

US EPA ARCHIVE DOCUMENT

Back Trajectory Analysis Prepared by the Kentucky Division for Air Quality

For the Posey County, Indiana Ozone Monitor

Using NOAA's HYSPLIT Trajectory Model

Posey County, Indiana Ozone Monitor (Site ID - 18-129-0003)
2000 8-Hour Average Top Four Maximum Values

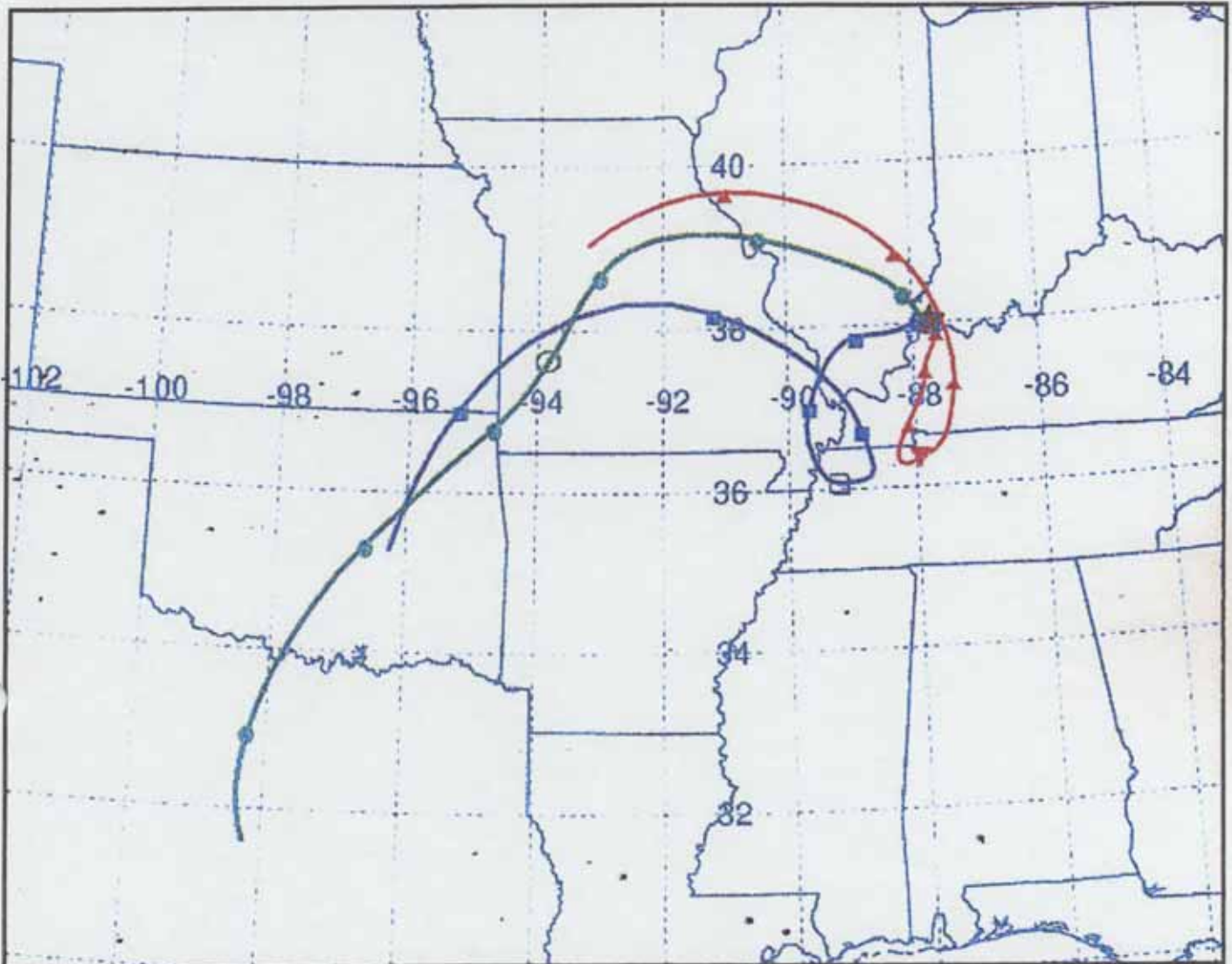
Date	Start Hour (CST)	8-Hour Reading (PPM)	
08/29/2000	11	.093	
07/09/2000	11	.086	
07/27/2000	10	.086	
06/08/2000	10	.085	(4 th Max)
08/17/2000	11	.085	(4 th Max)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

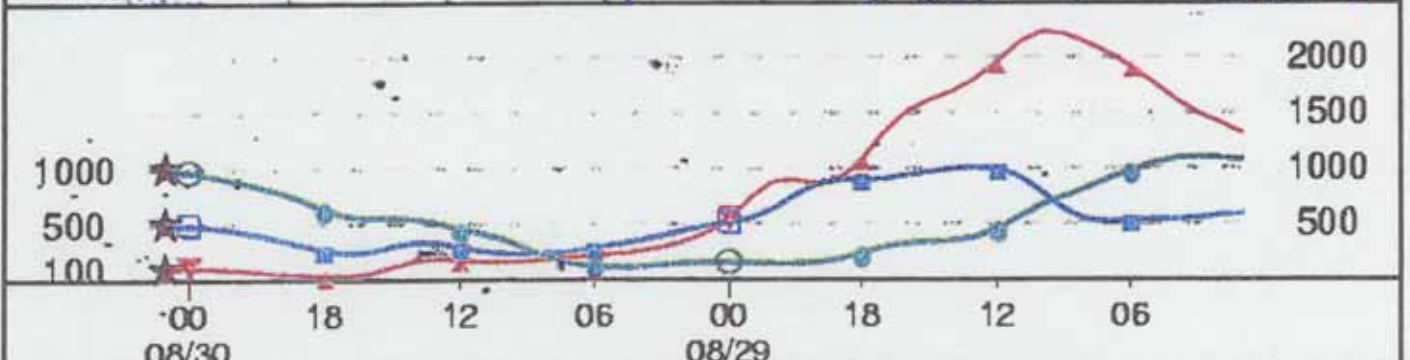
Backward trajectories ending at 01 UTC 30 Aug 00

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Meters AGL



Job ID: 3110 Job Start: Tue Apr 8 15:14:18 GMT 2003
lat.: 38.01 lon.: -87.72 hghts: 100, 500, 1000 m AGL

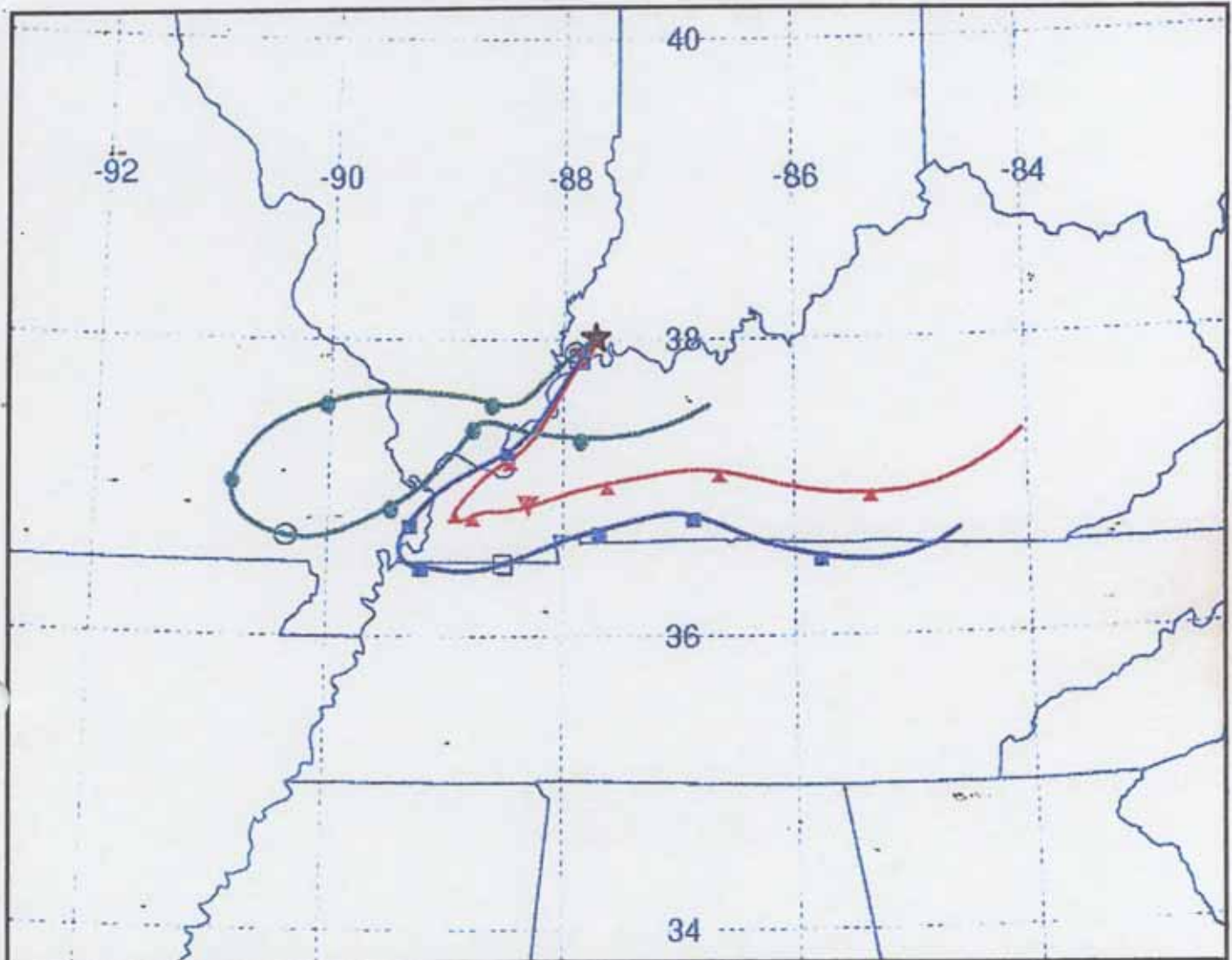
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

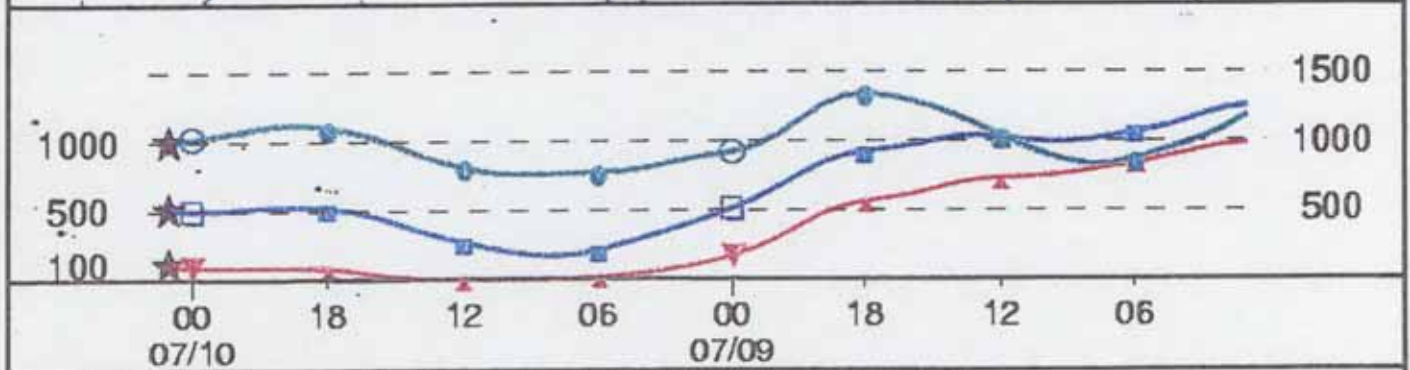
Backward trajectories ending at 01 UTC 10 Jul 00

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Meters AGL



Job ID: 3256 Job Start: Tue Apr 8 15:24:13 GMT 2003
lat.: 38.01 lon.: -87.72 hghts: 100, 500, 1000 m AGL

