

```
1.0*((a3/(a6 + 2*((x0 - 1568.5) * 0.000145275)*(a1 + ((x0 - 1568.5) * 0.000145275))))**(a2 + ((x0 - 1568.5) * 0.000145275))))
        a5*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a4 + ((x0 - 1568.5) *
        0.000145275))))
        a1 = -0.544, a2 = -0.75775^{+0.0257(3.39\%)}_{-0.0257(3.39\%)},
        a3 = 0.00140715^{+0.000314(22.3\%)}_{-0.000314(22.3\%)}, \quad a4 = 0.410494^{+0.00922(2.25\%)}_{-0.00922(2.25\%)},
        a5 = 1.63508^{+0.0847(5.18\%)}_{-0.0847(5.18\%)}, \ a6 = 1.04
                                                                                                                                                 Candidate #18
                                                                                                       \chi^2/NDF = 35.22/31, RMSE = 0.03265, R2 = 1.0
                                                                                                                                             Best-fit
 10^{2}
                                                                                                                                      ---- 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
  1.2
     1
```

 4×10^{3}

 6×10^3

 2×10^{3}

```
1.0*((a3/(a6 + 2*((x0 - 1568.5) * 0.000145275)*(a1 + ((x0 - 1568.5) * 0.000145275))))**(a2 + ((x0 - 1568.5) * 0.000145275))))
         a5*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a4 + ((x0 - 1568.5) *
         0.000145275))))
         a1 = -0.544, a2 = -0.75775^{+0.0257(3.39\%)}_{-0.0257(3.39\%)},
         \mathbf{a3} = \mathbf{0.00140715}^{+0.000314(22.3\%)}_{-0.000314(22.3\%)}, \quad \mathbf{a4} = 0.410494^{+0.00922(2.25\%)}_{-0.00922(2.25\%)},
         a5 = 1.63508^{+0.0847(5.18\%)}_{-0.0847(5.18\%)}, a6 = 1.04
                                                                                                                                                     Candidate #18
                                                                                                          \chi^2/NDF = 35.22/31, RMSE = 0.03265, R2 = 1.0
                                                                                                                                                  Best-fit
 10^{2}
                                                                                                                                          ---- a3 Up (+1\sigma)
                                                                                                                                                 a3 Down (-1\sigma)
 10^{1}
                                                                                                                                                  Data
 10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
     2
                                                                                                                                                                           Data – Fit
Uncertainty
     0
    -2
1.25
     1
0.75
```

 6×10^3

 2×10^{3}

```
1.0*((a3/(a6 + 2*((x0 - 1568.5) * 0.000145275)*(a1 + ((x0 - 1568.5) * 0.000145275))))**(a2 + ((x0 - 1568.5) * 0.000145275))))
          a5*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a4 + ((x0 - 1568.5) * 0.000145275))
          0.000145275))))
          a1 = -0.544, a2 = -0.75775^{+0.0257(3.39\%)}_{-0.0257(3.39\%)},
          a3 = 0.00140715^{+0.000314(22.3\%)}_{-0.000314(22.3\%)}, \quad \textbf{a4} = \textbf{0.410494}^{+\textbf{0.00922(2.25\%)}}_{-\textbf{0.00922(2.25\%)}},
          a5 = 1.63508^{+0.0847(5.18\%)}_{-0.0847(5.18\%)}, \ a6 = 1.04
                                                                                                                                                               Candidate #18
                                                                                                                 \chi^2/NDF = 35.22/31, RMSE = 0.03265, 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}
       2
                                                                                                                                                                                      Data – Fit
Uncertainty
       0
     -2
  1.03
       1
0.975
                                     2 \times 10^3
                                                                         3 \times 10^{3}
                                                                                                  4 \times 10^{3}
                                                                                                                                       6 \times 10^{3}
```

```
1.0*((a3/(a6 + 2*((x0 - 1568.5) * 0.000145275)*(a1 + ((x0 - 1568.5) * 0.000145275))))**(a2 + ((x0 - 1568.5) * 0.000145275))))
a5*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a4 + ((x0 - 1568.5) *
0.000145275))))
a1 = -0.544, a2 = -0.75775^{+0.0257(3.39\%)}_{-0.0257(3.39\%)},
a3 = 0.00140715^{+0.000314(22.3\%)}_{-0.000314(22.3\%)}, \quad a4 = 0.410494^{+0.00922(2.25\%)}_{-0.00922(2.25\%)},
\mathbf{a5} = \mathbf{1.63508}^{+0.0847(5.18\%)}_{-0.0847(5.18\%)},
                                      a6 = 1.04
                                                                                                                                           Candidate #18
                                                                                                \chi^2/NDF = 35.22/31, RMSE = 0.03265, R2 = 1.0
                                                                                                                                       Best-fit
                                                                                                                                ---- a5 Up (+1\sigma)
                                                                                                                                   -- a5 Down (-1\sigma)
                                                                                                                                       Data
                                                                                                                                                                Data – Fit
Uncertainty
```

 6×10^3

 10^{2}

 10^{1}

10⁰

 10^{-1}

 10^{-2}

 10^{-3}

 10^{-4}

 10^{-5}

2

0

-2

1.5

1

0.5

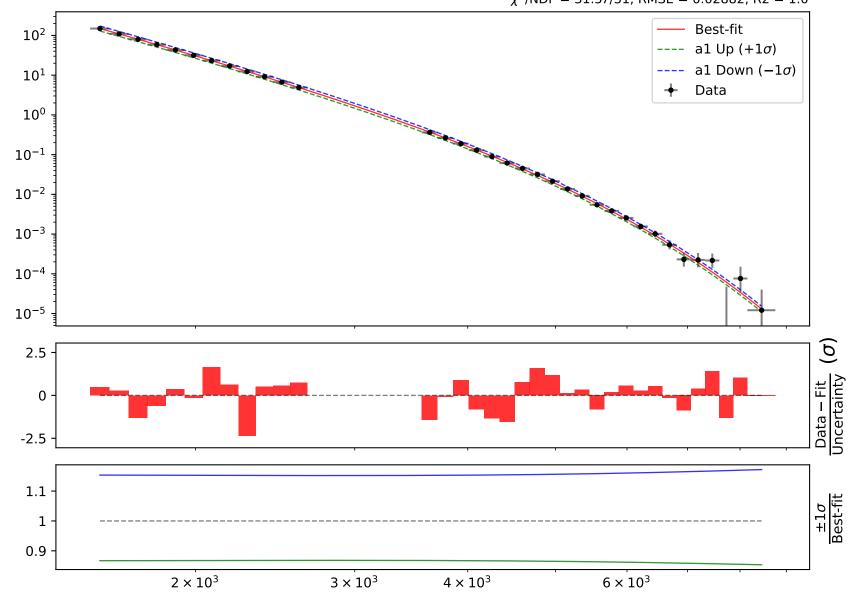
 2×10^{3}



1.0*((a3/(a6 + 2*((x0 - 1568.5) * 0.000145275)*(a2 + ((x0 - 1568.5) * 0.000145275))))**(a1 + a5*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a4 + ((x0 - 1568.5) * 0.000145275))))

 $\begin{array}{l} \textbf{a1} = -\textbf{0.70117}^{+0.02}_{-0.02(2.85\%)}, \quad a2 = -0.37, \\ a3 = 0.000825543^{+0.000168(20.4\%)}_{-0.000168(20.4\%)}, \quad a4 = 0.41692^{+0.0084(2.01\%)}_{-0.0084(2.01\%)}, \\ a5 = 1.4132^{+0.0635(4.49\%)}_{-0.0635(4.49\%)}, \quad a6 = 1.04 \end{array}$

 $\chi^2/NDF = 31.57/31$, RMSE = 0.02882, R2 = 1.0



```
a5*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a4 + ((x0 - 1568.5) * 0.00014275)/(a4 + ((x0 - 1568.5) * 0.0001475)/(a4 + ((x0 - 1568.
                                0.000145275))))
                                \mathrm{a1} = -0.70117^{+0.02(2.85\%)}_{-0.02(2.85\%)}, \ a2 = -0.37,
                                \mathbf{a3} = \mathbf{0.000825543}^{+0.000168}_{-0.000168}(20.4\%), \quad \mathbf{a4} = 0.41692^{+0.0084}_{-0.0084}(2.01\%),
                                \mathsf{a5} = 1.4132^{+0.0635(4.49\%)}_{-0.0635(4.49\%)}, \ \ \mathsf{a6} = 1.04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Candidate #17
                                                                                                                                                                                                                                                                                                                                                                                            \chi^2/NDF = 31.57/31, RMSE = 0.02882, 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}
         2.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Data – Fit
Uncertainty
                  0
     -2.5
   1.25 -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \pm 1\sigma
Best-fit
                   1
   0.75
```

