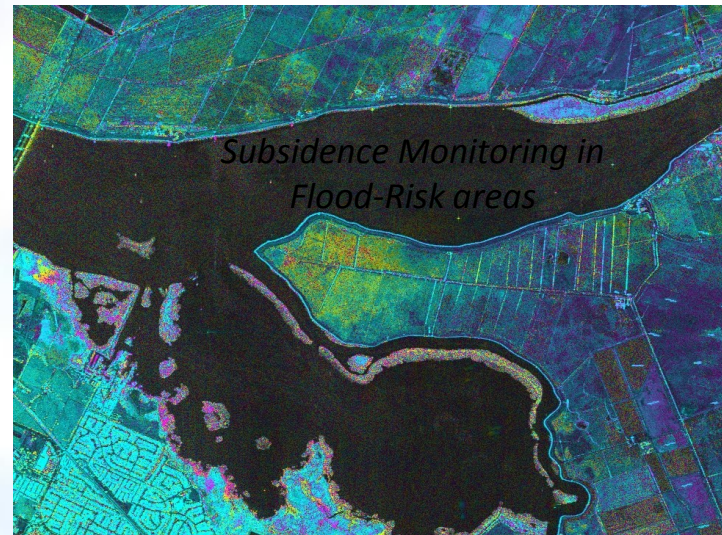
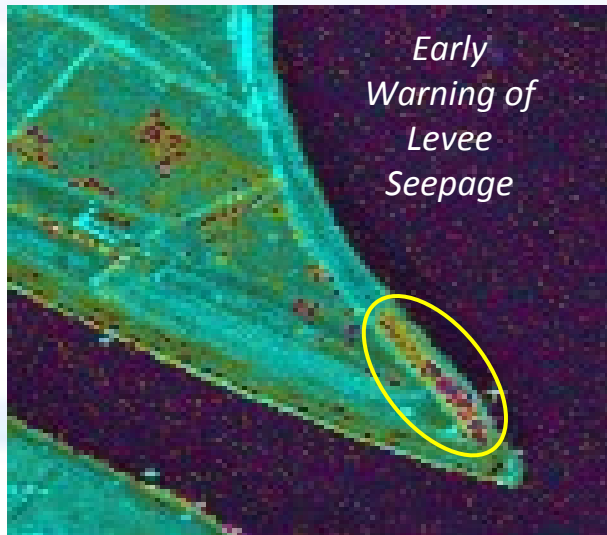


Infrastructure Monitoring & Emergency Response



UAVSAR flights image the Sacramento-San Joaquin Delta every ~6 weeks to monitor levy integrity and measure subsidence



Pixel size ~ 20 ft



AP / Craig Kohlross

Upcoming Water Resources Applied Research Activities

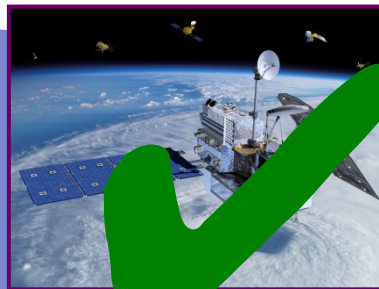


- ROSES 2013 A.45 Earth Science Applications: WATER RESOURCES Solicitation
 - The specific goal of this solicitation is to advance the long-term (30-180 day) outlooks of water supply anomalies and their effective use by water managers, their organizations, and/or decision-makers.
 - Proposals due 30 April
- 3rd SMAP Application Workshop and Short Course
 - 8-10 April
 - NCAR, Boulder CO
- NASA – WSWC Meeting
 - 18-20 August
 - JPL, Pasadena CA

New and Upcoming Freshwater Observing Satellite Missions



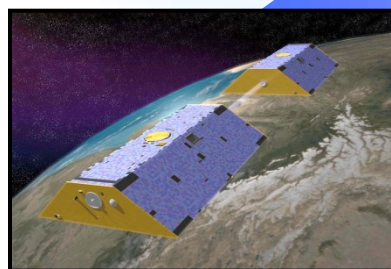
Landsat 8
2013
**Water Impacts and
Water Demand**



Global Precipitation
Measurement
(GPM)
2014
Precipitation



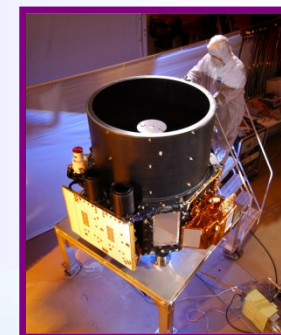
Soil Moisture Active-Passive
(SMAP)
2014
Soil Moist., Freeze/Thaw



