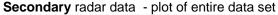
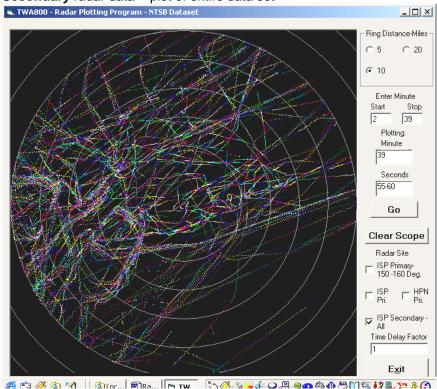
8/1999 leaked dataset

This dataset is combination of many files from various radar sites for primary and secondary returns. Note: The files in this dataset are selected data and not the entire data record from these radar sites.

The best way to go over these data sets is to show what is in each file that we are using then state what is missing and what we would like to acquire.

Islip





Data is from 8:02 – 8:37PM for all 360 degrees out to 60 miles. The data in this dataset has been rotated by the NTSB to account for magnetic variation (Exhibit 4C page 7). The correction to the Islip radar site is 13 degrees west

Raw data in this dataset:

What is missing:

The Islip Secondary data in the FIRO 8/2001 dataset contains the transponder codes for each radar return.

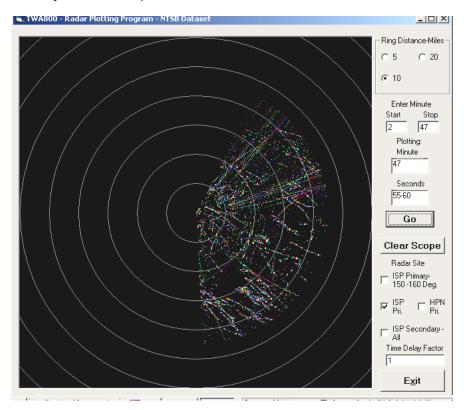
00,02,41.31 2653 36.781 307.617 280 0 3 3 1

Would like to get the Islip secondary data with the transponder codes. This helps identifying particular aircraft tracks.

Also, would like to have the Islip secondary data from 8:02pm out to at least 11PM to match the 8/2001 dataset's time period.

Islip

Primary radar data - plot of entire data set



The Islip primary data is limited to 45 miles out from 8:02 pm - 8:47 pm and only includes the following directions: ~25 degrees to 170 degrees.

What is missing:

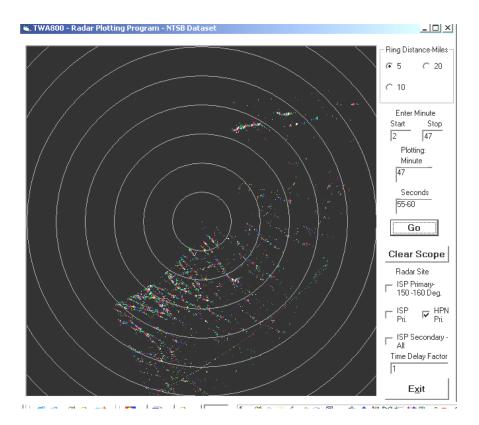
Would like to get the Islip primary for all 360 degrees out to 60 miles.

Also, would like to have the Islip primary data from 8:02pm out to at least 11PM to match the 8/2001 datasets time period.

New York Tracon Data

White Plains (HPN)

Primary radar data - plot of entire data set



The plot centered on Islip shows the HPN data for 8:02 pm - 8:47 pm (Note: the ring distance in this plot is 5 miles). The HPN data set contains from 8:02 pm - 8:50 pm.