 6×10^3

 2×10^{3}

```
a5*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a4 + ((x0 - 1568.5) * 0.00014275)/(a4 + ((x0 - 1568.5) * 0.0001475)/(a4 + ((x0 - 1568.
                                    0.000145275))))
                                    \mathrm{a1} = -0.70117^{+0.02(2.85\%)}_{-0.02(2.85\%)}, \ a2 = -0.37,
                                    a3 = 0.000825543^{+0.000168(20.4\%)}_{-0.000168(20.4\%)}, \quad \textbf{a4} = \textbf{0.41692}^{+0.0084(2.01\%)}_{-0.0084(2.01\%)},
                                    \mathsf{a5} = 1.4132^{+0.0635(4.49\%)}_{-0.0635(4.49\%)}, \ \ \mathsf{a6} = 1.04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Candidate #17
                                                                                                                                                                                                                                                                                                                                                                                    \chi^2/NDF = 31.57/31, RMSE = 0.02882, 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>
              2.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Data – Fit
Uncertainty
                      0
          -2.5
        1.03
                       1
0.975
                                                                                                                        2 \times 10^{3}
                                                                                                                                                                                                                                               3 \times 10^{3}
                                                                                                                                                                                                                                                                                                                                   4 \times 10^3
                                                                                                                                                                                                                                                                                                                                                                                                                                                        6 \times 10^3
```

```
SymbolFit
        1.0*((a3/(a6 + 2*((x0 - 1568.5) * 0.000145275)*(a2 + ((x0 - 1568.5) * 0.000145275))))**(a1 + ((x0 - 1568.5) * 0.000145275))))
        a5*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a4 + ((x0 - 1568.5) *
        0.000145275))))
        \mathrm{a1} = -0.70117^{+0.02(2.85\%)}_{-0.02(2.85\%)}, \ a2 = -0.37,
        \text{a3} = 0.000825543^{+0.000168(20.4\%)}_{-0.000168(20.4\%)}, \quad \text{a4} = 0.41692^{+0.0084(2.01\%)}_{-0.0084(2.01\%)},
        a5 = 1.4132^{+0.0635(4.49\%)}_{-0.0635(4.49\%)}, a6 = 1.04
                                                                                                                                                  Candidate #17
                                                                                                        \chi^2/NDF = 31.57/31, RMSE = 0.02882, 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}
  2.5
                                                                                                                                                                        Data – Fit
Uncertainty
     0
 -2.5
  1.5
     1
```

 6×10^3

 2×10^{3}



 $\mathbf{a1} = -1.18063^{+0.02941(2.49\%)}_{-0.03067(2.6\%)}, \ \ \mathbf{a2} = 0.014407^{+0.001637(11.4\%)}_{-0.001482(10.3\%)},$ $\mathsf{a3} = 0.0415555^{+0.003236(7.79\%)}_{-0.003057(7.36\%)},$ $a4 = 4.95336^{+0.1301(2.63\%)}_{-0.1246(2.52\%)}$ Candidate #16 $\chi^2/NDF = 29.06/31$, RMSE = 0.02363, R2 = 1.0 Best-fit 10² al Up $(+1\sigma)$ al Down (-1σ) 10^{1} Data 10^{0} 10^{-1} 10^{-2} 10^{-3} 10^{-4} 10^{-5} <u>g</u> 2 Data – Fit Uncertainty 0 -2 1.1 1 0.9 2×10^3 3×10^3 4×10^3 6×10^3

```
1.0*((a2 + a3*tanh(2*((x0 - 1568.5) * 0.000145275)))**(a1 + a4*((x0 - 1568.5) * 0.000145275)))
         \mathrm{a1} = -1.18063^{+0.02941(2.49\%)}_{-0.03067(2.6\%)},
                                                     \mathbf{a2} = \mathbf{0.014407}^{+0.001637(11.4\%)}_{-0.001482(10.3\%)},
         \mathsf{a3} = 0.0415555^{+0.003236(7.79\%)}_{-0.003057(7.36\%)},
                                                      a4 = 4.95336^{+0.1301(2.63\%)}_{-0.1246(2.52\%)}
                                                                                                                                                                Candidate #16
                                                                                                                  \chi^2/NDF = 29.06/31, RMSE = 0.02363, R2 = 1.0
                                                                                                                                                             Best-fit
  10^{2}
                                                                                                                                                             a2 Up (+1\sigma)
                                                                                                                                                             a2 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
                                                                        3 \times 10^3
                                                                                                                                       6 \times 10^3
                                                                                                  4 \times 10^{3}
```

```
1.0*((a2 + a3*tanh(2*((x0 - 1568.5) * 0.000145275)))**(a1 + a4*((x0 - 1568.5) * 0.000145275)))
         \mathtt{a1} = -1.18063^{+0.02941(2.49\%)}_{-0.03067(2.6\%)}\text{, }\mathtt{a2} = 0.014407^{+0.001637(11.4\%)}_{-0.001482(10.3\%)},
                                                            a4 = 4.95336^{+0.1301(2.63\%)}_{-0.1246(2.52\%)}
         \mathbf{a3} = \mathbf{0.0415555}^{+0.003236(7.79\%)}_{-0.003057(7.36\%)},
                                                                                                                                                                    Candidate #16
                                                                                                                     \chi^2/NDF = 29.06/31, RMSE = 0.02363, 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>6</u>
     2
                                                                                                                                                                                            Data – Fit
Uncertainty
     0
    -2
  1.2
     1
  0.8
                                    2 \times 10^{3}
                                                                          3 \times 10^3
                                                                                                                                           6 \times 10^3
                                                                                                     4 \times 10^{3}
```

```
1.0*((a2 + a3*tanh(2*((x0 - 1568.5) * 0.000145275)))**(a1 + a4*((x0 - 1568.5) * 0.000145275)))
         \mathrm{a1} = -1.18063^{+0.02941(2.49\%)}_{-0.03067(2.6\%)},
                                                     a2 = 0.014407^{+0.001637(11.4\%)}_{-0.001482(10.3\%)},
                                                      \mathbf{a4} = \mathbf{4.95336}^{+0.1301(2.63\%)}_{-0.1246(2.52\%)}
         \mathsf{a3} = 0.0415555^{+0.003236(7.79\%)}_{-0.003057(7.36\%)},
                                                                                                                                                                Candidate #16
                                                                                                                  \chi^2/NDF = 29.06/31, RMSE = 0.02363, 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
1.25
     1
0.75
                                    2 \times 10^{3}
                                                                        3 \times 10^3
                                                                                                                                        6 \times 10^3
                                                                                                   4 \times 10^{3}
```

Candidate function #15

```
1.0*((a3/(a6 + ((x0 - 1568.5) * 0.000145275))*(a1 + ((x0 - 1568.5) * 0.000145275))))**(a2 + ((x0 - 1568.5) * 0.000145275)))
         a5*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a4 + ((x0 - 1568.5) * 0.000145275))
         0.000145275))))
         a1 = -0.609, a2 = -0.502,
         \mathbf{a3} = \mathbf{1.28458e} - \mathbf{05}^{+2.63e}_{-2.63e} - \overset{\mathbf{06(20.5\%)}}{-06(20.5\%)}, \quad \mathbf{a4} = 0.573905^{+0.0155(2.7\%)}_{-0.0155(2.7\%)},
         a5 = 0.879901^{+0.0221(2.51\%)}_{-0.0221(2.51\%)}, \ a6 = 0.272846^{+0.0559(20.5\%)}_{-0.0559(20.5\%)}
                                                                                                                                                                  Candidate #15
                                                                                                                     \chi^2/NDF = 160.0/31, RMSE = 0.1354, R2 = 1.0
                                                                                                                                                              Best-fit
  10^{2}
                                                                                                                                                              a3 Up (+1\sigma)
                                                                                                                                                              a3 Down (-1\sigma)
  10^{1}
                                                                                                                                                              Data
  10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
     5
                                                                                                                                                                                          Data – Fit
Uncertainty
     0
    -5
  1.2
     1
  8.0
                                    2 \times 10^{3}
                                                                         3 \times 10^{3}
                                                                                                   4 \times 10^3
                                                                                                                                         6 \times 10^3
```

