

```
1.0*((a2/(a3 + a6*exp(((x0 - 1568.5) * 0.000145275))) + ((x0 - 1568.5) * 0.000145275)))**((a1 + a6*exp(((x0 - 1568.5) * 0.000145275))) + ((x0 - 1568.5) * 0.000145275)))
           ((x0 - 1568.5) * 0.000145275))/tanh(a4 + a5*((x0 - 1568.5) * 0.000145275))))
           \mathbf{a1} = -0.238614^{+0.0001934(0.081\%)}_{-0.0001933(0.081\%)}, \ \ a2 = 4.98e - 05,
           a3 = 0.4, a4 = 0.755684^{+0.0103(1.36\%)}_{-0.01045(1.38\%)},
           a5 = 1.53186^{+0.04307(2.81\%)}_{-0.04254(2.78\%)}, \ a6 = 32.2912^{+4.279(13.3\%)}_{-3.885(12.0\%)}
                                                                                                                                                                  Candidate #17
                                                                                                                   \chi^2/NDF = 30.91/31, RMSE = 0.02827, R2 = 1.0
                                                                                                                                                               Best-fit
   10^{2}
                                                                                                                                                               al Up (+1\sigma)
                                                                                                                                                               al Down (-1\sigma)
   10^{1}
                                                                                                                                                               Data
   10^{0}
 10^{-1}
 10^{-2}
 10^{-3}
 10^{-4}
 10^{-5}
                                                                                                                                                                                            <u>(d</u>
       2
                                                                                                                                                                                          Data – Fit
Uncertainty
       0
     -2
       1
                                                                                                                                                                                           \pm 1\sigma
Best-fit
       1
0.998
```

 4×10^{3}

 6×10^{3}

 2×10^3

```
1.0*((a2/(a3 + a6*exp(((x0 - 1568.5) * 0.000145275))) + ((x0 - 1568.5) * 0.000145275)))**((a1 + a6*exp(((x0 - 1568.5) * 0.000145275))) + ((x0 - 1568.5) * 0.000145275)))
         ((x0 - 1568.5) * 0.000145275))/tanh(a4 + a5*((x0 - 1568.5) * 0.000145275))))
         {\tt a1=-0.238614^{+0.0001934(0.081\%)}_{-0.0001933(0.081\%)},\ a2=4.98e-05,}
         a3 = 0.4, a4 = 0.755684^{+0.0103(1.36\%)}_{-0.01045(1.38\%)},
         \mathsf{a5} = 1.53186^{+0.04307(2.81\%)}_{-0.04254(2.78\%)}, \ \ \mathsf{a6} = 32.2912^{+4.279(13.3\%)}_{-3.885(12.0\%)}
                                                                                                                                                                     Candidate #17
                                                                                                                      \chi^2/NDF = 30.91/31, RMSE = 0.02827, R2 = 1.0
                                                                                                                                                                 Best-fit
  10<sup>2</sup>
                                                                                                                                                                 a4 Up (+1\sigma)
                                                                                                                                                                 a4 Down (-1\sigma)
  10^{1}
                                                                                                                                                                  Data
 10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
                                                                                                                                                                                                <u>(d</u>
     2
                                                                                                                                                                                              Data – Fit
Uncertainty
     0
    -2
1.05
     1
0.95
                                     2 \times 10^3
                                                                          3 \times 10^{3}
                                                                                                      4 \times 10^{3}
                                                                                                                                           6 \times 10^{3}
```

```
1.0*((a2/(a3 + a6*exp(((x0 - 1568.5) * 0.000145275))) + ((x0 - 1568.5) * 0.000145275)))**((a1 + a6*exp(((x0 - 1568.5) * 0.000145275))) + ((x0 - 1568.5) * 0.000145275)))
          ((x0 - 1568.5) * 0.000145275))/tanh(a4 + a5*((x0 - 1568.5) * 0.000145275))))
          \mathtt{a1} = -0.238614^{+0.0001934(0.081\%)}_{-0.0001933(0.081\%)},
                                                            a2 = 4.98e - 05
          a3 = 0.4, a4 = 0.755684^{+0.0103(1.36\%)}_{-0.01045(1.38\%)},
          \textbf{a5} = \textbf{1.53186}^{+0.04307(2.81\%)}_{-0.04254(2.78\%)}, \quad \text{a6} = 32.2912^{+4.279(13.3\%)}_{-3.885(12.0\%)}
                                                                                                                                                                      Candidate #17
                                                                                                                      \chi^2/NDF = 30.91/31, RMSE = 0.02827, R2 = 1.0
                                                                                                                                                                  Best-fit
  10^{2}
                                                                                                                                                                  a5 Up (+1\sigma)
                                                                                                                                                                  a5 Down (-1\sigma)
  10^{1}
                                                                                                                                                                   Data
 10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
                                                                                                                                                                                                 <u>6</u>
     2
                                                                                                                                                                                               Data – Fit
Uncertainty
     0
    -2
1.02
     1
0.98
                                     2 \times 10^{3}
                                                                           3 \times 10^3
                                                                                                      4 \times 10^{3}
                                                                                                                                            6 \times 10^{3}
```

```
1.0*((a2/(a3 + a6*exp(((x0 - 1568.5) * 0.000145275))) + ((x0 - 1568.5) * 0.000145275)))**((a1 + a6*exp(((x0 - 1568.5) * 0.000145275))) + ((x0 - 1568.5) * 0.000145275)))
         ((x0 - 1568.5) * 0.000145275))/tanh(a4 + a5*((x0 - 1568.5) * 0.000145275))))
         \mathtt{a1} = -0.238614^{+0.0001934(0.081\%)}_{-0.0001933(0.081\%)},
                                                          a2 = 4.98e - 05
         a3 = 0.4, a4 = 0.755684^{+0.0103(1.36\%)}_{-0.01045(1.38\%)},
         a5 = 1.53186^{+0.04307(2.81\%)}_{-0.04254(2.78\%)},
                                                                                                                                                                Candidate #17
                                                                                                                  \chi^2/NDF = 30.91/31, RMSE = 0.02827, R2 = 1.0
                                                                                                                                                            Best-fit
  10^{2}
                                                                                                                                                            a6 Up (+1\sigma)
                                                                                                                                                            a6 Down (-1\sigma)
  10^{1}
                                                                                                                                                            Data
  10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
                                                                                                                                                                                         <u>(d</u>
     2
                                                                                                                                                                                       Data – Fit
Uncertainty
     0
    -2
  1.1
     1
  0.9
                                   2 \times 10^{3}
                                                                        3 \times 10^{3}
                                                                                                  4 \times 10^{3}
                                                                                                                                       6 \times 10^{3}
```



```
1.0*((a2/(a3 + a6*exp(((x0 - 1568.5) * 0.000145275)))))**((a1 + ((x0 - 1568.5) * 0.000145275)))))
          0.000145275)/tanh(a4 + a5*((x0 - 1568.5) * 0.000145275))))
          \mathbf{a1} = -0.238614^{+0.0001934(0.081\%)}_{-0.0001933(0.081\%)}, \ \ a2 = 4.98e - 05,
          a3 = 0.4, a4 = 0.756811^{+0.01017(1.34\%)}_{-0.01031(1.36\%)},
          a5 = 1.53311^{+0.043(2.8\%)}_{-0.04247(2.77\%)}, \ a6 = 32.7509^{+4.275(13.1\%)}_{-3.88(11.8\%)}
                                                                                                                                                        Candidate #16
                                                                                                            \chi^2/NDF = 30.92/31, RMSE = 0.02831, R2 = 1.0
                                                                                                                                                     Best-fit
   10^{2}
                                                                                                                                                     al Up (+1\sigma)
                                                                                                                                                     al Down (-1\sigma)
   10^{1}
                                                                                                                                                     Data
   10^{0}
 10^{-1}
 10^{-2}
 10^{-3}
 10^{-4}
 10^{-5}
                                                                                                                                                                                <u>6</u>
      2
                                                                                                                                                                               Data – Fit
Uncertainty
      0
     -2
      1
      1
0.998
                                   2 \times 10^3
                                                                      3 \times 10^{3}
                                                                                              4 \times 10^{3}
                                                                                                                                 6 \times 10^{3}
```

