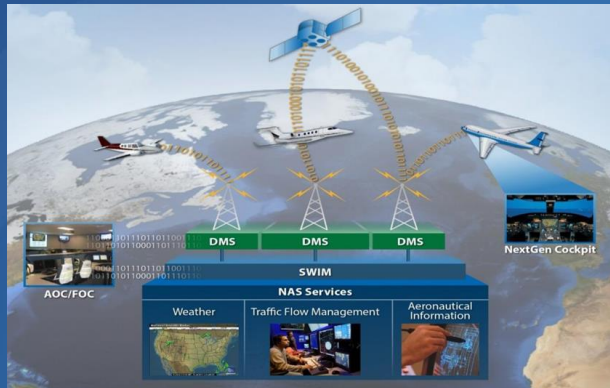


MetService Presentation Reflection and Realignment



Aviation Services Review Setting the scene

- 1) Introduction (Rob Harrison GM Customers)
- 2) Review and optimisation of our aviation forecasting services (Marcel Roux Manager Aviation Weather Services)
- 3) SWIM and Wider implications (Kevin Alder Manager Meteorological Data Services & Peter Lowe Business Development Manager Aviation)
- 4) Changing the charging model (Ray Thorpe GM Sales NZ)
- 5) Roadmap



No current lightning alerts for possible eruptions.

WebCams Ruapehu South 1/12

2019 Jul 29 12:30 pm NZST © Institute of Geological and Nuclear Sciences Ltd.

WebCams	Lightning	Seismic Drums
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Latest NOAA CIMSS observations

- Vanuatu North RGB - Ash 4 panel
- Vanuatu South RGB - Ash 4 panel
- Vanuatu Large Area - Ash 4 panel
- Tanahulu RGB - Ash 4 panel
- Hungua Tonga RGB - Ash 4 panel
- American Samoa RGB - Ash 4 panel
- Fiji RGB - Ash 4 panel
- Kermadec Islands RGB - Ash 4 panel
- New Zealand RGB - Ash 4 panel
- Mt Erebus RGB - Ash 4 panel

Internal links

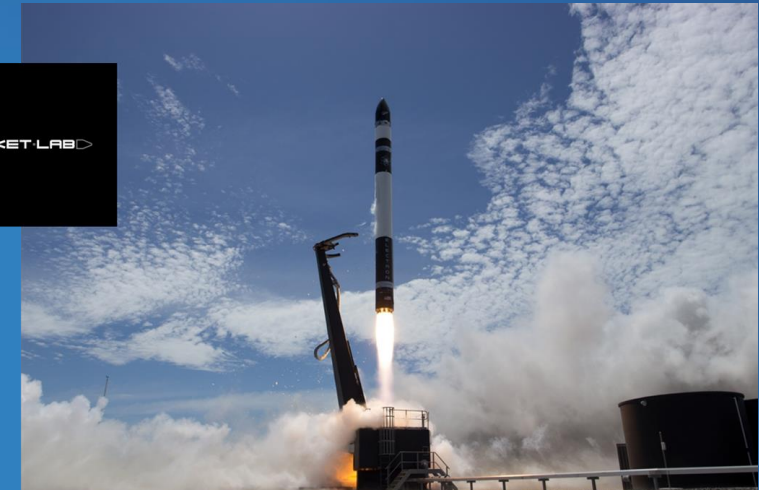
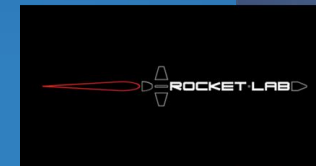
- Active VAAs
- Wellington VAAC Wiki page
- VAAC Monitoring Page - Current Duty Officers
- Current VAAC Activity log
- Volcano Watch webpage

