
# Appendix H:
# HYSPLITS

West Virginia Division of Air Quality
601 57th Street, SE
Charleston, WV 25304

Promoting a healthy environment.

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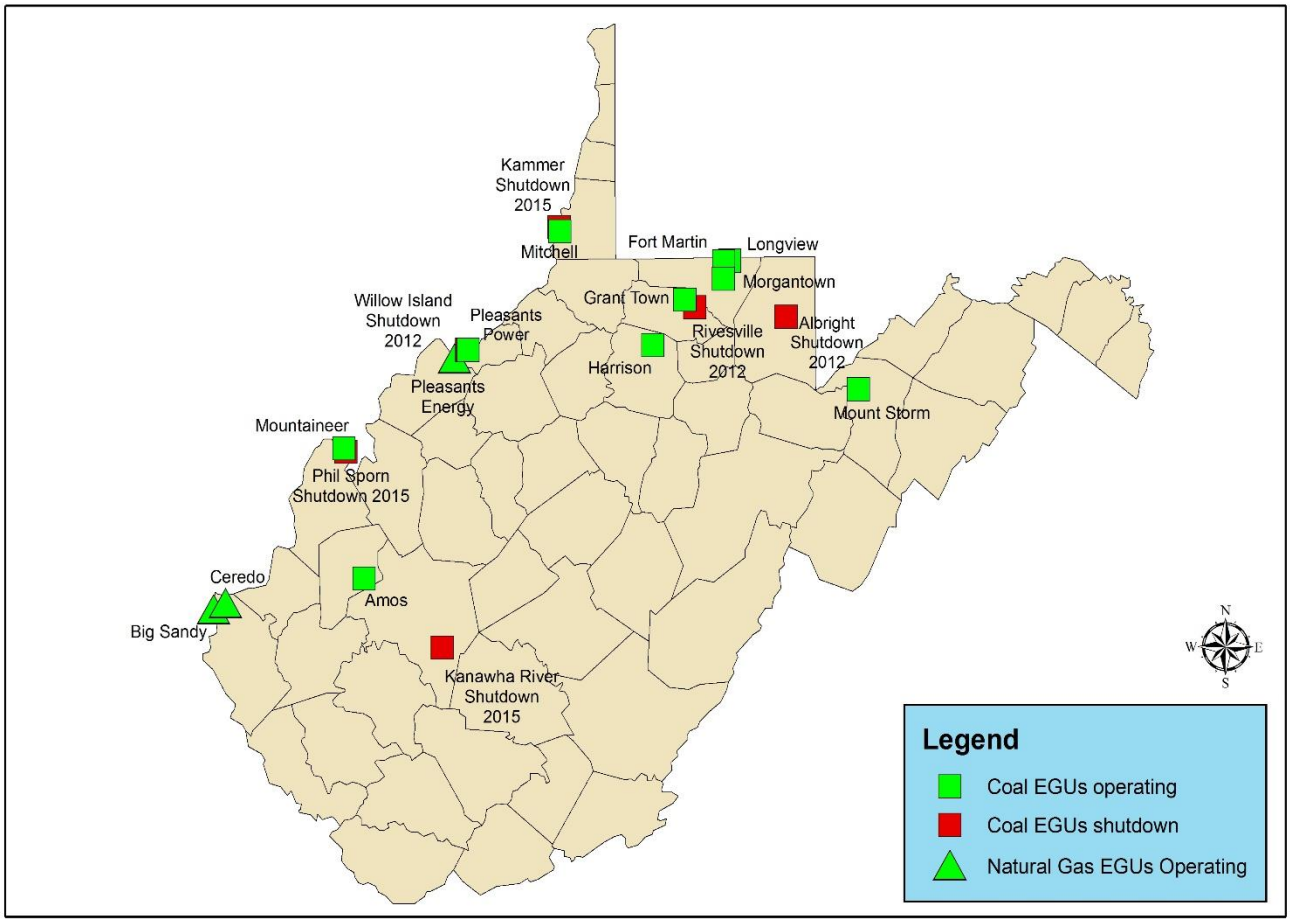
# West Virginia Electric Generating Units



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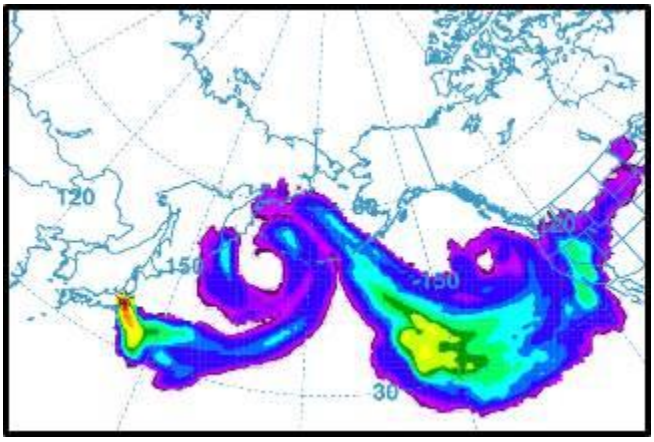
## HYSPLIT Description




The National Oceanic and Atmospheric Administration (NOAA), Air Resource Laboratory maintains a model for simulating atmospheric dispersions. This model is called the Hybrid Single-Particle Lagrangian Integrated Trajectory (HYSPLIT). The HYSPLIT model is a complete system for computing simple air parcel trajectories, as well as complex transport, dispersion, chemical transformation, and deposition simulations. HYSPLIT continues to be one of the most extensively used atmospheric transport and dispersion models in the atmospheric sciences community. A common application is a back-trajectory analysis to determine the origin of air masses and establish source-receptor relationships.

The HYSPLIT back-trajectory model was used in the West Virginia Transport SIP to determine historical wind patterns and if West Virginia air emission sources could contribute to downwind air monitoring station's ozone exceedances. The day and beginning time a downwind air monitoring station experienced an exceedance of the 2015 National Ambient Air Quality (NAAQ) Ozone 8-hour standard were used in the HYSPLIT model as the starting point for the backward air mass trajectories. Ozone exceedances for 2015, 2016, and 2017 were evaluated.

## HYSPLIT Data Inputs:

To run the HYSPLIT model, the Eta Data Assimilation System (EDAS) 40 kilometer archived meteorological data was used. This archive contains atmospheric data from 2004 to present, which includes the Ozone exceedance years West Virginia evaluated. As pervious noted, the model was selected to run in backward trajectory direction mode. Air monitoring station Ozone exceedance dates and times were used with the exceedance beginning hour converted to Coordinated Universal Time (UTC). Each HYSPLIT model total run time was set to 48 hours. This length of time was sufficient to show air mass directions that may have crossed West Virginia's borders prior to the station's Ozone exceedance. Latitude and longitude coordinates entered represent the station's physical location. Three vertical wind heights were selected to account for the possibility of the model showing a wind height bottoming out at ground level. Vertical heights at 500, 1,000, and 1,500 meters above ground level were entered.

**HYSPLIT Model Results:**

Based on Alpine's modeling, HYSPLIT backward trajectory models were run for four downwind air monitoring stations which were projected to be impacted by West Virginia air emission sources. These stations include the Harford, Maryland (station No. 24-025-1001), Gloucester, New Jersey (34-015-0002), Richmond, New York (station No. 36-085-0067), and Philadelphia, Pennsylvania (station No. 42-101-0024). The HYSPILT model results for each model run are shown in the plots below for Ozone exceedances occurring in 2015, 2016, and 2017.

These HYSPLIT plots demonstrate that the majority of the air mass affecting the modeled air monitoring stations on an exceedance day did not cross West Virginia's borders. The following tables indicate with an X which vertical wind height backward trajectories crossed into West Virginia in the 48 hours preceding the exceedance. Of the 97 HYSPLIT model runs, representing 291 separate vertical wind heights, only 77 heights (26%) cross West Virginia's borders. Although these heights may have crossed West Virginia's borders, only 50 (17%) potentially cross an industrial area of the state (red Xs in the following table) where air emissions are more predominate. Additionally, in most of these cases the ozone concentration exceedance experienced was near the ozone NAAQS.

A review of the plots shows for the higher exceedance days the winds were coming from the north-north-west or the south-south-west. These wind directions do not across or intersect the state of West Virginia. Most notably, backward trajectories coming from the north-north-west strongly indicate that international emissions may be impacting the air monitoring stations on days with ozone NAAQS exceedances.

**Harford, MD (Station No. 24-025-1001):**

| Date | Ozone Conc. (ppm) | Did Air Mass Cross WV Borders? | | |
|---|---|---|---|---|
| | | 500 m | 1,000 m | 1,500 m |
| 6/11/15 | 0.074 | X | X | X |
| 8/31/15 | 0.072 | X | X | X |
| 9/2/15 | 0.88 | | | |
| 9/3/15 | 0.074 | | | |
| 9/4/15 | 0.074 | | | |
| 5/25/16 | 0.079 | | | |
| 5/26/16 | 0.080 | X | X | |
| 6/20/16 | 0.079 | | | |
| 7/21/16 | 0.072 | | | |
| 7/22/16 | 0.082 | | X* | |
| 7/25/16 | 0.076 | | | X |
| 7/27/16 | 0.079 | | | |
| 9/14/16 | 0.077 | | | X |
| 9/23/16 | 0.080 | | | |
| 5/17/17 | 0.076 | X | X | X |
| 5/18/17 | 0.073 | | | |
| 6/12/17 | 0.077 | X | X | X |
| 6/13/17 | 0.088 | X | X | X |
| 7/19/17 | 0.072 | | | X |
| 7/20/17 | 0.086 | X | X | |
| | **Totals:** | **6** | **7** | **7** |

*Trajectory hit ground before exiting West Virginia boundaries.

**Gloucester, NJ (Station No. 34-015-0002):**

| Date | Ozone Conc. (ppm) | Did Air Mass Cross WV Borders? | | |
|---|---|---|---|---|
| | | 500 m | 1,000 m | 1,500 m |
| 6/11/15 | 0.080 | X | X | |
| 7/28/15 | 0.079 | | | X |
| 8/23/15 | 0.075 | | | |
| 9/1/15 | 0.076 | X | | |
| 9/2/15 | 0.077 | | | |
| 5/25/16 | 0.083 | | | |
| 6/11/16 | 0.074 | | | |
| 6/20/16 | 0.077 | X | | |
| 7/8/16 | 0.076 | | | |
| 7/22/16 | 0.074 | | X | |
| 7/27/16 | 0.071 | | | |
| 9/23/16 | 0.079 | | | |
| 5/17/17 | 0.071 | X | X | X |
| 5/18/17 | 0.076 | | | |
| 6/12/17 | 0.073 | X | X | X |
| 6/13/17 | 0.078 | X | X | X |
| 7/19/17 | 0.076 | | | X |
| 7/20/17 | 0.071 | | X | X |
| **Totals:** | | **6** | **6** | **6** |

**Richmond, NY (Station No. 36-085-0067):**

| Date | Ozone Conc. (ppm) | Did Air Mass Cross WV Borders? | | |
|---|---|---|---|---|
| | | 500 m | 1,000 m | 1,500 m |
| 5/5/15 | 0.075 | | | |
| 5/17/15 | 0.073 | X | X | X |
| 6/11/15 | 0.080 | X | | |
| 7/19/15 | 0.073 | | | |
| 7/28/15 | 0.079 | | | |
| 8/15/15 | 0.075 | | | |
| 8/16/15 | 0.072 | X | X | |
| 8/17/15 | 0.074 | | | |
| 9/3/15 | 0.081 | | | |
| 9/17/15 | 0.085 | | | |
| 5/25/16 | 0.086 | | | |
| 5/26/16 | 0.078 | | | |
| 5/28/16 | 0.074 | | X | X |
| 6/11/16 | 0.071 | | | |
| 7/6/16 | 0.075 | | | |
| 7/15/16 | 0.071 | X | X | X |
| 7/21/16 | 0.077 | | | |
| 7/22/16 | 0.081 | | X | |
| 7/28/16 | 0.071 | | | |
| 7/29/16 | 0.073 | | | |
| 5/17/17 | 0.081 | | | |
| 5/18/17 | 0.074 | | | X |
| 6/10/17 | 0.071 | | | |
| 6/12/17 | 0.079 | X | X | |
| 6/13/17 | 0.072 | | | |
| 7/22/17 | 0.072 | | | |
| 8/1/17 | 0.072 | | | |
| | **Totals:** | **5** | **6** | **4** |

**Philadelphia, PA (Station No. 42-101-0024):**

| Date | Ozone Conc. (ppm) | Did Air Mass Cross WV Borders? | | |
|---|---|---|---|---|
| | | 500 m | 1,000 m | 1,500 m |
| 5/8/15 | 0.073 | | | |
| 6/11/15 | 0.089 | X | X | X |
| 7/19/15 | 0.074 | X | | |
| 7/28/15 | 0.075 | | | X |
| 7/29/15 | 0.074 | | | |
| 8/15/15 | 0.080 | | | |
| 8/30/15 | 0.071 | | | X |
| 9/2/15 | 0.079 | | | |
| 9/16/15 | 0.076 | | | |
| 9/17/15 | 0.086 | | | |
| 9/18/15 | 0.078 | | | |
| 5/25/16 | 0.084 | | | |
| 5/26/16 | 0.079 | X | | |
| 6/11/16 | 0.074 | | | |
| 6/20/16 | 0.073 | | | |
| 6/26/16 | 0.076 | | | |
| 7/21/16 | 0.081 | | | |
| 7/22/16 | 0.084 | | X | |
| 8/31/16 | 0.080 | | | |
| 9/23/16 | 0.078 | | | |
| 4/11/17 | 0.073 | | X | X |
| 5/17/17 | 0.086 | X | X | X |
| 5/18/17 | 0.092 | | | |
| 6/10/17 | 0.073 | | | |
| 6/12/17 | 0.075 | X | X | X |
| 6/13/17 | 0.076 | X | X | X |
| 6/22/17 | 0.072 | | | |
| 7/18/17 | 0.074 | | | |
| 7/19/17 | 0.073 | | X | X |
| 7/22/17 | 0.072 | | | |
| 8/1/17 | 0.074 | | | |
| 9/25/17 | 0.071 | | | |
| | **Totals:** | **6** | **7** | **8** |

**HYSPLIT Backward Trajectory Plots:**

# Harford, MD
# 24-025-1001

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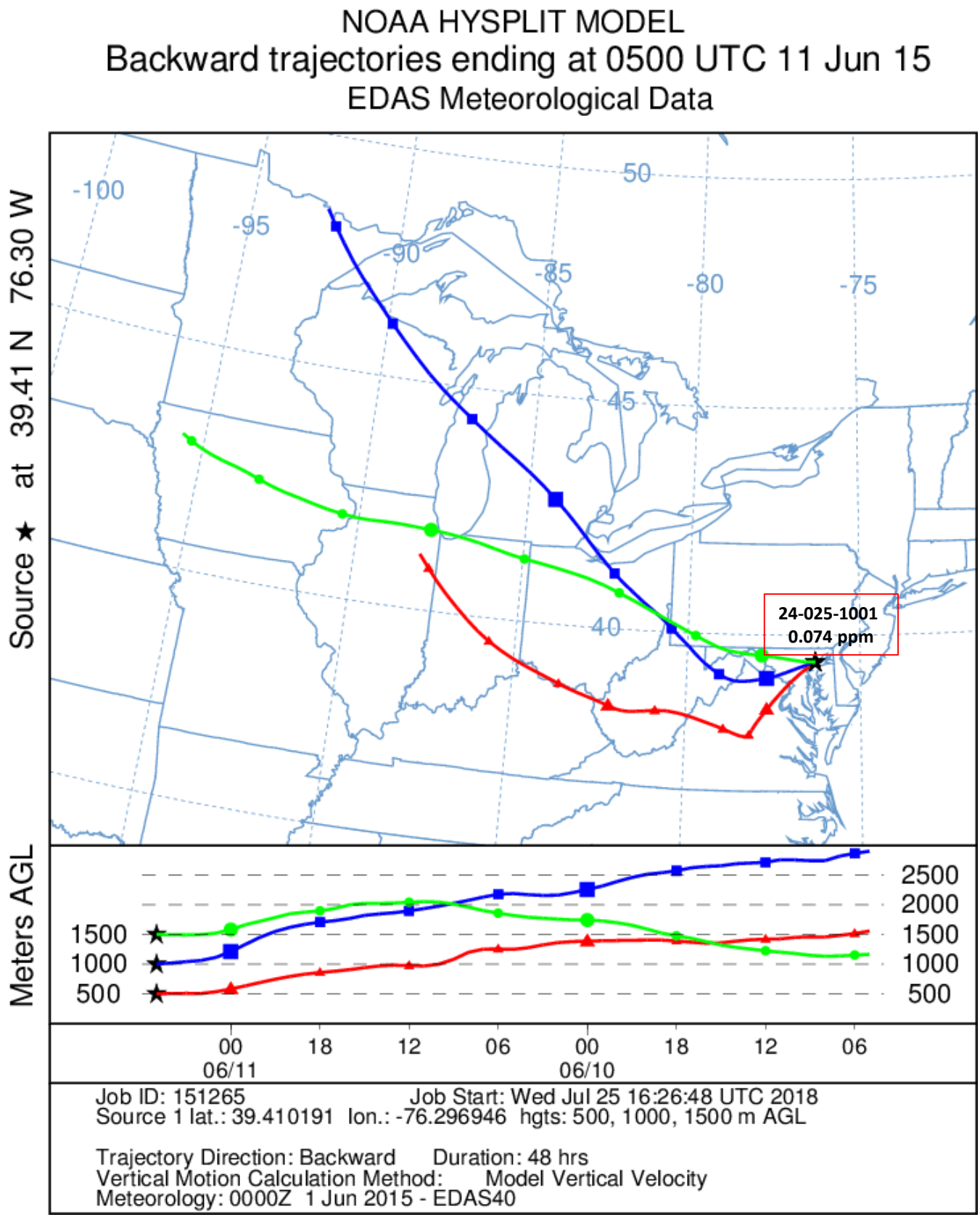
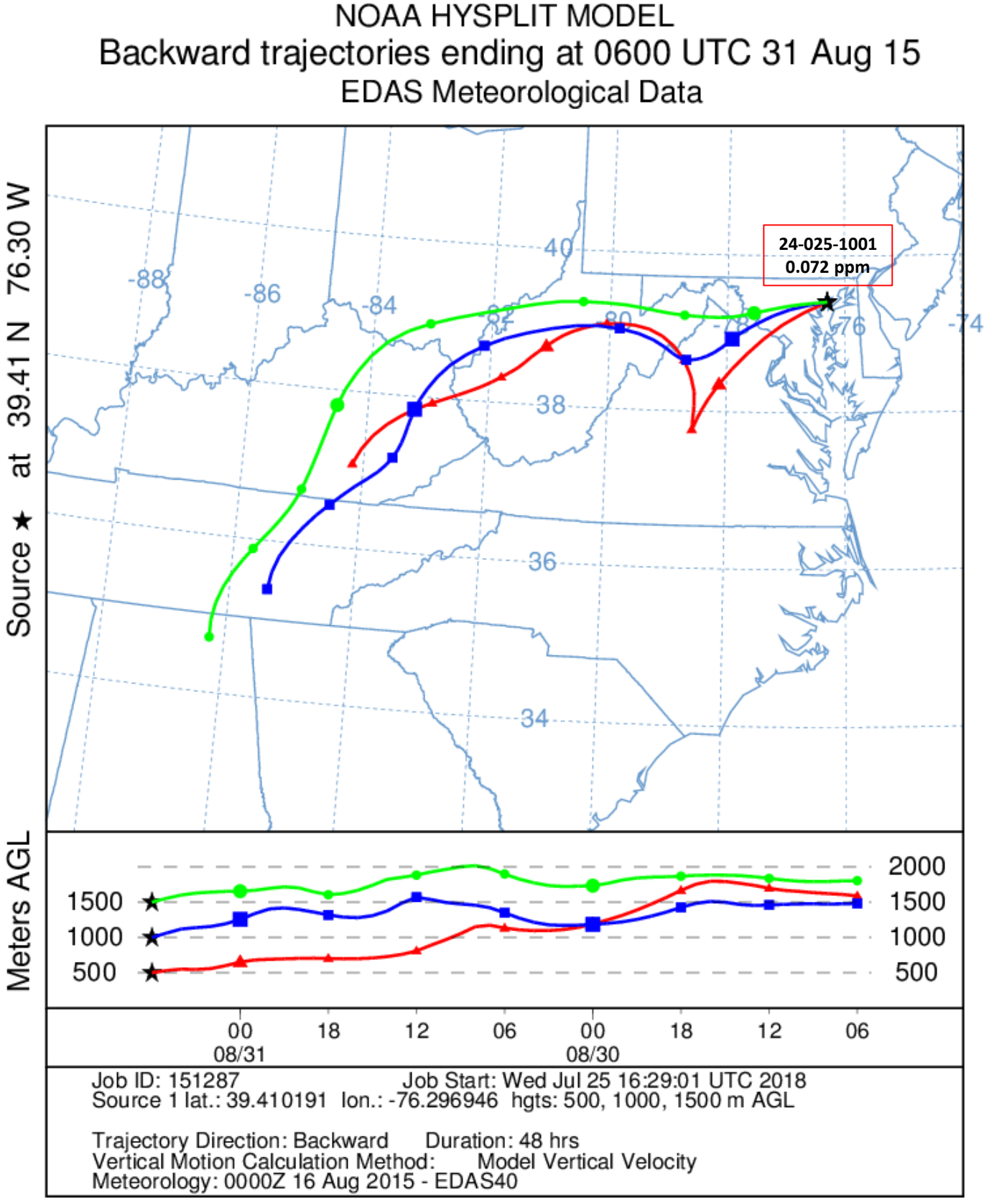
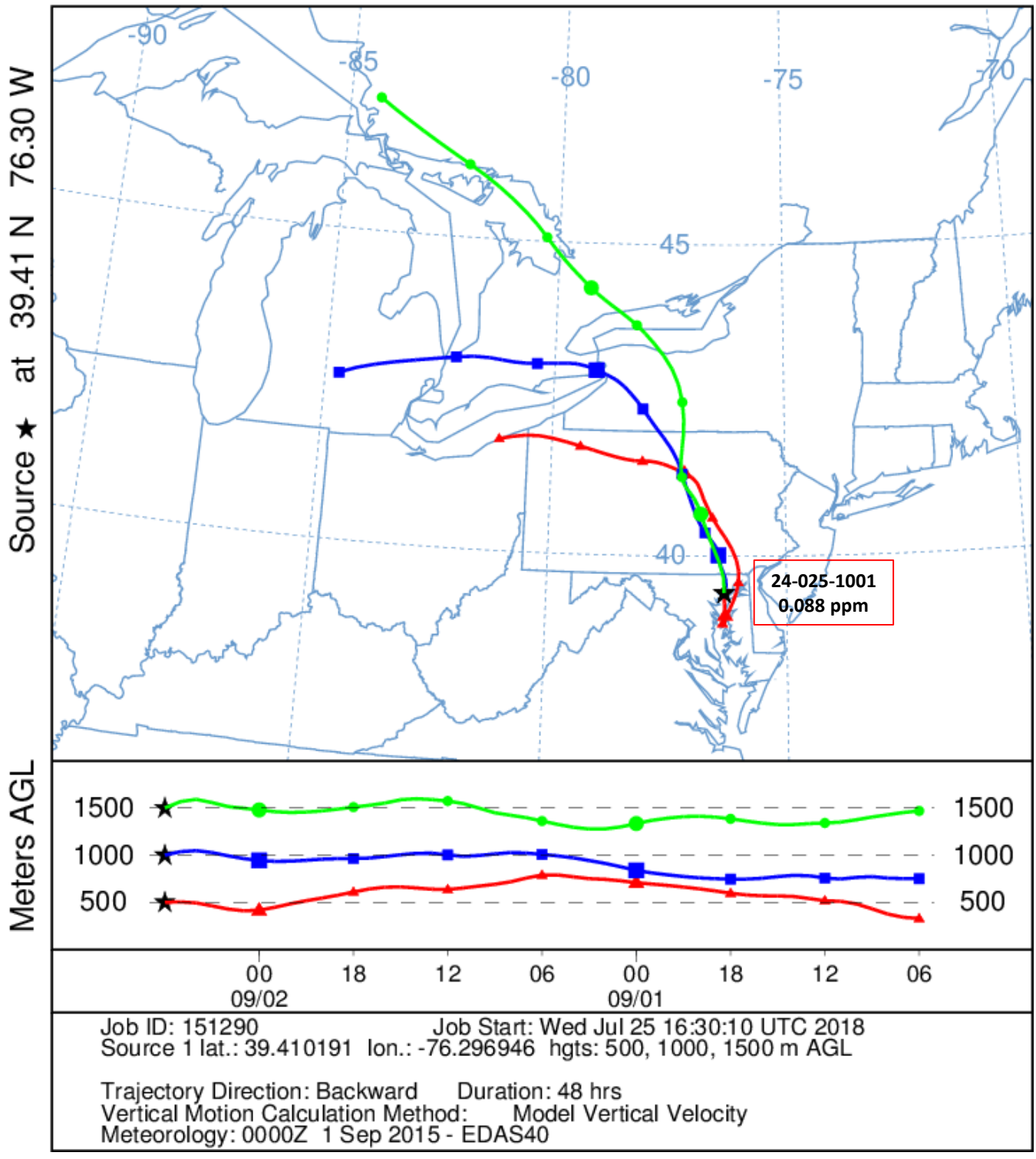
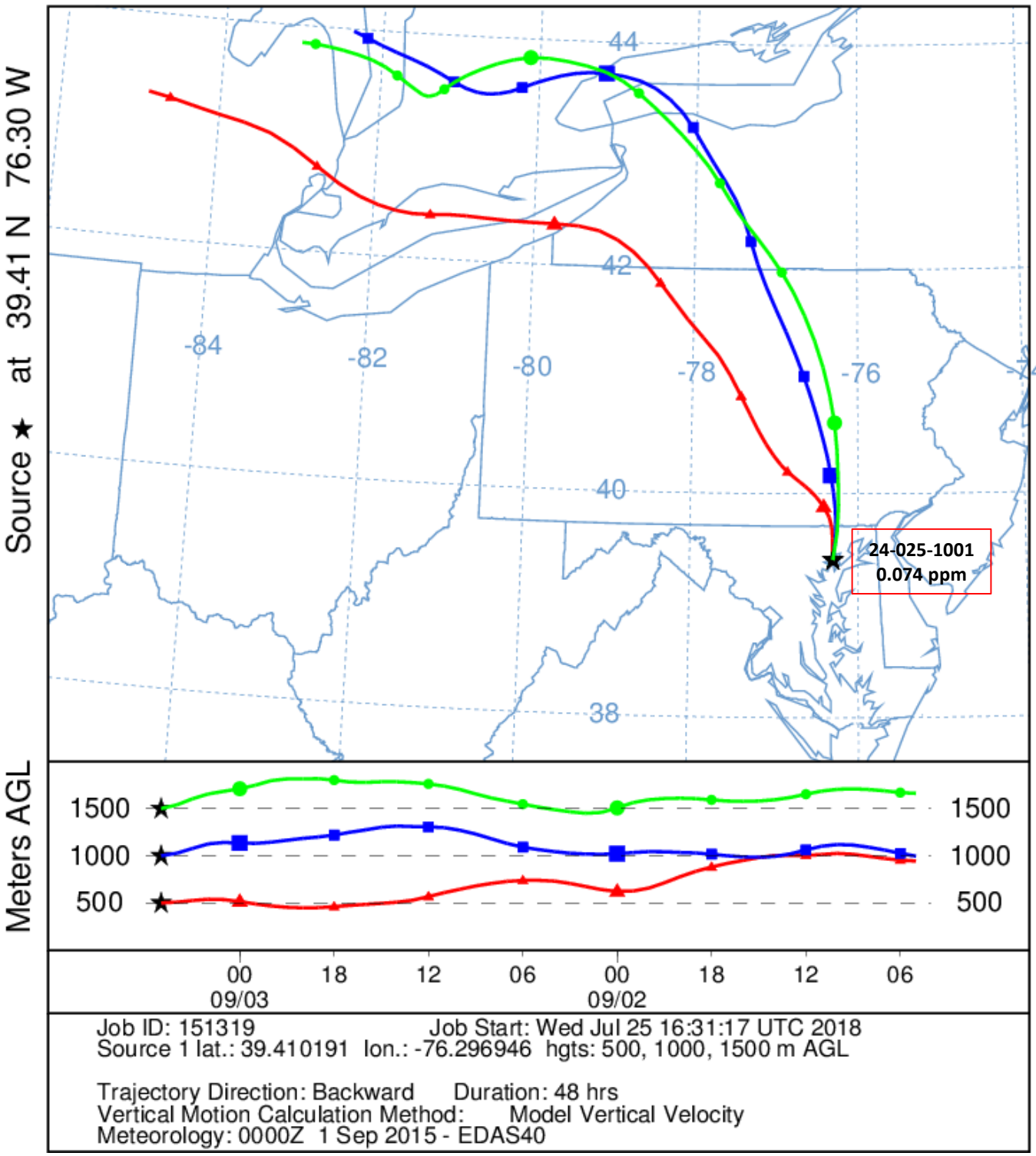
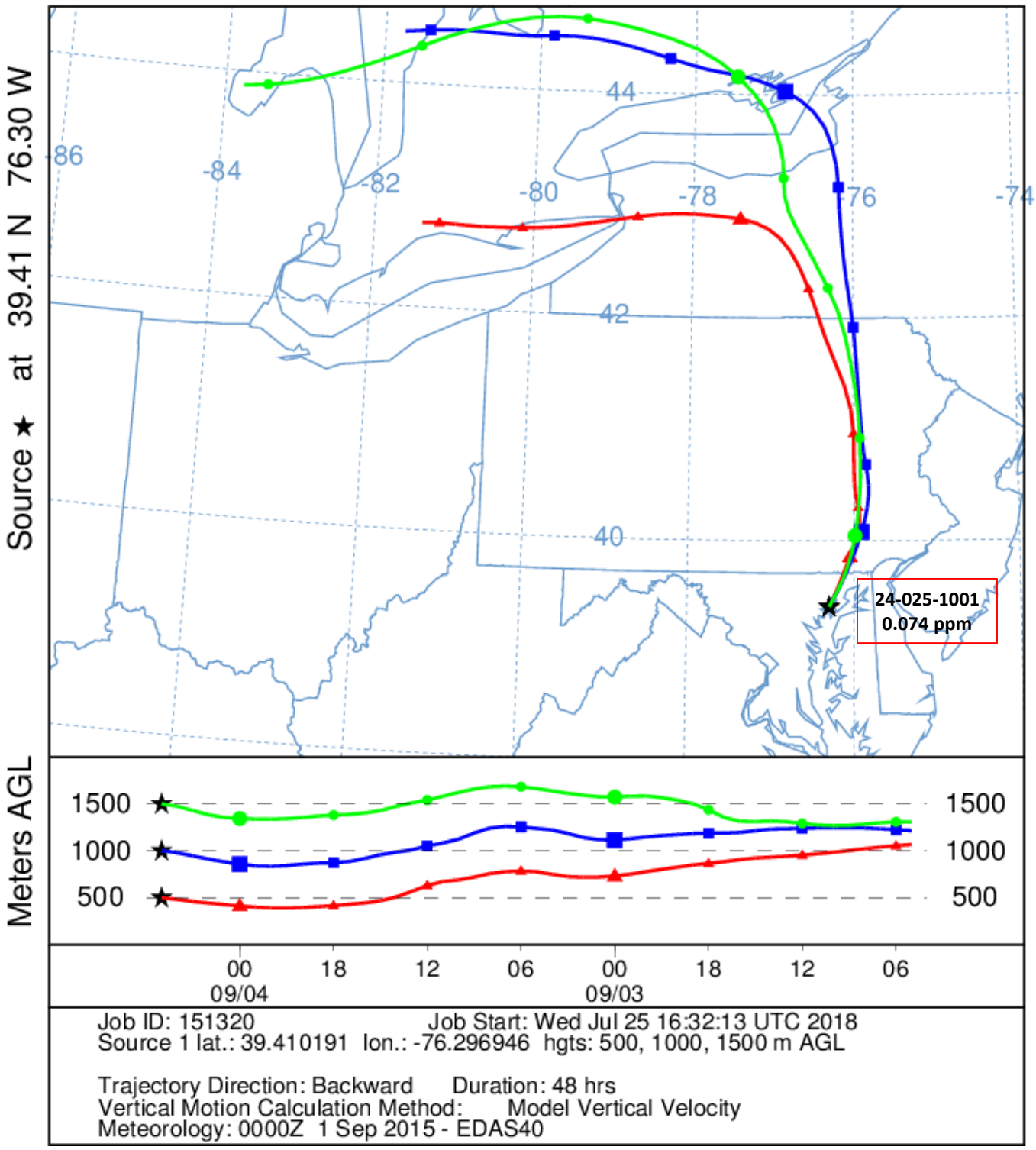
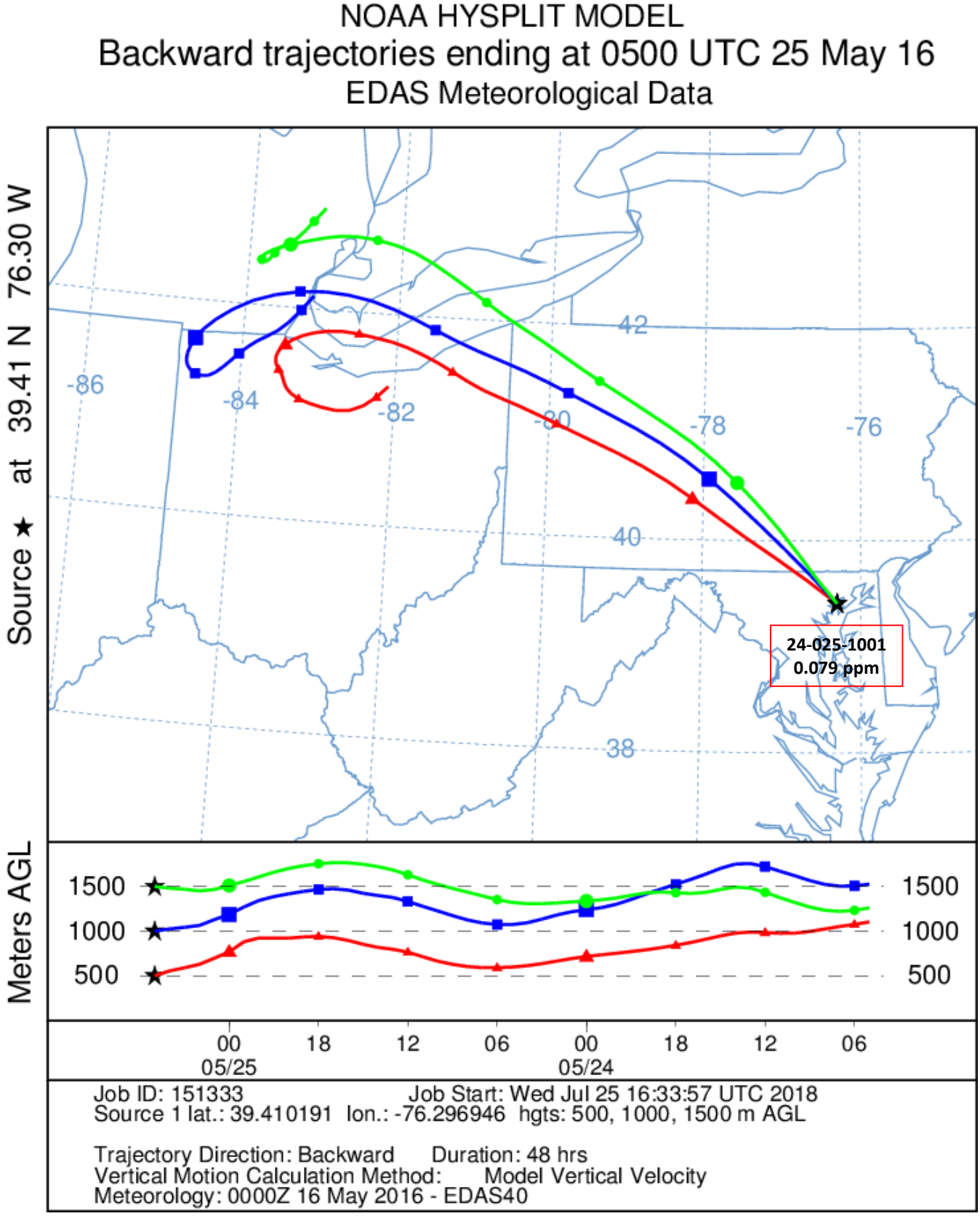

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 11 Jun 15
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
-100
-95
-90
-85
-80
-75
50
45
40
24-025-1001
0.074 ppm
Meters AGL
2500
2000
1500
1000
500
1500
1000
500
00
06/11
18
12
06
00
06/10
18
12
06
Job ID: 151265
Job Start: Wed Jul 25 16:26:48 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2015 - EDAS40

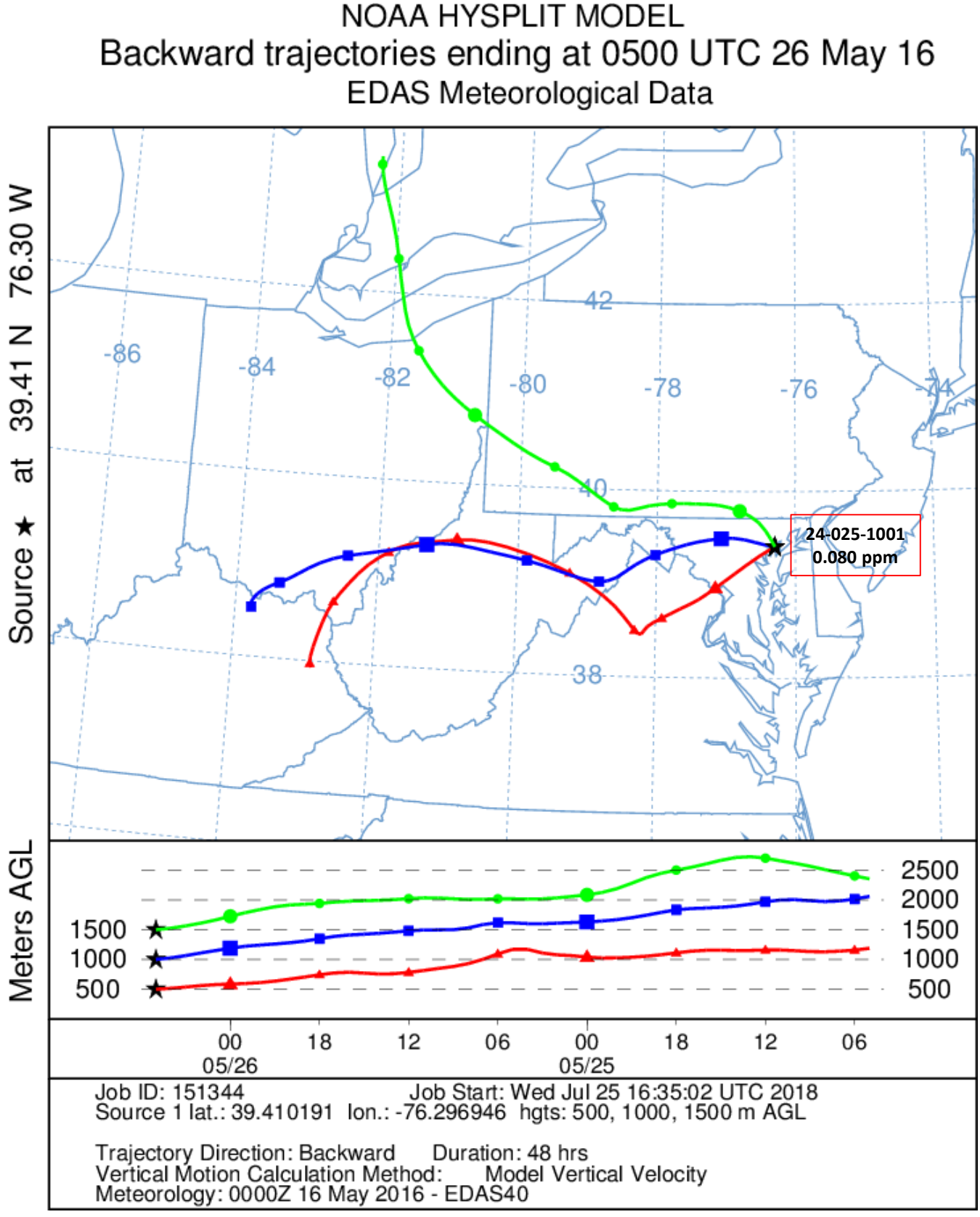

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 31 Aug 15
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
24-025-1001
0.072 ppm
-88
-86
-84
-82
-80
-78
-76
-74
40
38
36
34
Meters AGL
2000
1500
1000
500
1500
1000
500
00
08/31
18
12
06
00
08/30
18
12
06
Job ID: 151287
Job Start: Wed Jul 25 16:29:01 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Aug 2015 - EDAS40

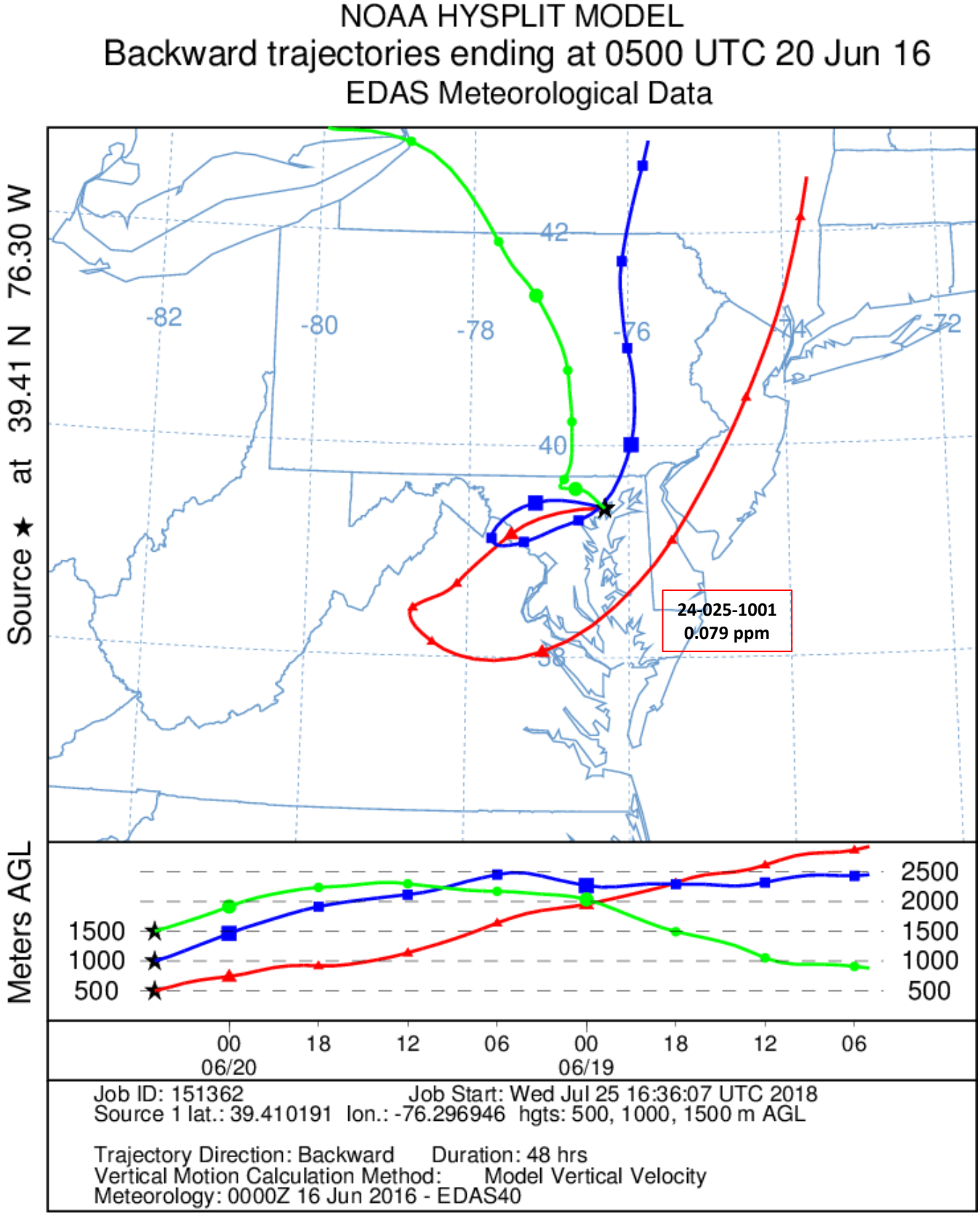

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 02 Sep 15
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
-90
-85
-80
-75
-70
45
40
24-025-1001
0.088 ppm
Meters AGL
1500
1000
500
00
09/02
18
12
06
00
09/01
18
12
06
Job ID: 151290
Job Start: Wed Jul 25 16:30:10 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 1 Sep 2015 - EDAS40

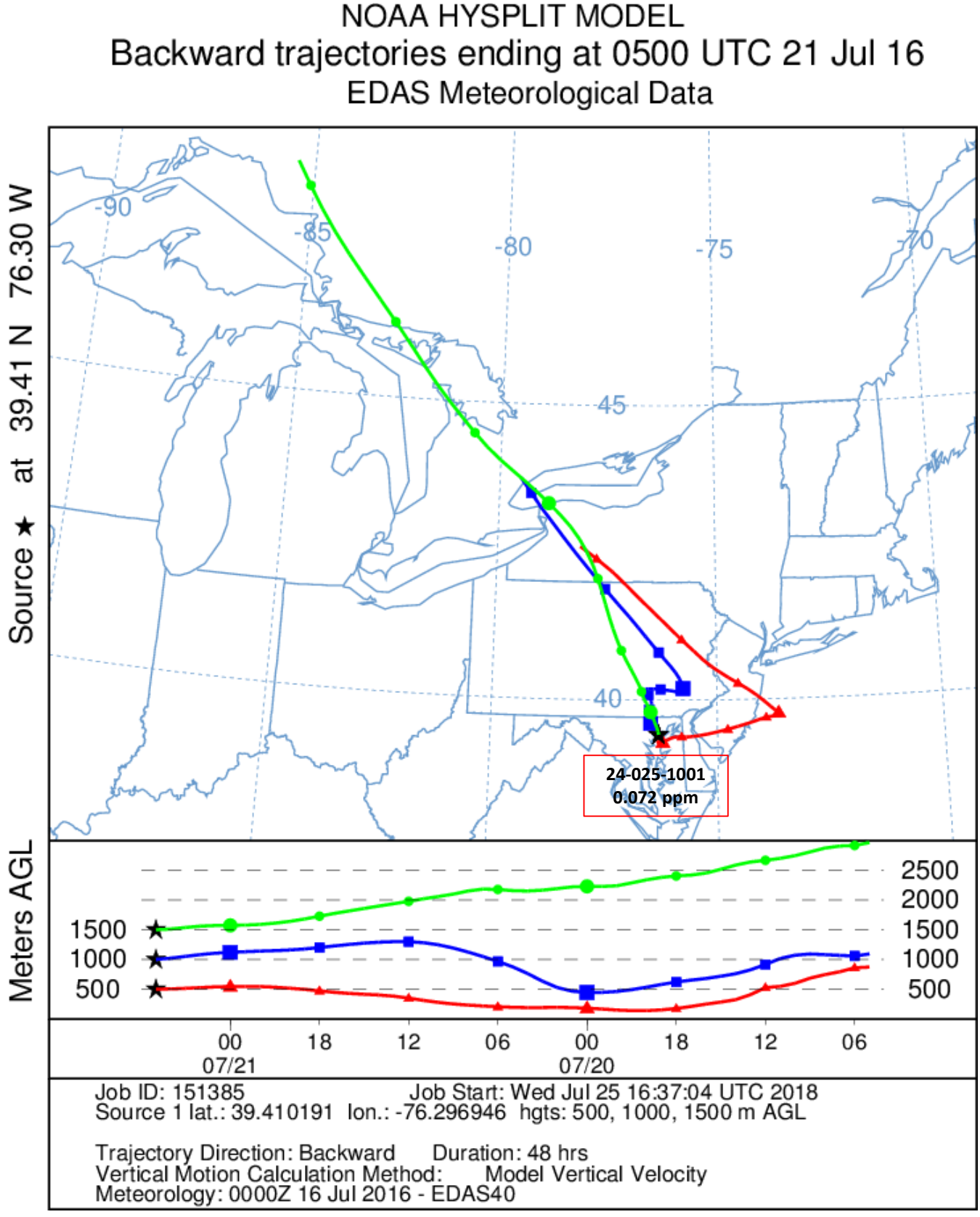

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 03 Sep 15
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
44
42
40
38
-84
-82
-80
-78
-76
24-025-1001
0.074 ppm
Meters AGL
1500
1000
500
00
09/03
18
12
06
00
09/02
18
12
06
Job ID: 151319
Job Start: Wed Jul 25 16:31:17 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 1 Sep 2015 - EDAS40

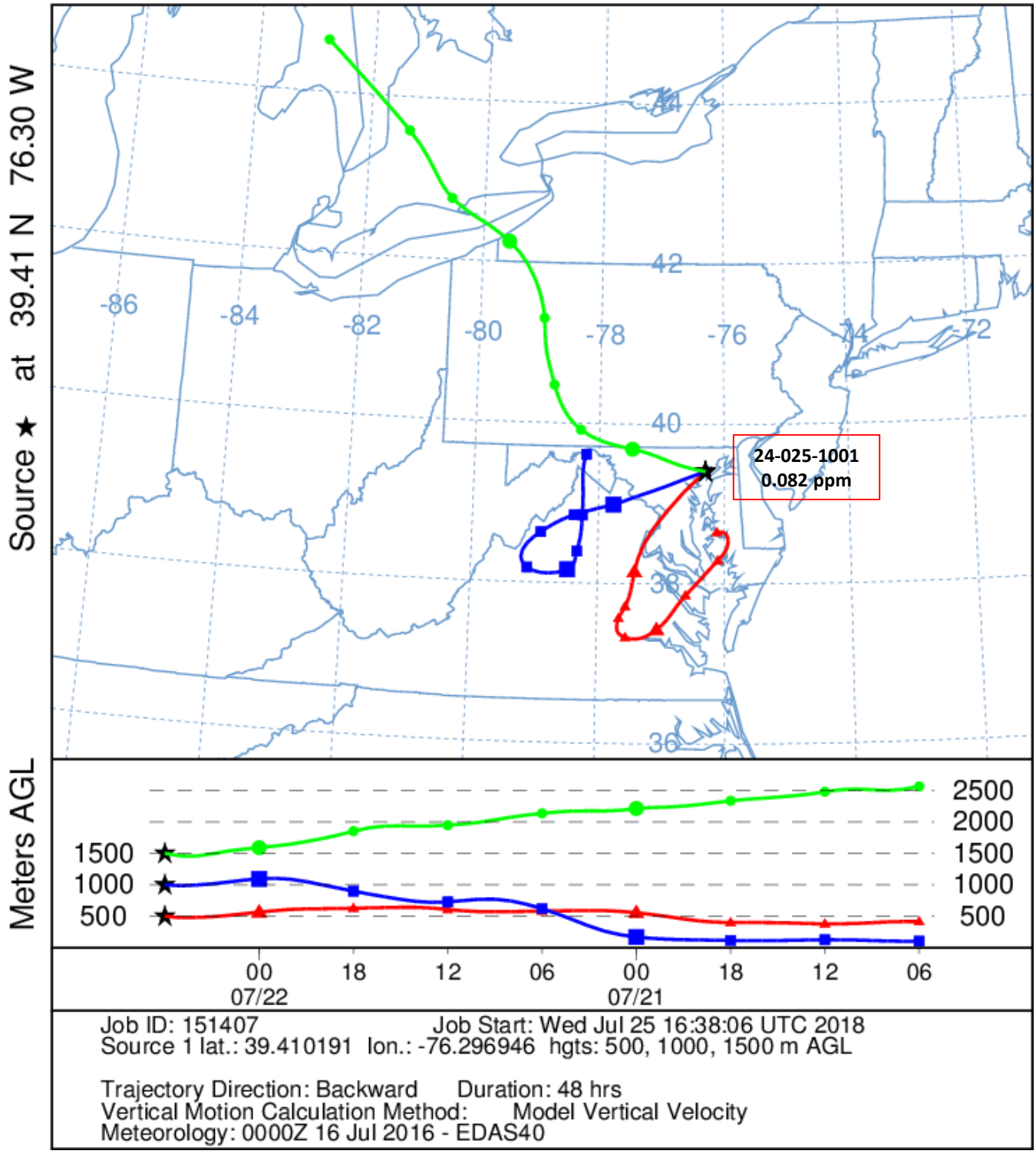

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 04 Sep 15
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
Meters AGL
24-025-1001
0.074 ppm
1500
1000
500
00
09/04
18
12
06
00
09/03
18
12
06
Job ID: 151320 Job Start: Wed Jul 25 16:32:13 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Sep 2015 - EDAS40

