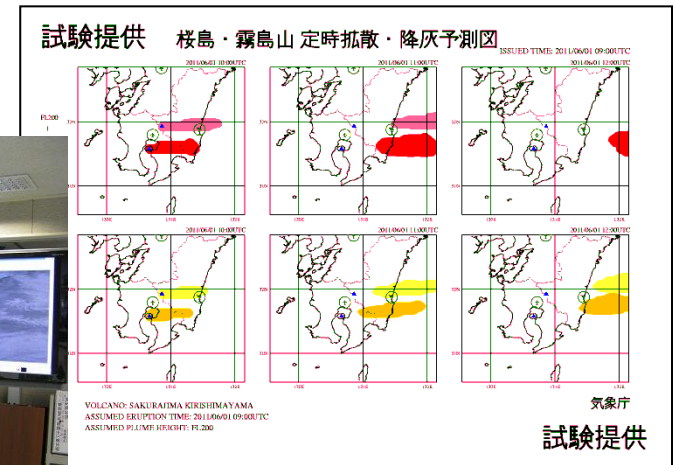


Services & Products of Tokyo VAAC



Jun Ryuzaki

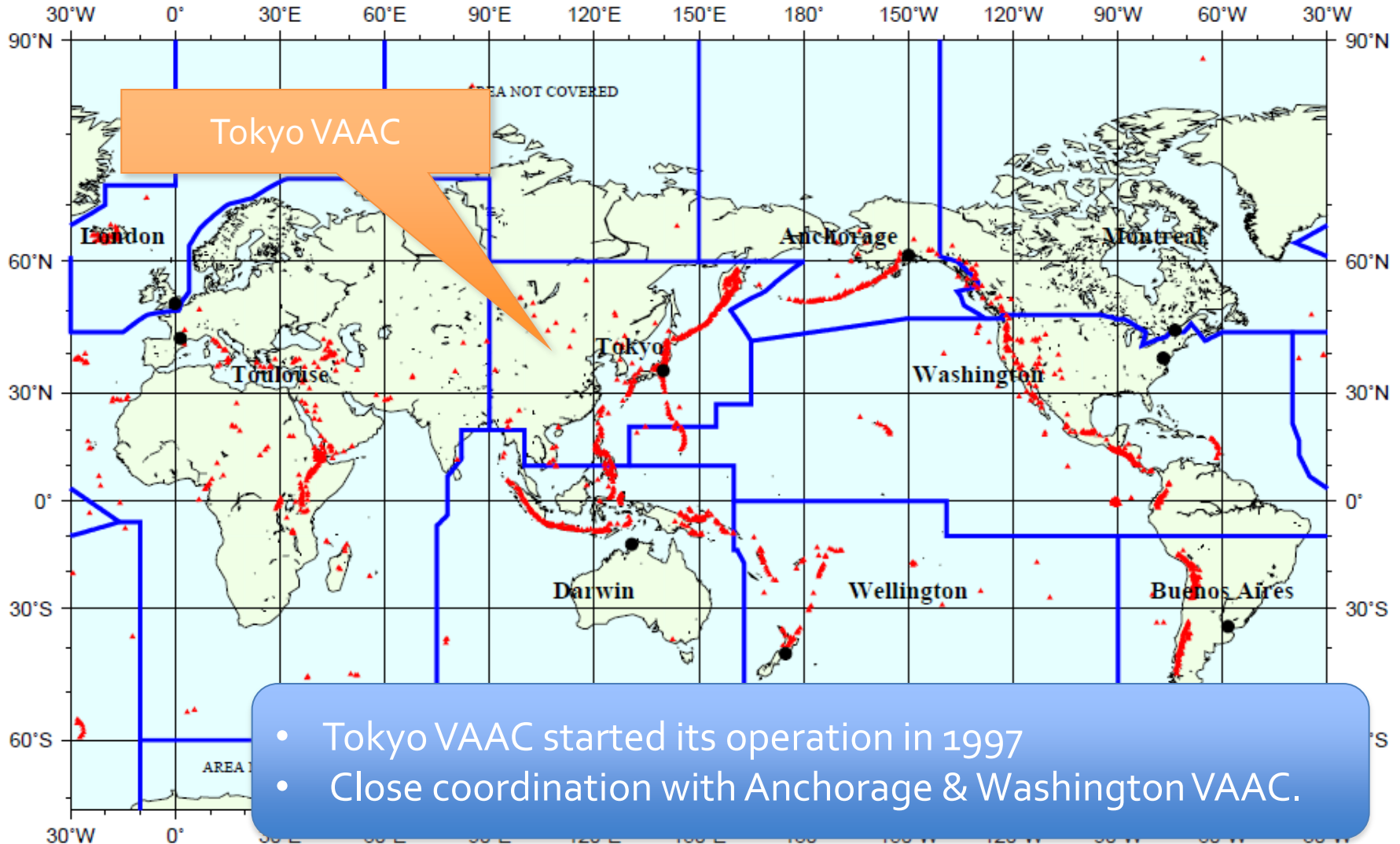
30 October, 2012 FPAW in Orlando
Tokyo Volcanic Ash Advisory Center
Japan Meteorological Agency