Shortcut to VAAC Logo Favourites - works best in IE

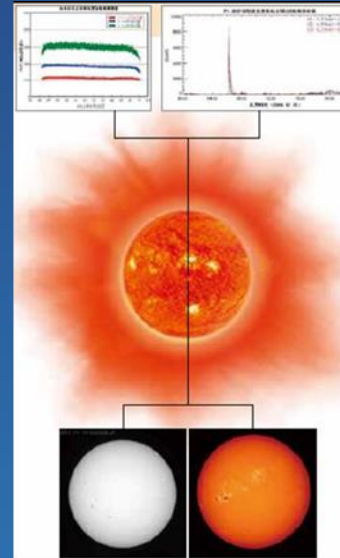
- Vanuatu True Color Ash Dust
- Tonga True Color Ash Dust
- Tropics True Color Ash Dust
- NZ/Tasman NZ True Color Ash Dust

Satellite imagery

Google Earth - [WVTLN data](#)



Weather intelligence for Collaborative Decision Making



Name akl-syd Route NZAA/(N774)YSSY

Duration 03

Flight Levels

ROFOR SUPPLIED BY METSERVICE. VALID 040157/040542

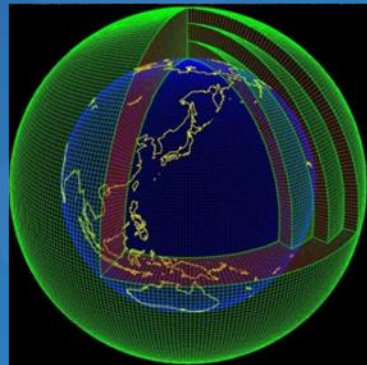
ROUTE NZAA/(N774)/YSSY akl-syd

ZONES	FL100	FL200	FL250	FL270	FL300	FL330
NZAA/MADEP	14024M04	12005M22	35007M33	35012M37	34020M44	31016M48
MADEP/OLREL	02003M01	24013M24	24027M34	24037M37	24052M41	24078M42
OLREL/MAGDA	30025M02	27041M22	26077M29	26098M31	26131M33	26138M38
MAGDA/MAYOP	30038M02	28067M20	27102M26	27115M28	27133M31	27134M37
MAYOP/SHARK	30045M02	28073M20	27108M26	27118M28	27134M31	27135M37
SHARK/MARLN	29049M03	28078M20	27112M26	27121M28	27136M31	27136M37
MARLN/YSSY	29051M03	28083M20	28115M25	27124M28	27137M31	27137M36

OK

SHARK	S34045600, E1
MARLN	S34020500, E1
YSSY	S33564600, E1

The map shows the flight route from NZAA (Auckland) to YSSY (Sydney) via ACT (ACT). The route is marked with a red line and green dots. The map also shows the Tasman Sea and the locations of Queensland, New South Wales, and Victoria.



What we observe is not nature herself, but nature exposed to our method of questioning. *Werner Heisenberg, theoretical physicist*



2) Review and optimisation of our aviation forecasting services

Marcel Roux: Manager Aviation Services

- Data centric environment, introduction of smart automation.
- SIGWX charts – Gridded Data Approach.
- DOM TAF Review
- WLG VAAC capabilities review – quantitative volcanic ash
- T + 30 TAF implementation for NZAA, NZWN, NZCH and NZOH
- Connection into wider ATM system – Consultancy approach