What is missing:

Would like to get the White Plains primary for all 360 degrees out to 60 miles. A Critical radar sweep is missing.

for minute 0,31,14 onward.

```
0,31,14.35,0,5.497,15.7234,0,1874.35,3,,1874.1\\0,31,14.49,0,6.5088,5.4718,0,1874.49,3,,1874.24\\0,31,14.49,0,14.9548,3.4977,0,1874.49,3,,1874.24\\0,31,14.64,0,17.7502,-11.5025,0,1874.64,3,,1874.39\\0,31,14.64,0,19.594,-8.7756,0,1874.64,3,,1874.39\\0,31,14.94,0,-6.3122,-8.8658,0,1874.94,3,,1874.69\\0,31,14.94,0,1.7601,-15.7714,0,1874.94,3,,1874.69\\0,31,14.94,0,-4.0056,-9.8024,0,1874.94,3,,1874.69\\0,31,14.94,0,-2.5163,-8.8411,0,1874.94,3,,1874.69\\0,31,15.08,0,-10.2865,-14.8087,0,1875.08,3,,1874.83\\0,31,15.08,0,-7.694,-13.6754,0,1875.08,3,,1874.83\\0,31,15.08,0,-10.7884,-22.4195,0,1875.08,3,,1874.83\\0,31,15.08,0,-12.9096,-14.6536,0,1875.08,3,,1874.83
```

0,31,19.04,0,5.45,15.724,0,1879.04,3,,1878.79

Notice the data point from the next 4+ second sweep is in here !!!!

```
0,31,15.08,0,-10.3811,-14.8622,0,1875.08,3,,1874.83
0,31,15.08,0,-7.6677,-13.7143,0,1875.08,3,,1874.83
0,31,15.08,0,-10.7299,-22.3935,0,1875.08,3,,1874.83
0,31,15.08,0,-9.5534,-24.3657,0,1875.08,3,,1874.83
0,31,15.08,0,-13.0042,-14.6995,0,1875.08,3,,1874.83
```

0.31,19 MISSING DATA

The rest of the sweep data for 0.31.19 is missing.

And then it picks up with the next 4+sec sweep at 0,31,23+

```
0,31,23.76,0,5.4493,15.6728,0,1883.76,3,,1883.51
0,31,23.76,0,5.3416,15.7764,0,1883.76,3,,1883.51
0,31,23.62,0,15.2035,18.4471,0,1883.62,3,,1883.37
0,31,23.91,0,22.0211,6.2063,0,1883.91,3,,1883.66
0,31,24.04,0,20.797,-7.7169,0,1884.04,3,,1883.79
0,31,23.91,0,6.5251,5.5246,0,1883.91,3,,1883.66
0,31,23.91,0,14.9742,3.5635,0,1883.91,3,,1883.66
0,31,24.04,0,17.1523,-11.9973,0,1884.04,3,,1883.79
0,31,24.04,0,13.6109,-10.3183,0,1884.04,3,,1883.79
0.31,24.04,0,5.02,-2.6365,0,1884.04,3,,1883.79
0.31.24.04.0.19.4841.-9.1837.0.1884.04.3..1883.79
0,31,24.32,0,-3.7278,-12.1245,0,1884.32,3,,1884.07
0,31,24.32,0,-4.5572,-10.9005,0,1884.32,3,,1884.07
0.31.24.32.0.-5.4985.-9.6495.0.1884.32.3..1884.07
0,31,24.32,0,-6.1569,-8.8133,0,1884.32,3,,1884.07
0,31,24.32,0,1.858,-15.6803,0,1884.32,3,,1884.07
0,31,24.18,0,14.2064,-18.8396,0,1884.18,3,,1883.93
0,31,24.47,0,-10.3983,-14.9431,0,1884.47,3,,1884.22
0,31,24.47,0,-7.8514,-13.8379,0,1884.47,3,,1884.22
0,31,24.32,0,-0.9857,-16.0262,0,1884.32,3,,18
```

Now we know, since there was one hit in for 0,31,19, that the radar was not down for that sweep.

Also, would like to have the Islip primary data from 8:02pm out to at least 11PM to match the 8/2001 datasets time period.

New York Tracon Data

White Plains

Secondary radar data - No Data in the 8/99 dataset except for TWA800 secondaries from HPN.

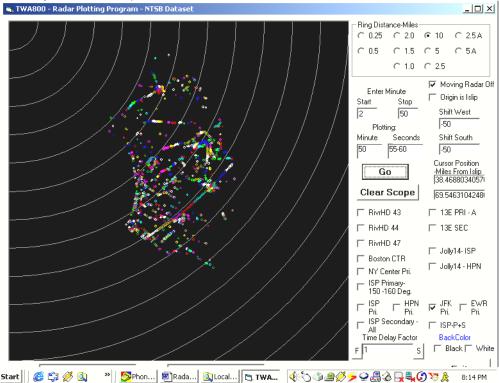
What is missing:

Would like to get the White Plains secondary for all 360 degrees out to 60 miles.