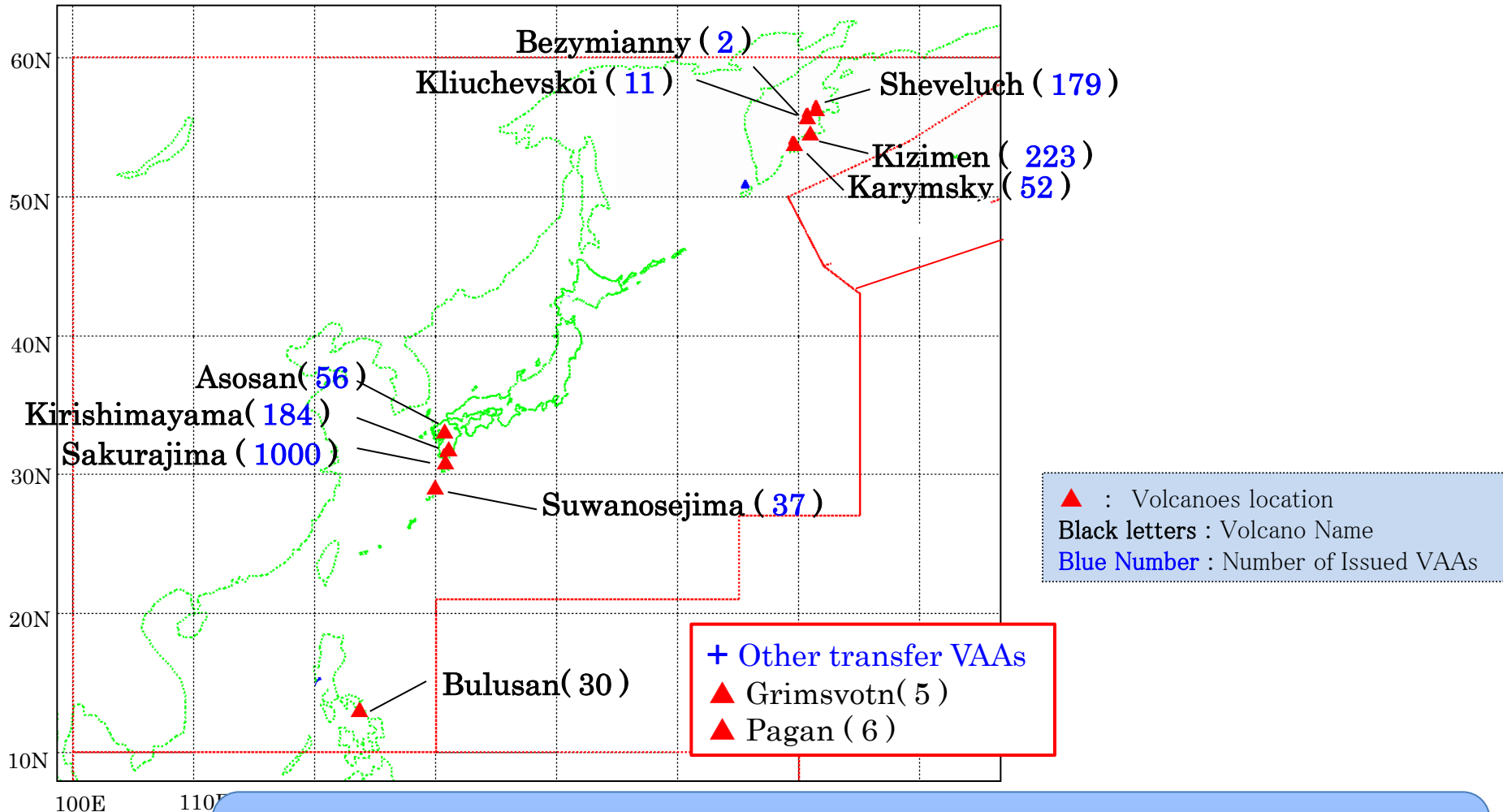
Area of Responsibility



VOLCANIC ASH ADVISORY CENTERS - AREAS OF RESPONSIBILITY



“Busiest” VAAC in the World?



- 1785 VAAs were issued for 12 volcanoes only in 2011.

