

Progress in Ground-based Dissemination

ADDS

TMU Weather Needs

Volcanic Ash Coordination Tool

Advanced Convective Tool

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FPAW Forum

22 October 2002



**Forecast
Systems
Laboratory**



Boulder, Colorado

ADDS

Funded by: FAA Aviation
Weather Research Program



Built by: FAA PDT for Aviation Forecasts
and Quality Assessment



NCAR



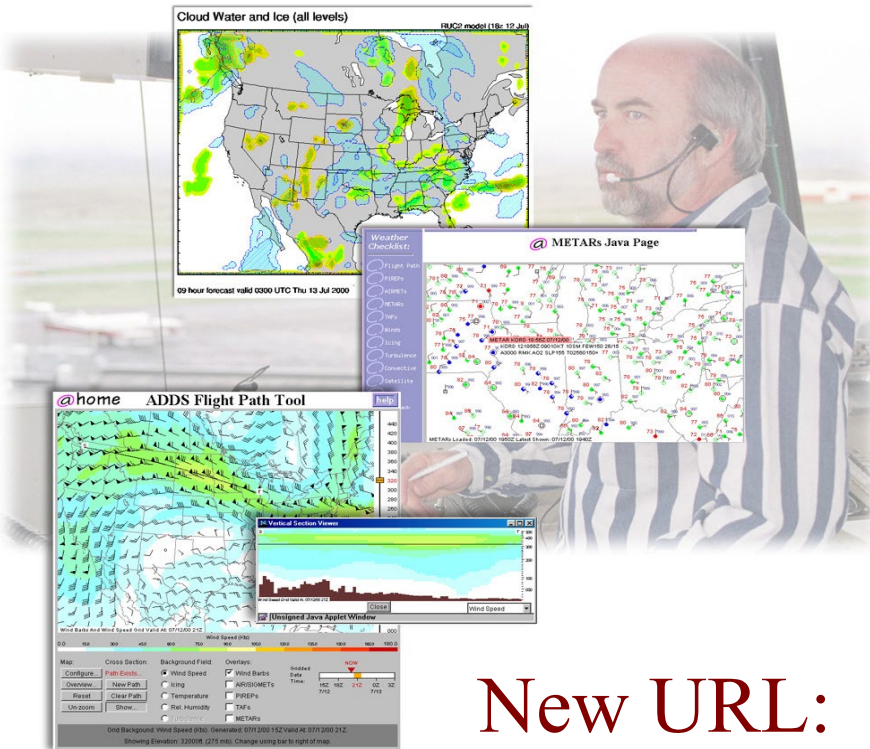
**Forecast
Systems
Laboratory**



Boulder, Colorado



No matter how much utility ADDS has to aviation operations.....



.....our job will not be done until ADDS is “owned” by NWS and supported 24/7

New URL: adds.aviationweather.gov

ADDS Ops Implementation

Top priority for FY 03

Target Date: July 2003

Agreement with NWS calls for *ops* & *exp* versions

Ops Version of ADDS

Supported 24/7 by AWC

All functions and “look and feel” of current ADDS
--but no *exp* products

Conforms to FAA criteria for Internet providers

Enhancements may require formal notice

Exp Version of ADDS

Supported 8/5 by AF&QA PDT

Has all that ops version has--enables comparing exp products with ops products

Not required to conform to FAA Internet criteria

Has *exp* products and viewing tools

Enhancements announced via home page

Recent Comments

“ADD5 is an example of government at its best.”

“Frankly, I thought I’d never say this about any Web service from the government. The Java tools are incredible. I am completely stunned.”

Tailoring and Evaluating Advanced Convective Products for FAA Traffic Managers



Decision-Based Weather Needs for
Air Route Traffic Control Center
Traffic Management Unit