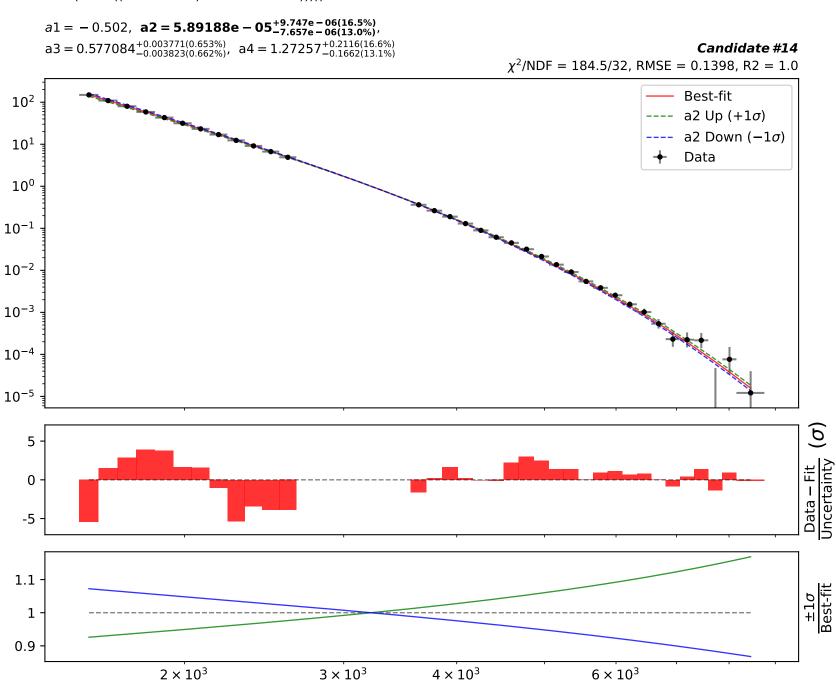
```
1.0*((a3/(a6 + ((x0 - 1568.5) * 0.000145275))*(a1 + ((x0 - 1568.5) * 0.000145275))))**(a2 + ((x0 - 1568.5) * 0.000145275)))
         a5*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a4 + ((x0 - 1568.5) * 0.000145275))
         0.000145275))))
         a1 = -0.609, a2 = -0.502.
         a3 = 1.28458e - 05^{+2.63e - 06(20.5\%)}_{-2.63e - 06(20.5\%)}, \quad \textbf{a4} = \textbf{0.573905}^{+\textbf{0.0155}(2.7\%)}_{-\textbf{0.0155}(2.7\%)},
         a5 = 0.879901^{+0.0221(2.51\%)}_{-0.0221(2.51\%)}, \ a6 = 0.272846^{+0.0559(20.5\%)}_{-0.0559(20.5\%)}
                                                                                                                                                              Candidate #15
                                                                                                                  \chi^2/NDF = 160.0/31, RMSE = 0.1354, 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}
     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*((a3/(a6 + ((x0 - 1568.5) * 0.000145275))*(a1 + ((x0 - 1568.5) * 0.000145275))))**(a2 + ((x0 - 1568.5) * 0.000145275)))
        a5*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a4 + ((x0 - 1568.5) *
        0.000145275))))
        a1 = -0.609, a2 = -0.502.
        a3 = 1.28458e - 05^{+2.63e}_{-2.63e} {}^{-06(20.5\%)}_{-0(20.5\%)}, \ a4 = 0.573905^{+0.0155(2.7\%)}_{-0.0155(2.7\%)},
        a5 = 0.879901_{-0.0221(2.51\%)}^{+0.0221(2.51\%)}, a6 = 0.272846_{-0.0559(20.5\%)}^{+0.0559(20.5\%)}
                                                                                                                                                   Candidate #15
                                                                                                           \chi^2/NDF = 160.0/31, RMSE = 0.1354, 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}
     5
                                                                                                                                                                         Data – Fit
Uncertainty
     0
    -5
  1.2
     1
  0.8
                                 2 \times 10^{3}
                                                                  3 \times 10^{3}
                                                                                          4 \times 10^3
                                                                                                                            6 \times 10^3
```

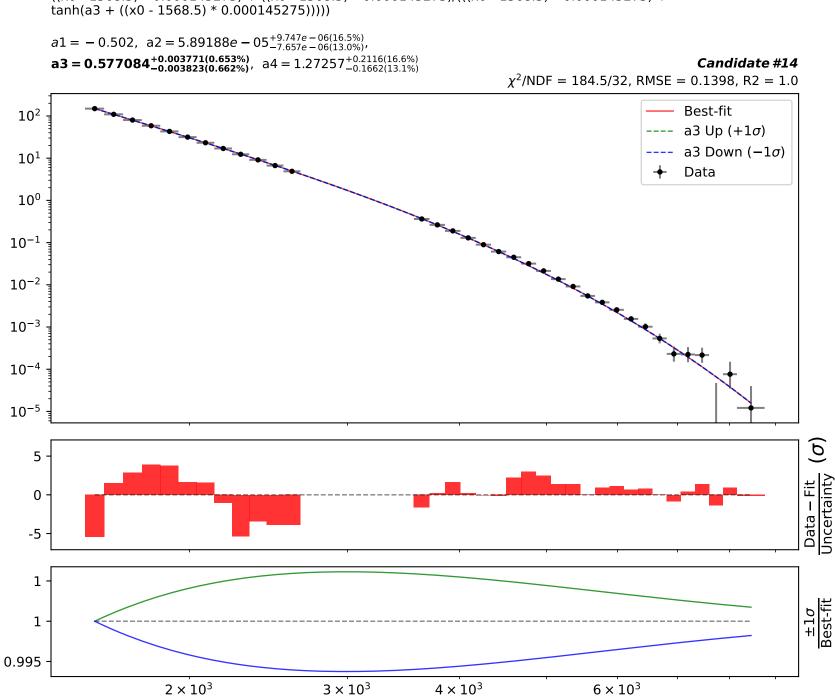
```
1.0*((a3/(a6 + ((x0 - 1568.5) * 0.000145275))*(a1 + ((x0 - 1568.5) * 0.000145275))))**(a2 + ((x0 - 1568.5) * 0.000145275)))
         a5*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a4 + ((x0 - 1568.5) * 0.000145275))
         0.000145275))))
         a1 = -0.609, a2 = -0.502.
         a3 = 1.28458e - 05^{+2.63e}_{-2.63e} {}^{-06(20.5\%)}_{-0(20.5\%)}, \ a4 = 0.573905^{+0.0155(2.7\%)}_{-0.0155(2.7\%)},
         a5 = 0.879901^{+0.0221(2.51\%)}_{-0.0221(2.51\%)}, a6 = 0.272846^{+0.0559(20.5\%)}_{-0.0559(20.5\%)}
                                                                                                                                                       Candidate #15
                                                                                                             \chi^2/NDF = 160.0/31, RMSE = 0.1354, 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}
     5
                                                                                                                                                                              Data – Fit
Uncertainty
     0
    -5
  1.1
     1
  0.9
                                  2 \times 10^{3}
                                                                    3 \times 10^{3}
                                                                                             4 \times 10^{3}
                                                                                                                                6 \times 10^3
```

Candidate function #14

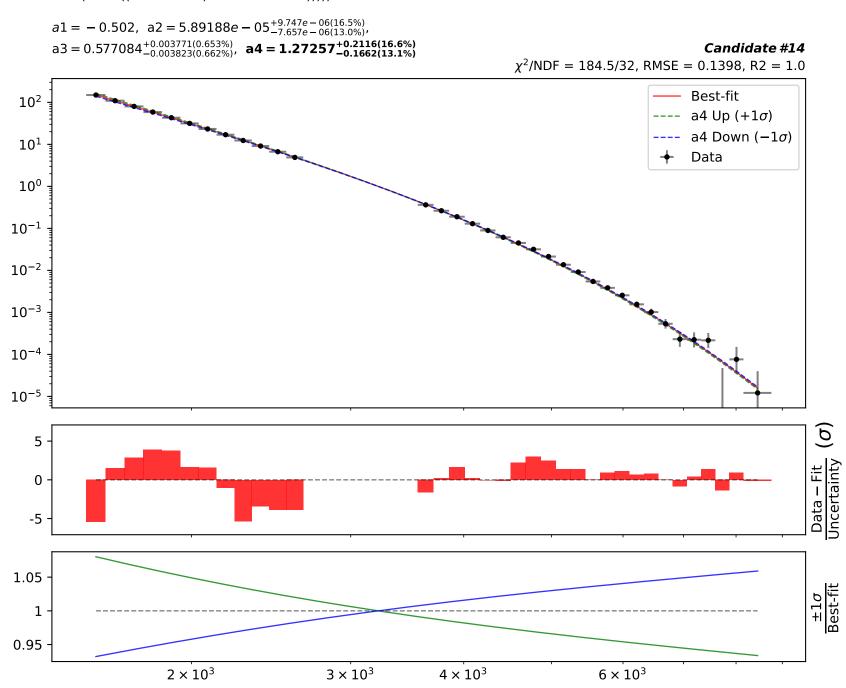
1.0*((a2/(a4 + ((x0 - 1568.5) * 0.000145275) + tanh(((x0 - 1568.5) * 0.000145275))))**(a1 + ((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(((x0 - 1568.5) * 0.000145275) + tanh(a3 + ((x0 - 1568.5) * 0.000145275)))))