Operational Efforts of JMA

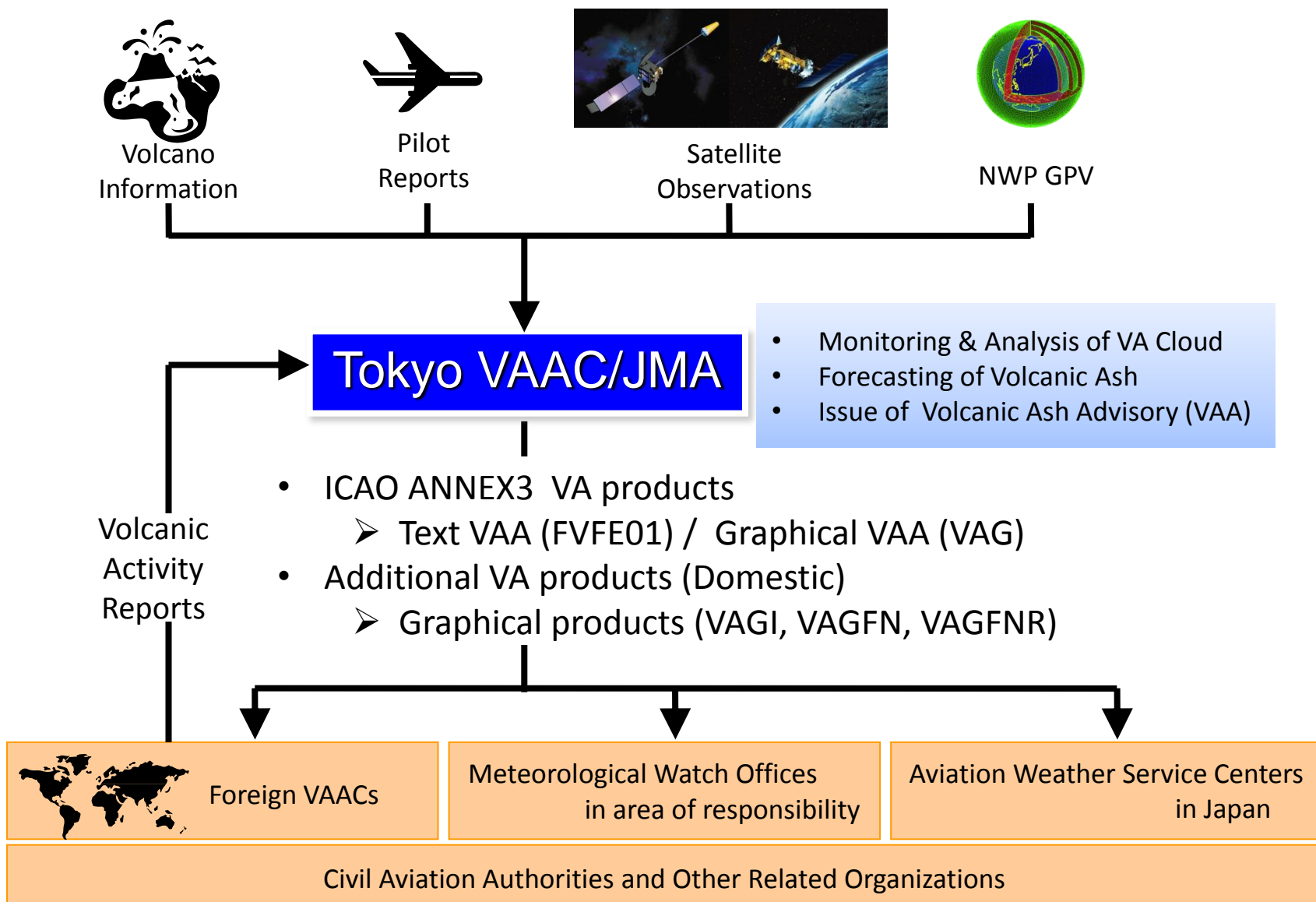


- Dedicated VA forecaster (since 2011)
- Close collaboration with JMA volcanologists
- Semi-Automated operating system with GUI



