



Volcanic Ash Collaboration Tool (VACT)

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A Look Back 15 Years Ago...

- During the Redoubt Eruption...satellite data was limited
- Volcanic Ash forecasting was but another duty assigned to the general forecaster
- VAACs ??



Changes Since the Redoubt Eruption

“We’ve come a long way...”

- Huge advances in technology
- Rapid development of the internet
- “World” getting smaller – greater interaction with partners
- Need to rapidly assimilate huge quantities of data and decide upon a single representative solution

VACT

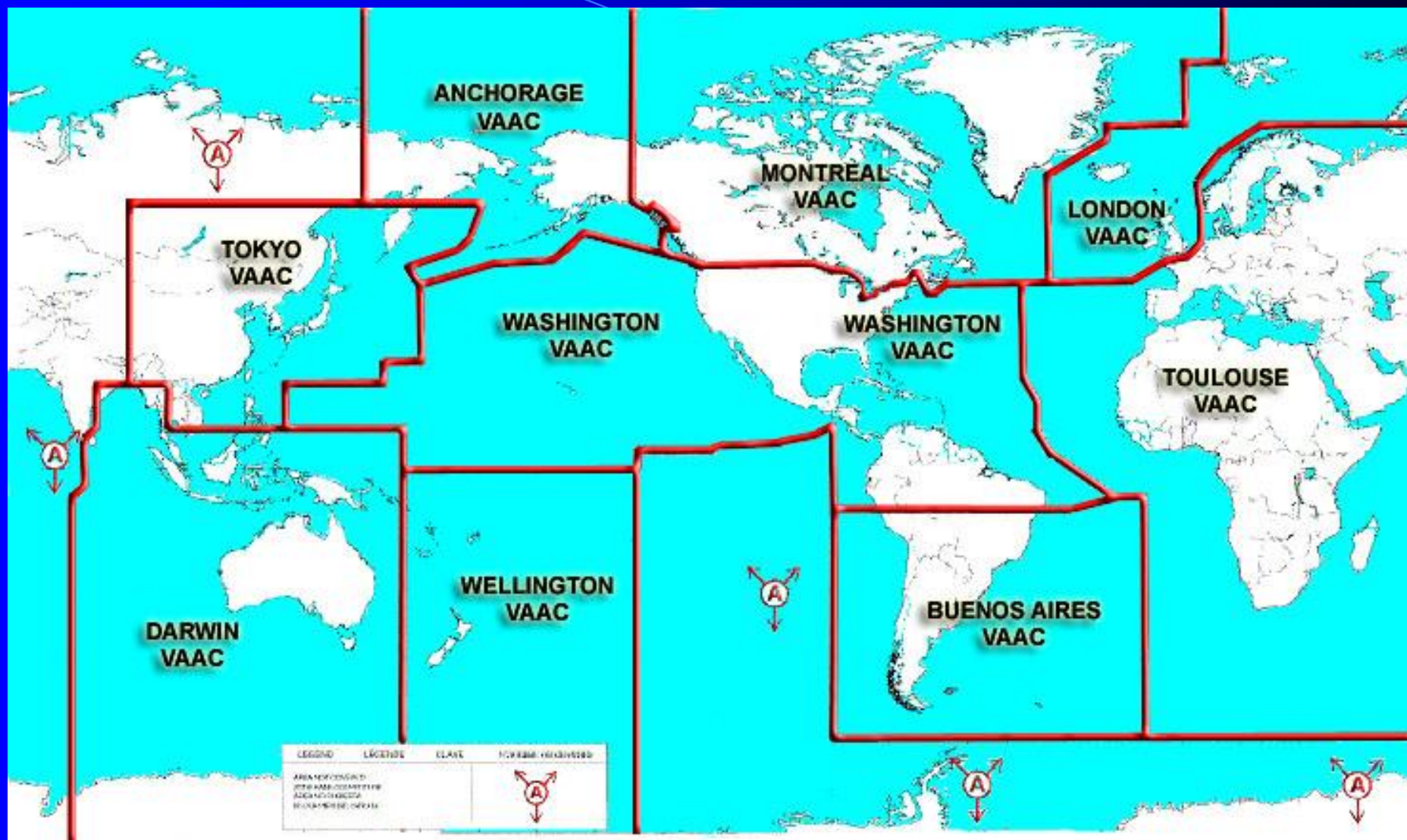
- Relatively inexpensive means to display meteorological data and share that data amongst several users
- Runs on either XP or LINUX platforms
- Can support a number of users (30 users were connected simultaneously in system tests)
- Those interested may view a demo of the VACT!!

