



NISAC Chemical Infrastructure Analysis

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Chemical Infrastructure Analysis Capability

NISAC is developing chemical infrastructure analysis to assist DHS with

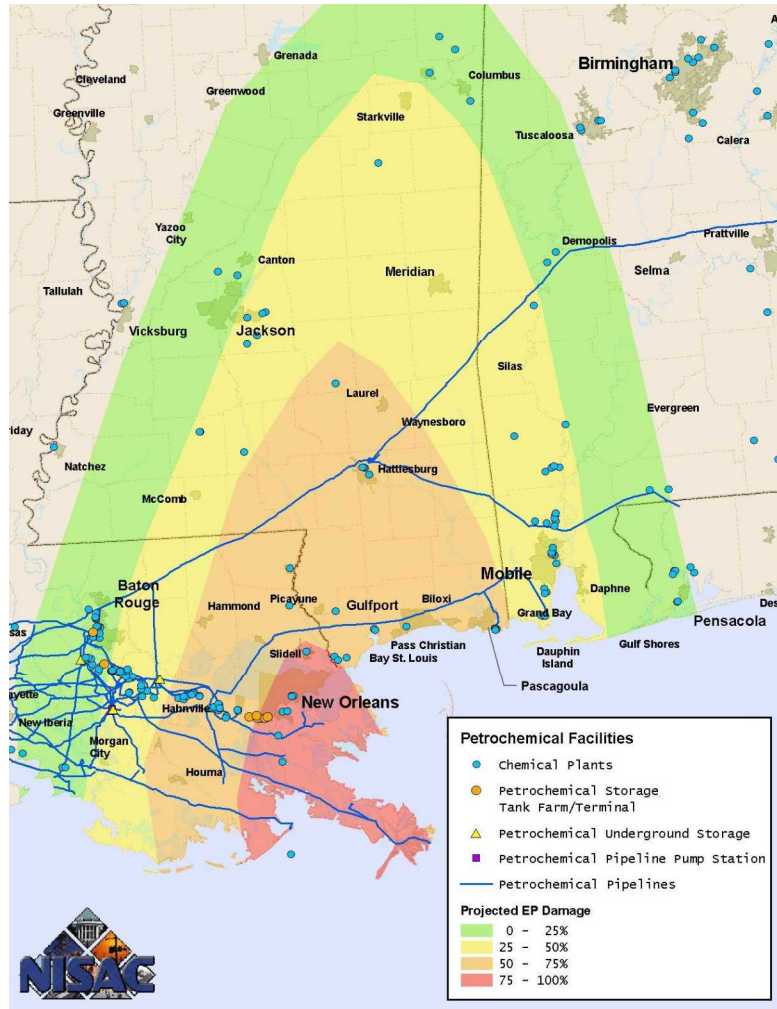
- Asset Prioritization
 - Provide definition of economically critical for the chemical sector
- Consequence Analysis
 - Provide capability for consequence analysis from national, regional, and facility perspectives from disruptions of the chemical sector and/or interdependent infrastructures
- Policy Analysis
 - Provide capability to analyze consequences of policy decisions at the sector and sub-sector level.

