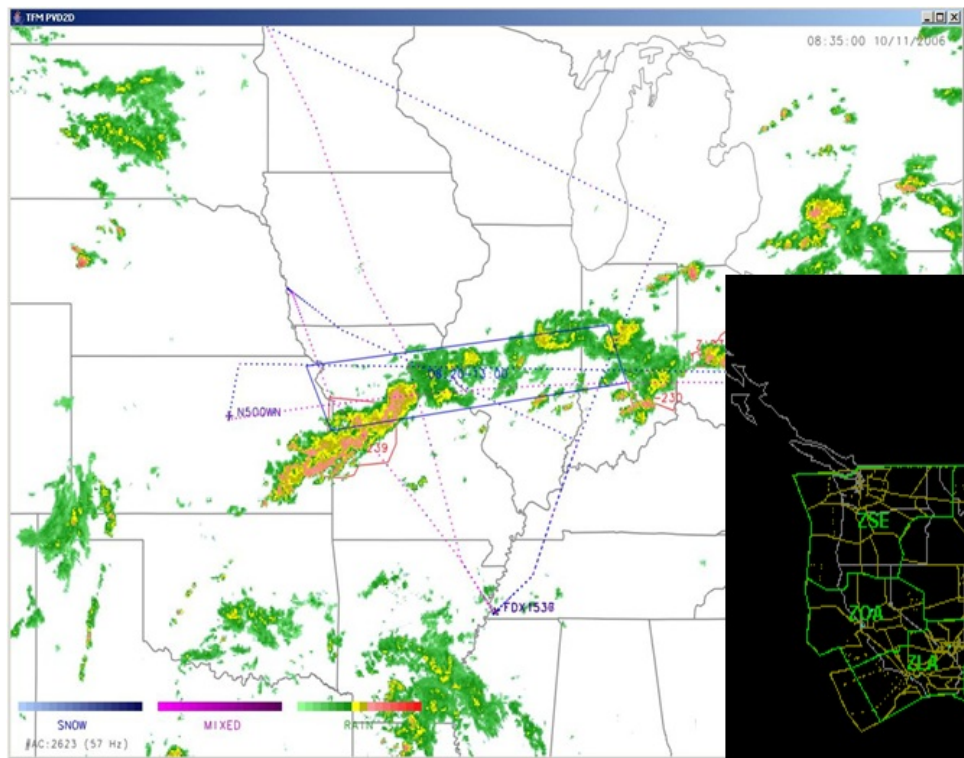
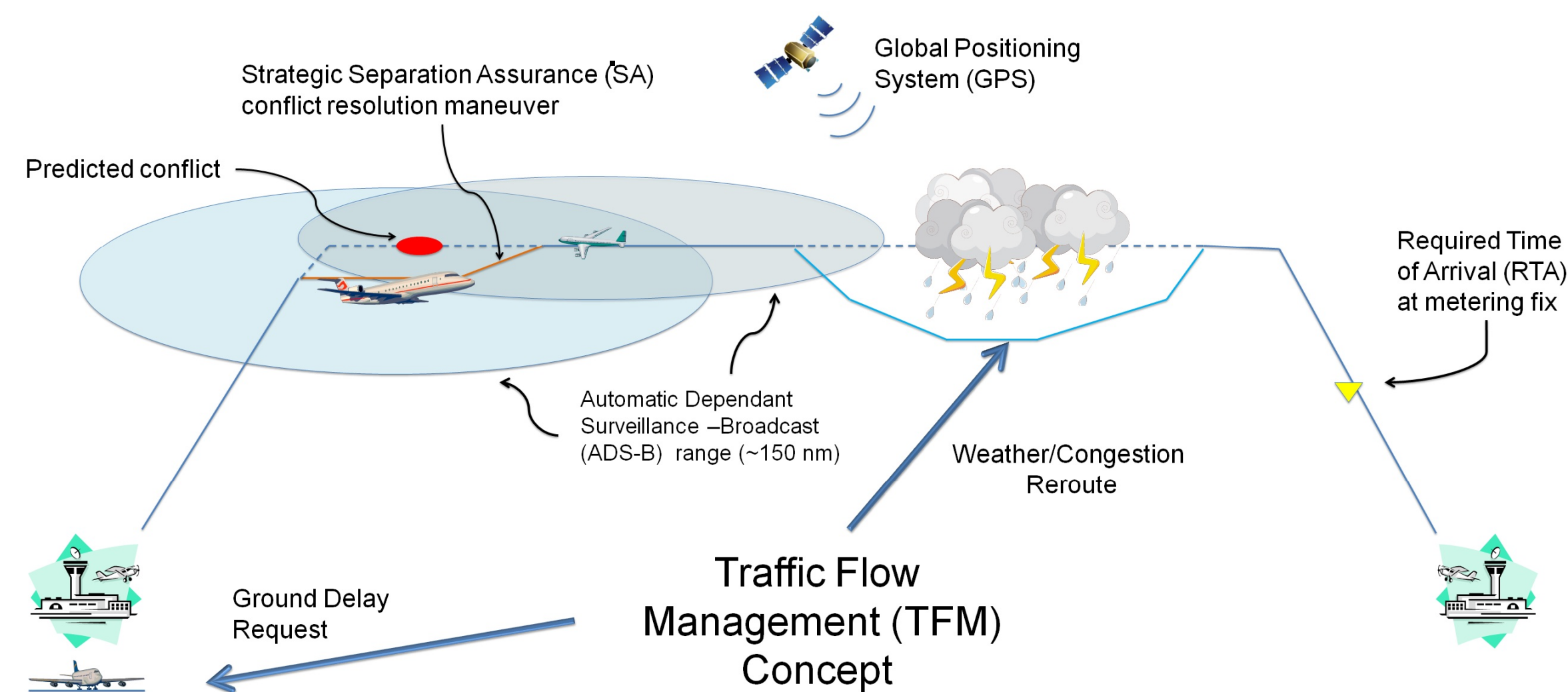
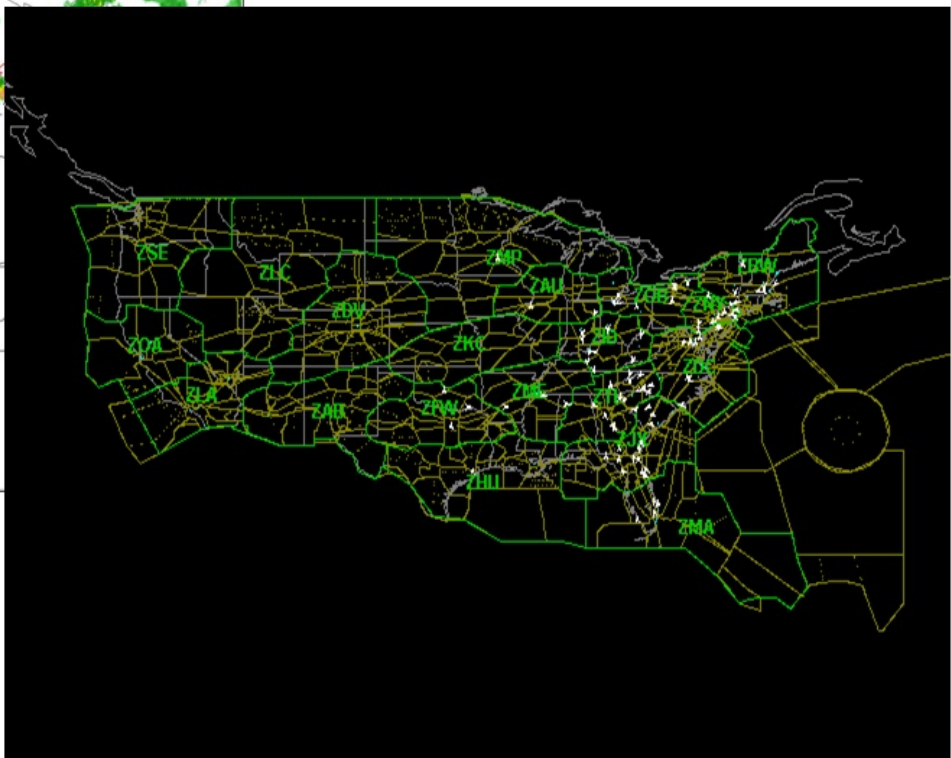


Integration of Strategic Airborne Separation Assurance and Traffic Flow Management Concepts in the National Airspace System



PNP



ACES

Study Background

Separation Assurance (SA) and Traffic Flow Management (TFM) are key enablers for safe and efficient operations in the future National Airspace System (NAS). Integration design studies for these concepts are needed to identify important interactions.

TFM - sequential optimization concepts to manage air traffic flow under uncertainty in airspace capacity and demand.

Strategic Airborne SA - flight-deck-based system that accesses current state and trajectory-intent information via Automatic Dependent Surveillance-Broadcast (ADS-B) from other aircraft within ADS-B range.

Study Objectives

- Demonstrate the integration of TFM and strategic airborne SA within a NAS-wide simulation environment.
- Assess key interactions between TFM and strategic airborne SA under various demand and weather scenarios
- Evaluate the overall system effects of the integrated SA and TFM concepts.

Current Status

Currently conducting preliminary interaction studies using the Probabilistic NAS Platform (PNP) simulation tool. A more detailed Advanced Concept Evaluation System (ACES) follow-on study will be completed by 2QFY12.