



SPACE2016

Spire Global Inc. A Satellite-powered Big Data Company

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ICAO / UNOOSA Symposium

15–17 March 2016, Abu Dhabi, United Arab Emirates

A flexible, upgradeable nanosatellite constellation collecting global radio frequency data in near-real time

SPIRE AT A GLANCE

- A satellite powered data company
- Founded in 2012
- ~100 people in San Francisco, Washington DC, Boulder, Glasgow (UK) and Singapore
- 4 satellites in orbit (8 launched in total)
 - Target of 20+ satellites in orbit by Q2 2016
- 20 global ground stations
- Launching new satellites every single month
- 100 satellites launches; 50 ground stations by end of 2017



Spire Nanosatellite – Glasgow, UK office



Spire Nanosatellite Qualification Model (QM) Assembly



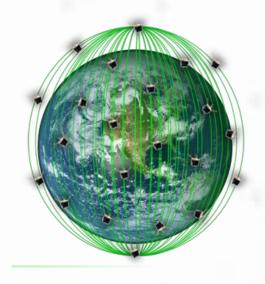


PSLV Launch on September 28th, 2015



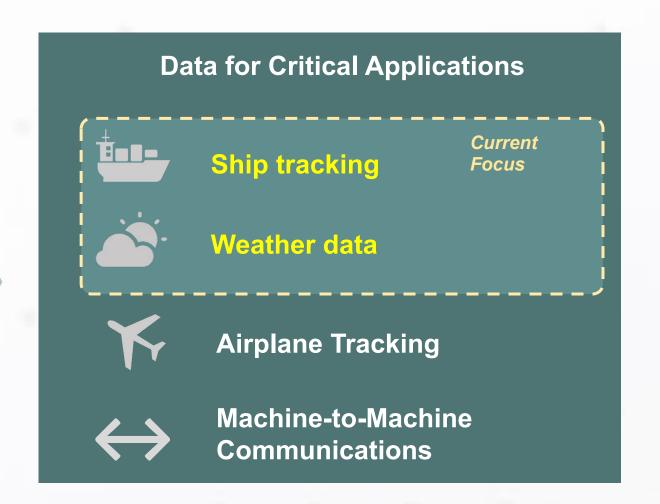
SPIRE CAPABILITIES OVERVIEW

Software-Defined Radio Technology on a Nanosatellite Platform



A Global Ground Station Network

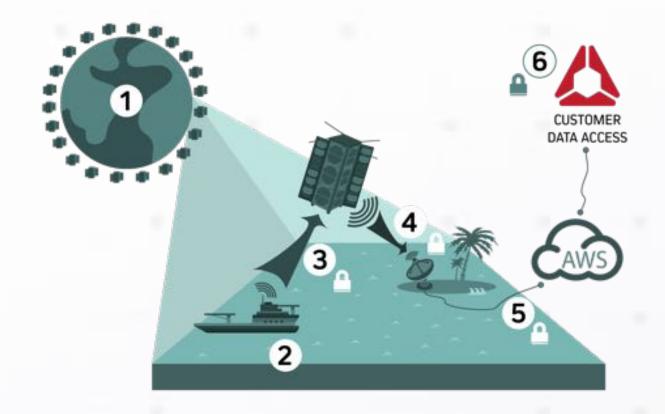