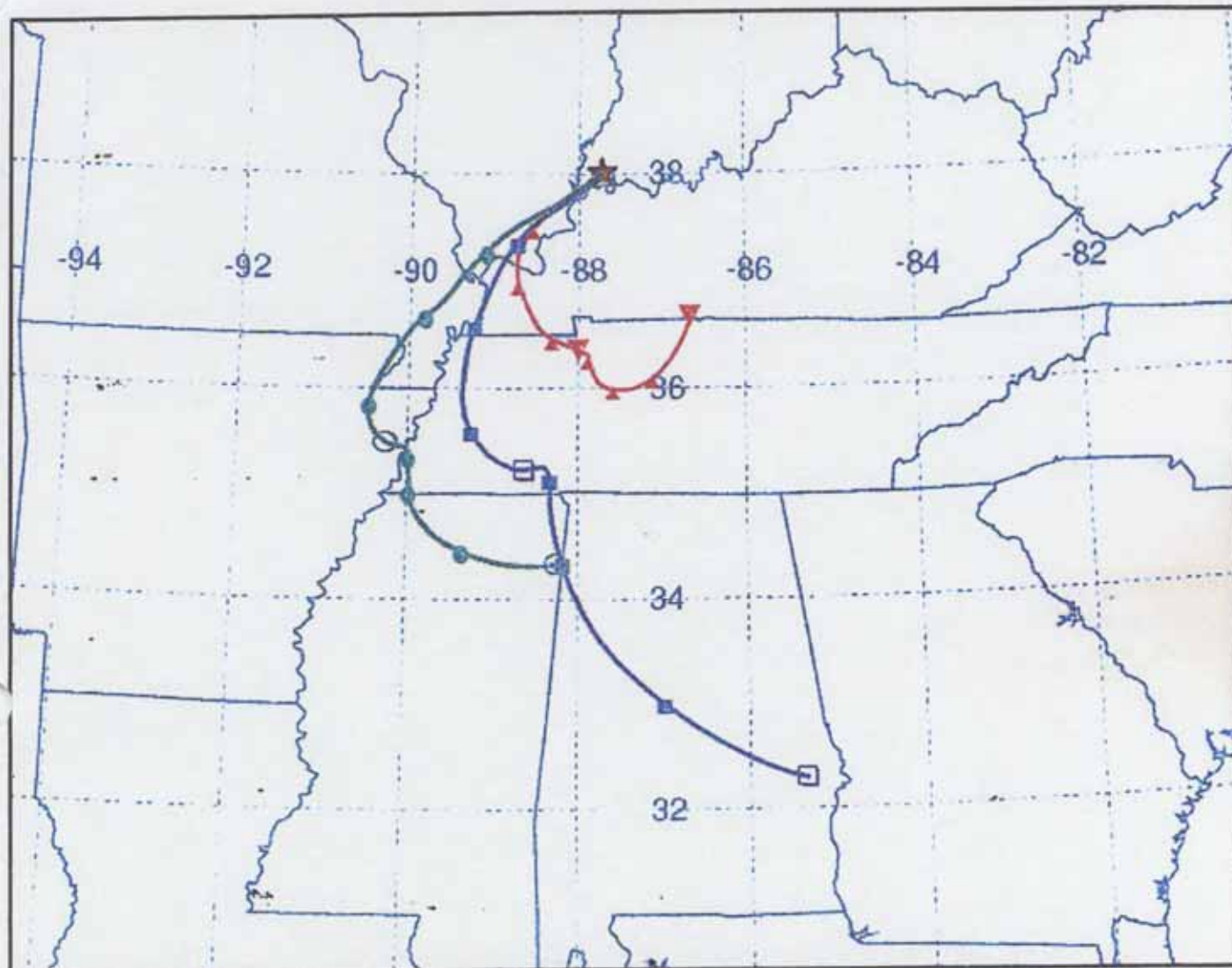
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

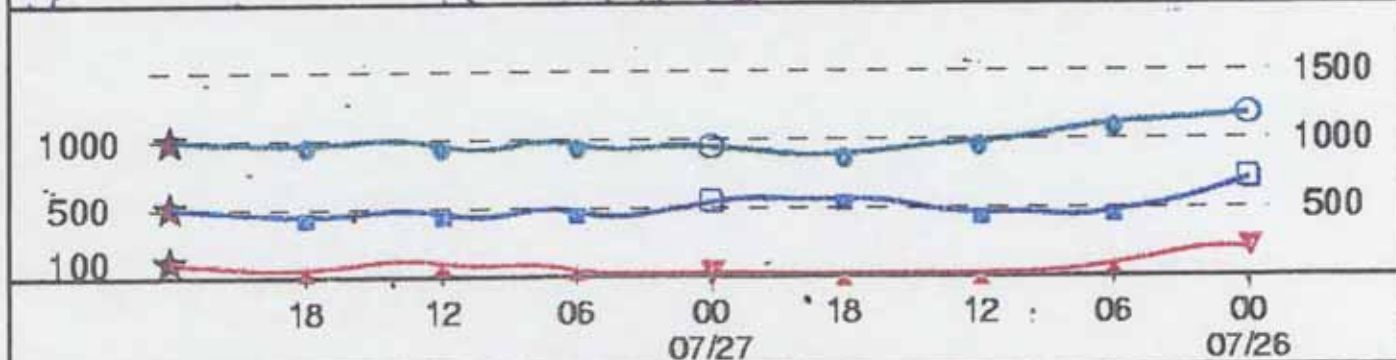
Backward trajectories ending at 00 UTC 28 Jul 00

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Meters AGL



Job ID: 3417 Job Start: Tue Apr 8 15:34:09 GMT 2003
 lat.: 38.01 lon.: -87.72 hghts: 100, 500, 1000 m AGL

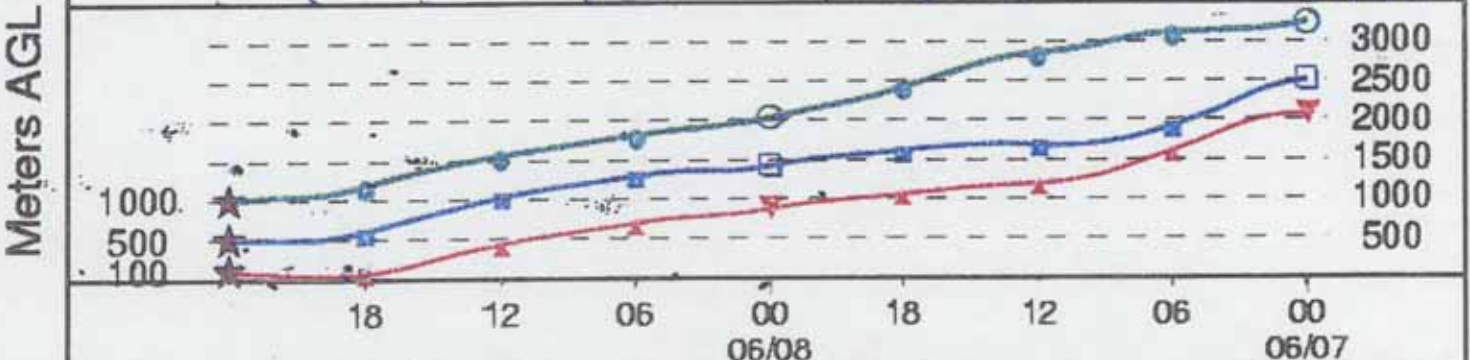
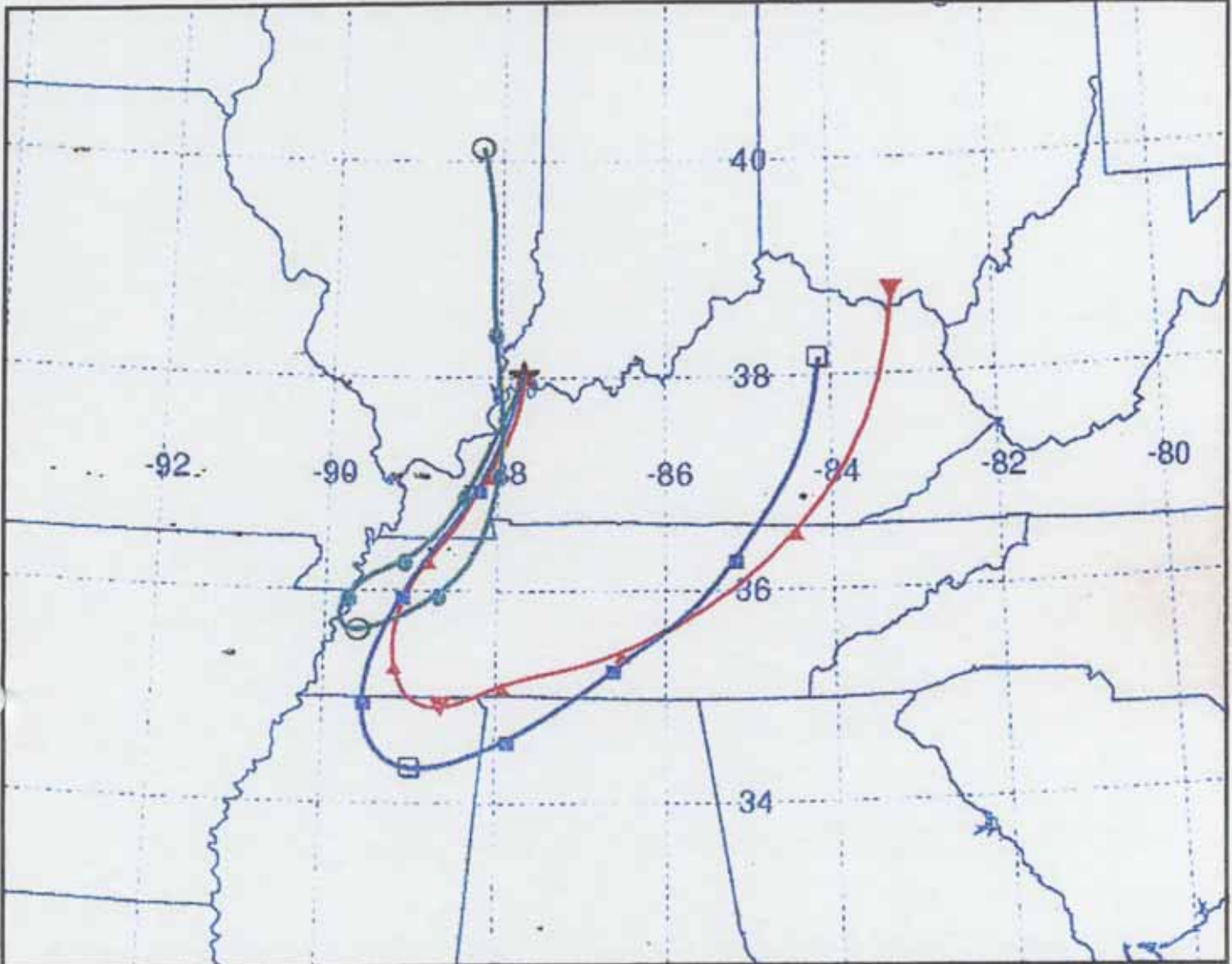
Trajectory Direction: Backward Duration: 48 hrs
 Vertical Motion Calculation Method: Model Vertical Velocity
 Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

Backward trajectories ending at 00 UTC 09 Jun 00

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Job ID: 3711 Job Start: Tue Apr 8 15:46:34 GMT 2003
lat.: 38.01 lon.: -87.72 hgts: 100, 500, 1000 m AGL

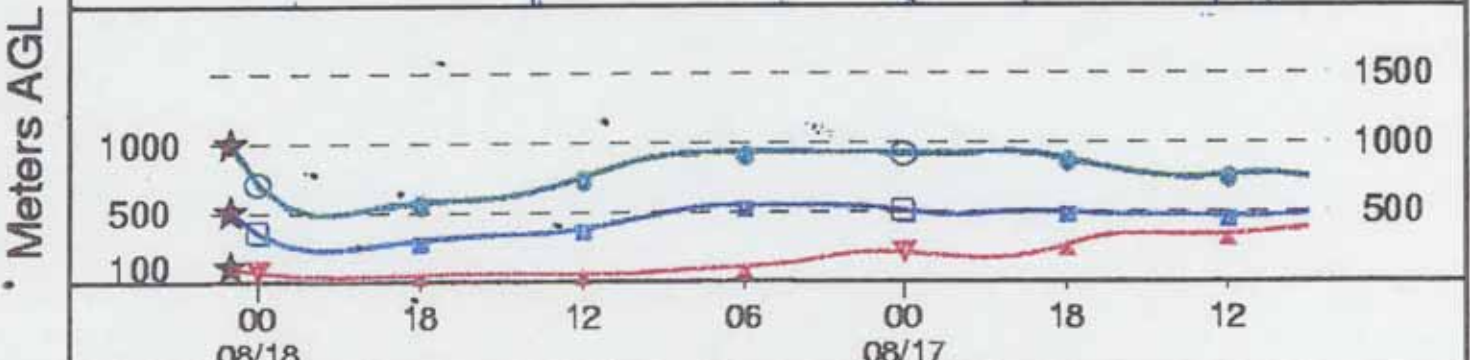
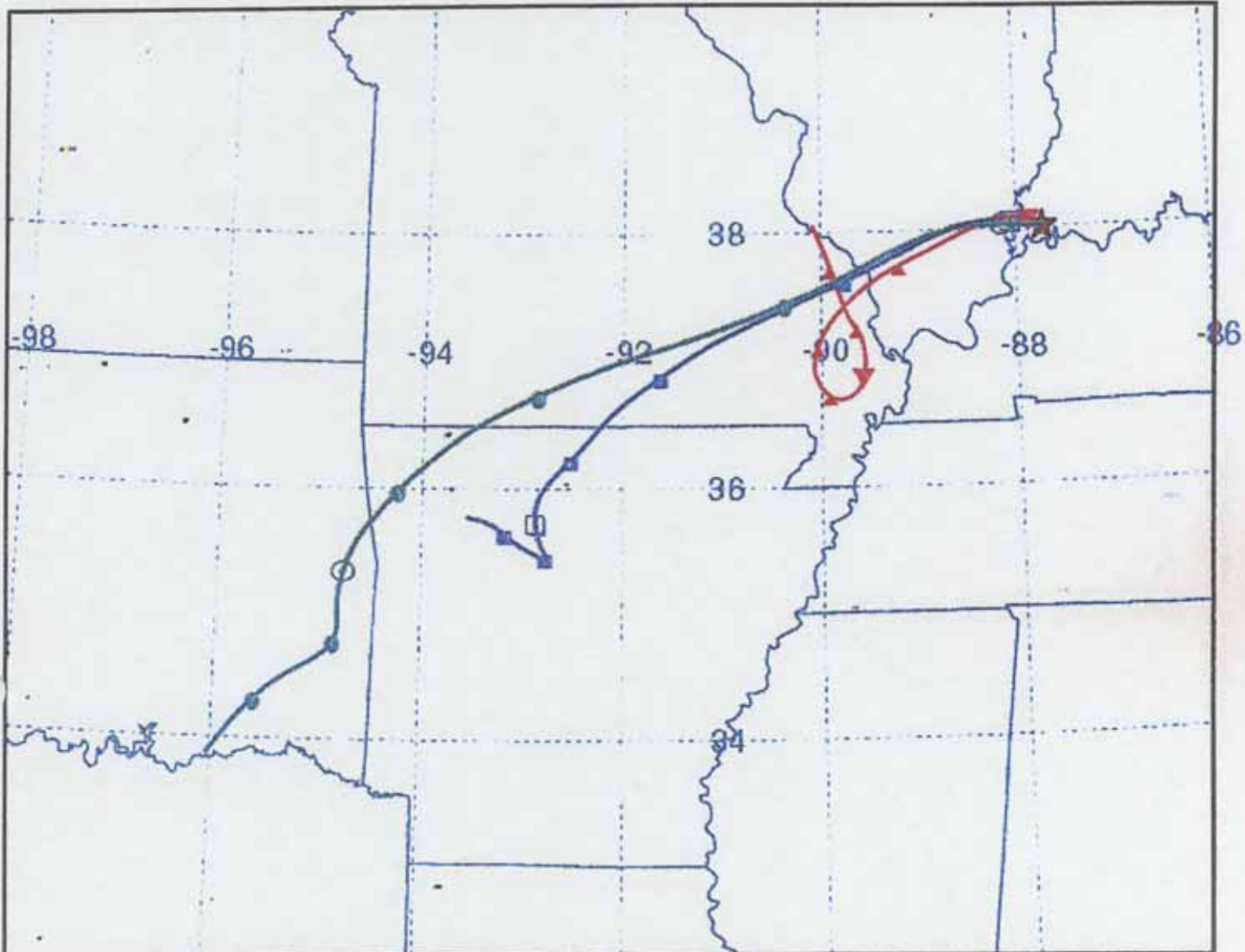
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