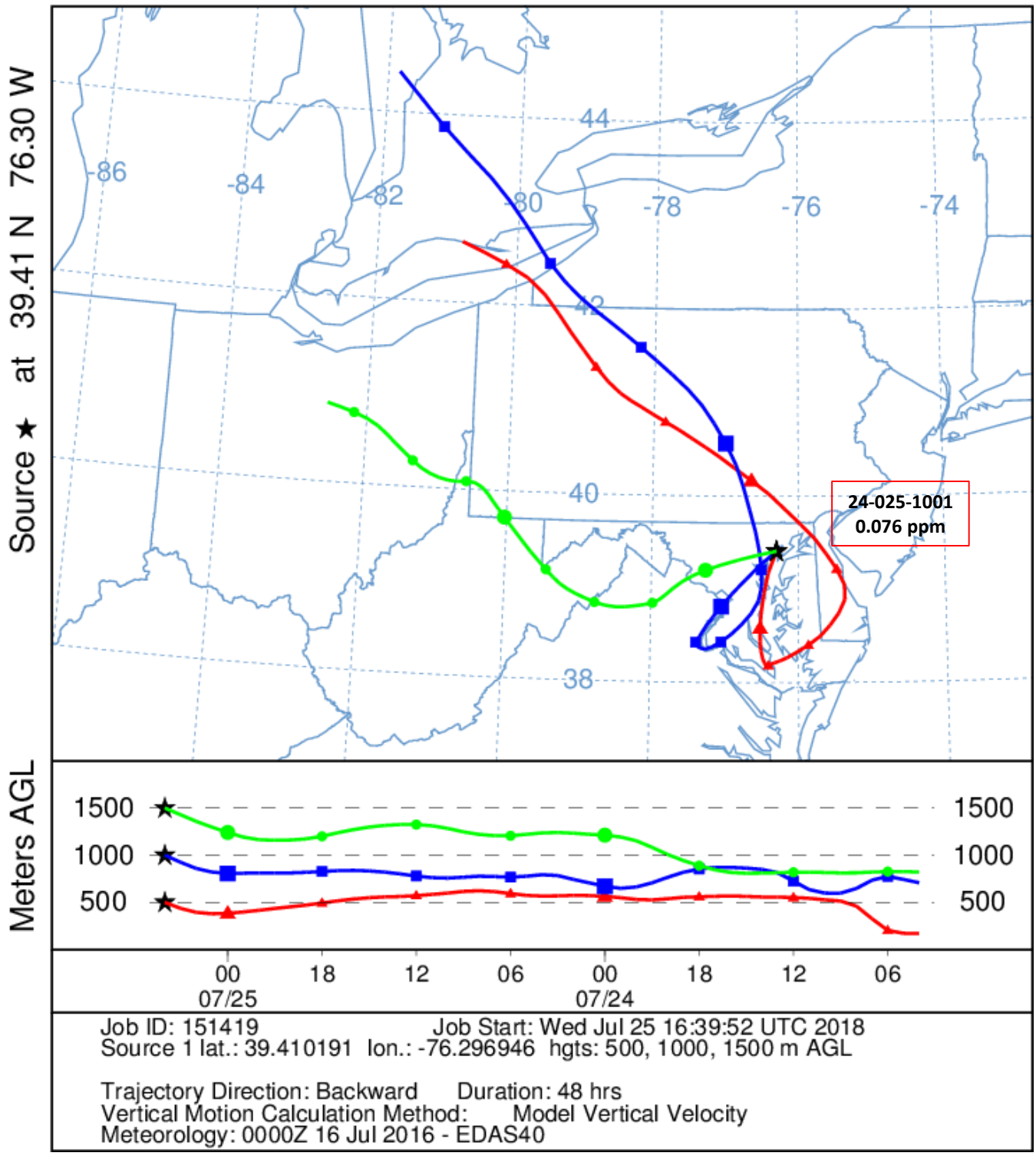

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 25 May 16
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
-86
-84
-82
-80
-78
-76
42
40
38
24-025-1001
0.079 ppm
Meters AGL
1500
1000
500
00
05/25
18
12
06
00
05/24
18
12
06
Job ID: 151333 Job Start: Wed Jul 25 16:33:57 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 May 2016 - EDAS40

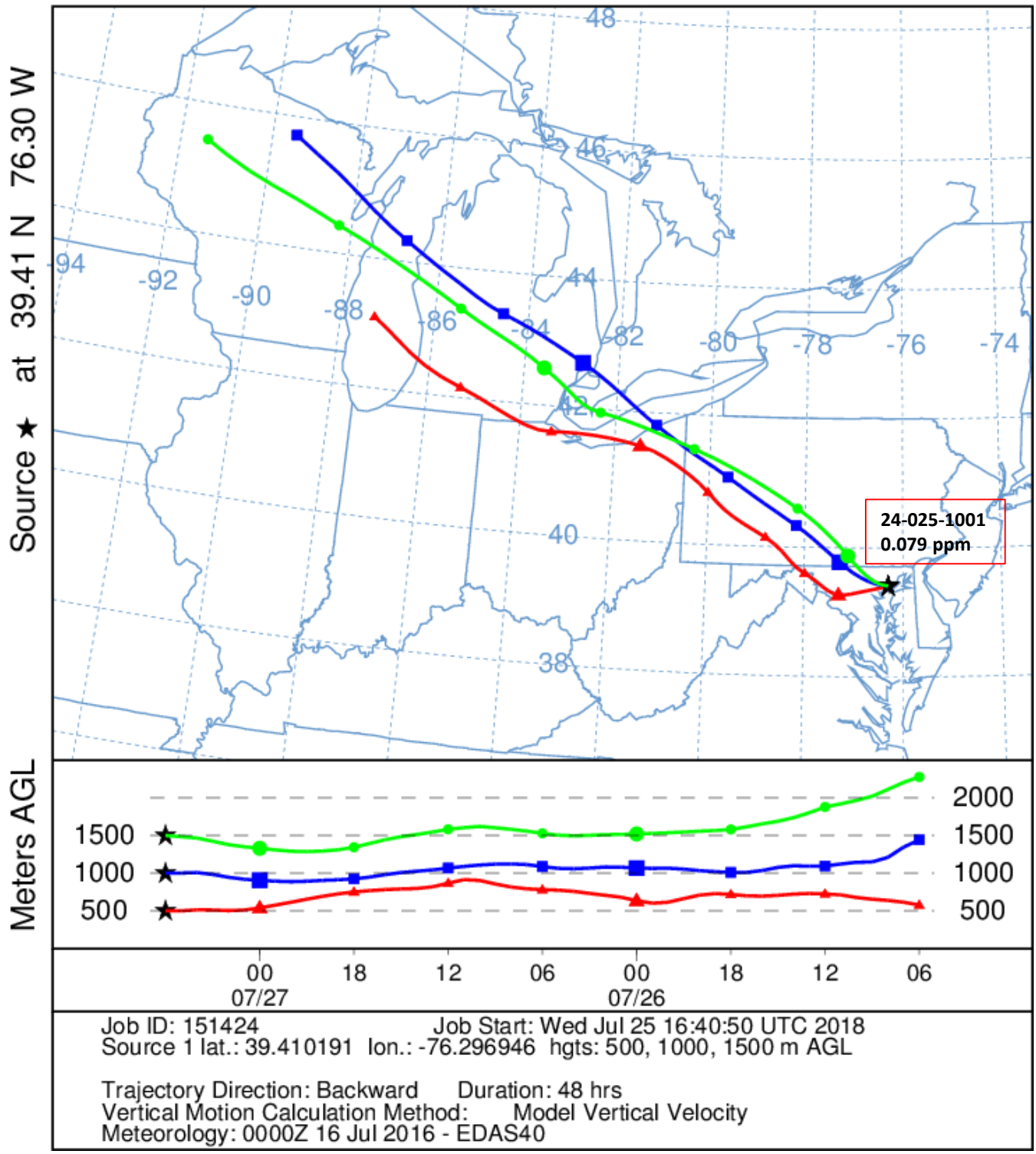

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 26 May 16
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
42
40
38
-86
-84
-82
-80
-78
-76
24-025-1001
0.080 ppm
Meters AGL
2500
2000
1500
1000
500
1500
1000
500
00
05/26
18
12
06
00
05/25
18
12
06
Job ID: 151344 Job Start: Wed Jul 25 16:35:02 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 May 2016 - EDAS40

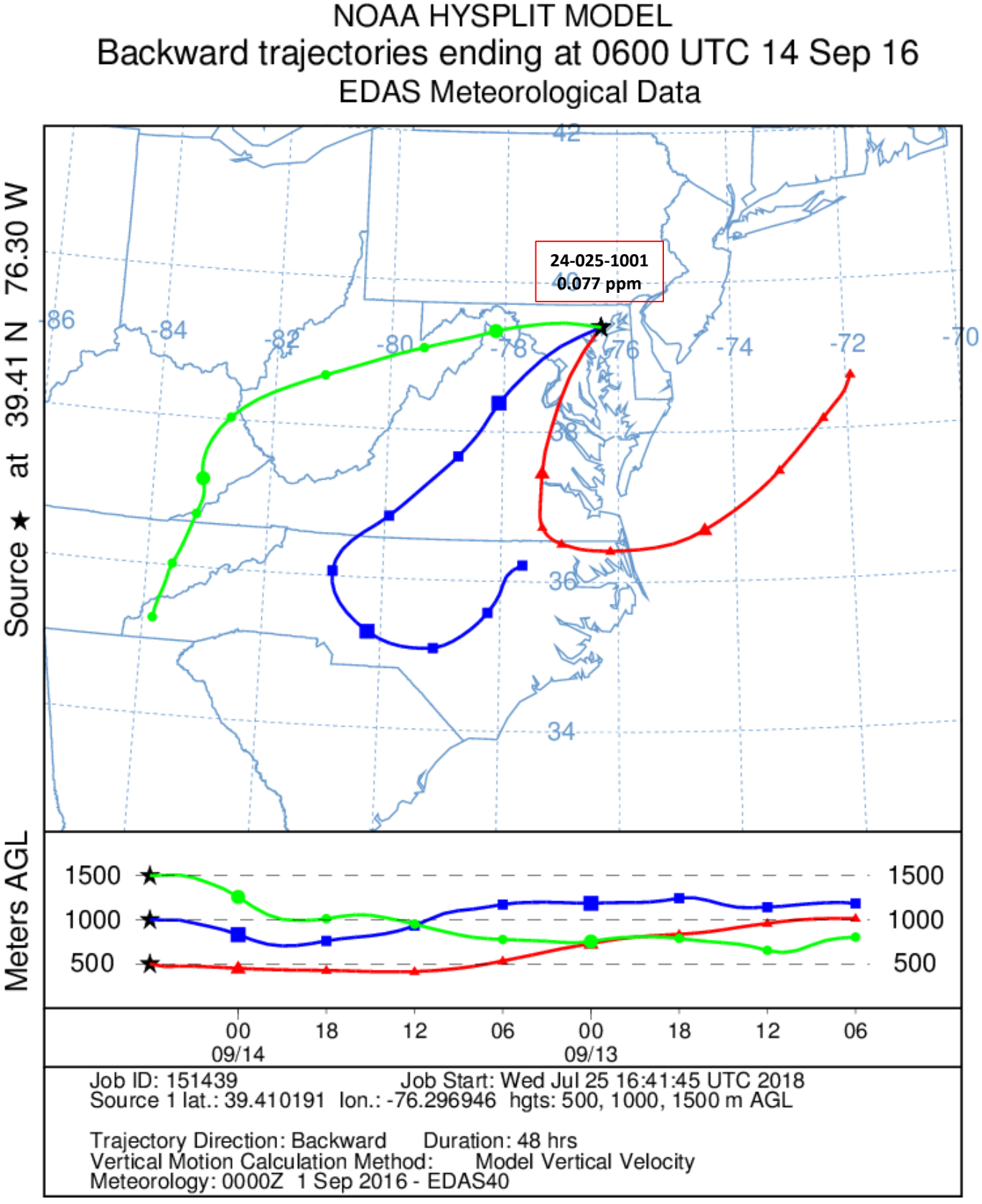

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 20 Jun 16
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
42
40
38
-82
-80
-78
-76
-74
-72
24-025-1001
0.079 ppm
Meters AGL
2500
2000
1500
1000
500
1500
1000
500
00
06/20
18
12
06
00
06/19
18
12
06
Job ID: 151362
Job Start: Wed Jul 25 16:36:07 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Jun 2016 - EDAS40

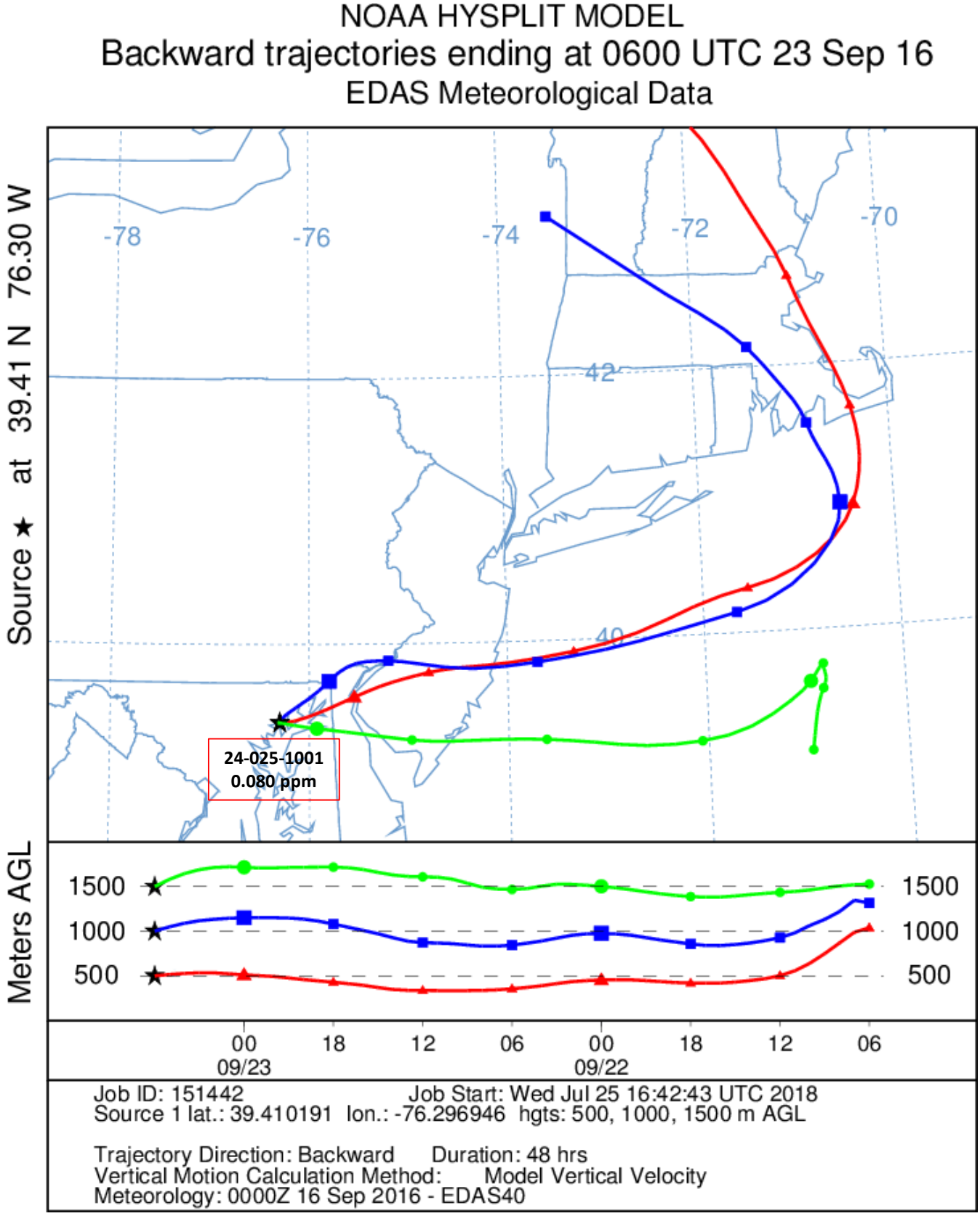

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 21 Jul 16
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
-90
-85
-80
-75
-70
45
40
24-025-1001
0.072 ppm
Meters AGL
2500
2000
1500
1000
500
1500
1000
500
00
07/21
18
12
06
00
07/20
18
12
06
Job ID: 151385
Job Start: Wed Jul 25 16:37:04 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2016 - EDAS40

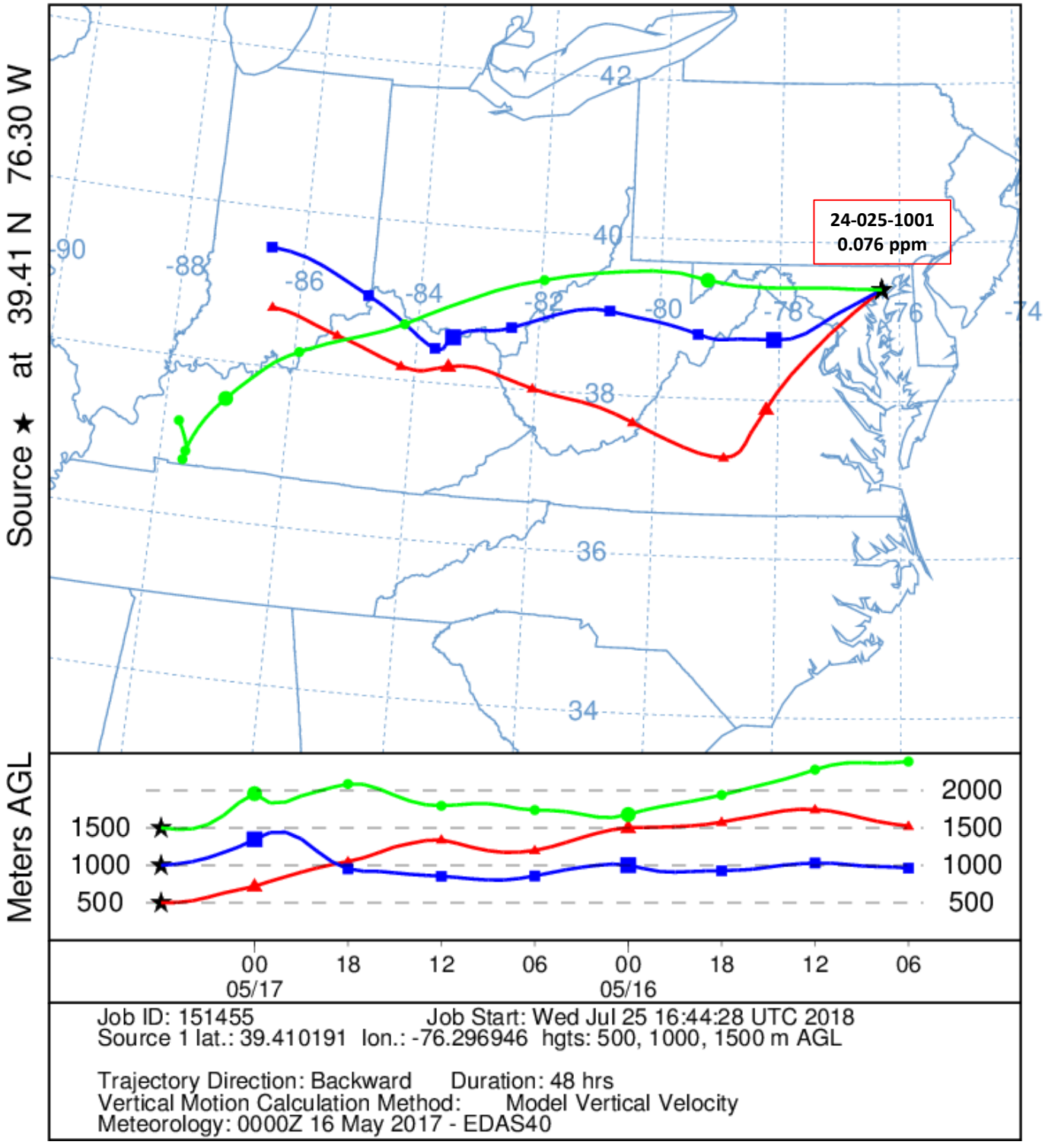

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 22 Jul 16
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
24-025-1001
0.082 ppm
Meters AGL
2500
2000
1500
1000
500
00
07/22
18
12
06
00
07/21
18
12
06
Job ID: 151407 Job Start: Wed Jul 25 16:38:06 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2016 - EDAS40

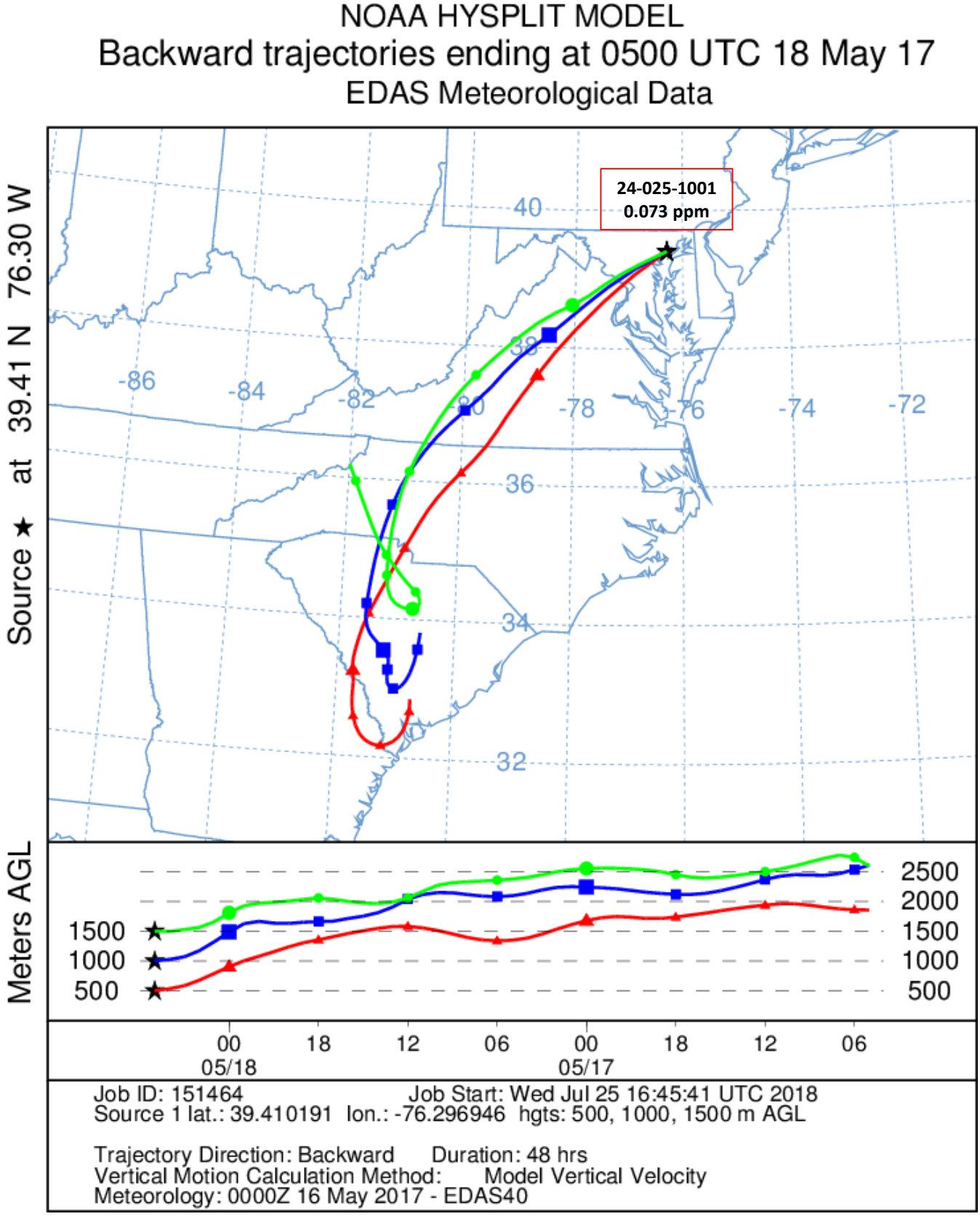

NOAA HYSPLIT MODEL
Backward trajectories ending at 0400 UTC 25 Jul 16
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
Meters AGL
24-025-1001
0.076 ppm
1500
1000
500
00
07/25
18
12
06
00
07/24
18
12
06
Job ID: 151419 Job Start: Wed Jul 25 16:39:52 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2016 - EDAS40

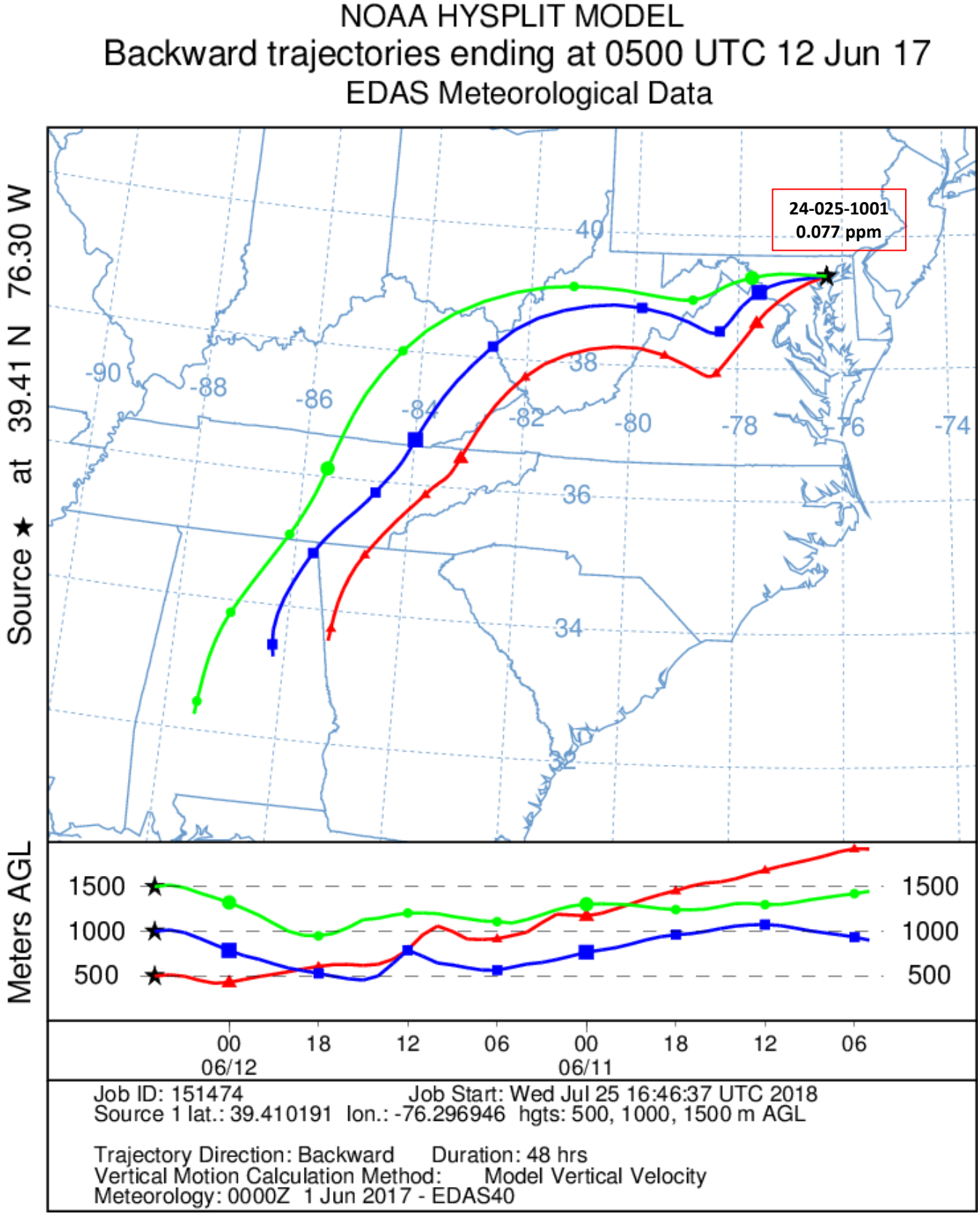

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 27 Jul 16
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
48
46
44
42
40
38
-94
-92
-90
-88
-86
-84
-82
-80
-78
-76
-74
24-025-1001
0.079 ppm
Meters AGL
2000
1500
1000
500
1500
1000
500
00
07/27
18
12
06
00
07/26
18
12
06
Job ID: 151424 Job Start: Wed Jul 25 16:40:50 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2016 - EDAS40

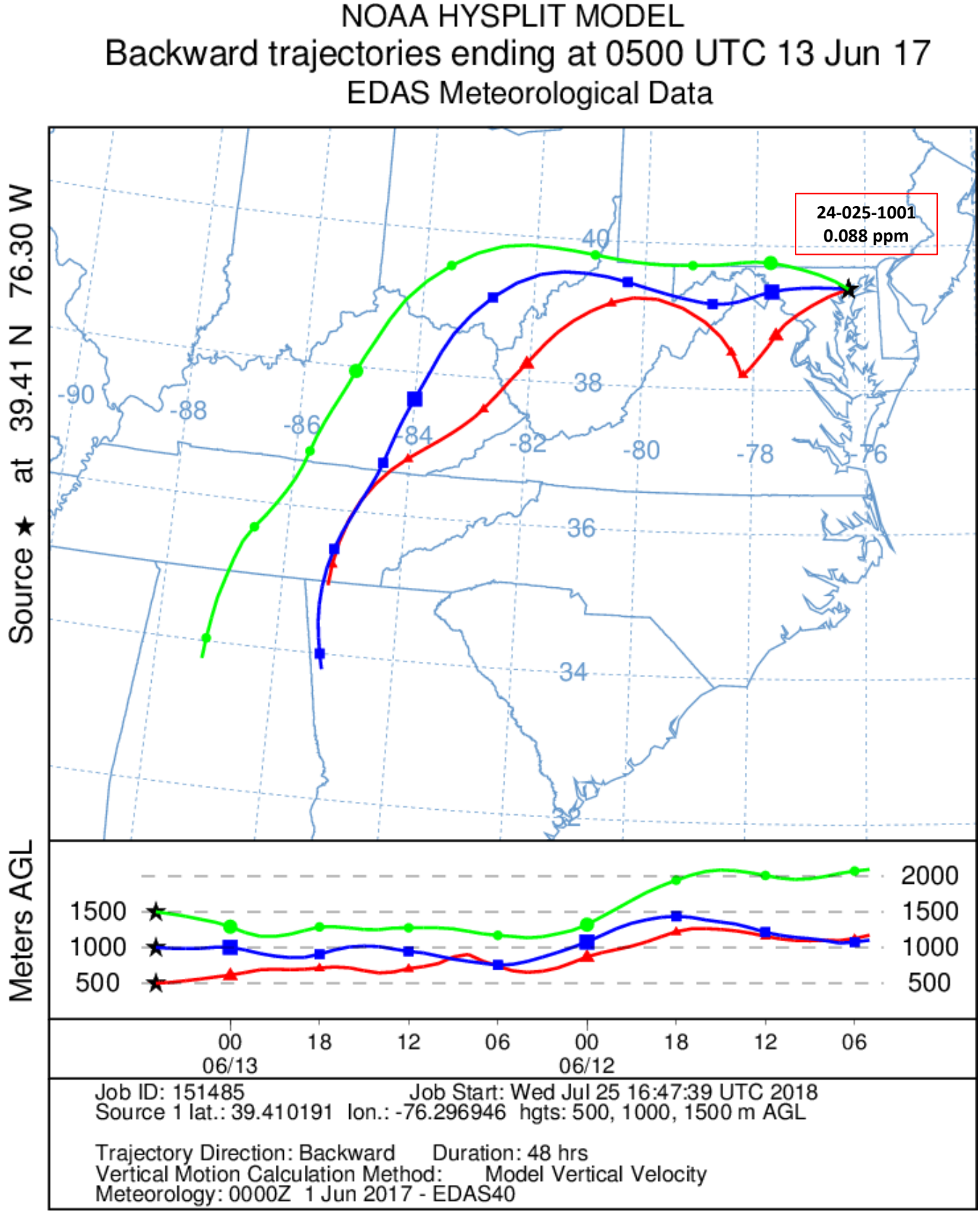

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 14 Sep 16
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
24-025-1001
0.077 ppm
Meters AGL
1500
1000
500
00
09/14
18
12
06
00
09/13
18
12
06
Job ID: 151439
Job Start: Wed Jul 25 16:41:45 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 1 Sep 2016 - EDAS40

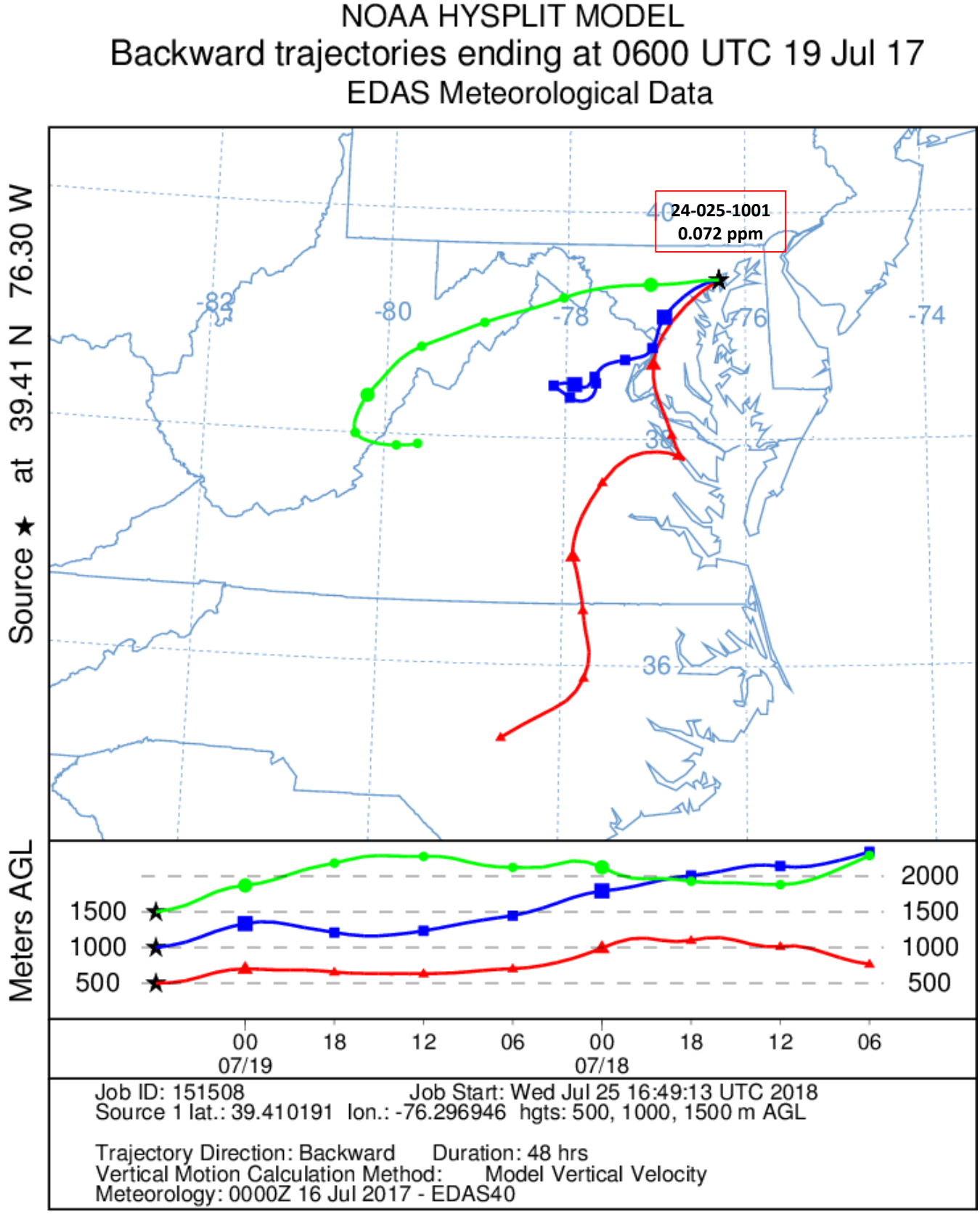

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 23 Sep 16
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
-78
-76
-74
-72
-70
42
40
24-025-1001
0.080 ppm
Meters AGL
1500
1000
500
00
09/23
18
12
06
00
09/22
18
12
06
Job ID: 151442 Job Start: Wed Jul 25 16:42:43 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Sep 2016 - EDAS40

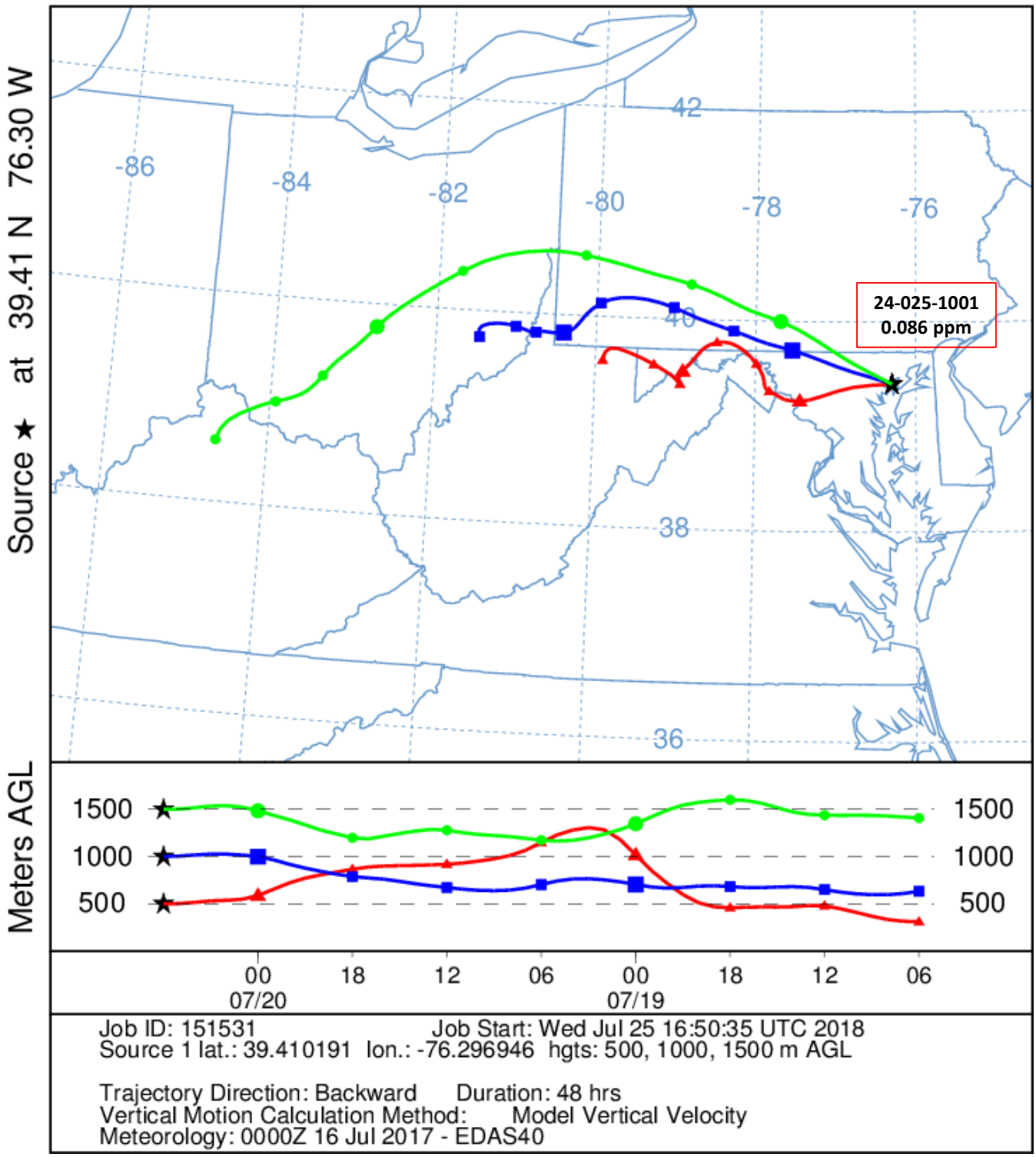

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 17 May 17
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
24-025-1001
0.076 ppm
Meters AGL
2000
1500
1000
500
00
05/17
18
12
06
00
05/16
18
12
06
Job ID: 151455 Job Start: Wed Jul 25 16:44:28 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 May 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 18 May 17
EDAS Meteorological Data
24-025-1001
0.073 ppm
Source ★ at 39.41 N 76.30 W
Meters AGL
1500
1000
500
2500
2000
1500
1000
500
00 18 12 06 00 18 12 06
05/18
05/17
Job ID: 151464 Job Start: Wed Jul 25 16:45:41 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 May 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 12 Jun 17
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
24-025-1001
0.077 ppm
Meters AGL
1500
1000
500
00 06/12
18
12
06
00 06/11
18
12
06
Job ID: 151474 Job Start: Wed Jul 25 16:46:37 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 13 Jun 17
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
24-025-1001
0.088 ppm
40
38
36
34
32
-90
-88
-86
-84
-82
-80
-78
-76
Meters AGL
2000
1500
1000
500
1500
1000
500
00
06/13
18
12
06
00
06/12
18
12
06
Job ID: 151485 Job Start: Wed Jul 25 16:47:39 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 19 Jul 17
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
24-025-1001
0.072 ppm
-82
-80
-78
-76
-74
40
38
36
Meters AGL
1500
1000
500
2000
1500
1000
500
00
07/19
18
12
06
00
07/18
18
12
06
Job ID: 151508
Job Start: Wed Jul 25 16:49:13 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 20 Jul 17
EDAS Meteorological Data
Source ★ at 39.41 N 76.30 W
24-025-1001
0.086 ppm
42
40
38
36
-86
-84
-82
-80
-78
-76
Meters AGL
1500
1000
500
00
07/20
18
12
06
00
07/19
18
12
06
Job ID: 151531 Job Start: Wed Jul 25 16:50:35 UTC 2018
Source 1 lat.: 39.410191 lon.: -76.296946 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2017 - EDAS40