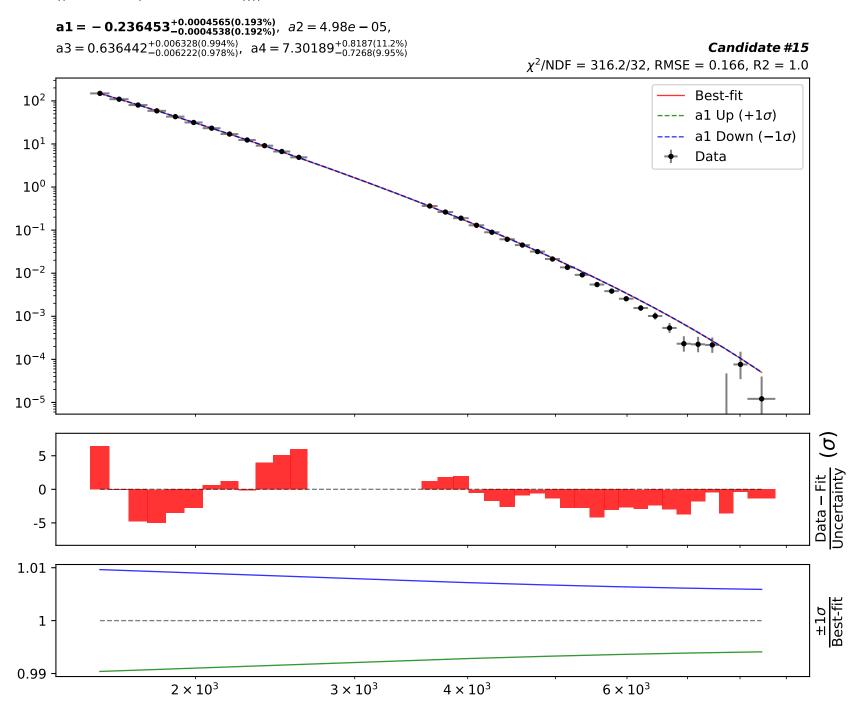
```
1.0*((a2/(a3 + a6*exp(((x0 - 1568.5) * 0.000145275)))))**((a1 + ((x0 - 1568.5) * 0.000145275))))tanh(a4 + a5*((x0 - 1568.5) * 0.000145275))))
          \mathtt{a1} = -0.238614^{+0.0001934(0.081\%)}_{-0.0001933(0.081\%)}\text{, } \mathtt{a2} = 4.98e - 05\text{,}
          a3 = 0.4, a4 = 0.756811^{+0.01017(1.34\%)}_{-0.01031(1.36\%)},
          \mathsf{a5} = 1.53311^{+0.043(2.8\%)}_{-0.04247(2.77\%)}, \ \ \mathsf{a6} = 32.7509^{+4.275(13.1\%)}_{-3.88(11.8\%)}
                                                                                                                                                                                    Candidate #16
                                                                                                                                \chi^2/NDF = 30.92/31, RMSE = 0.02831, R2 = 1.0
                                                                                                                                                                                Best-fit
  10^{2}
                                                                                                                                                                                a4 Up (+1\sigma)
                                                                                                                                                                                a4 Down (-1\sigma)
  10^{1}
                                                                                                                                                                                Data
  10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
                                                                                                                                                                                                                 <u>g</u>
      2
                                                                                                                                                                                                               Data – Fit
Uncertainty
      0
    -2
 1.05
      1
 0.95
                                        2 \times 10^{3}
                                                                                 3 \times 10^3
                                                                                                               4 \times 10^{3}
                                                                                                                                                        6 \times 10^{3}
```

```
1.0*((a2/(a3 + a6*exp(((x0 - 1568.5) * 0.000145275)))))**((a1 + ((x0 - 1568.5) * 0.000145275))))tanh(a4 + a5*((x0 - 1568.5) * 0.000145275))))
          \mathtt{a1} = -0.238614^{+0.0001934(0.081\%)}_{-0.0001933(0.081\%)}, \ \ \mathtt{a2} = 4.98e - 05,
          a3 = 0.4, a4 = 0.756811^{+0.01017(1.34\%)}_{-0.01031(1.36\%)},
          \mathbf{a5} = \mathbf{1.53311}^{+0.043(2.8\%)}_{-0.04247(2.77\%)}, \quad \mathbf{a6} = 32.7509^{+4.275(13.1\%)}_{-3.88(11.8\%)}
                                                                                                                                                                                   Candidate #16
                                                                                                                               \chi^2/NDF = 30.92/31, RMSE = 0.02831, R2 = 1.0
                                                                                                                                                                               Best-fit
  10^{2}
                                                                                                                                                                               a5 Up (+1\sigma)
                                                                                                                                                                               a5 Down (-1\sigma)
  10^{1}
                                                                                                                                                                               Data
  10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
                                                                                                                                                                                                                <u>6</u>
      2
                                                                                                                                                                                                              Data – Fit
Uncertainty
      0
    -2
 1.02
      1
 0.98
                                        2 \times 10^{3}
                                                                                 3 \times 10^3
                                                                                                              4 \times 10^3
                                                                                                                                                       6 \times 10^{3}
```

```
1.0*((a2/(a3 + a6*exp(((x0 - 1568.5) * 0.000145275)))))**((a1 + ((x0 - 1568.5) * 0.000145275))))tanh(a4 + a5*((x0 - 1568.5) * 0.000145275))))
           \mathtt{a1} = -0.238614^{+0.0001934(0.081\%)}_{-0.0001933(0.081\%)}\text{, } \mathtt{a2} = 4.98e - 05\text{,}
           a3 = 0.4, a4 = 0.756811^{+0.01017(1.34\%)}_{-0.01031(1.36\%)},
           \mathsf{a5} = 1.53311^{+0.043(2.8\%)}_{-0.04247(2.77\%)}, \quad \mathsf{a6} = \mathbf{32.7509}^{+4.275(13.1\%)}_{-3.88(11.8\%)}
                                                                                                                                                                                       Candidate #16
                                                                                                                                   \chi^2/NDF = 30.92/31, RMSE = 0.02831, R2 = 1.0
                                                                                                                                                                                   Best-fit
  10^{2}
                                                                                                                                                                                   a6 Up (+1\sigma)
                                                                                                                                                                                   a6 Down (-1\sigma)
  10^{1}
                                                                                                                                                                                   Data
  10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
                                                                                                                                                                                                                     <u>6</u>
      2
                                                                                                                                                                                                                   Data – Fit
Uncertainty
      0
     -2
   1.1
      1
   0.9
                                         2 \times 10^{3}
                                                                                                                                                           6 \times 10^3
                                                                                   3 \times 10^{3}
                                                                                                                 4 \times 10^{3}
```

Candidate function #15

1.0*((a2/(a4 + ((x0 - 1568.5) * 0.000145275))))**((a1 + ((x0 - 1568.5) * 0.000145275)))/tanh(a3 + ((x0 - 1568.5) * 0.000145275))))



```
1.0*((a2/(a4 + ((x0 - 1568.5) * 0.000145275)))**((a1 + ((x0 - 1568.5) * 0.000145275)))/tanh(a3 + ((x0 - 1568.5) * 0.000145275))))
          ((x0 - 1568.5) * 0.000145275))))
          a1 = -0.236453^{+0.0004565(0.193\%)}_{-0.0004538(0.192\%)},
                                                           a2 = 4.98e - 05,
          \mathbf{a3} = \mathbf{0.636442}^{+0.006328(0.994\%)}_{-0.006222(0.978\%)},
                                                          a4 = 7.30189^{+0.8187(11.2\%)}_{-0.7268(9.95\%)}
                                                                                                                                                             Candidate #15
                                                                                                                    \chi^2/NDF = 316.2/32, RMSE = 0.166, R2 = 1.0
                                                                                                                                                          Best-fit
   10^{2}
                                                                                                                                                  ---- a3 Up (+1\sigma)
                                                                                                                                                          a3 Down (-1\sigma)
   10^{1}
                                                                                                                                                          Data
   10<sup>0</sup>
 10^{-1}
 10^{-2}
 10^{-3}
 10^{-4}
 10^{-5}
       5
                                                                                                                                                                                     Data – Fit
Uncertainty
       0
     -5
  1.03
       1
0.975
                                    2 \times 10^3
                                                                        3 \times 10^3
                                                                                                 4 \times 10^{3}
                                                                                                                                     6 \times 10^{3}
```

