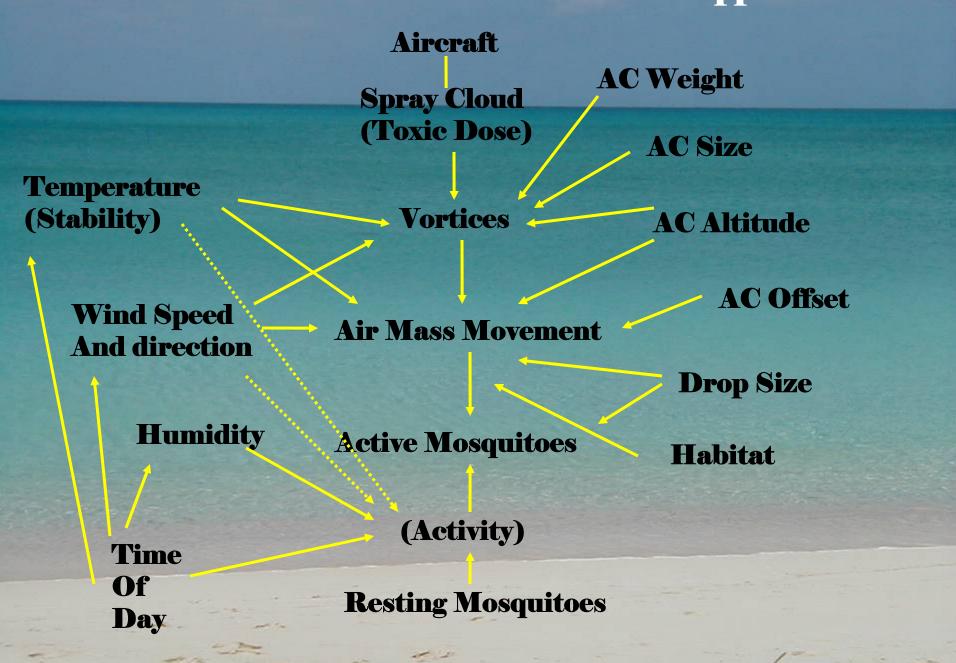
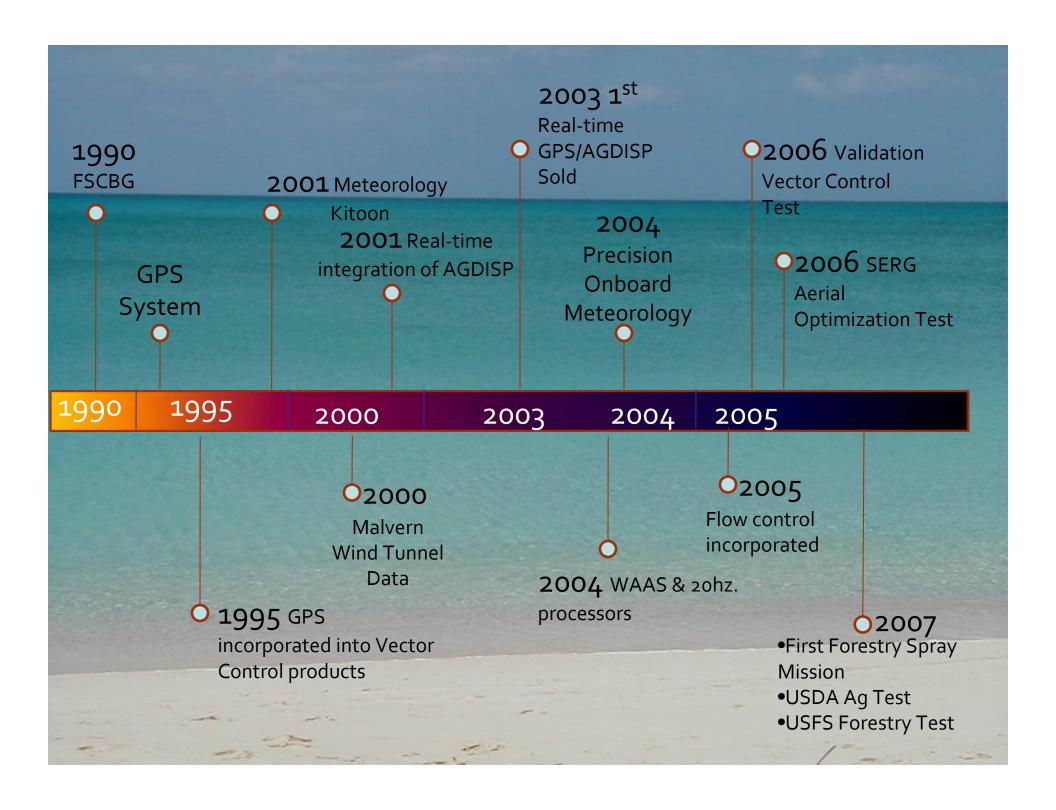


