

National Weather Service Partners Meeting Panel

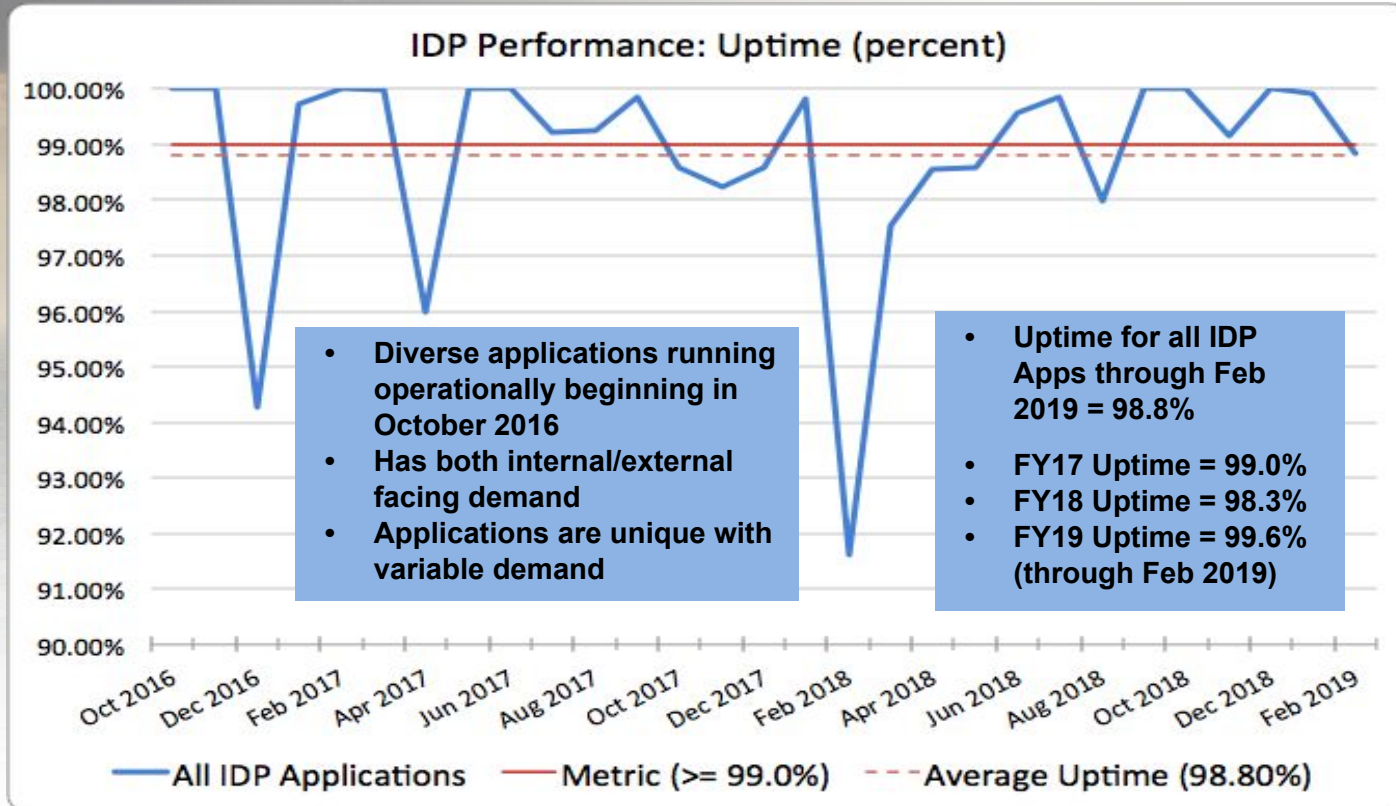
March 26, 2019

Washington, D.C.