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

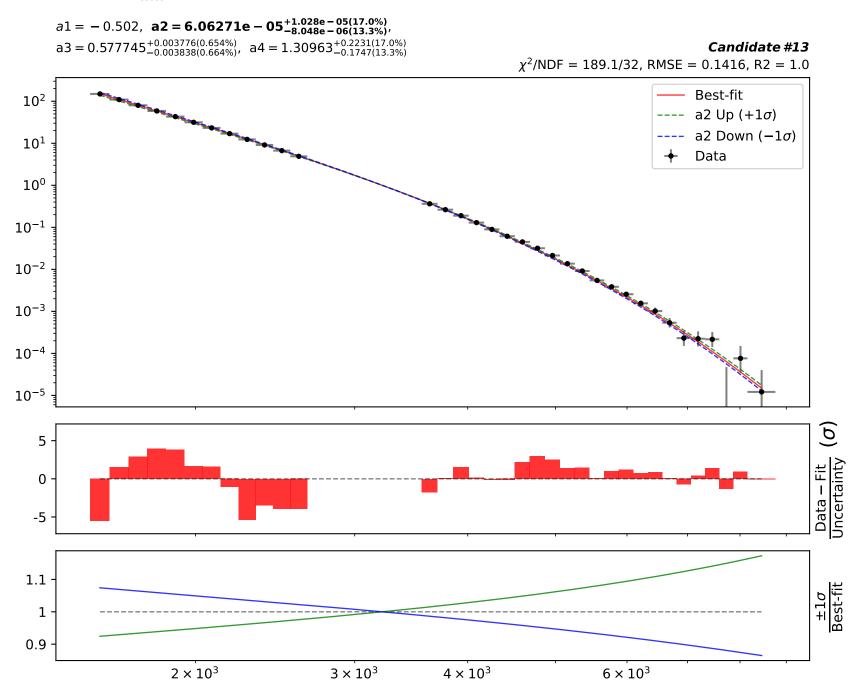


1.0*((a2/(a4 + ((x0 - 1568.5) * 0.000145275) + tanh(((x0 - 1568.5) * 0.000145275))))**(a1 + ((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(((x0 - 1568.5) * 0.000145275) + tanh(a3 + ((x0 - 1568.5) * 0.000145275)))))





1.0*((a2/(a4 + 2*((x0 - 1568.5) * 0.000145275)))**(a1 + ((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(((x0 - 1568.5) * 0.000145275) + tanh(a3 + ((x0 - 1568.5) * 0.000145275)))))



1.0*((a2/(a4 + 2*((x0 - 1568.5) * 0.000145275)))**(a1 + ((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275))))) **(a1 + ((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275))))))

a1 = -0.502, $a2 = 6.06271e - 05^{+1.028e - 05(17.0\%)}_{-8.048e - 06(13.3\%)}$, $a3 = 0.577745^{+0.003776(0.654\%)}_{-0.003838(0.664\%)},$ $a4 = 1.30963^{+0.2231(17.0\%)}_{-0.1747(13.3\%)}$ Candidate #13 $\chi^2/NDF = 189.1/32$, RMSE = 0.1416, R2 = 1.0 Best-fit 10^{2} ---- a3 Up $(+1\sigma)$ a3 Down (-1σ) 10^{1} Data 10⁰ 10^{-1} 10^{-2} 10^{-3} 10^{-4} 10^{-5} 5 Data – Fit Uncertainty 0 -5 1 1 0.995

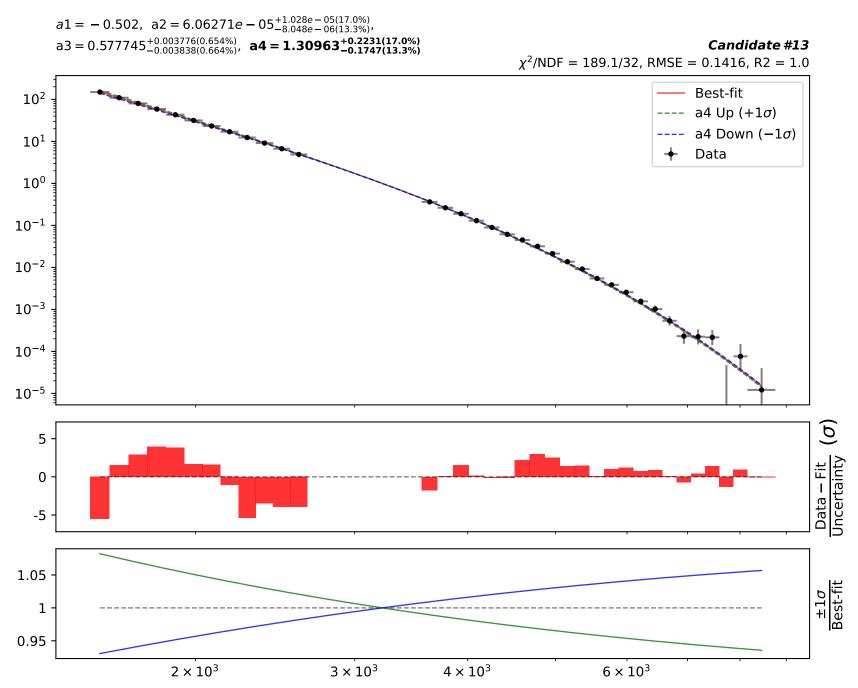
 4×10^{3}

 6×10^{3}

 3×10^3

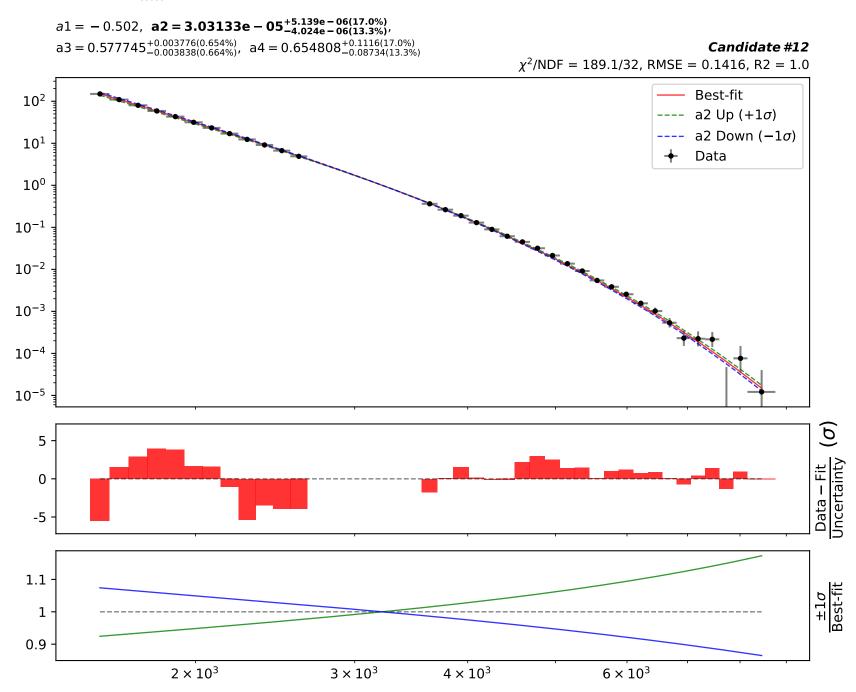
 2×10^3

1.0*((a2/(a4 + 2*((x0 - 1568.5) * 0.000145275)))**(a1 + ((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(((x0 - 1568.5) * 0.000145275) + tanh(a3 + ((x0 - 1568.5) * 0.000145275)))))