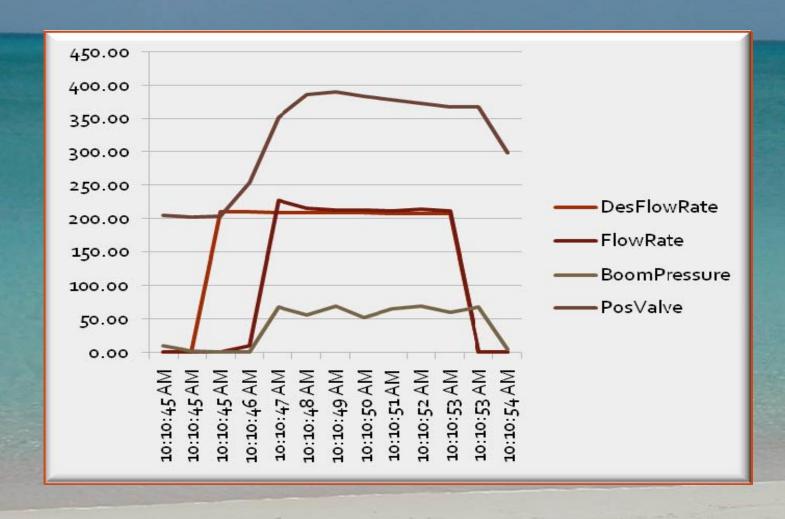
# **Integrated Avionics** Aerial Application Technologies Public Health Forestry Agriculture