NWS Office of Dissemination

Integrated Dissemination Program (IDP)



NWS Office of Dissemination

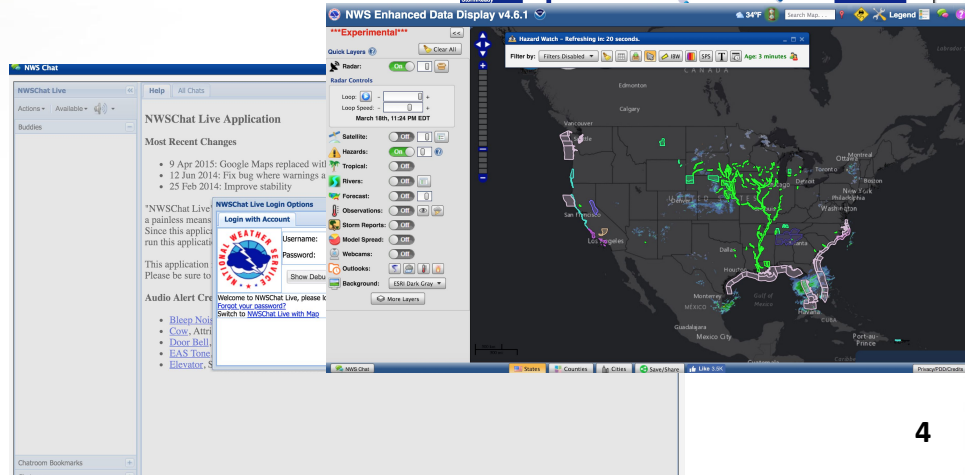
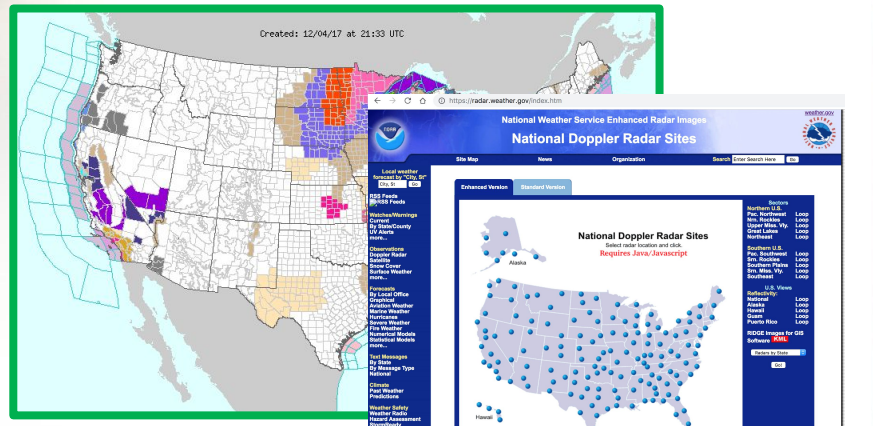
- Continue to improve NWS delivery services
- November 2018: Congress approved one-time reprogramming of NWS funds to:
 - Optimize the IDP system by contracting with highly specialized subject matter experts from the IDP infrastructure vendors
 - Increase reliability of IDP Infrastructure and Application Performance
 - Accelerate the onboarding or enhancement of three critical applications (NWSSchat, AHPS, CAP Handler/IPAWS) to IDP ensuring 100% backup capability in the event of a primary system failure

IDP-What's on it ... vs ... What's not

Functionality in place on IDP (March 2019)

- NOMADS
- FTPPRD
- TGFTP
- MADIS
- MRMS
- MAG
- Radar Level 2
- Radar Level 3
- NWSTG Switch
- BUFR Migration Tool
- NLETS
- EDIS/FTPMail
- HazCollect
- ISatSS
- FTP / SFTP
- NextGEN IT Web
- Services
- Datastream
- FTPPUSH
- OWP Processing
- FTPS In
- FTPS Out
- Global Information Center System (GISC)
- IRIS/iNWS
- GMDSS
- SNOTEL
- Hydrometeorological Automated Data System
- HF-FAX
- SOCKET
- NWS GIS Services
- NOS Chart Tile
- nowCOAST
- AOMC/EM7 Monitoring
- Hurricane Hotline
- Weather.gov*
- VLAB*
- SPOT*
- Aviation.weather.gov*
- Tsunami.gov*

