

Volcanic Activity  
Impact to American Airlines in  
Caribbean / South America

Atlantic Conference on

**Eyjafjallajökull and Aviation**

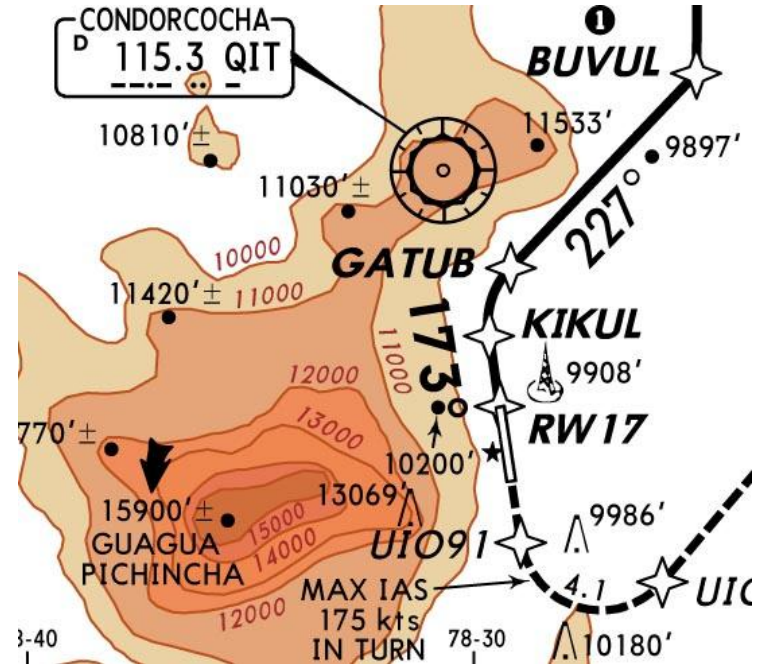
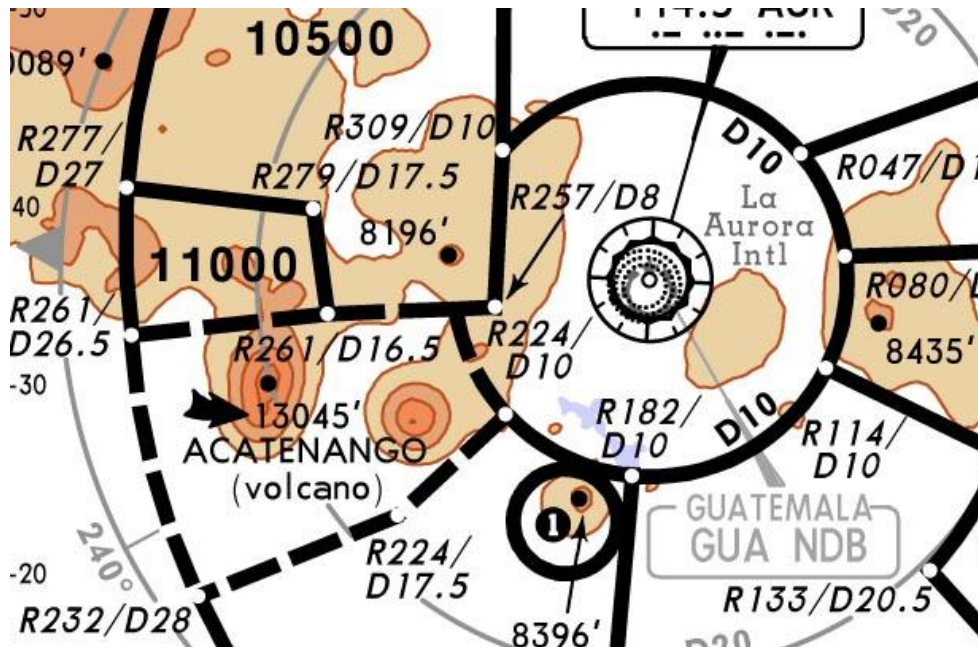
**Captain David A. Strand**

**15 September 2010**

**Keflavik Airport, Iceland**

# Current Activity in Latin America

- Daily Flights into numerous airports e.g. - Guatemala, Quito, Saint Martin, Mexico City with very little impact.