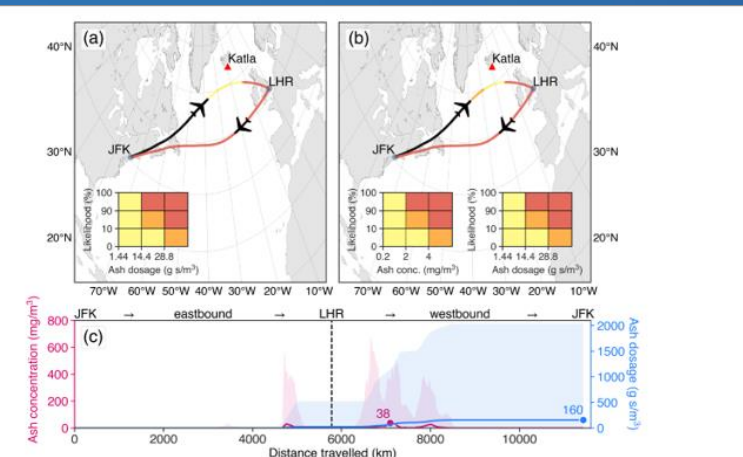
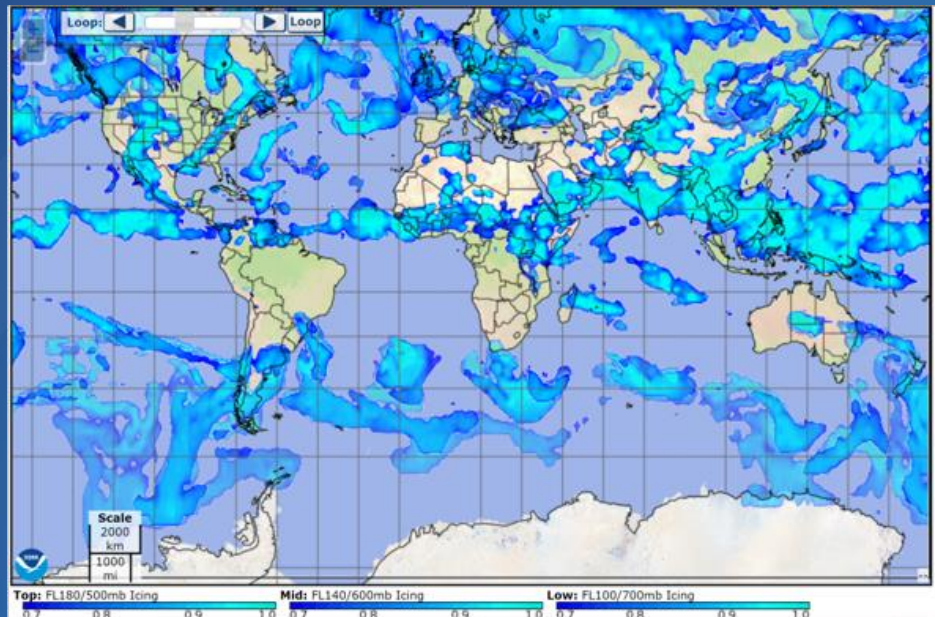
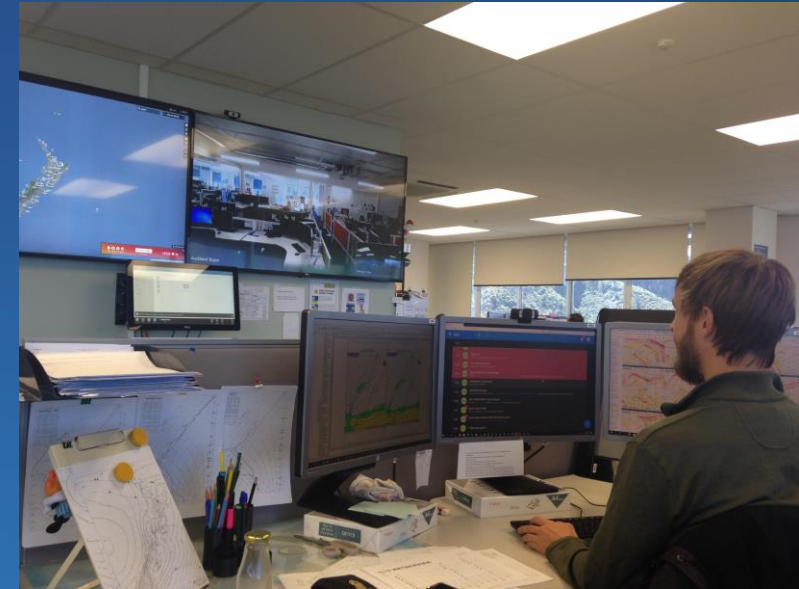


FIGURE 7 (a) Dosage risk for the JFK (New York) to LHR (London Heathrow) trans-Atlantic air route at T + 30 and thick-layer level FL350-FL550; (b) dosage and ash concentration risk for the same route shown in (a); and (c) along-route ash concentration and dosage. Values annotated are the ensemble median maximum values correct to two significant figures; shaded regions correspond to the minimum and maximum of the ash concentration and dosage (Colour figures can be viewed at wileyonlinelibrary.com).