# Gloucester, NJ
# 34-015-0002

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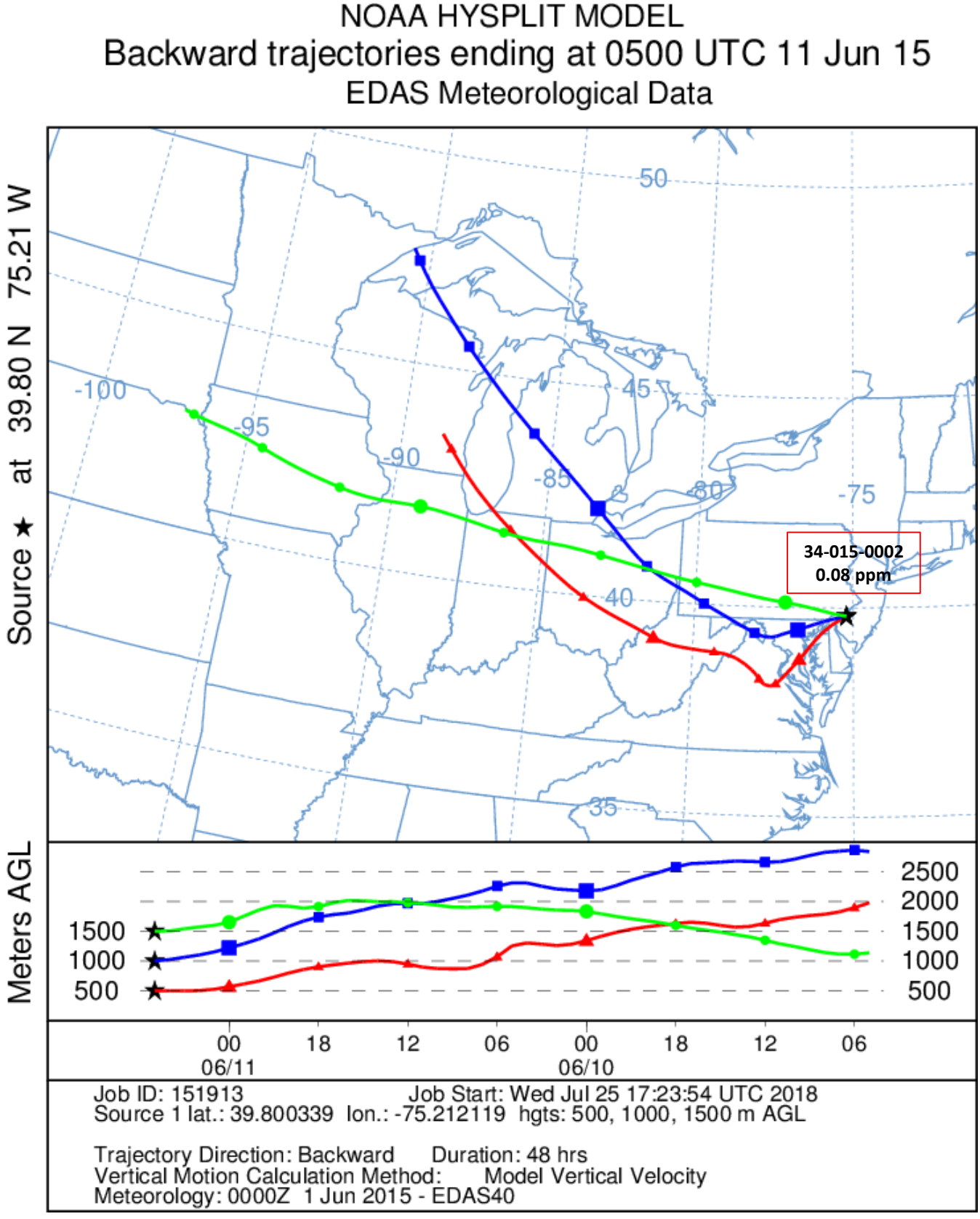
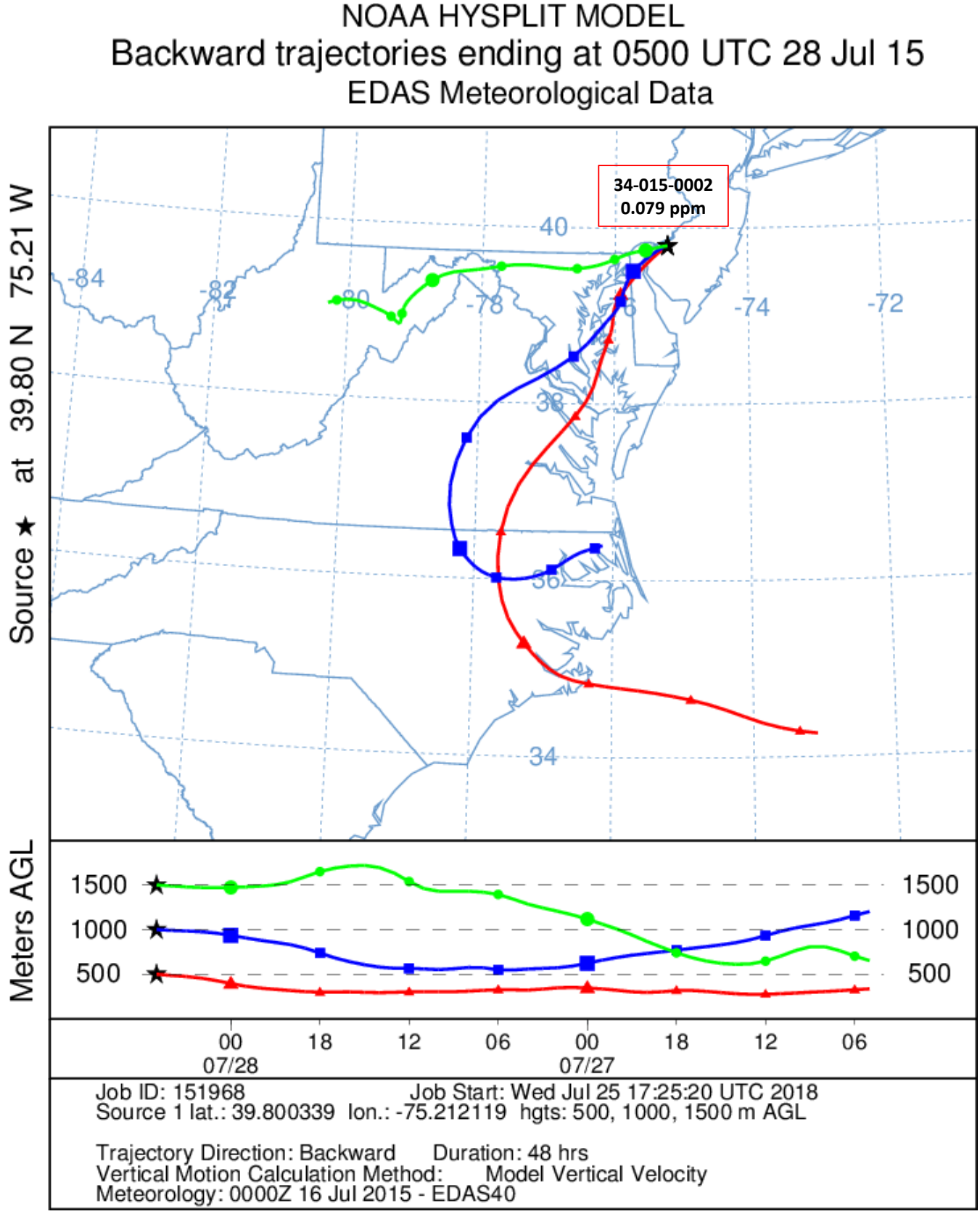
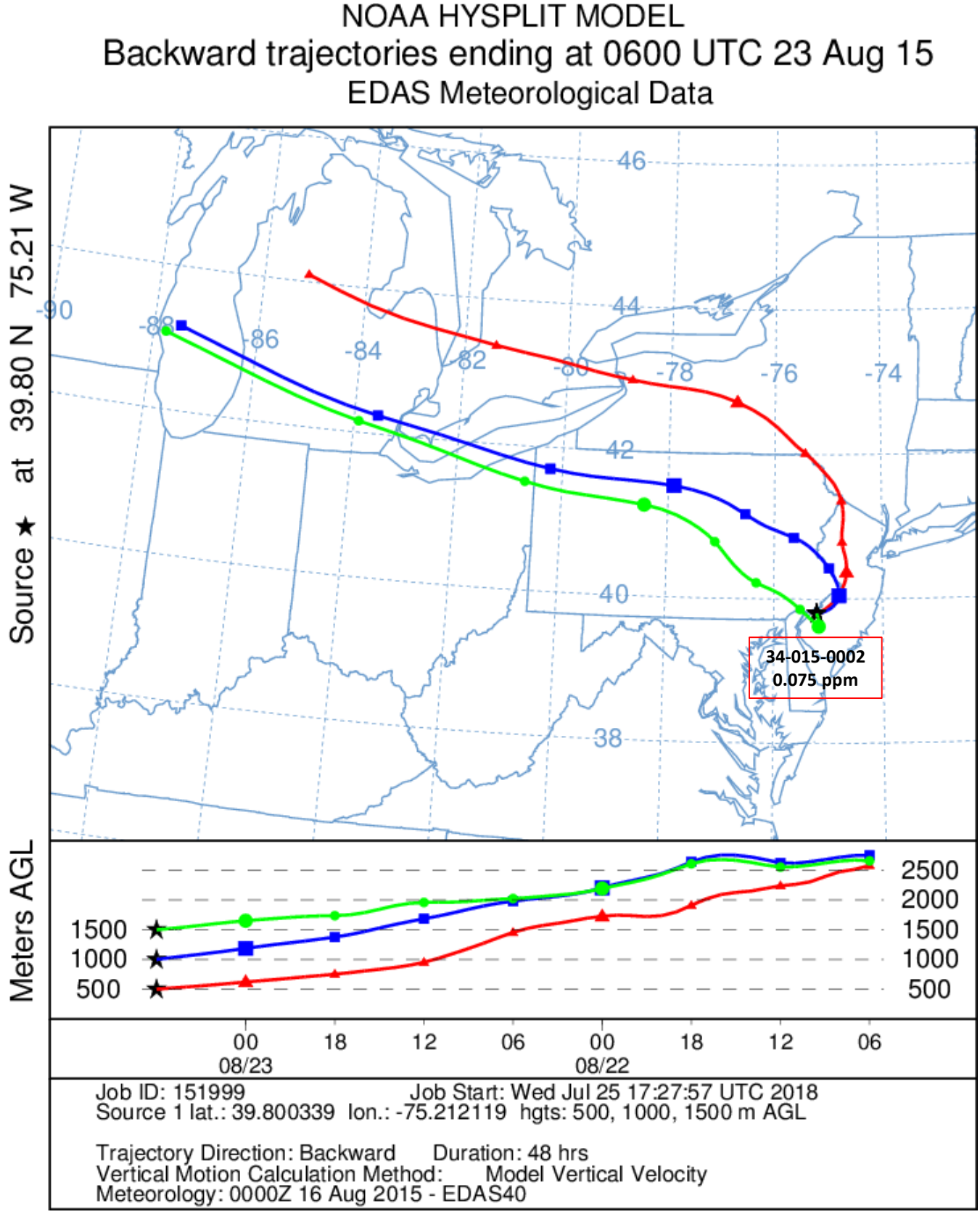
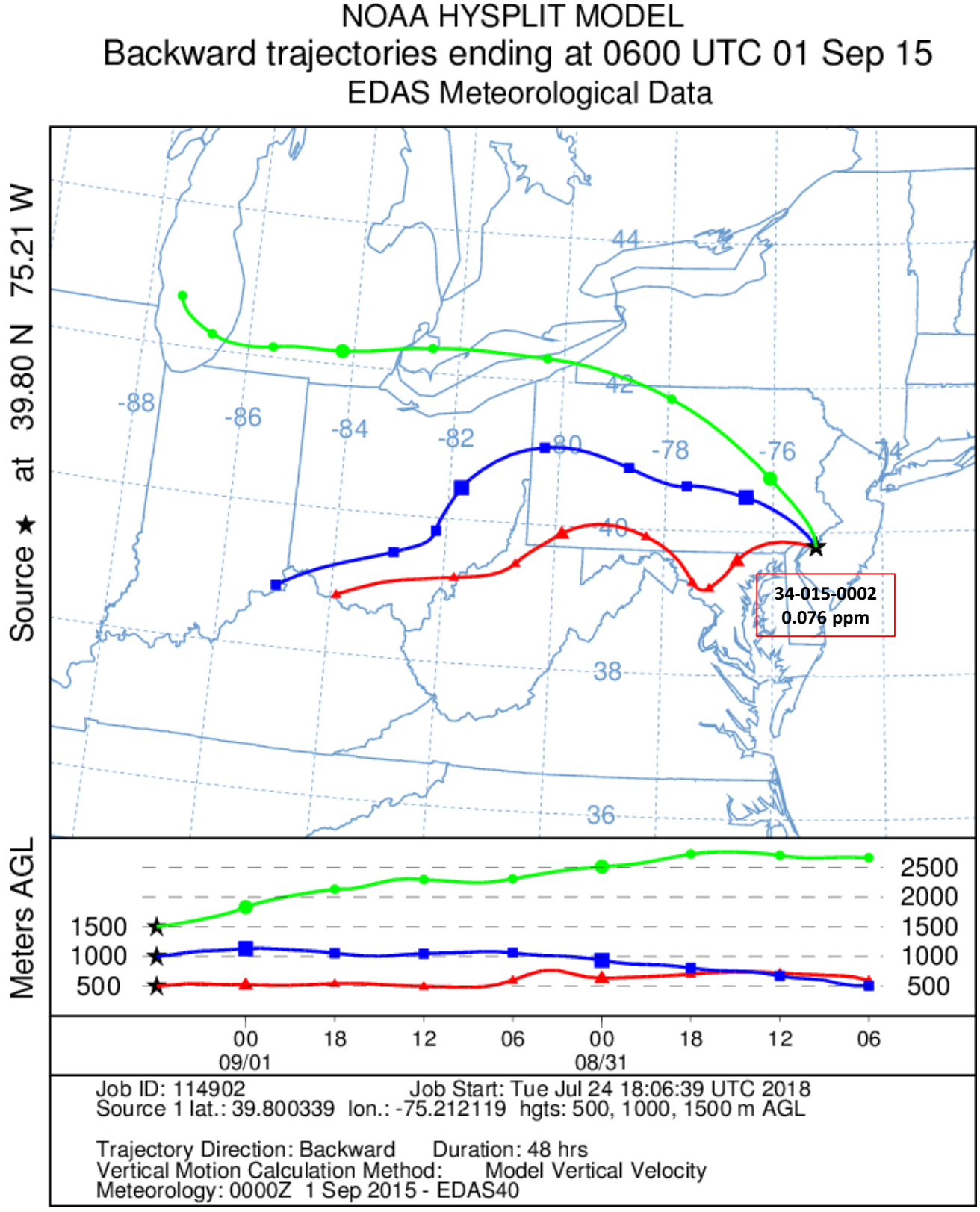
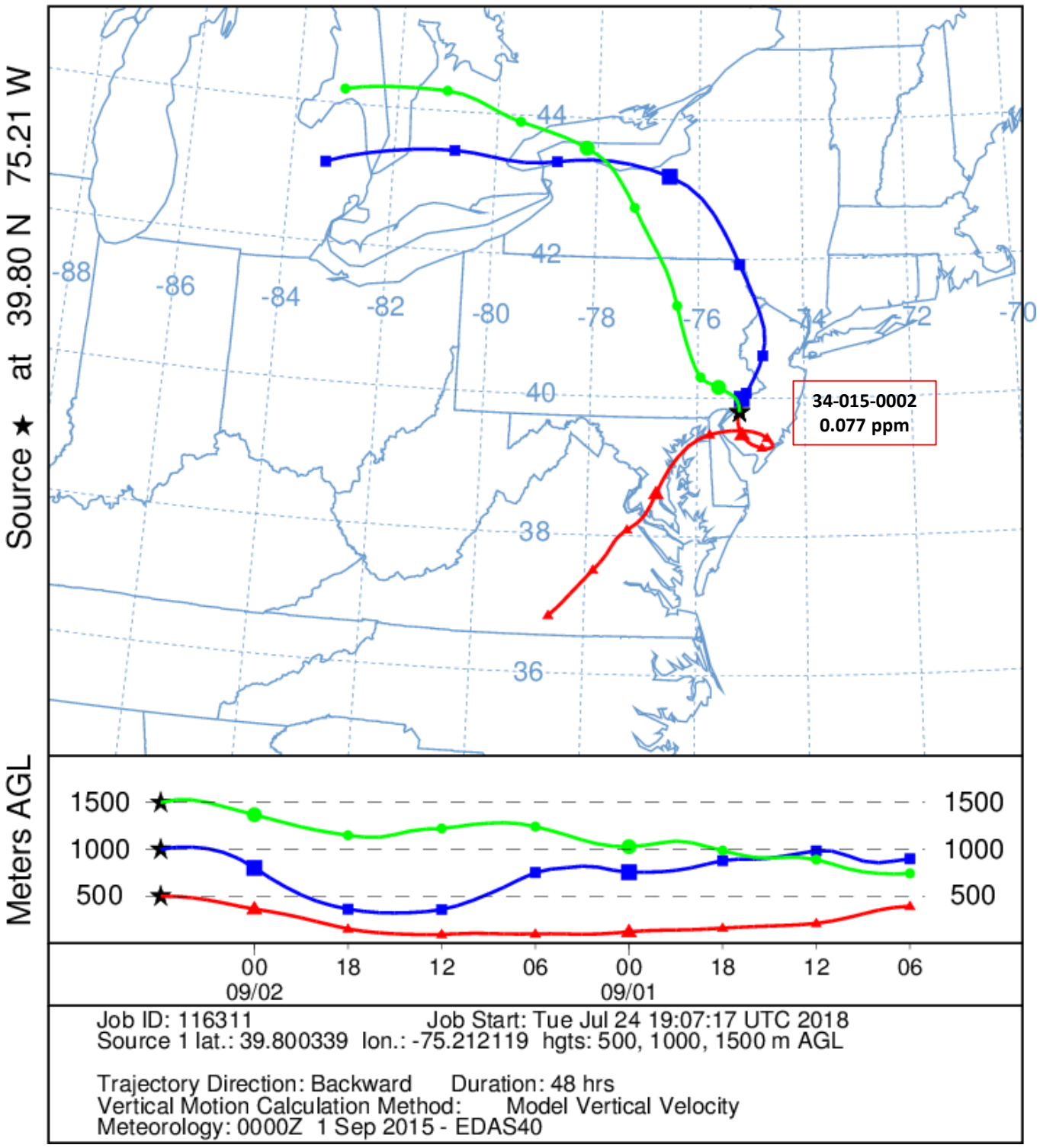
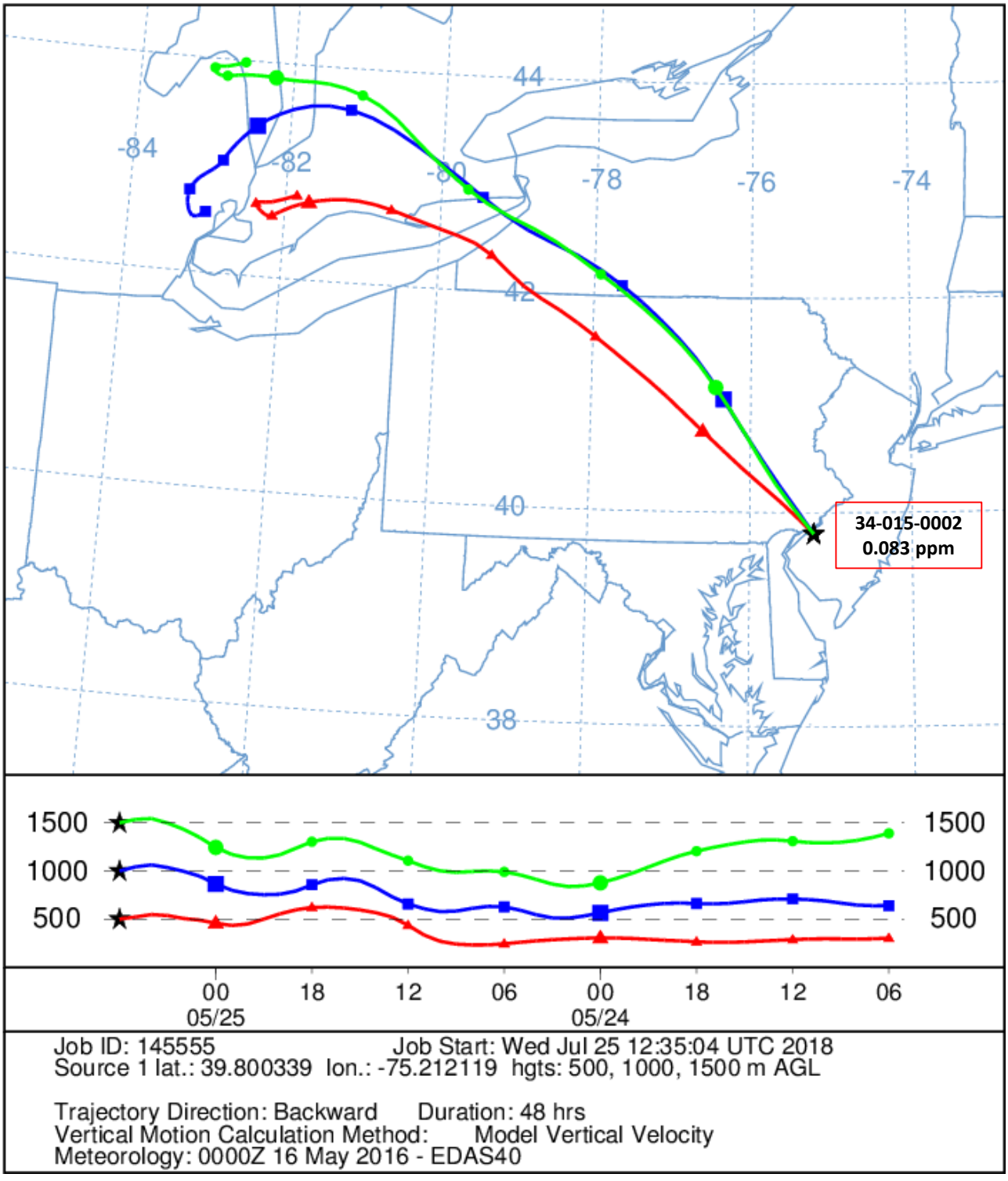

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 11 Jun 15
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
50
45
40
35
-100
-95
-90
-85
-80
-75
34-015-0002
0.08 ppm
Meters AGL
2500
2000
1500
1000
500
1500
1000
500
00
06/11
18
12
06
00
06/10
18
12
06
Job ID: 151913 Job Start: Wed Jul 25 17:23:54 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2015 - EDAS40

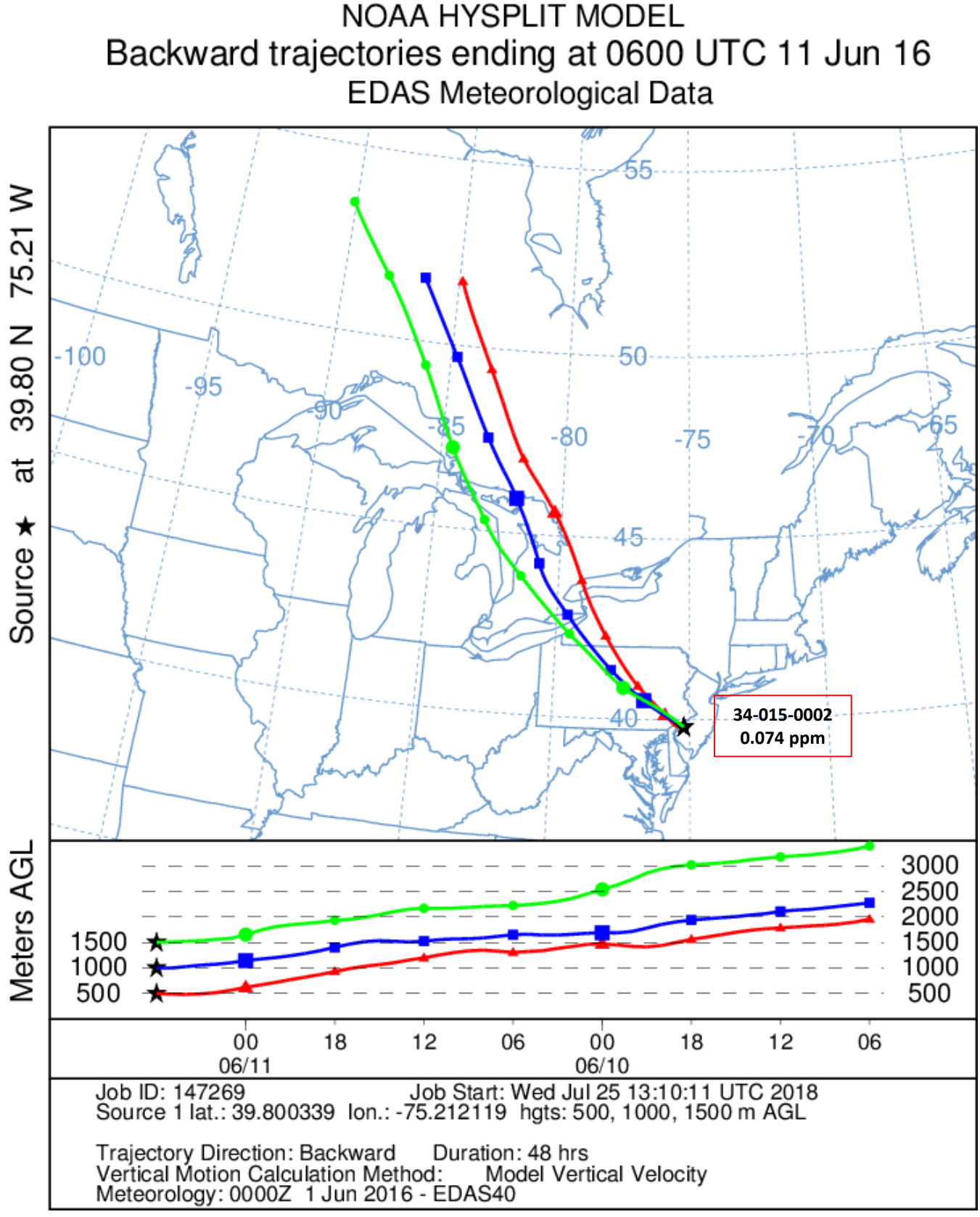

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 28 Jul 15
EDAS Meteorological Data
34-015-0002
0.079 ppm
Source ★ at 39.80 N 75.21 W
Meters AGL
1500
1000
500
00
07/28
18
12
06
00
07/27
18
12
06
Job ID: 151968 Job Start: Wed Jul 25 17:25:20 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2015 - EDAS40

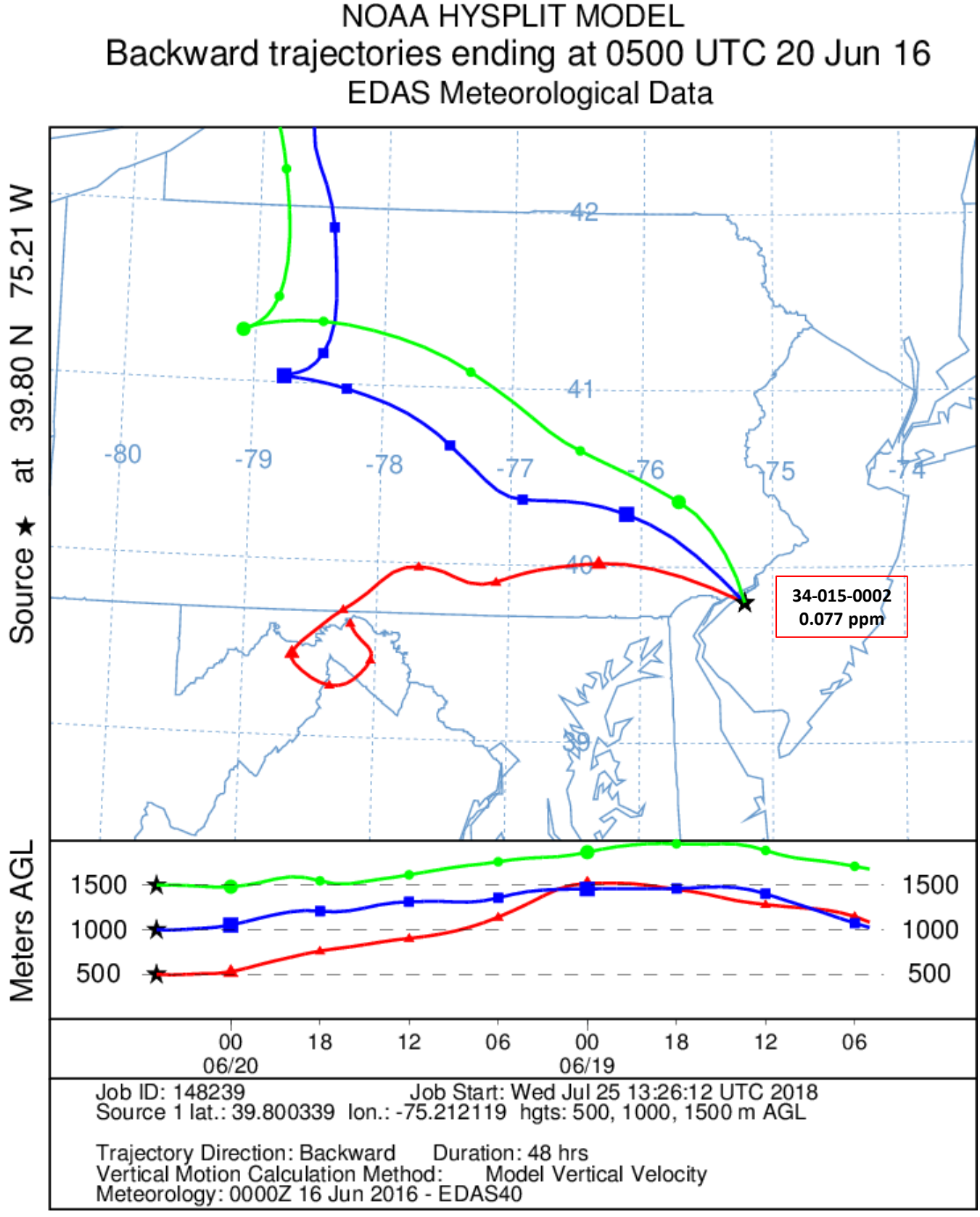

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 23 Aug 15
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
34-015-0002
0.075 ppm
Meters AGL
2500
2000
1500
1000
500
00 18 12 06 00 18 12 06
08/23 08/22
Job ID: 151999 Job Start: Wed Jul 25 17:27:57 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Aug 2015 - EDAS40

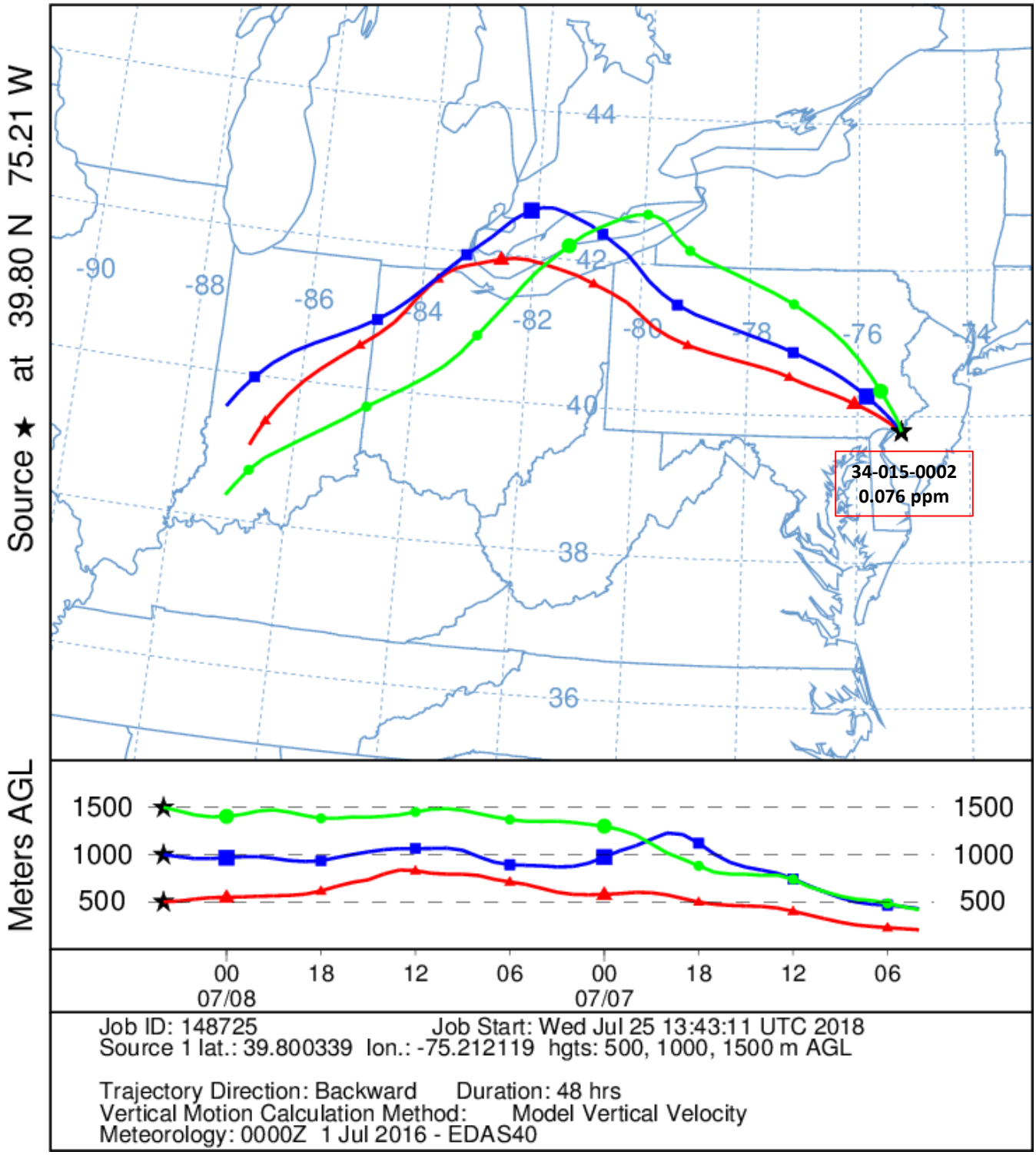

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 01 Sep 15
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
34-015-0002
0.076 ppm
Meters AGL
2500
2000
1500
1000
500
1500
1000
500
00 18 12 06 00 18 12 06
09/01
08/31
Job ID: 114902 Job Start: Tue Jul 24 18:06:39 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Sep 2015 - EDAS40

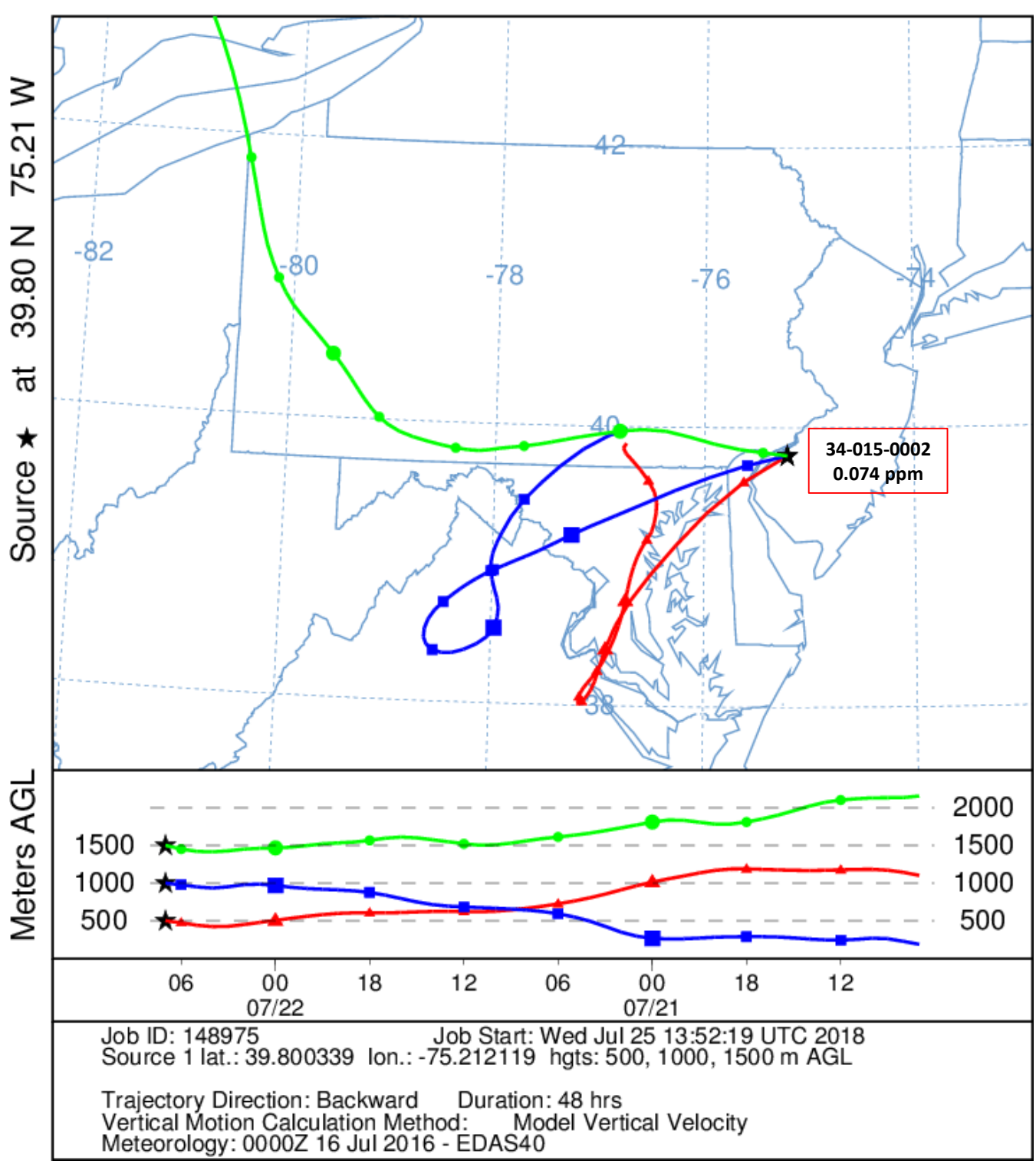

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 02 Sep 15
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
34-015-0002
0.077 ppm
Meters AGL
1500
1000
500
00
09/02
18
12
06
00
09/01
18
12
06
Job ID: 116311 Job Start: Tue Jul 24 19:07:17 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Sep 2015 - EDAS40

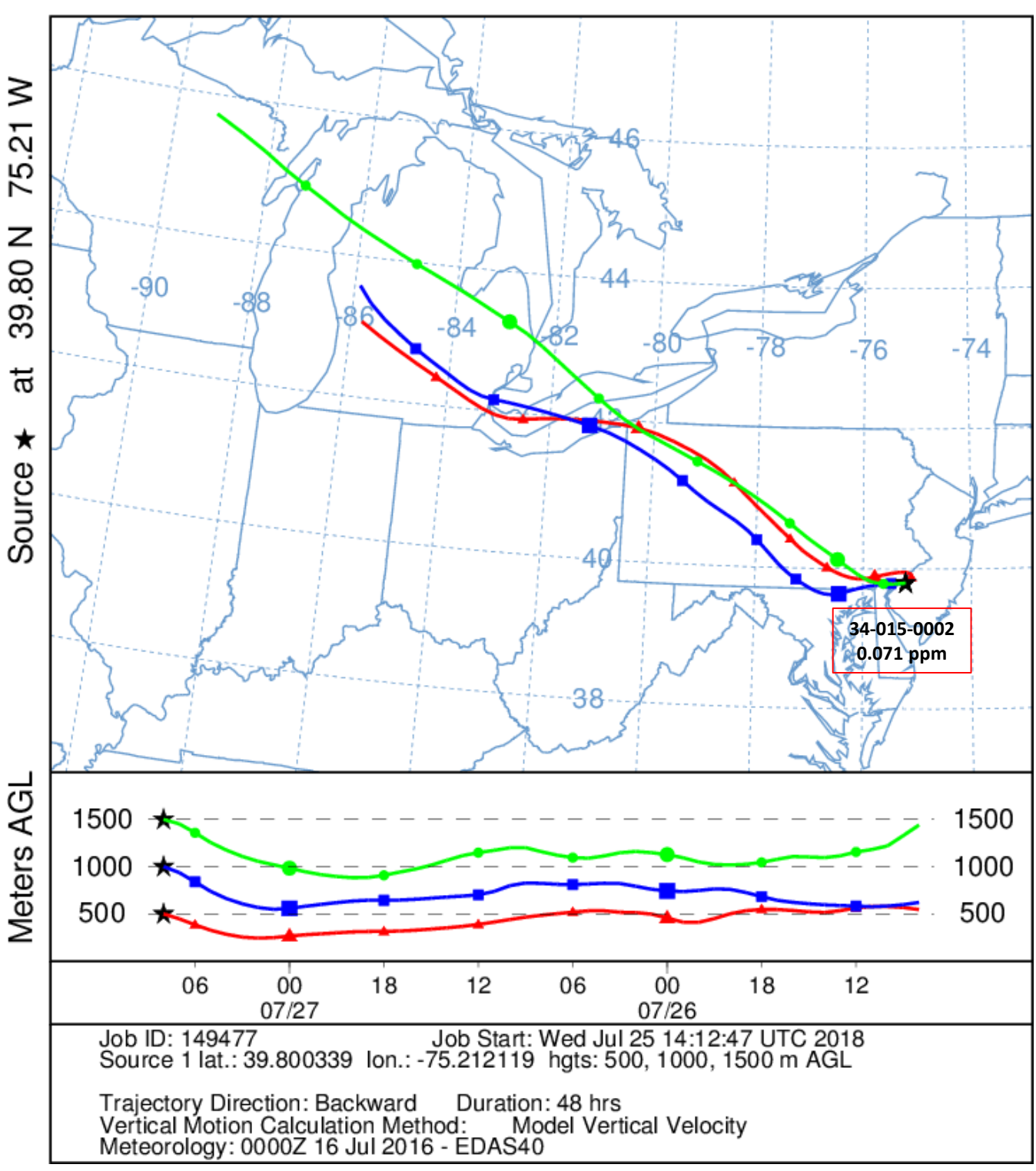

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 25 May 16
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
Meters AGL
34-015-0002
0.083 ppm
1500
1000
500
00
05/25
18
12
06
00
05/24
18
12
06
Job ID: 145555 Job Start: Wed Jul 25 12:35:04 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 May 2016 - EDAS40

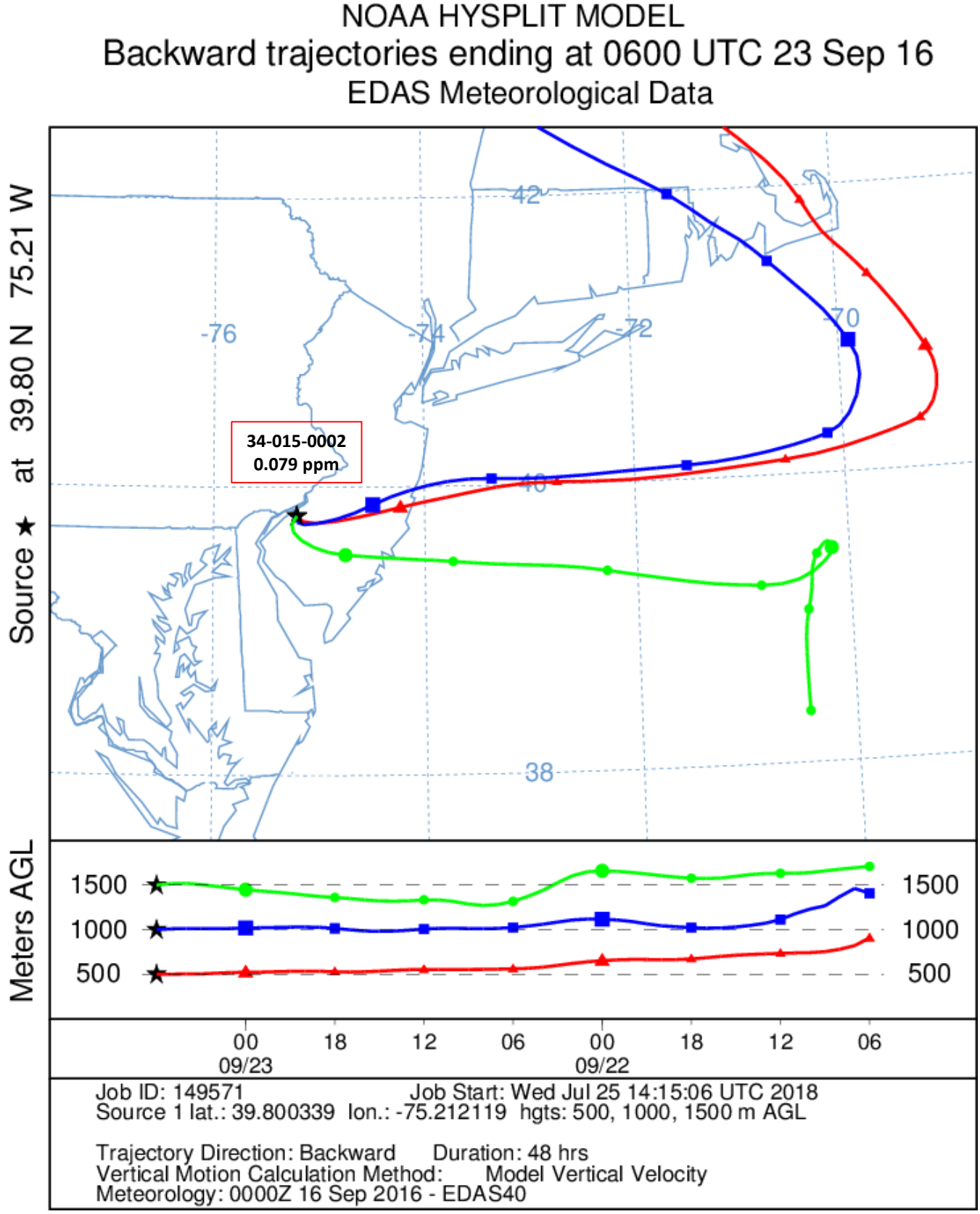

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 11 Jun 16
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
34-015-0002
0.074 ppm
Meters AGL
3000
2500
2000
1500
1000
500
1500
1000
500
00 18 12 06 00 18 12 06
06/11 06/10
Job ID: 147269 Job Start: Wed Jul 25 13:10:11 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2016 - EDAS40

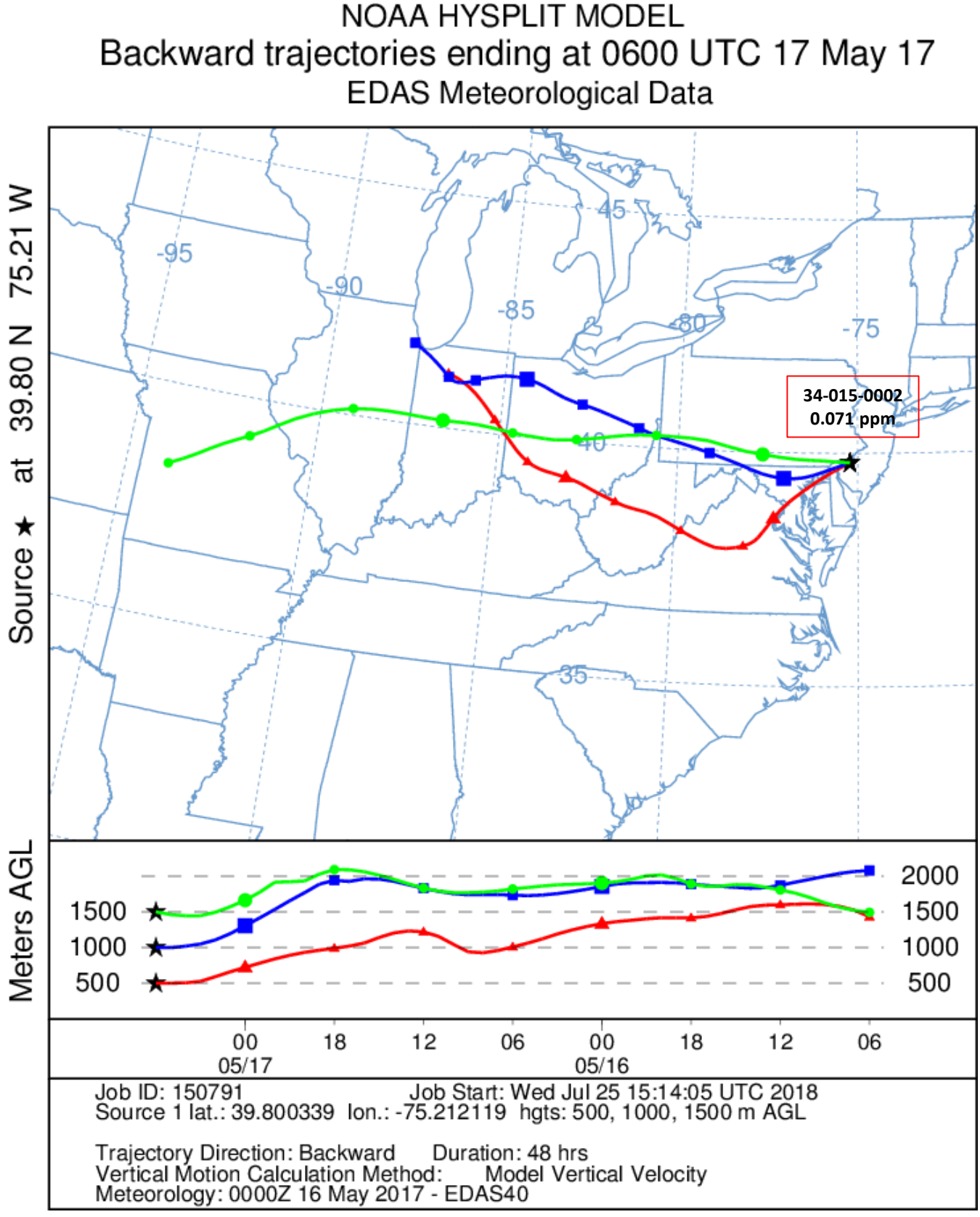

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 20 Jun 16
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
42
41
40
39
-80
-79
-78
-77
-76
75
-74
34-015-0002
0.077 ppm
Meters AGL
1500
1000
500
00
06/20
18
12
06
00
06/19
18
12
06
Job ID: 148239
Job Start: Wed Jul 25 13:26:12 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Jun 2016 - EDAS40

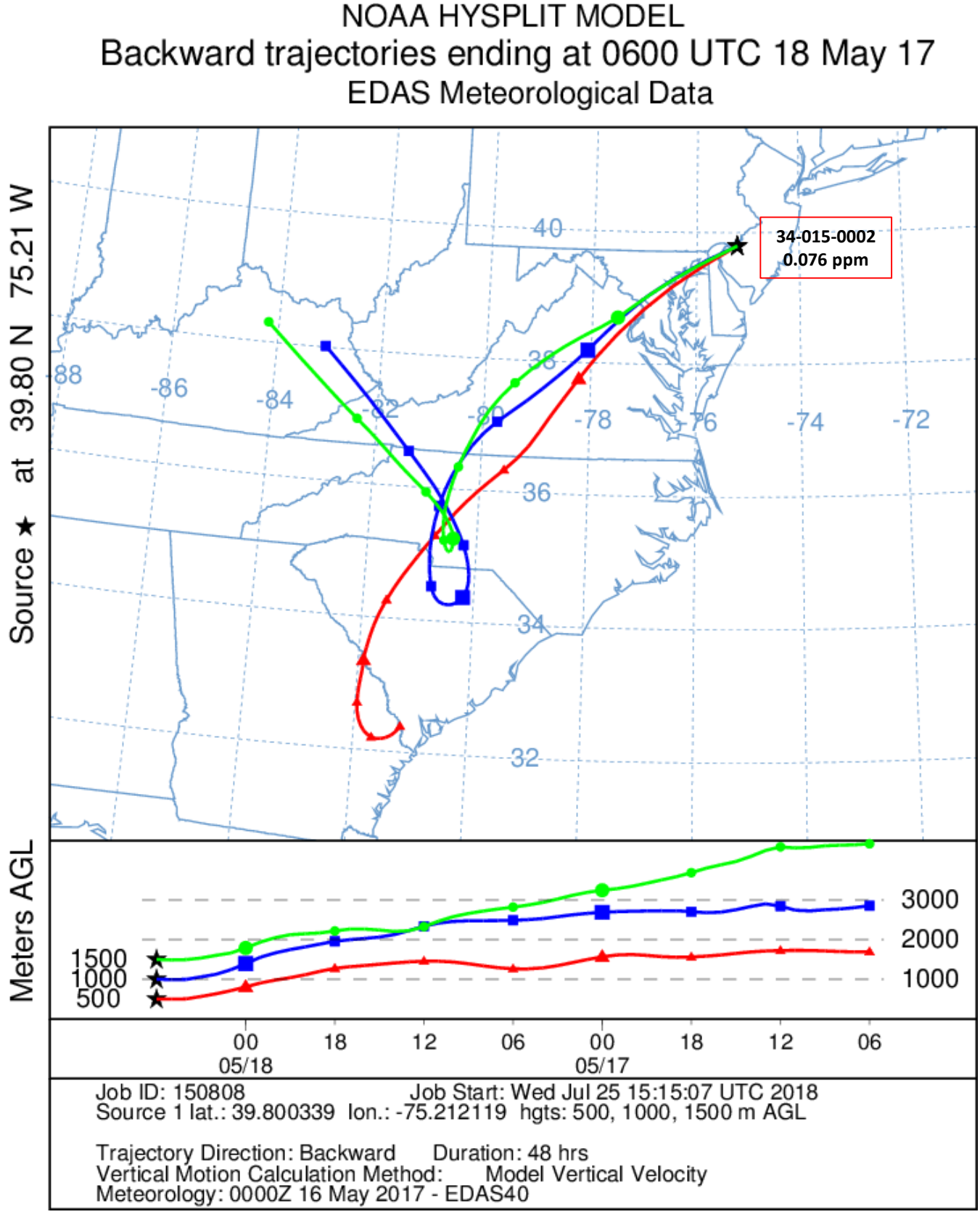

NOAA HYSPLIT MODEL
Backward trajectories ending at 0400 UTC 08 Jul 16
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
34-015-0002
0.076 ppm
Meters AGL
1500
1000
500
00
07/08
18
12
06
00
07/07
18
12
06
Job ID: 148725 Job Start: Wed Jul 25 13:43:11 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jul 2016 - EDAS40

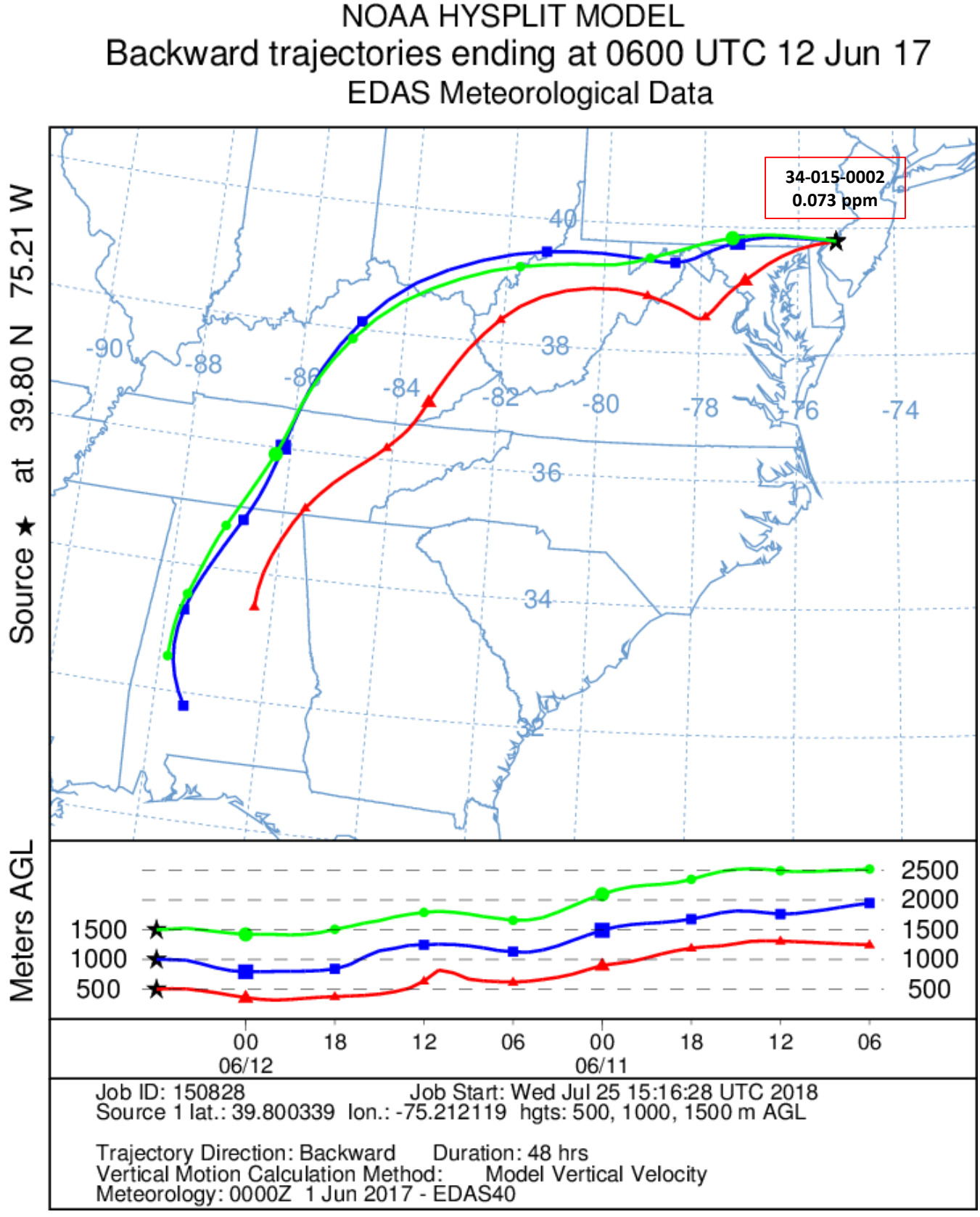

NOAA HYSPLIT MODEL
Backward trajectories ending at 0700 UTC 22 Jul 16
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
34-015-0002
0.074 ppm
Meters AGL
2000
1500
1000
500
06
00
18
12
07/22
07/21
Job ID: 148975 Job Start: Wed Jul 25 13:52:19 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2016 - EDAS40