Also, would like to have the White Plains secondary data from 8:02pm out to at least 11PM to match the 8/2001 datasets time period.

JFK

Primary radar data - plot of entire data set



The JFK data is from 8:02 pm - 8:50 pm.

What is missing:

Would like to get the JFK primary for all 360 degrees out to 60 miles from JFK.

Also, would like to have the JFK primary data from 8:02pm out to at least 11PM to match the 8/2001 datasets time period.

JFK

Secondary radar data - No Data in the 8/99 dataset except for TWA800 secondaries from JFK.

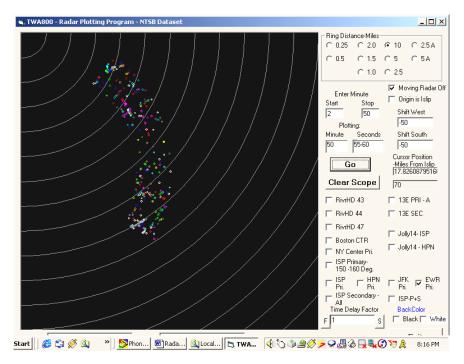
What is missing:

Would like to get the JFK secondary for all 360 degrees out to 60 miles.

Also, would like to have the JFK secondary data from 8:02pm out to at least 11PM to match the 8/2001 datasets time period.

Newark -EWR

Primary radar data - plot of entire data set



The EWR data is from 8:02 pm - 8:49 pm.

What is missing:

Would like to get the EWR primary for all 360 degrees out to 60 miles from EWR. Also, would like to have the EWR primary data from 8:02pm out to at least 11PM to match the 8/2001 datasets time period.

New York Tracon Data

Newark – EWR

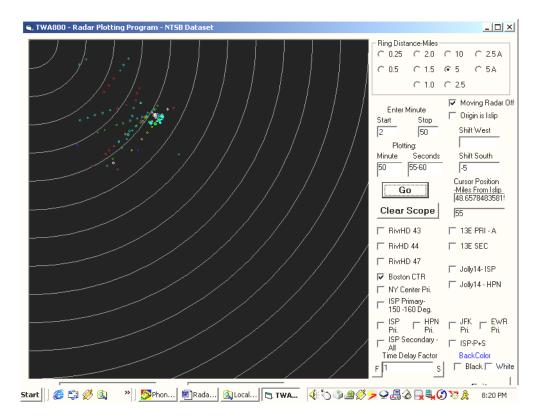
Secondary radar data - No Data in the 8/99 dataset except for TWA800 secondaries from EWR.

What is missing:

Would like to get the EWR secondary for all 360 degrees out to 60 miles. Also, would like to have the EWR secondary data from 8:02pm out to at least 11PM to match the 8/2001 datasets time period.

Boston Center

Primary radar data - plot of entire data set



The Boston Center data is from 8:30 pm – 8:39 pm.

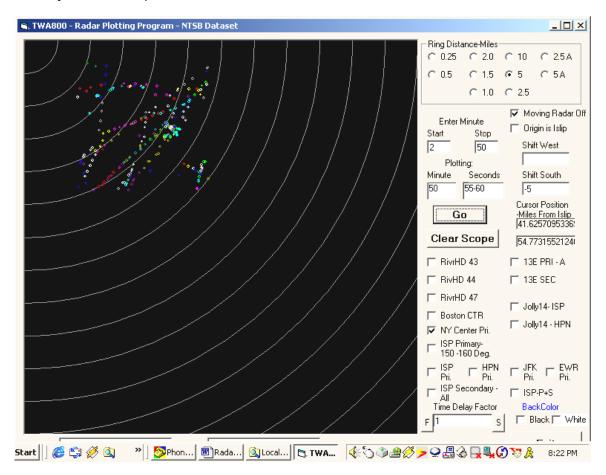
What is missing:

Would like to get the Boston Center primary for all 360 degrees out to 150 miles from Boston Center.

Also, would like to have the Boston Center primary data from 8:02pm out to at least 11PM to match the 8/2001 datasets time period.