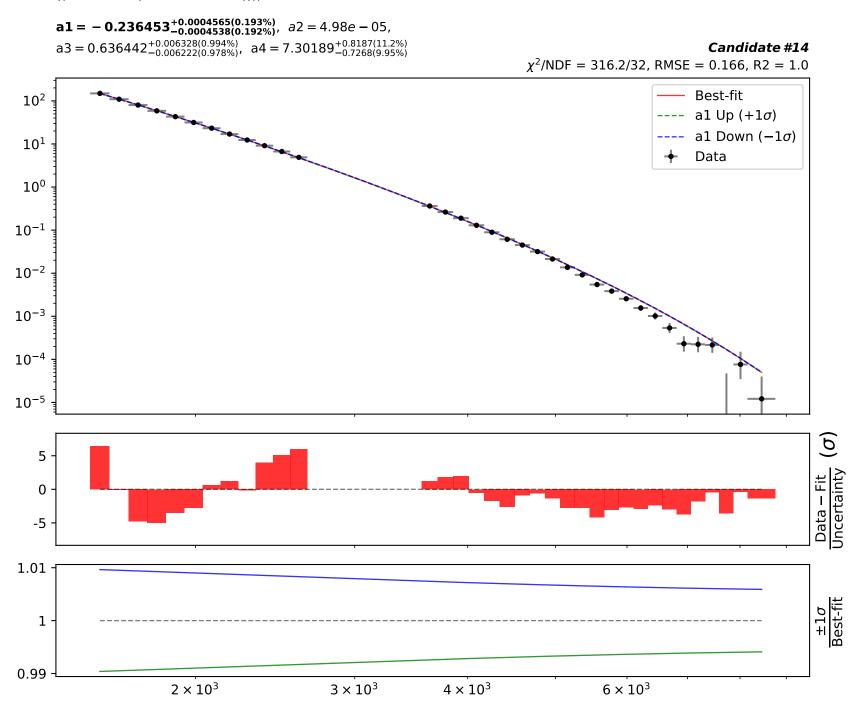
```
SymbolFit
         1.0*((a2/(a4 + ((x0 - 1568.5) * 0.000145275)))**((a1 + ((x0 - 1568.5) * 0.000145275)))/tanh(a3 + ((x0 - 1568.5) * 0.000145275))))
         ((x0 - 1568.5) * 0.000145275))))
         a1 = -0.236453^{+0.0004565(0.193\%)}_{-0.0004538(0.192\%)},
                                                         a2 = 4.98e - 05
         a3 = 0.636442^{+0.006328(0.994\%)}_{-0.006222(0.978\%)},
                                                    \mathbf{a4} = \mathbf{7.30189}^{+0.8187(11.2\%)}_{-0.7268(9.95\%)}
                                                                                                                                                          Candidate #15
                                                                                                                 \chi^2/NDF = 316.2/32, RMSE = 0.166, R2 = 1.0
                                                                                                                                                      Best-fit
 10<sup>2</sup>
                                                                                                                                               ---- a4 Up (+1\sigma)
                                                                                                                                                      a4 Down (-1\sigma)
 10^{1}
                                                                                                                                                      Data
 10<sup>0</sup>
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
                                                                                                                                                                                  <u>(d</u>
     5
                                                                                                                                                                                 Data – Fit
Uncertainty
     0
    -5
1.05
     1
0.95
```

 6×10^3

 2×10^{3}

Candidate function #14

1.0*((a2/(a4 + ((x0 - 1568.5) * 0.000145275))))**((a1 + ((x0 - 1568.5) * 0.000145275)))/tanh(a3 + ((x0 - 1568.5) * 0.000145275))))



```
1.0*((a2/(a4 + ((x0 - 1568.5) * 0.000145275)))**((a1 + ((x0 - 1568.5) * 0.000145275)))/tanh(a3 + ((x0 - 1568.5) * 0.000145275))))
          ((x0 - 1568.5) * 0.000145275))))
          a1 = -0.236453^{+0.0004565(0.193\%)}_{-0.0004538(0.192\%)},
                                                          a2 = 4.98e - 05,
          \mathbf{a3} = \mathbf{0.636442}^{+0.006328(0.994\%)}_{-0.006222(0.978\%)},
                                                         a4 = 7.30189^{+0.8187(11.2\%)}_{-0.7268(9.95\%)}
                                                                                                                                                          Candidate #14
                                                                                                                 \chi^2/NDF = 316.2/32, RMSE = 0.166, R2 = 1.0
                                                                                                                                                       Best-fit
   10^{2}
                                                                                                                                               ---- a3 Up (+1\sigma)
                                                                                                                                                       a3 Down (-1\sigma)
   10^{1}
                                                                                                                                                       Data
   10<sup>0</sup>
 10^{-1}
 10^{-2}
 10^{-3}
 10^{-4}
 10^{-5}
      5
                                                                                                                                                                                 Data – Fit
Uncertainty
      0
     -5
  1.03
      1
0.975
```

 4×10^{3}

 6×10^{3}

 2×10^3

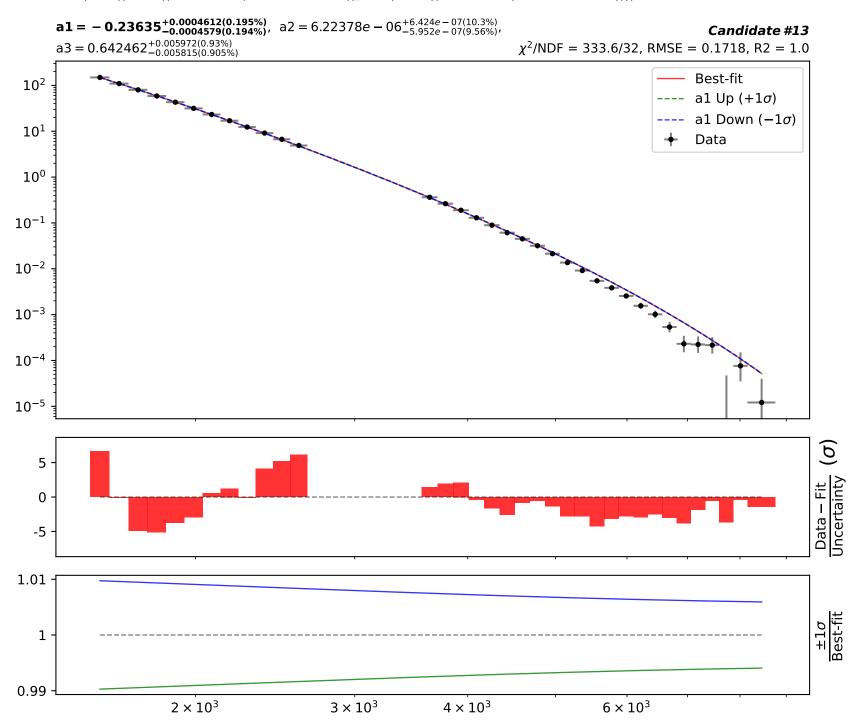
```
SymbolFit
         1.0*((a2/(a4 + ((x0 - 1568.5) * 0.000145275)))**((a1 + ((x0 - 1568.5) * 0.000145275)))/tanh(a3 + ((x0 - 1568.5) * 0.000145275))))
         ((x0 - 1568.5) * 0.000145275))))
         a1 = -0.236453^{+0.0004565(0.193\%)}_{-0.0004538(0.192\%)},
                                                         a2 = 4.98e - 05
         a3 = 0.636442^{+0.006328(0.994\%)}_{-0.006222(0.978\%)},
                                                    \mathbf{a4} = \mathbf{7.30189}^{+0.8187(11.2\%)}_{-0.7268(9.95\%)}
                                                                                                                                                          Candidate #14
                                                                                                                 \chi^2/NDF = 316.2/32, RMSE = 0.166, R2 = 1.0
                                                                                                                                                      Best-fit
 10<sup>2</sup>
                                                                                                                                               ---- a4 Up (+1\sigma)
                                                                                                                                                      a4 Down (-1\sigma)
 10^{1}
                                                                                                                                                      Data
 10<sup>0</sup>
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
                                                                                                                                                                                  <u>(d</u>
     5
                                                                                                                                                                                 Data – Fit
Uncertainty
     0
    -5
1.05
     1
0.95
```

 6×10^3

 2×10^{3}



1.0*(a2**((a1 + ((x0 - 1568.5) * 0.000145275)))/tanh(a3 + ((x0 - 1568.5) * 0.000145275))))



SymbolFit 1.0*(a2**((a1 + ((x0 - 1568.5) * 0.000145275)))/tanh(a3 + ((x0 - 1568.5) * 0.000145275)))) $a2 = 6.22378e - 06^{+6.424e - 07(10.3\%)}_{-5.952e - 07(9.56\%)},$ $a1 = -0.23635^{+0.0004612(0.195\%)}_{-0.0004579(0.194\%)},$ Candidate #13 $a3 = 0.642462^{+0.005972(0.93\%)}_{-0.005815(0.905\%)}$ $\chi^2/NDF = 333.6/32$, RMSE = 0.1718, R2 = 1.0 Best-fit 10^{2} a2 Up $(+1\sigma)$ a2 Down (-1σ) 10^{1} Data 10⁰ 10^{-1} 10^{-2} 10^{-3} 10^{-4} 10^{-5} $\widehat{\mathcal{Q}}$ 5 Data – Fit Uncertainty 0 -5 1.05 1 0.95