Why the need for VACT?

- Excellent “team” in Alaska with the AVO, FAA ARTCC/CWSU, and Anchorage VAAC – good site for development work
- Need to communicate and share data with adjacent VAACs and MWOs
- Be proactive in developing ways to work better with our partners (e.g. Tokyo VAAC, Elizovo MWO, etc.)

VACT

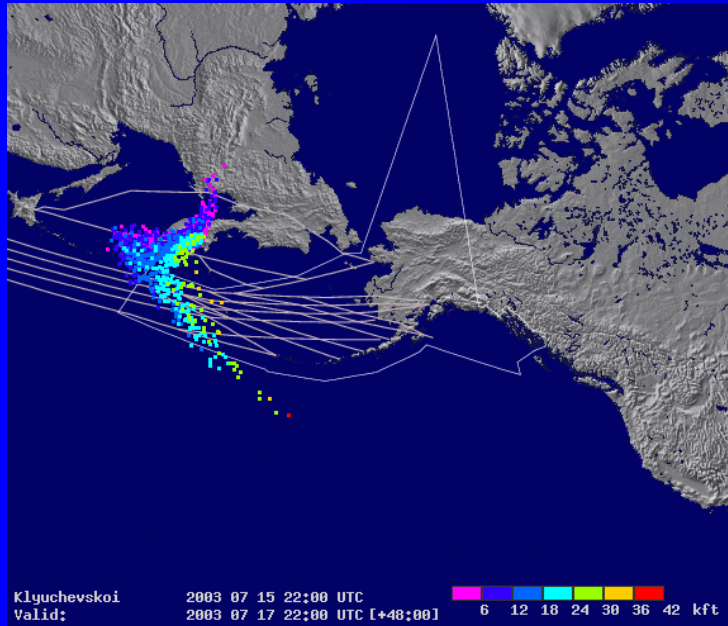
- Shared situational awareness
- Data sharing through NWS AWIPS (operational meteorological workstation), internet, or local database
- Graphical drawing tools
- Chat capability