Backward trajectories ending at 01 UTC 18 Aug 00

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Job ID: 3890 Job Start: Tue Apr 8 15:52:37 GMT 2003
lat.: 38.01 lon.: -87.72 hgts: 100, 500, 1000 m AGL

Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

**Posey County, Indiana Ozone Monitor (Site ID - 18-129-0003)
2001 8-Hour Average Top Four Maximum Values**

Date	Start Hour (CST)	8-Hour Reading (PPM)
06/18/2001	11	.080
06/19/2001	09	.080
05/10/2001	10	.079
06/12/2001	09	.079 (4 th Max)

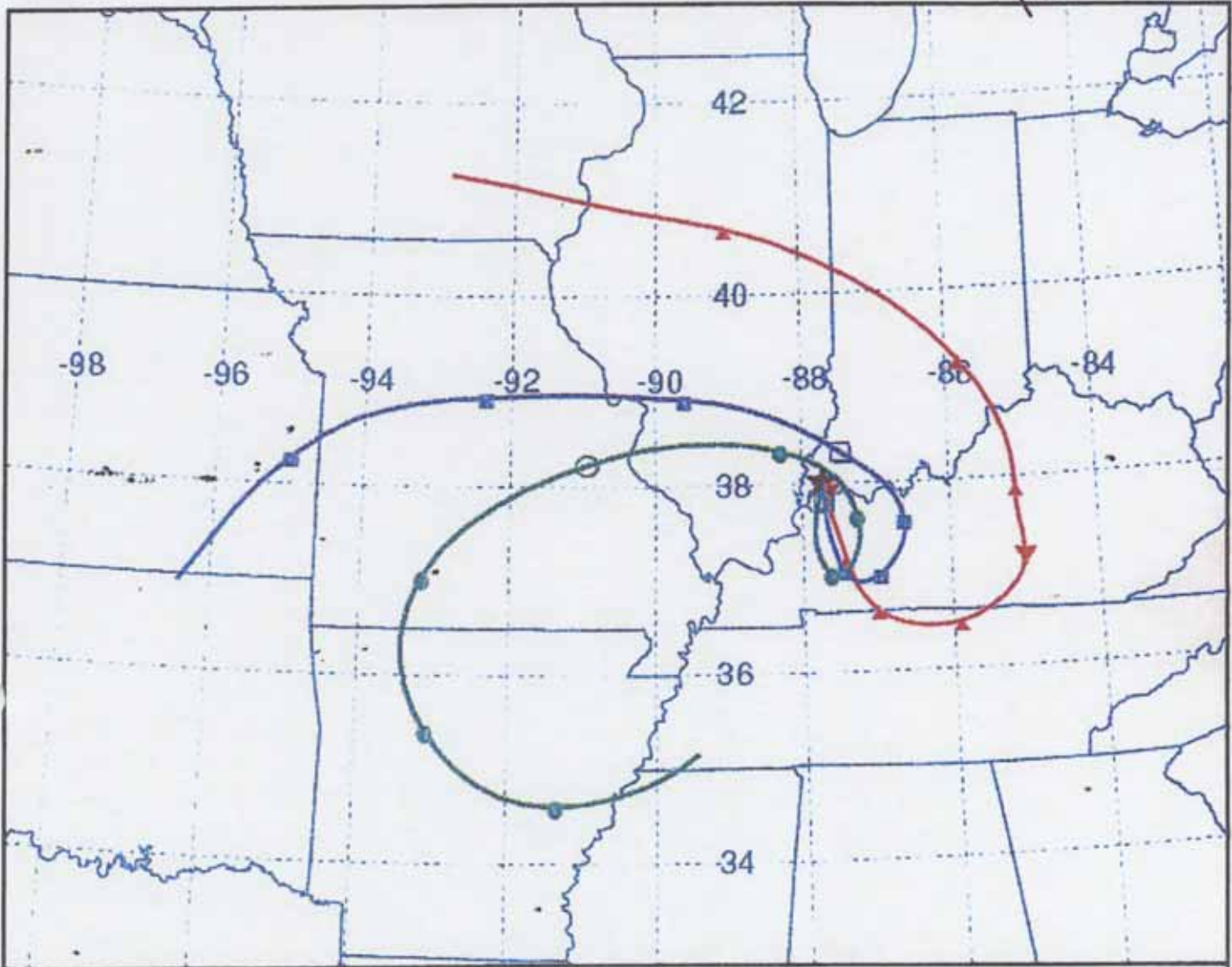
NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

Backward trajectories ending at 01 UTC 19 Jun 01

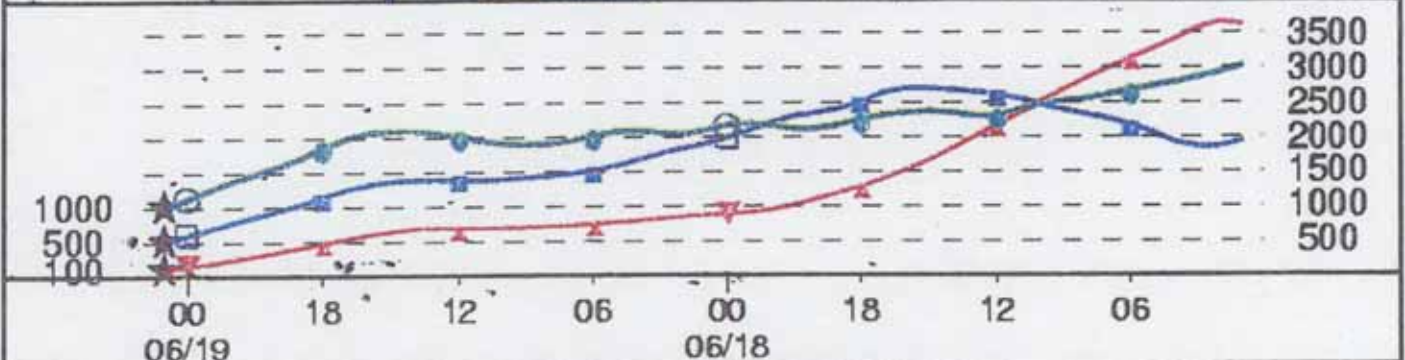
EDAS Meteorological Data

Handwritten initials

Source ★ at 38.01 N 87.72 W



Meters AGL



Job ID: 32492 Job Start: Tue Apr 8 17:13:08 GMT 2003
 lat.: 38.01 lon.: -87.72 hghts: 100, 500, 1000 m AGL

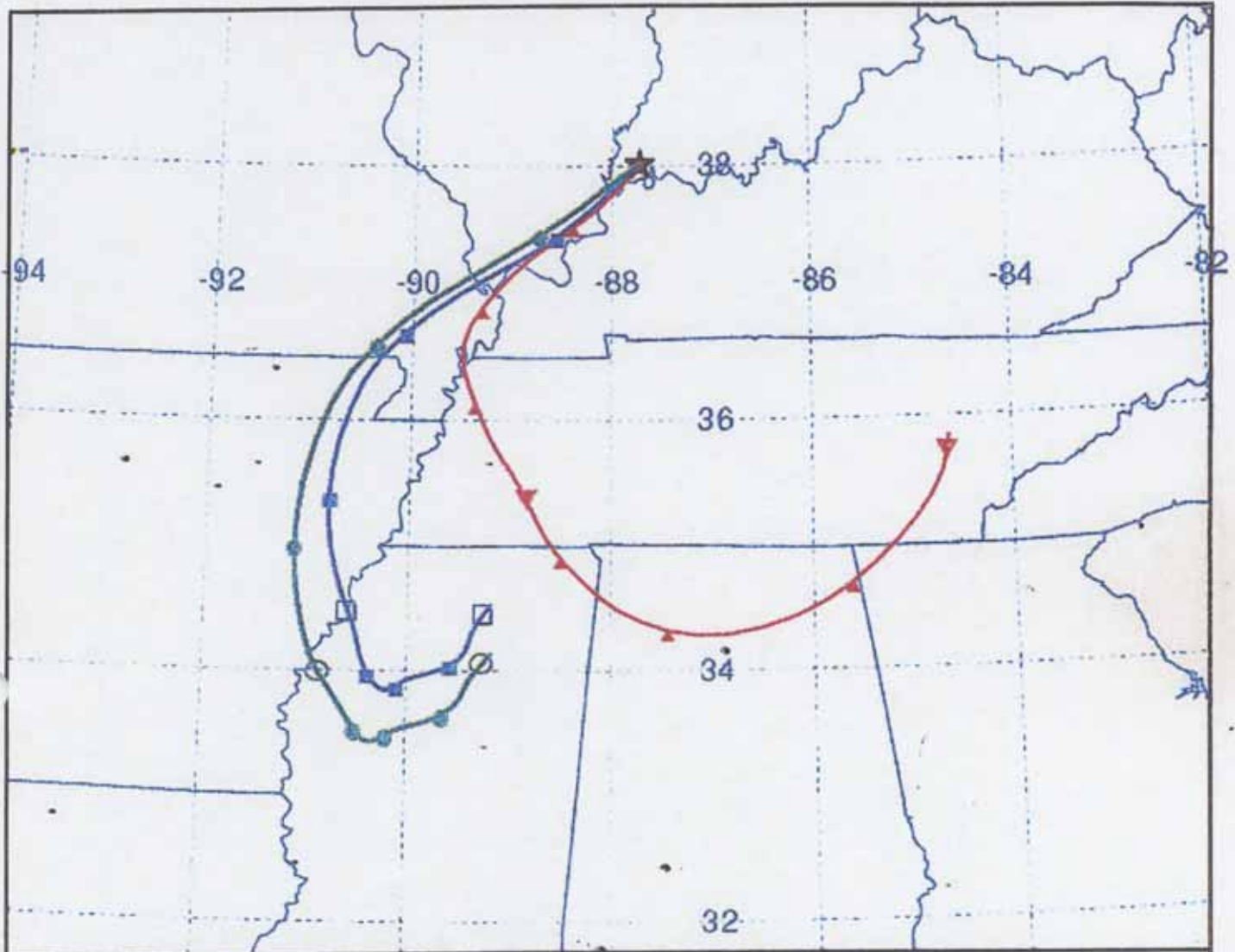
Trajectory Direction: Backward Duration: 48 hrs
 Vertical Motion Calculation Method: Model Vertical Velocity
 Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

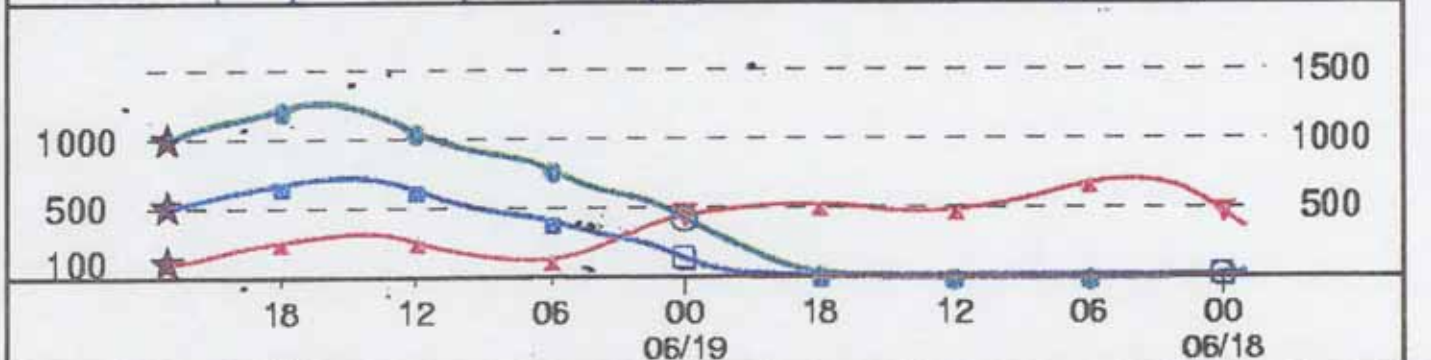
Backward trajectories ending at 23 UTC 19 Jun 01

