



INNOVIM

The Power of Innovation

# Bringing Value to the FAA

2014



# You need weather, climate, data, satellite, and operational solutions...INNOVIM delivers

CLIMATE  
MODELING

ARCHITECTURE  
PROCESSING

ATMOSPHERIC  
SCIENCE

SENSORS  
&  
CALIBRATION

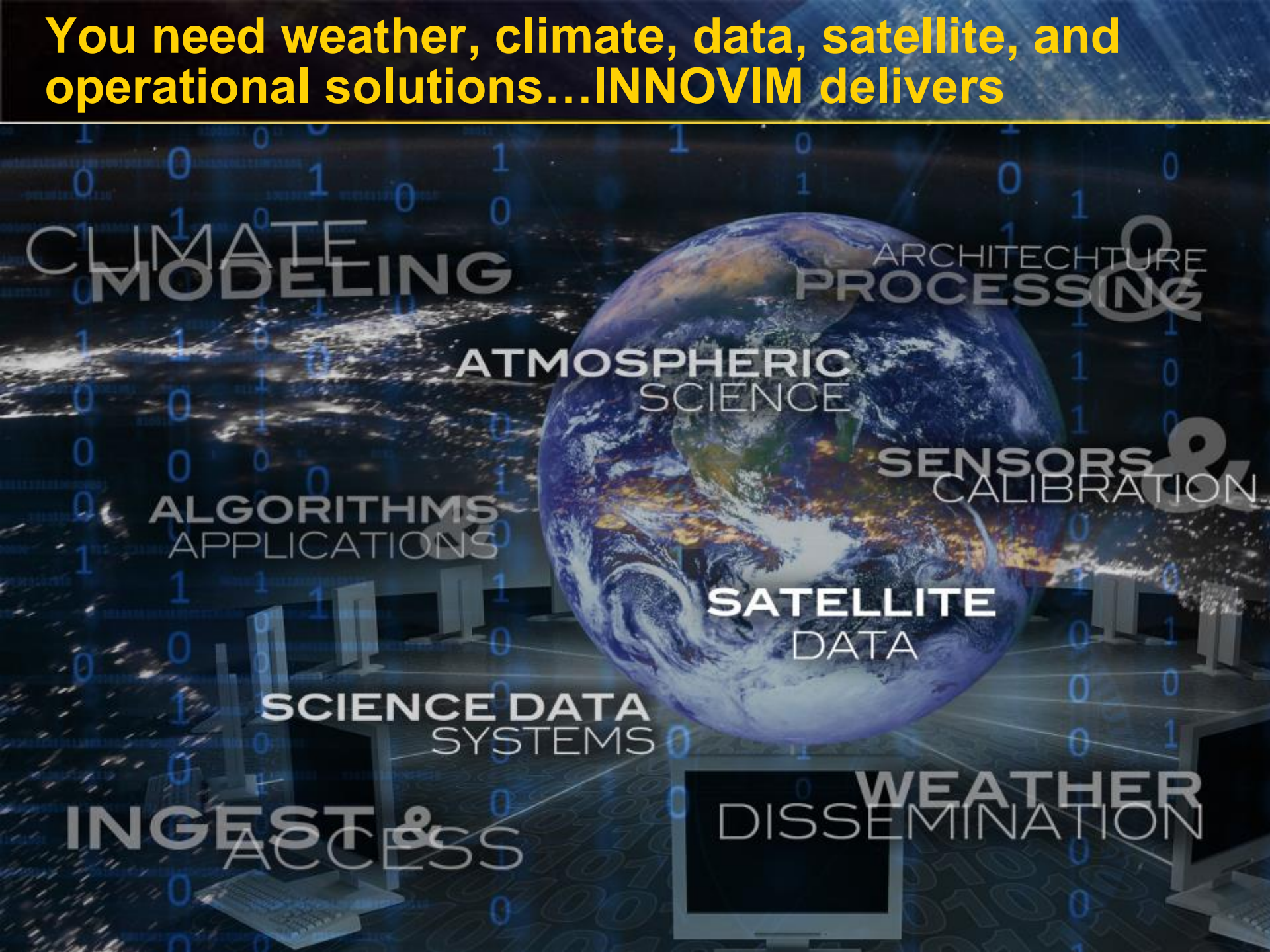
ALGORITHMS  
APPLICATIONS

SATELLITE  
DATA

SCIENCE DATA  
SYSTEMS

INGEST &  
ACCESS

WEATHER  
DISSEMINATION



# You need weather, climate, data, satellite, and operational solutions...INNOVIM delivers

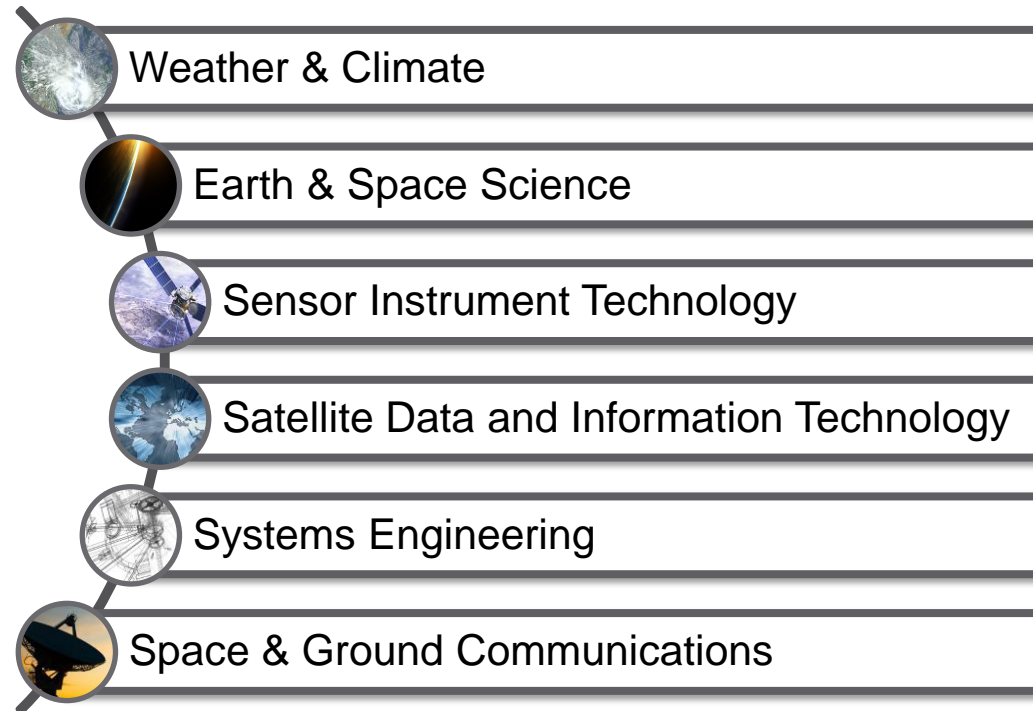
- data delivered in real time while retaining integrity and resolution
- remote sensors, calibrated and validated
- satellite systems engineered for seamless integration
- enterprise architecture prepared to meet your infrastructure needs
- meteorological data integrated into global models that promote local preparedness



# We develop cost-effective solutions to technical and operational challenges

An Economically Disadvantaged Woman-Owned Small Business with 11 years supporting NASA & NOAA

- ✦ Data management and distribution
- ✦ Systems engineering and enterprise architecture
- ✦ Program management and operational support
- ✦ Algorithm development and modeling
- ✦ Satellites and sensors



# FAA-Ready: Stepping into NextGen

INNOVIM brings **focused expertise** enabling **improved access** to relevant weather nowcasts and forecasts for FAA customers, **reducing weather impacts**



# Why INNOVIM?

Expertise in operational weather systems:

- ✦ on-the-ground role in operating National Weather Service systems
- ✦ cross-agency expertise in satellite data systems engineering
- ✦ understanding of weather data sources and users along with the architectures they need





# How We Can Help: Service Life Extension Program & Weather Observation Improvements

We will help ensure FAA's legacy observing systems, including ASWON and NEXRAD, are maintained and upgrade where needed, with gaps in coverage identified and corrected.