VAAC Coordination

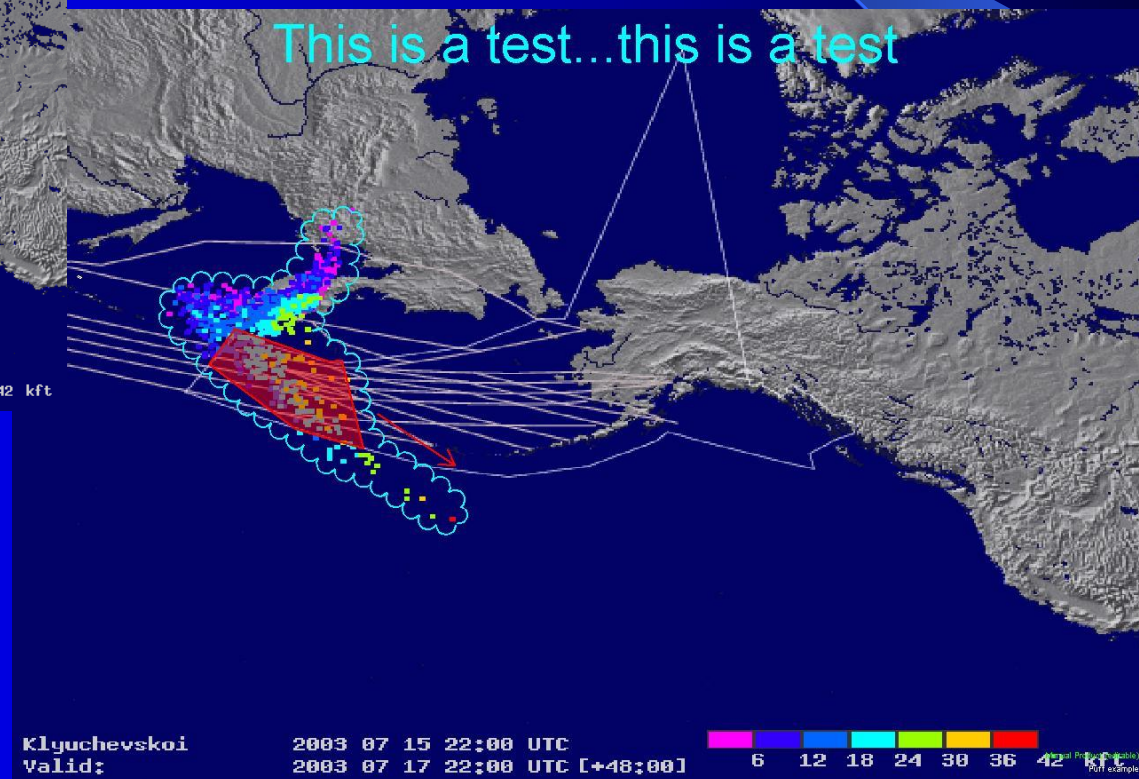
- Future integration of multi-lingual chat capabilities
- Improve VAAC to VAAC hand-off and coordination despite language differences
- Share data between the VAACs
- Gain a better understanding of each others perspective

VACT Capabilities

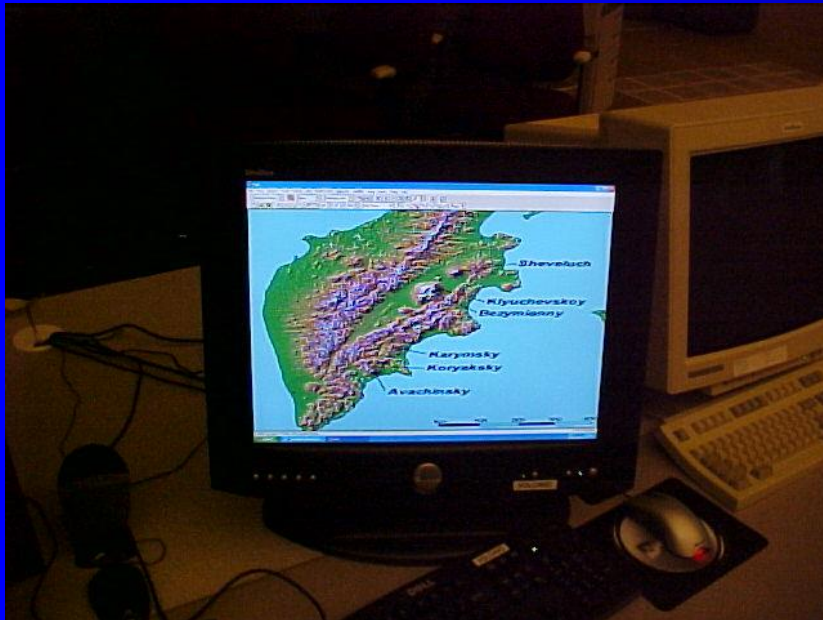


Unmodified

Graphics Enhanced



Data Sharing



Benefits of the VACT

- Beneficial in larger, long-lasting events
- Useful briefing tool
- Archive for case studies
- Post-event analysis



Summary

- Shared situational awareness
- Data sharing
- Briefing/archive capabilities
- Please stop by the NOAA exhibit to see a demo of the VACT!

Thanks

- VACT project funding support through the NWS Aviation Initiative and the FAA Aviation Weather Research Program
- Thanks to our partners who have contributed to the development of the VACT



Forecast Systems Laboratory



National Weather Service - Alaska Region



USGS - Alaska Volcano Observatory