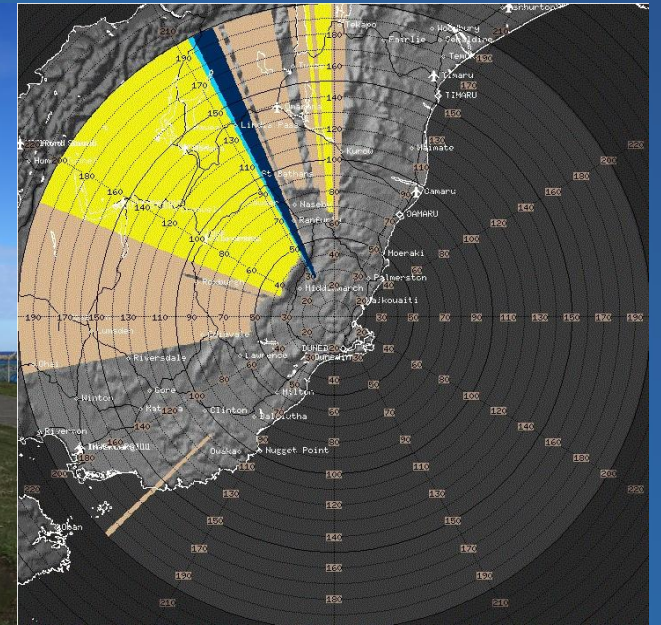


3) SWIM and Wider implications Part 1

Kevin Alder: Manager Meteorological Data Services

SWIM and Wider implications

- NZ Observing System Developments – Weather Radar / Amdar / AUTO METAR
- Assisting in the Pacific - Observing Network Support and Enhancement
- Future - utilising ADS-B Data

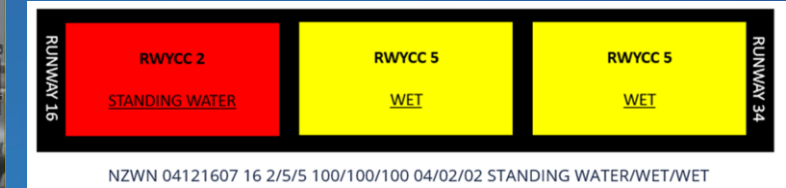
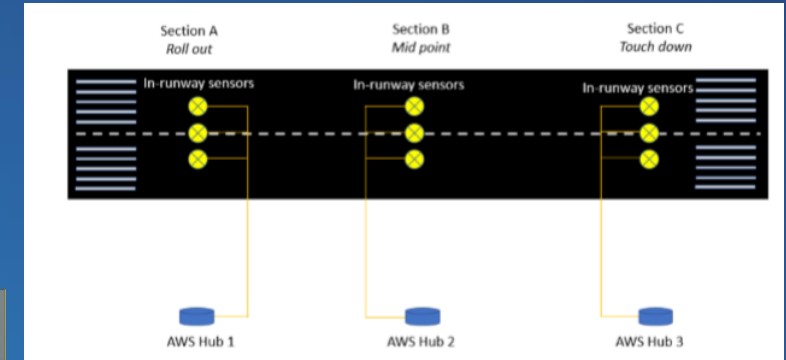