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Meters AGL



Job ID: 348545 Job Start: Wed Apr 2 16:47:51 GMT 2003
lat.: 38.01 lon.: -87.72 hghts: 100, 500, 1000 m AGL

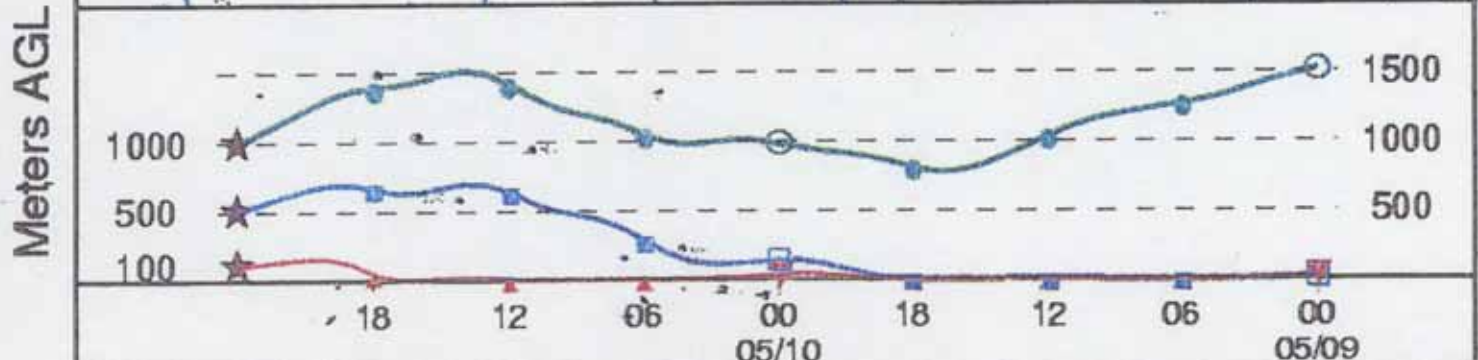
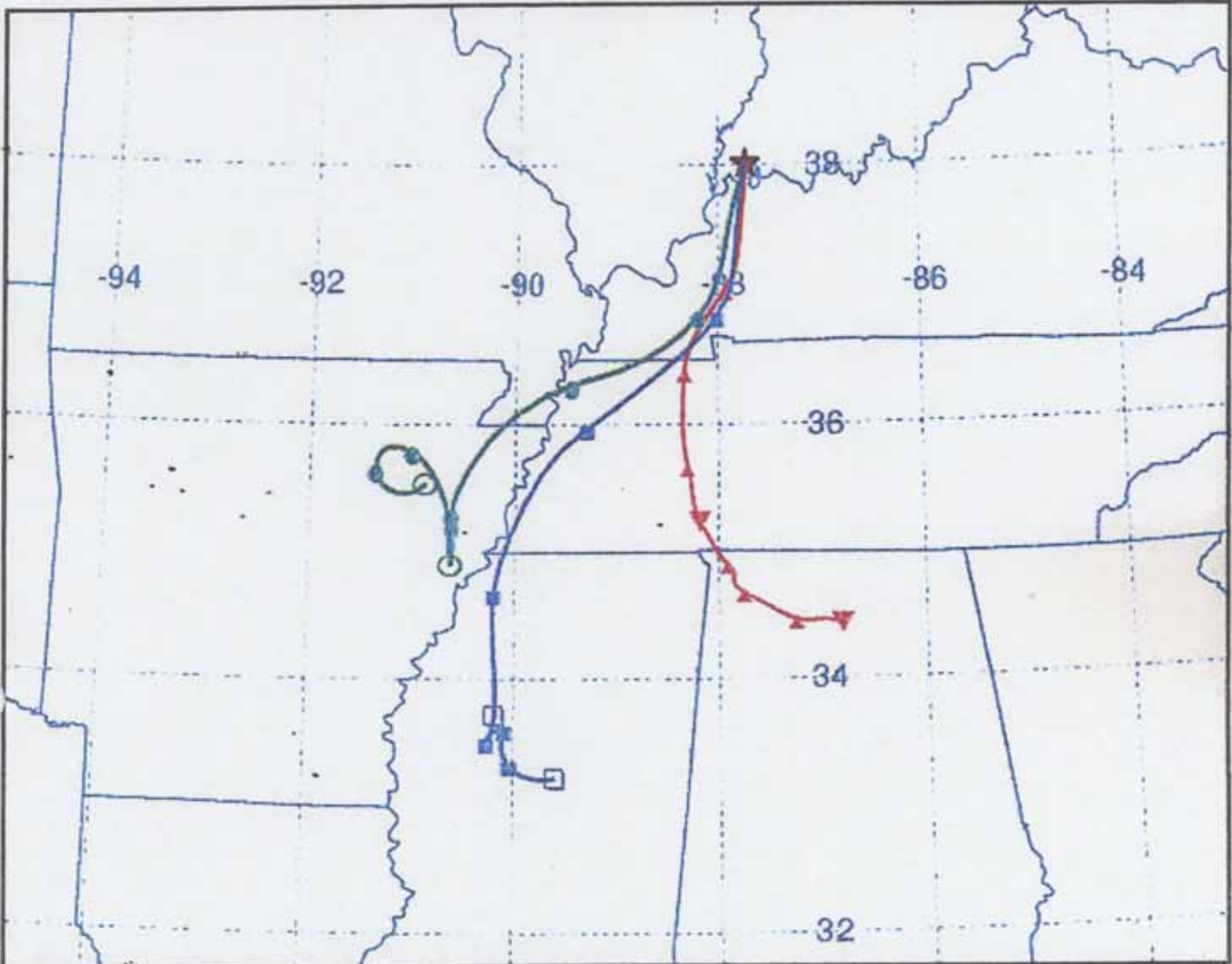
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

Backward trajectories ending at 00 UTC 11 May 01

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Job ID: 32541 Job Start: Tue Apr 8 17:20:40 GMT 2003
lat.: 38.01 lon.: -87.72 hghts: 100, 500, 1000 m AGL

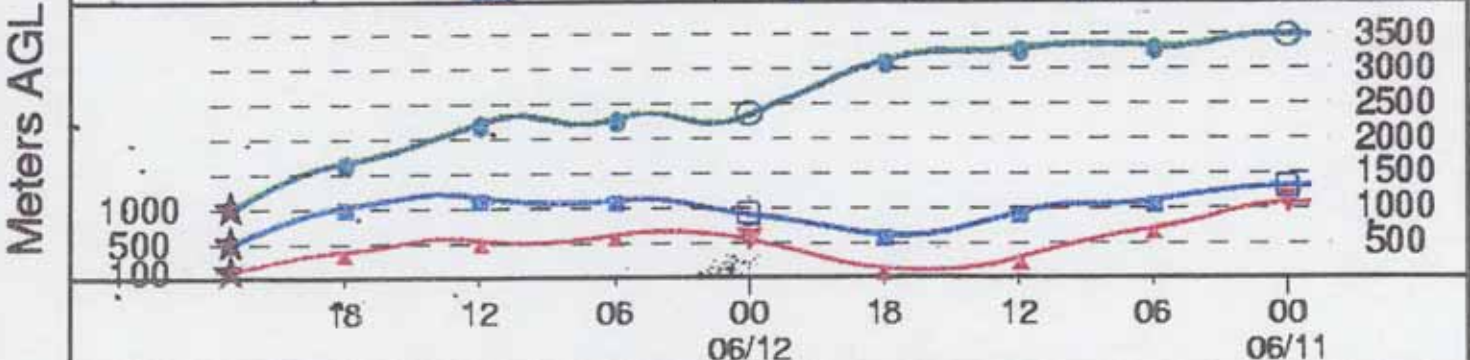
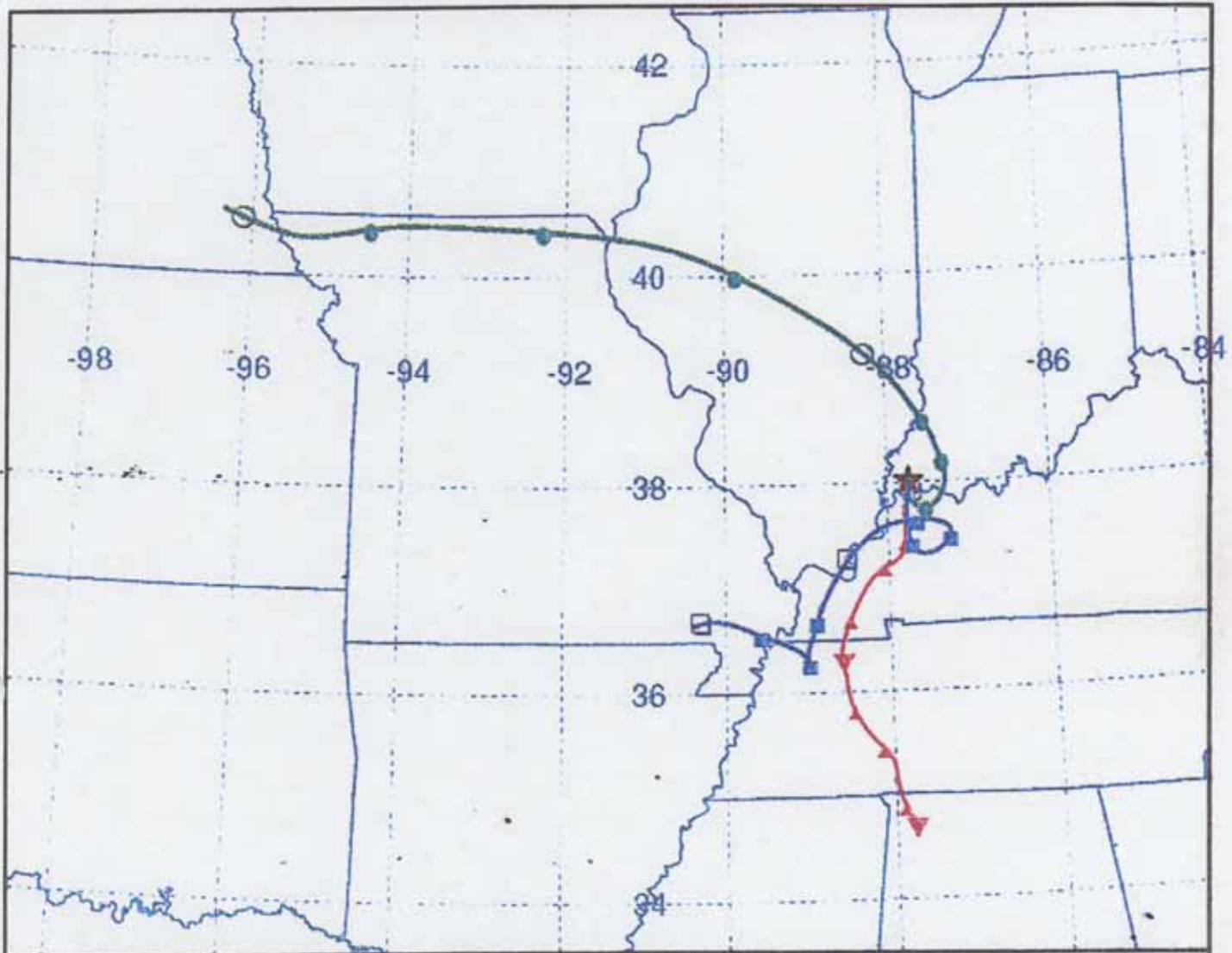
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

Backward trajectories ending at 23 UTC 12 Jun 01

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Job ID: 348384 Job Start: Wed Apr 2 16:36:21 GMT 2003
 lat.: 38.01 lon.: -87.72 hghts: 100, 500, 1000 m AGL

Trajectory Direction: Backward Duration: 48 hrs
 Vertical Motion Calculation Method: Model Vertical Velocity
 Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

Posey County, Indiana Ozone Monitor (Site ID - 18-129-0003)
2002 8-Hour Average Top Four Maximum Values