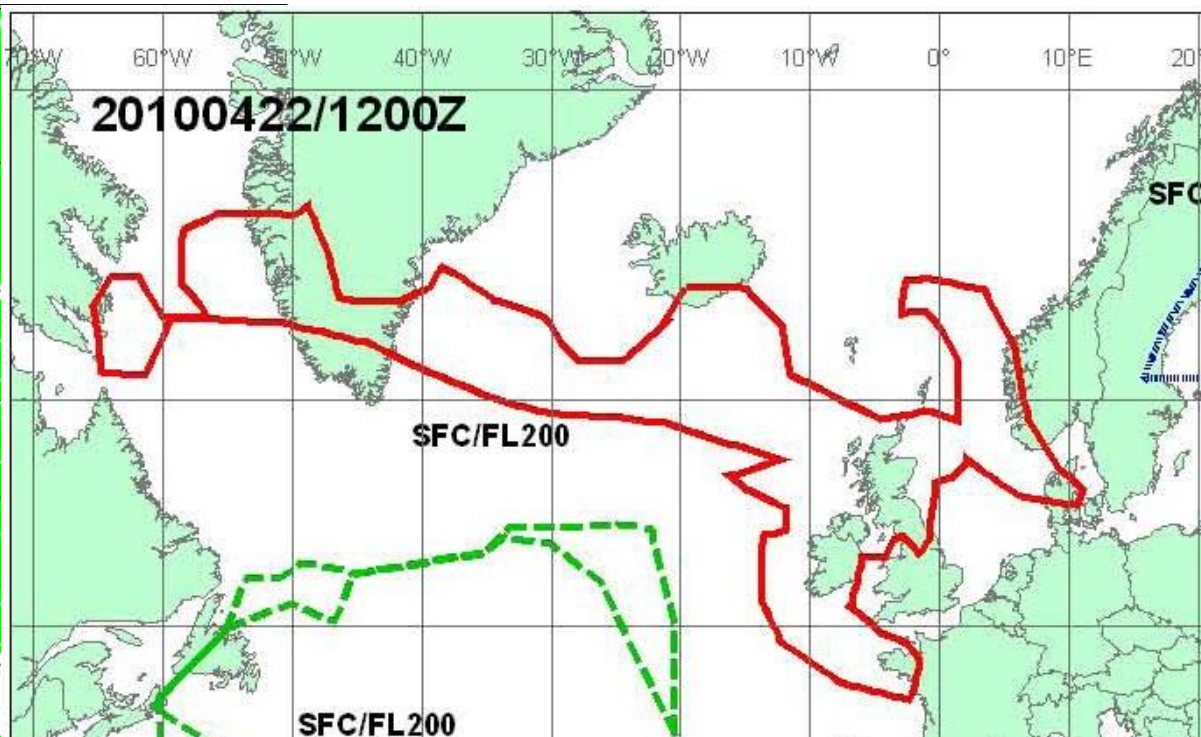
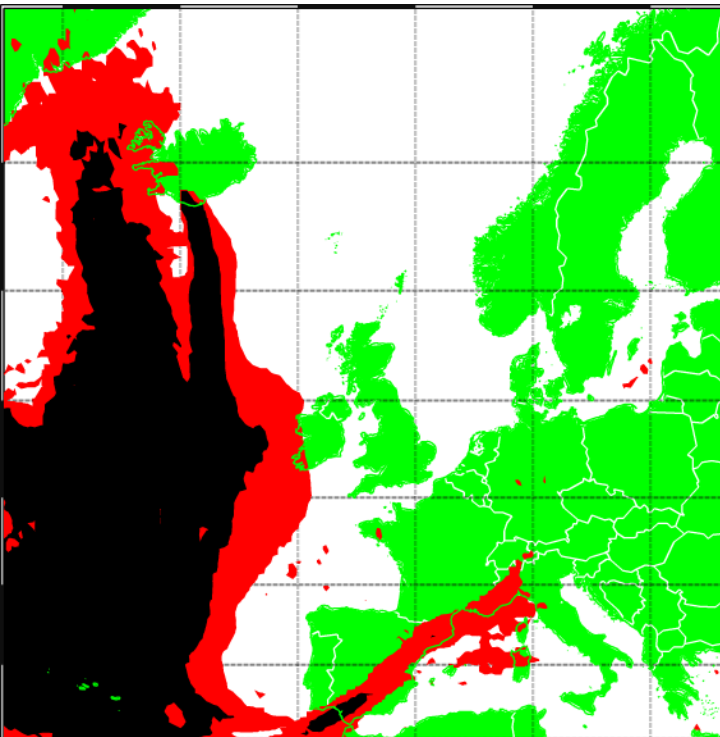
# Contrast to Eyjafjallajökull Event

- AA Alone Had 379 North Atlantic Cancellations during 3 weeks in April/May 2010 Due to Eyjafjallajökull Airspace Closures
- In past 12 months, have had zero cancellations due to enroute issues relative to volcanic ash in remainder of system.
- Some Minor Impact Due to Erroneous Surface Observations (where none is present)
  - E.G. - SJU CLR 7SM VA
- Volcanic Ash is an Atmospheric Hazard, as is Severe Turbulence or Severe Icing.
  - Regulations prohibit planning or operating through areas of known or forecast Severe Turbulence or Icing
  - However, ATC does not separate aircraft from Turbulence or Icing, nor should it from Volcanic Ash.



# Forecast Model Changes Needed

- Better Minimum Concentration Threshold is Required
  - Too Low of Concentration in Dispersion Model Results in Unrealistic Output.
  - How Do You Flight Plan Around These Areas?



# Airport and Aircraft Surface Cleaning Issues During/After an Eruption

- Need More Focus on Issues in Cleaning Airport/Aircraft Surfaces After an Eruption



# Airport and Aircraft Surface Cleaning Issues During/After an Eruption

- Event Earlier this Year in Guatemala With Additional Complication of Rainfall after the Event.
- Cement-like Consistency



# Conclusions

- Improve Forecast Models, Input Data and Operational Use (Multiple/Suite Models)
- More Research on Model Impact with Relation to Type, Size and Ambient Conditions Specific to an Eruption
- Allow Aircraft Planning by Pilot/Operator in accordance with Procedures Approved by it's State of Registry
- Address Issues Concerning Airport Surface/Ramp and Transient Aircraft during/after an Eruption
- Consistent Application of Procedures among ATS Providers
- Volcanic Ash is an Atmospheric Hazard, as is Severe Turbulence or Severe Icing.
  - Regulations prohibit planning or operating through areas of known or forecast Severe Turbulence or Icing
  - However, ATC does not separate aircraft from Turbulence or Icing, nor should it from Volcanic Ash.

Questions?