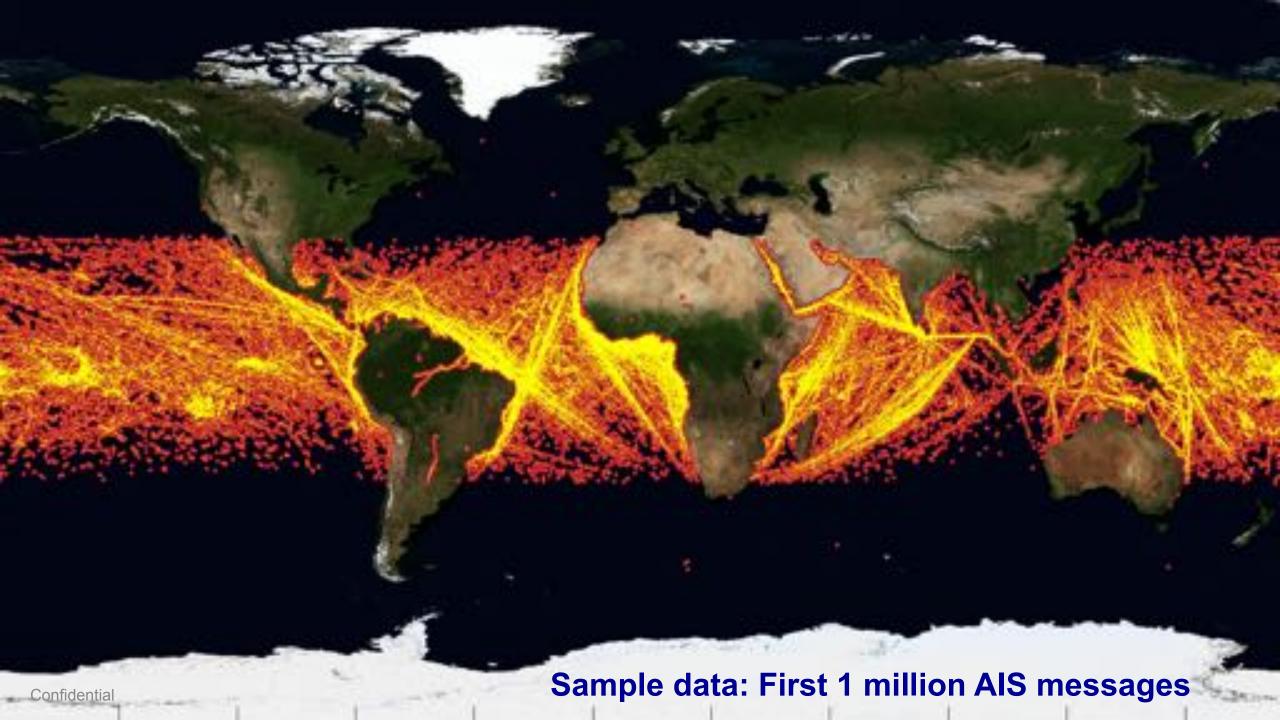




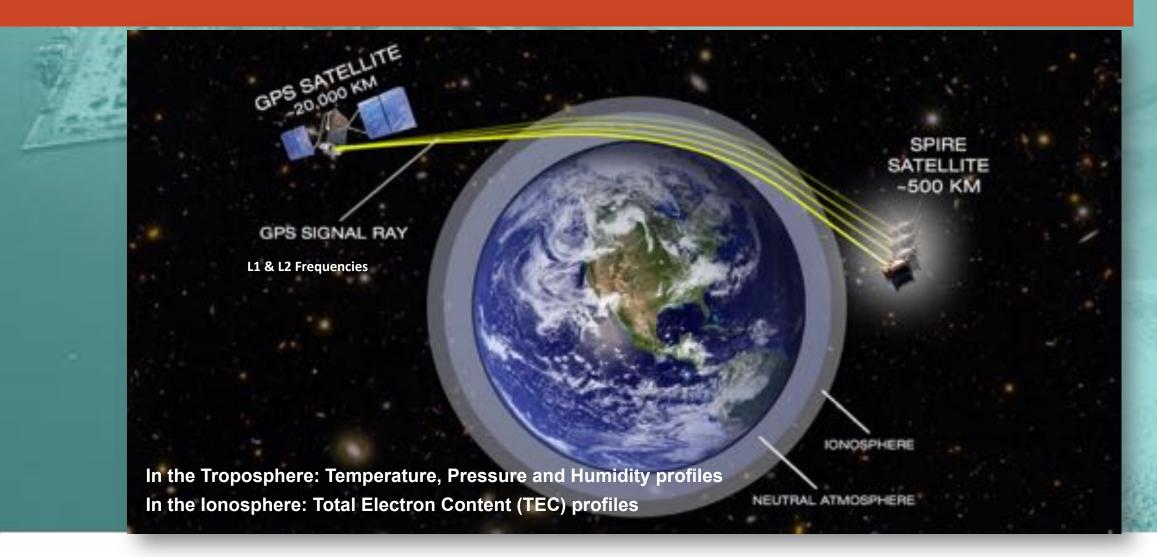
Market Opportunity: AIS ship tracking

- Up to \$20bn losses in illegal fishing each year
- Ship traffic monitoring and security





Weather Data from GPS Radio Occultation





Market Opportunity: GPS Radio Occultation weather data

Over \$1.9 Trillion losses due to weather disasters 1995-2015

RO processing: Vertical profiles of atmospheric P, T, and H

- Proven technology; used in all global Numerical Weather Prediction Models
- Only 10,000 profiles/day available today
- Only 2-3% of the assimilations in global NWPs, yet the 4th most effective type of data in reducing forecast error



Spire will collect 100,000 Pressure, Temp, Humidity profiles per day

- Global Coverage on a continuous basis
- Improvements up to 130,000+ profiles
- Goal= ubiquitous, holistic and accurate forecasts







High Revisit & Access
Time



Sensor Fusion



Persistent and Resilient Service



Fast Technology Upgrade Time



On-board data analysis



Plentiful Launches

SPIRE Global - SPACE 3.0

Moore's law in Space: closing the business case