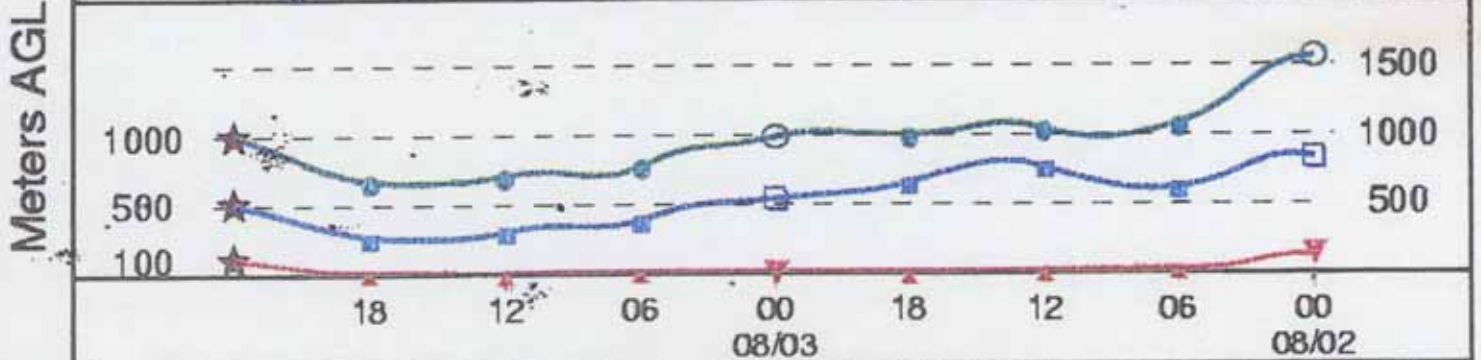
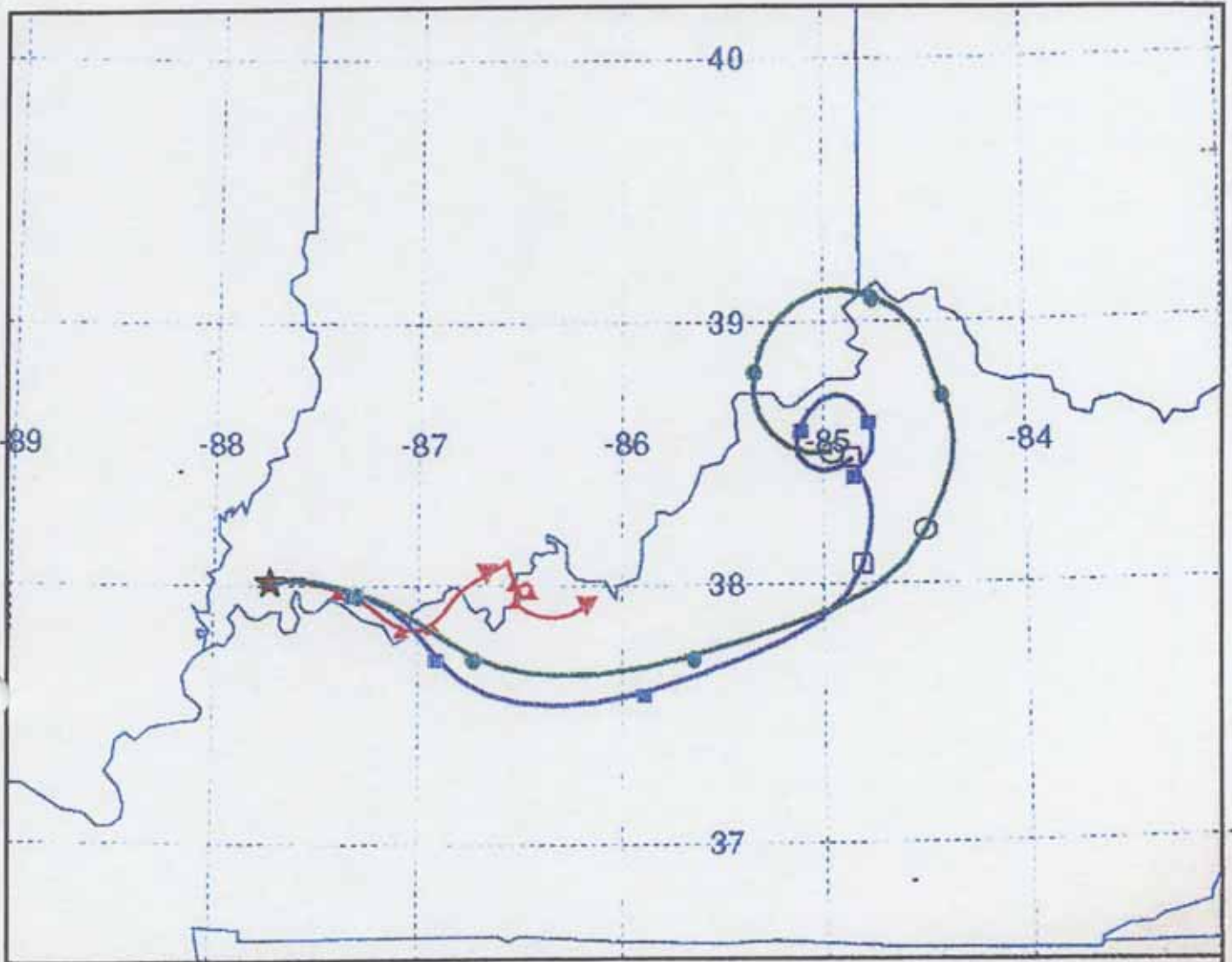
Date	Start Hour (CST)	8-Hour Reading (PPM)
08/03/2002	10	.106
08/09/2002	11	.099
09/08/2002	10	.098
06/20/2002	10	.097 (4 th Max)
09/06/2002	10	.097 (4 th Max)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

Backward trajectories ending at 00 UTC 04 Aug 02

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Job ID: 32598 Job Start: Tue Apr 8 17:26:30 GMT 2003
lat.: 38.01 lon.: -87.72 hghts: 100, 500, 1000 m AGL

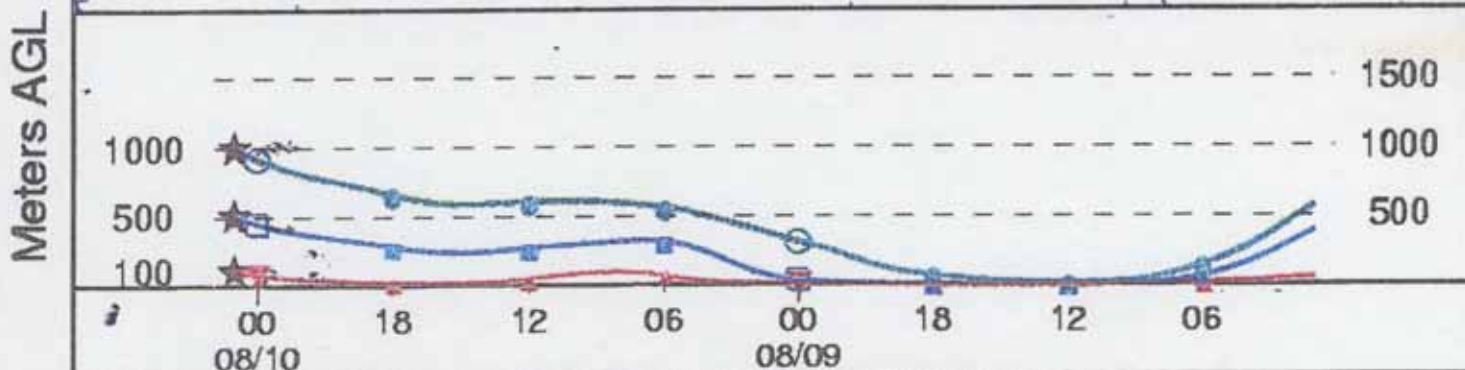
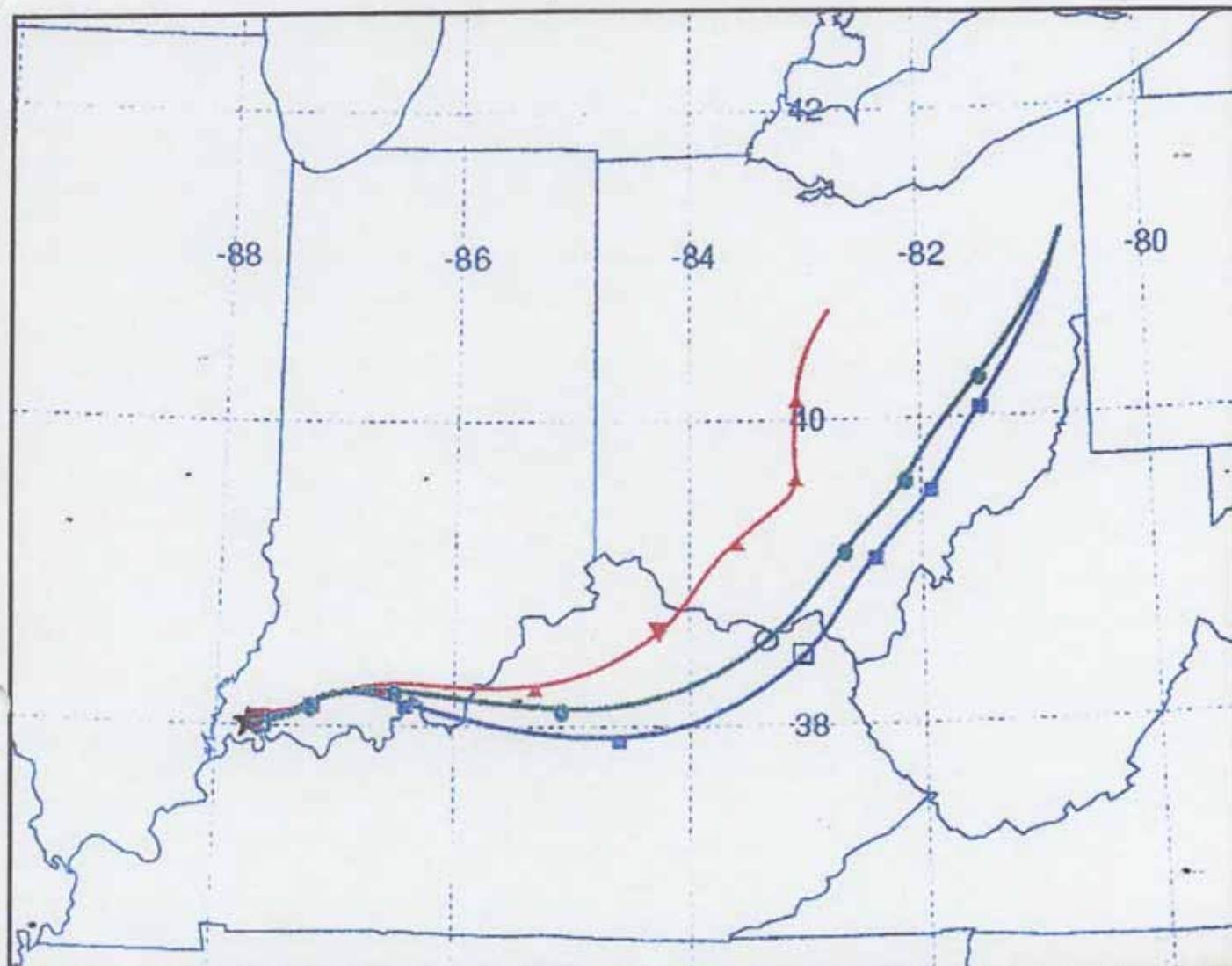
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

Backward trajectories ending at 01 UTC 10 Aug 02

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Job ID: 32653 Job Start: Tue Apr 8 17:30:33 GMT 2003
lat.: 38.01 lon.: -87.72 hghts: 100, 500, 1000 m AGL

