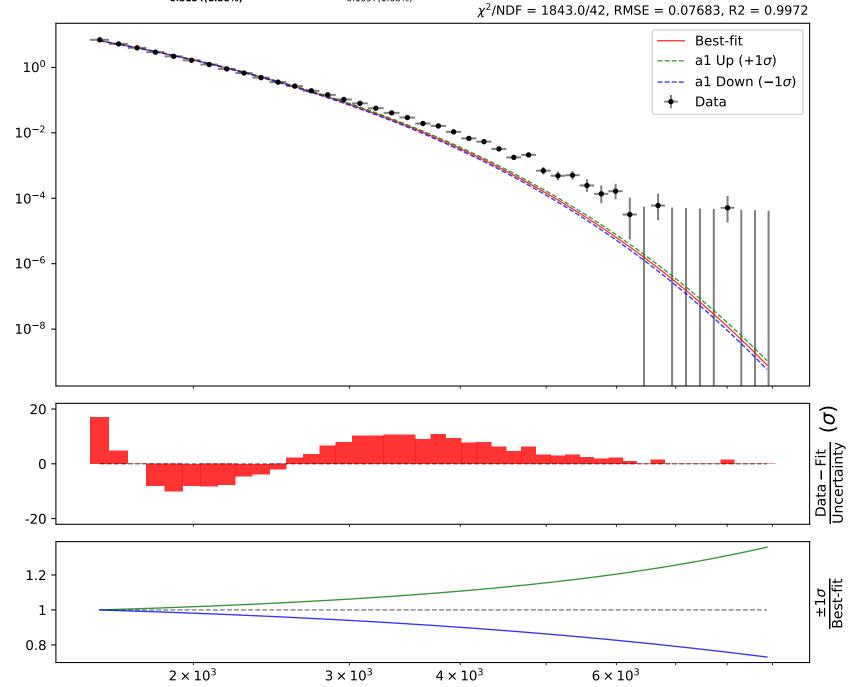
1.0\*(a1\*\*(2\*((x0 - 1568.5) \* 0.000136221))/(a2 + ((x0 - 1568.5) \* 0.000136221)))

 $a1 = 0.000112318^{+9.236e - 06(8.22\%)}_{-8.666e - 06(7.72\%)}$ ,  $a2 = 0.148636^{+0.001613(1.08\%)}_{-0.001585(1.07\%)}$ Candidate #5  $\chi^2/NDF = 747.9/42$ , RMSE = 0.04364, R2 = 0.9991  $10^1$ Best-fit ---- a2 Up  $(+1\sigma)$ a2 Down  $(-1\sigma)$ Data  $10^{-1}$ 10-3 10<sup>-5</sup>  $10^{-7}$ 10 <u>(d</u> Data – Fit Uncertainty 0 -10 1.01 1 0.99  $2 \times 10^3$  $3 \times 10^3$  $4 \times 10^3$  $6 \times 10^3$ 

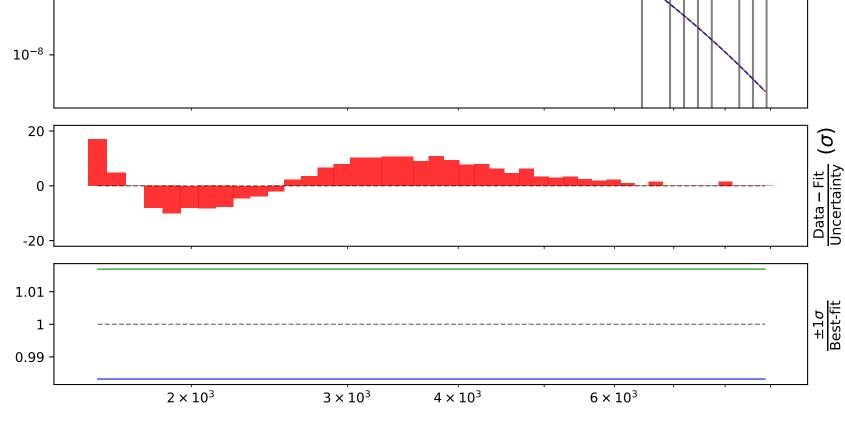
Candidate function #4

 $a1 = -22.9406^{+0.3084(1.34\%)}_{-0.3154(1.38\%)}$ ,  $a2 = 6.53015^{+0.1105(1.69\%)}_{-0.1097(1.68\%)}$ 

Candidate #4



```
1.0*(a2*exp(a1*((x0 - 1568.5) * 0.000136221)))
        a1 = -22.9406^{+0.3084(1.34\%)}_{-0.3154(1.38\%)}, a2 = 6.53015^{+0.1105(1.69\%)}_{-0.1097(1.68\%)}
                                                                                                                                      Candidate #4
                                                                                        \chi^2/NDF = 1843.0/42, RMSE = 0.07683, R2 = 0.9972
                                                                                                                                  Best-fit
                                                                                                                           ---- a2 Up (+1\sigma)
 10<sup>0</sup>
                                                                                                                                  a2 Down (-1\sigma)
                                                                                                                                  Data
10-2
10^{-4}
10^{-6}
```





1.0\*(a1\*\*((x0 - 1568.5) \* 0.000136221)\*a2) a1 = 6.88e - 06,  $a2 = 2.17294^{+0.273(12.6\%)}_{-0.273(12.6\%)}$ Candidate #3  $\chi^2/NDF = 130100.0/43$ , RMSE = 0.9834, R2 = 0.5446 10<sup>1</sup>  $\frac{1}{3}$ Best-fit ---- a2 Up  $(+1\sigma)$ a2 Down  $(-1\sigma)$  $10^{0}$ Data  $10^{-1}$  $10^{-2}$  $10^{-3}$  $10^{-4}$  $10^{-5}$ 200  $\widehat{\sigma}$ Data – Fit Uncertainty 0 -200 1.1 1 0.9  $2 \times 10^3$  $3 \times 10^3$  $4 \times 10^3$  $6 \times 10^3$ 



 $4 \times 10^3$ 

 $6 \times 10^3$ 

0

 $2 \times 10^3$ 

 $3 \times 10^3$ 