Candidate function #12

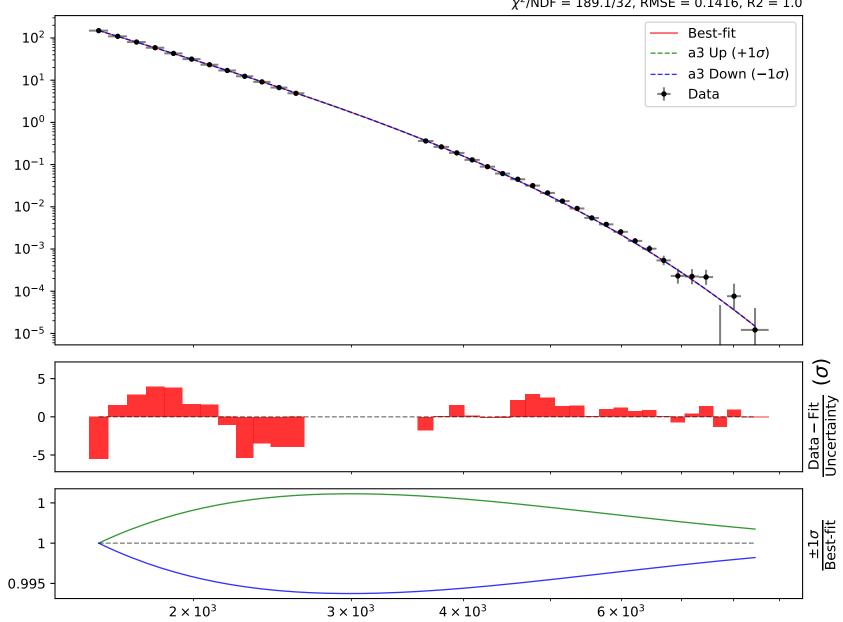
1.0*((a2/(a4 + ((x0 - 1568.5) * 0.000145275))))**(a1 + ((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(((x0 - 1568.5) * 0.000145275) + tanh(a3 + ((x0 - 1568.5) * 0.000145275)))))



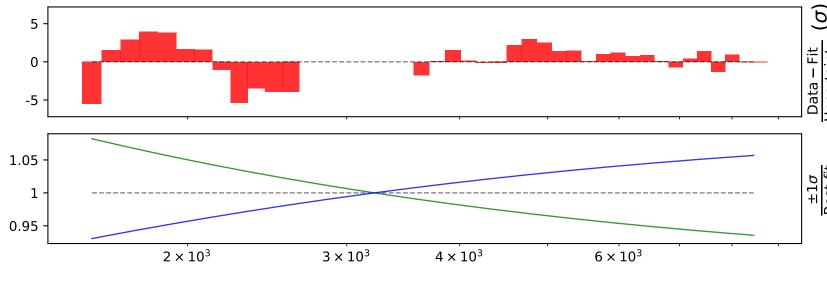
1.0*((a2/(a4 + ((x0 - 1568.5) * 0.000145275)))**(a1 + ((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(((x0 - 1568.5) * 0.000145275) + tanh(a3 + ((x0 - 1568.5) * 0.000145275)))))

a1 = -0.502, $a2 = 3.03133e - 05^{+5.139e - 06(17.0\%)}_{-4.024e - 06(13.3\%)}$, $a3 = 0.577745^{+0.003776(0.654\%)}_{-0.003838(0.664\%)}$, $a4 = 0.654808^{+0.1116(17.0\%)}_{-0.08734(13.3\%)}$

Candidate #12 $\chi^2/NDF = 189.1/32$, RMSE = 0.1416, R2 = 1.0



```
SymbolFit
        1.0*((a2/(a4 + ((x0 - 1568.5) * 0.000145275)))**(a1 + ((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)))
        1568.5) * 0.000145275)/(((x0 - 1568.5) * 0.000145275) + tanh(a3 + ((x0 - 1568.5) *
        0.000145275)))))
        a1 = -0.502, a2 = 3.03133e - 05^{+5.139e - 06(17.0\%)}_{-4.024e - 06(13.3\%)},
        a3 = 0.577745^{+0.003776(0.654\%)}_{-0.003838(0.664\%)},
                                               a4 = 0.654808^{+0.1116(17.0\%)}_{-0.08734(13.3\%)}
                                                                                                                                            Candidate #12
                                                                                                      \chi^2/NDF = 189.1/32, RMSE = 0.1416, 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}
                                                                                                                                                                 Data – Fit
Uncertainty
```

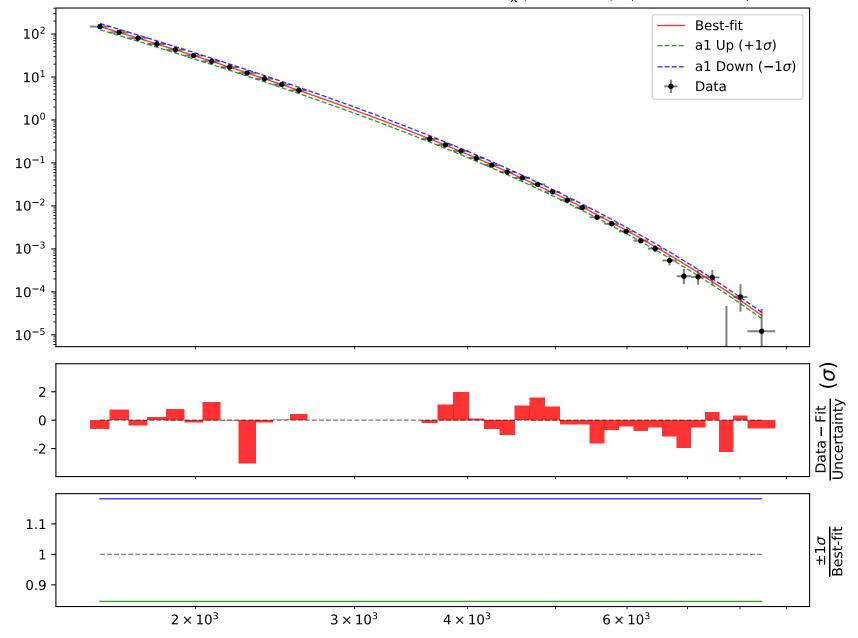




1.0*(a2**(a1 + a4*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + ((x0 - 1568.5) * 0.000145275))))

 $\begin{aligned} \textbf{a1} &= -\textbf{0.889641}^{+0.0298(3.35\%)}_{-0.0298(3.35\%)}, \quad \text{a2} &= 0.00359818^{+0.000676(18.8\%)}_{-0.000676(18.8\%)}, \\ \textbf{a3} &= 0.339232^{+0.00876(2.58\%)}_{-0.00876(2.58\%)}, \quad \text{a4} &= 2.00351^{+0.0978(4.88\%)}_{-0.0978(4.88\%)} \end{aligned}$

Candidate #11 $\chi^2/NDF = 39.47/31$, RMSE = 0.02687, R2 = 1.0



```
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 = 0.00359818^{+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 #11
                                                                                                                                                                                                                                                                                                                                                                                                                                                      \chi^2/NDF = 39.47/31, RMSE = 0.02687, 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 = 0.00359818^{+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 #11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \chi^2/NDF = 39.47/31, RMSE = 0.02687, 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}
                       2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Data – Fit
Uncertainty
                      0
                 -2
   1.04
   1.02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \pm 1\sigma
Best-fit
                       1
  0.98
```