New York Center

Primary radar data - plot of entire data set



The New York Center data is from 8:20 pm - 8:39 pm.

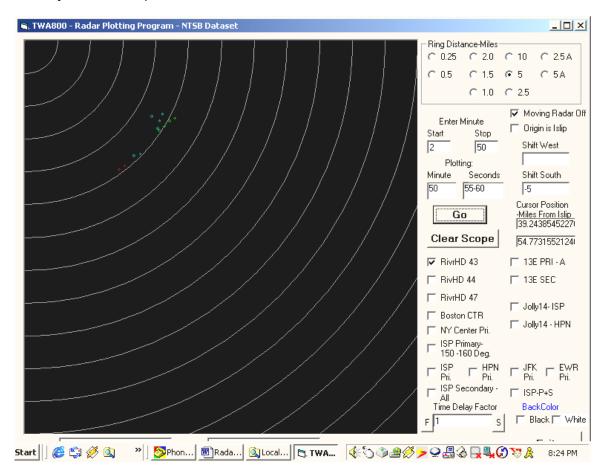
What is missing:

Would like to get the New York Center primary for all 360 degrees out to 150 miles from New York Center.

Also, would like to have the New York Center primary data from 8:02pm out to at least 11PM to match the 8/2001 datasets time period.

Riverhead 43

Primary radar data - plot of entire data set



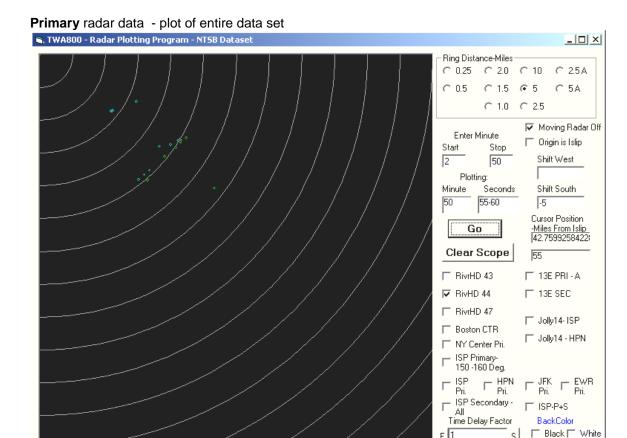
The Riverhead 43 data is from 8:30 pm – 8:32 pm.

What is missing:

Would like to get the Riverhead 43 primary for all 360 degrees out to 60 miles from Riverhead.

Also, would like to have the Riverhead 43 primary data from 8:02pm out to at least 11PM to match the 8/2001 datasets time period.

Riverhead 44



The Riverhead 44 data is from 8:30 pm – 8:32 pm.

What is missing:

Start 📗 🏉 🖏

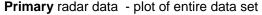
Would like to get the Riverhead 44 primary for all 360 degrees out to 60 miles from Riverhead.

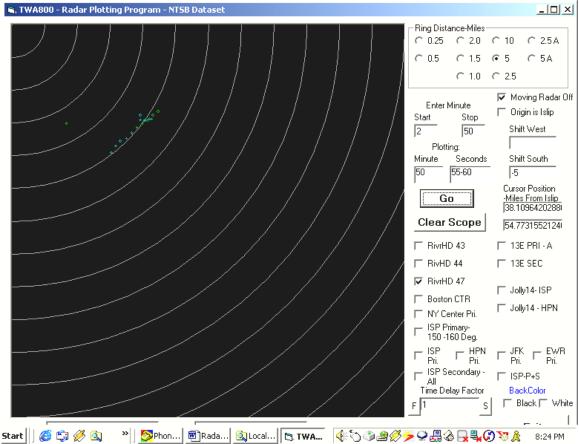
Also, would like to have the Riverhead 44 primary data from 8:02pm out to at least 11PM to match the 8/2001 datasets time period.

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Riverhead 47





The Riverhead 47 data is from 8:30 pm – 8:32 pm.

What is missing:

Would like to get the Riverhead 47 primary for all 360 degrees out to 60 miles from Riverhead.

Also, would like to have the Riverhead 47 primary data from 8:02pm out to at least 11PM to match the 8/2001 datasets time period.