

# Vaisala Dropsonde Business Update

AVAPS Users' Group Meeting (NCAR, Boulder)

Vaisala, 24<sup>th</sup> April, 2018

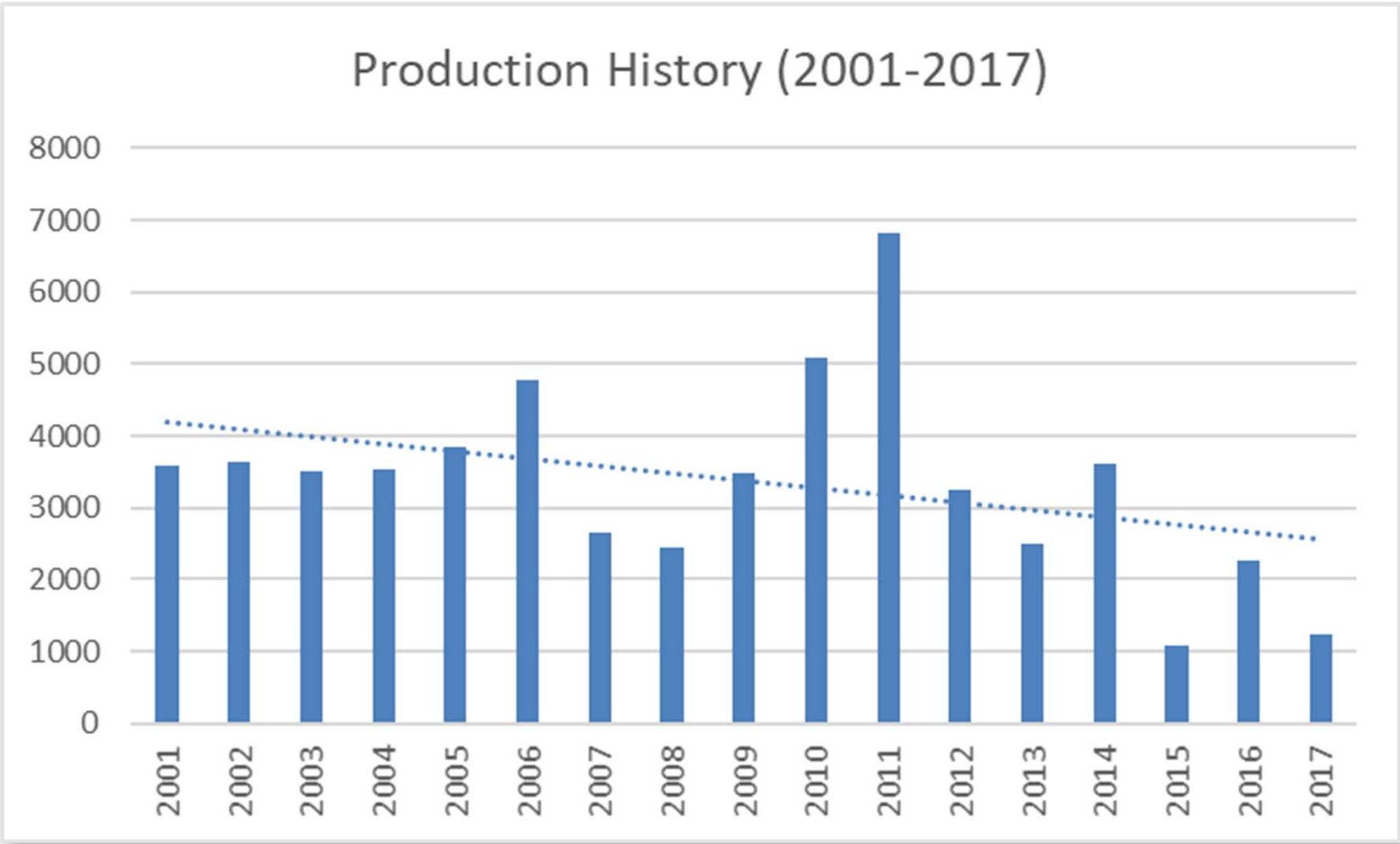
**VAISALA**

# GPS Dropsonde History

- **2018: RD41 Dropsonde released for production**
- **2017: RD41 prototyping: NCAR NRD41 design / Vaisala RS41 sensor technology (RSS421)**
- 2013: RD94 Production in-sourced to Vaisala from sub-contractor
- 2016: NOAA Open-Competition: RD94 production award to Vaisala (5-year contract)
- 2010: RD93 Production completed, and product ramped-down Jan-2010
- 2009: RD94 Production started and 600 x RD94 delivered to NOAA AOC
- 2009: Vaisala signs commercial license with NCAR
- 2009: NOAA Open-Competition: RD93 production contract awarded to Vaisala (5-year contract)
- 2008: NCAR issues improved new design Dropsonde: RD94 to replace RD93
- 2004: NOAA Open-Competition: Second production contract awarded to Vaisala (5-year contract)
- 1998: NOAA Open-Competition: RD93 production contract awarded to Vaisala (5-year contract)
- 1997: NOAA contracted with Vaisala for one year production
- 1996: NCAR awarded Vaisala serial production of RD93
- 1996: NOAA received first new NCAR built sondes
- 1994: NCAR, German Aerospace Research Establishment (DLR) and NOAA entered into a joint agreement to develop the Advanced GPS Dropsonde (RD93) – Vaisala Radiosonde technology was accepted: Sensor unit, Sonde GPS receiver, Receiving system GPS Processor

# Vaisala Dropsonde Production History

Year	Manu
2001	3,579
2002	3,649
2003	3,516
2004	3,532
2005	3,833
2006	4,789
2007	2,650
2008	2,457
2009	3,485
2010	5,093
2011	6,816
2012	3,250
2013	2,513
2014	3,602
2015	1,066
2016	2,276
2017	1,236



# Dropsonde Shipments, 2017

(RD94's / RS92 Sensor Packs)

- Alfred-Wegener-Institut
- CNRS - SAFIRE
- Deutsches Zentrum für Luft- und Raumfahrt e.V.
- Environmental Science & Eng'n Corp.
- Hong Kong Observatory
- Keesler AFB
- National Institute of Meteorological Science
- OPTOLAB Co. Ltd
- SPEC Inc

# RD94 Dropsonde Revision History

- Production Release
- A2: New PTU firmware for offset issue; drawing updates
- A3: Recess J2; new PCBA
- A4: Equivalent part, LED (never built due to Gov. shutdown)
- A5: Changes for PTU oscillation (from Feb 2011)
- A6: New PCB layout; firmware; and launch detect LED
- A7: Tested in Winter Campaign, released Jun-2014. New PCBA; new GPS; new NCAR PIC; new test computer, software, and bench set-up
- A8 & A9: C56 removed; R22 & R27 changed; Drawing Package updates
- RD41 Pre-Production Dropsonde (2017-2018 testing)
- RD41 Drawing Package approved, Apr-2018