Tokyo VAAC operations room in Tokyo, JMA HQs

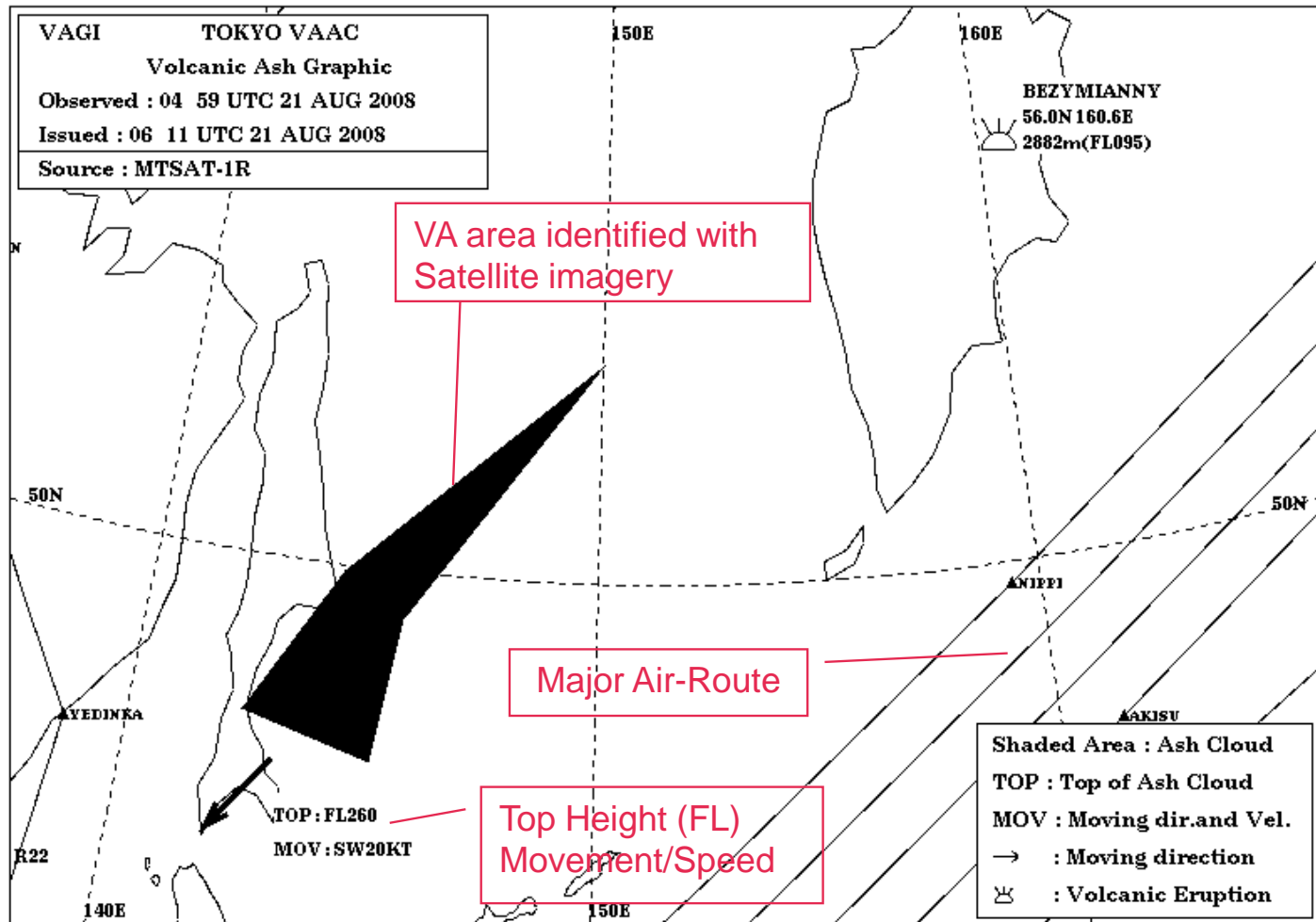
Information Flow of VAA



Additional VA Products (Example)



- Volcanic Ash Graphic Information (VAGI)



INDICATED AIRWAYS ARE FOR REFERENCE ONLY



Experimental VA Product

- “Volcanic Ash Dispersion Chart for Mt. Sakurasima & Mt. Kirishimayama”
 - Assuming Eruption of 2 very active Volcanoes
 - Forecast up to 3 hours later, 3 hourly updated
 - Ash Dispersion and Deposition from the two volcanoes
- Help Air Traffic Controllers, Airline Dispatchers, and Aircraft pilots;
 - Immediate response to mitigate risk of VA encounter
 - Consider possibility of VA fall over airports nearby
- Now under Evaluation by Users
 - Started since 29 July, 2010