## Variables and Interactions in Aerial Application

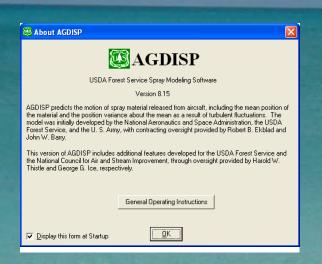


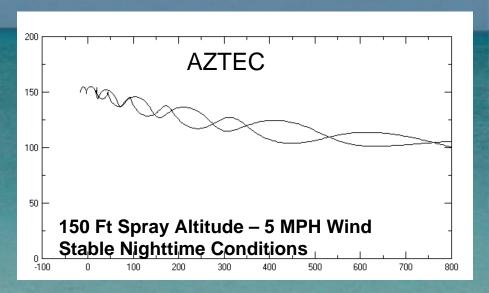


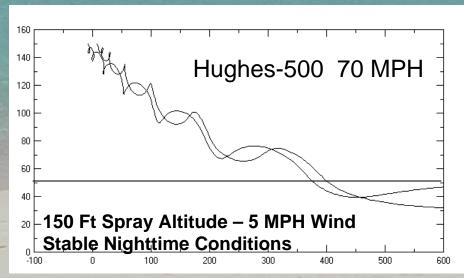
#### **Automated Flow Control**



## AGDISP (AGricultural DISPersal) Model



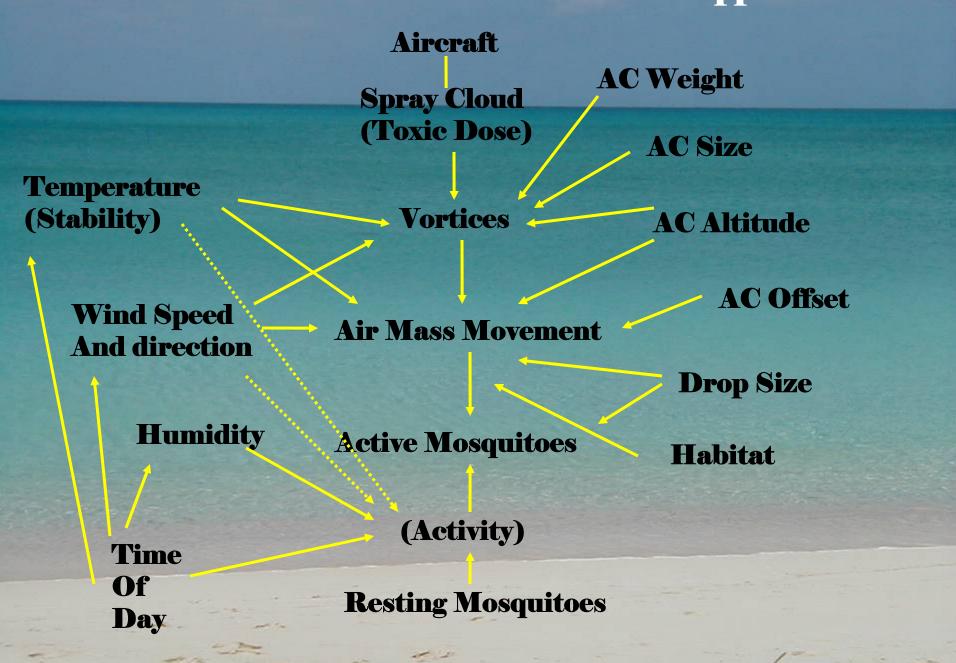




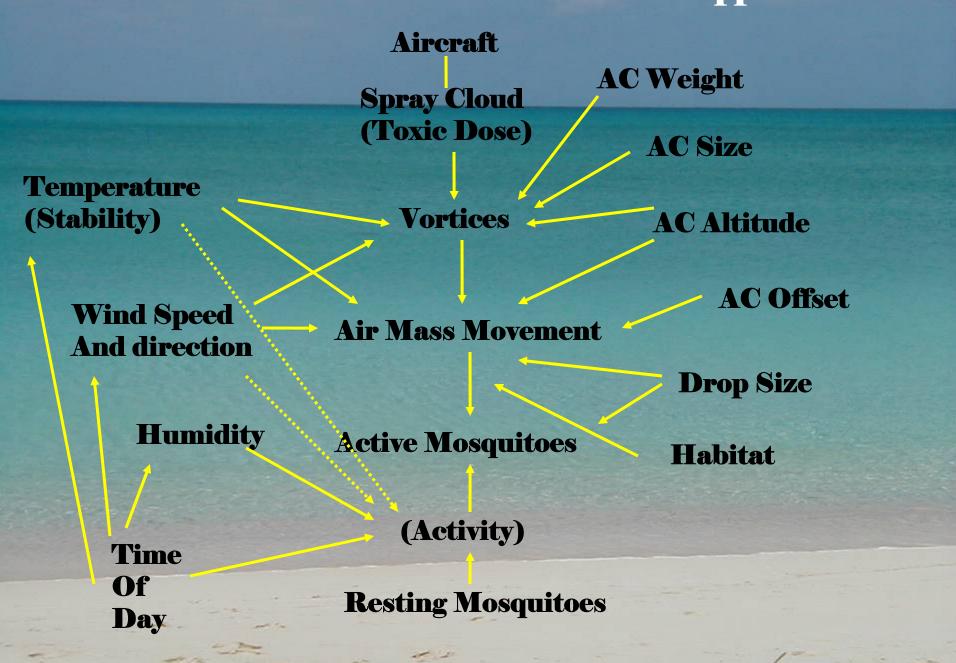
## High-speed precision onboard meteorology