 6×10^3

 2×10^{3}

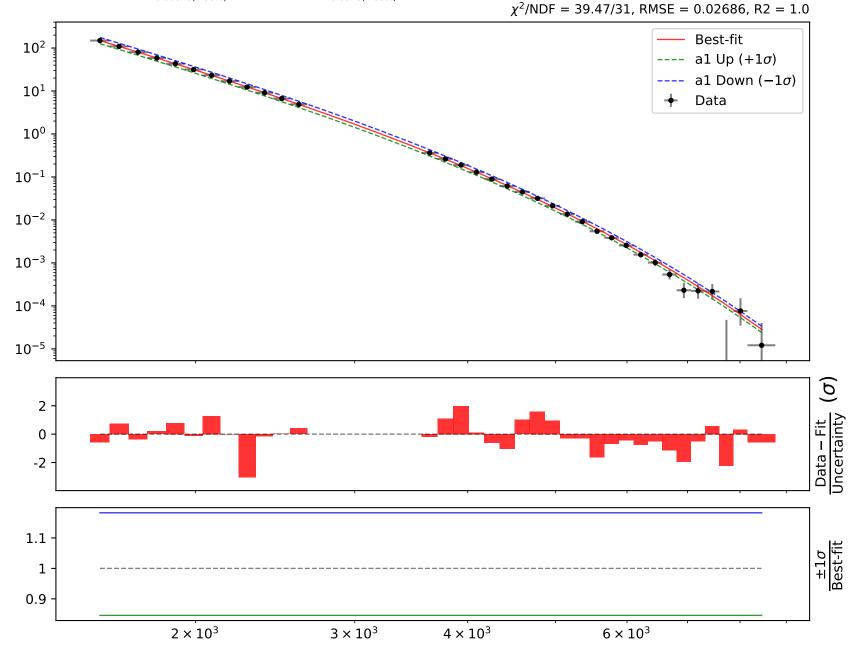
```
1.0*(a2**(a1 + a4*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + ((x0 - 1568.5) * 0.000145275))/(a3 + ((x0 - 1568.5) * 0.0001425275))/(a3 + ((x0 - 1568.5) * 0.0001425275))/(
                                     1568.5) * 0.000145275))))
                                     a1 = -0.889641^{+0.0298(3.35\%)}_{-0.0298(3.35\%)},
                                                                                                                                                                                                                    a2 = 0.00359818^{+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 #11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                \chi^2/NDF = 39.47/31, RMSE = 0.02687, 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^{-5}
                       2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Data – Fit
Uncertainty
                      0
                 -2
   1.04
   1.02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \pm 1\sigma
Best-fit
                       1
  0.98
```

 4×10^3

 6×10^3

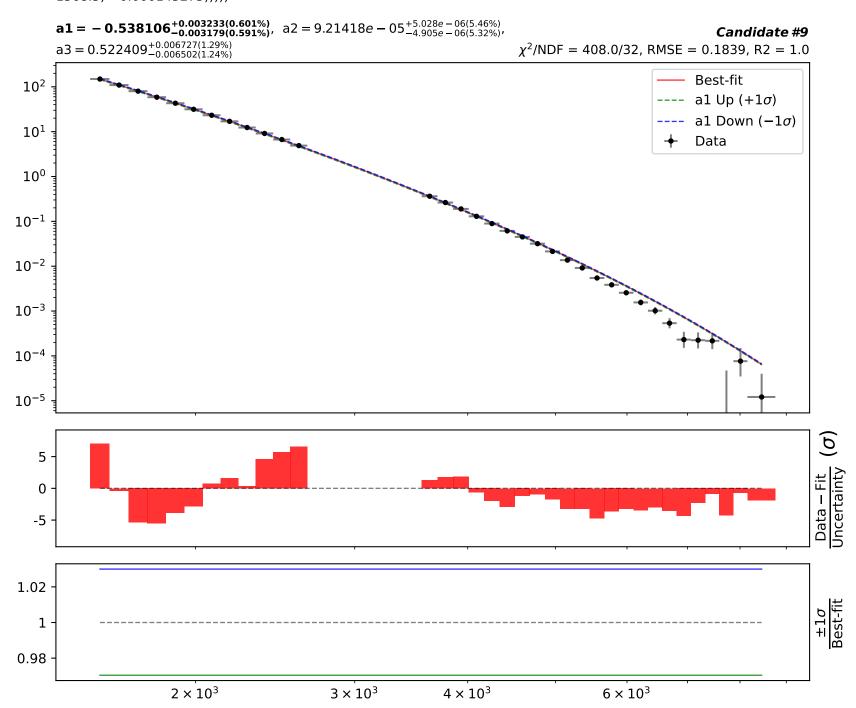
 2×10^{3}

 3×10^{3}

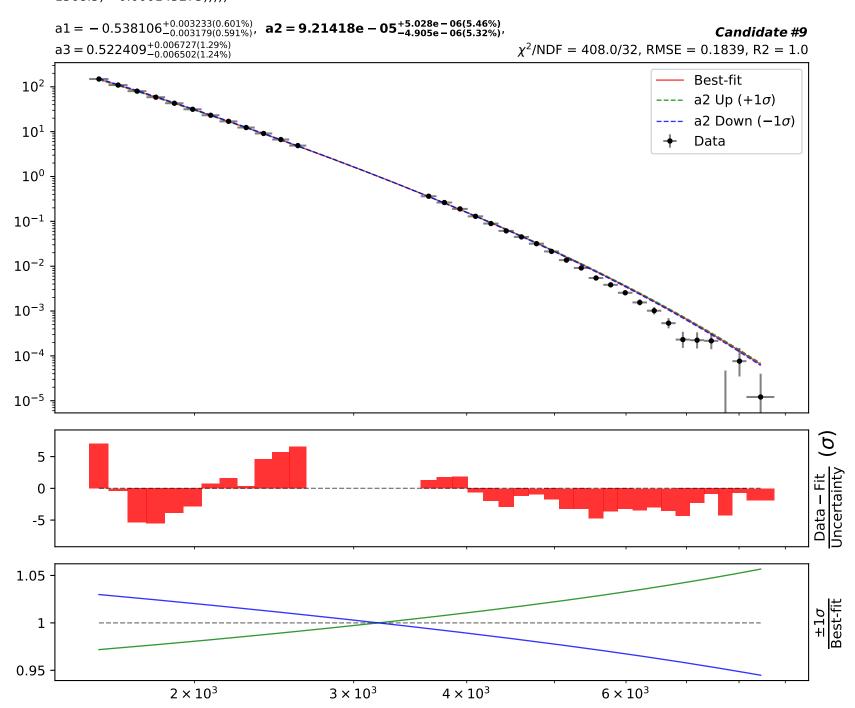
```
1.0*(a2**(a1 + a4*((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + ((x0 - 1568.5) * 0.000145275))/(a3 + ((x0 - 1568.5) * 0.0001425275))/(a3 + ((x0 - 1568.5) * 0.0001425275))/(
                                     1568.5) * 0.000145275))))
                                     a1 = -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
```



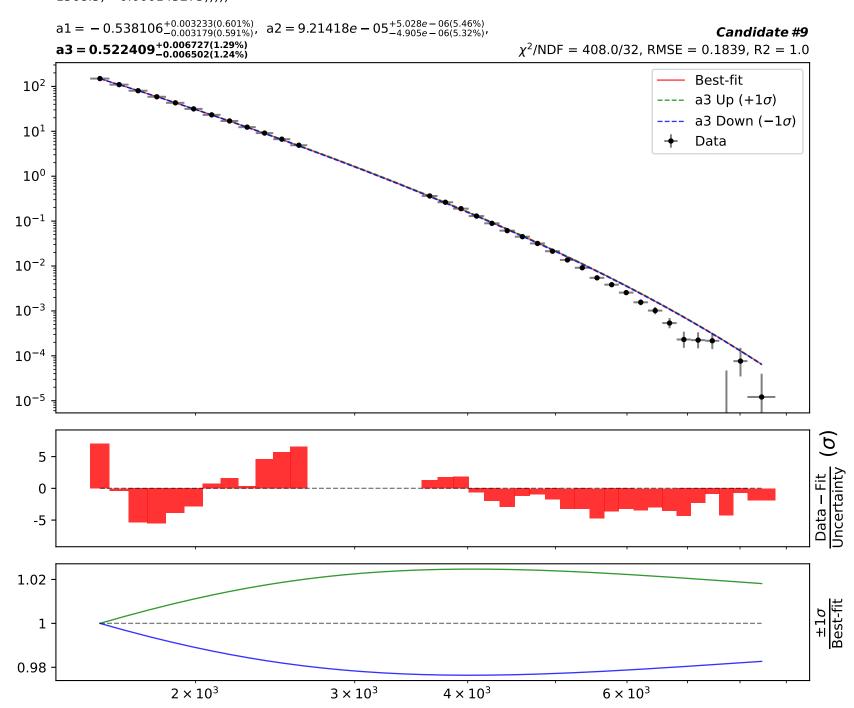
1.0*(a2**(a1 + ((x0 - 1568.5) * 0.000145275) + tanh(((x0 - 1568.5) * 0.000145275))/(a3 + ((x0 - 1568.5) * 0.000145275)))))