Experimental VA Product



試験提供 桜島・霧島山 定時拡散・降灰予測図

Miyazaki Airport

ISSUED TIME: 2011/06/01 09:00UTC

Kagoshima Airport

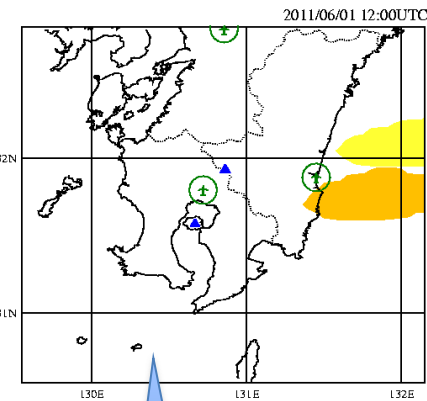
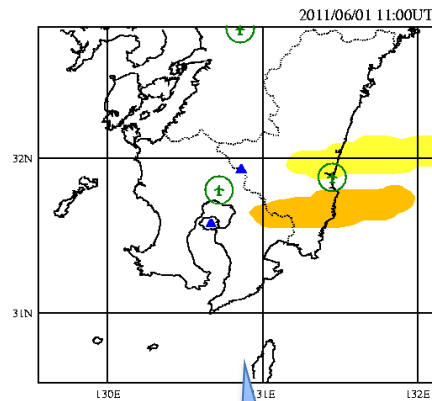
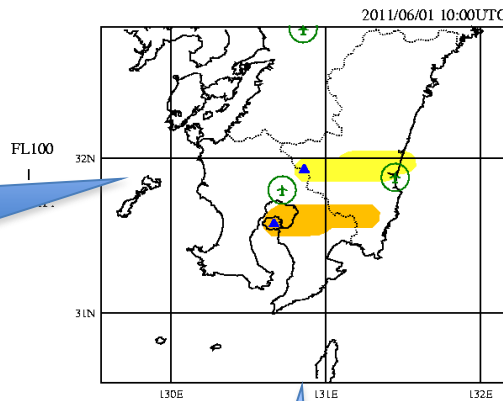
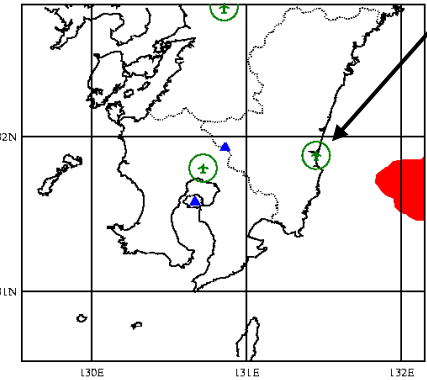
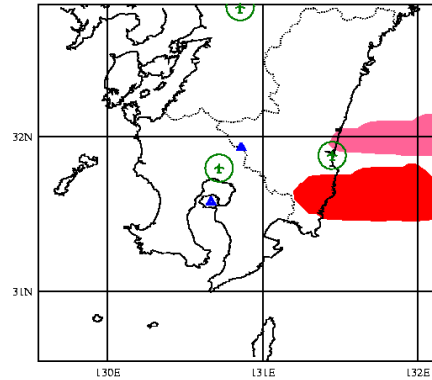
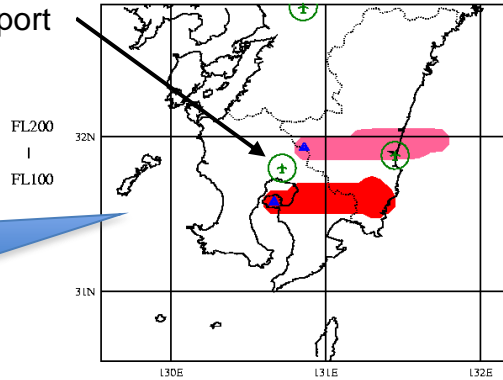
2011/06/01 10:00UTC