November 1999

Our work responds to
requirements based on
identified *needs*

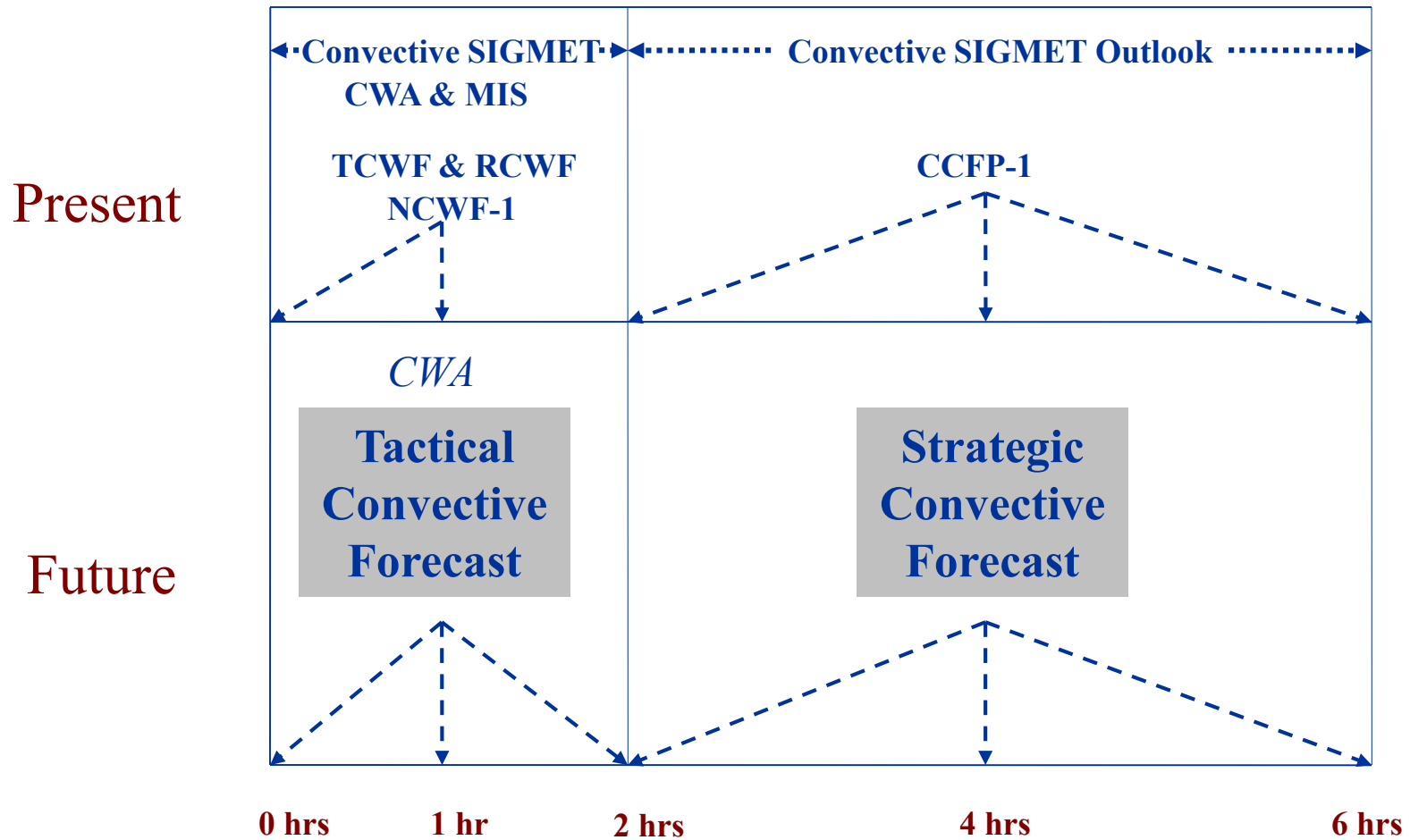
Objectives

Tailor (from existing products & research)
graphics that support *strategic* decisions

Consolidate critical information from *automated*
and *human-generated* forecasts

Assess met validity and ops utility via RTVS

High-level Goal



Volcanic Ash Coordination Tool: Test/Evaluate for Alaska



Proposal to FAA

Use FSL's FX-C workstation to enable.....