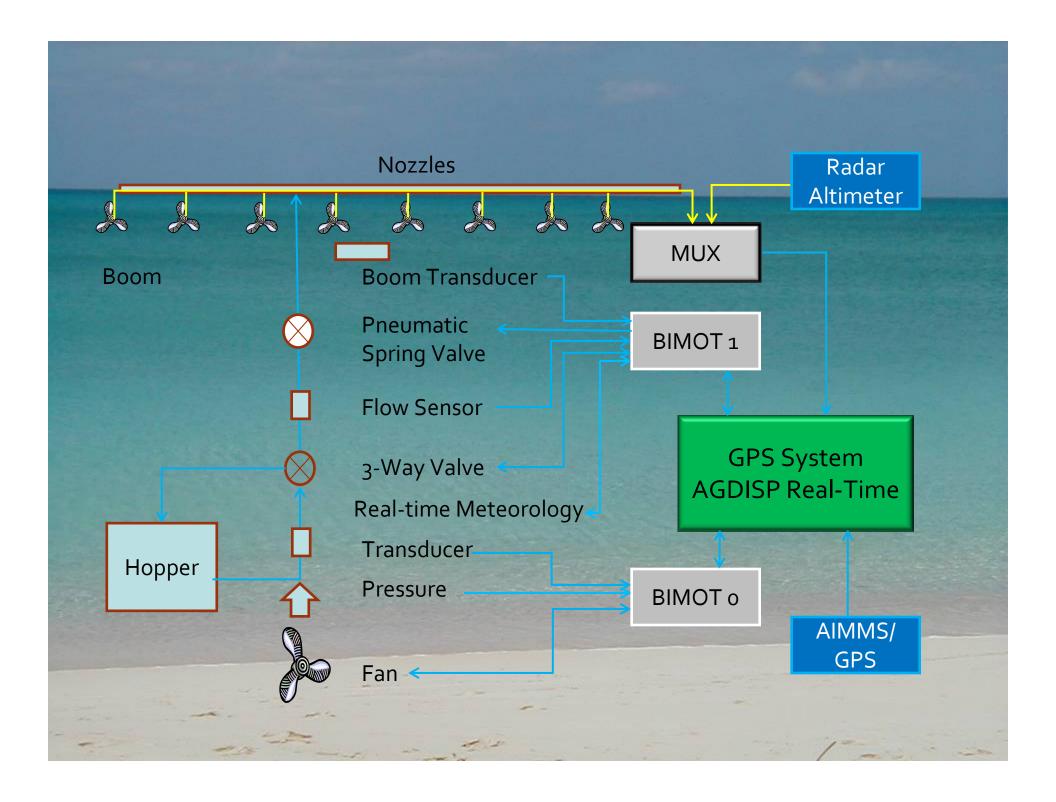


## Variables and Interactions in Aerial Application



## Variables and Interactions in Aerial Application





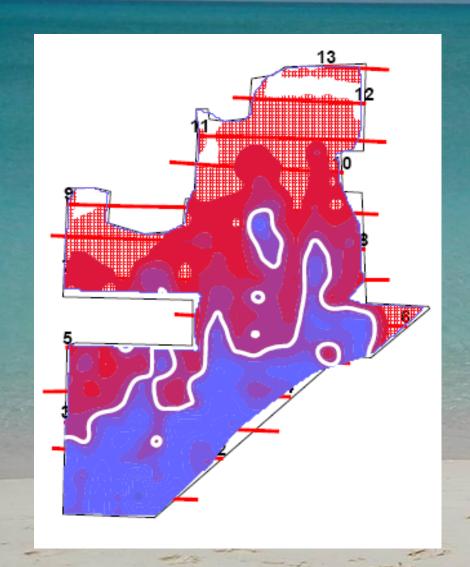


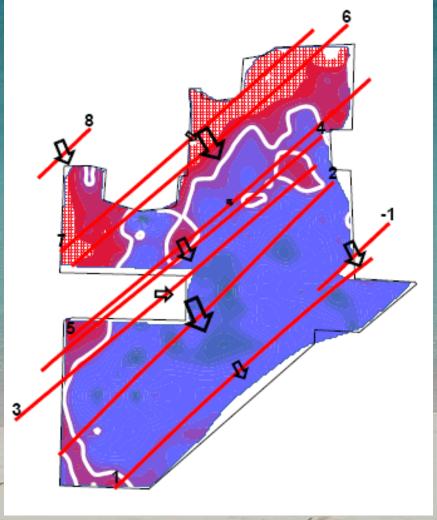
January 31, 2006 a.m.

**Standard Application Method** 

January 31, 2006 p.m.

**Optimized Application Method** 





## **Executive Summary:**

- Optimization strategies offset flight lines show deposit & droplet densities increase up to 2.8 fold
- Droplet densities >20 drops/cm2 would result in high efficacy against spruce budworm
- Improved deposition was achieved using the Wingman GX
- In some instances droplet densities per cm2 were increased by a factor of 10X