3) SWIM and Wider implications Part 2

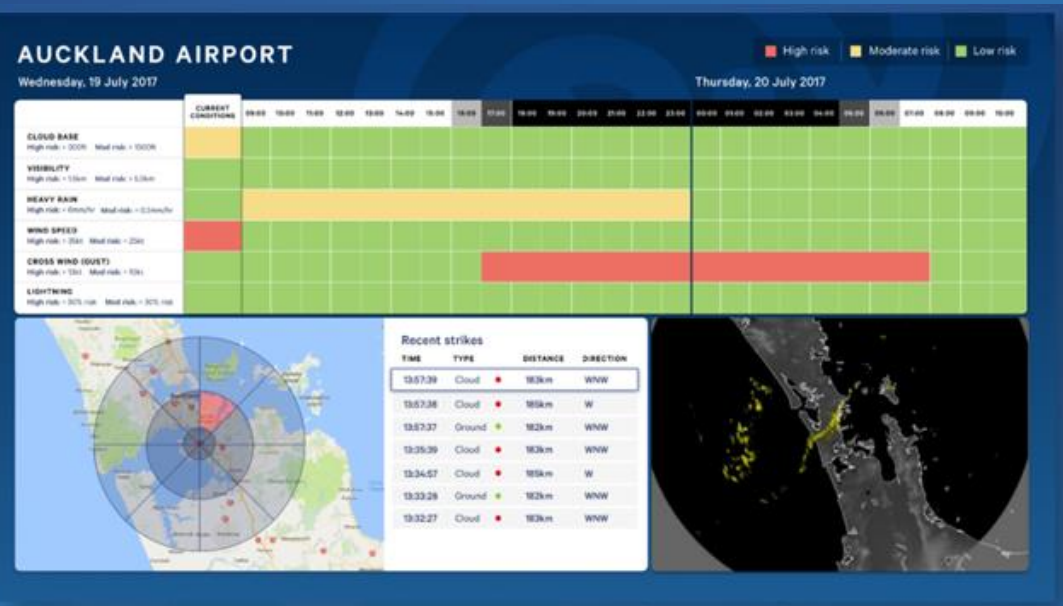
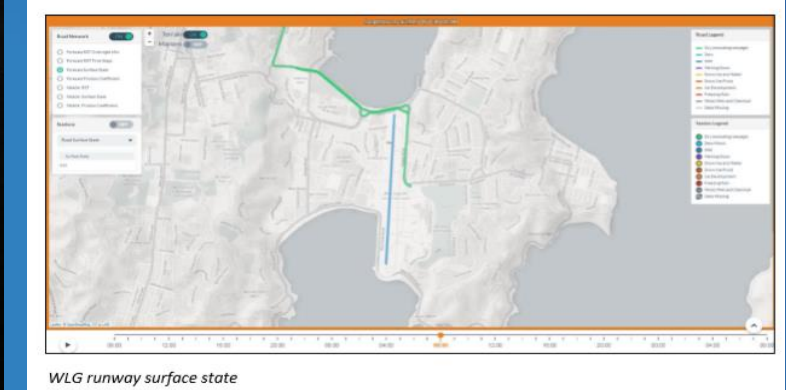
Peter Lowe: Aviation Business Development Manager

SWIM and Wider implications

- API feeds for customers and or linked 3rd Party Suppliers.
- Runway monitoring and reporting (TALPA).
- MetOps Display - Met CDM across AAA (Threat matrices + LDS + Radar + Harbour Dials + TALPA).
- Better Utilisation of Met (Obs/ forecasts/ modelling) to improve aircraft separation.