 4×10^3

 6×10^3

 2×10^3

SymbolFit 1.0*(a2**((a1 + ((x0 - 1568.5) * 0.000145275)))/tanh(a3 + ((x0 - 1568.5) * 0.000145275)))) $a2 = 6.22378e - 06^{+6.424e - 07(10.3\%)}_{-5.952e - 07(9.56\%)},$ $\mathrm{a1} = -0.23635^{+0.0004612(0.195\%)}_{-0.0004579(0.194\%)}\text{,}$ Candidate #13 $a3 = 0.642462^{+0.005972(0.93\%)}_{-0.005815(0.905\%)}$ $\chi^2/NDF = 333.6/32$, RMSE = 0.1718, R2 = 1.0 Best-fit 10² a3 Up $(+1\sigma)$ a3 Down (-1σ) 10^{1} Data 10^{0} 10^{-1} 10^{-2} 10^{-3} 10^{-4} 10^{-5} $\widehat{\mathcal{Q}}$ 5 Data – Fit Uncertainty 0 -5 1.02 1 0.98

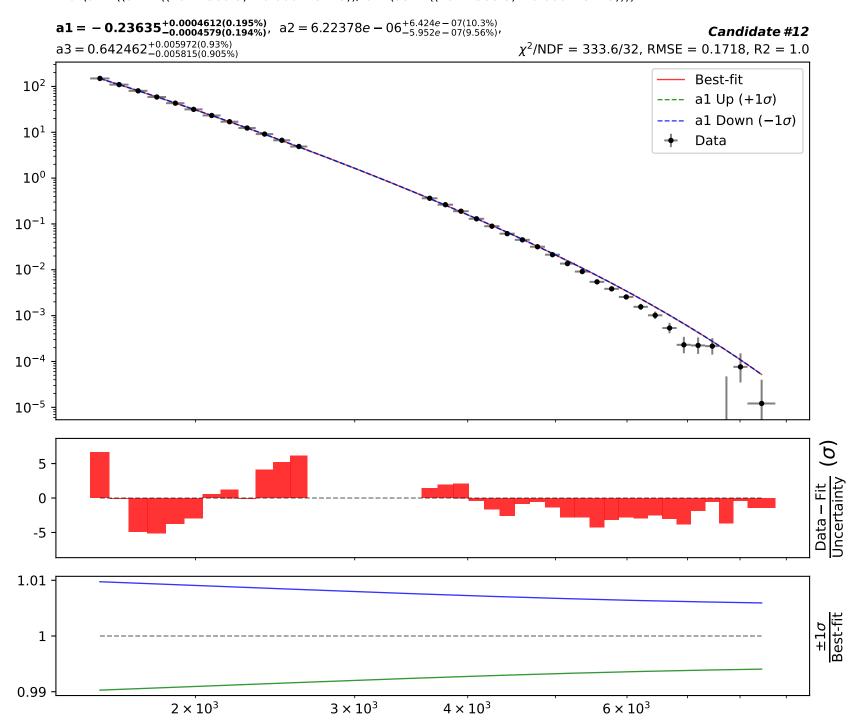
 4×10^3

 6×10^3

 2×10^3

Candidate function #12

1.0*(a2**((a1 + ((x0 - 1568.5) * 0.000145275)))/tanh(a3 + ((x0 - 1568.5) * 0.000145275))))



SymbolFit 1.0*(a2**((a1 + ((x0 - 1568.5) * 0.000145275)))/tanh(a3 + ((x0 - 1568.5) * 0.000145275)))) $a2 = 6.22378e - 06^{+6.424e - 07(10.3\%)}_{-5.952e - 07(9.56\%)},$ $a1 = -0.23635^{+0.0004612(0.195\%)}_{-0.0004579(0.194\%)},$ Candidate #12 $a3 = 0.642462^{+0.005972(0.93\%)}_{-0.005815(0.905\%)}$ $\chi^2/NDF = 333.6/32$, RMSE = 0.1718, R2 = 1.0 Best-fit 10^{2} a2 Up $(+1\sigma)$ a2 Down (-1σ) 10^{1} Data 10⁰ 10^{-1} 10^{-2} 10^{-3} 10^{-4} 10^{-5} $\widehat{\mathcal{Q}}$ 5 Data – Fit Uncertainty 0 -5 1.05 1 0.95

 4×10^3

 6×10^3

 2×10^3

SymbolFit 1.0*(a2**((a1 + ((x0 - 1568.5) * 0.000145275)))/tanh(a3 + ((x0 - 1568.5) * 0.000145275)))) $a2 = 6.22378e - 06^{+6.424e - 07(10.3\%)}_{-5.952e - 07(9.56\%)},$ $\mathrm{a1} = -0.23635^{+0.0004612(0.195\%)}_{-0.0004579(0.194\%)}\text{,}$ Candidate #12 $a3 = 0.642462^{+0.005972(0.93\%)}_{-0.005815(0.905\%)}$ $\chi^2/NDF = 333.6/32$, RMSE = 0.1718, R2 = 1.0 Best-fit 10² a3 Up $(+1\sigma)$ a3 Down (-1σ) 10^{1} Data 10^{0} 10^{-1} 10^{-2} 10^{-3} 10^{-4} 10^{-5} $\widehat{\mathcal{Q}}$ 5 Data – Fit Uncertainty 0 -5 1.02 1 0.98

 4×10^3

 6×10^3

 2×10^3



1.0*(a2**(a1 + a4*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + tanh(((x0 - 1568.5) * 0.000145275))))) $\mathbf{a1} = -\mathbf{0.725443}^{+0.0245(3.38\%)}_{-0.00245(3.38\%)}, \quad a2 = 0.00100735^{+0.000234(23.2\%)}_{-0.000234(23.2\%)},$



```
1.0*(a2**(a1 + a4*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + tanh)((x0 - 1568.5) * 0.000145275))
         - 1568.5) * 0.000145275)))))
         a1 = -0.725443^{+0.0245(3.38\%)}_{-0.0245(3.38\%)},
                                                     a2 = 0.00100735^{+0.000234(23.2\%)}_{-0.000234(23.2\%)},
         a3 = 0.384686^{+0.00957(2.49\%)}_{-0.00957(2.49\%)},
                                                   a4 = 1.42649^{+0.0772(5.41\%)}_{-0.0772(5.41\%)}
                                                                                                                                                             Candidate #11
                                                                                                                \chi^2/NDF = 30.14/31, RMSE = 0.02375, R2 = 1.0
                                                                                                                                                          Best-fit
  10<sup>2</sup>
                                                                                                                                                  ---- a2 Up (+1\sigma)
                                                                                                                                                          a2 Down (-1\sigma)
  10^{1}
                                                                                                                                                          Data
  10<sup>0</sup>
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
                                                                                                                                                                                       <u>6</u>
     2
                                                                                                                                                                                     Data – Fit
Uncertainty
     0
    -2
1.25
     1
0.75
                                   2 \times 10^{3}
                                                                                                                                     6 \times 10^3
                                                                       3 \times 10^{3}
                                                                                                 4 \times 10^3
```

```
1.0*(a2**(a1 + a4*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + tanh)((x0 - 1568.5) * 0.000145275))
         - 1568.5) * 0.000145275)))))
         a1 = -0.725443^{+0.0245(3.38\%)}_{-0.0245(3.38\%)},
                                                     a2 = 0.00100735^{+0.000234(23.2\%)}_{-0.000234(23.2\%)},
         \mathbf{a3} = \mathbf{0.384686}^{+0.00957(2.49\%)}_{-0.00957(2.49\%)},
                                                      a4 = 1.42649^{+0.0772(5.41\%)}_{-0.0772(5.41\%)}
                                                                                                                                                            Candidate #11
                                                                                                               \chi^2/NDF = 30.14/31, RMSE = 0.02375, R2 = 1.0
                                                                                                                                                         Best-fit
  10^{2}
                                                                                                                                                 ---- a3 Up (+1\sigma)
                                                                                                                                                         a3 Down (-1\sigma)
  10^{1}
                                                                                                                                                         Data
 10<sup>0</sup>
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
                                                                                                                                                                                     <u>a</u>
     2
                                                                                                                                                                                    Data – Fit
Uncertainty
     0
    -2
1.05
     1
0.95
```