2011/06/01 11:00UTC

2011/06/01 12:00UTC

FL100
to
FL200

Surface
to
FL200



VOLCANO: SAKURAJIMA KIRISHIMAYAMA
ASSUMED ERUPTION TIME: 2011/06/01 09:00UTC
ASSUMED PLUME HEIGHT: FL200

FT=1

FT=2

FT=3

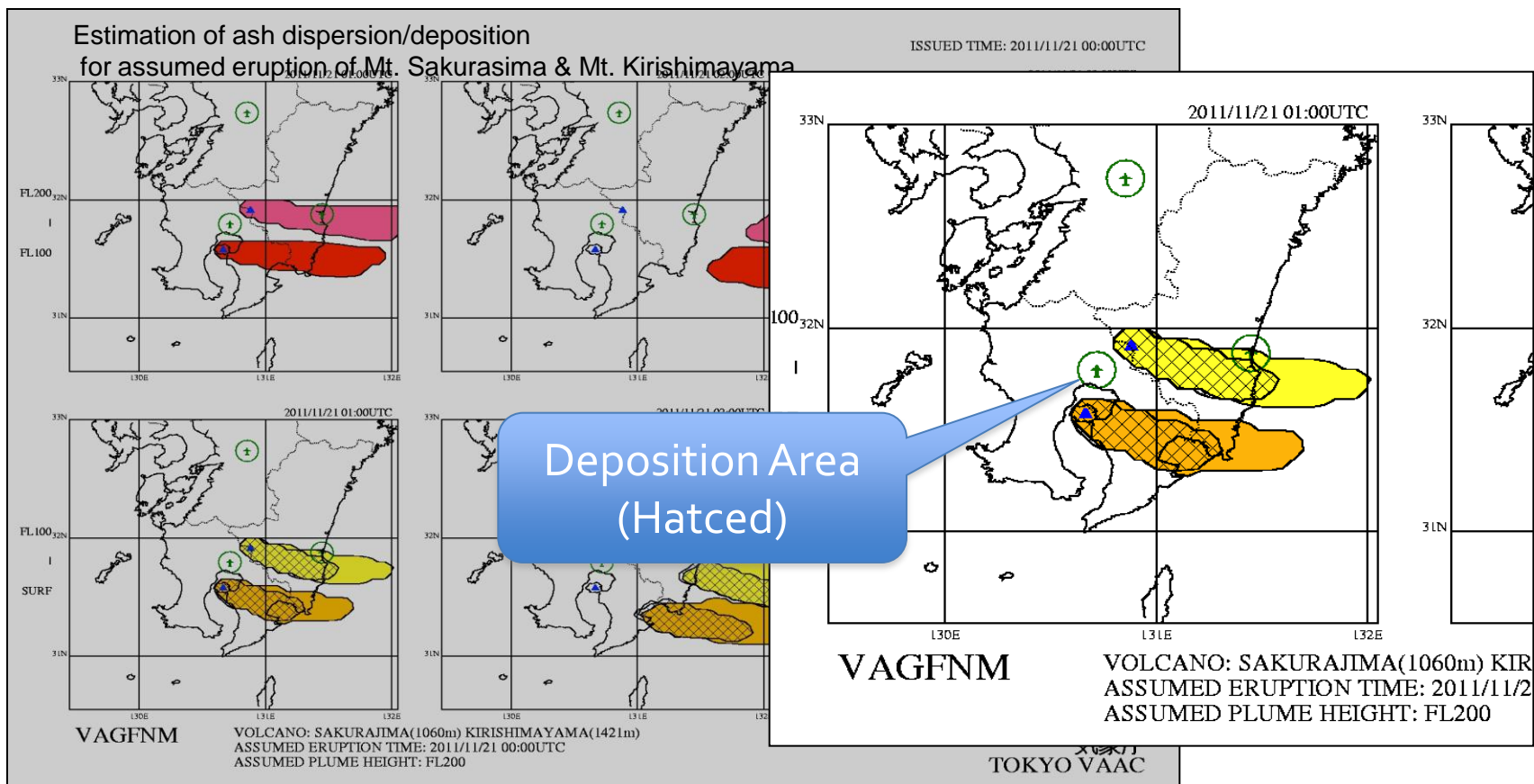
気象庁

試験提供

Further Development



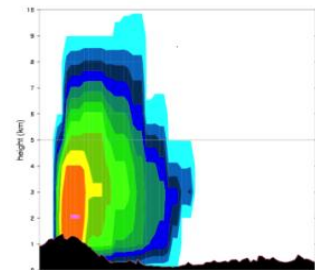
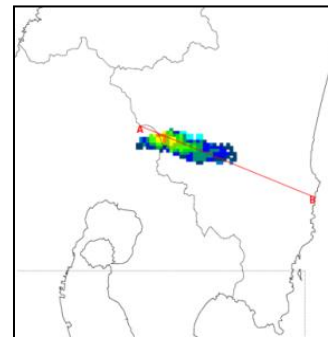
- Deposition Area will be directly forecasted
 - by JMA's future VA deposition prediction model



- New MET Satellite will be launched in 2015
 - Multi-Channel Sensors equipped
 - Rapid Scan (every 10 minutes)
 - High Resolution (1km)



- Ground Radar Observation for VA
 - VA Height and Vertical Profile can be obtained



Further Efforts...



- Enhance collaboration with Anchorage VAAC
 - Use of collaboration tool (being discussed)
- Establish ment of back-up procedure
 - With Darwin VAAC (Australia)
 - Routine exercise also will start soon
- Improve harmonization between VAACs
 - VAAC Best Practice Seminar
- Enhance contribution to scientific groups
 - WMO VA Scientific Advisory Group (VASAG),
the other related seminar/workshops

Thank you!