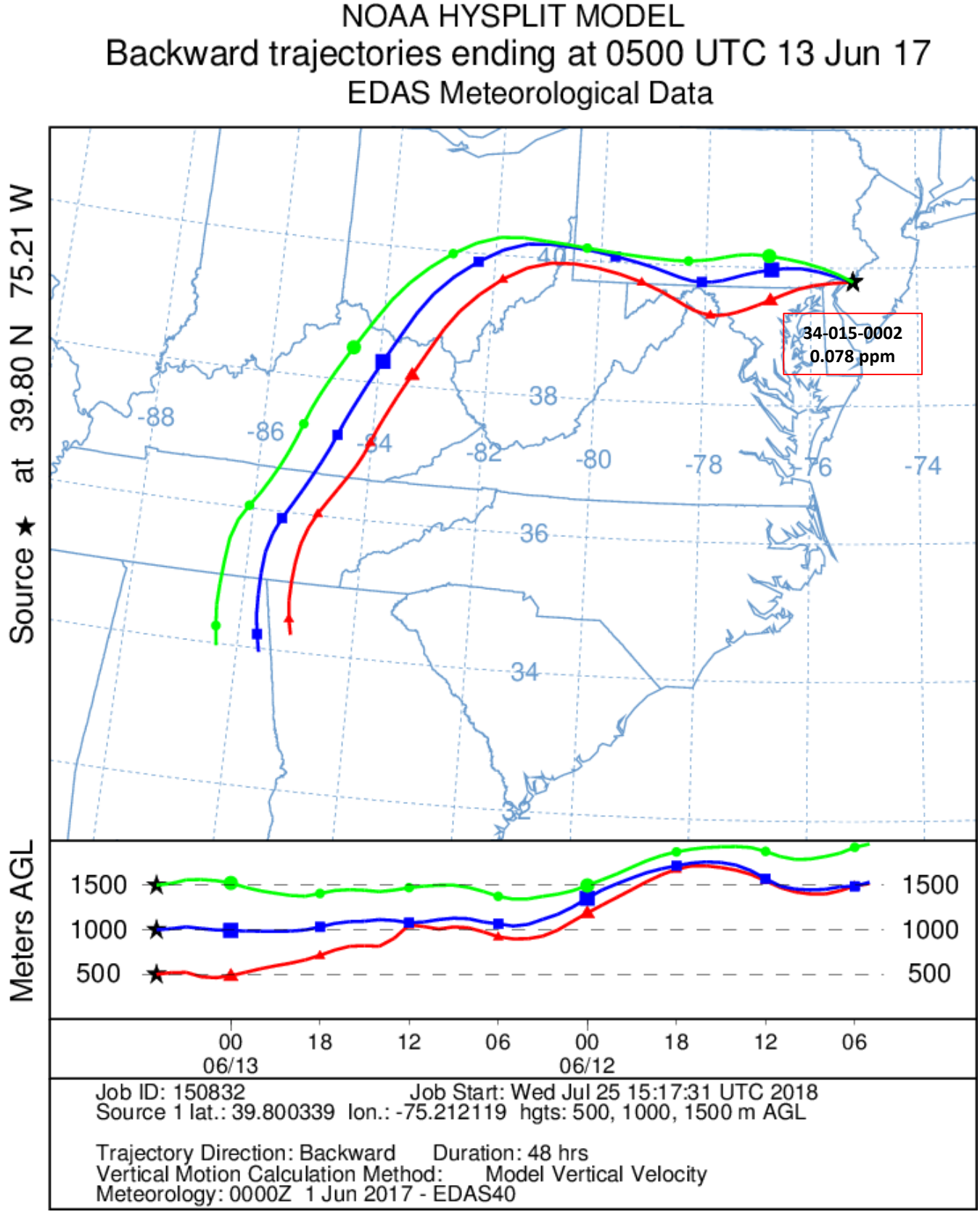

NOAA HYSPLIT MODEL
Backward trajectories ending at 0800 UTC 27 Jul 16
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
-90
-88
-86
-84
-82
-80
-78
-76
-74
46
44
42
40
38
34-015-0002
0.071 ppm
Meters AGL
1500
1000
500
06
00
07/27
18
12
06
00
07/26
18
12
Job ID: 149477 Job Start: Wed Jul 25 14:12:47 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2016 - EDAS40

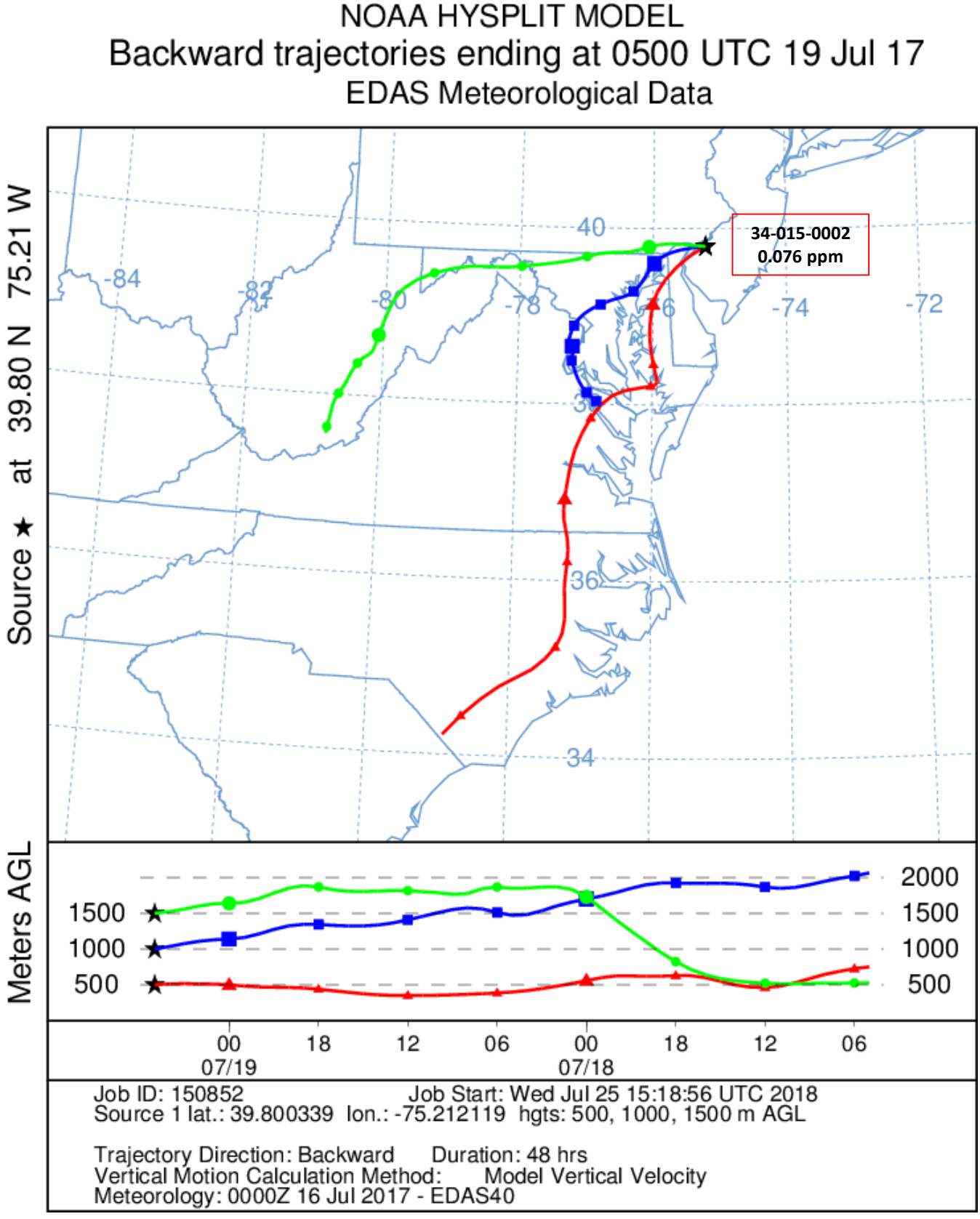

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 23 Sep 16
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
34-015-0002
0.079 ppm
42
40
38
-76
-74
-72
-70
Meters AGL
1500
1000
500
00
09/23
18
12
06
00
09/22
18
12
06
Job ID: 149571 Job Start: Wed Jul 25 14:15:06 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Sep 2016 - EDAS40

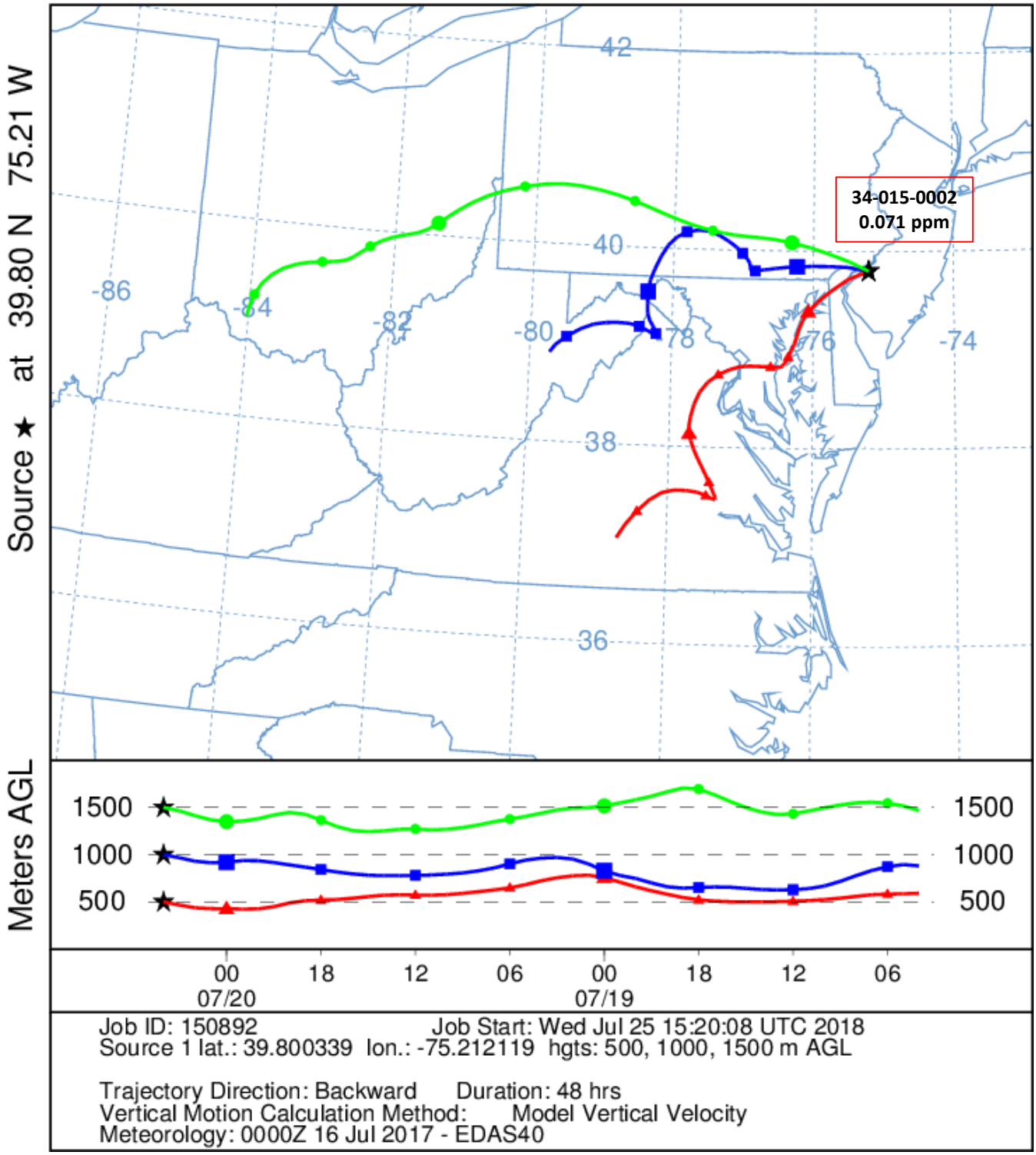

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 17 May 17
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
-95
-90
-85
-80
-75
45
40
35
34-015-0002
0.071 ppm
Meters AGL
1500
1000
500
2000
1500
1000
500
00
05/17
18
12
06
00
05/16
18
12
06
Job ID: 150791 Job Start: Wed Jul 25 15:14:05 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 May 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 18 May 17
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
34-015-0002
0.076 ppm
40
38
36
34
32
-88
-86
-84
-82
-80
-78
-76
-74
-72
Meters AGL
3000
2000
1000
1500
1000
500
00
05/18
18
12
06
00
05/17
18
12
06
Job ID: 150808 Job Start: Wed Jul 25 15:15:07 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 May 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 12 Jun 17
EDAS Meteorological Data
34-015-0002
0.073 ppm
Source ★ at 39.80 N 75.21 W
Meters AGL
2500
2000
1500
1000
500
00 06/12
18
12
06
00 06/11
18
12
06
Job ID: 150828 Job Start: Wed Jul 25 15:16:28 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 13 Jun 17
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
34-015-0002
0.078 ppm
-88
-86
-84
-82
-80
-78
-76
-74
40
38
36
34
Meters AGL
1500
1000
500
00
06/13
18
12
06
00
06/12
18
12
06
Job ID: 150832 Job Start: Wed Jul 25 15:17:31 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 19 Jul 17
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
34-015-0002
0.076 ppm
40
-84
-82
-80
-78
-74
-72
36
34
Meters AGL
1500
1000
500
2000
1500
1000
500
00
07/19
18
12
06
00
07/18
18
12
06
Job ID: 150852 Job Start: Wed Jul 25 15:18:56 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0400 UTC 20 Jul 17
EDAS Meteorological Data
Source ★ at 39.80 N 75.21 W
34-015-0002
0.071 ppm
42
40
38
36
-86
-84
-82
-80
-78
-76
-74
Meters AGL
1500
1000
500
00
07/20
18
12
06
00
07/19
18
12
06
Job ID: 150892 Job Start: Wed Jul 25 15:20:08 UTC 2018
Source 1 lat.: 39.800339 lon.: -75.212119 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2017 - EDAS40

# Richmond, NY
# 36-085-0067

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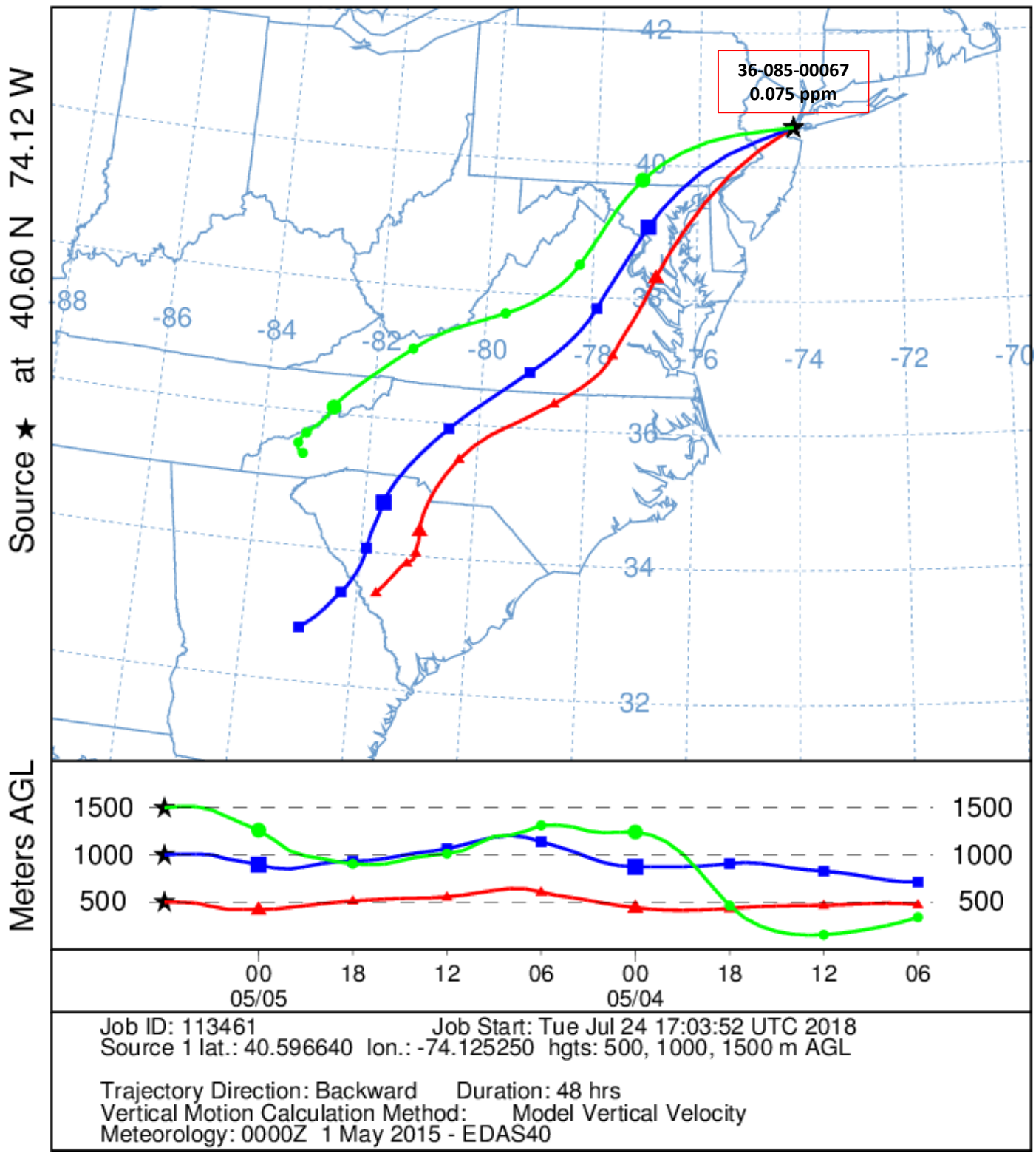
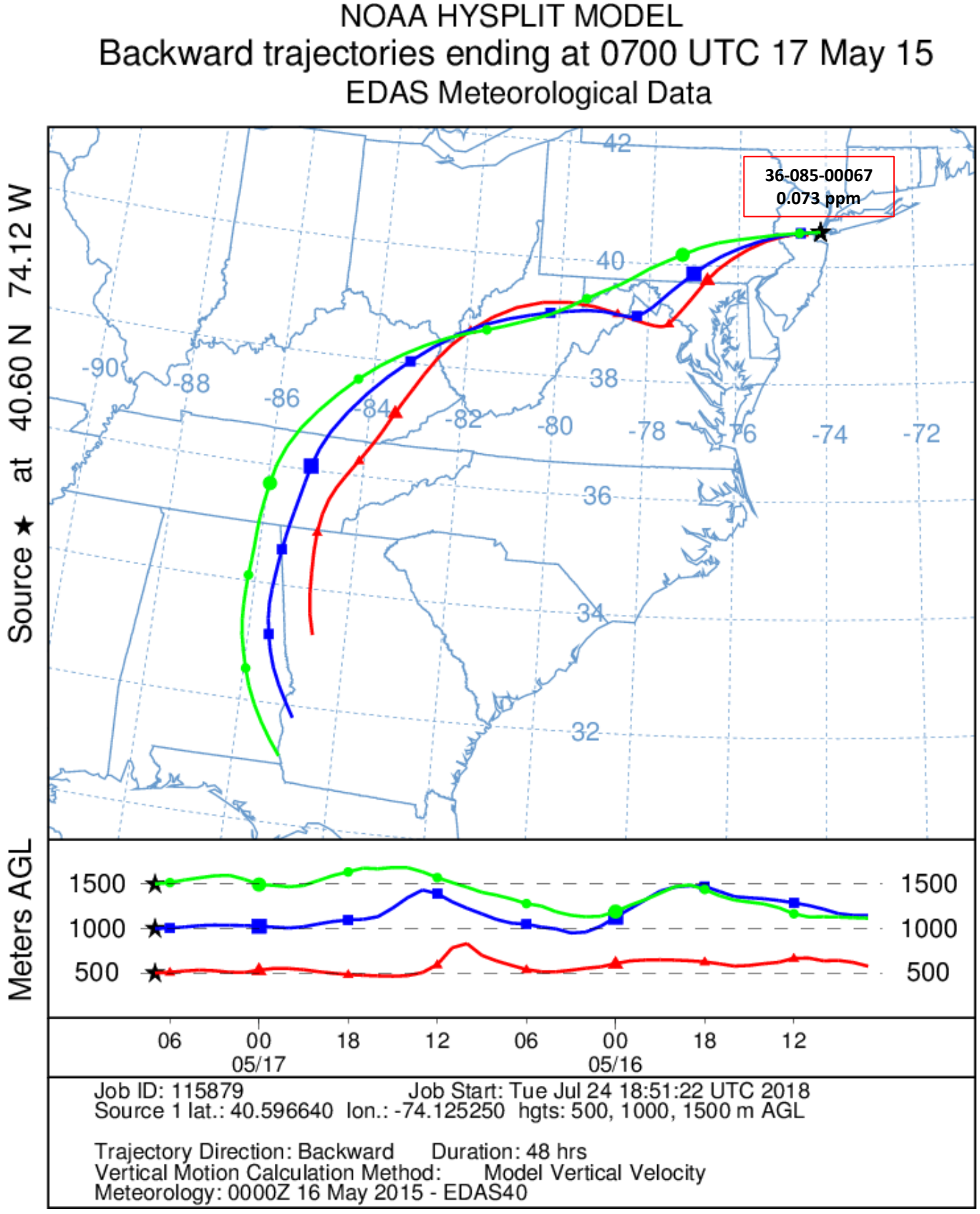
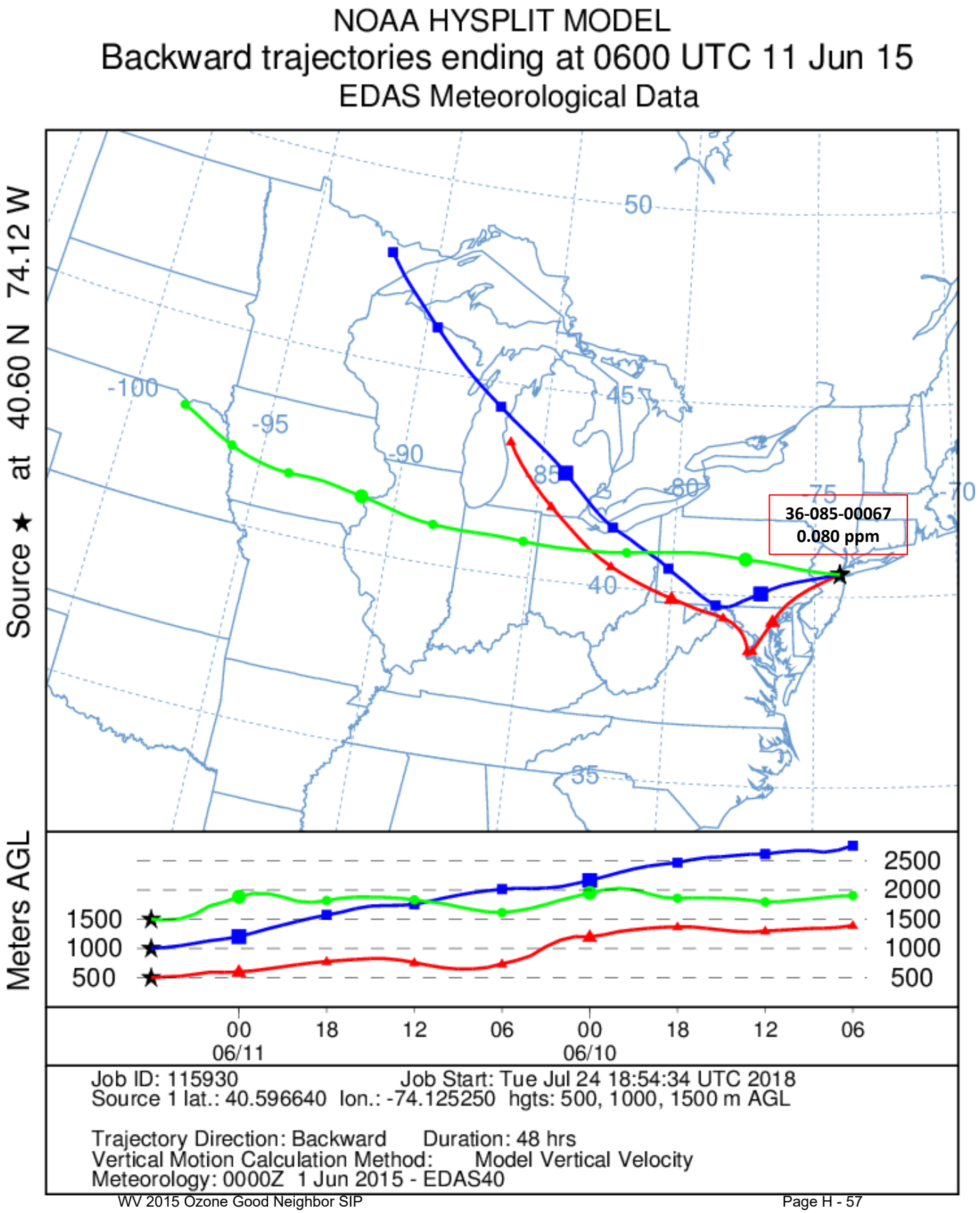
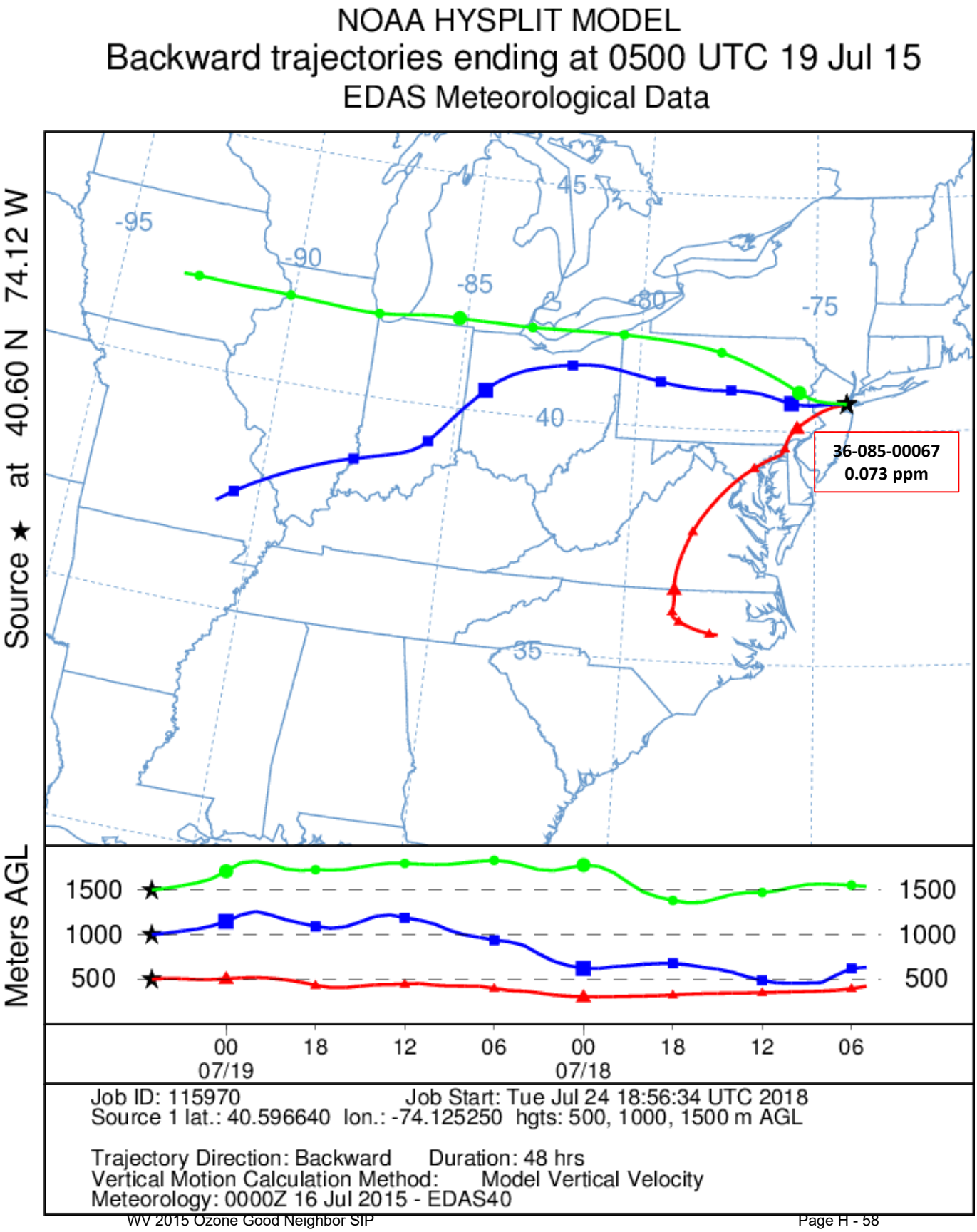
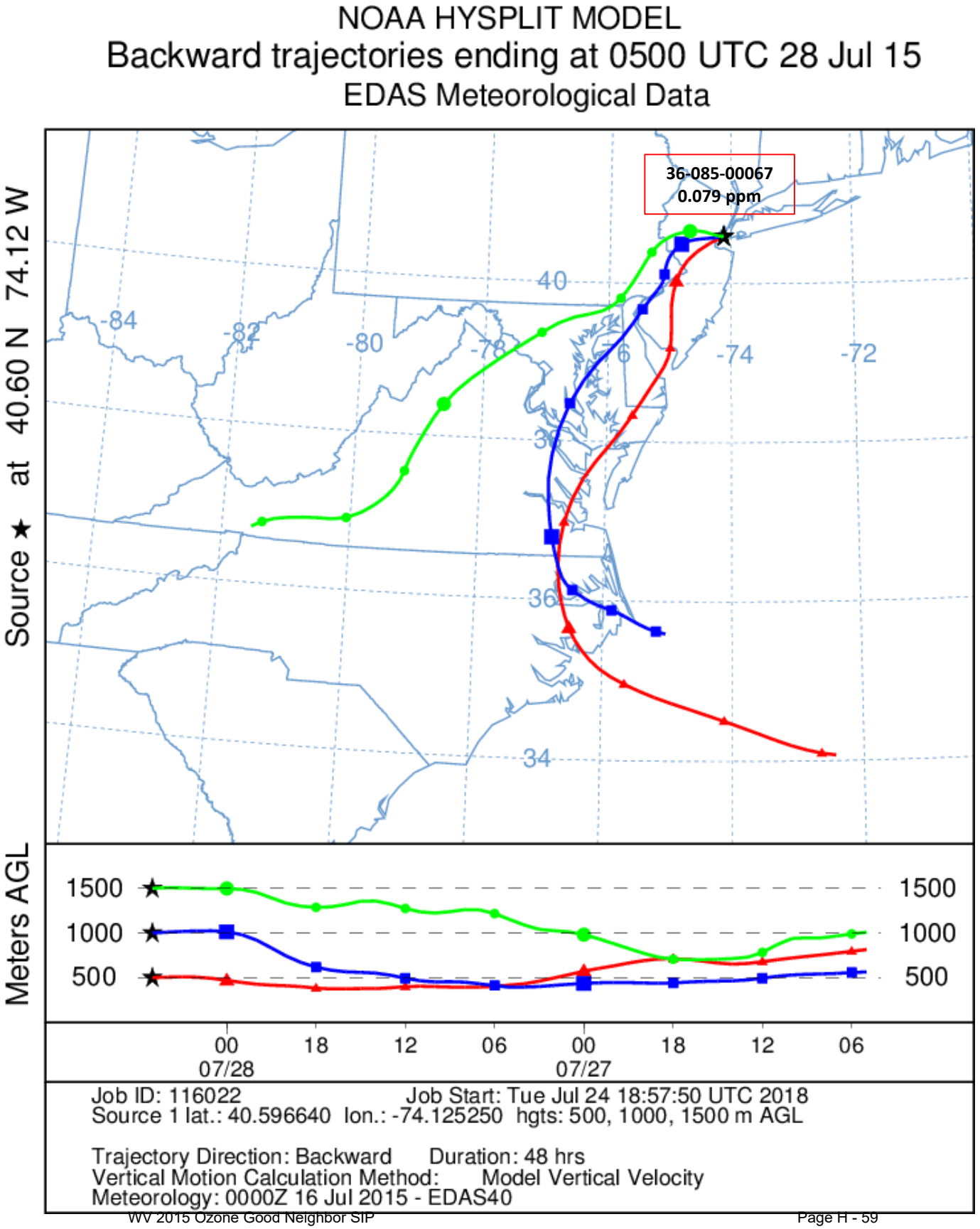
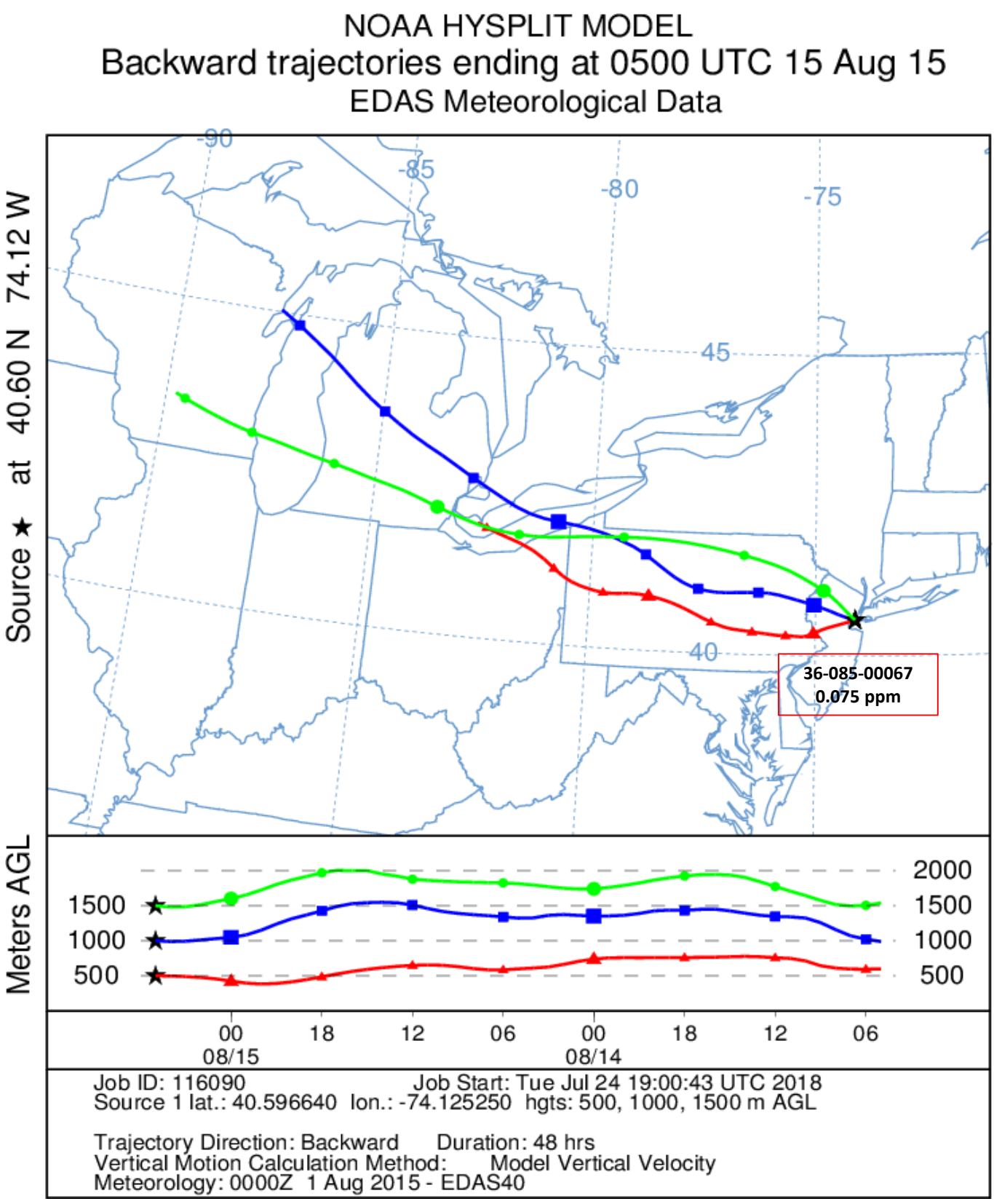

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 05 May 15
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
36-085-00067
0.075 ppm
42
40
38
36
34
32
-88
-86
-84
-82
-80
-78
-76
-74
-72
-70
Meters AGL
1500
1000
500
00
18
12
06
00
18
12
06
05/05
05/04
Job ID: 113461 Job Start: Tue Jul 24 17:03:52 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 May 2015 - EDAS40

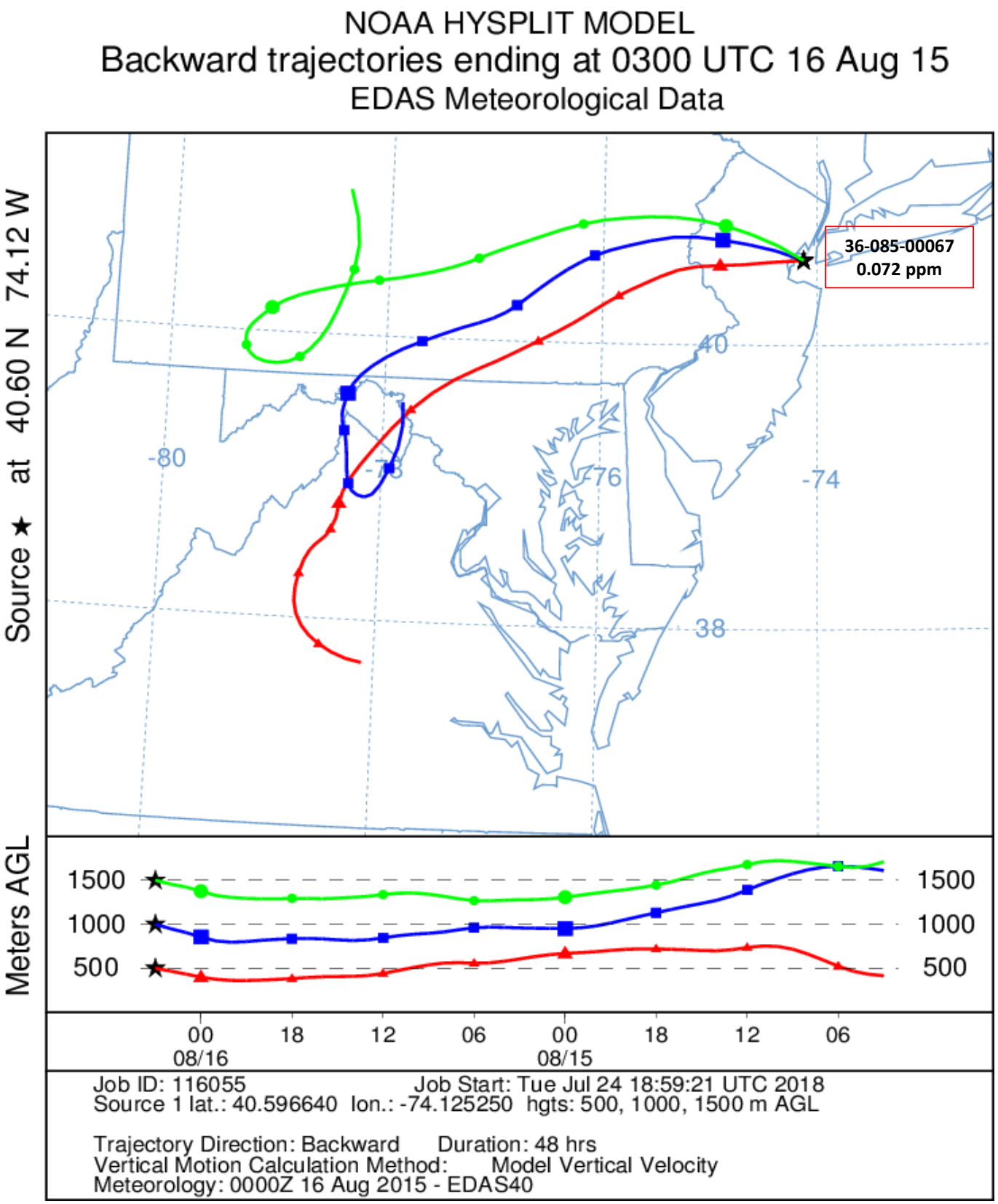

NOAA HYSPLIT MODEL
Backward trajectories ending at 0700 UTC 17 May 15
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
36-085-00067
0.073 ppm
42
40
38
36
34
32
-90
-88
-86
-84
-82
-80
-78
-76
-74
-72
Meters AGL
1500
1000
500
06
00
18
12
06
00
18
12
05/17
05/16
Job ID: 115879 Job Start: Tue Jul 24 18:51:22 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 May 2015 - EDAS40

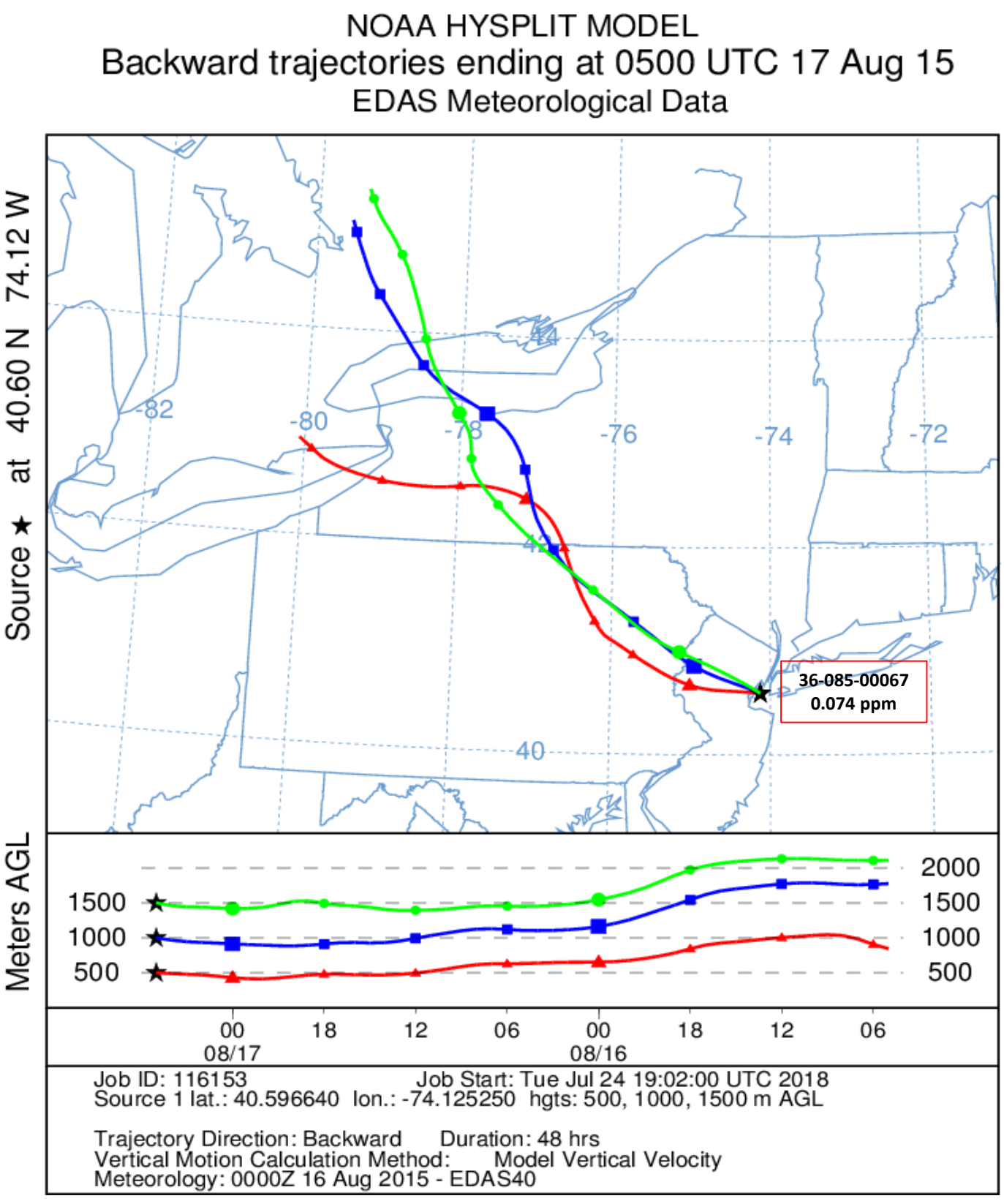

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 11 Jun 15
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
36-085-00067
0.080 ppm
Meters AGL
2500
2000
1500
1000
500
1500
1000
500
00
06/11
18
12
06
00
06/10
18
12
06
Job ID: 115930 Job Start: Tue Jul 24 18:54:34 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2015 - EDAS40

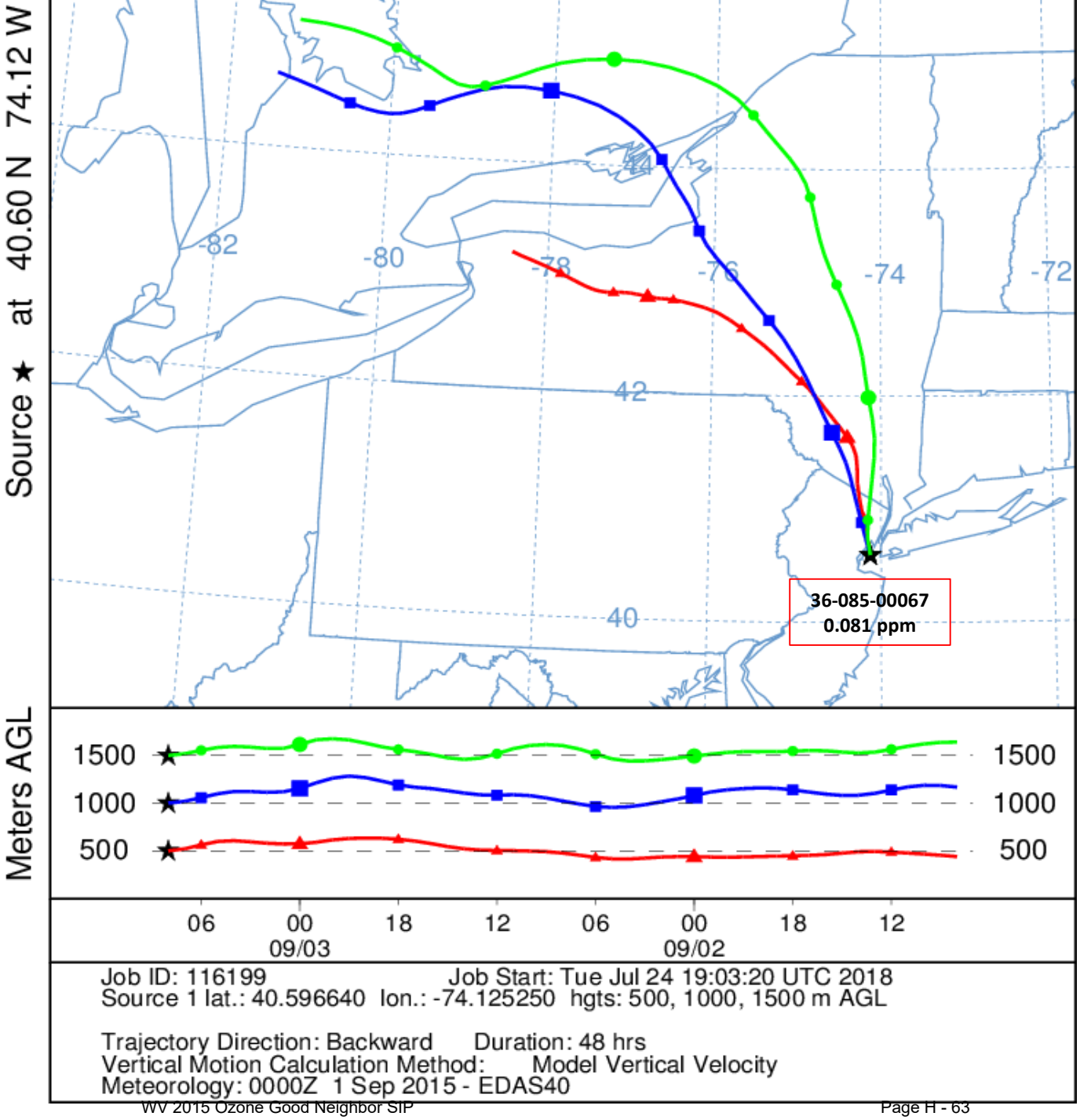

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 19 Jul 15
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
-95
-90
-85
-80
-75
45
40
35
36-085-00067
0.073 ppm
Meters AGL
1500
1000
500
00
07/19
18
12
06
00
07/18
18
12
06
Job ID: 115970 Job Start: Tue Jul 24 18:56:34 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2015 - EDAS40