 6×10^{3}

 2×10^{3}

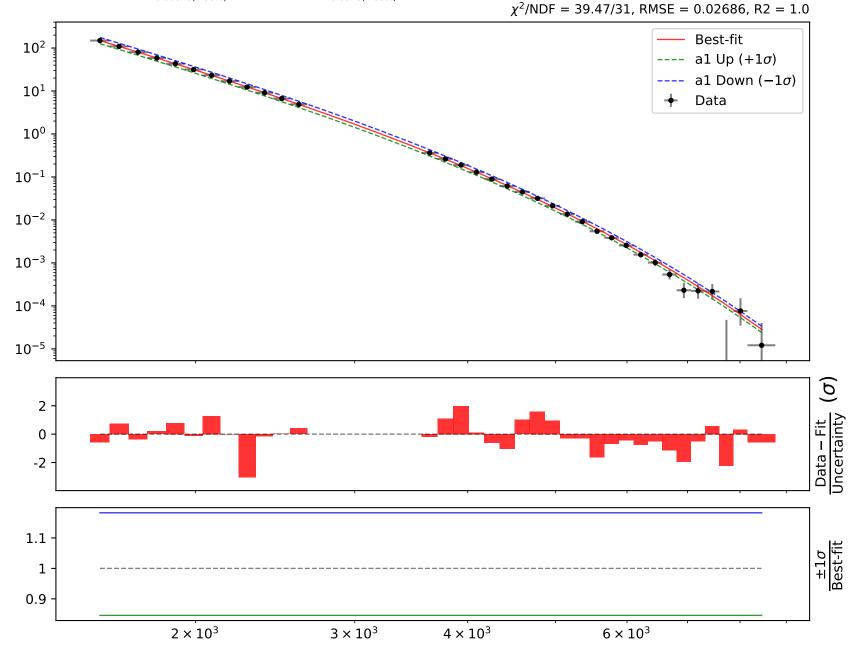
```
1.0*(a2**(a1 + a4*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + tanh)((x0 - 1568.5) * 0.000145275))
         - 1568.5) * 0.000145275)))))
         a1 = -0.725443^{+0.0245(3.38\%)}_{-0.0245(3.38\%)},
                                                     a2 = 0.00100735^{+0.000234(23.2\%)}_{-0.000234(23.2\%)},
         a3 = 0.384686^{+0.00957(2.49\%)}_{-0.00957(2.49\%)},
                                                   \mathbf{a4} = \mathbf{1.42649}^{+0.0772(5.41\%)}_{-0.0772(5.41\%)}
                                                                                                                                                               Candidate #11
                                                                                                                 \chi^2/NDF = 30.14/31, RMSE = 0.02375, R2 = 1.0
                                                                                                                                                            Best-fit
  10^{2}
                                                                                                                                                    ---- a4 Up (+1\sigma)
                                                                                                                                                            a4 Down (-1\sigma)
  10^{1}
                                                                                                                                                            Data
  10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
                                                                                                                                                                                         <u>g</u>
     2
                                                                                                                                                                                       Data – Fit
Uncertainty
     0
    -2
  1.5
     1
                                   2 \times 10^{3}
                                                                                                                                       6 \times 10^3
                                                                        3 \times 10^{3}
                                                                                                  4 \times 10^3
```



1.0*(a2**(a1 + a4*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + ((x0 - 1568.5) * 0.000145275))))

 $\begin{array}{l} \textbf{a1} = -\textbf{0.889641}^{+0.0298(3.35\%)}_{-0.0298(3.35\%)}, \quad \textbf{a2} = 0.00359819^{+0.000676(18.8\%)}_{-0.000676(18.8\%)}, \\ \textbf{a3} = 0.339232^{+0.00876(2.58\%)}_{-0.00876(2.58\%)}, \quad \textbf{a4} = 2.00351^{+0.0978(4.88\%)}_{-0.0978(4.88\%)} \\ \end{array}$

Candidate #10



```
1.0*(a2**(a1 + a4*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + ((x0 - 1568.5) * 0.000145275))/(a3 + ((x0 - 1568.5) * 0.0001425275))/(a3 + ((x0 - 1568.5) * 0.0001425275))/(
                                     1568.5) * 0.000145275))))
                                     a1 = -0.889641^{+0.0298(3.35\%)}_{-0.0298(3.35\%)},
                                                                                                                                                                                                               a2 = 0.00359819^{+0.000676(18.8\%)}_{-0.000676(18.8\%)},
                                     a3 = 0.339232^{+0.00876(2.58\%)}_{-0.00876(2.58\%)},
                                                                                                                                                                                                      a4 = 2.00351^{+0.0978(4.88\%)}_{-0.0978(4.88\%)}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Candidate #10
                                                                                                                                                                                                                                                                                                                                                                                                                                                      \chi^2/NDF = 39.47/31, RMSE = 0.02686, R2 = 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best-fit
       10<sup>2</sup>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ---- a2 Up (+1\sigma)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a2 Down (-1\sigma)
       10^{1}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Data
       10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
                      2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Data – Fit
Uncertainty
                      0
                -2
          1.4
          1.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \pm 1\sigma
Best-fit
                      1
          8.0
                                                                                                                                         2 \times 10^{3}
                                                                                                                                                                                                                                                                                      3 \times 10^3
                                                                                                                                                                                                                                                                                                                                                                                          4 \times 10^3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6 \times 10^{3}
```

```
1.0*(a2**(a1 + a4*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + ((x0 - 1568.5) * 0.000145275))/(a3 + ((x0 - 1568.5) * 0.0001425275))/(a3 + ((x0 - 1568.5) * 0.0001425275))/(
                                       1568.5) * 0.000145275))))
                                       a1 = -0.889641^{+0.0298(3.35\%)}_{-0.0298(3.35\%)},
                                                                                                                                                                                                                           a2 = 0.00359819^{+0.000676(18.8\%)}_{-0.000676(18.8\%)},
                                       \mathbf{a3} = \mathbf{0.339232}^{+0.00876(2.58\%)}_{-0.00876(2.58\%)},
                                                                                                                                                                                                                               a4 = 2.00351^{+0.0978(4.88\%)}_{-0.0978(4.88\%)}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Candidate #10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \chi^2/NDF = 39.47/31, RMSE = 0.02686, R2 = 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best-fit
        10^{2}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ---- a3 Up (+1\sigma)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a3 Down (-1\sigma)
        10^{1}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Data
       10<sup>0</sup>
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10<sup>-5</sup>
                       2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Data – Fit
Uncertainty
                      0
                 -2
   1.04
   1.02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \pm 1\sigma
Best-fit
                       1
  0.98
```