VS





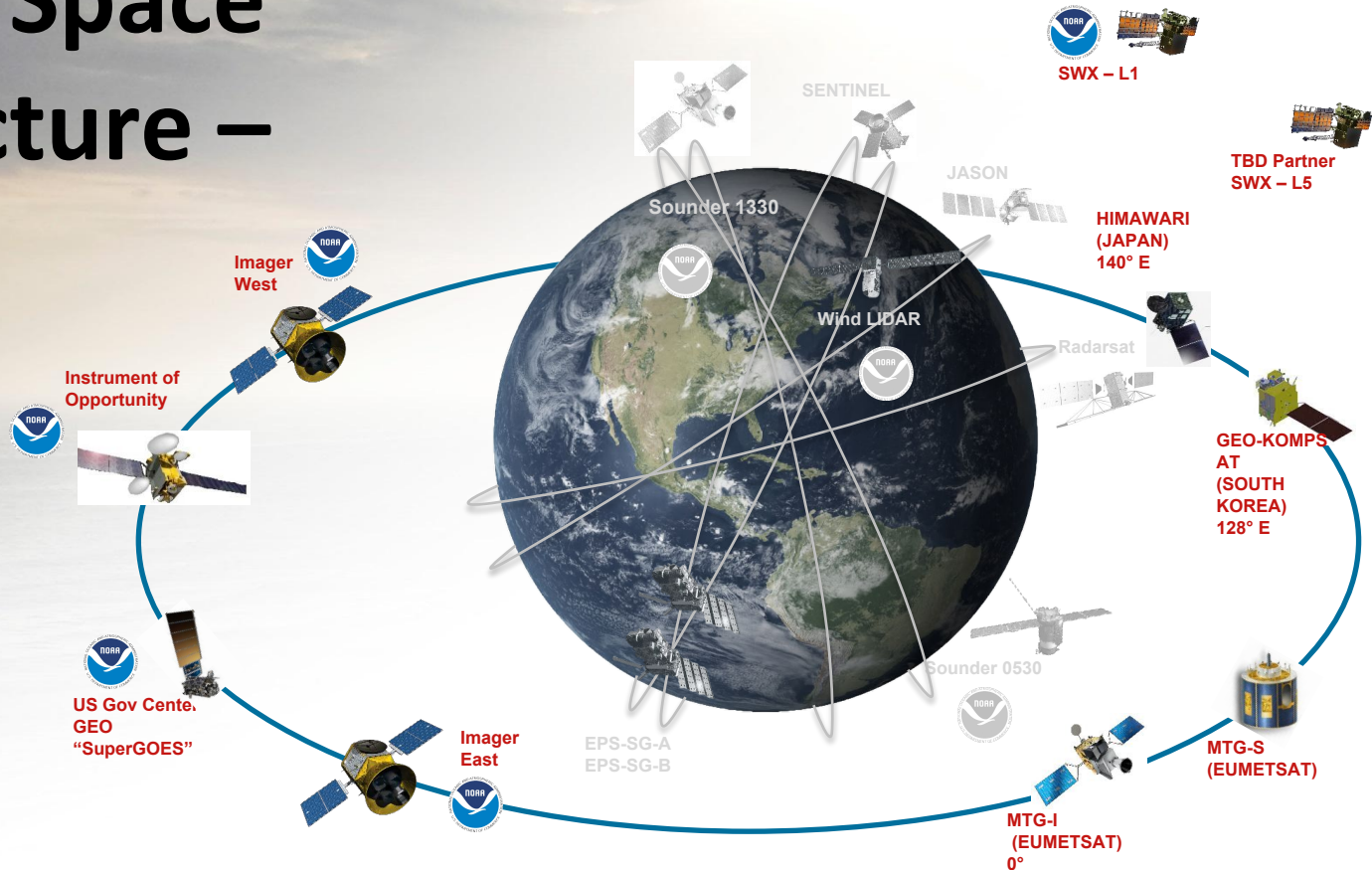
NESDIS

- At National Environmental Satellite, Data, and Information Service (NESDIS), we provide secure and timely access to global environmental data and information from satellites and other sources to promote and protect the Nation's security, environment, economy, and quality of life.