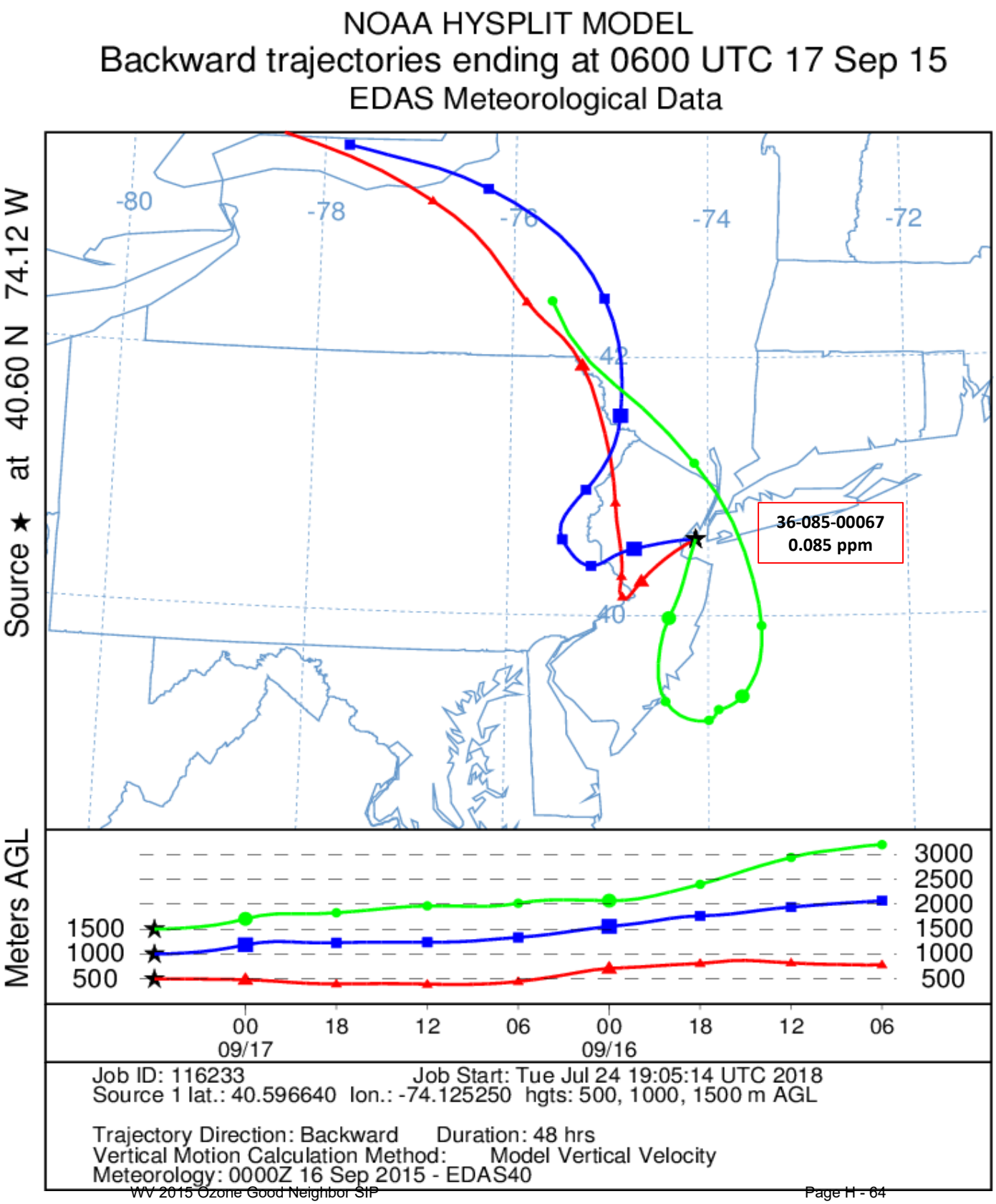

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 28 Jul 15
EDAS Meteorological Data
36-085-00067
0.079 ppm
Source ★ at 40.60 N 74.12 W
Meters AGL
1500
1000
500
00
07/28
18
12
06
00
07/27
18
12
06
Job ID: 116022
Job Start: Tue Jul 24 18:57:50 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2015 - EDAS40

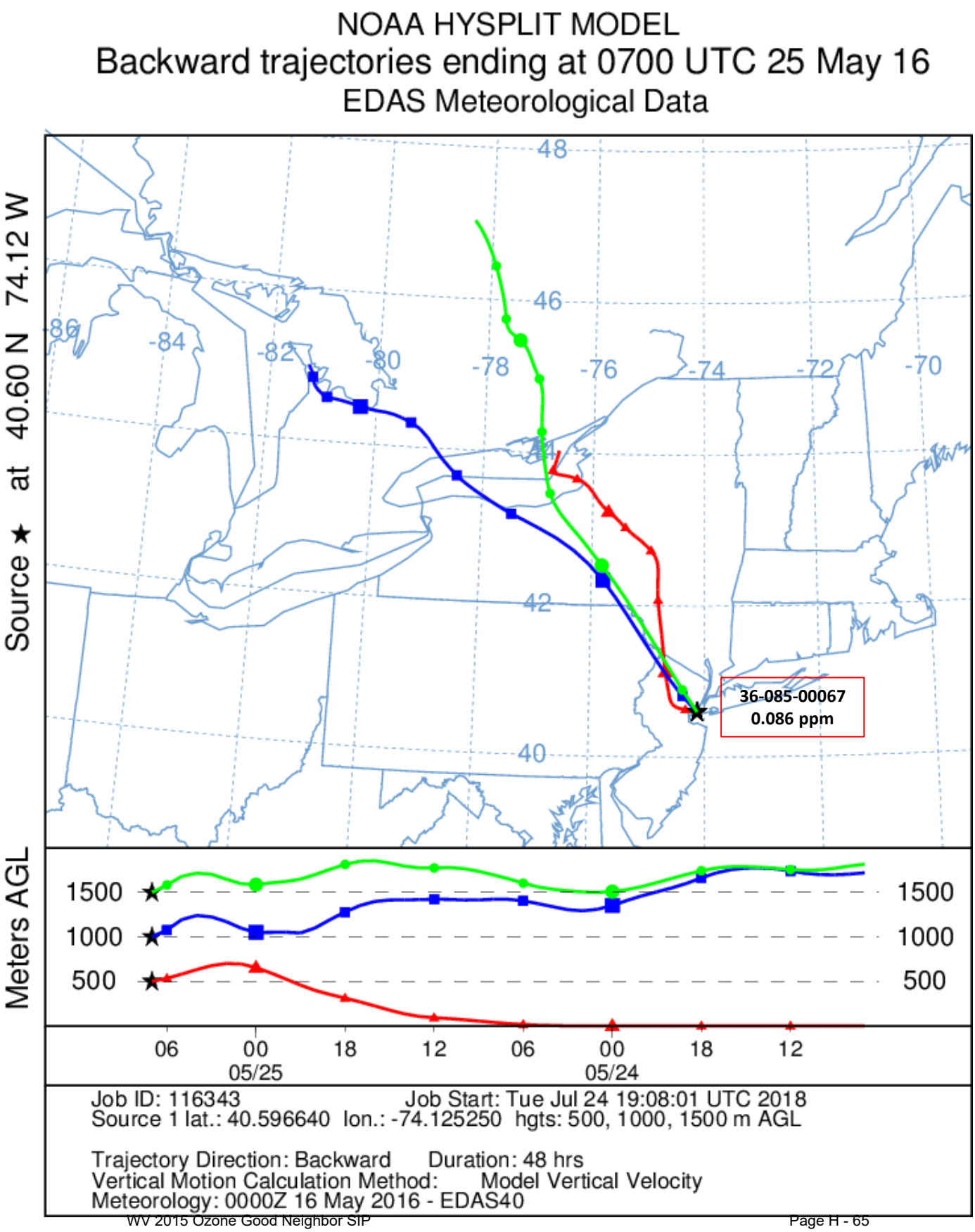

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 15 Aug 15
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
-90
-85
-80
-75
45
40
36-085-00067
0.075 ppm
Meters AGL
2000
1500
1000
500
1500
1000
500
00
08/15
18
12
06
00
08/14
18
12
06
Job ID: 116090 Job Start: Tue Jul 24 19:00:43 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Aug 2015 - EDAS40

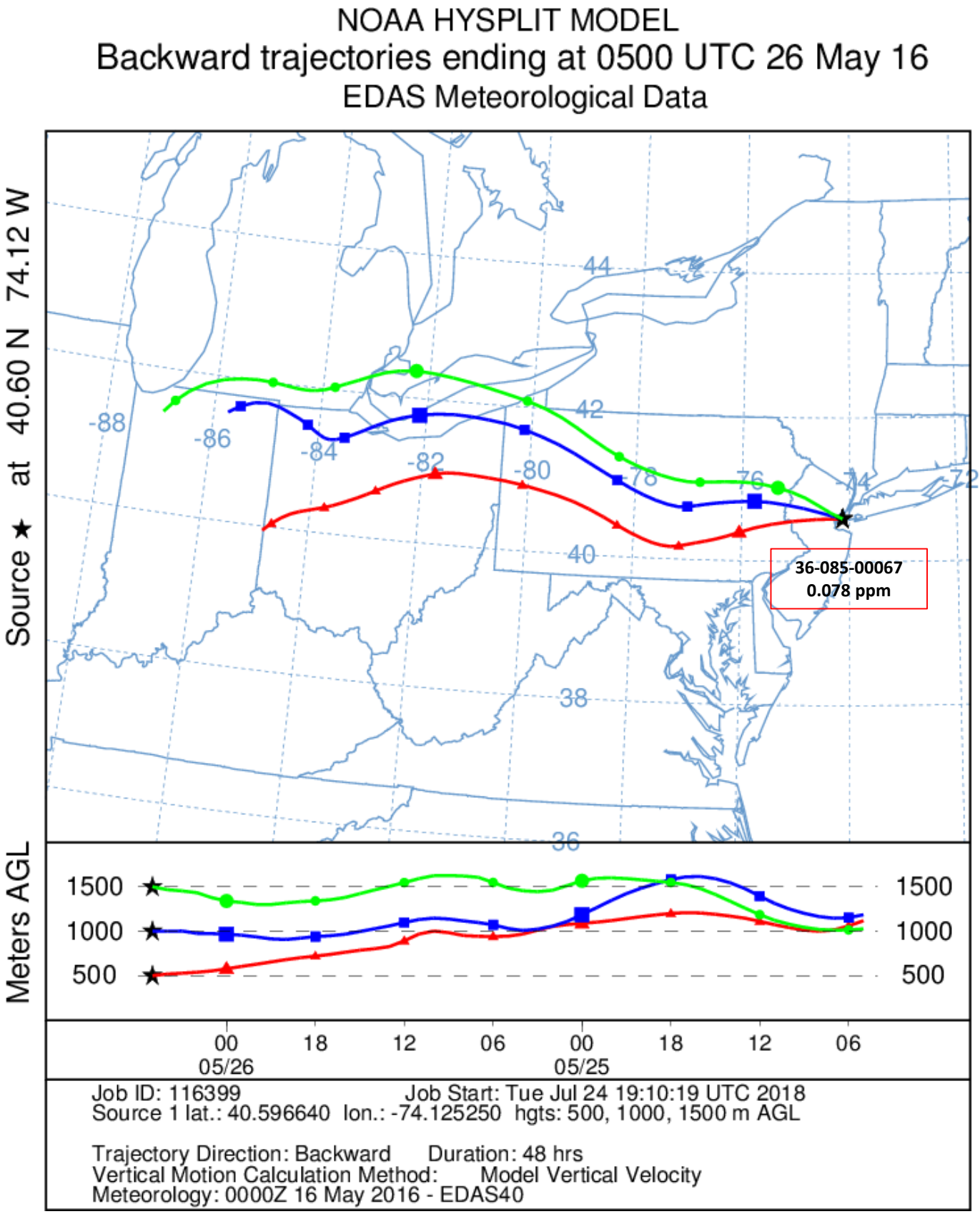

NOAA HYSPLIT MODEL
Backward trajectories ending at 0300 UTC 16 Aug 15
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
36-085-00067
0.072 ppm
-80
-78
76
-74
40
38
Meters AGL
1500
1000
500
00
08/16
18
12
06
00
08/15
18
12
06
Job ID: 116055
Job Start: Tue Jul 24 18:59:21 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Aug 2015 - EDAS40

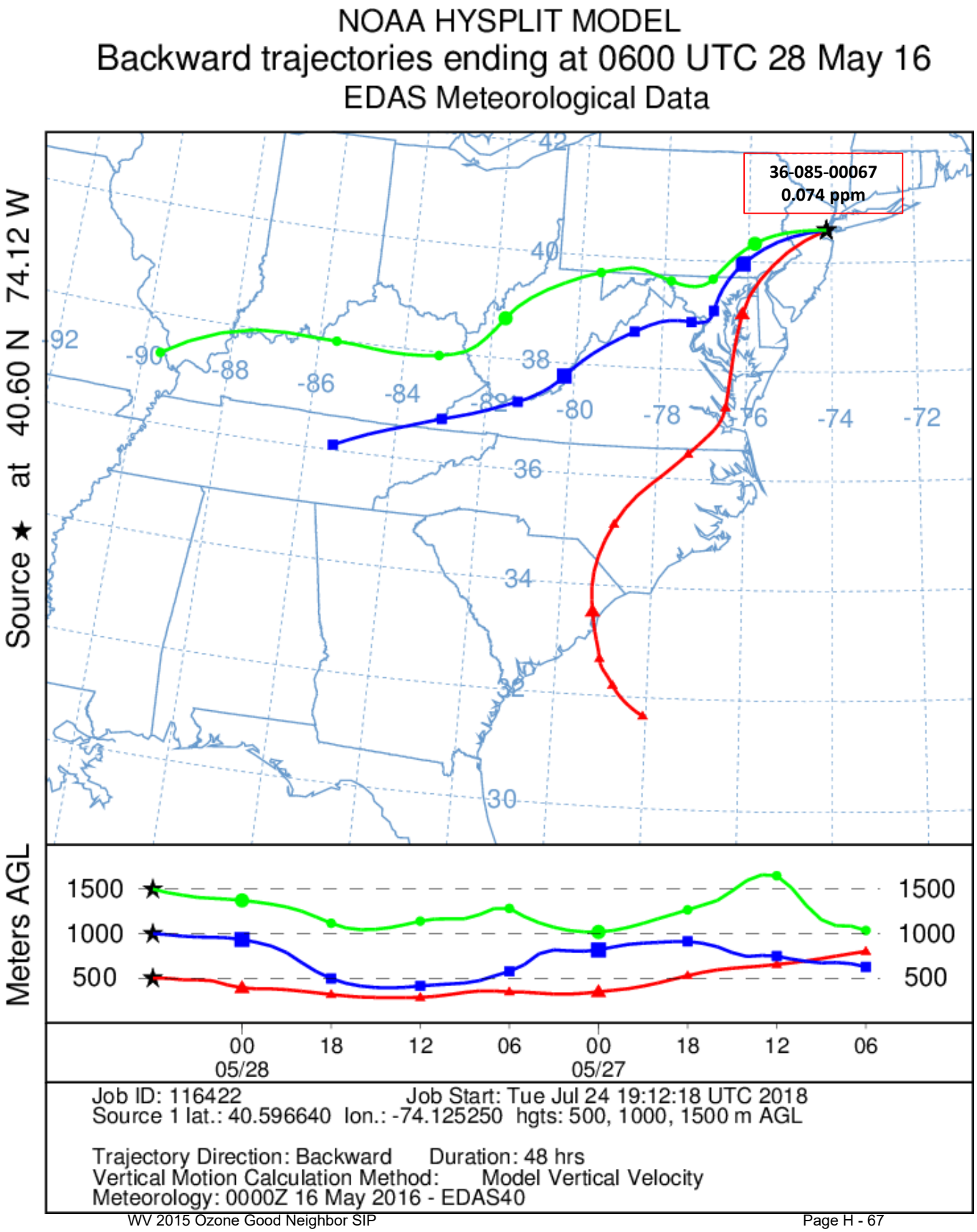

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 17 Aug 15
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
-82
-80
-78
-76
-74
-72
44
42
40
36-085-00067
0.074 ppm
Meters AGL
1500
1000
500
2000
1500
1000
500
00
08/17
18
12
06
00
08/16
18
12
06
Job ID: 116153 Job Start: Tue Jul 24 19:02:00 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Aug 2015 - EDAS40

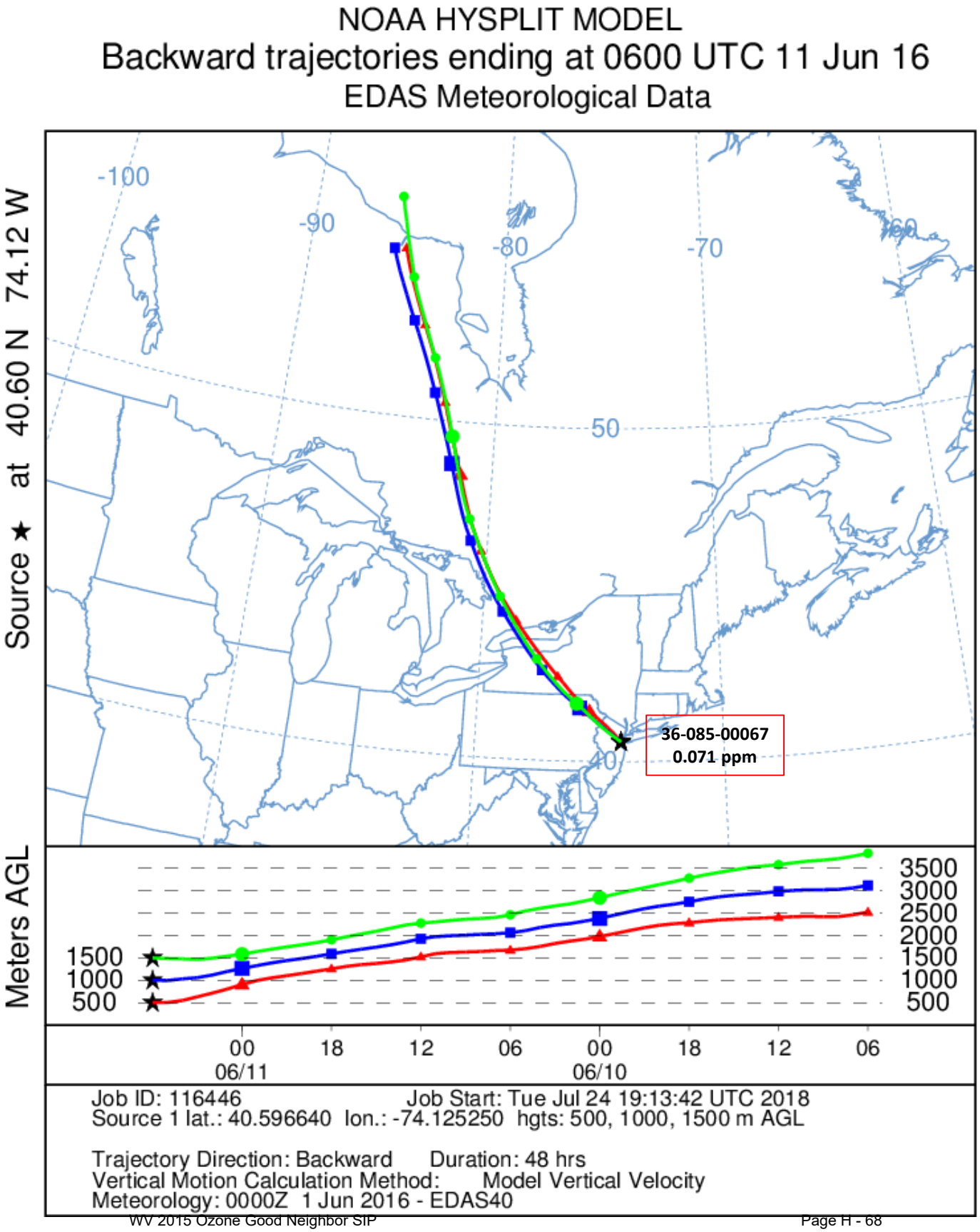

NOAA HYSPLIT MODEL
Backward trajectories ending at 0800 UTC 03 Sep 15
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
-82
-80
-78
-76
-74
-72
42
40
36-085-00067
0.081 ppm
Meters AGL
1500
1000
500
06
00
09/03
18
12
06
00
09/02
18
12
Job ID: 116199 Job Start: Tue Jul 24 19:03:20 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Sep 2015 - EDAS40

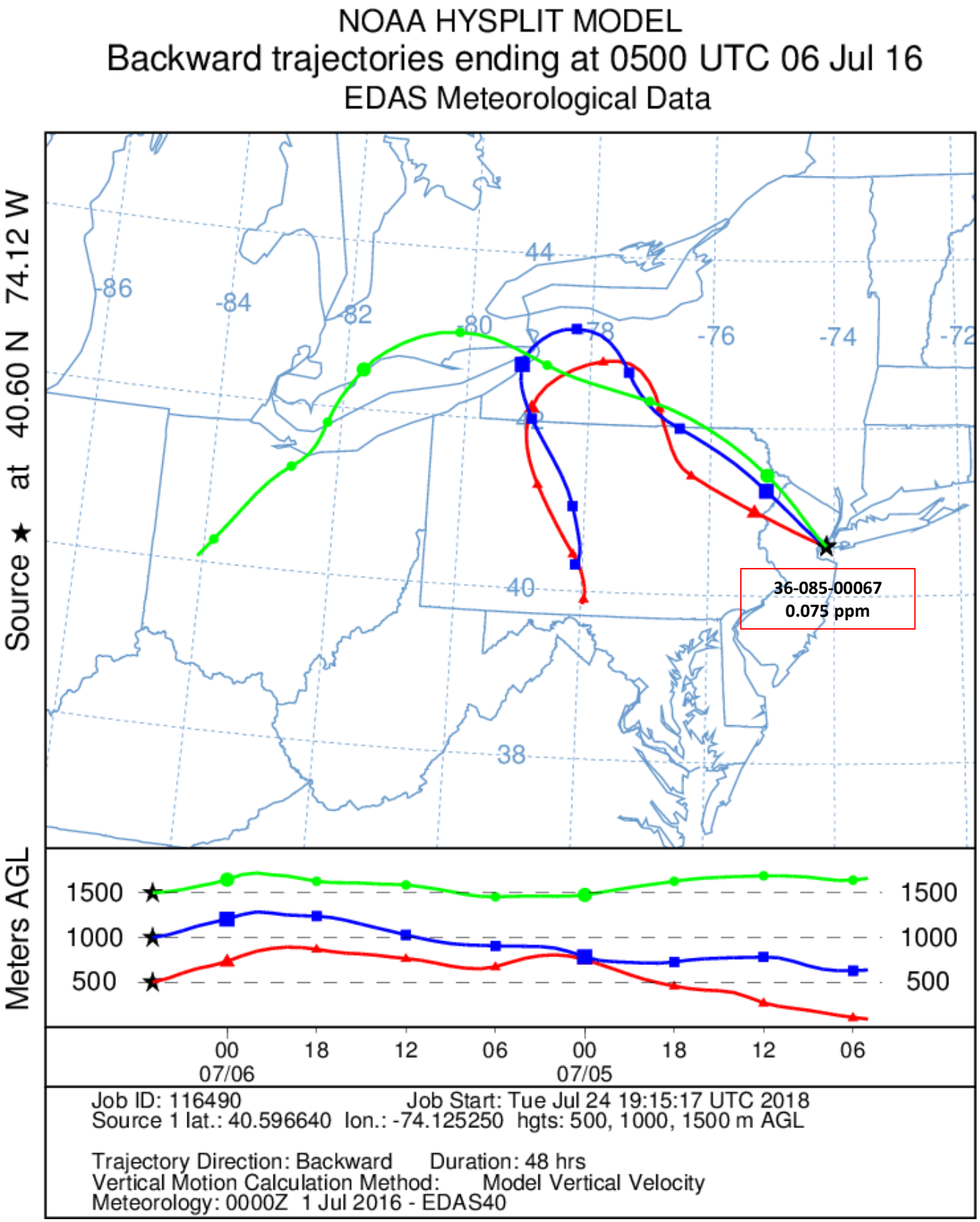

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 17 Sep 15
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
-80
-78
-76
-74
-72
42
40
36-085-00067
0.085 ppm
Meters AGL
3000
2500
2000
1500
1000
500
1500
1000
500
00
09/17
18
12
06
00
09/16
18
12
06
Job ID: 116233 Job Start: Tue Jul 24 19:05:14 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Sep 2015 - EDAS40

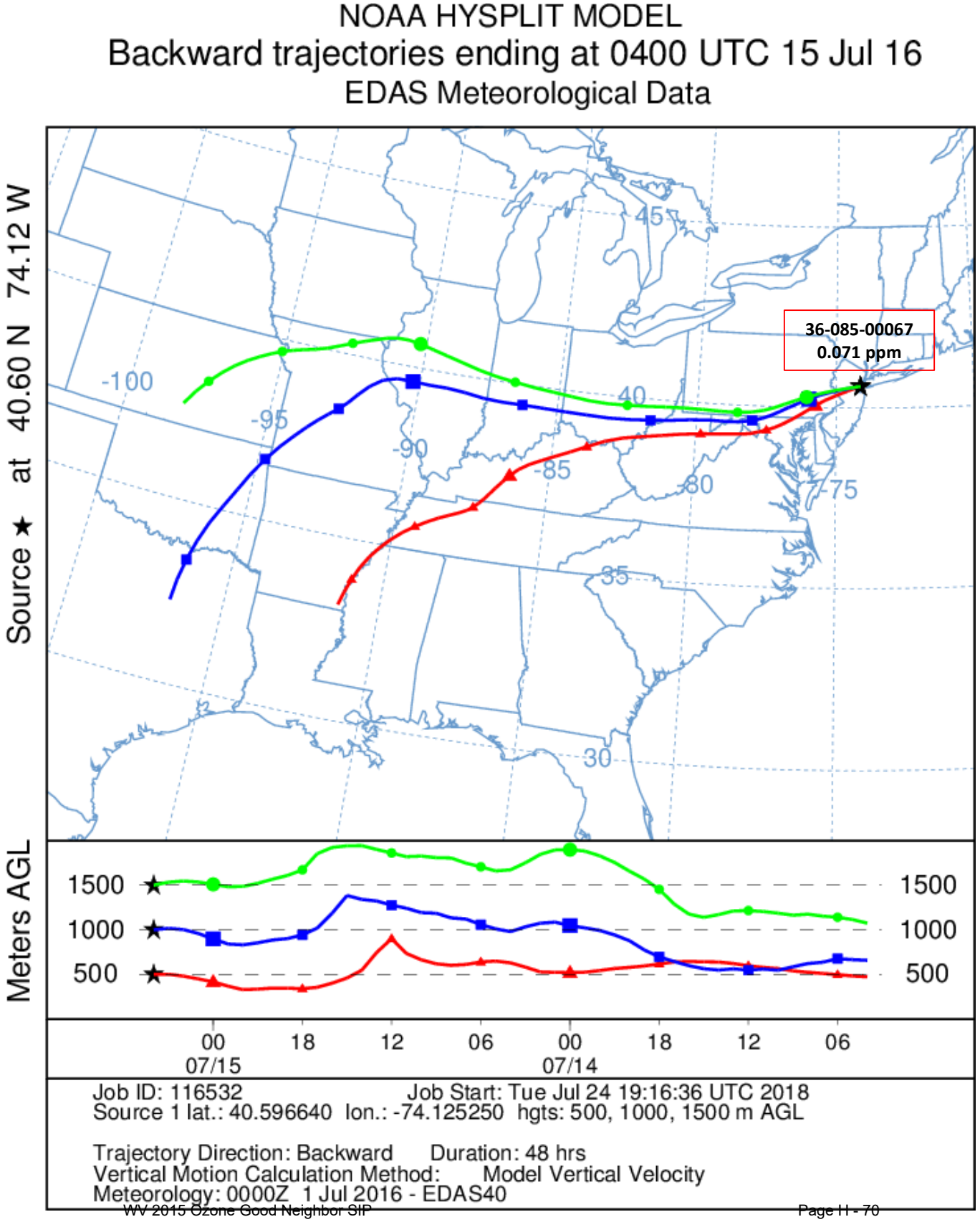

NOAA HYSPLIT MODEL
Backward trajectories ending at 0700 UTC 25 May 16
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
48
46
44
42
40
-86
-84
-82
-80
-78
-76
-74
-72
-70
36-085-00067
0.086 ppm
Meters AGL
1500
1000
500
06
00
18
12
06
00
18
12
05/25
05/24
Job ID: 116343
Job Start: Tue Jul 24 19:08:01 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 May 2016 - EDAS40

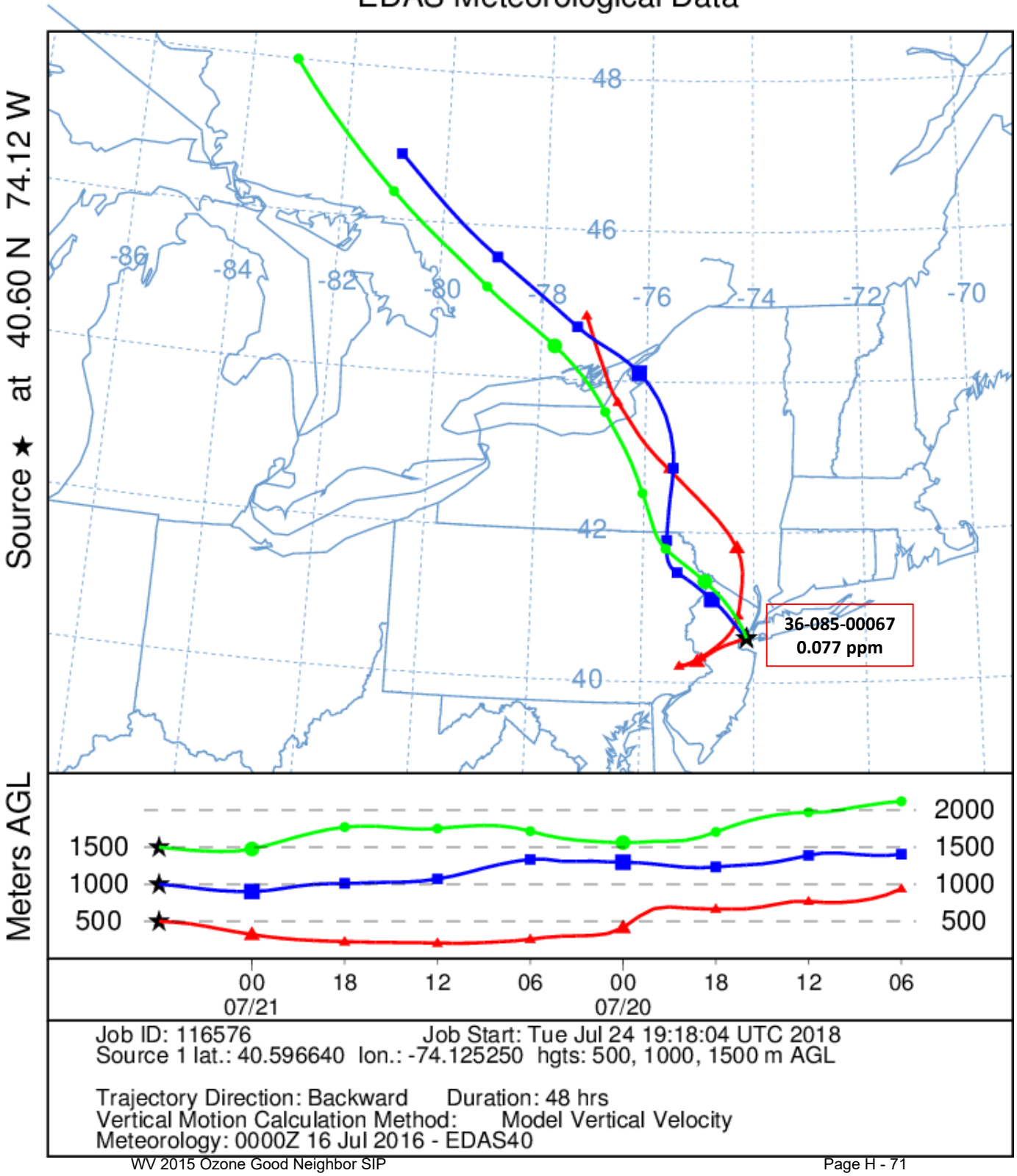

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 26 May 16
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
Meters AGL
36-085-00067
0.078 ppm
1500
1000
500
00
05/26
18
12
06
00
05/25
18
12
06
Job ID: 116399 Job Start: Tue Jul 24 19:10:19 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 May 2016 - EDAS40

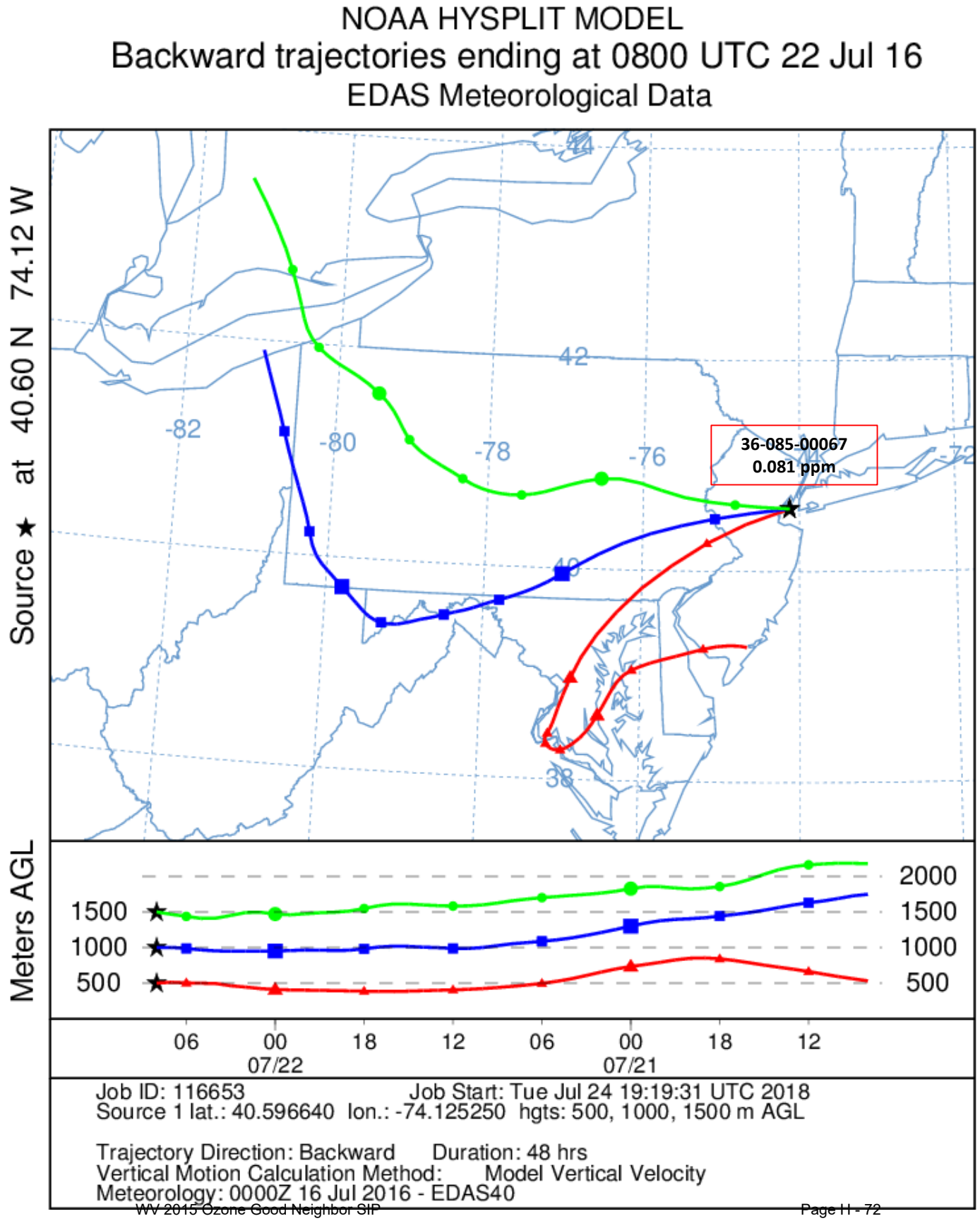

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 28 May 16
EDAS Meteorological Data
36-085-00067
0.074 ppm
Source ★ at 40.60 N 74.12 W
Meters AGL
1500
1000
500
00
05/28
18
12
06
00
05/27
18
12
06
Job ID: 116422 Job Start: Tue Jul 24 19:12:18 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 May 2016 - EDAS40

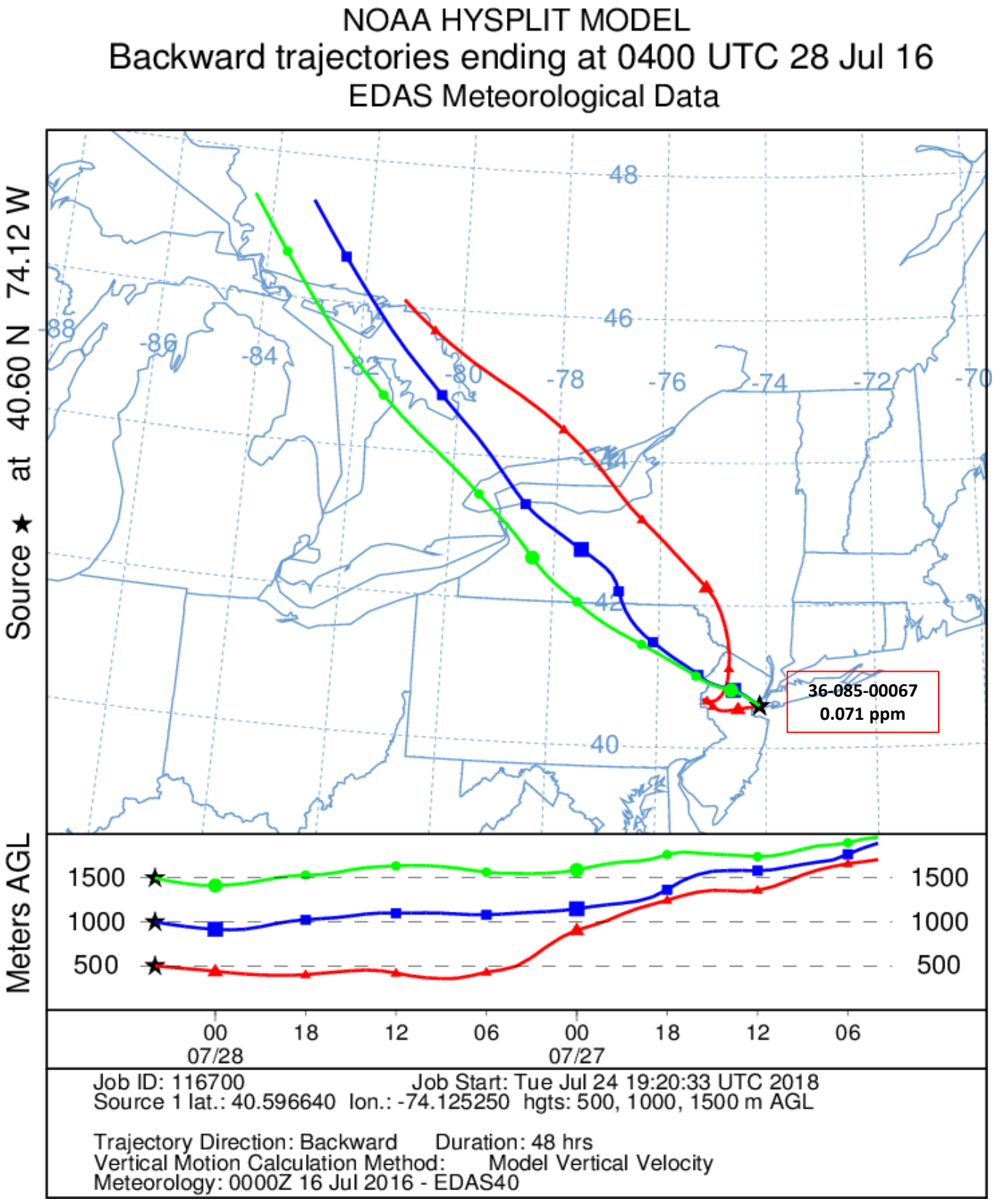

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 11 Jun 16
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
-100
-90
-80
-70
-60
50
40
36-085-00067
0.071 ppm
Meters AGL
1500
1000
500
3500
3000
2500
2000
1500
1000
500
00
06/11
18
12
06
00
06/10
18
12
06
Job ID: 116446 Job Start: Tue Jul 24 19:13:42 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2016 - EDAS40

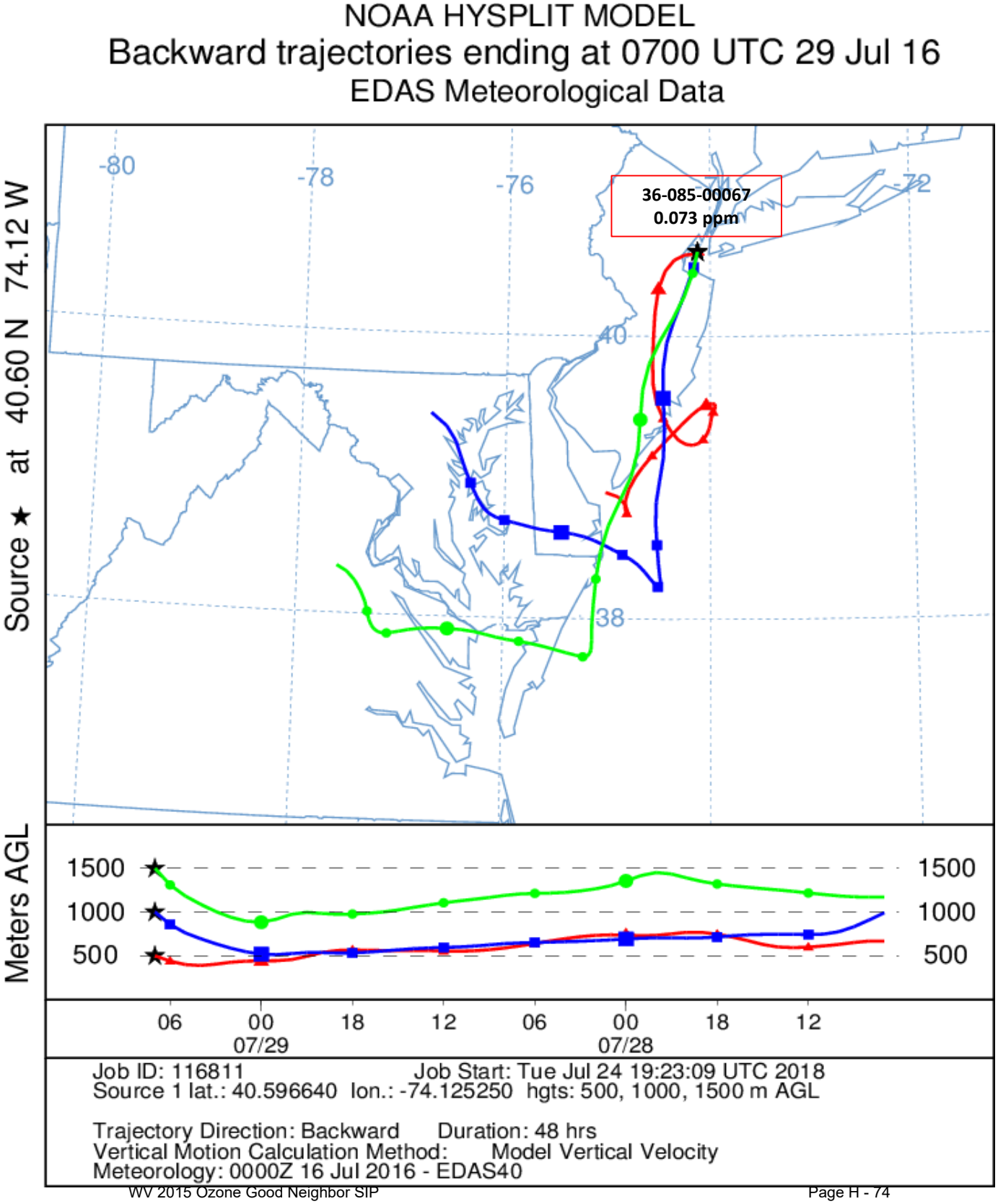

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 06 Jul 16
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
Meters AGL
36-085-00067
0.075 ppm
1500
1000
500
00
07/06
18
12
06
00
07/05
18
12
06
Job ID: 116490 Job Start: Tue Jul 24 19:15:17 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jul 2016 - EDAS40

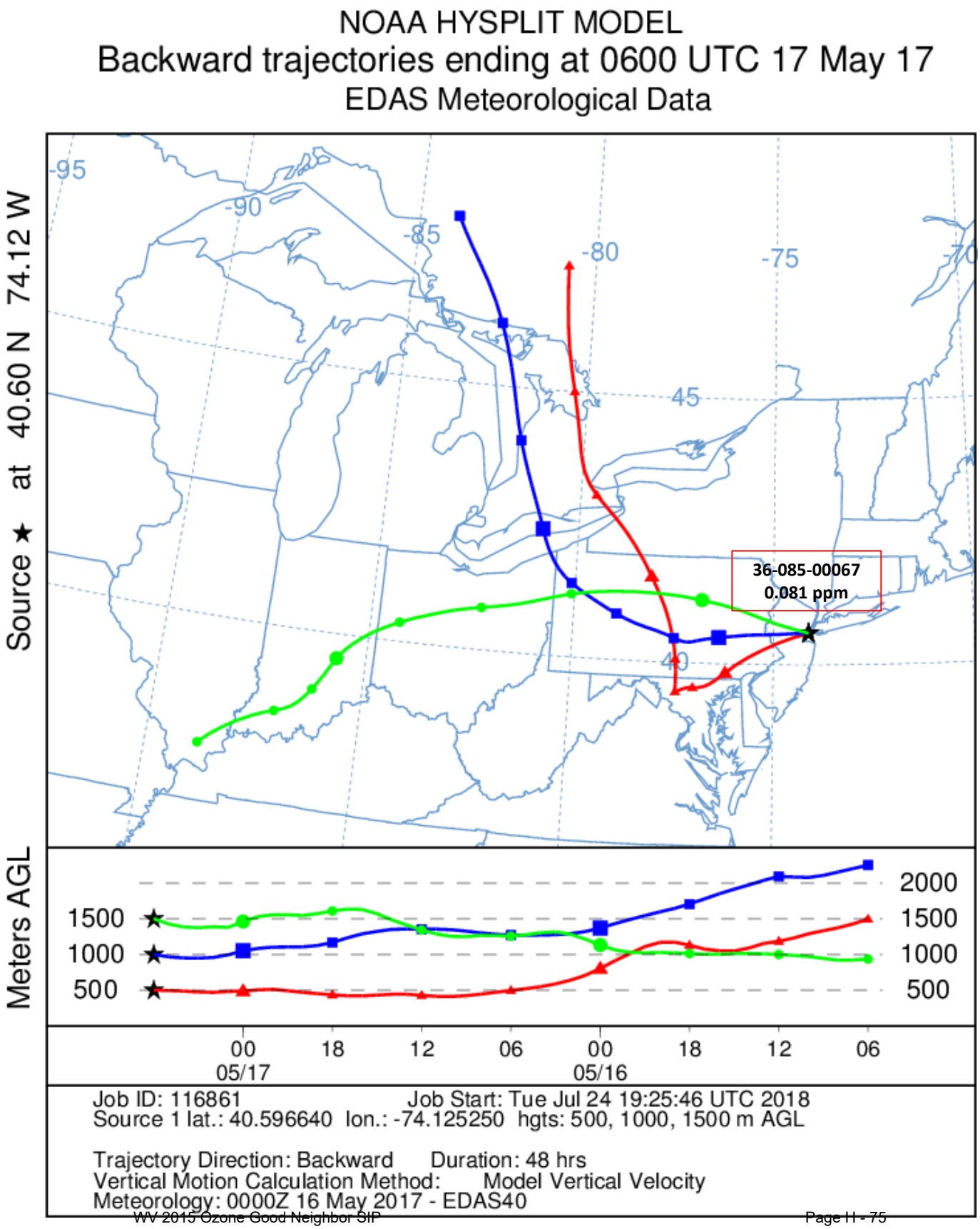

NOAA HYSPLIT MODEL
Backward trajectories ending at 0400 UTC 15 Jul 16
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
36-085-00067
0.071 ppm
-100
-95
-90
-85
-80
-75
45
40
35
30
Meters AGL
1500
1000
500
00
07/15
18
12
06
00
07/14
18
12
06
Job ID: 116532 Job Start: Tue Jul 24 19:16:36 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jul 2016 - EDAS40

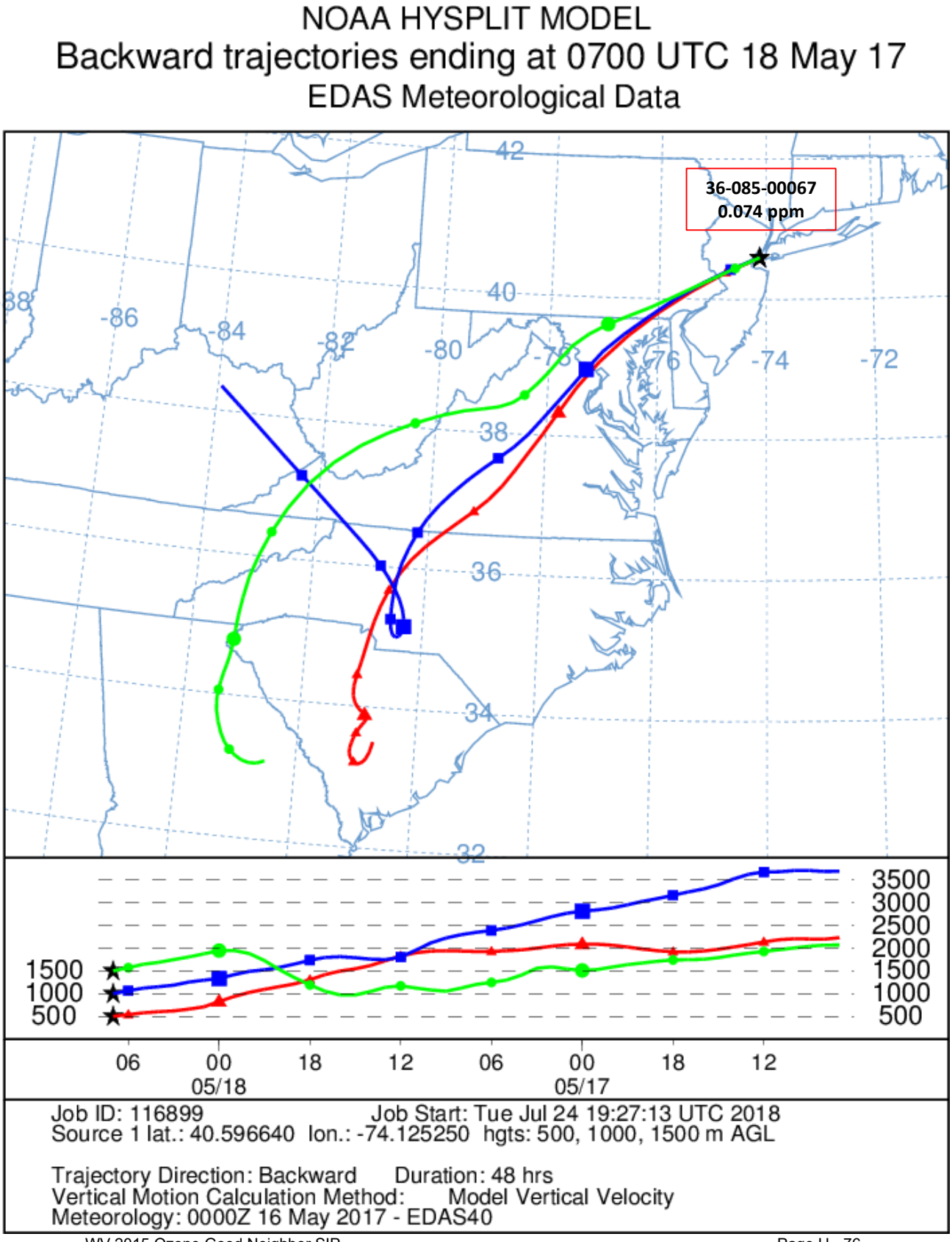

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 21 Jul 16
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
48
46
42
40
-86
-84
-82
-80
-78
-76
-74
-72
-70
36-085-00067
0.077 ppm
Meters AGL
2000
1500
1000
500
1500
1000
500
00
07/21
18
12
06
00
07/20
18
12
06
Job ID: 116576 Job Start: Tue Jul 24 19:18:04 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2016 - EDAS40