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

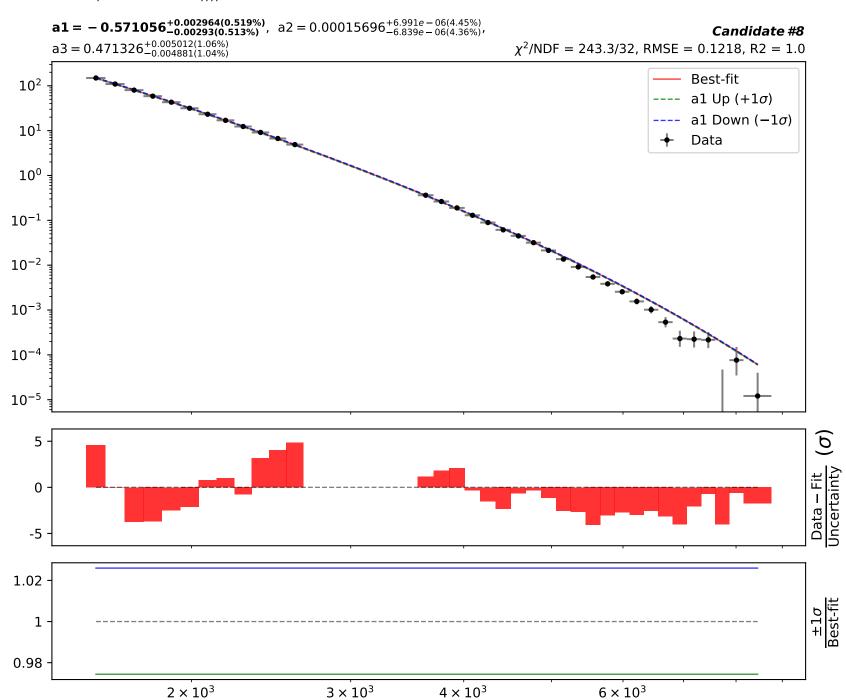


1.0*(a2**(a1 + ((x0 - 1568.5) * 0.000145275) + tanh(((x0 - 1568.5) * 0.000145275))/(a3 + ((x0 - 1568.5) * 0.000145275)))))

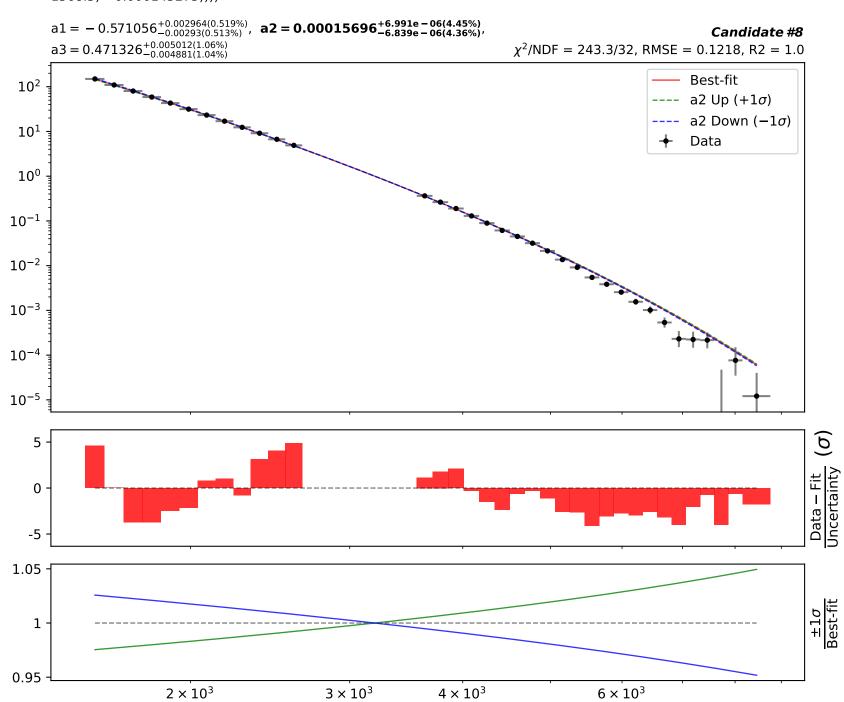




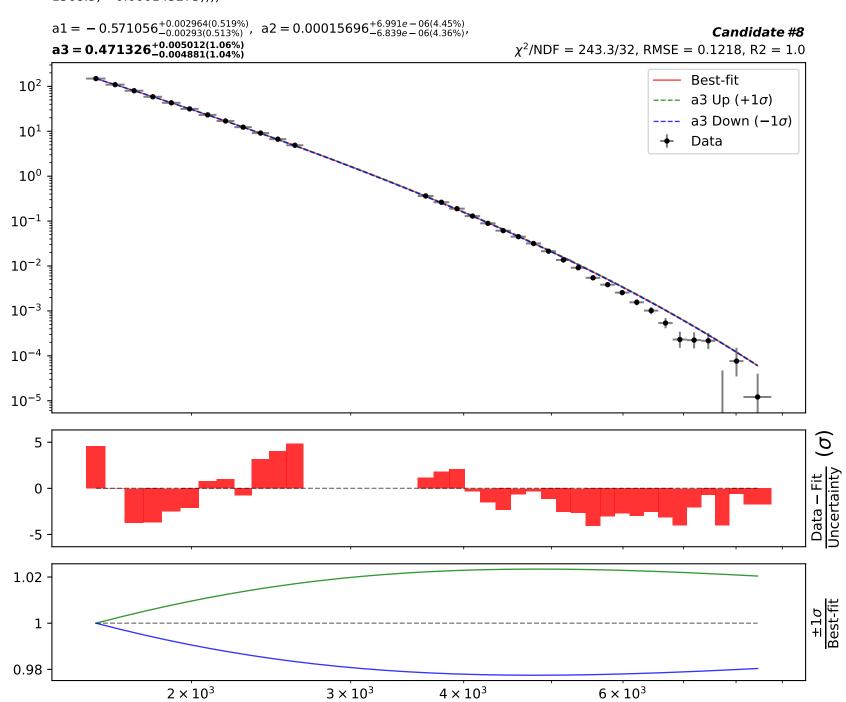
1.0*(a2**(a1 + ((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + ((x0 - 1568.5) * 0.000145275))))



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

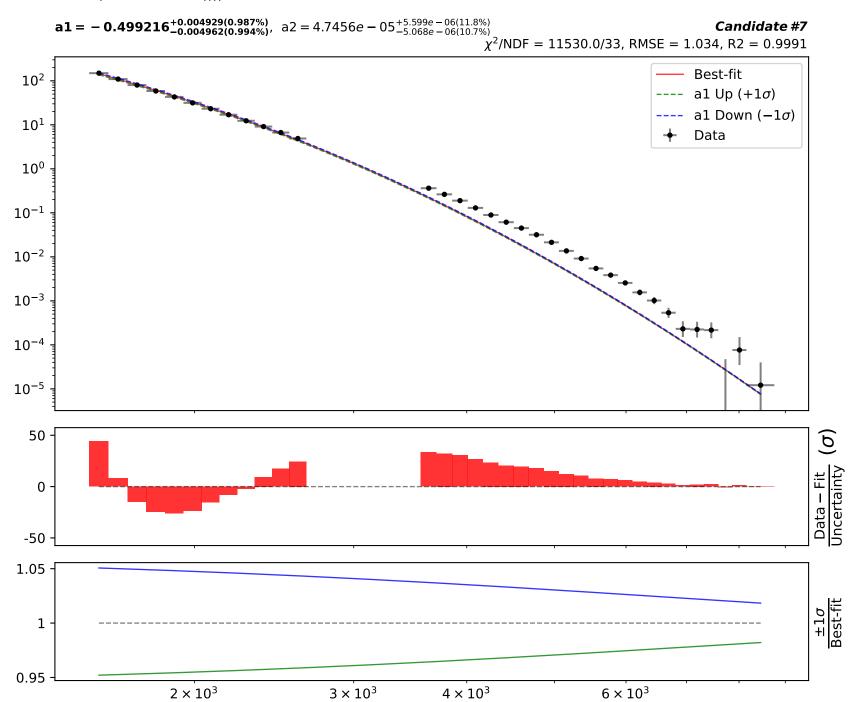


1.0*(a2**(a1 + ((x0 - 1568.5) * 0.000145275) + ((x0 - 1568.5) * 0.000145275)/(a3 + ((x0 - 1568.5) * 0.000145275))))