- Our two primary distribution systems are
 - Product Distribution within Environmental Satellite Processing and Distribution System (ESPDS)
 - Comprehensive Large Array-data Stewardship System (CLASS)

NESDIS Today's Observational Capability



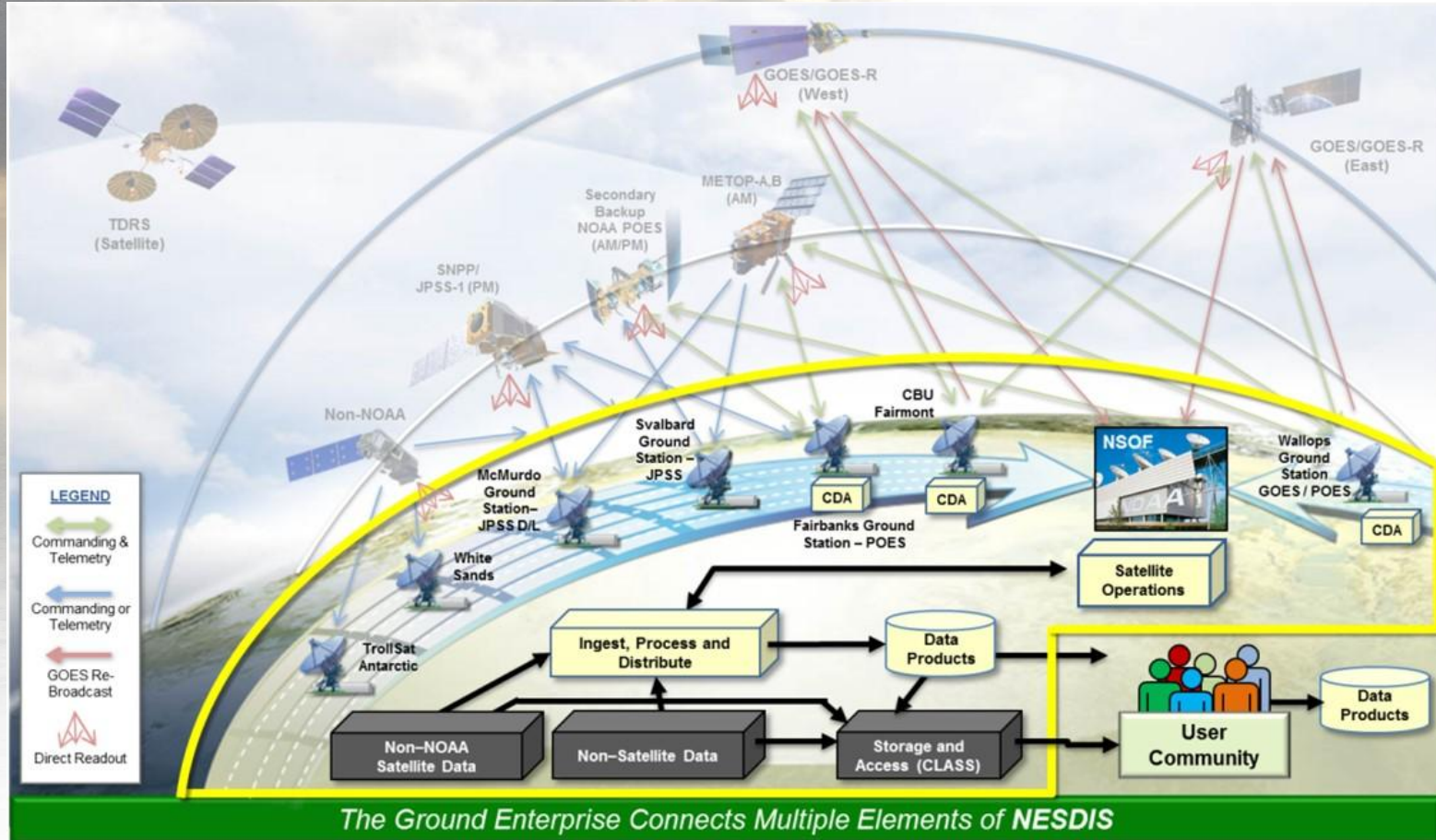
Evolution of NOAA's Space Architecture – GEO