INNOVIM currently supports NWS in:

- ✦ analysis and optimization of radio frequency dissemination plots
- ✦ signal penetration enhancements
- ✦ transmission hardware and software upgrades
- ✦ clearing maintenance and Engineering Change Notices for ASOS and NEXRAD
- ✦ local forecasting office support in maintaining and documenting equipment

# How We Can Help: NextGen Weather Processor

We will enhance the display of weather information available to pilots and traffic controllers using new algorithms.

## INNOVIM:

- ✦ is experienced at integrating meteorological algorithms into operational product flows
- ✦ improves wind and precipitation models, supporting the NOAA Climate Prediction Center and NASA Goddard Institute for Space Studies
- ✦ ensures effective data product capture in operational code, working with algorithm developers and end product users
- ✦ efficiently implements error-free data processing due to long familiarity with both ends of weather processing systems

★ INNOVIM was cited by a NESDIS Independent Review Team for success in designing NOAA's Suomi-NPP Data Exploitation system for effective product generation (PG) and product distribution and access (PDA) approaches





# How We Can Help: Common Support Services

We will support migration of the Weather Message Switching Center Replacement network with distribution nodes to SWIM Common Support Services efficiently and cost-effectively

INNOVIM is developing capabilities for the analogous National Weather Service Telecommunications Gateway

- performing Analysis of Alternatives to identify the optimal implementation
- developing Concept of Operations for that solution
- designing Implementation Plan and detailed artifacts, with lessons from this system to benefit CSS

# How We Can Help: Common Support Services

We will bring Service-oriented Architecture approaches to prioritize and create data streams

INNOVIM created a large SOA enterprise system with NOAA's ESPDS infrastructure using a WSO2 Enterprise Service Bus, resulting in:

- ✦ efficient scaling of new services and functionality to grow the system
- ✦ real time data delivery to the NOAA High-Rate Information Transmission / Emergency Managers Weather Information Network (HRIT/EMWIN)

# How We Can Help: Enhancing Real Time Decision Support Tools

We will help develop interactive tools such as those pilots require in-flight to assess current and future weather conditions on a hyper-local scale

INNOVIM created:

- ✦ Invasive Species Forecasting System (ISFS) with NASA & USGS that helps land managers predict the influx of invasive plant and animal species using integrated ground and satellite data
- ✦ RECOVER mobile app that allows Burn Area Emergency Responders to prioritize response measures after a wildfire





# How We Can Help: Weather Dissemination, Processing, and Display Roadmap

We will ensure **reduced weather impacts** through **processor architecture redesign and restructuring** to deliver real time local weather data to pilots and air traffic controllers

INNOVIM is currently upgrading NOAA's Environmental Satellite Processing and Distribution System, feeding critical data to forecast meteorologists and emergency response teams such as the Managers Weather Information Network. We are:

- ✦ applying enterprise-wide “system of systems” approach to combine collection, processing, and distribution system for satellites including GOES-R and JPSS
- ✦ upgrading capability of IT environment to handle exponential increase in data volume
- ✦ automating common user operations



# For Better Weather Products Delivered Faster, You Need INNOVIM

## Let's Get to Work:

- ✦ eFAST contract vehicle for quick and easy access to FAA task orders.
- ✦ thorough grounding in FAA needs and culture, supporting FAA communities through work for the NOAA Aviation Service Branch and Information Dissemination Program (NextGen Web Services)
- ✦ cross-agency recognition for optimization through software reuse, superb cost control, and effective risk management



# We can support you through eFAST

We are qualified for the following eFAST functional areas:

- ✦ Air Transportation Support (ATS)
- ✦ Business Administration & Management (BAM)
- ✦ Computer/Information Systems Development (CSD)
- ✦ Computer Systems Support (CSS)
- ✦ Documentation & Training (D&T)
- ✦ Engineering Services (ES)



# Our NAICS codes give you options to meet small business targets while getting the job done

Size Bracket	Qualifying NAICS Codes
\$10M	611420 Computer Training 611430 Professional and Management Development Training
\$14M	541330 Engineering Services 541360 Geophysical Surveying and Mapping Services 541611 Administrative Management and General Management Consulting Services 541618 Other Management Consulting Services 541620 Environmental Consulting Services 541690 Other Scientific and Technical Consulting Services 541990 All Other Professional, Scientific, and Technical Services
\$30M	518210 Data Processing, Hosting, and Related services
\$25.5M	541511 Custom Computer Programming Services 541512 Computer Systems Design Services 541513 Computer Facilities Management Services 541519 Other Computer Related Services
500 employ.	541712 Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)

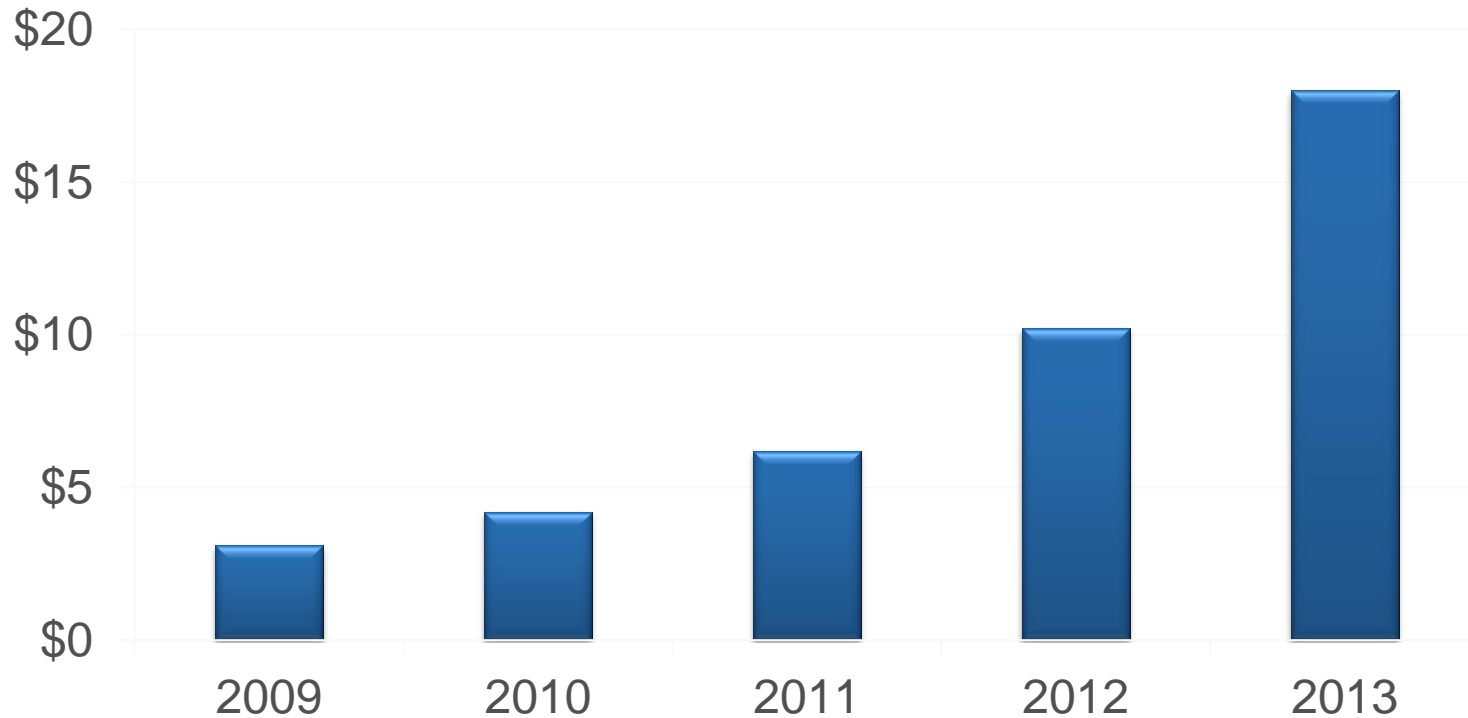
# Our prime contracts span all areas of our scientific, engineering, and operational domains