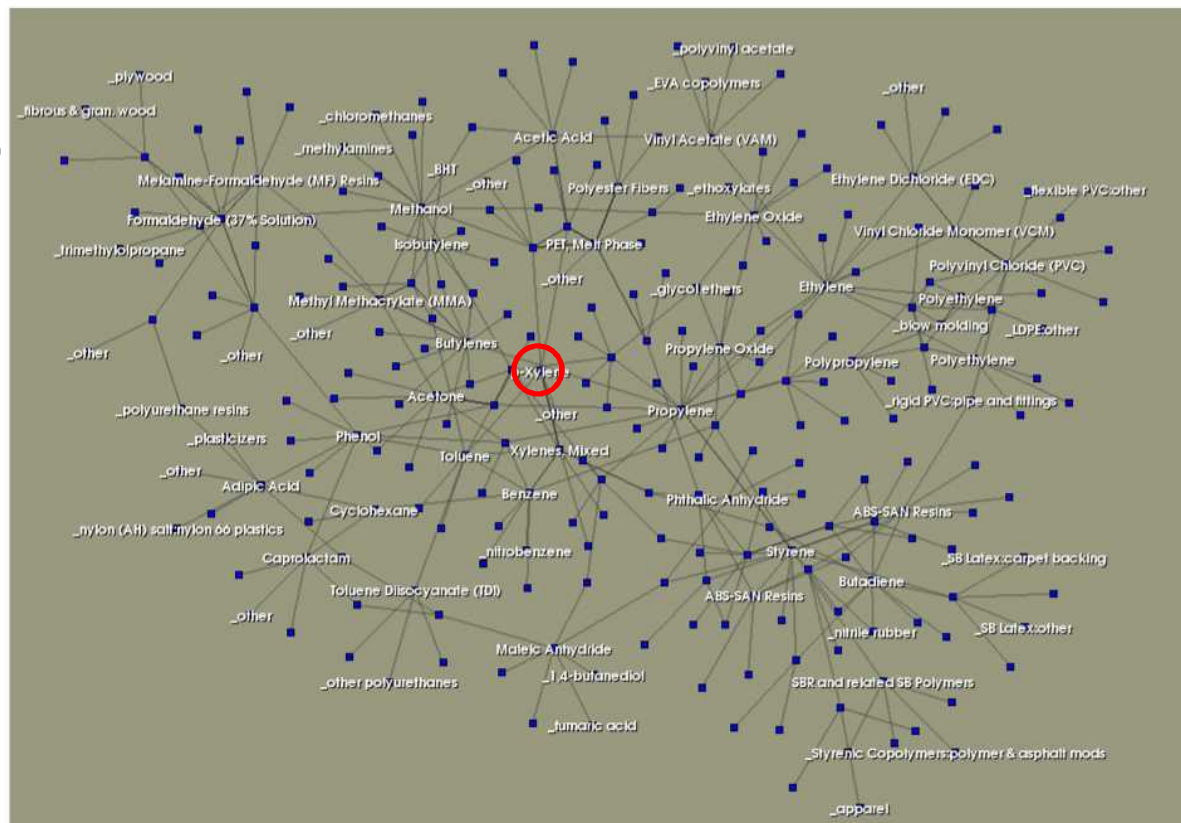
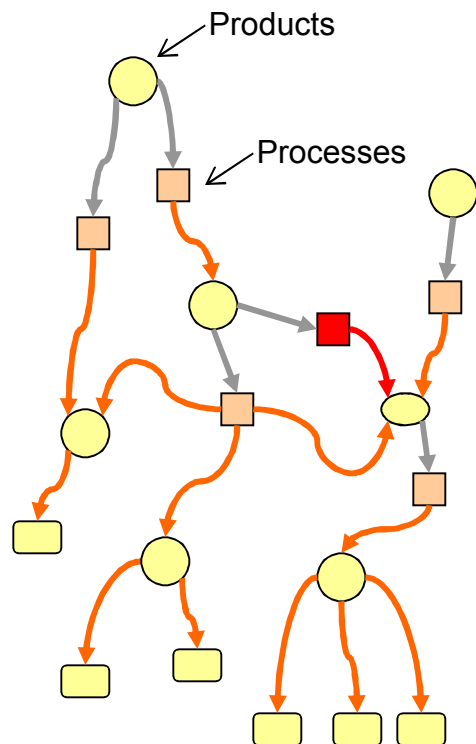


Consequence Analysis

Q: How far does a hurricane reach?

A: Depends on the reach of the supply chain



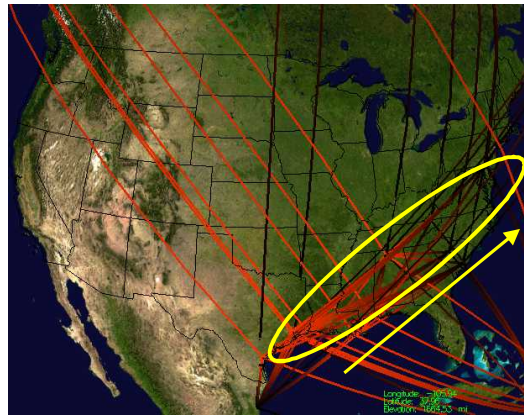


Multiple network representations: Products to Products, Processes to Processes, Combined

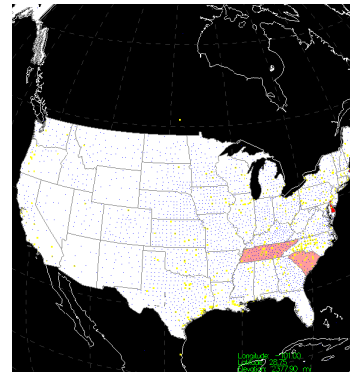


The Supply Chain Implications

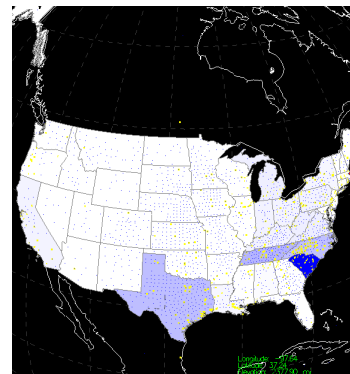
- Chemicals depend on chemicals
 - p-xylene→DMT→polyethylene resins →packaging materials



p-xylene market



DMT supply



DMT demand



The Results