Evolution of NOAA's Space Architecture – LEO



NESDIS Ground Enterprise



NESDIS - What We're Doing Next



- Pilot projects and demos
- Joint Venture
- Tech investments
- LEO small sounder satellite CST
- GEO payloads and deployment options

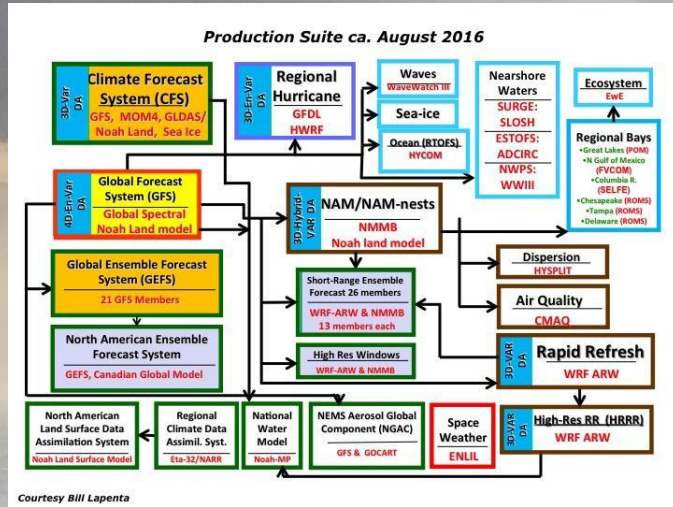
NWS Office of Central Processing

- AWIPS Satellite Broadcast Network (SBN) capacity management
 - On-going testing with National Blend of Models
 - Fixed Grid Mapped GOES-16/17 Imagery
- Weather and Climate Operational Supercomputing System
 - Implementation of Phase III (2018)
 - Phase I/II replacement - 2019 implementation moratorium
 - Upcoming solicitation for WCOSS follow-on contract

Moving toward Community Model Development

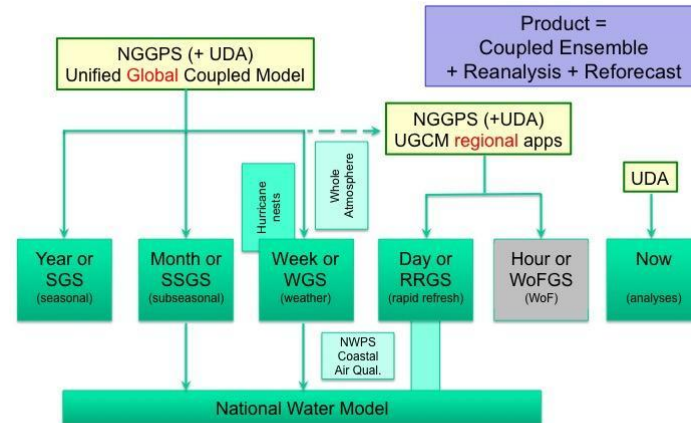


Strategic Vision



Starting from the quilt of models and products created by the implementing solutions rather than addressing requirements