Contract:	NASA Goddard Institute of Space Science
Domain:	Climate Modeling & Programming Support
Value:	\$15M
Contract:	NASA Suomi-NPP Science Data Segment
Domain:	Distributed Data System Design & Implementation
Value:	\$10M
Contract:	NOAA National Weather Service Operations Technical Support Services (OPSTECH)
Domain:	Engineering, Climate Modeling & Operations
Value:	\$140M
Contract:	NOAA Environmental Satellite Processing and Distribution System(ESPDS)
Domain:	Program Management & Enterprise Architecture: GOES-R, JPSS, Jason-3
Value:	\$10M



**Our growth is dynamic and sustainable...we'll be here when you need us**

## Annual Revenue in Millions

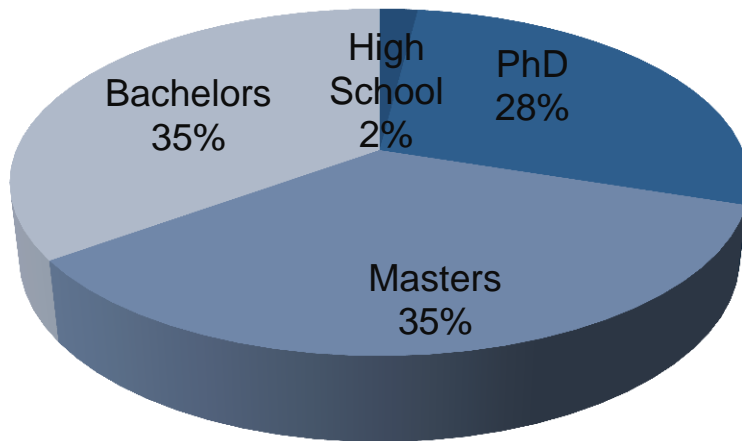




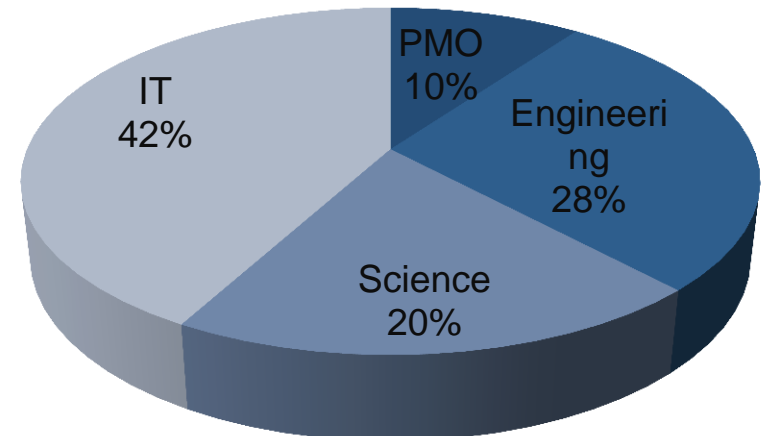
# We deliver innovation from highly educated and domain-knowledgeable employees

Over 150 committed professionals enthusiastically support agency missions from the down-to-earth to the out-of-this-world

Degrees



Domains





**more information**, please contact us:

[www.innovim.com](http://www.innovim.com)

240.542.0200