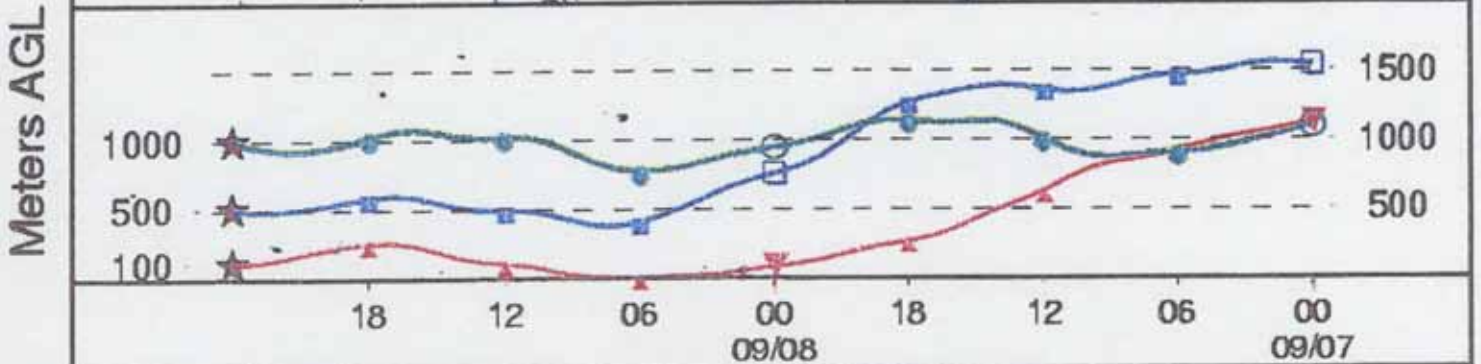
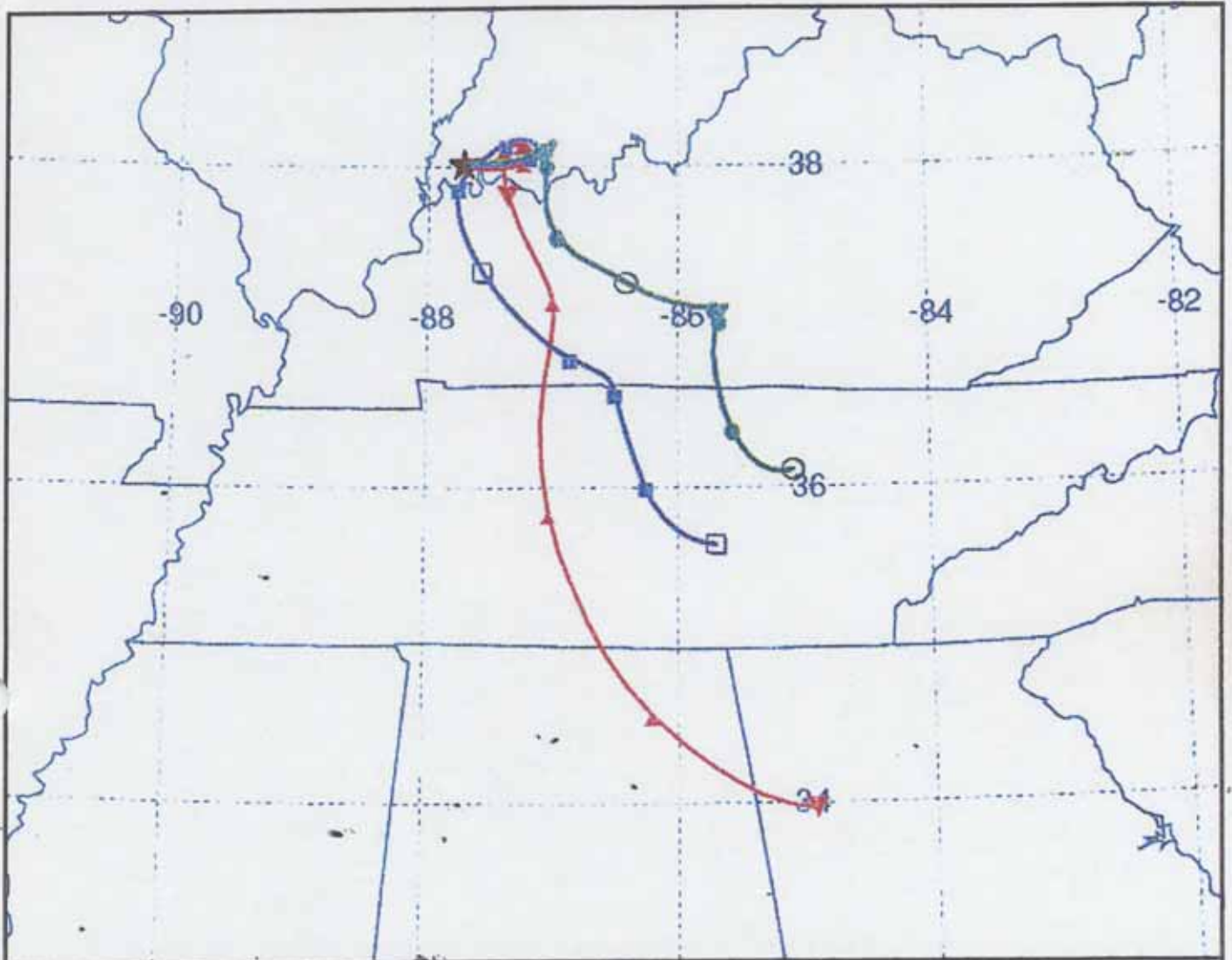
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

Backward trajectories ending at 00 UTC 09 Sep 02

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Job ID: 32802 Job Start: Tue Apr 8 17:38:06 GMT 2003
lat.: 38.01 lon.: -87.72 hgts: 100, 500, 1000 m AGL

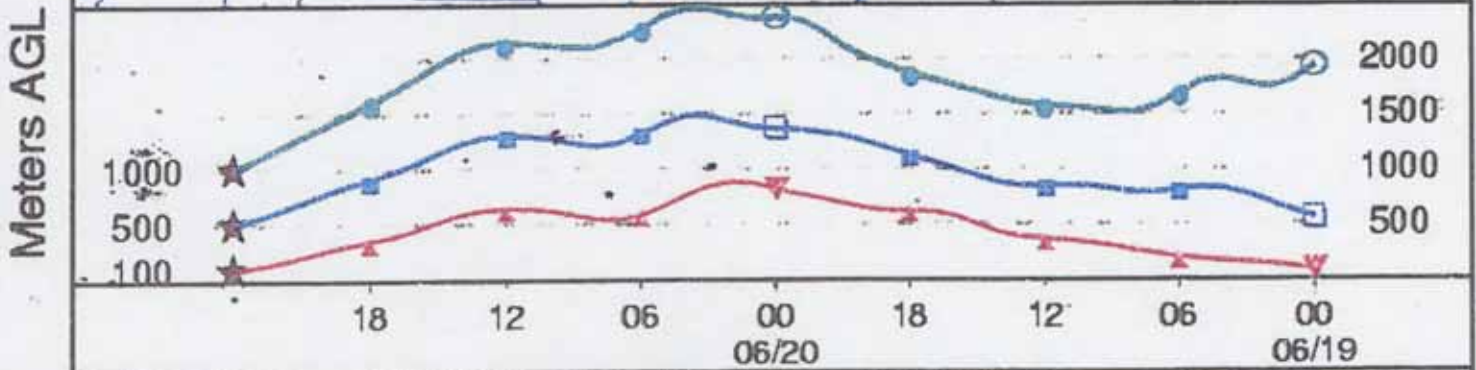
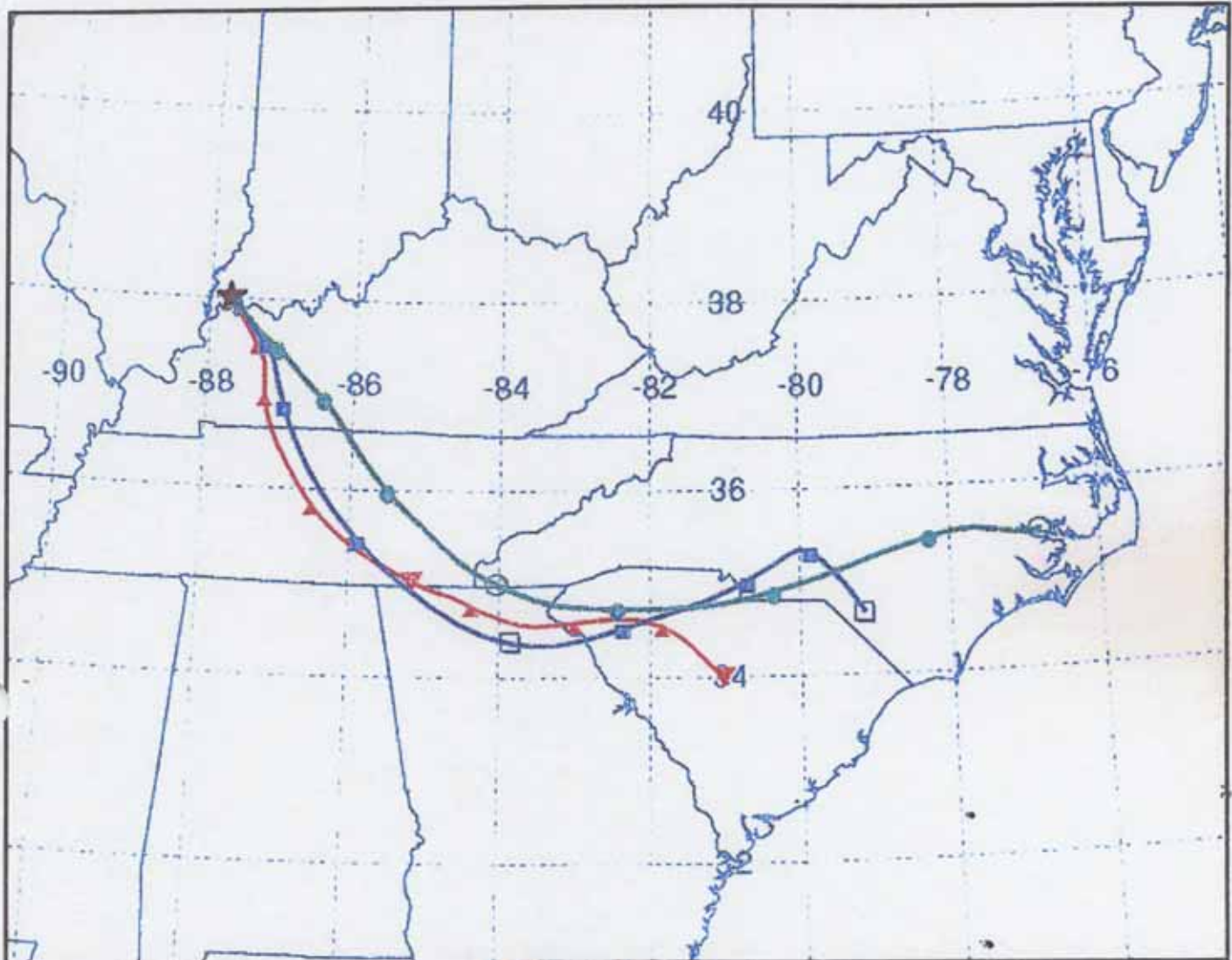
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

Backward trajectories ending at 00 UTC 21 Jun 02

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Job ID: 32895 Job Start: Tue Apr 8 17:45:48 GMT 2003
lat.: 38.01 lon.: -87.72 hghts: 100, 500, 1000 m AGL

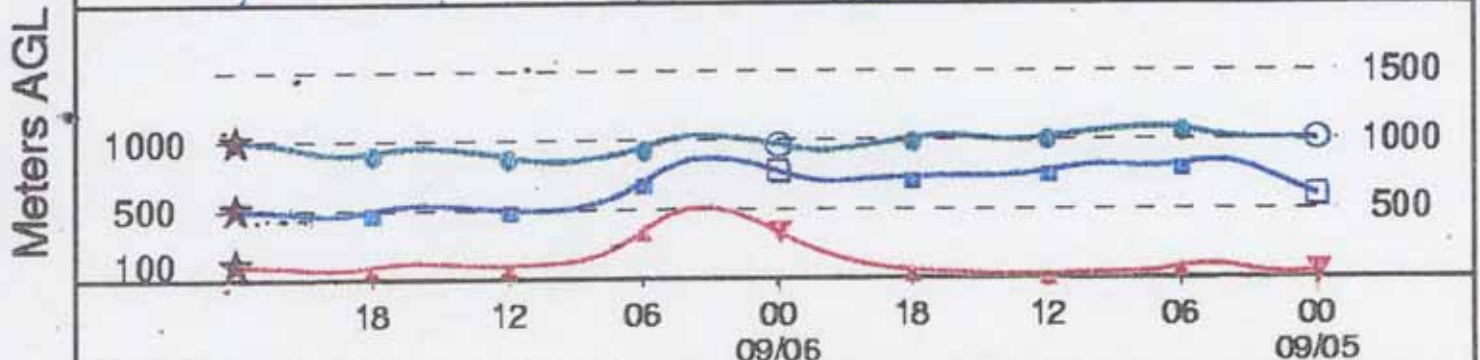
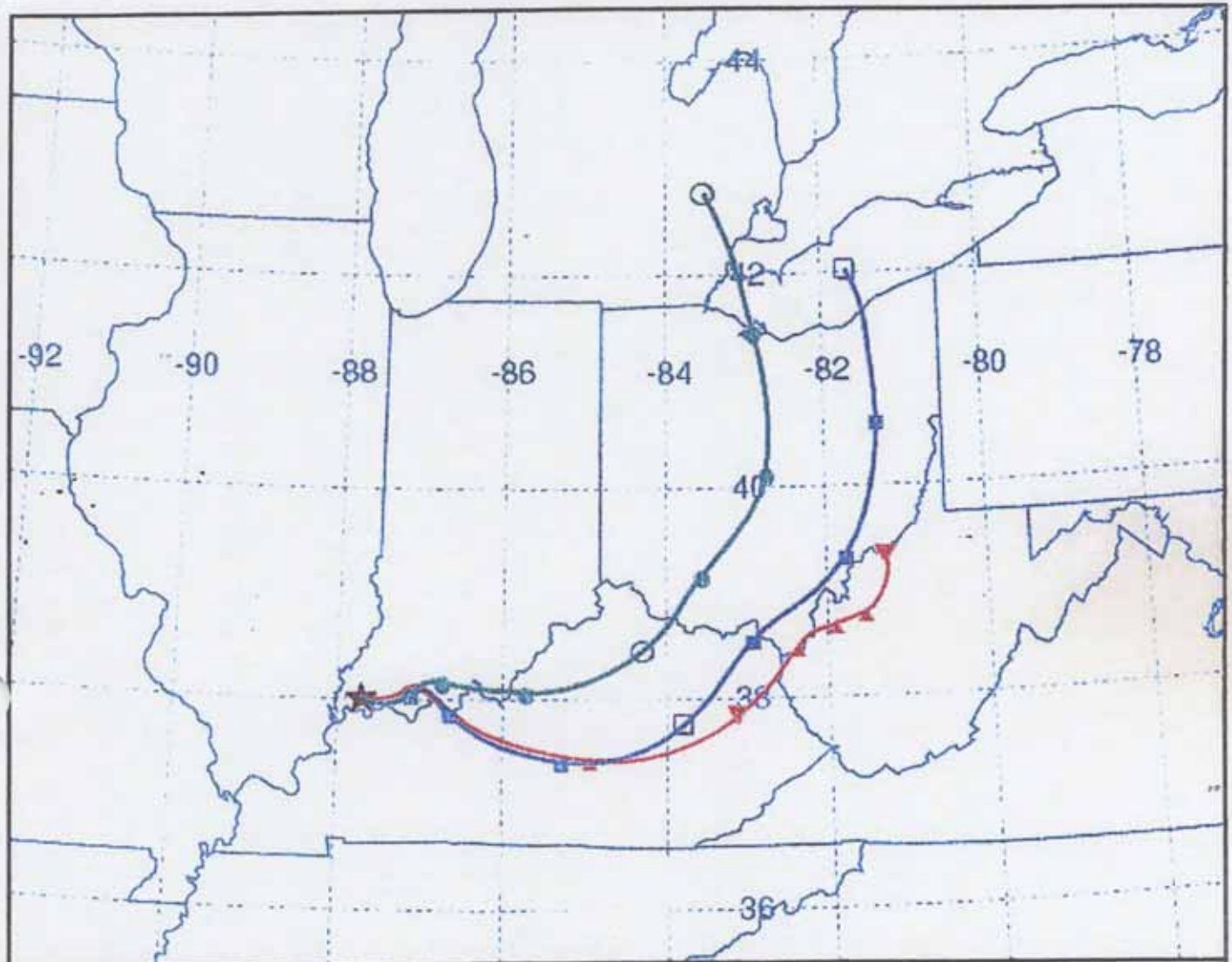
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