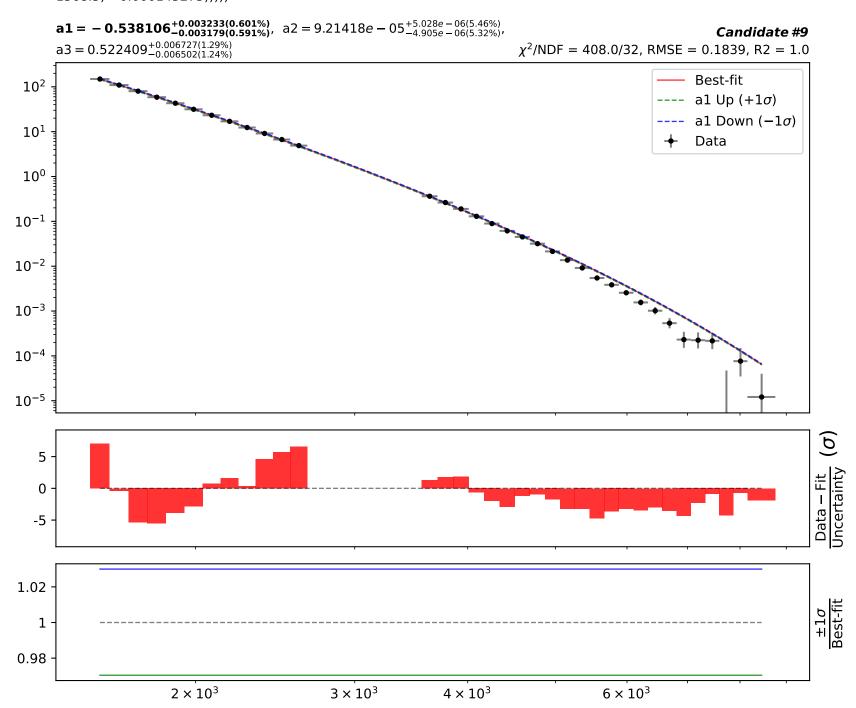
 6×10^3

 2×10^{3}

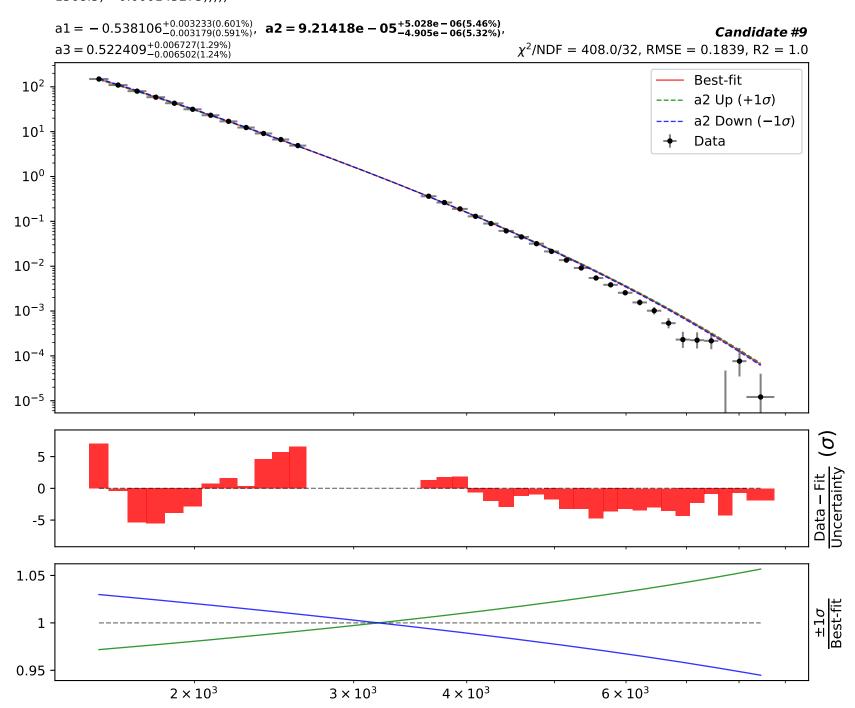
```
1.0*(a2**(a1 + a4*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + ((x0 - 1568.5) * 0.000145275))/(a3 + ((x0 - 1568.5) * 0.0001425275))/(a3 + ((x0 - 1568.5) * 0.0001425275))/(
                                     1568.5) * 0.000145275))))
                                     a1 = -0.889641^{+0.0298(3.35\%)}_{-0.0298(3.35\%)},
                                                                                                                                                                                                                    a2 = 0.00359819^{+0.000676(18.8\%)}_{-0.000676(18.8\%)},
                                     a3 = 0.339232^{+0.00876(2.58\%)}_{-0.00876(2.58\%)},
                                                                                                                                                                                                           \mathbf{a4} = \mathbf{2.00351}^{+0.0978(4.88\%)}_{-0.0978(4.88\%)}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Candidate #10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                \chi^2/NDF = 39.47/31, RMSE = 0.02686, R2 = 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best-fit
        10^{2}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ---- a4 Up (+1\sigma)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a4 Down (-1\sigma)
        10^{1}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Data
        10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>g</u>
                      2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Data – Fit
Uncertainty
                      0
                  -2
          1.5
                      1
                                                                                                                                            2 \times 10^{3}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 \times 10^3
                                                                                                                                                                                                                                                                                            3 \times 10^3
                                                                                                                                                                                                                                                                                                                                                                                                   4 \times 10^3
```



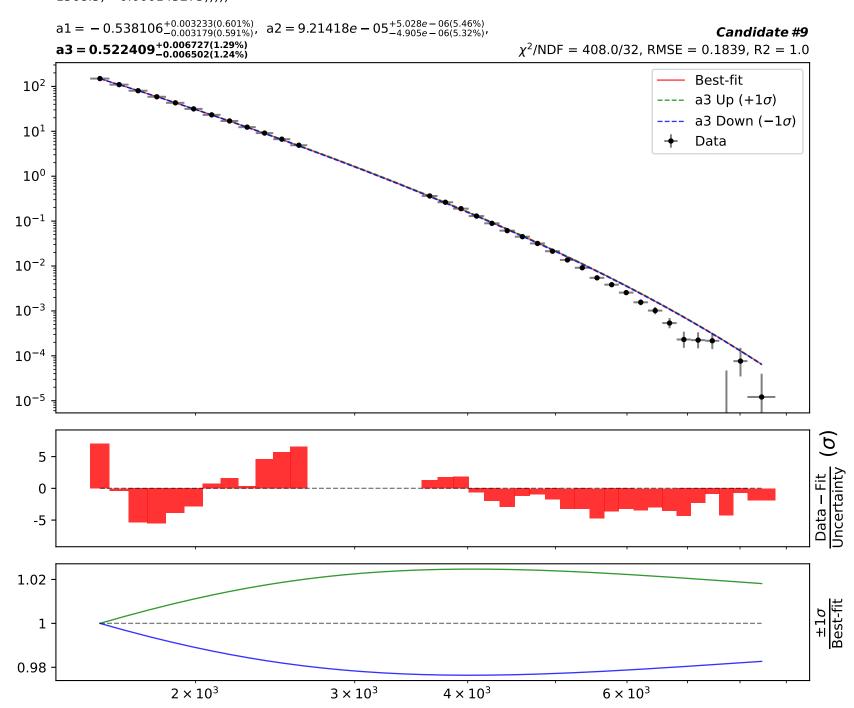
1.0*(a2**(a1 + ((x0 - 1568.5) * 0.000145275) + tanh(((x0 - 1568.5) * 0.000145275))/(a3 + ((x0 - 1568.5) * 0.000145275)))))



1.0*(a2**(a1 + ((x0 - 1568.5) * 0.000145275) + tanh(((x0 - 1568.5) * 0.000145275))/(a3 + ((x0 - 1568.5) * 0.000145275)))))

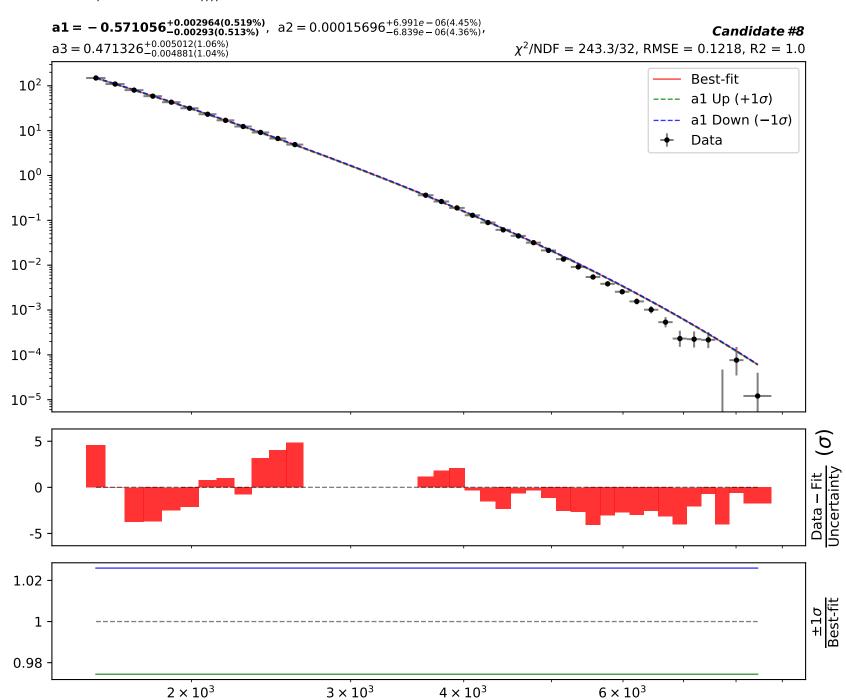


1.0*(a2**(a1 + ((x0 - 1568.5) * 0.000145275) + tanh(((x0 - 1568.5) * 0.000145275))/(a3 + ((x0 - 1568.5) * 0.000145275)))))