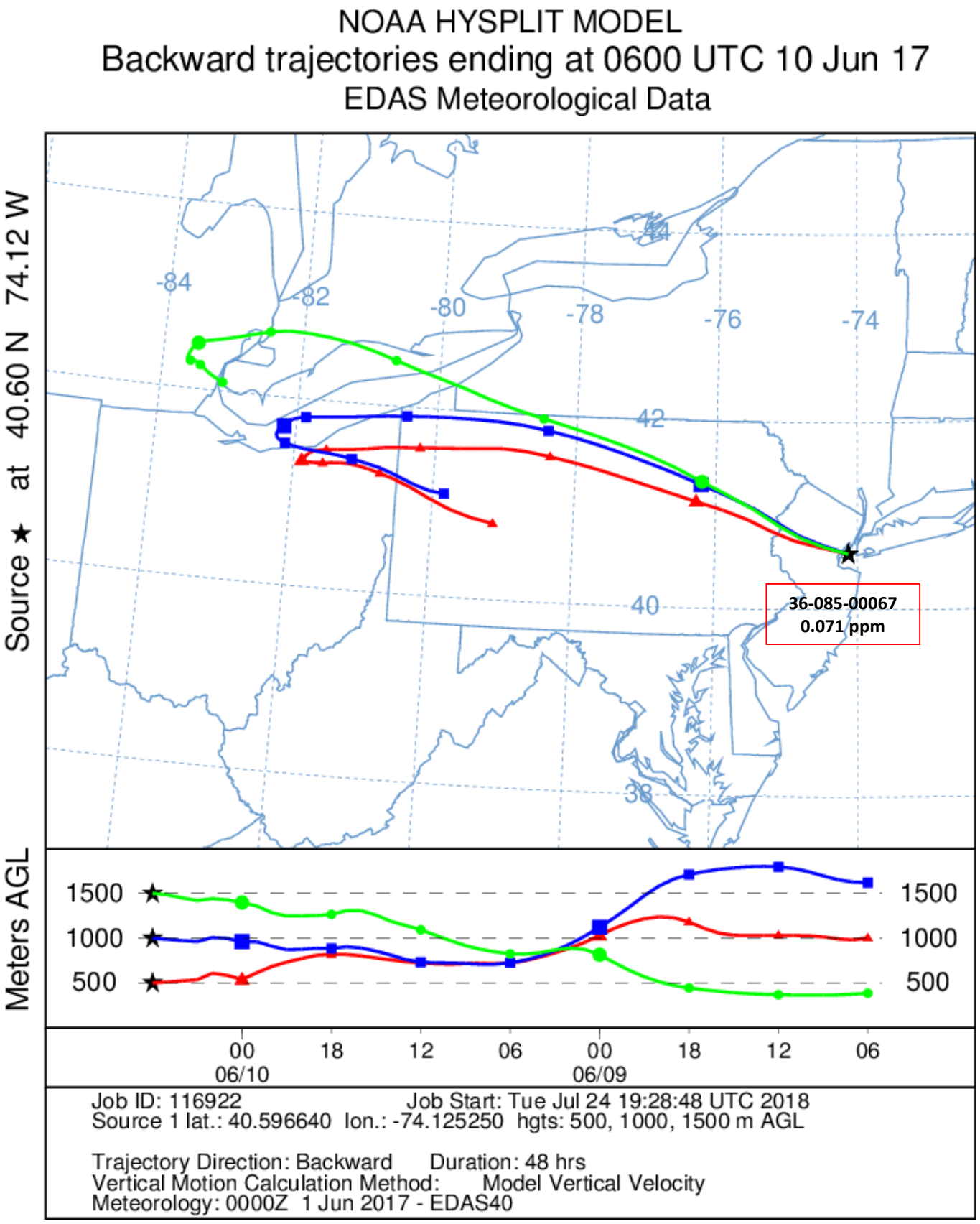

NOAA HYSPLIT MODEL
Backward trajectories ending at 0800 UTC 22 Jul 16
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
36-085-00067
0.081 ppm
-82
-80
-78
-76
42
40
38
Meters AGL
1500
1000
500
2000
1500
1000
500
06
00
07/22
18
12
06
00
07/21
18
12
Job ID: 116653 Job Start: Tue Jul 24 19:19:31 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2016 - EDAS40

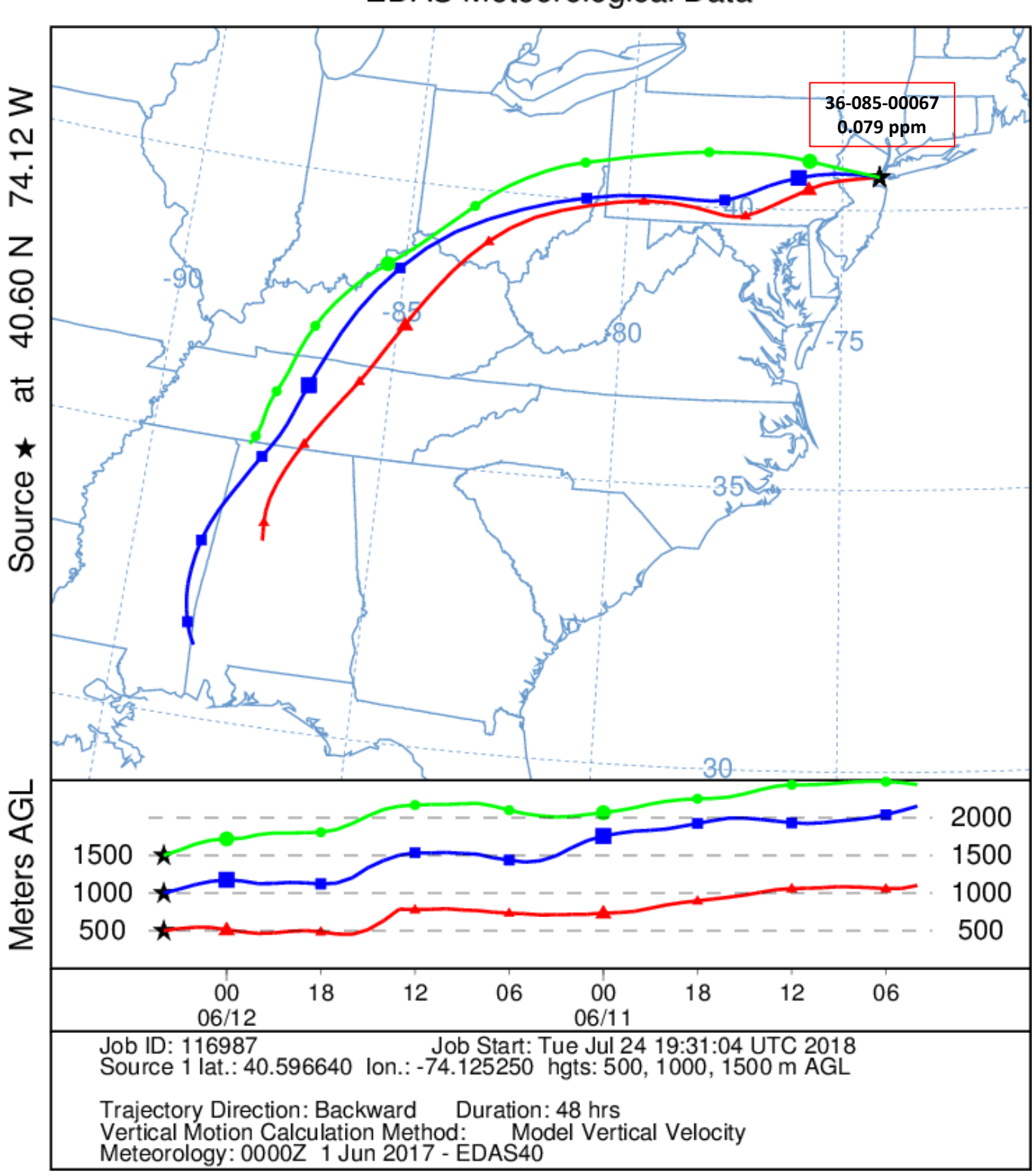

NOAA HYSPLIT MODEL
Backward trajectories ending at 0400 UTC 28 Jul 16
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
48
46
44
42
40
-88
-86
-84
-82
-80
-78
-76
-74
-72
-70
36-085-00067
0.071 ppm
Meters AGL
1500
1000
500
00
07/28
18
12
06
00
07/27
18
12
06
Job ID: 116700 Job Start: Tue Jul 24 19:20:33 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2016 - EDAS40

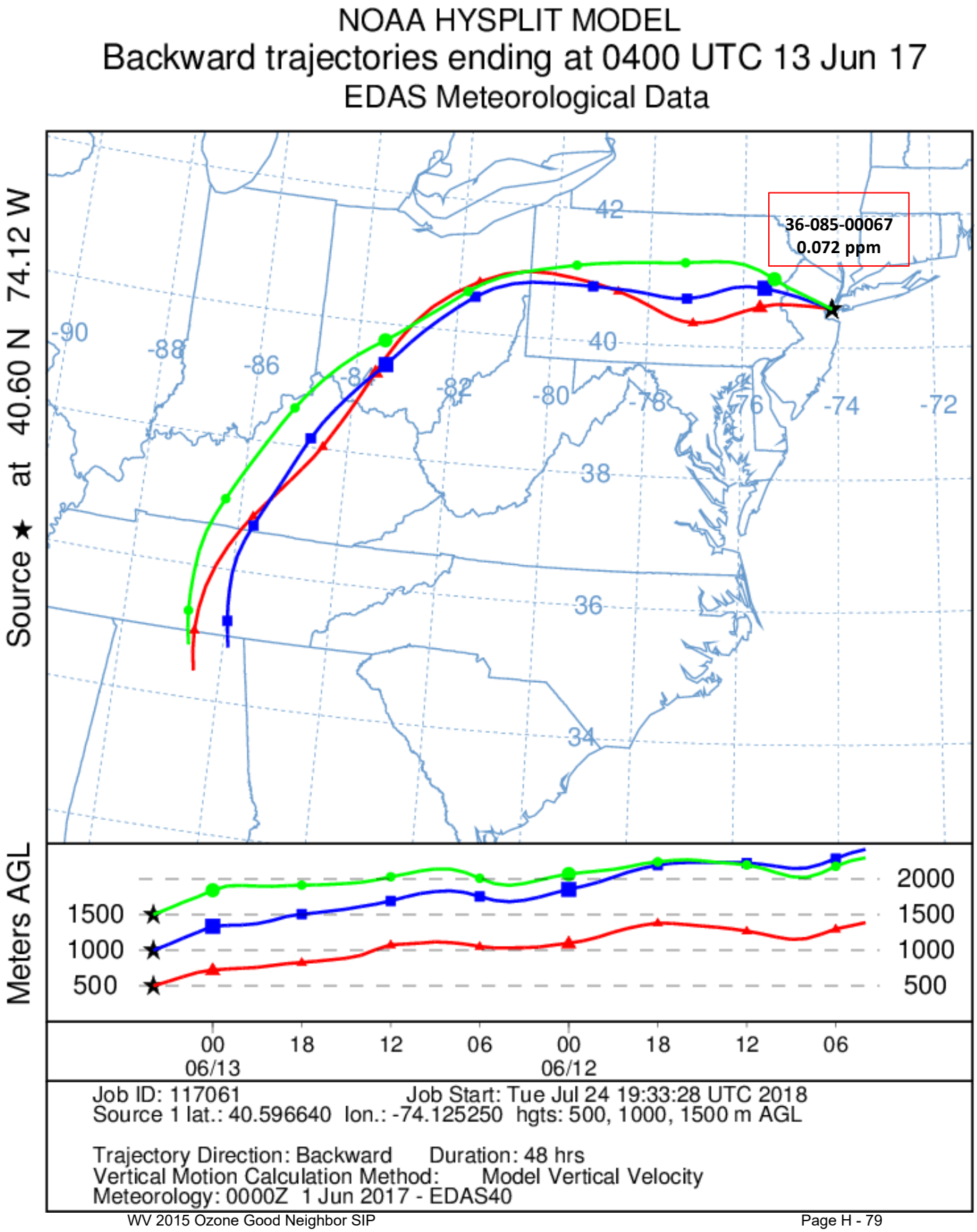

NOAA HYSPLIT MODEL
Backward trajectories ending at 0700 UTC 29 Jul 16
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
36-085-00067
0.073 ppm
-80
-78
-76
-72
40
38
Meters AGL
1500
1000
500
06
00
07/29
18
12
06
00
07/28
18
12
Job ID: 116811
Job Start: Tue Jul 24 19:23:09 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2016 - EDAS40

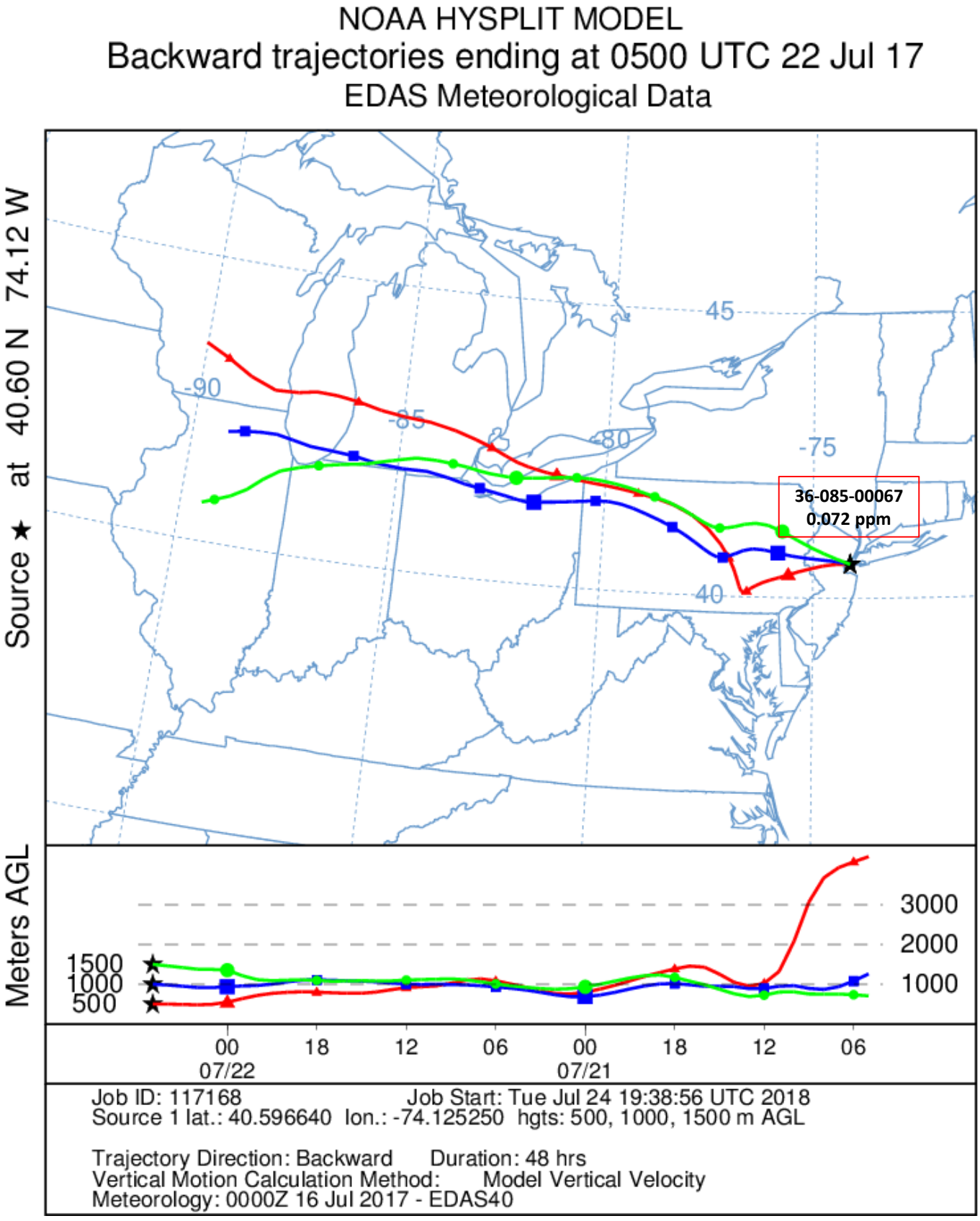

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 17 May 17
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
-95
-90
-85
-80
-75
45
40
36-085-00067
0.081 ppm
Meters AGL
2000
1500
1000
500
1500
1000
500
00
05/17
18
12
06
00
05/16
18
12
06
Job ID: 116861 Job Start: Tue Jul 24 19:25:46 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 May 2017 - EDAS40

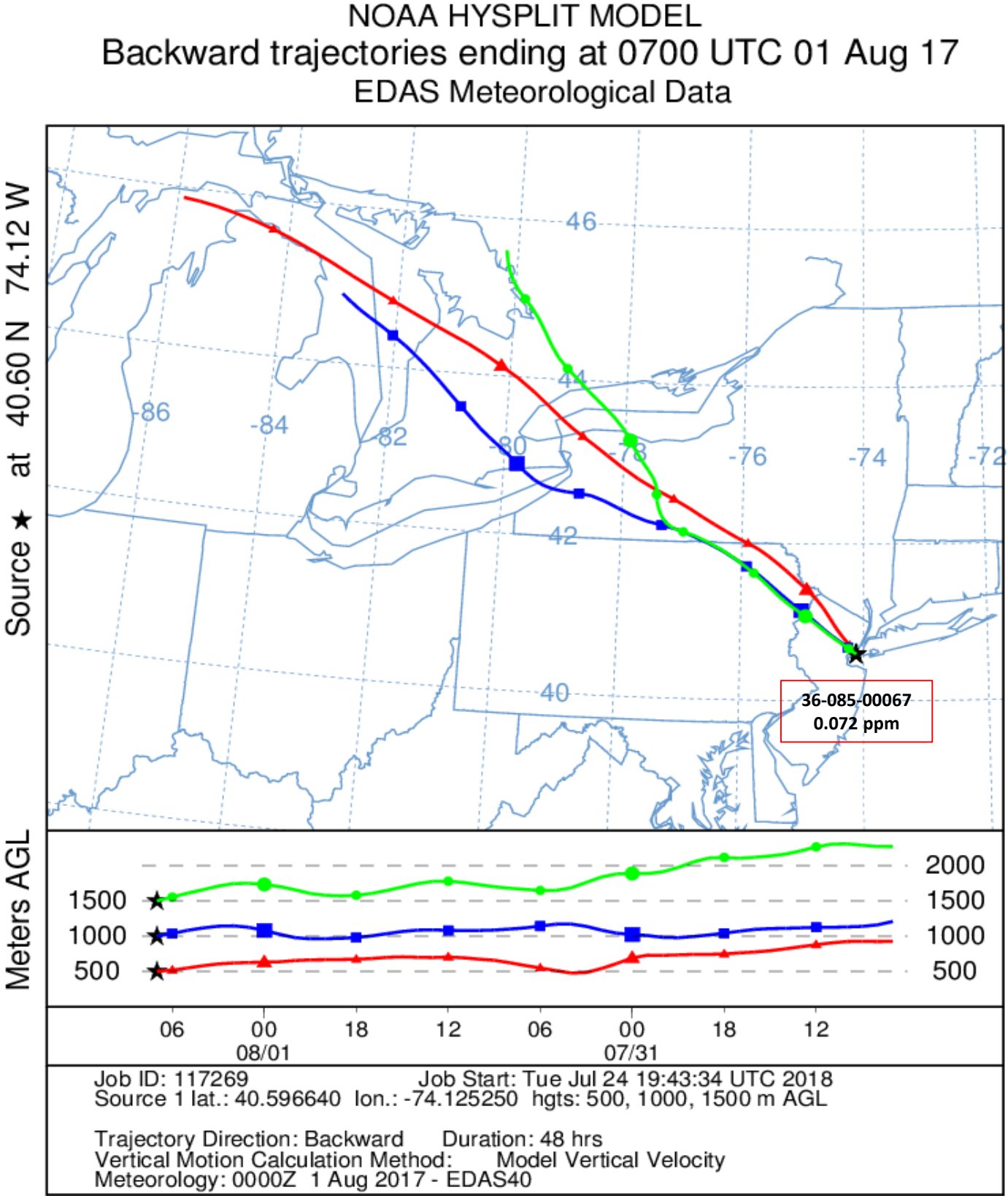

NOAA HYSPLIT MODEL
Backward trajectories ending at 0700 UTC 18 May 17
EDAS Meteorological Data
36-085-00067
0.074 ppm
Source ★ at 40.60 N 74.12 W
Meters AGL
1500
1000
500
3500
3000
2500
2000
1500
1000
500
06
00
18
12
06
00
18
12
05/18
05/17
Job ID: 116899 Job Start: Tue Jul 24 19:27:13 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 May 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 10 Jun 17
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
-84
-82
-80
-78
-76
-74
44
42
40
38
36-085-00067
0.071 ppm
Meters AGL
1500
1000
500
00
06/10
18
12
06
00
06/09
18
12
06
Job ID: 116922 Job Start: Tue Jul 24 19:28:48 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0400 UTC 12 Jun 17
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
36-085-00067
0.079 ppm
-90
-85
-80
-75
40
35
30
Meters AGL
2000
1500
1000
500
00
06/12
18
12
06
00
06/11
18
12
06
Job ID: 116987 Job Start: Tue Jul 24 19:31:04 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0400 UTC 13 Jun 17
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
36-085-00067
0.072 ppm
Meters AGL
2000
1500
1000
500
00 18 12 06 00 18 12 06
06/13 06/12
Job ID: 117061 Job Start: Tue Jul 24 19:33:28 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 22 Jul 17
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
Meters AGL
45
40
-90
-85
-80
-75
36-085-00067
0.072 ppm
3000
2000
1000
1500
1000
500
00
07/22
18
12
06
00
07/21
18
12
06
Job ID: 117168 Job Start: Tue Jul 24 19:38:56 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0700 UTC 01 Aug 17
EDAS Meteorological Data
Source ★ at 40.60 N 74.12 W
46
44
42
40
-86
-84
-82
-80
-78
-76
-74
-72
36-085-00067
0.072 ppm
Meters AGL
2000
1500
1000
500
1500
1000
500
06
00
18
12
06
00
18
12
08/01
07/31
Job ID: 117269 Job Start: Tue Jul 24 19:43:34 UTC 2018
Source 1 lat.: 40.596640 lon.: -74.125250 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Aug 2017 - EDAS40

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# Philadelphia, PA
# 42-101-0024

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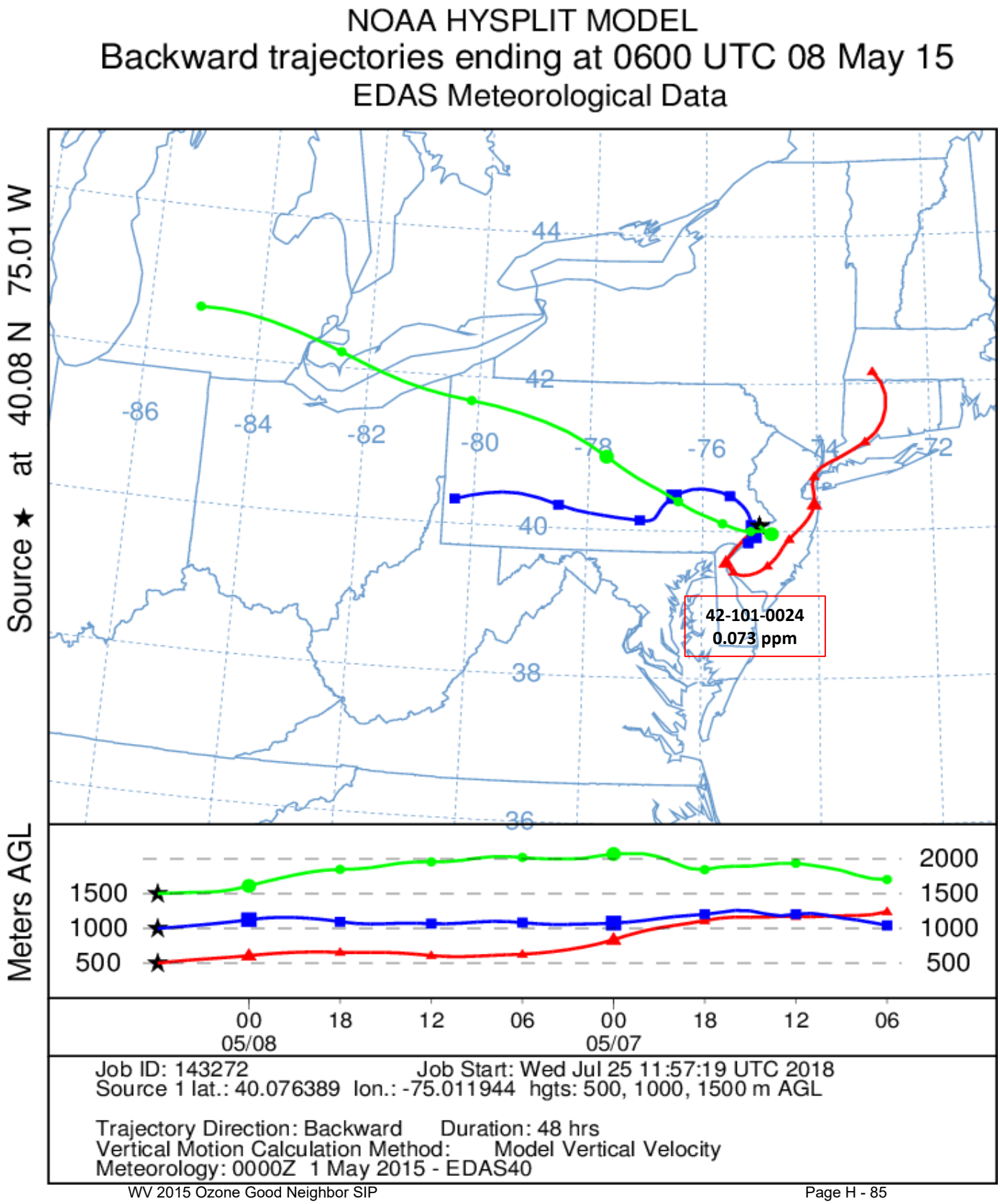
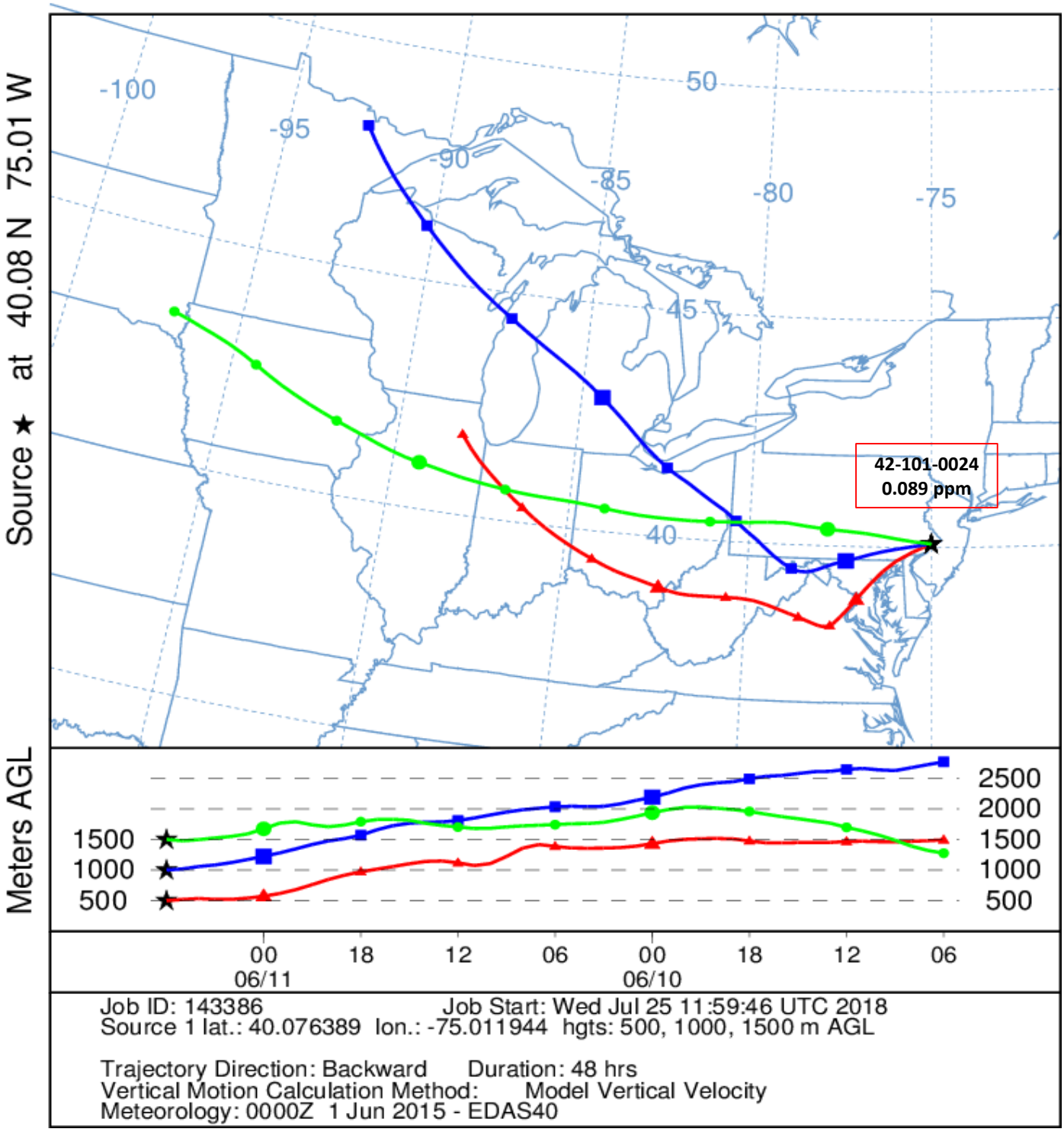
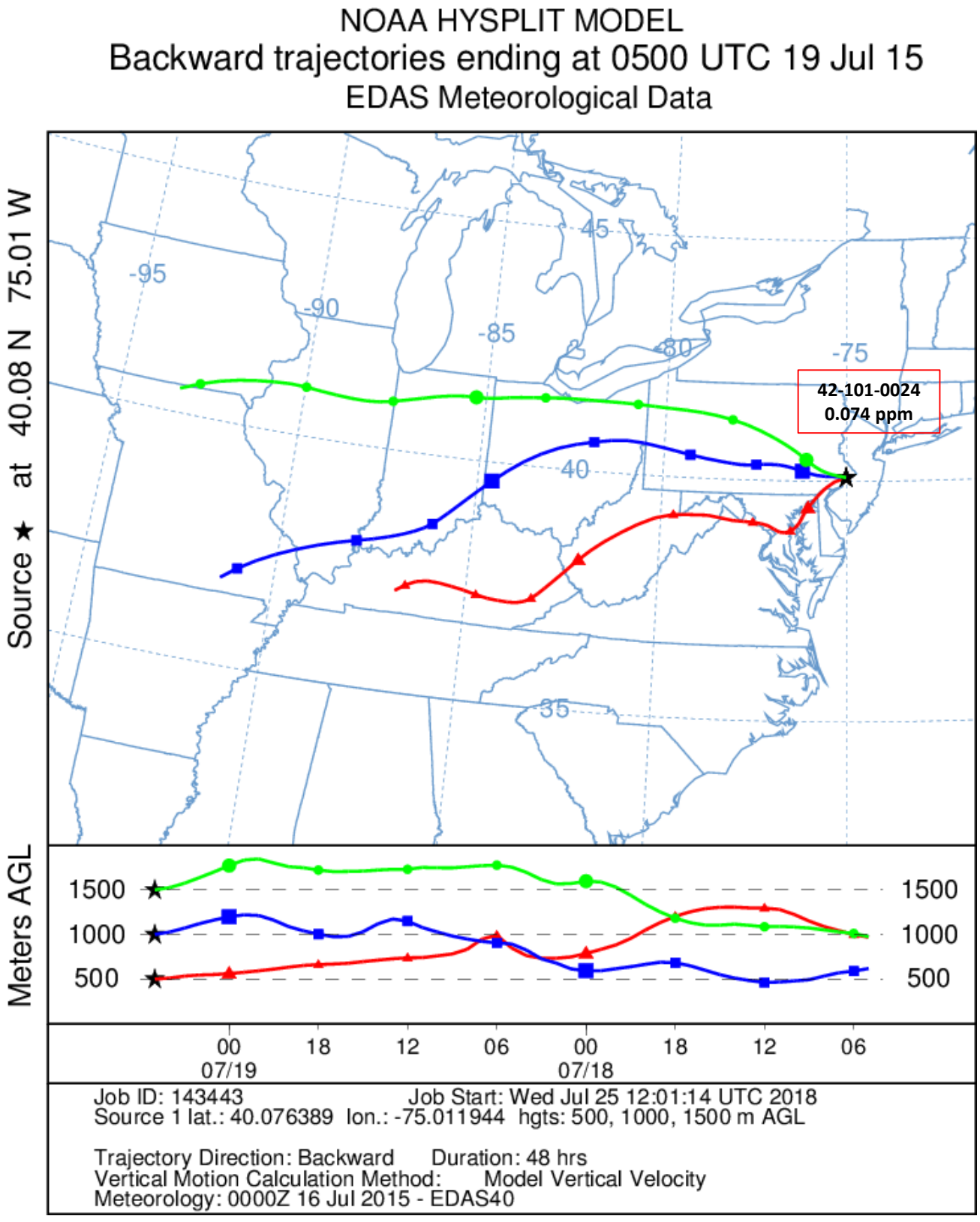
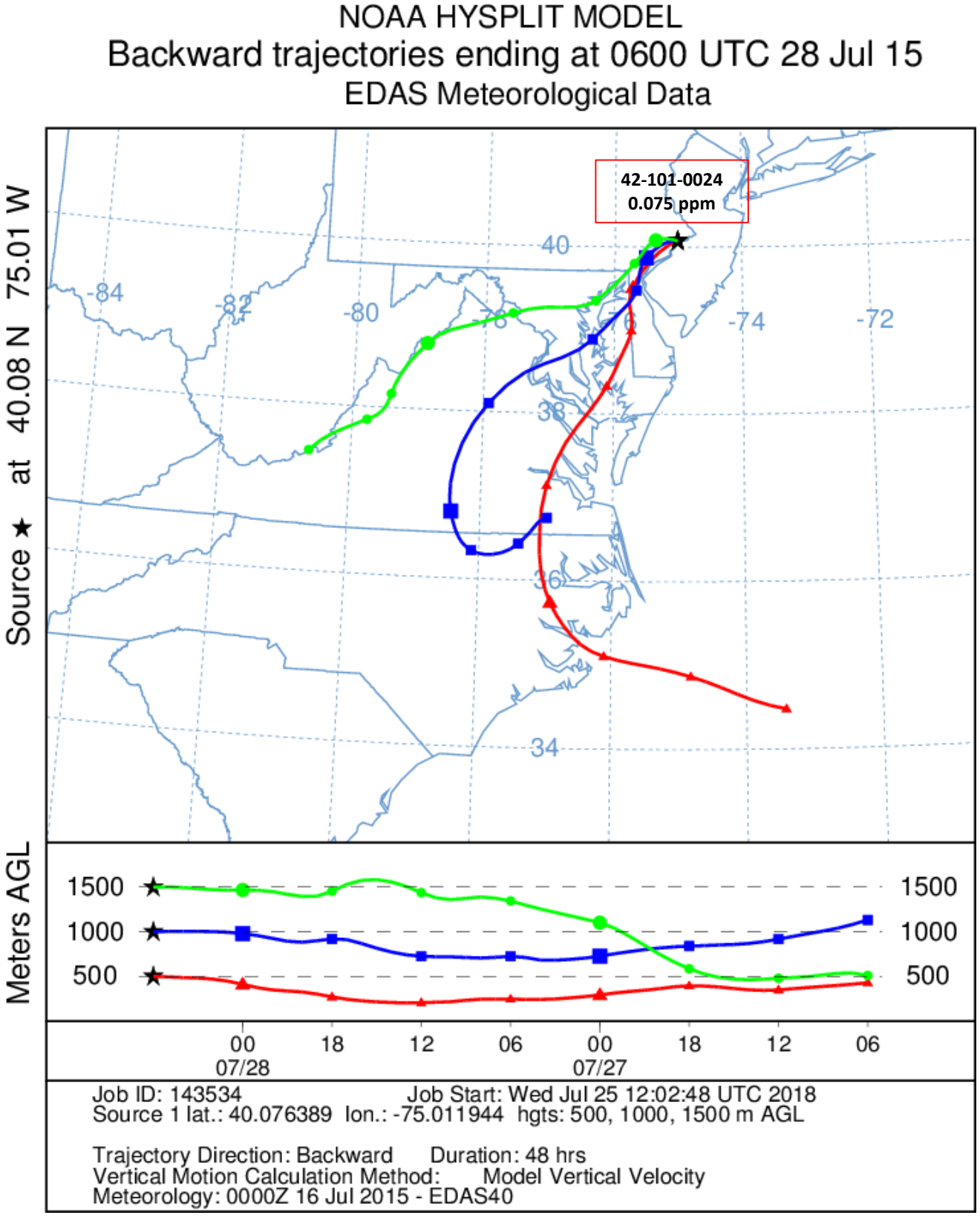
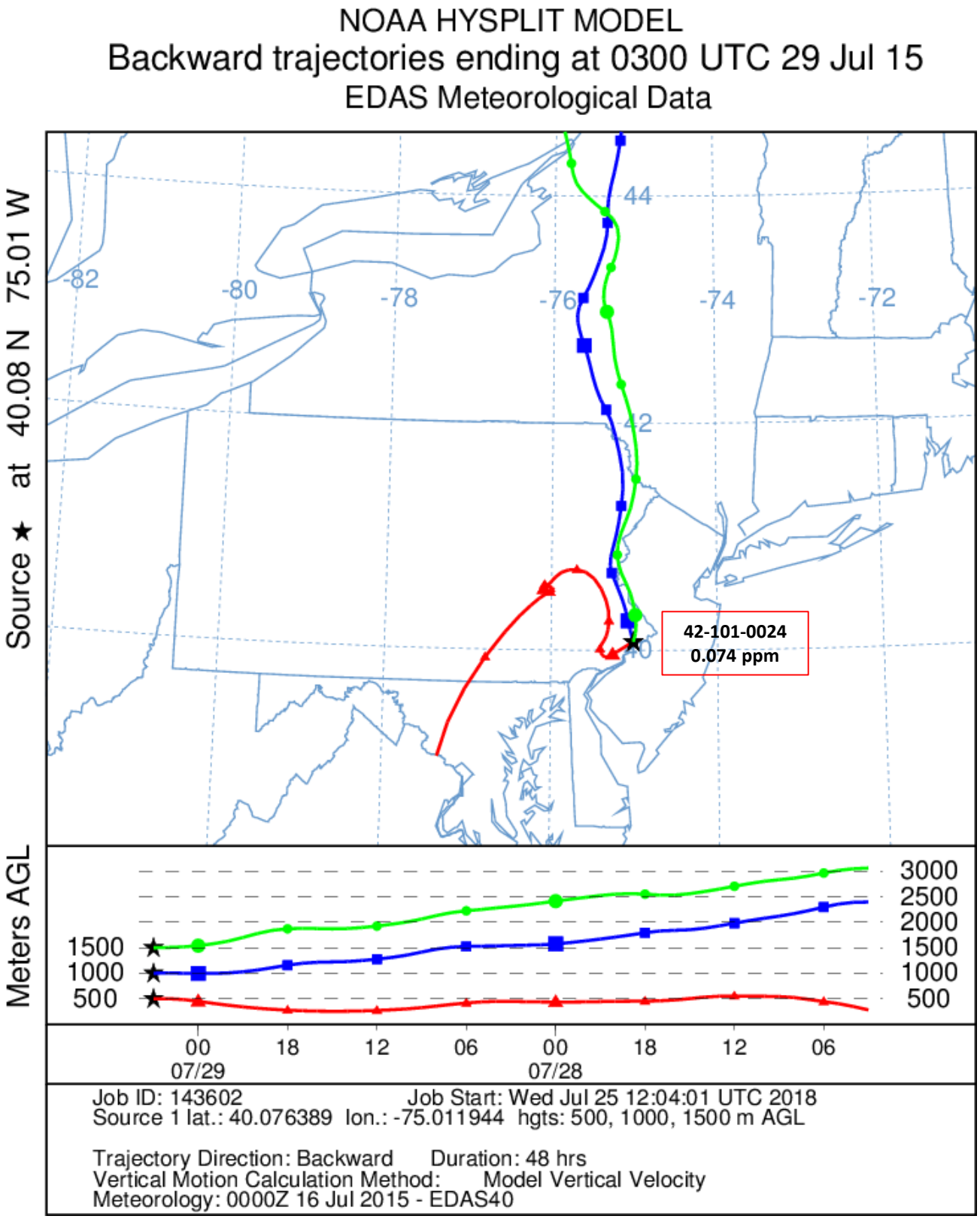
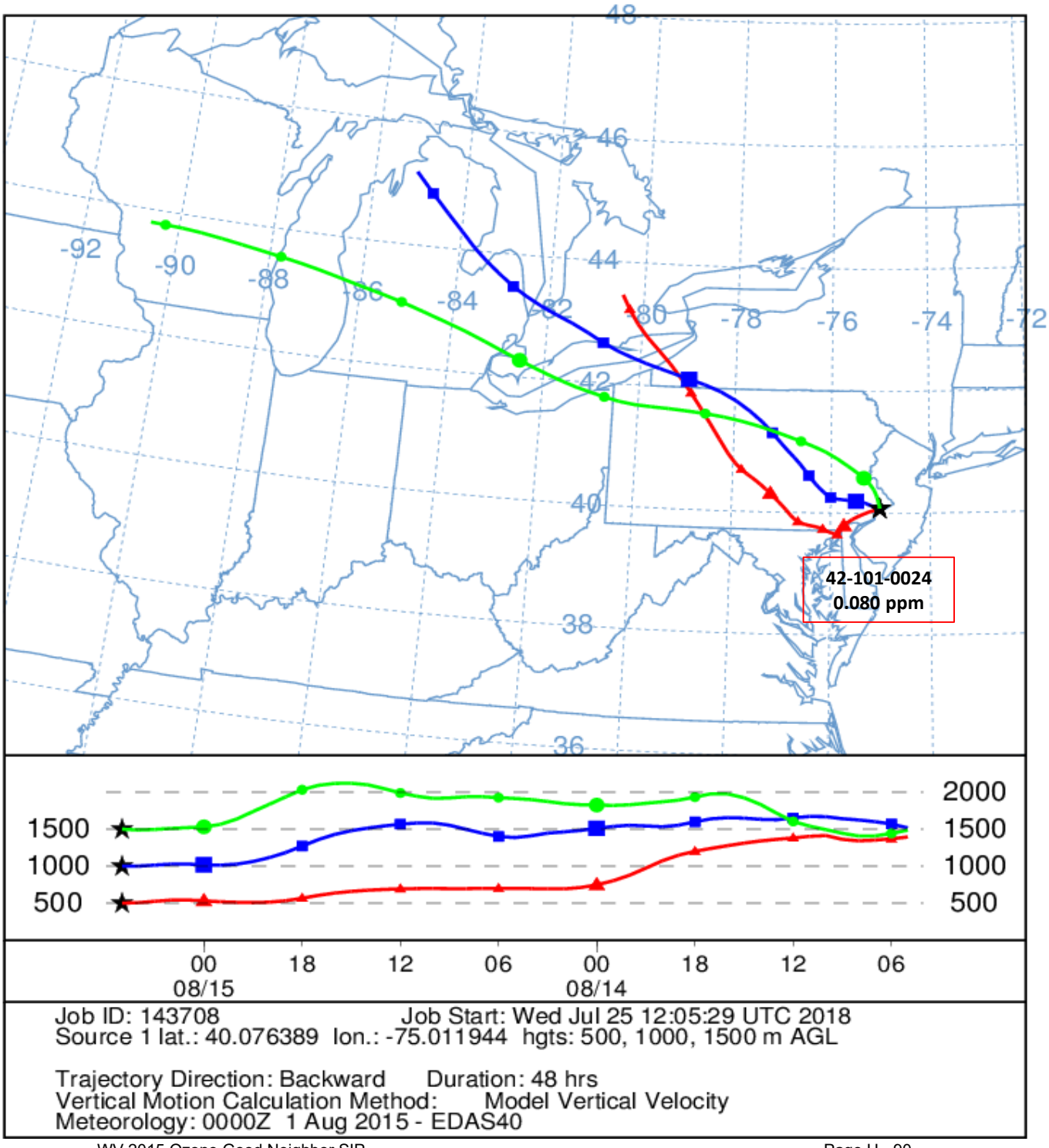

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 08 May 15
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
44
42
40
38
36
-86
-84
-82
-80
-78
-76
-74
-72
42-101-0024
0.073 ppm
Meters AGL
2000
1500
1000
500
1500
1000
500
00
05/08
18
12
06
00
05/07
18
12
06
Job ID: 143272
Job Start: Wed Jul 25 11:57:19 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 1 May 2015 - EDAS40

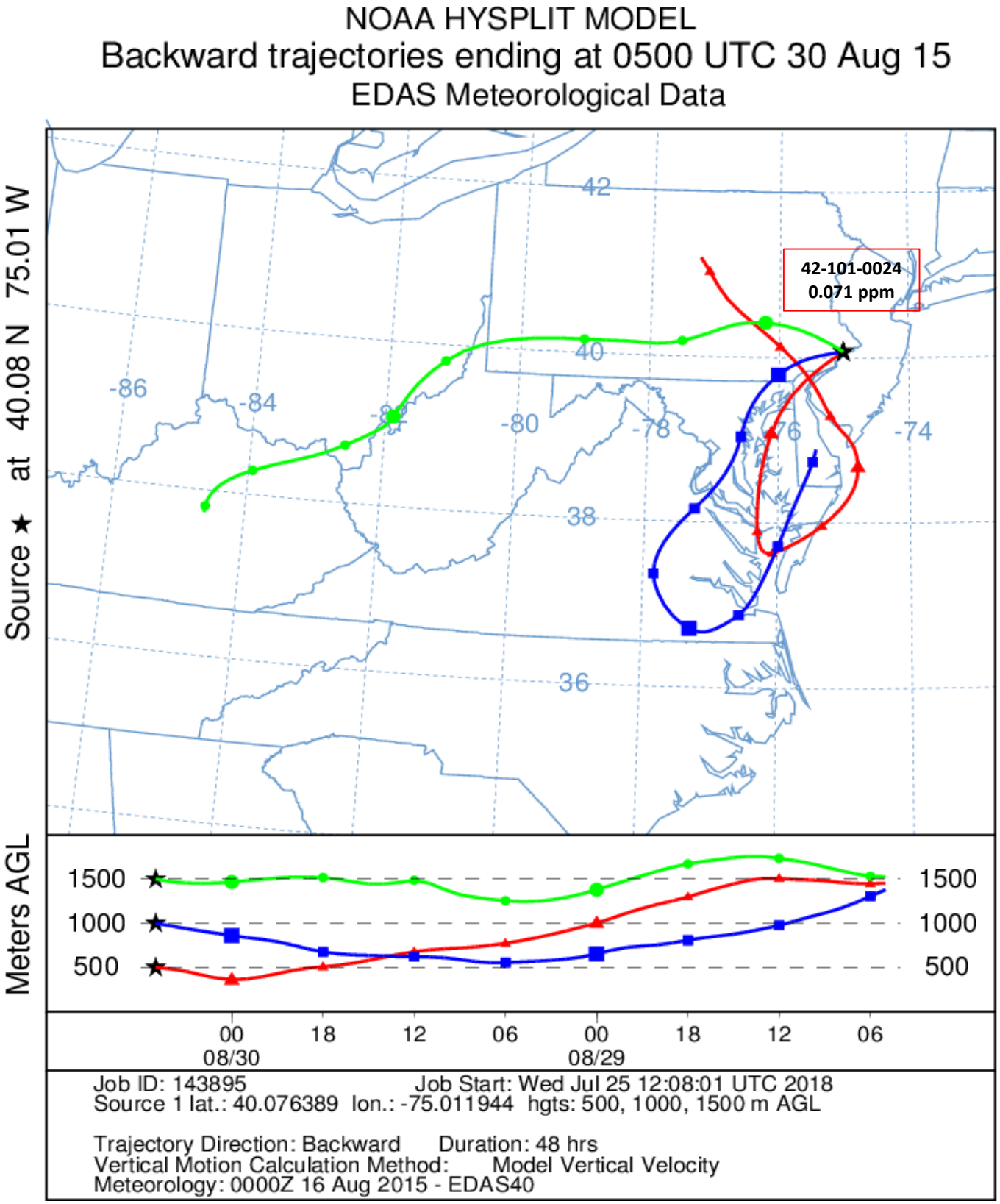

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 11 Jun 15
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
-100
-95
-90
-85
-80
-75
50
45
40
42-101-0024
0.089 ppm
Meters AGL
2500
2000
1500
1000
500
1500
1000
500
00
06/11
18
12
06
00
06/10
18
12
06
Job ID: 143386
Job Start: Wed Jul 25 11:59:46 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2015 - EDAS40