Backward trajectories ending at 00 UTC 07 Sep 02

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Job ID: 32842 Job Start: Tue Apr 8 17:40:46 GMT 2003
lat.: 38.01 lon.: -87.72 hgts: 100, 500, 1000 m AGL

Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

Posey County, Indiana Ozone Monitor (Site ID - 18-129-0003)
2000-2002 1-Hour Average Top Four Maximum Values

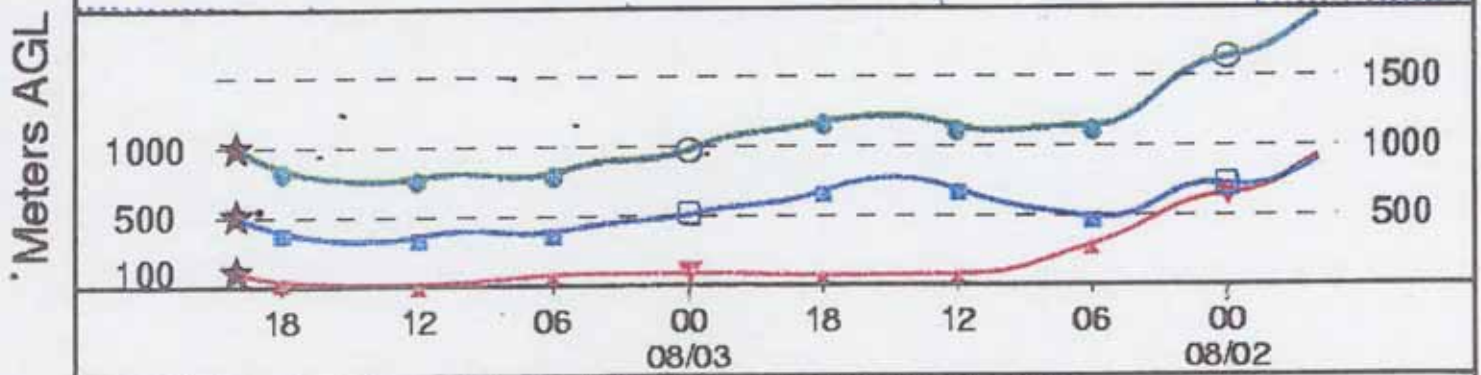
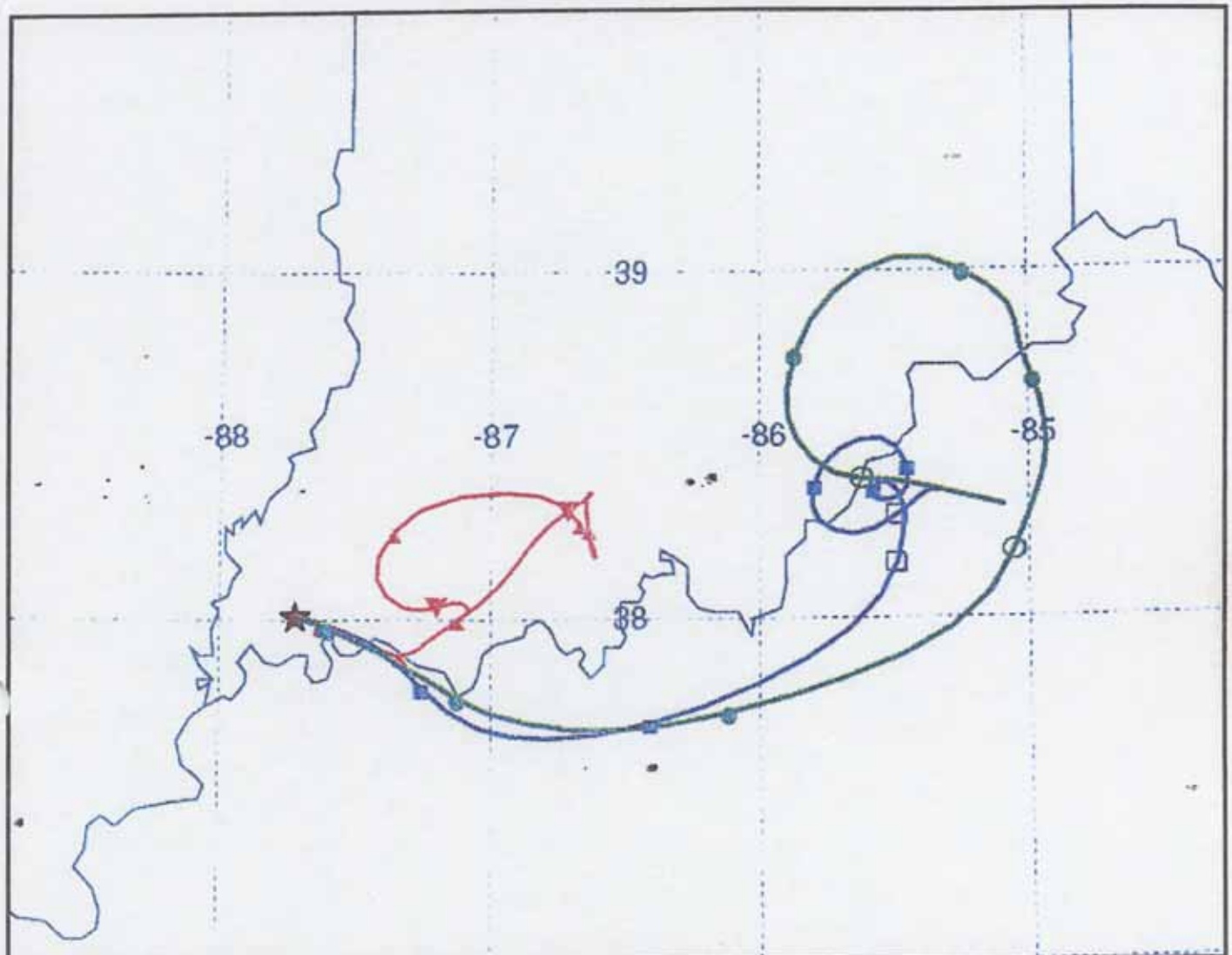
Date	Start Hour (CST)	1-Hour Reading (PPM)
08/03/2002	13	.121
08/29/2000	14	.116
08/09/2002	15	.109
06/20/2002	16	.108 (4 th Max)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

Backward trajectories ending at 20 UTC 03 Aug 02

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Job ID: 348904 Job Start: Wed Apr 2 17:14:39 GMT 2003
 lat.: 38.01 lon.: -87.72 hghts: 100, 500, 1000 m AGL

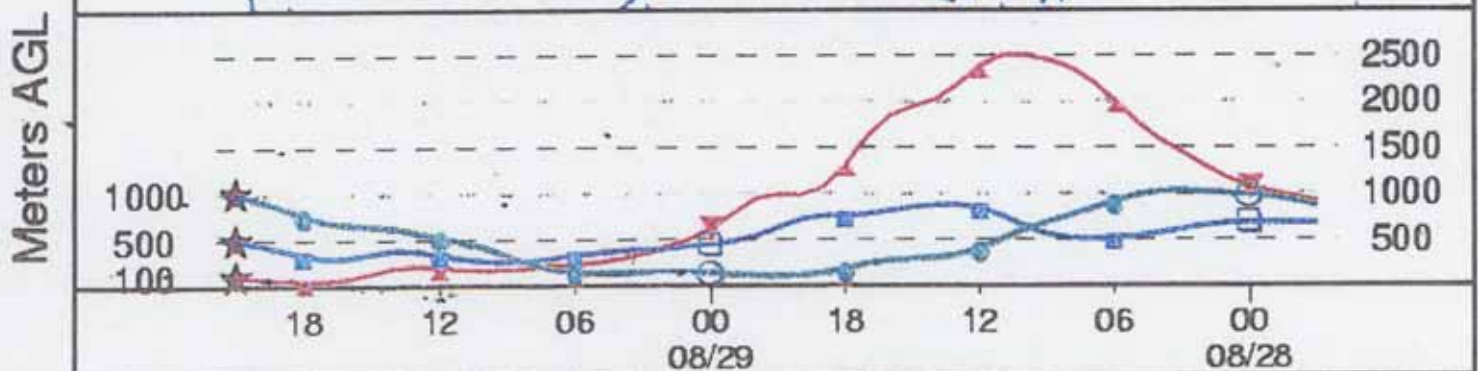
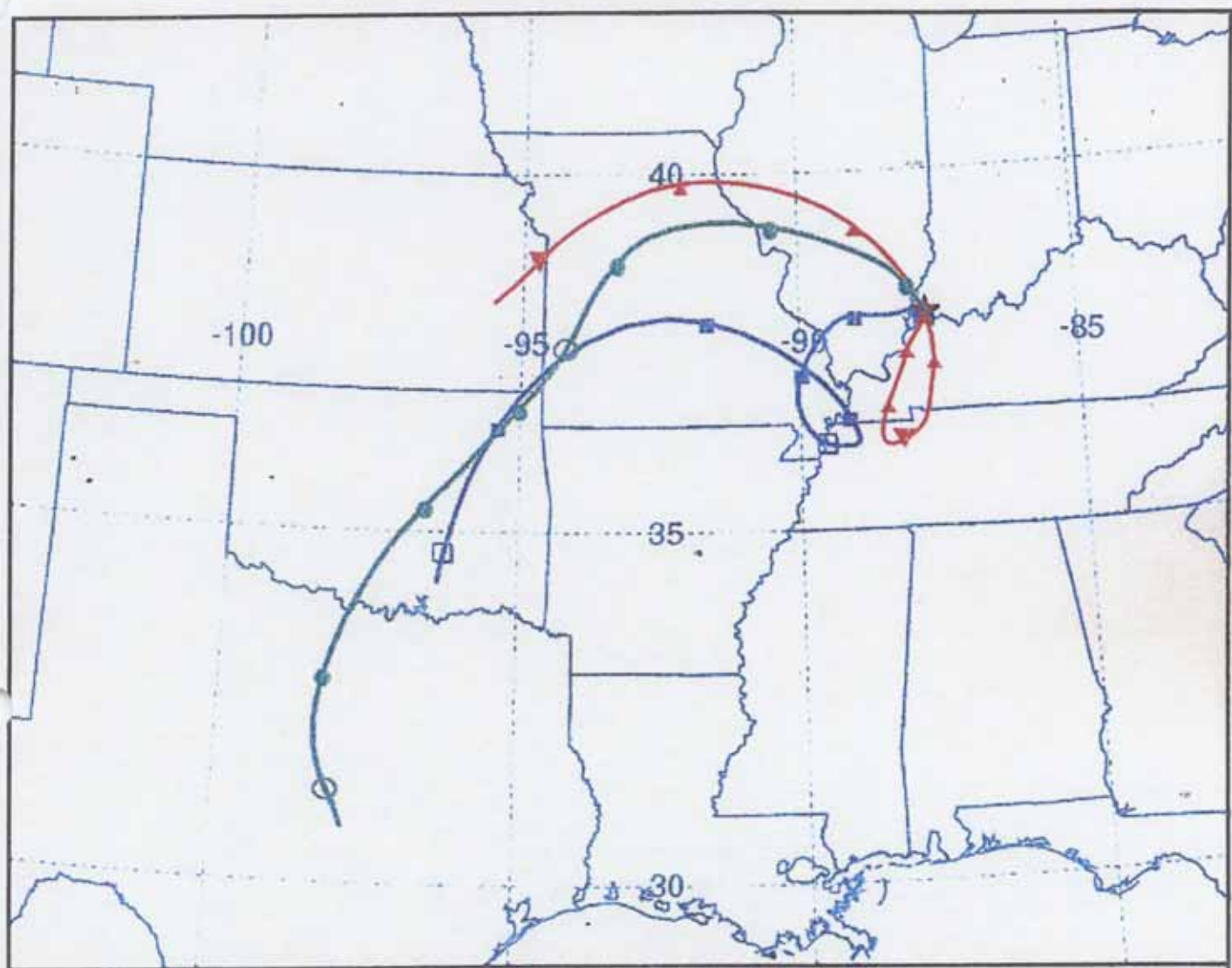
Trajectory Direction: Backward Duration: 48 hrs
 Vertical Motion Calculation Method: Model Vertical Velocity
 Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

Backward trajectories ending at 21 UTC 29 Aug 00

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Job ID: 348272 Job Start: Wed Apr 2 16:30:38 GMT 2003
lat.: 38.01 lon.: -87.72 hgts: 100, 500, 1000 m AGL