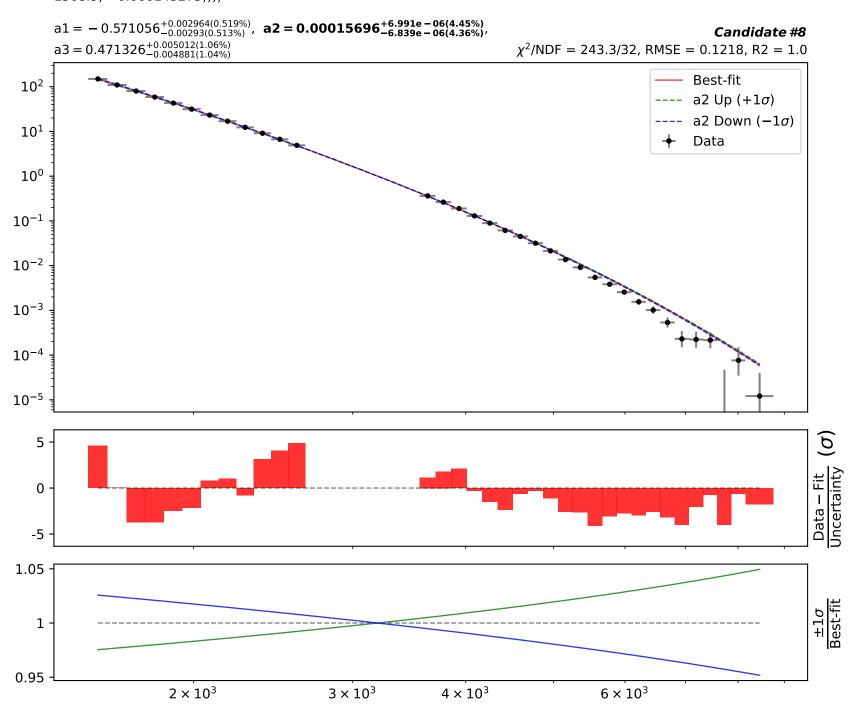




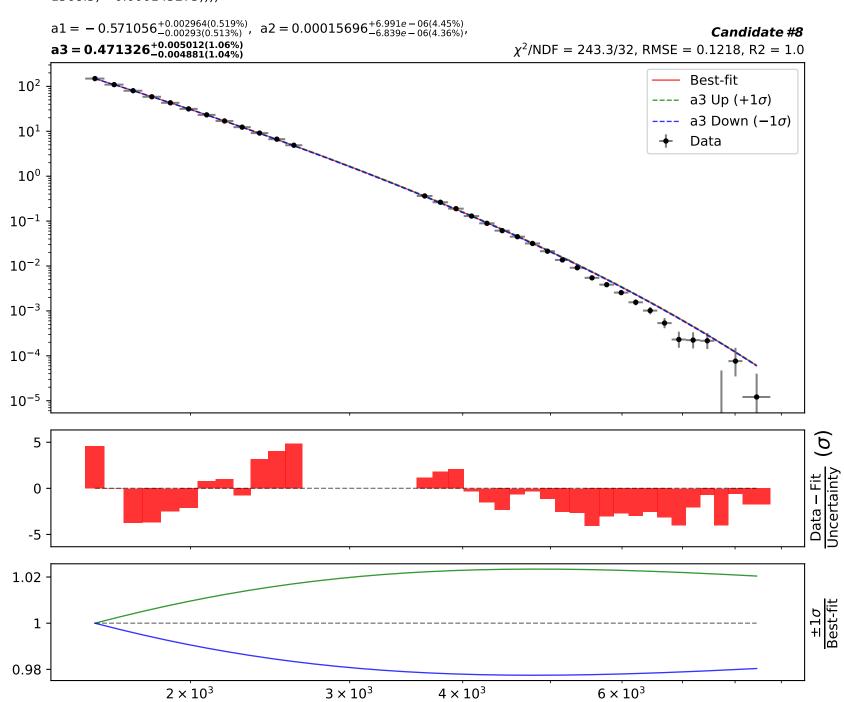
1.0*(a2**(a1 + ((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + ((x0 - 1568.5) * 0.000145275))))



1.0*(a2**(a1 + ((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + ((x0 - 1568.5) * 0.000145275))))

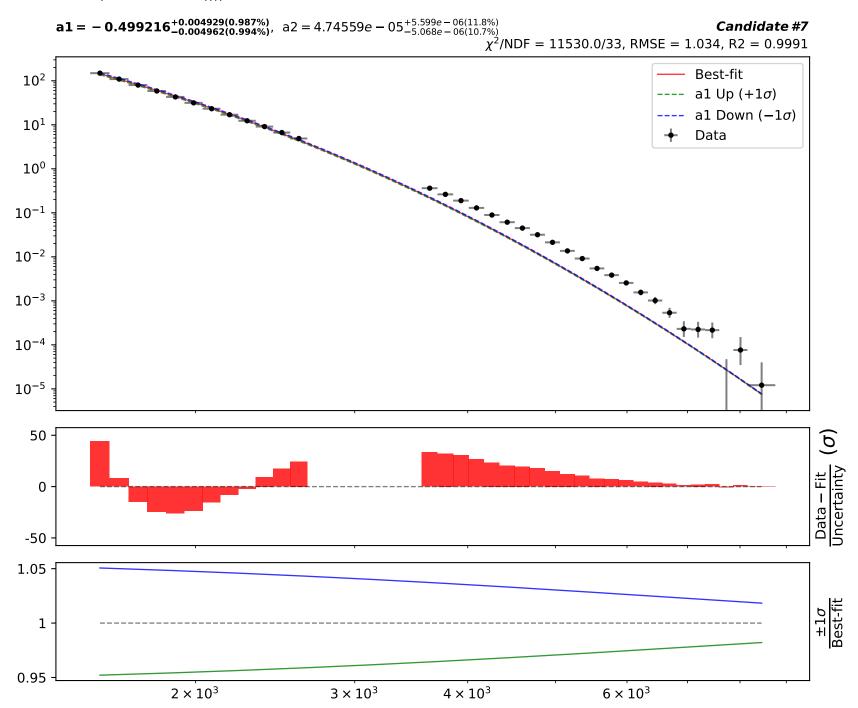


1.0*(a2**(a1 + ((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + ((x0 - 1568.5) * 0.000145275))))

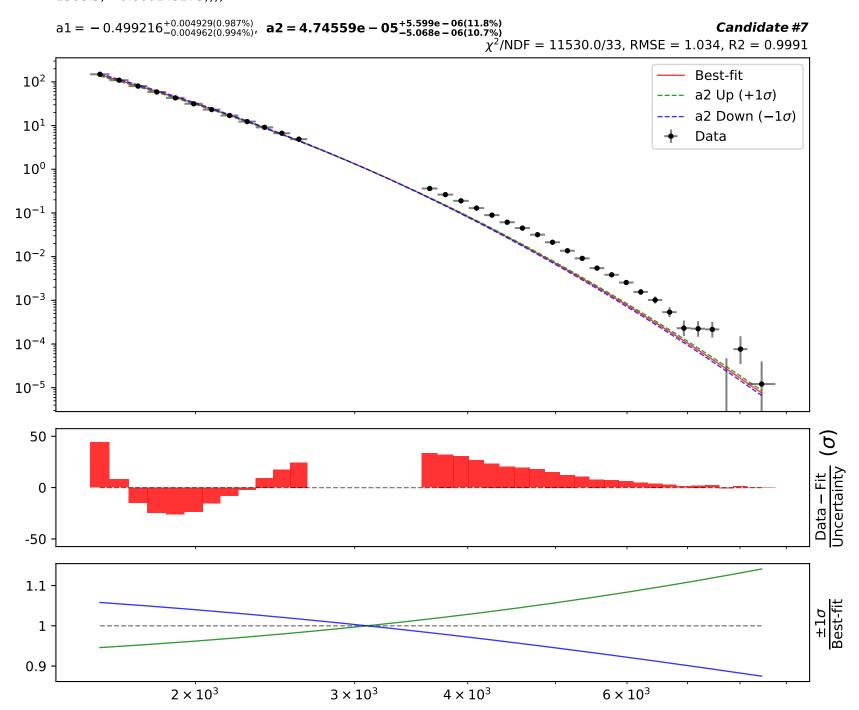




1.0*(a2**(((x0 - 1568.5) * 0.000145275) + (a1 + ((x0 - 1568.5) * 0.000145275))*exp(-((x0 - 1568.5) * 0.000145275))))



1.0*(a2**(((x0 - 1568.5) * 0.000145275)) + (a1 + ((x0 - 1568.5) * 0.000145275))*exp(-((x0 - 1568.5) * 0.000145275))))





1.0*(a2**(a1 + a3*((x0 - 1568.5) * 0.000145275)))a1 = -0.5, $a2 = 4.96357e - 05^{+1.754e - 06(3.53\%)}_{-1.674e - 06(3.37\%)}$, Candidate #6 $a3 = 2.38701^{+0.03206(1.34\%)}_{-0.03151(1.32\%)}$ $\chi^2/NDF = 28850.0/33$, RMSE = 1.466, R2 = 0.9981 Best-fit -- a2 Up $(+1\sigma)$ 10^{1} a2 Down (-1σ) Data 10^{-1} 10⁻³ 10^{-5} 10^{-7} $\widehat{\mathcal{Q}}$ 50 Data – Fit Uncertainty 0 -50 1.05 $\pm 1\sigma$ Best-fit 1 0.95 2×10^3 6×10^3 3×10^{3} 4×10^3