... we will move to a product based system that covers all present elements of the productions suite in a more systematic and efficient way

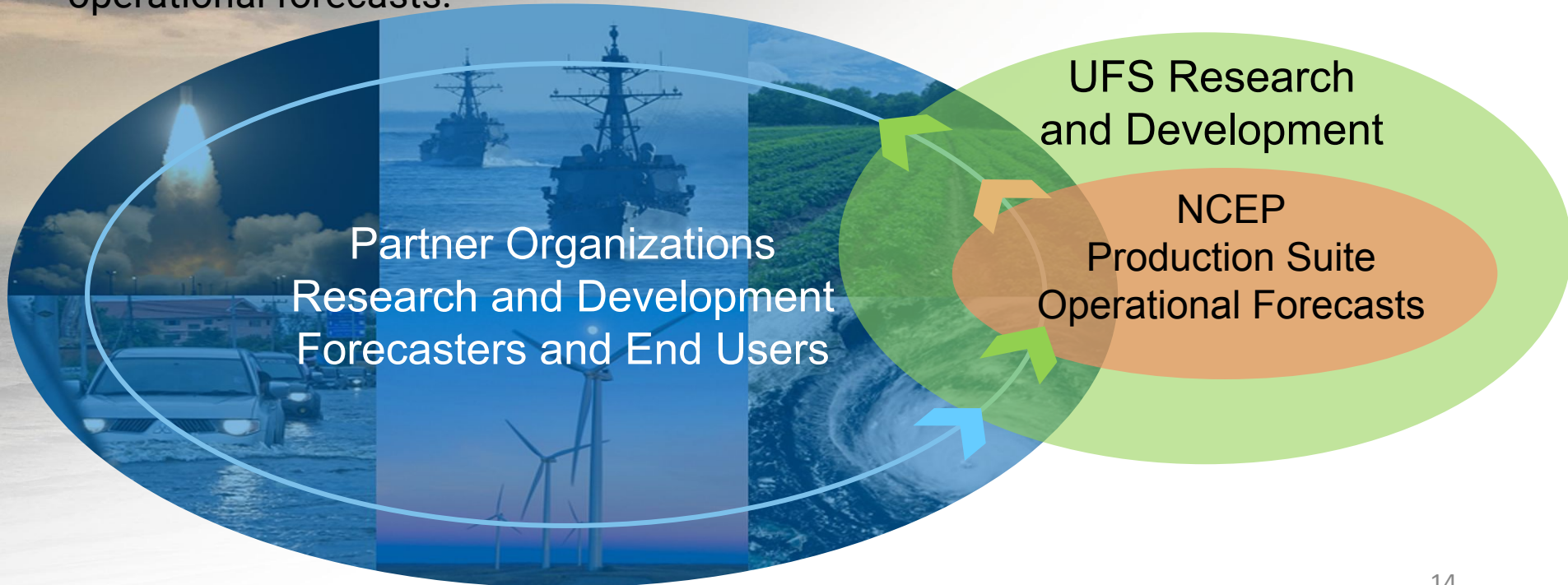


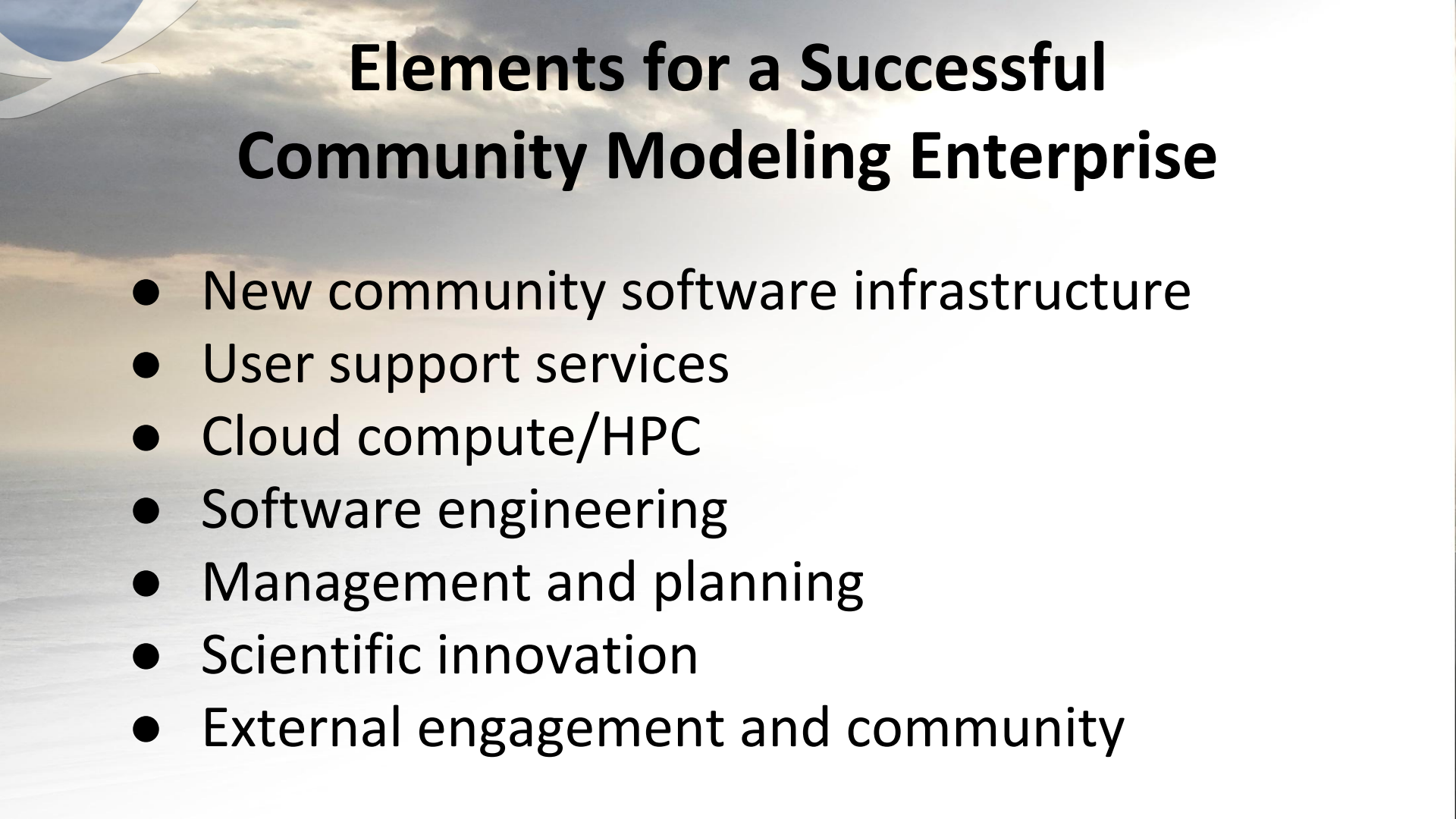
UDA: Unified Data assimilation
SGS: Seasonal Guidance System
SSGS: Subseasonal Guidance System

WGS: Weather Guidance System
RRGs: Rapid Refresh Guidance System
WoFGS: WoF Guidance System

Community-Based Development

The Unified Forecast System (UFS) is a comprehensive, **community-based** Earth modeling system, designed as both a research tool and as the basis for NOAA's operational forecasts.





Elements for a Successful Community Modeling Enterprise

- New community software infrastructure
- User support services
- Cloud compute/HPC
- Software engineering
- Management and planning
- Scientific innovation
- External engagement and community