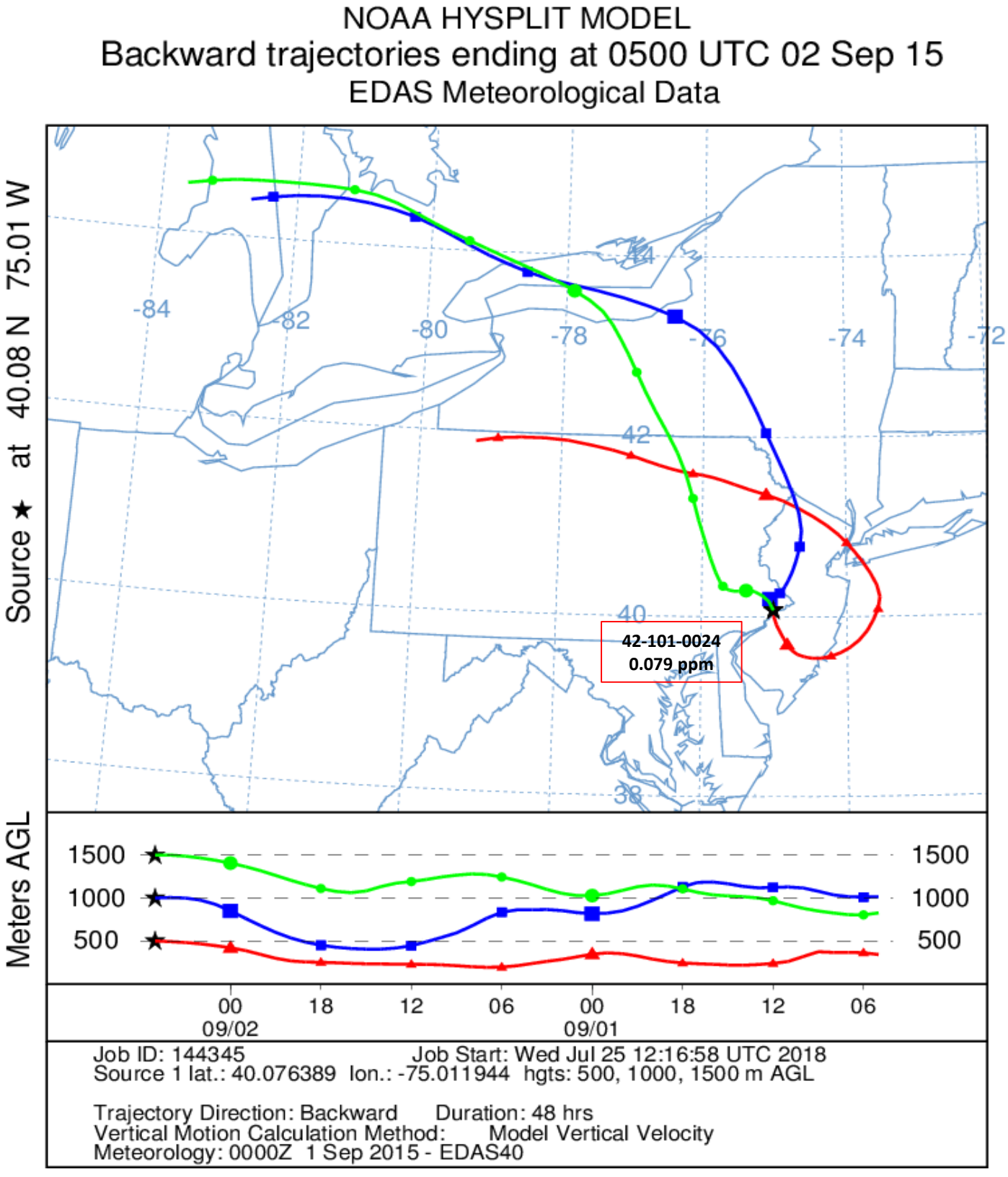

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 19 Jul 15
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
-95
-90
-85
-80
-75
45
40
35
42-101-0024
0.074 ppm
Meters AGL
1500
1000
500
00
07/19
18
12
06
00
07/18
18
12
06
Job ID: 143443 Job Start: Wed Jul 25 12:01:14 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2015 - EDAS40

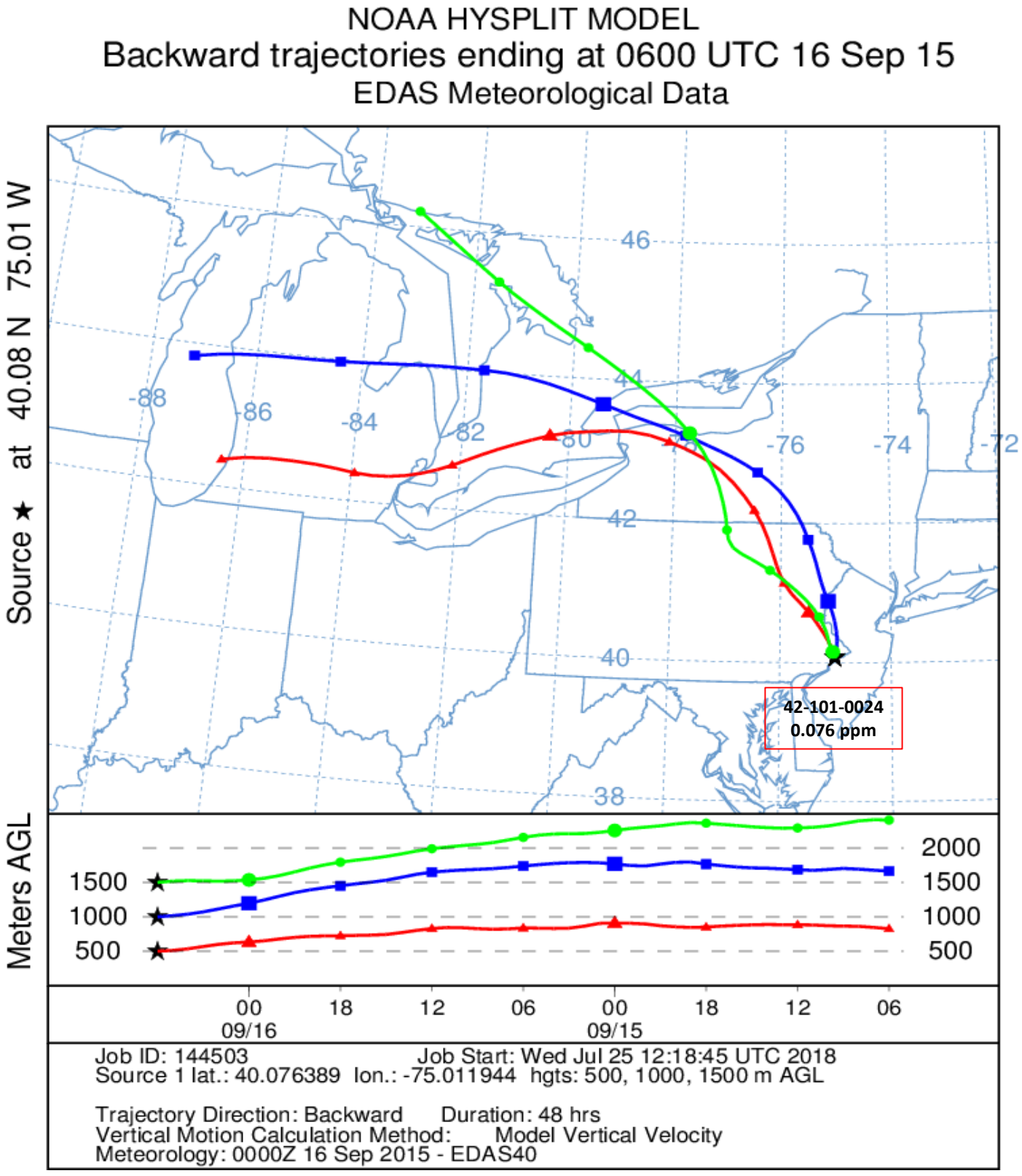

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 28 Jul 15
EDAS Meteorological Data
42-101-0024
0.075 ppm
Source ★ at 40.08 N 75.01 W
Meters AGL
1500
1000
500
00
07/28
18
12
06
00
07/27
18
12
06
Job ID: 143534 Job Start: Wed Jul 25 12:02:48 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2015 - EDAS40

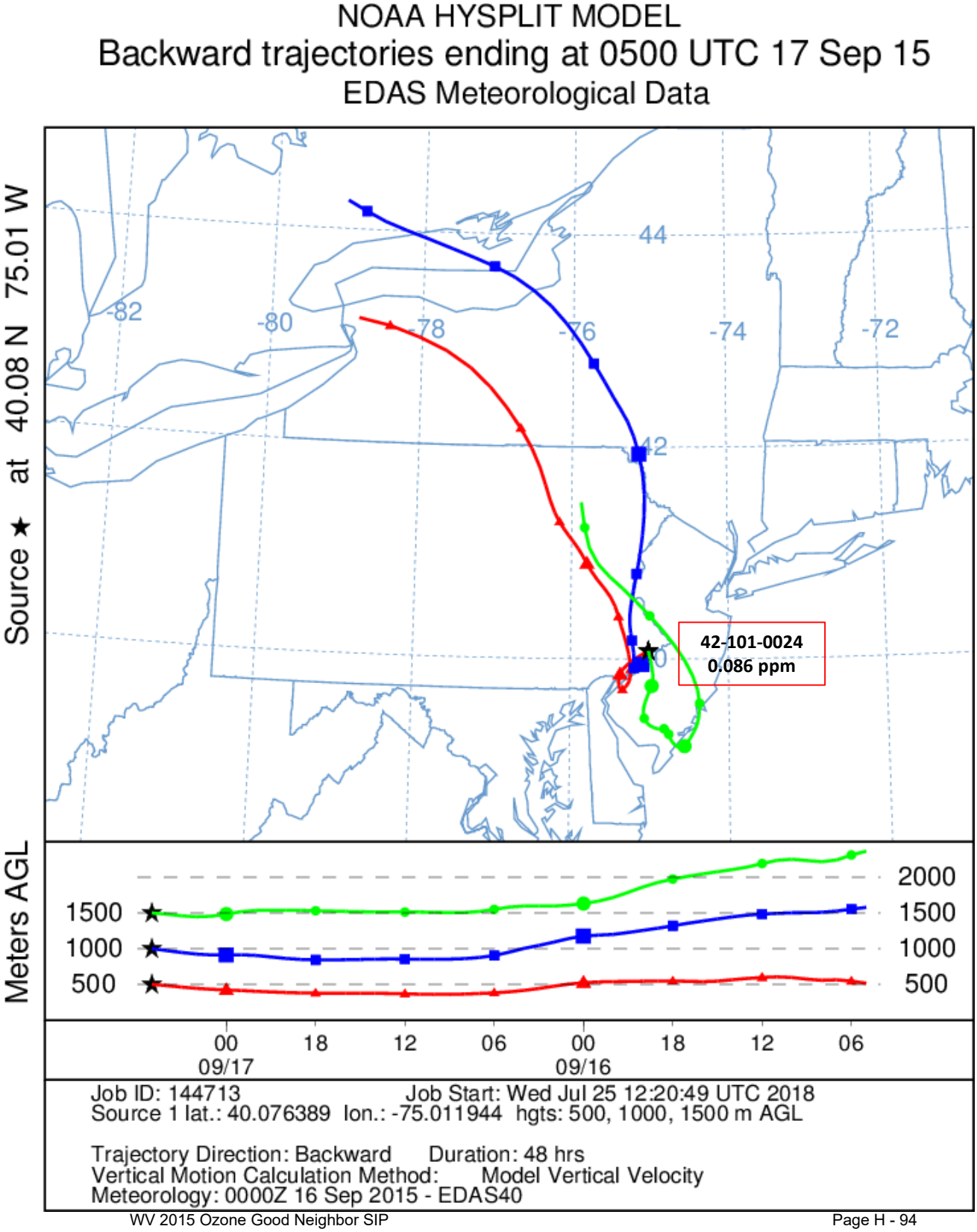

NOAA HYSPLIT MODEL
Backward trajectories ending at 0300 UTC 29 Jul 15
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
-82
-80
-78
-76
-74
-72
44
42
42-101-0024
0.074 ppm
Meters AGL
1500
1000
500
3000
2500
2000
1500
1000
500
00
07/29
18
12
06
00
07/28
18
12
06
Job ID: 143602
Job Start: Wed Jul 25 12:04:01 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2015 - EDAS40

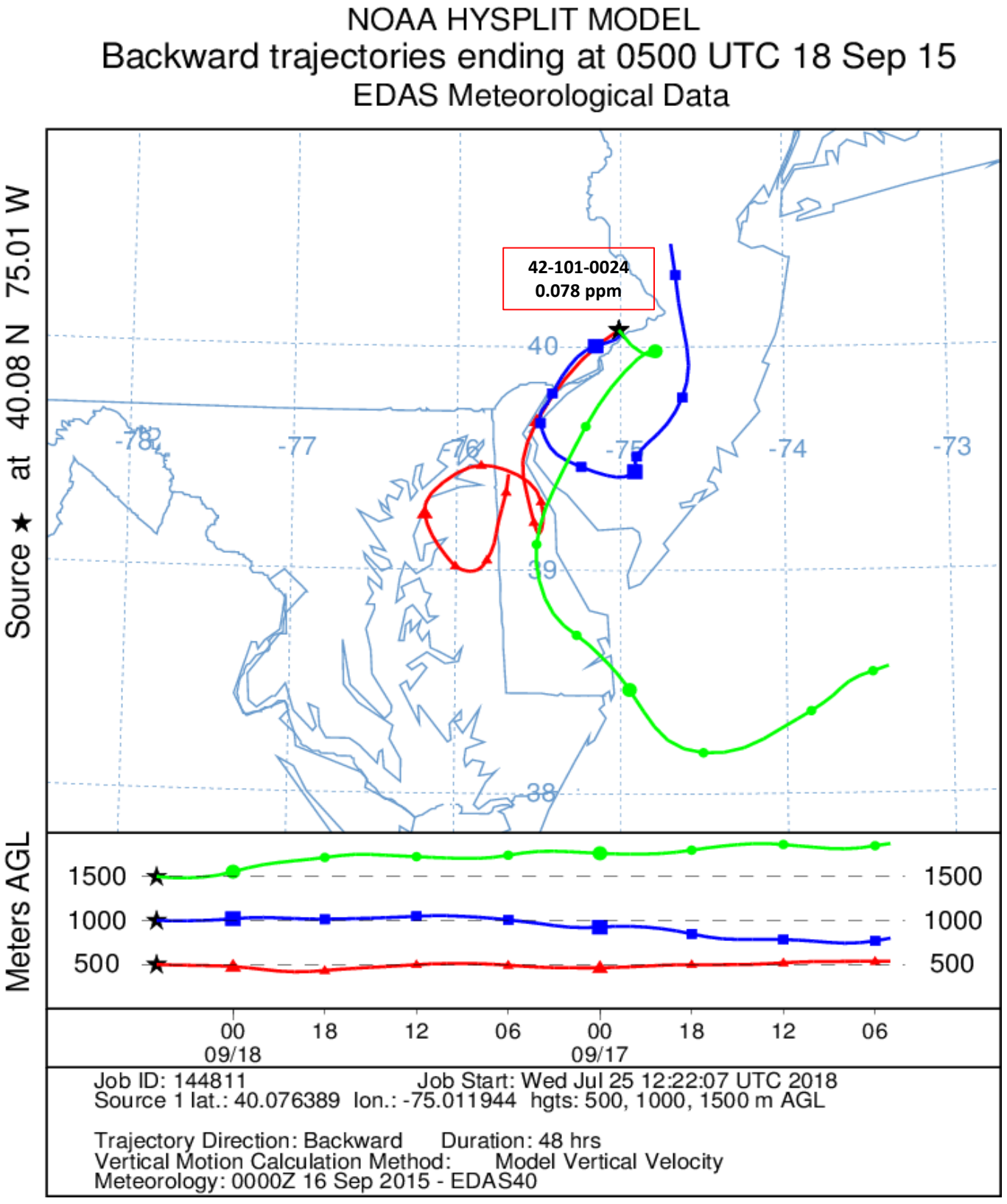

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 15 Aug 15
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
Meters AGL
48
46
44
42
40
38
36
-92
-90
-88
-86
-84
-82
-80
-78
-76
-74
-72
42-101-0024
0.080 ppm
2000
1500
1000
500
1500
1000
500
00
08/15
18
12
06
00
08/14
18
12
06
Job ID: 143708
Job Start: Wed Jul 25 12:05:29 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 1 Aug 2015 - EDAS40

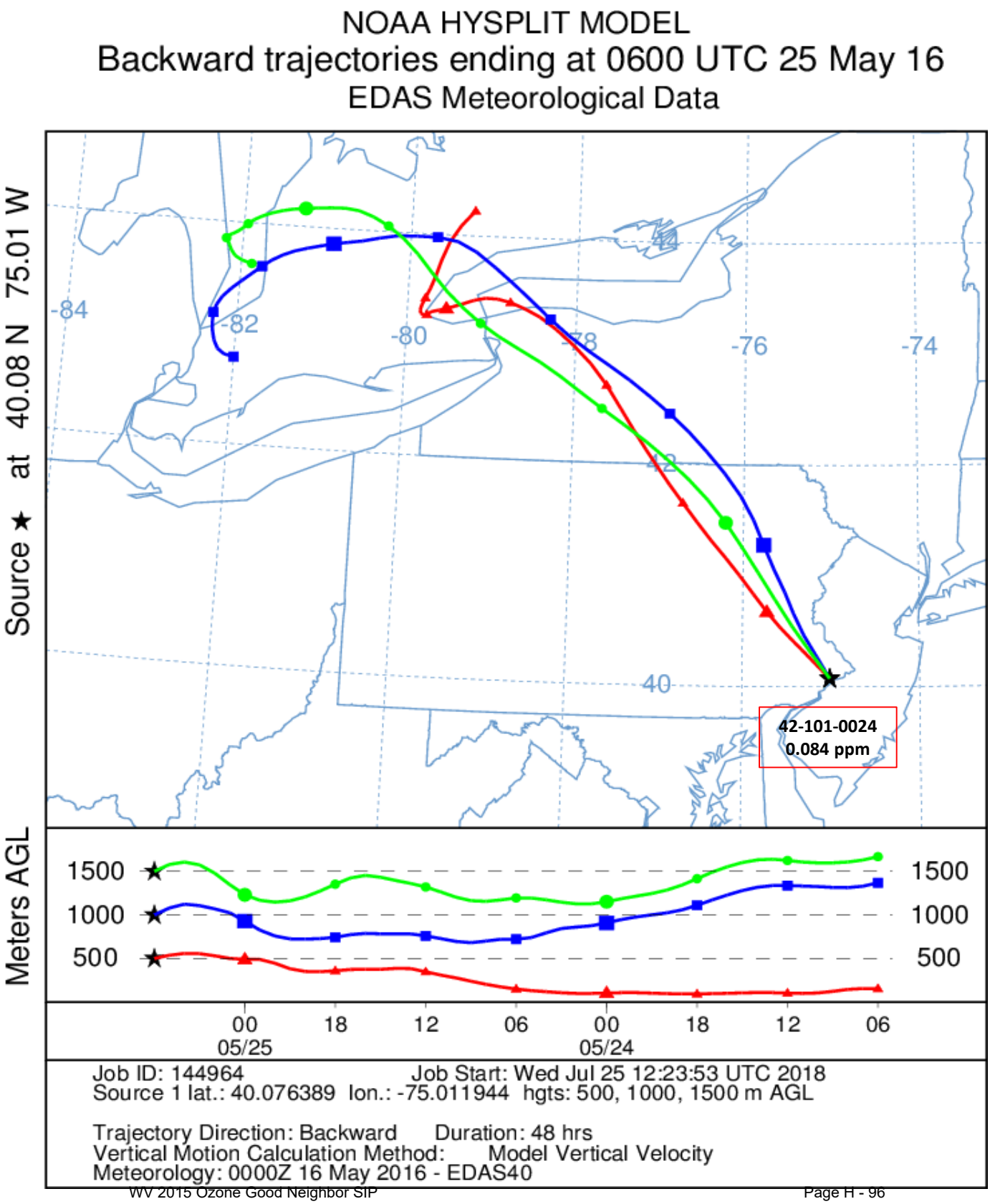

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 30 Aug 15
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
42-101-0024
0.071 ppm
42
40
38
36
-86
-84
-82
-80
-78
-76
-74
Meters AGL
1500
1000
500
00
08/30
18
12
06
00
08/29
18
12
06
Job ID: 143895
Job Start: Wed Jul 25 12:08:01 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Aug 2015 - EDAS40

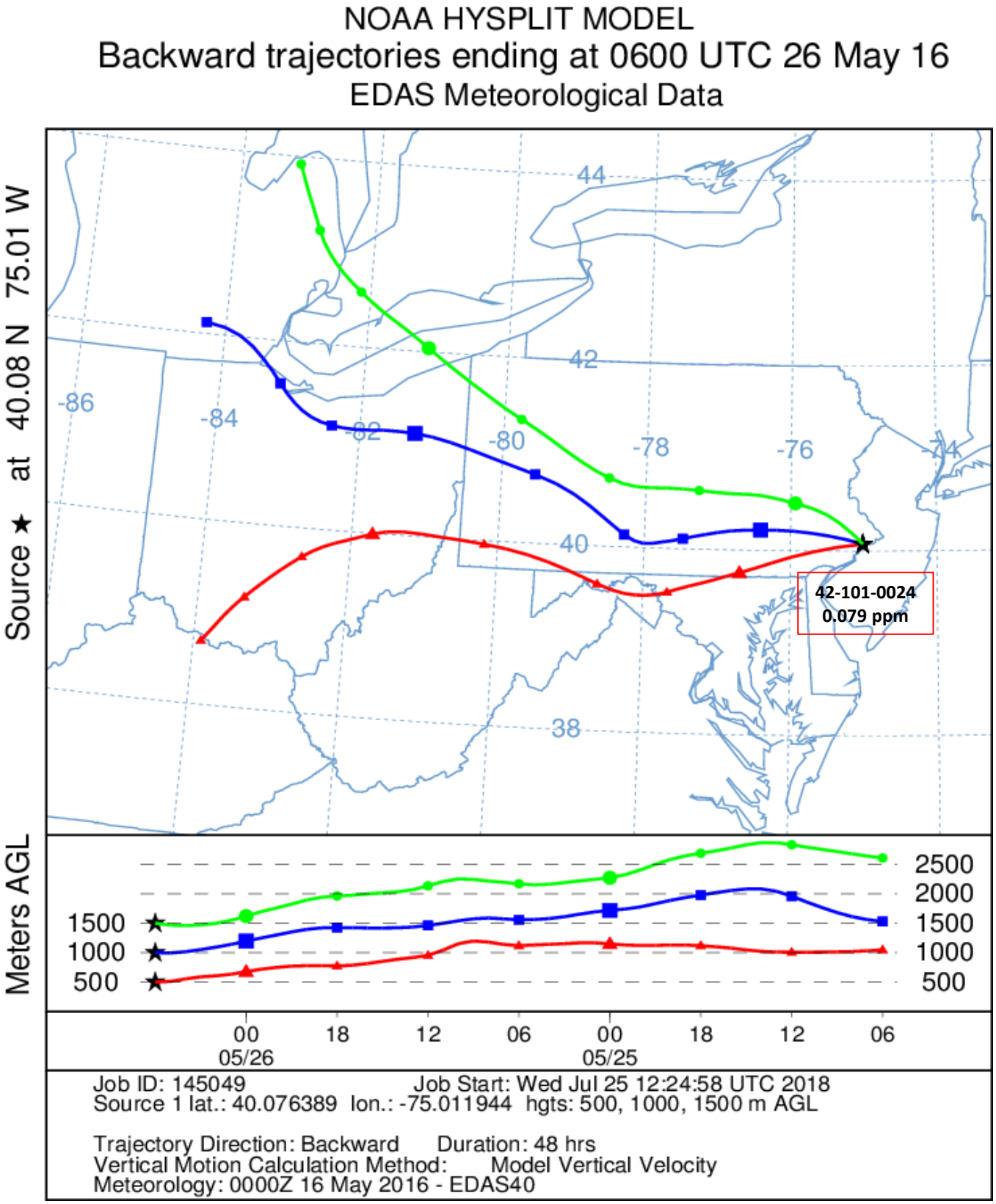

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 02 Sep 15
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
Meters AGL
-84
-82
-80
-78
-76
-74
-72
44
42
40
38
42-101-0024
0.079 ppm
1500
1000
500
00
09/02
18
12
06
00
09/01
18
12
06
Job ID: 144345 Job Start: Wed Jul 25 12:16:58 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Sep 2015 - EDAS40

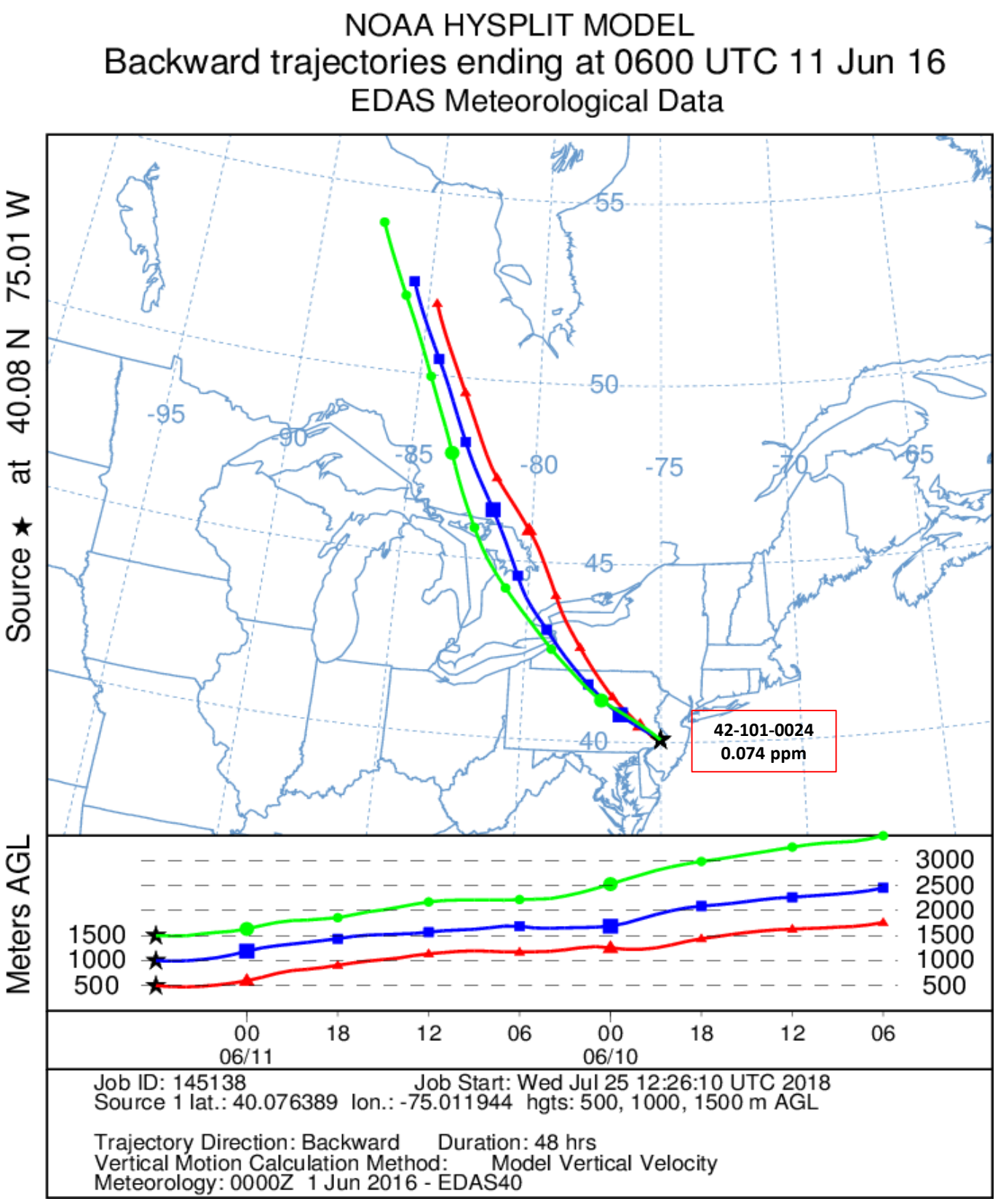

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 16 Sep 15
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
Meters AGL
46
44
42
40
38
-88
-86
-84
-82
-80
-76
-74
-72
42-101-0024
0.076 ppm
2000
1500
1000
500
1500
1000
500
00
09/16
18
12
06
00
09/15
18
12
06
Job ID: 144503
Job Start: Wed Jul 25 12:18:45 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Sep 2015 - EDAS40

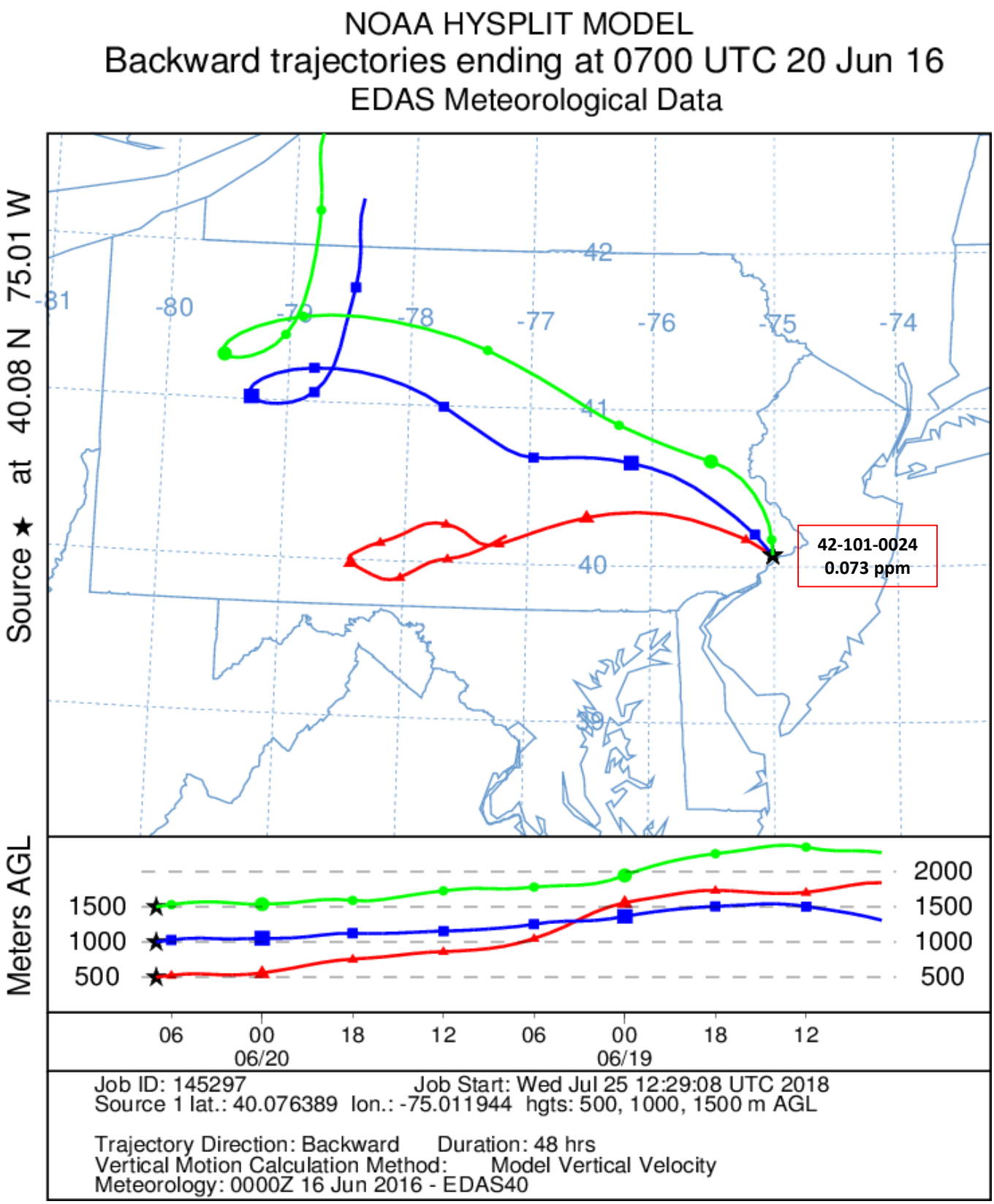

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 17 Sep 15
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
Meters AGL
42-101-0024
0.086 ppm
2000
1500
1000
500
00
09/17
18
12
06
00
09/16
18
12
06
Job ID: 144713 Job Start: Wed Jul 25 12:20:49 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Sep 2015 - EDAS40

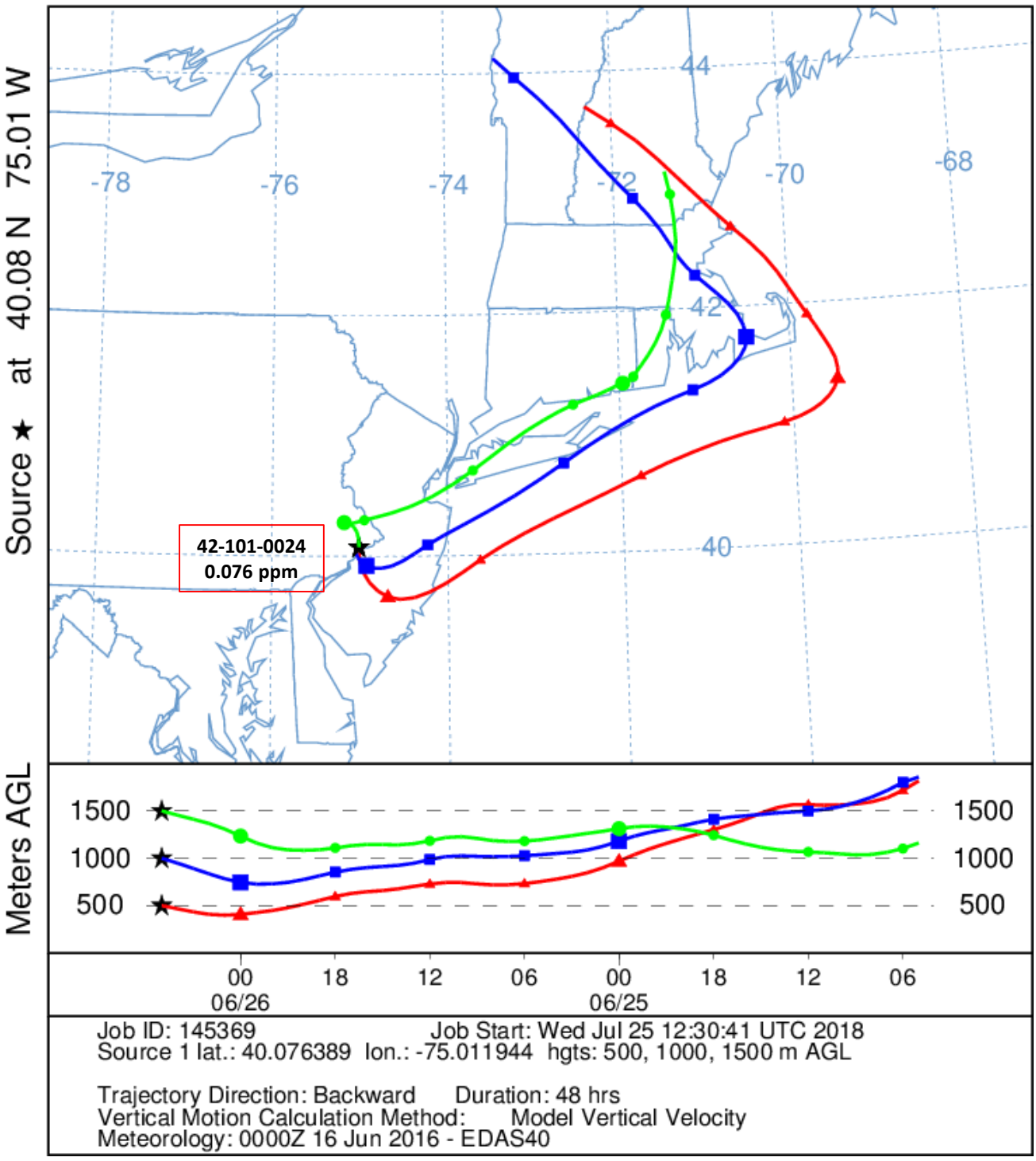

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 18 Sep 15
EDAS Meteorological Data
42-101-0024
0.078 ppm
Source ★ at 40.08 N 75.01 W
40
39
38
-78
-77
-76
-75
-74
-73
Meters AGL
1500
1000
500
00
09/18
18
12
06
00
09/17
18
12
06
Job ID: 144811 Job Start: Wed Jul 25 12:22:07 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Sep 2015 - EDAS40

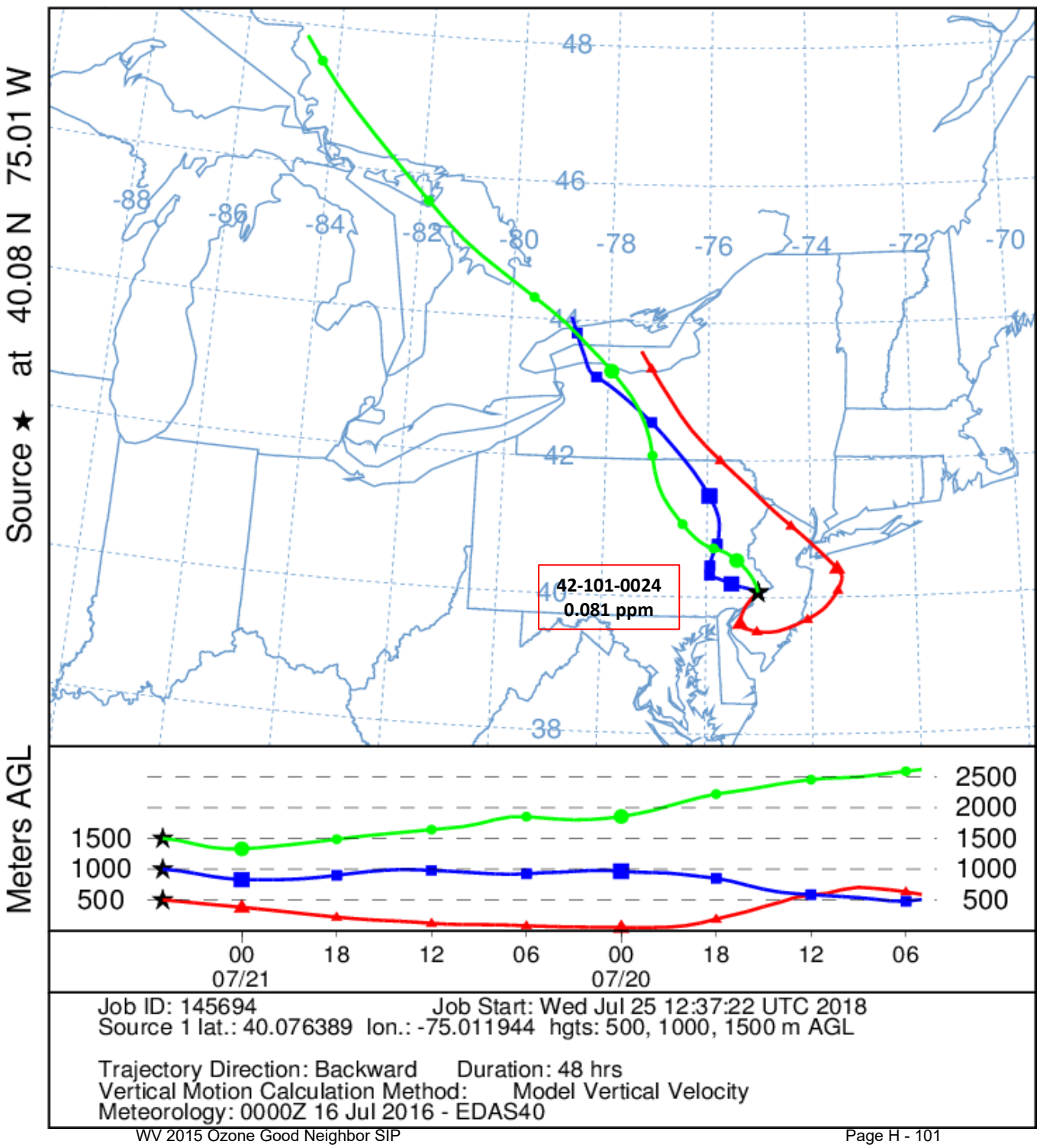

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 25 May 16
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
-84
-82
-80
-78
-76
-74
42
40
42-101-0024
0.084 ppm
Meters AGL
1500
1000
500
00
05/25
18
12
06
00
05/24
18
12
06
Job ID: 144964 Job Start: Wed Jul 25 12:23:53 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 May 2016 - EDAS40

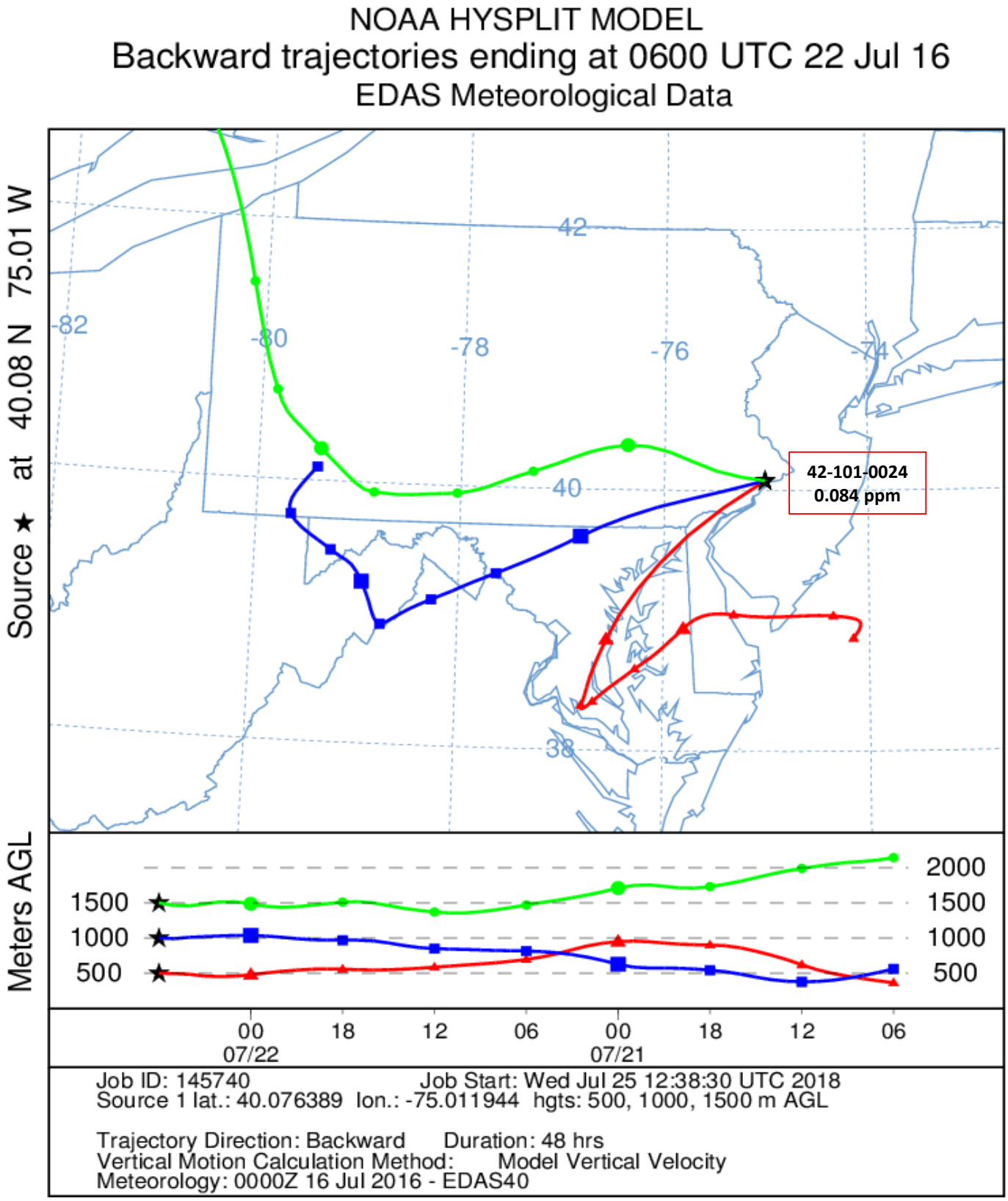

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 26 May 16
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
Meters AGL
44
42
40
38
-86
-84
-82
-80
-78
-76
-74
42-101-0024
0.079 ppm
2500
2000
1500
1000
500
1500
1000
500
00
05/26
18
12
06
00
05/25
18
12
06
Job ID: 145049
Job Start: Wed Jul 25 12:24:58 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 May 2016 - EDAS40

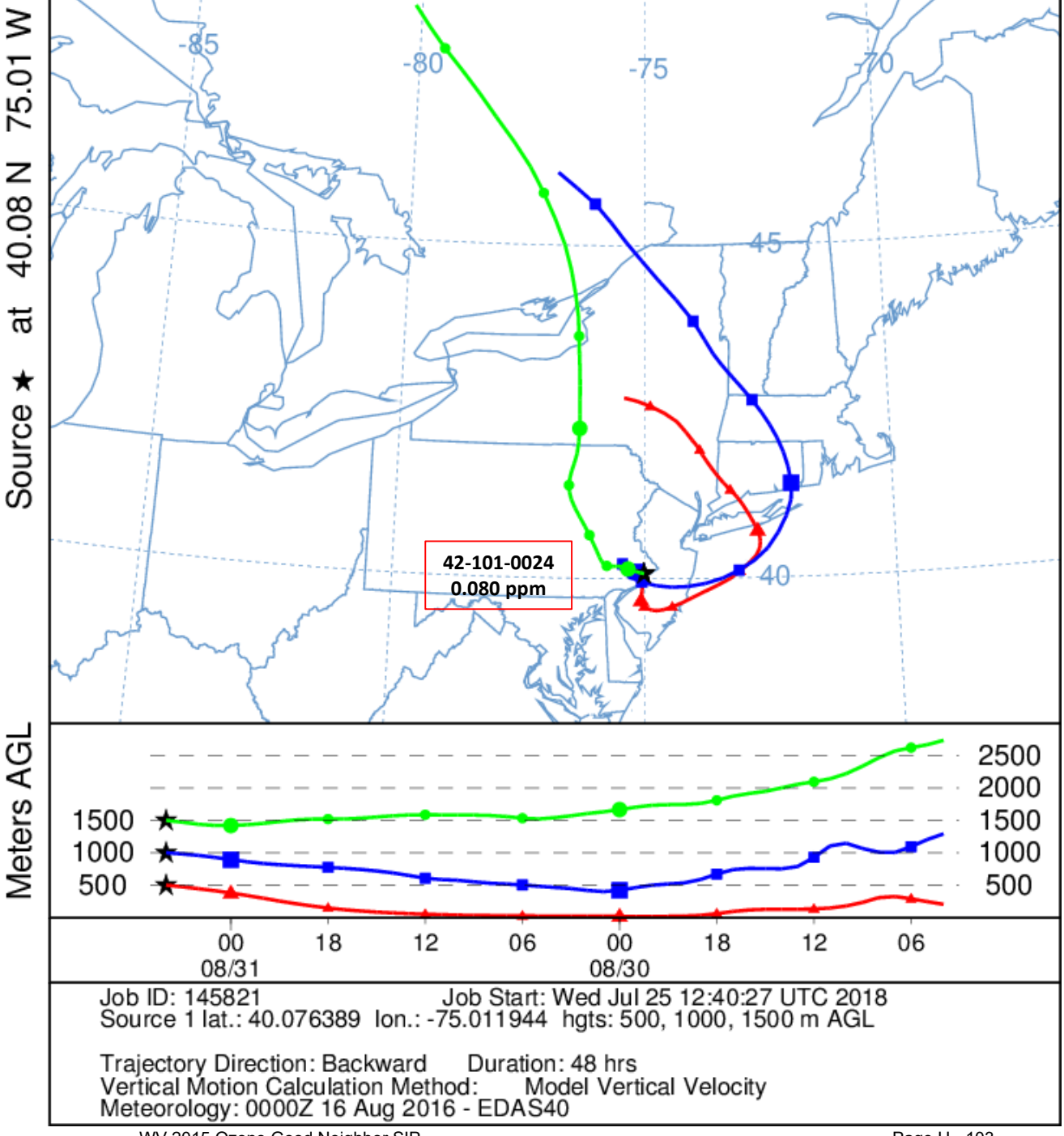

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 11 Jun 16
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
55
50
45
40
-95
-90
-85
-80
-75
-70
-65
42-101-0024
0.074 ppm
Meters AGL
3000
2500
2000
1500
1000
500
1500
1000
500
00
06/11
18
12
06
00
06/10
18
12
06
Job ID: 145138
Job Start: Wed Jul 25 12:26:10 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2016 - EDAS40

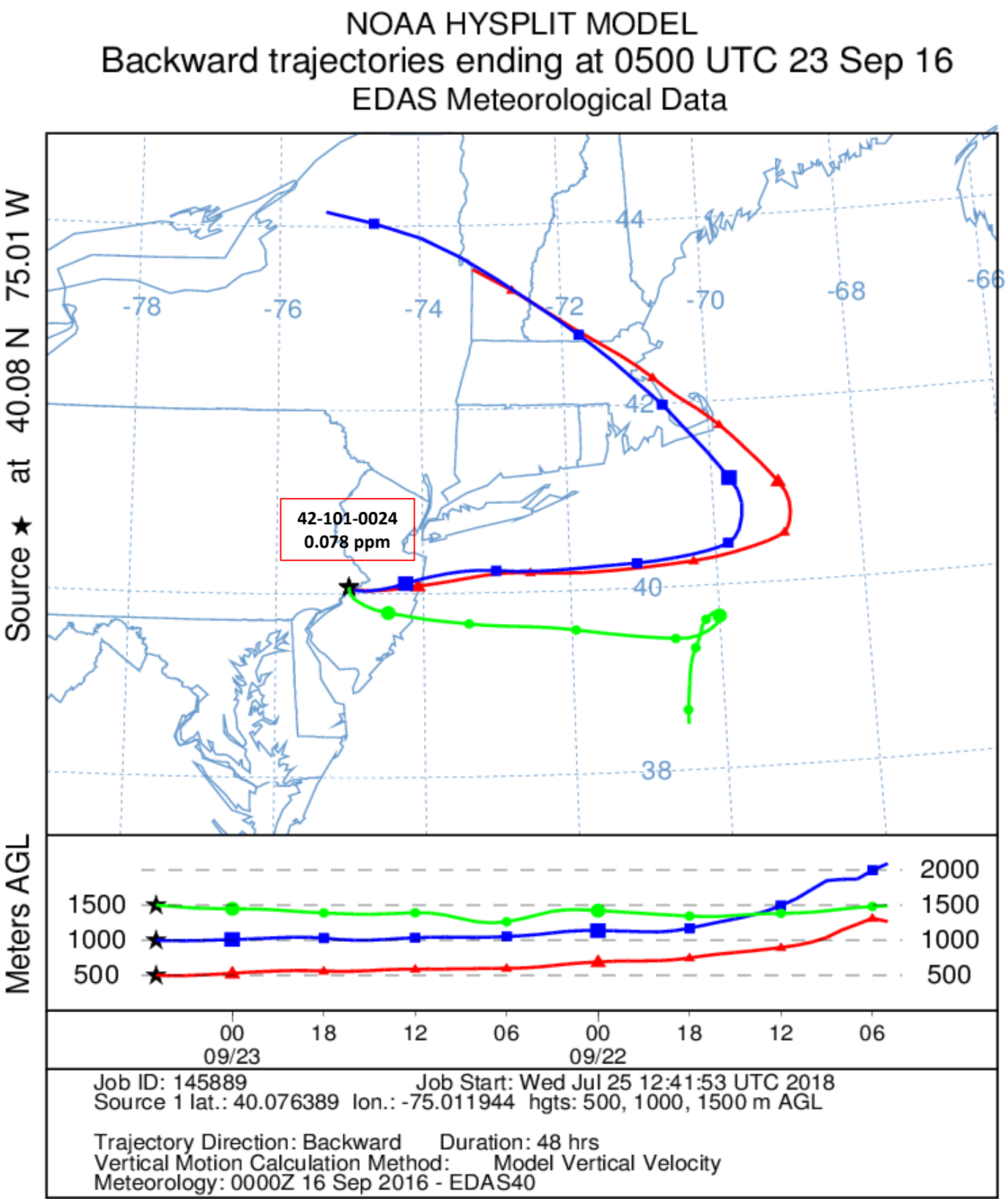

NOAA HYSPLIT MODEL
Backward trajectories ending at 0700 UTC 20 Jun 16
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
42
41
40
-81
-80
-79
-78
-77
-76
-75
-74
42-101-0024
0.073 ppm
Meters AGL
2000
1500
1000
500
1500
1000
500
06
00
06/20
18
12
06
00
06/19
18
12
Job ID: 145297
Job Start: Wed Jul 25 12:29:08 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Jun 2016 - EDAS40