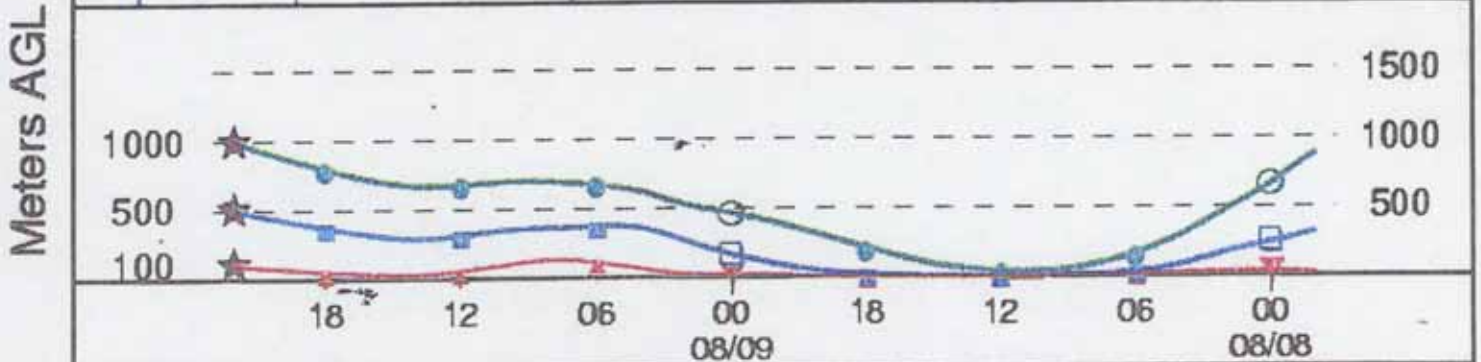
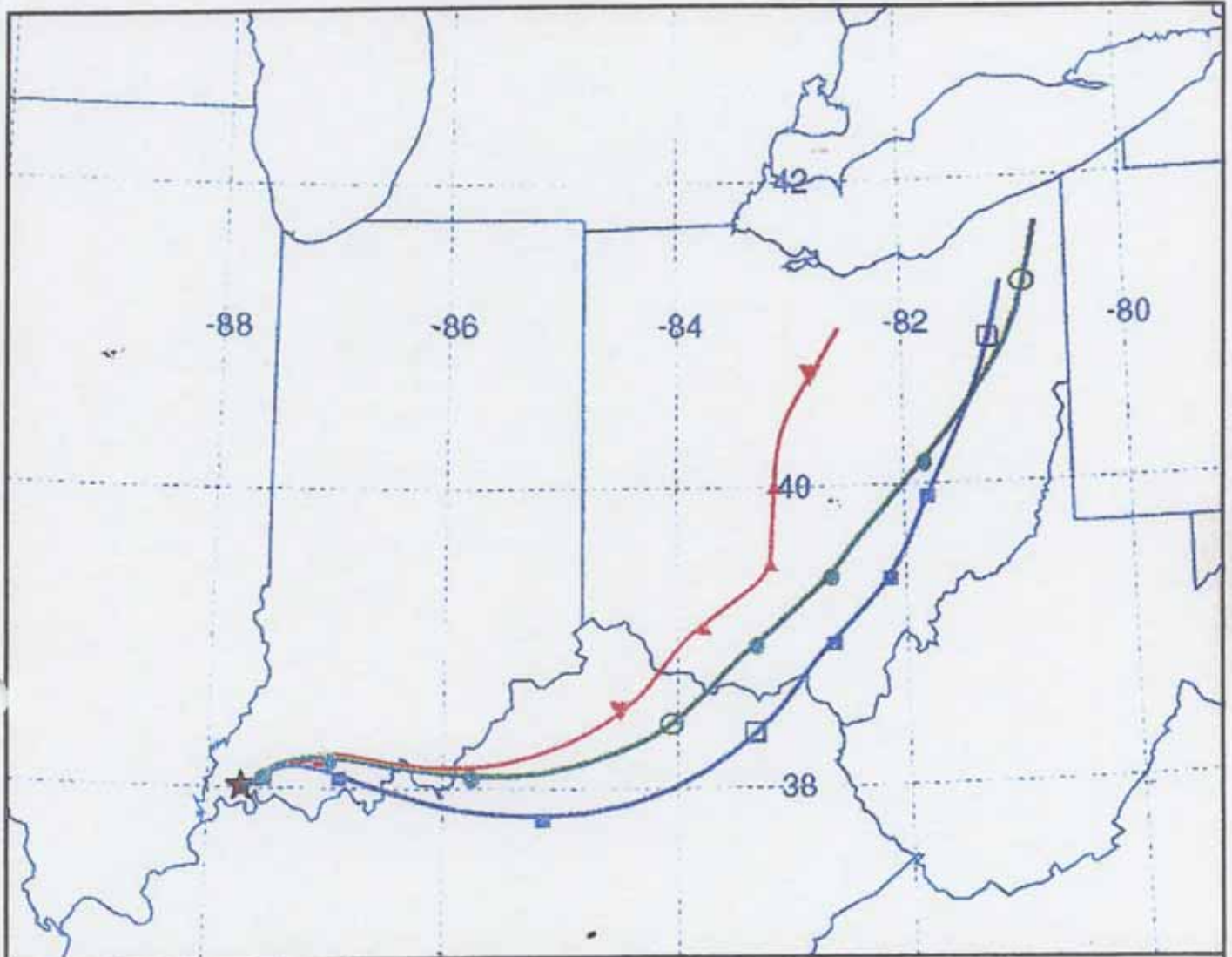
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

Backward trajectories ending at 22 UTC 09 Aug 02

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Job ID: 348931 Job Start: Wed Apr 2 17:17:32 GMT 2003
lat.: 38.01 lon.: -87.72 hgts: 100, 500, 1000 m AGL

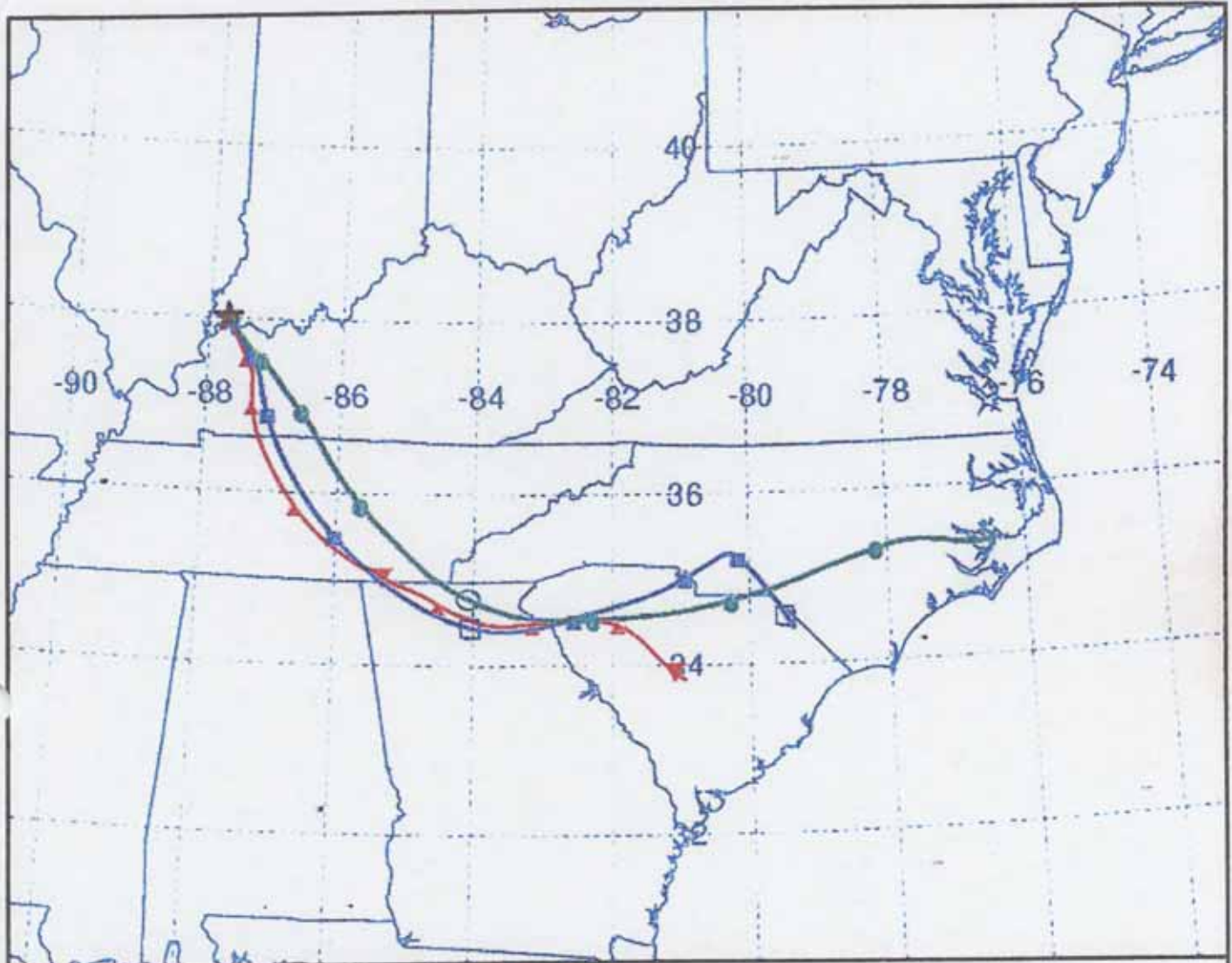
Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

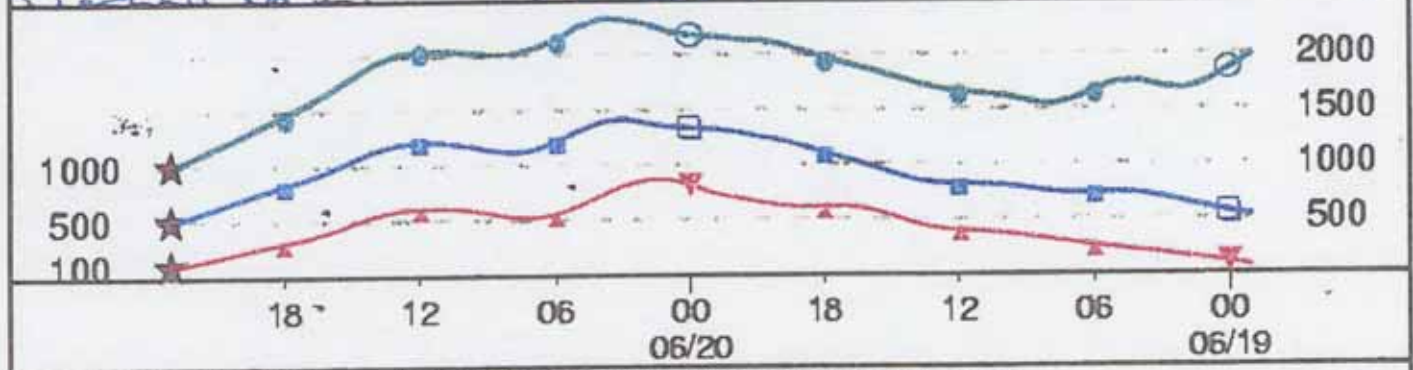
Backward trajectories ending at 23 UTC 20 Jun 02

EDAS Meteorological Data

Source ★ at 38.01 N 87.72 W



Meters, AGL



Job ID: 349009 Job Start: Wed Apr 2 17:24:36 GMT 2003
lat.: 38.01 lon.: -87.72 hgts: 100, 500, 1000 m AGL

Trajectory Direction: Backward Duration: 48 hrs
Vertical Motion Calculation Method: Model Vertical Velocity
Produced using NOAA ARL Website (www.arl.noaa.gov/ready/)

Time Conversion Table

Z Time (UTC)	Pacific Standard Time	Mountain Standard Time	Central Standard Time	Eastern Standard Time
00Z	4:00 PM	5:00 PM	6:00 PM	7:00 PM
03Z	7:00 PM	8:00 PM	9:00 PM	10:00 PM
06Z	10:00 PM	11:00 PM	12:00 AM	1:00 AM
09Z	1:00 AM	2:00 AM	3:00 AM	4:00 AM
12Z	4:00 AM	5:00 AM	6:00 AM	7:00 AM
15Z	7:00 AM	8:00 AM	9:00 AM	10:00 AM
18Z	10:00 AM	11:00 AM	12:00 PM	1:00 PM
21Z	1:00 PM	2:00 PM	3:00 PM	4:00 PM

Z Time (UTC)	Pacific Daylight Savings Time	Mountain Daylight Savings Time	Central Daylight Savings Time	Eastern Daylight Savings Time
00Z	5:00 PM	6:00 PM	7:00 PM	8:00 PM
03Z	8:00 PM	9:00 PM	10:00 PM	11:00 PM
06Z	11:00 PM	12:00 AM	1:00 AM	2:00 AM
09Z	2:00 AM	3:00 AM	4:00 AM	5:00 AM
12Z	5:00 AM	6:00 AM	7:00 AM	8:00 AM
15Z	8:00 AM	9:00 AM	10:00 AM	11:00 AM
18Z	11:00 AM	12:00 PM	1:00 PM	2:00 PM
21Z	2:00 PM	3:00 PM	4:00 PM	5:00 PM