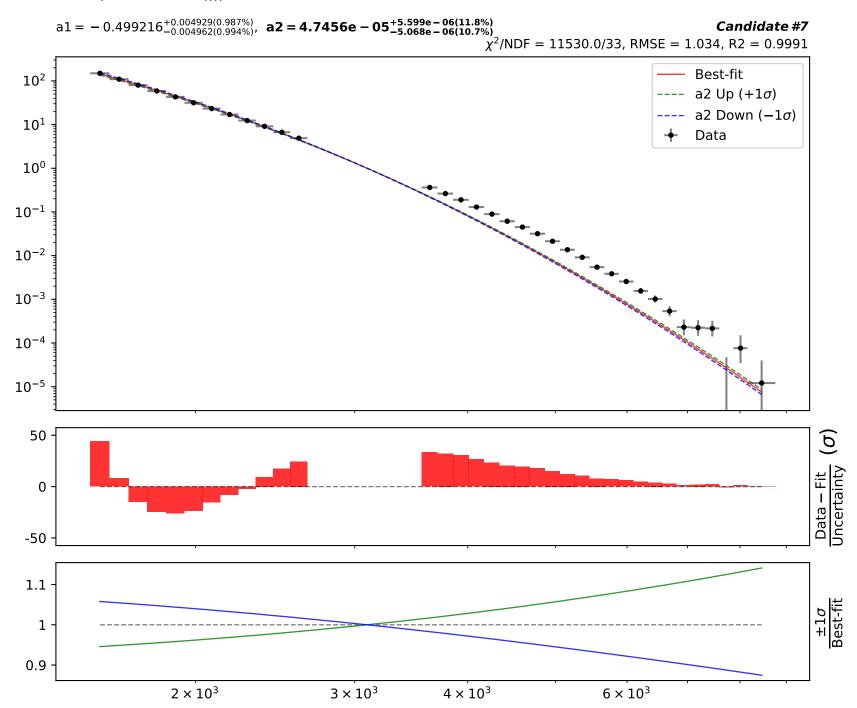




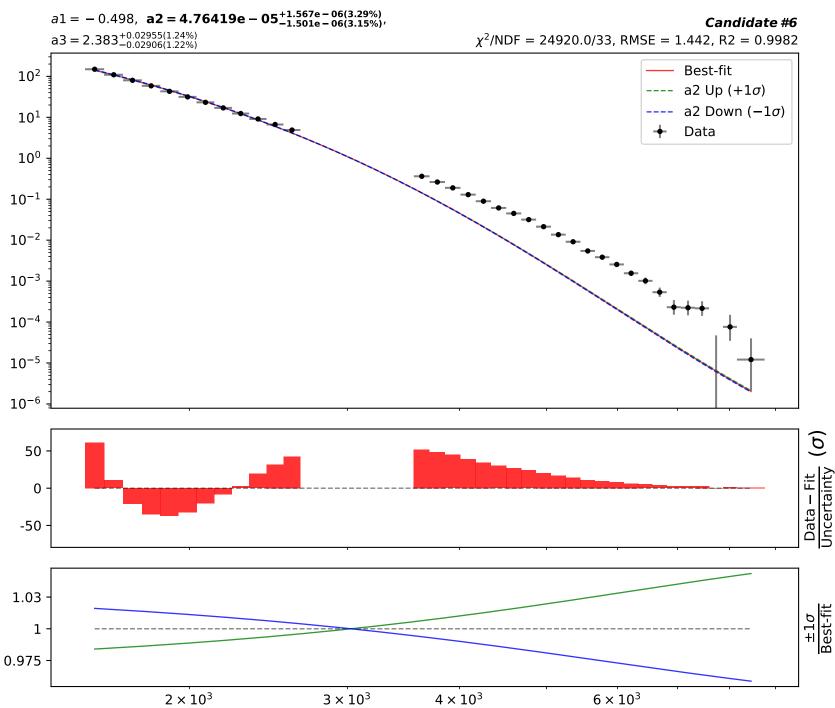
1.0*(a2**(((x0 - 1568.5) * 0.000145275)) + (a1 + ((x0 - 1568.5) * 0.000145275))*exp(-((x0 - 1568.5) * 0.000145275))))



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*tanh(((x0 - 1568.5) * 0.000145275))))a1 = -0.498, $a2 = 4.76419e - 05^{+1.567e - 06(3.29\%)}_{-1.501e - 06(3.15\%)}$ Candidate #6 $a3 = 2.383^{+0.02955(1.24\%)}_{-0.02906(1.22\%)}$ $\chi^2/NDF = 24920.0/33$, 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



SymbolFit 1.0*(a2**(a1 + a3*tanh(((x0 - 1568.5) * 0.000145275))))a1 = -0.502, $a2 = 5.15735e - 05^{+1.683e - 06(3.26\%)}_{-1.612e - 06(3.13\%)}$, Candidate #5 $a3 = 2.40214^{+0.02979(1.24\%)}_{-0.02929(1.22\%)}$ $\chi^2/NDF = 24920.0/33$, 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 1 0.975

 4×10^{3}

 6×10^3

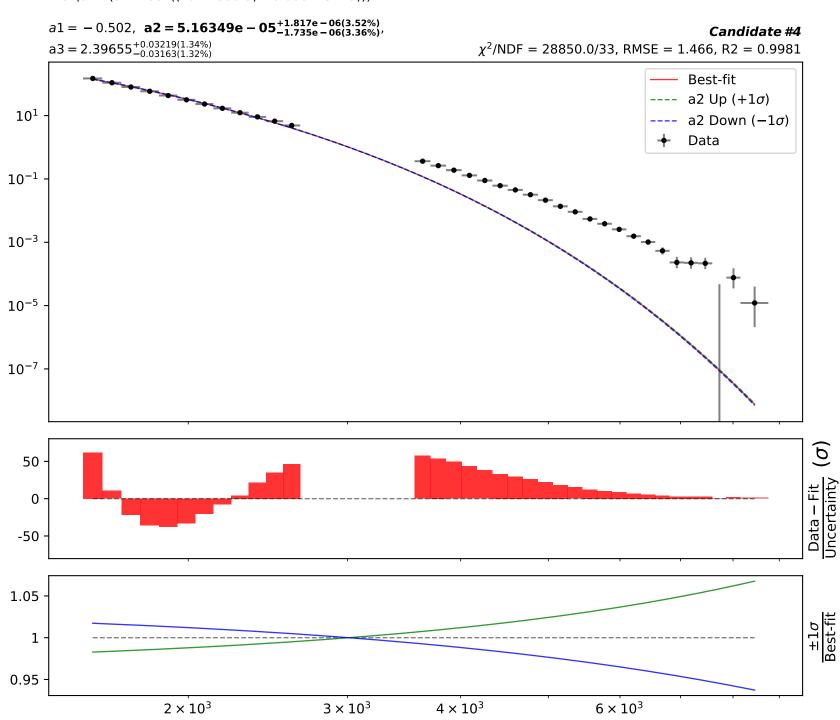
 3×10^3

 2×10^3

1.0*(a2**(a1 + a3*tanh(((x0 - 1568.5) * 0.000145275))))a1 = -0.502, $a2 = 5.15735e - 05^{+1.683e - 06(3.26\%)}_{-1.612e - 06(3.13\%)}$ Candidate #5 $a3 = 2.40214^{+0.02979(1.24\%)}_{-0.02929(1.22\%)}$ $\chi^2/NDF = 24920.0/33$, 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 = -0.502, $a2 = 5.16349e - 05^{+1.817e - 06(3.52\%)}_{-1.735e - 06(3.36\%)}$, Candidate #4 $a3 = 2.39655^{+0.03219(1.34\%)}_{-0.03163(1.32\%)}$ $\chi^2/NDF = 28850.0/33$, 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 = -1.44, $a2 = 8.98556e - 05^{+3.07e}_{-3.07e} - 05(34.2\%)$ Candidate #3 $\chi^2/NDF = 2737000.0/34$, RMSE = 19.04, R2 = 0.6793 Best-fit 10^{2} ---- a2 Up $(+1\sigma)$ a2 Down (-1σ) 10^{1} Data 10⁰ 10^{-1} 10^{-2} 10^{-3} 10^{-4} 10⁻⁵ 500 Data – Fit Uncertainty 0 -500 1.25 1 0.75 2×10^3 6×10^3 3×10^3 4×10^3



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

 $a1 = -0.349657^{+0.0197(5.63\%)}_{-0.0197(5.63\%)}, a2 = 4.9e - 05$

Candidate #2