Gravity Recovery and
Climate Experiment
(GRACE) Follow-On
2017
**Global Mass
& Water Variation**



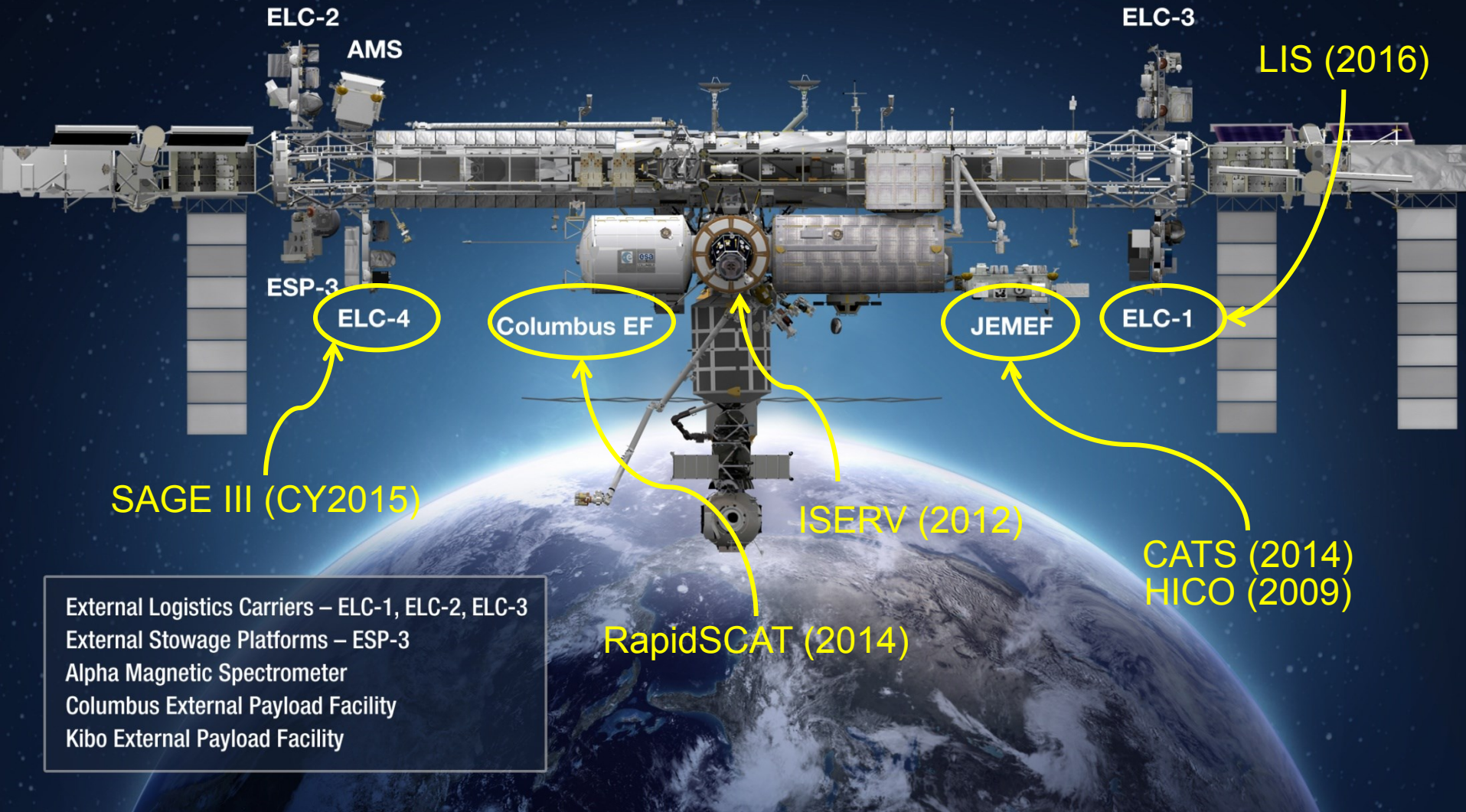
Cyclone Global
Navigation Satellite
System (CYGNSS)
2016
**Cyclone
Generation**



Ice, Cloud, and land
Elevation Satellite
(ICESat-2)
2016
Ice Dynamics

International Space Station

Earth Science Instruments



External Logistics Carriers – ELC-1, ELC-2, ELC-3
External Stowage Platforms – ESP-3
Alpha Magnetic Spectrometer
Columbus External Payload Facility
Kibo External Payload Facility