

# Research & Examination of Convection Operationally with Real-time Data by Students (RECORDS) for Prediction in New Jersey



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## Purpose

- o Determine Convective Initiation
- o Identify Patterns & Coverage
- o Movement, Intensity, Duration

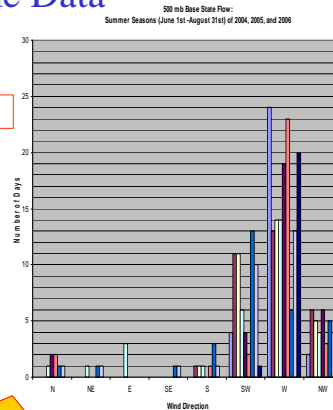
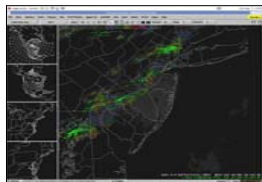
### Methods:

**Data Collection Guide** developed to categorize websites and data folders for online archival process and analysis.

**Bookmarks** to simplify the data collection process, this was to insure continuity throughout the data that was collected.

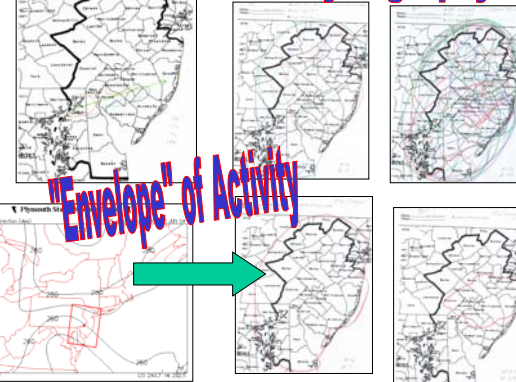
**Data Inventory** for classification and analysis of null, contaminated, & events.

NWS-PHI: County Warning Area (CWA)



**CWA**

**Relation to Flow & Physiography**



Frequency Distribution			
	June	July	August
Event	8	5	1
Contaminated	0	1	0
Null	8	11	3

Base State Flow at 500mb								
	N	NE	E	SE	S	SW	W	NW
June	1	1	0	1	1	9	3	5
July	1	1	0	1	1	10	10	2
August	0	0	0	0	0	0	3	1

**Data Collection**  
12, 15, 18, 21, 00 UTC

AWIPS: Lighting Data (+/- cloud to ground strikes)

Method 2: Wind Speed and Direction Data (1000, 925, 850, 700 and 500 mb)

o Base State Flow to assess synoptic regime role in initiation, development, movement, coverage, behaviors, and possible severity

o Flow at surface, 925, 850, 700, 500, 300, 200 mb levels

**= Results**

**Null – Contaminated - Event**