Anchorage ARTCC CWSU

AAWU Volcanic Ash Advisory Center

Alaska Volcano Observatory

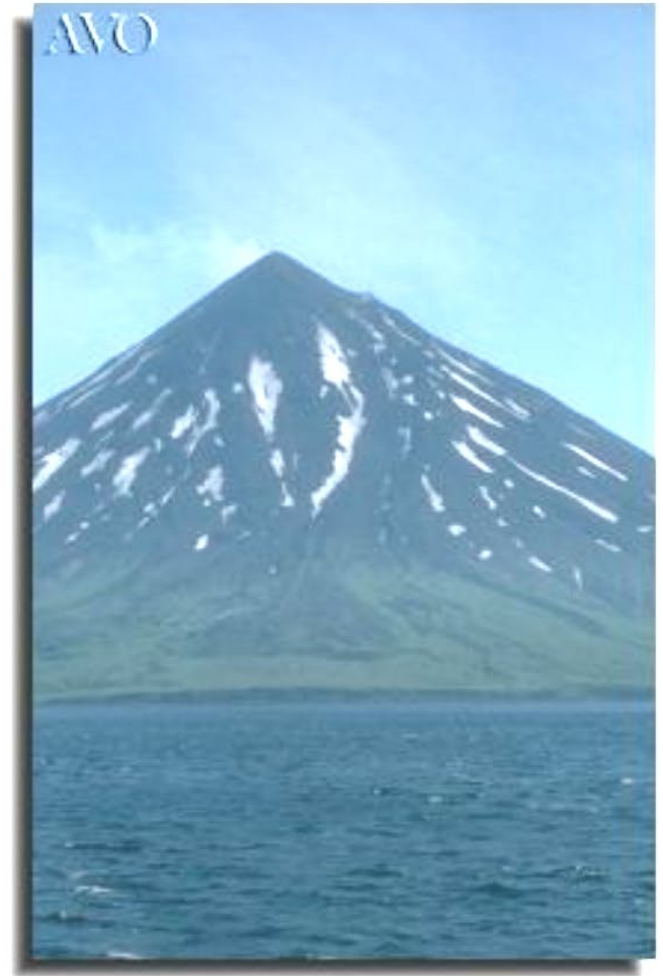
.....to collaborate in real-time (viewing identical data) to generate *time-critical* advisories for ash.

Aviation Operations Problem

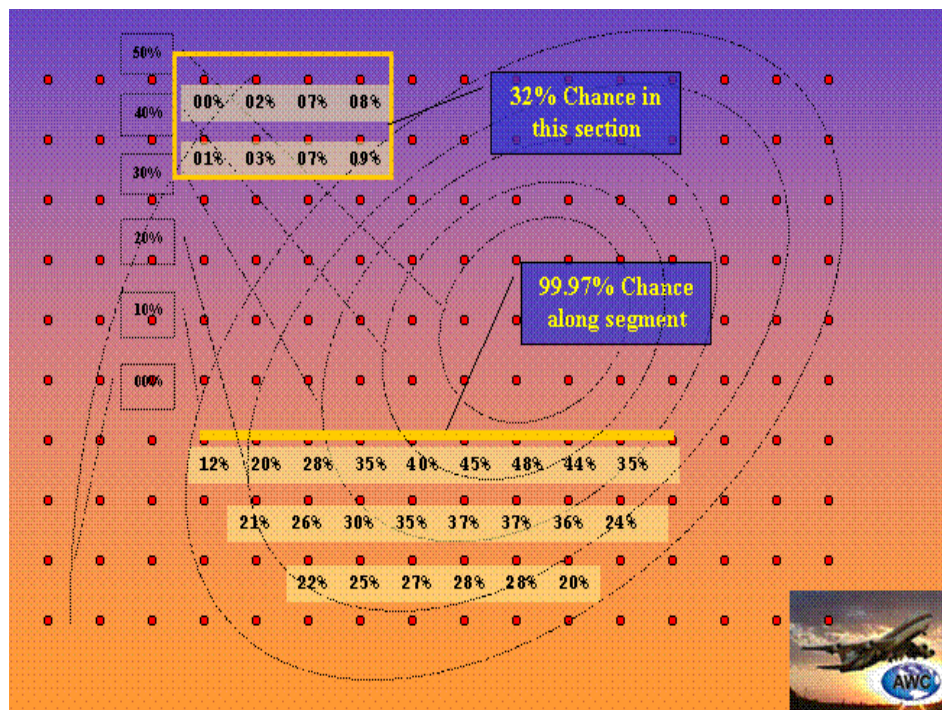
More than 200 flights cross
North Pacific each day.....

.....and 100 active volcanoes
may emit ash in that airspace.

Ash/aircraft = sodium/water



Advanced Convective Tool (ACT)



Explore concepts for AWC to generate 0-6 hr gridded probabilistic convective fcsts based on *automation & forecaster input*.

Explore utility to aviation end users--subjectively and objectively via RTVS.

Advanced Convective Tool (ACT)

Develop/test concepts for AWC to generate 0-6 hr seamless probabilistic gridded fcsts of convection based on *automation & forecaster input*.

Explore utility of probability forecasts to aviation end users--subjectively & objectively via RTVS.

Why Probabilistic Forecasts

Accurate explicit forecasts are not possible now.

Current CCFP has a “probabilistic” component.

Some users want NWS fcsts to include “confidence.”

Enable FAA traffic mgrs (in concert with air carriers) to “manage” risk based on ops costs.