1.0*(a2**(a1 + a3*((x0 - 1568.5) * 0.000145275)))a1 = -0.5, $a2 = 4.96357e - 05^{+1.754e - 06(3.53\%)}_{-1.674e - 06(3.37\%)}$, Candidate #6 $\mathbf{a3} = \mathbf{2.38701}^{+0.03206(1.34\%)}_{-0.03151(1.32\%)}$ $\chi^2/NDF = 28850.0/33$, RMSE = 1.466, R2 = 0.9981 Best-fit -- a3 Up $(+1\sigma)$ 10^{1} a3 Down (-1σ) Data 10^{-1} 10^{-3} 10^{-5} 10^{-7} $\widehat{\mathcal{Q}}$ 50 Data – Fit Uncertainty 0 -50 1.2 $\pm 1\sigma$ Best-fit 1 8.0 6×10^3 2×10^3 3×10^{3} 4×10^3



SymbolFit 1.0*(a2**(a1 + a3*tanh(((x0 - 1568.5) * 0.000145275))))a1 = -0.504, $a2 = 5.36341e - 05^{+1.743e - 06(3.25\%)}_{-1.67e - 06(3.11\%)}$, Candidate #5 $a3 = 2.41171^{+0.02991(1.24\%)}_{-0.02941(1.22\%)}$ $\chi^2/NDF = 24920.0/33$, RMSE = 1.442, R2 = 0.9982 Best-fit 10^{2} a2 Up $(+1\sigma)$ a2 Down (-1σ) 10^{1} Data 10^{0} 10^{-1} 10^{-2} 10^{-3} 10^{-4} 10⁻⁵ 10^{-6} ð 50 Data – Fit Uncertainty 0 -50

1.03

0.975

1

 2×10^3

 3×10^3

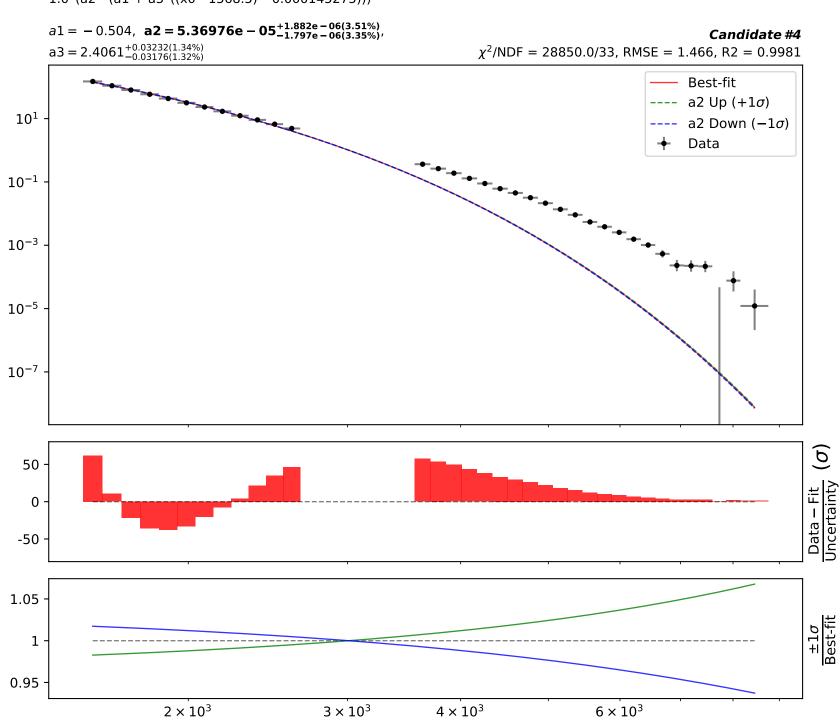
 4×10^{3}

 6×10^3

1.0*(a2**(a1 + a3*tanh(((x0 - 1568.5) * 0.000145275))))a1 = -0.504, $a2 = 5.36341e - 05^{+1.743e - 06(3.25\%)}_{-1.67e - 06(3.11\%)}$, Candidate #5 $\mathbf{a3} = \mathbf{2.41171}^{+0.02991(1.24\%)}_{-0.02941(1.22\%)}$ $\chi^2/NDF = 24920.0/33$, RMSE = 1.442, R2 = 0.9982 Best-fit 10^{2} a3 Up $(+1\sigma)$ a3 Down (-1σ) 10^{1} Data 10^{0} 10^{-1} 10^{-2} 10^{-3} 10^{-4} 10^{-5} 10^{-6} $\widehat{\mathcal{Q}}$ 50 Data – Fit Uncertainty 0 -50 1.2 1 8.0 2×10^3 3×10^3 4×10^3 6×10^3

Candidate function #4

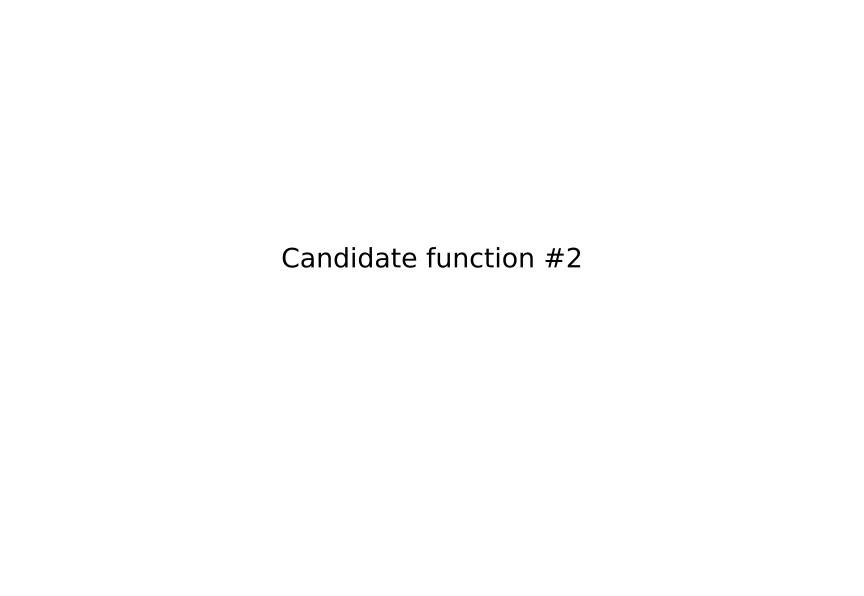
1.0*(a2**(a1 + a3*((x0 - 1568.5) * 0.000145275)))



1.0*(a2**(a1 + a3*((x0 - 1568.5) * 0.000145275)))a1 = -0.504, $a2 = 5.36976e - 05^{+1.882e - 06(3.51\%)}_{-1.797e - 06(3.35\%)}$, Candidate #4 $\mathbf{a3} = \mathbf{2.4061}^{+0.03232(1.34\%)}_{-0.03176(1.32\%)}$ $\chi^2/NDF = 28850.0/33$, RMSE = 1.466, R2 = 0.9981 Best-fit -- a3 Up $(+1\sigma)$ 10^{1} a3 Down (-1σ) Data 10^{-1} 10^{-3} 10^{-5} 10^{-7} $\widehat{\mathcal{Q}}$ 50 Data – Fit Uncertainty 0 -50 1.2 $\pm 1\sigma$ Best-fit 1 8.0 2×10^3 6×10^3 3×10^{3} 4×10^3



1.0*(a2**(a1 + exp(((x0 - 1568.5) * 0.000145275))))a1 = -1.42, $a2 = 4.85834e - 05^{+1.55e - 05(31.9\%)}_{-1.55e - 05(31.9\%)}$ Candidate #3 χ^2 /NDF = 2237000.0/34, RMSE = 17.95, R2 = 0.715 Best-fit 10^{2} ---- a2 Up $(+1\sigma)$ a2 Down (-1σ) 10¹ Data 10⁰ 10^{-1} 10^{-2} 10^{-3} 10^{-4} 10^{-5} 10^{-6} 500 Data – Fit Uncertainty 0 -500 1.25 -1 0.75 6×10^3 2×10^3 3×10^{3} 4×10^3



1.0*(a1**((x0 - 1568.5) * 0.000145275)*a2) a1 = 9.06e - 06, $a2 = 54.3973^{+6.77(12.4\%)}_{-6.77(12.4\%)}$ Candidate #2 $\chi^2/NDF = 2191000.0/34$, RMSE = 20.76, R2 = 0.6189 Best-fit 10² ---- a2 Up $(+1\sigma)$ a2 Down (-1σ) 10^{1} Data 10⁰ 10^{-1} 10^{-2} 10^{-3} 10^{-4} 10^{-5} 1e+03 \widehat{g} Data – Fit Uncertainty 0 -1e+03 1.1 1 0.9 2×10^3 3×10^3 4×10^3 6×10^3