NZWN 04121607 16 2/5/5 100/100/100 04/02/02 STANDING WATER/WET/WET



4) Changing the charging model

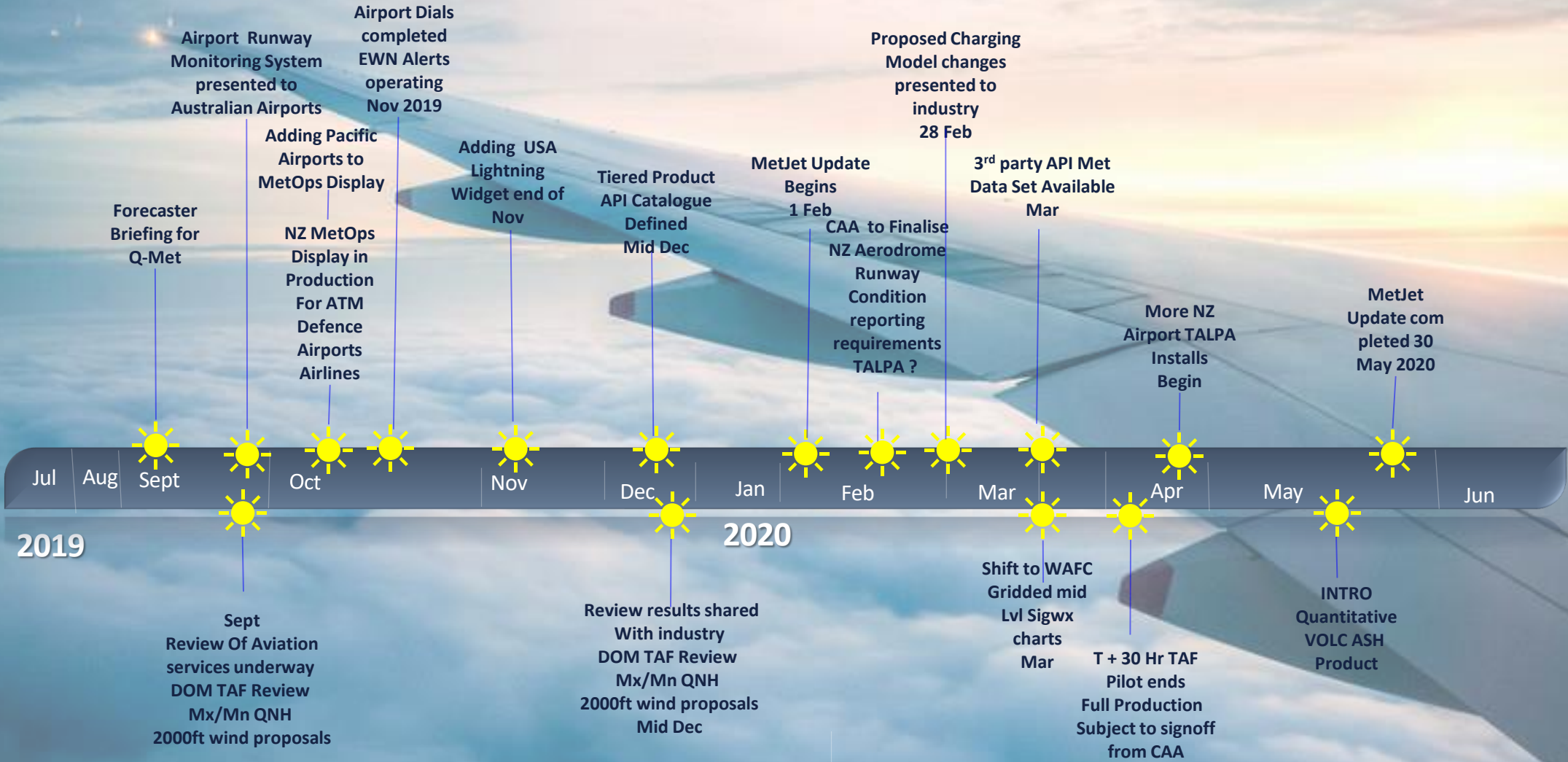
Ray Thorpe: GM Sales NZ

Changing the charging model

- Current charging Model & Rules are not sustainable in a proposed SWIM environment.
- Overflights - a test bed for change utilising proven airways system and mimicking already implemented & widely used overseas practices.
- Future charging model options to be explored with industry to suit NZ Rules Environment.



5) MetService RoadMap - Activities and Milestones 2019/2020





Thank you 