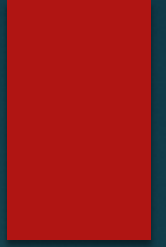


From Butterflies to Fukushima

A SHORT HISTORY OF THE
INTERAGENCY MODELING AND
ATMOSPHERIC ADVISORY
CENTER 2002 - 2012

Overview



- ▶ Background
- ▶ Why is there an IMAAC
- ▶ What is an IMAAC
- ▶ How did it work
- ▶ Did it Work

Background

- ▶ The Impetus - TOPOFF 2 and the creation of the Butterfly
- ▶ Homeland Security Council directive

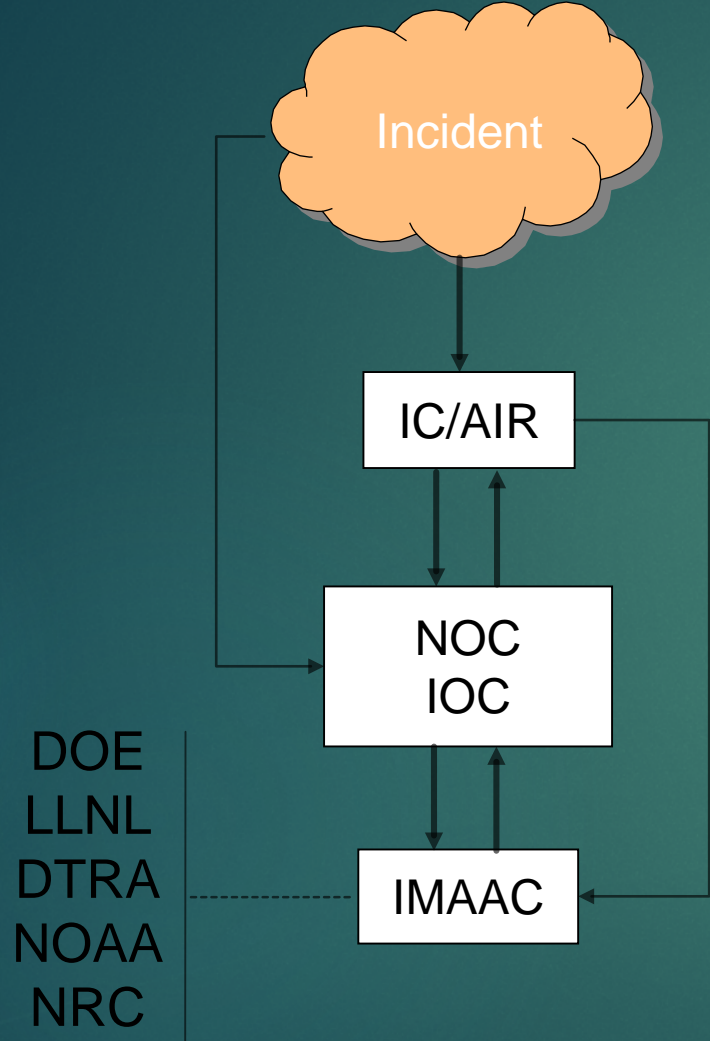
Why is there an IMAAC

- ▶ Multiple Federal models
- ▶ Lack of a coordinated Federal response plan
- ▶ Support to first responders

What IS AN IMAAC

- ▶ “Single Federal prediction atmospheric dispersion and their consequences utilizing the best available resources [of] the Federal government.”
- ▶ Partnership of 8 Federal agencies
 - ▶ DHS, DOE, DoD, DoC (NOAA), EPA, NRC, NASA, HHS
 - ▶ Led by DHS

How would it work



- ▶ Principals
 - ▶ IC- Incident commander
 - ▶ AIR – Authorized IMAAC requestor
 - ▶ IOC – IMAAC Operations Coordinator
- ▶ Operations concept
 - ▶ Alert
 - ▶ Call - IC, AIR
 - ▶ Situational awareness – IOC
 - ▶ Initial run
 - ▶ Coordinate
 - ▶ Release
 - ▶ Subsequent runs
 - ▶ Hotwash

Concept of OPerations

- ▶ Initial Response
 - ▶ Dispersion model run by LLNL as DOE - National Atmospheric Release Advisory Center (NARAC)
 - ▶ LODI
 - ▶ NWS weather models
 - ▶ Coordinate with NOC
 - ▶ NOC releases
- ▶ Follow-up/subsequent actions
 - ▶ Contact NWS forecast office nearest to incident
 - ▶ Local issues
 - ▶ "Model of the day"
 - ▶ Rerun dispersion model as necessary

Issues/MAturation

- ▶ Fed vs. State/Local/Tribal
- ▶ Triggers
- ▶ Lanes
- ▶ Turn around
- ▶ Distribution/Use
- ▶ Permanent IMAAC
 - ▶ Interagency study
 - ▶ Verification & Validation



Did it work?