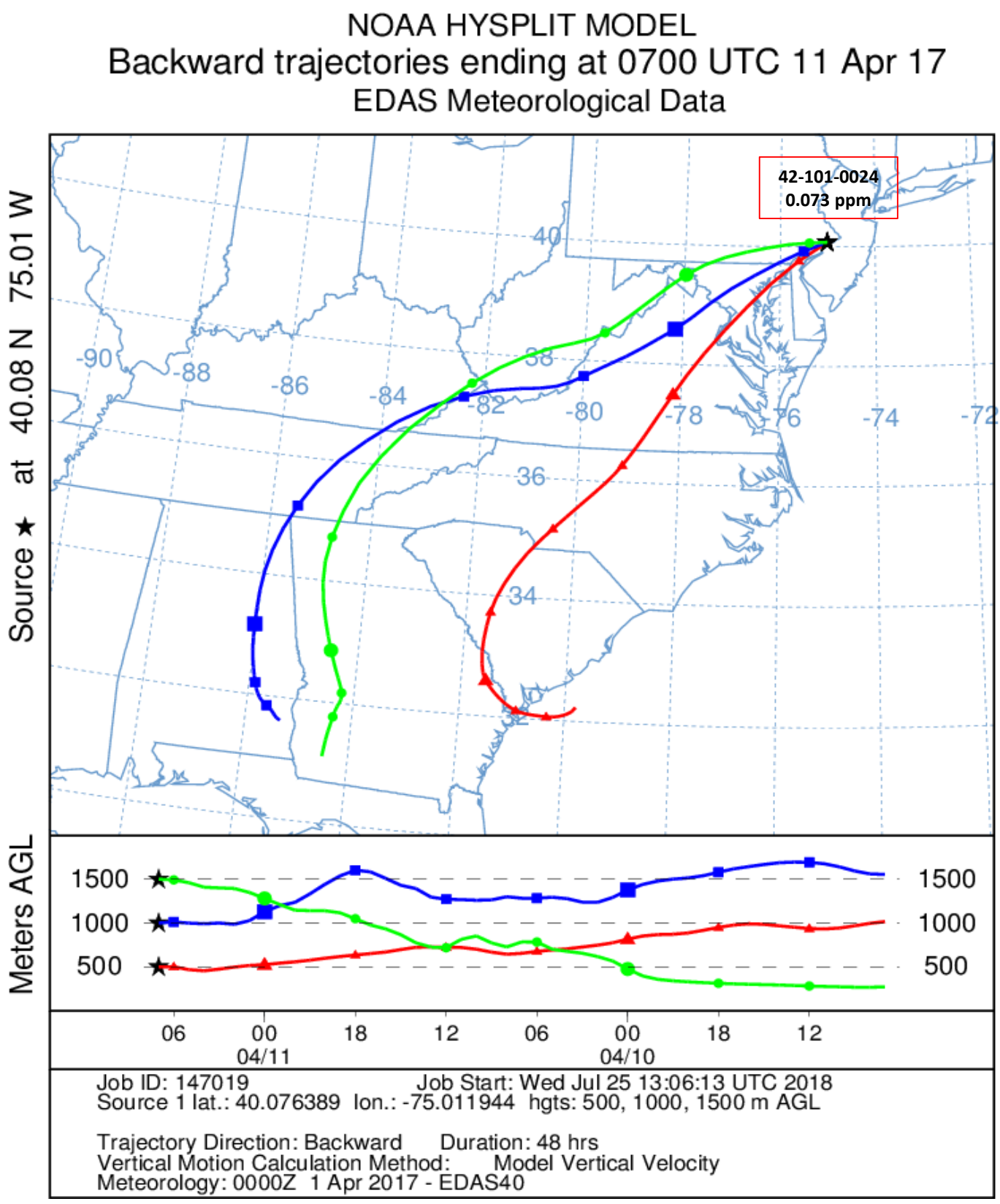

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 26 Jun 16
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
42-101-0024
0.076 ppm
Meters AGL
1500
1000
500
00
06/26
18
12
06
00
06/25
18
12
06
Job ID: 145369
Job Start: Wed Jul 25 12:30:41 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Jun 2016 - EDAS40

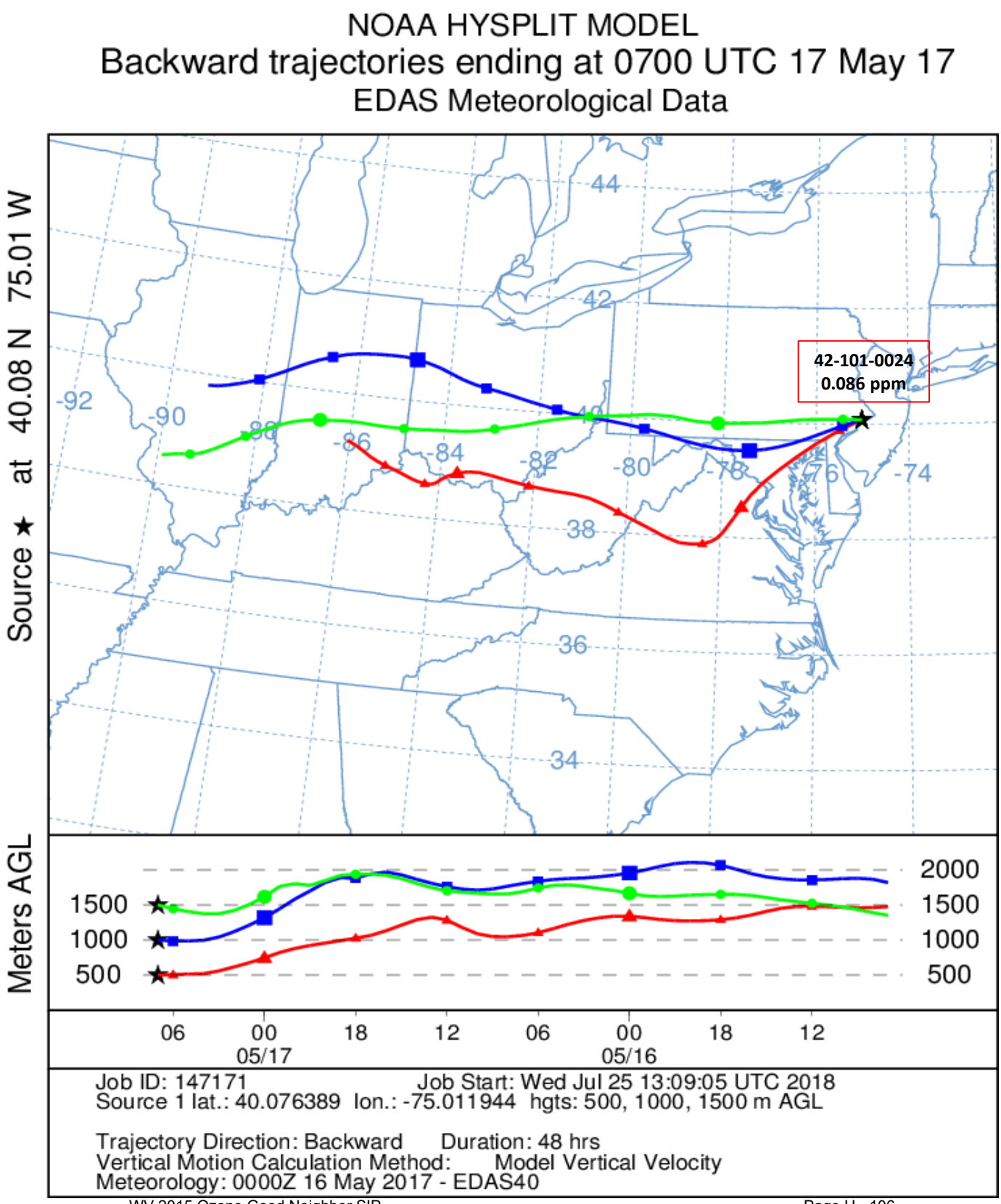

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 21 Jul 16
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
48
46
44
42
40
38
-88
-86
-84
-82
-80
-78
-76
-74
-72
-70
42-101-0024
0.081 ppm
Meters AGL
2500
2000
1500
1000
500
1500
1000
500
00
07/21
18
12
06
00
07/20
18
12
06
Job ID: 145694
Job Start: Wed Jul 25 12:37:22 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2016 - EDAS40

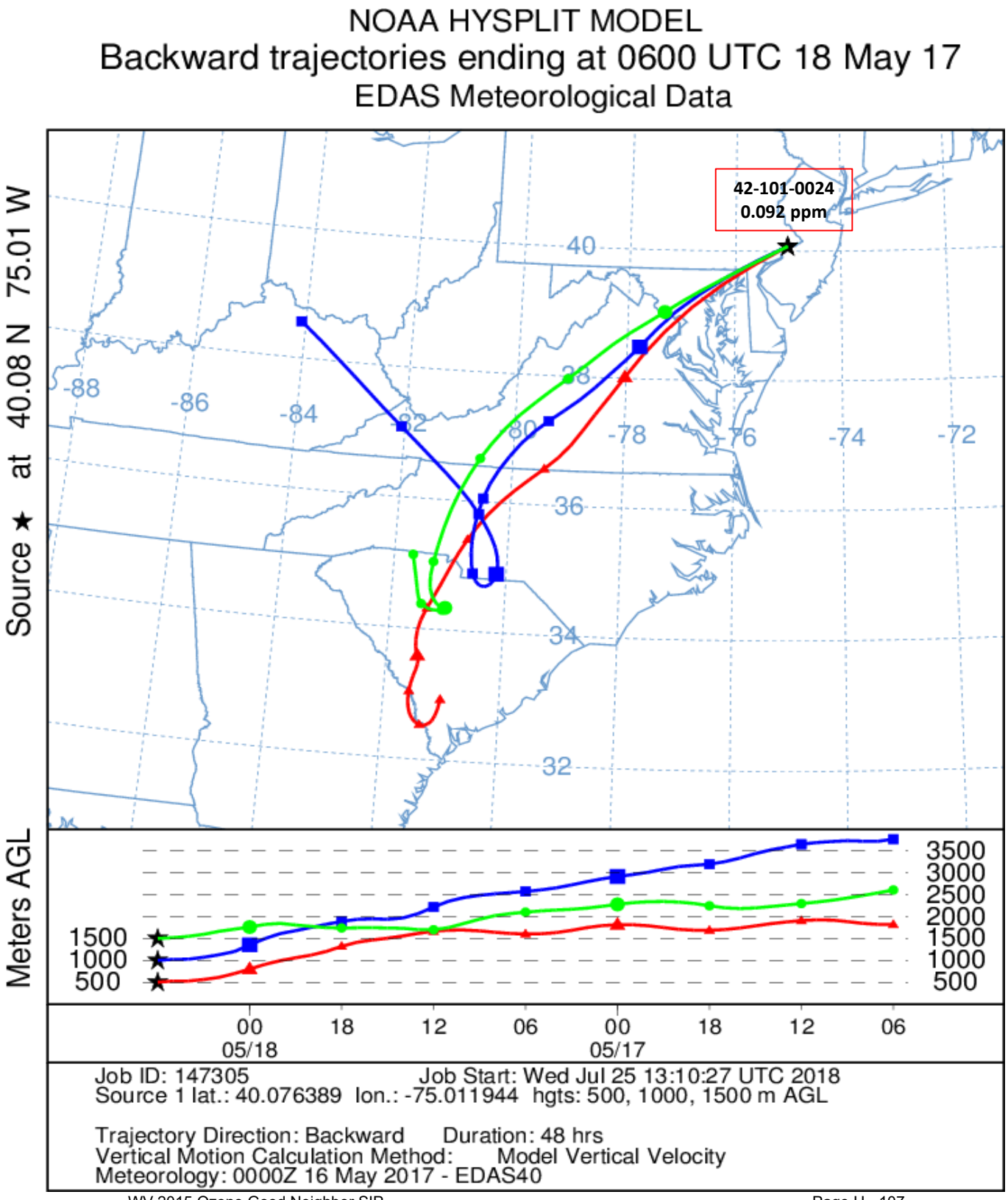

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 22 Jul 16
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
42
-82
-80
-78
-76
-74
40
38
42-101-0024
0.084 ppm
Meters AGL
2000
1500
1000
500
1500
1000
500
00
07/22
18
12
06
00
07/21
18
12
06
Job ID: 145740
Job Start: Wed Jul 25 12:38:30 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2016 - EDAS40

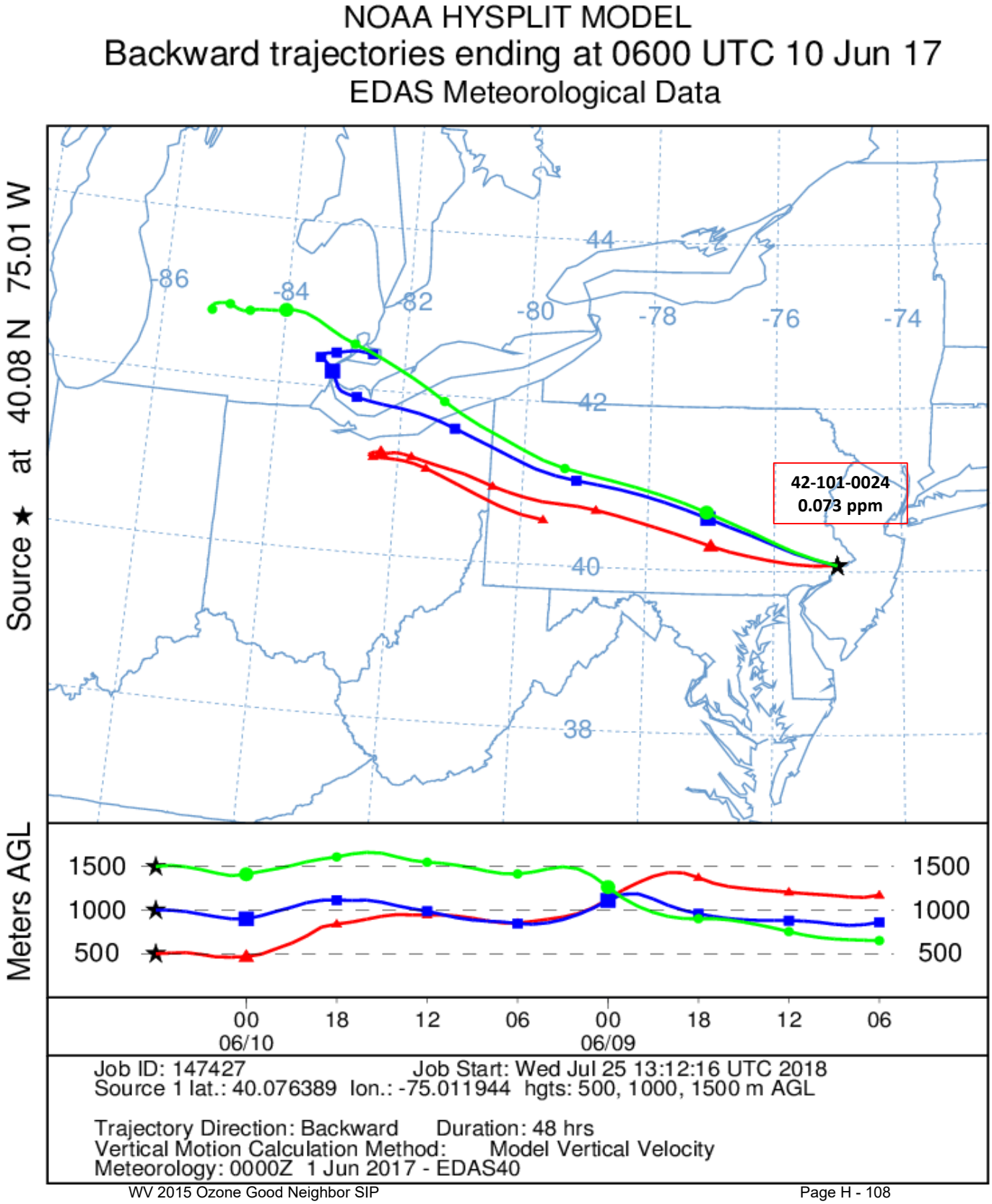

NOAA HYSPLIT MODEL
Backward trajectories ending at 0400 UTC 31 Aug 16
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
-85
-80
-75
-70
45
40
42-101-0024
0.080 ppm
Meters AGL
2500
2000
1500
1000
500
1500
1000
500
00
08/31
18
12
06
00
08/30
18
12
06
Job ID: 145821
Job Start: Wed Jul 25 12:40:27 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Aug 2016 - EDAS40

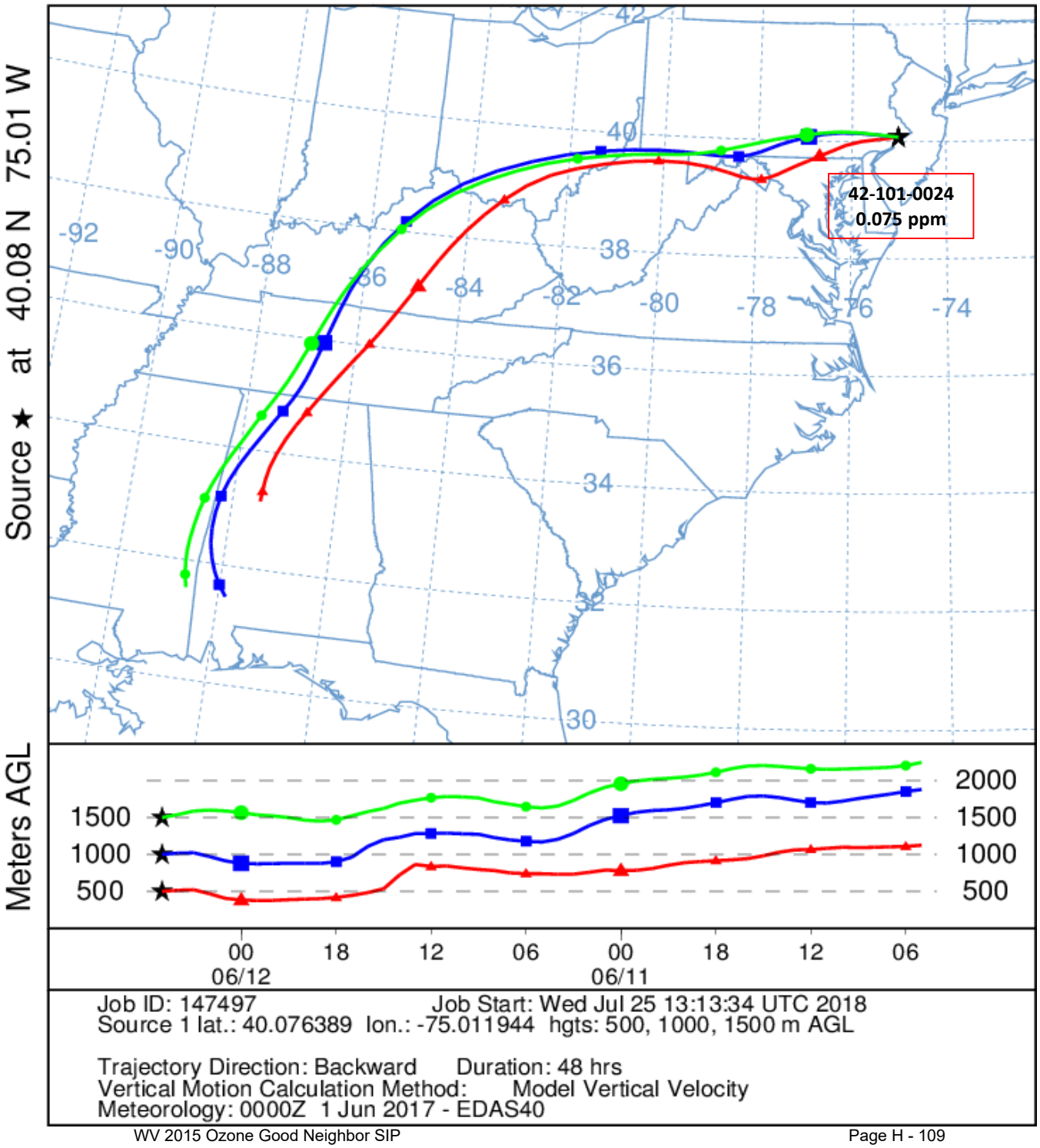

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 23 Sep 16
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
42-101-0024
0.078 ppm
-78
-76
-74
-72
-70
-68
-66
44
42
40
38
Meters AGL
1500
1000
500
2000
1500
1000
500
00
09/23
18
12
06
00
09/22
18
12
06
Job ID: 145889
Job Start: Wed Jul 25 12:41:53 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Sep 2016 - EDAS40

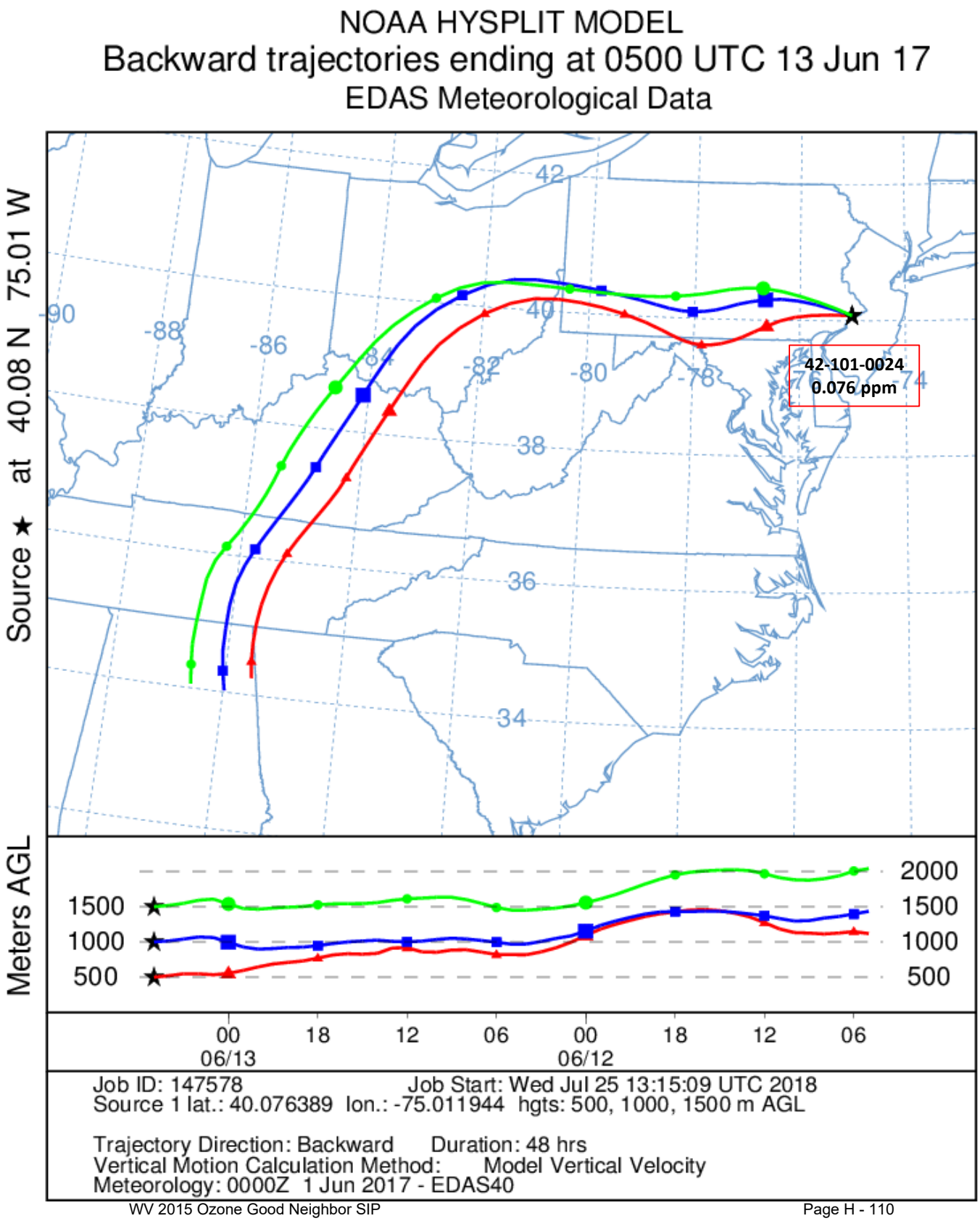

NOAA HYSPLIT MODEL
Backward trajectories ending at 0700 UTC 11 Apr 17
EDAS Meteorological Data
42-101-0024
0.073 ppm
Source ★ at 40.08 N 75.01 W
Meters AGL
1500
1000
500
06
00
04/11
18
12
06
00
04/10
18
12
Job ID: 147019 Job Start: Wed Jul 25 13:06:13 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Apr 2017 - EDAS40

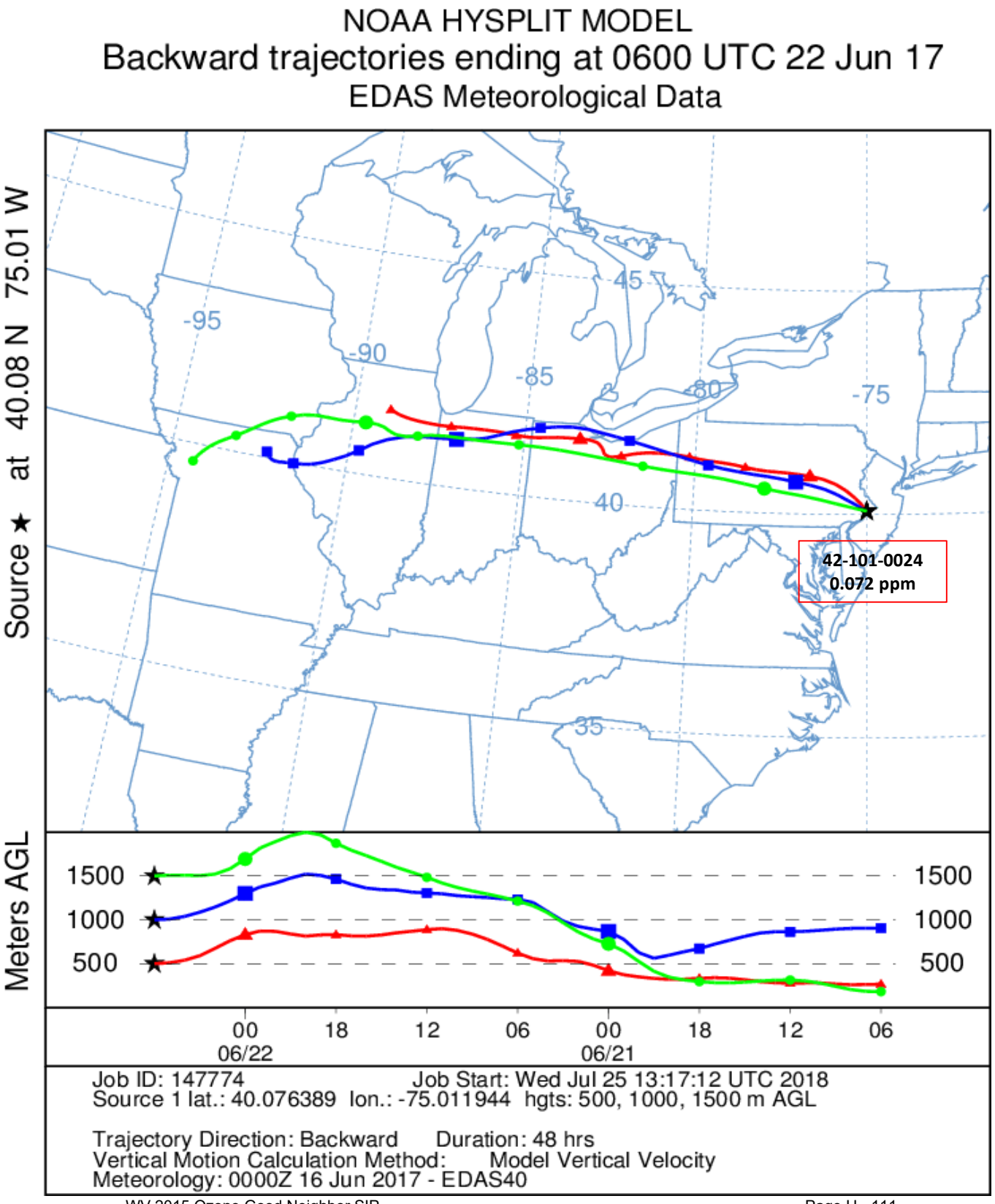

NOAA HYSPLIT MODEL
Backward trajectories ending at 0700 UTC 17 May 17
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
42-101-0024
0.086 ppm
Meters AGL
2000
1500
1000
500
06
00
05/17
18
12
06
00
05/16
18
12
Job ID: 147171
Job Start: Wed Jul 25 13:09:05 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 May 2017 - EDAS40

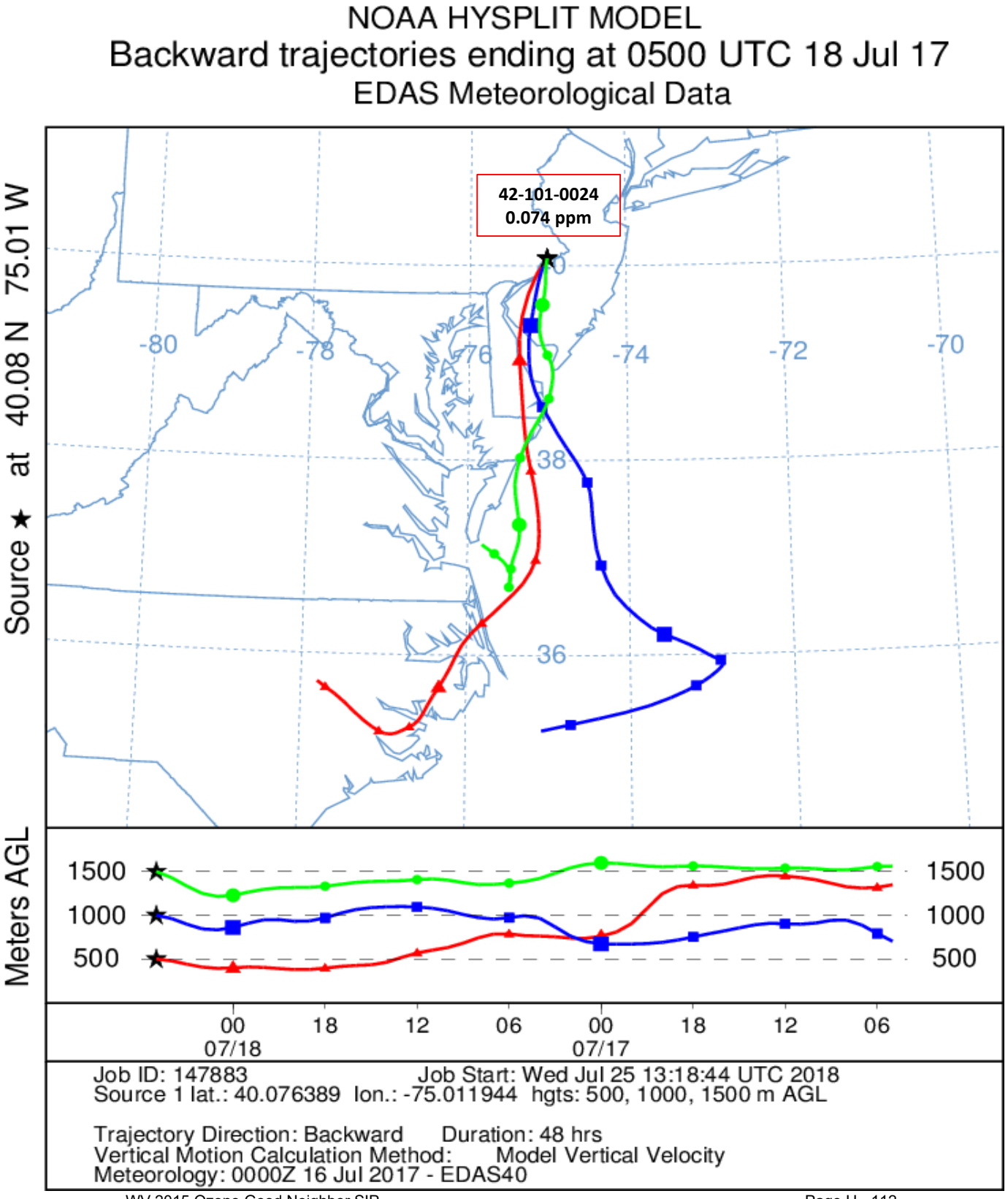

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 18 May 17
EDAS Meteorological Data
42-101-0024
0.092 ppm
Source ★ at 40.08 N 75.01 W
Meters AGL
1500
1000
500
3500
3000
2500
2000
1500
1000
500
00 18 12 06 00 18 12 06
05/18 05/17
Job ID: 147305 Job Start: Wed Jul 25 13:10:27 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 May 2017 - EDAS40

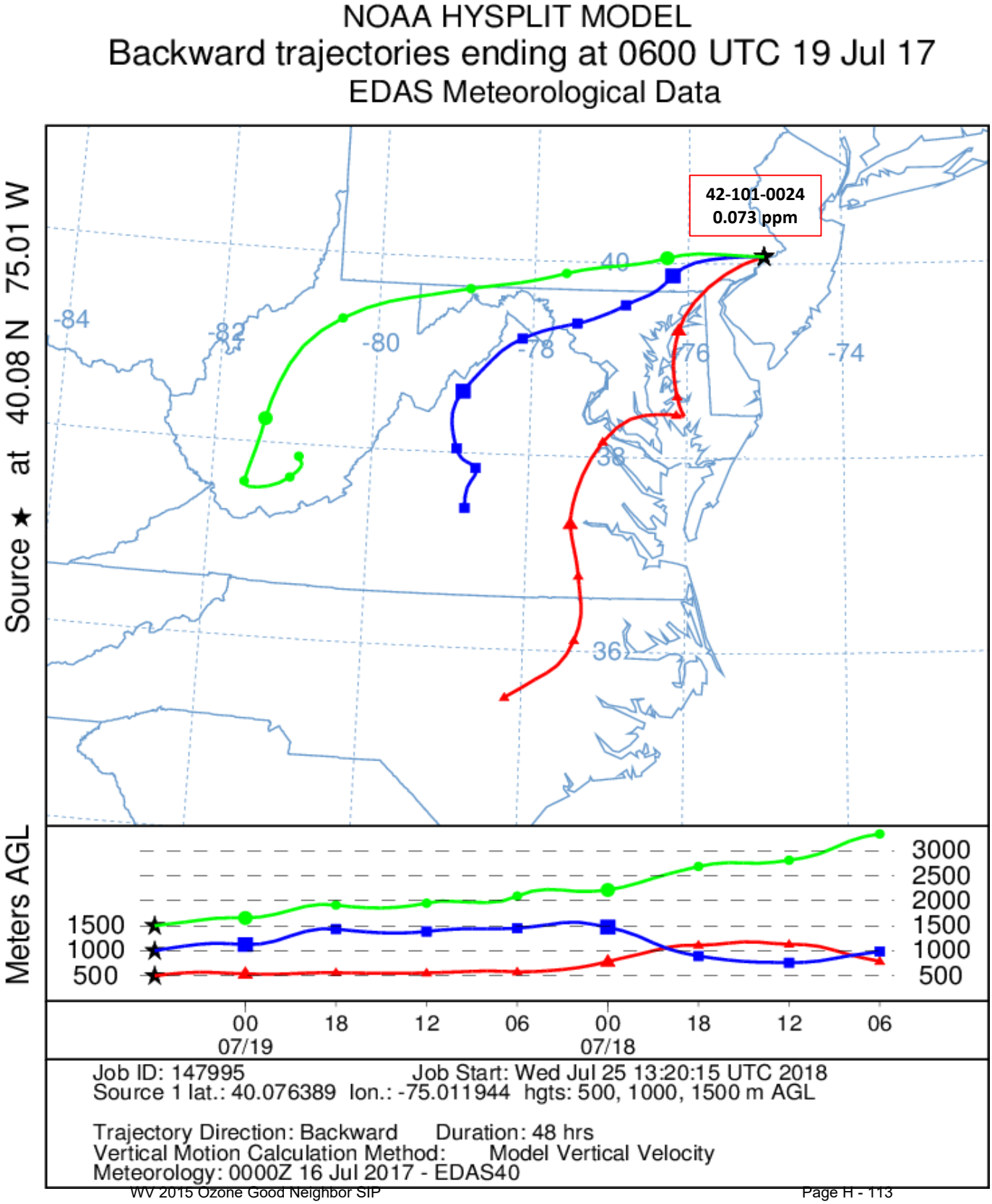

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 10 Jun 17
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
42-101-0024
0.073 ppm
-86
-84
-82
-80
-78
-76
-74
44
42
40
38
Meters AGL
1500
1000
500
00
06/10
18
12
06
00
06/09
18
12
06
Job ID: 147427 Job Start: Wed Jul 25 13:12:16 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2017 - EDAS40

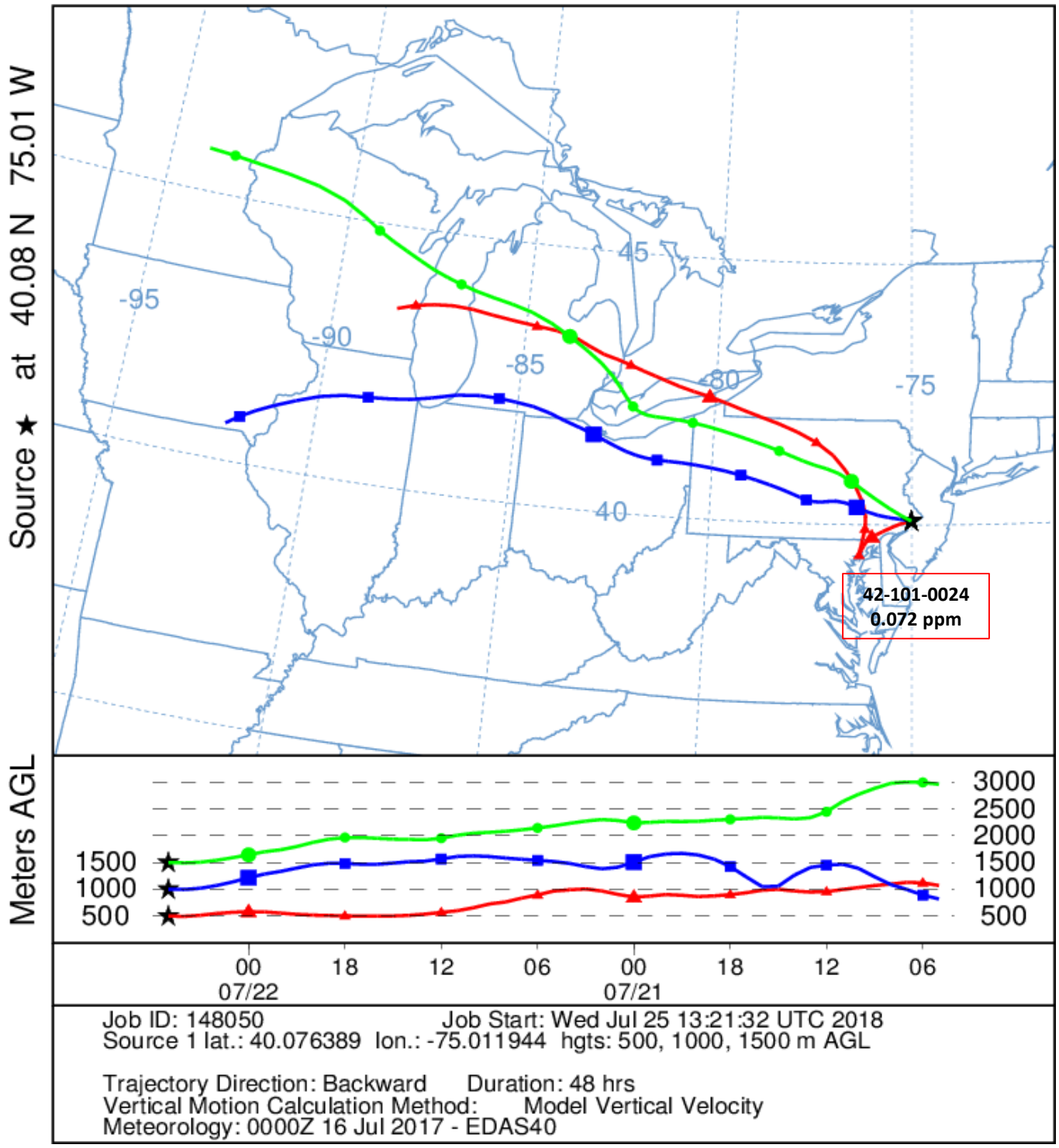

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 12 Jun 17
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
42-101-0024
0.075 ppm
Meters AGL
2000
1500
1000
500
00 06/12
18
12
06
00 06/11
18
12
06
Job ID: 147497 Job Start: Wed Jul 25 13:13:34 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2017 - EDAS40

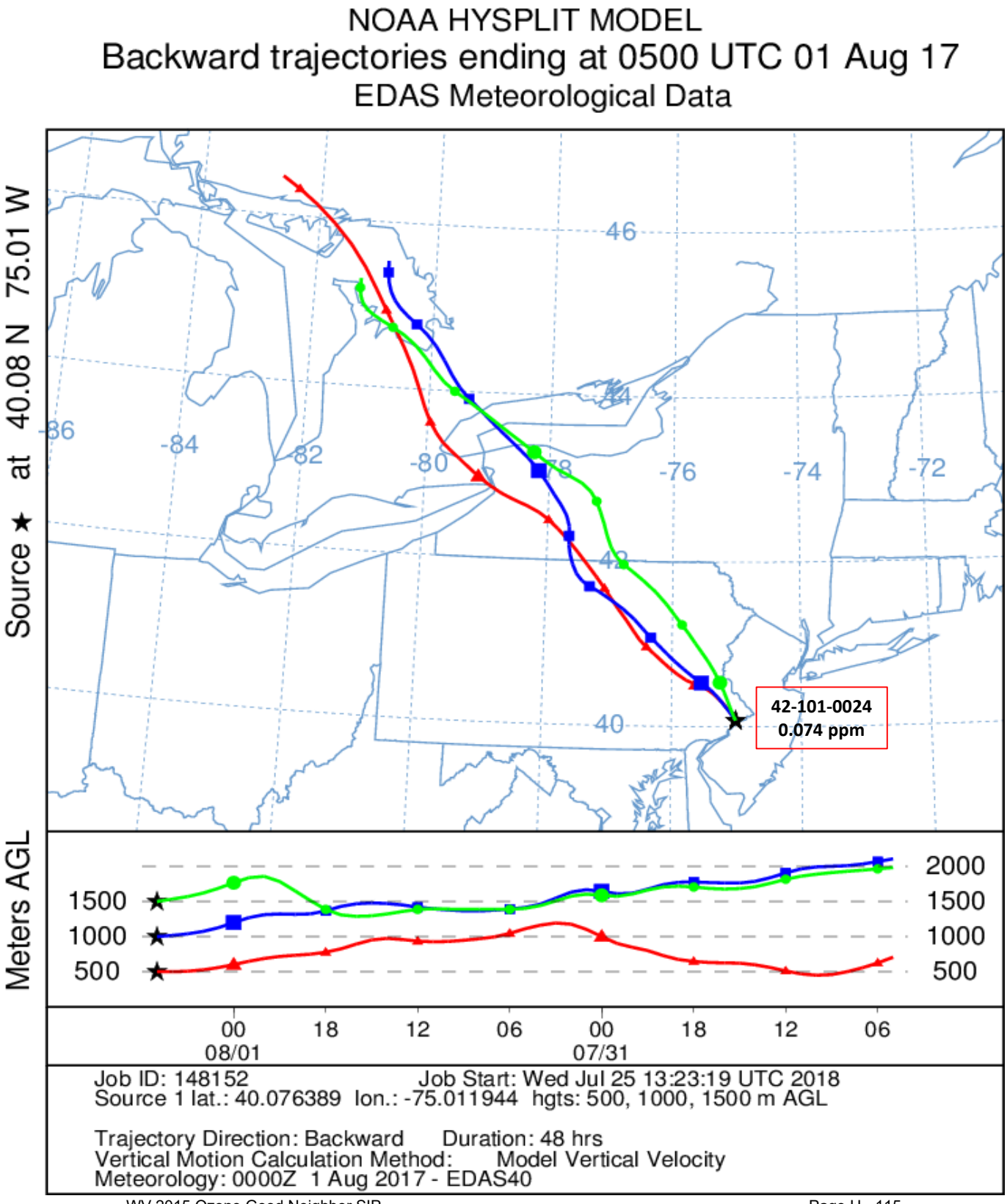

NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 13 Jun 17
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
42-101-0024
0.076 ppm
Meters AGL
2000
1500
1000
500
00
06/13
18
12
06
00
06/12
18
12
06
Job ID: 147578 Job Start: Wed Jul 25 13:15:09 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 1 Jun 2017 - EDAS40

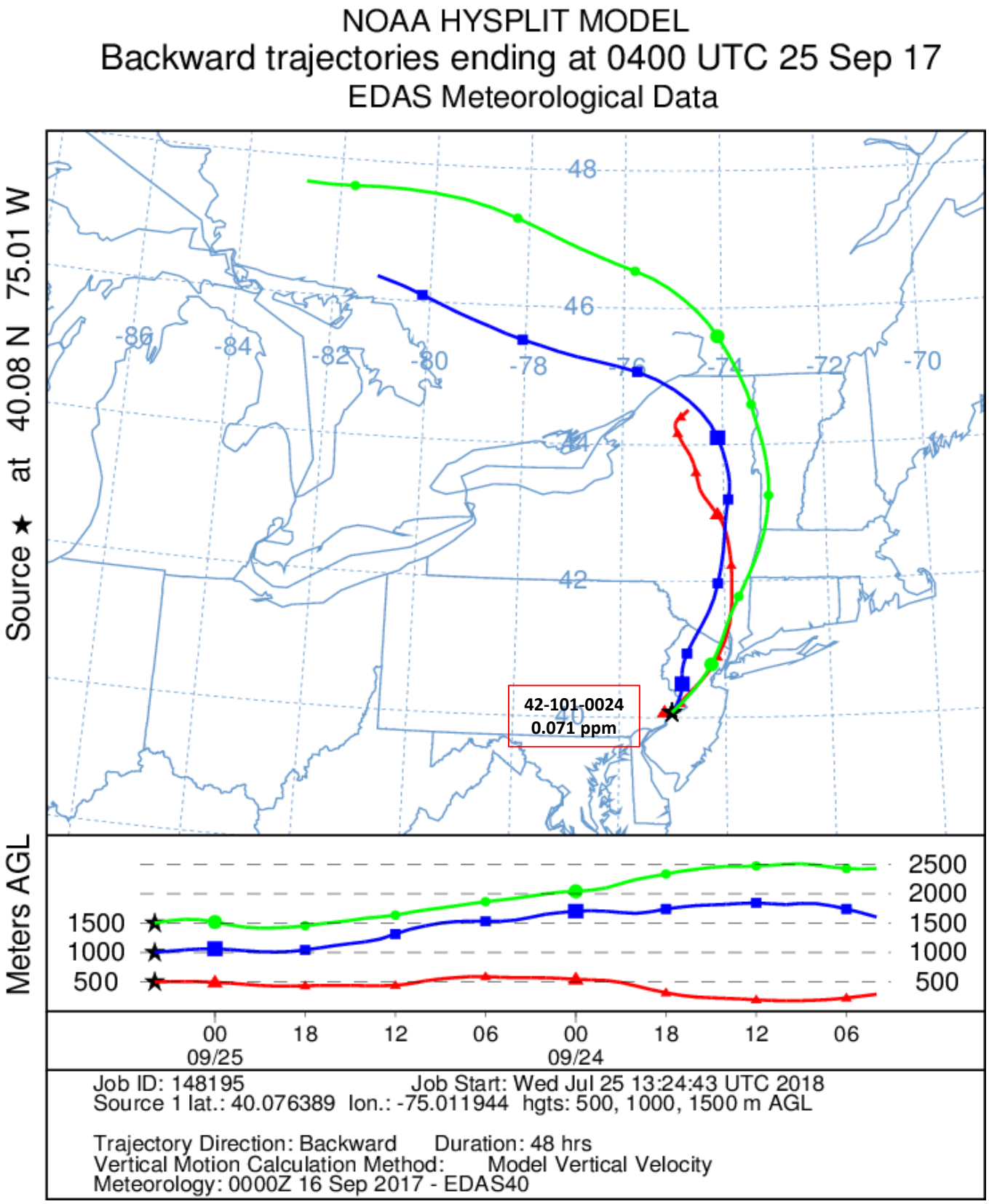

NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 22 Jun 17
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
-95
-90
-85
-80
-75
45
40
35
42-101-0024
0.072 ppm
Meters AGL
1500
1000
500
00
06/22
18
12
06
00
06/21
18
12
06
Job ID: 147774
Job Start: Wed Jul 25 13:17:12 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Jun 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 18 Jul 17
EDAS Meteorological Data
42-101-0024
0.074 ppm
Source ★ at 40.08 N 75.01 W
-80
-78
-76
-74
-72
-70
38
36
Meters AGL
1500
1000
500
00
07/18
18
12
06
00
07/17
18
12
06
Job ID: 147883 Job Start: Wed Jul 25 13:18:44 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0600 UTC 19 Jul 17
EDAS Meteorological Data
42-101-0024
0.073 ppm
Source ★ at 40.08 N 75.01 W
Meters AGL
1500
1000
500
3000
2500
2000
1500
1000
500
00
07/19
18
12
06
00
07/18
18
12
06
Job ID: 147995 Job Start: Wed Jul 25 13:20:15 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 22 Jul 17
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
-95
-90
-85
-80
-75
45
40
42-101-0024
0.072 ppm
Meters AGL
3000
2500
2000
1500
1000
500
1500
1000
500
00
07/22
18
12
06
00
07/21
18
12
06
Job ID: 148050
Job Start: Wed Jul 25 13:21:32 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Jul 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0500 UTC 01 Aug 17
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
46
44
42
40
-86
-84
-82
-80
-78
-76
-74
-72
42-101-0024
0.074 ppm
Meters AGL
2000
1500
1000
500
1500
1000
500
00
08/01
18
12
06
00
07/31
18
12
06
Job ID: 148152
Job Start: Wed Jul 25 13:23:19 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 1 Aug 2017 - EDAS40


NOAA HYSPLIT MODEL
Backward trajectories ending at 0400 UTC 25 Sep 17
EDAS Meteorological Data
Source ★ at 40.08 N 75.01 W
48
46
42
40
-86
-84
-82
-80
-78
-76
-74
-72
-70
42-101-0024
0.071 ppm
Meters AGL
2500
2000
1500
1000
500
1500
1000
500
00
09/25
18
12
06
00
09/24
18
12
06
Job ID: 148195
Job Start: Wed Jul 25 13:24:43 UTC 2018
Source 1 lat.: 40.076389 lon.: -75.011944 hgts: 500, 1000, 1500 m AGL
Trajectory Direction: Backward
Duration: 48 hrs
Vertical Motion Calculation Method:
Model Vertical Velocity
Meteorology: 0000Z 16 Sep 2017 - EDAS40