



JPL Missions To Enable Ocean Science

TOPEX/Poseidon

& Jason-1

provide global views of El Niño/La Niña Pacific Decadal Oscillation, and sea level rise

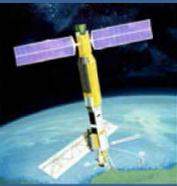
SeaWinds

increases prediction time for hazardous weather events over oceans by 6-12 hours

OSTM/Jason-2

will discriminate mesoscale ocean features

Aquarius will improve climate models



SeaSAT (1978)



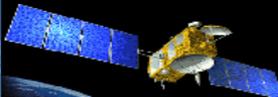
TOPEX / Poseidon (1992-Present)



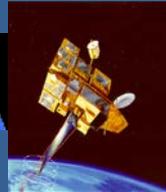
NSCAT (1996)



QuikSCAT (1999-Present)



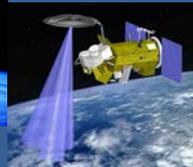
Topex / Poseidon and Jason-1 Tandem (2002-Present)



SeaWinds on Midori-II (2002-2003)



Ocean Surface Topography Mission (2008)



Aquarius (2010)



Ocean Vector Winds Mission (TBD)



SWOT (Proposed)

1978

1992

1996

1999

2002

2003

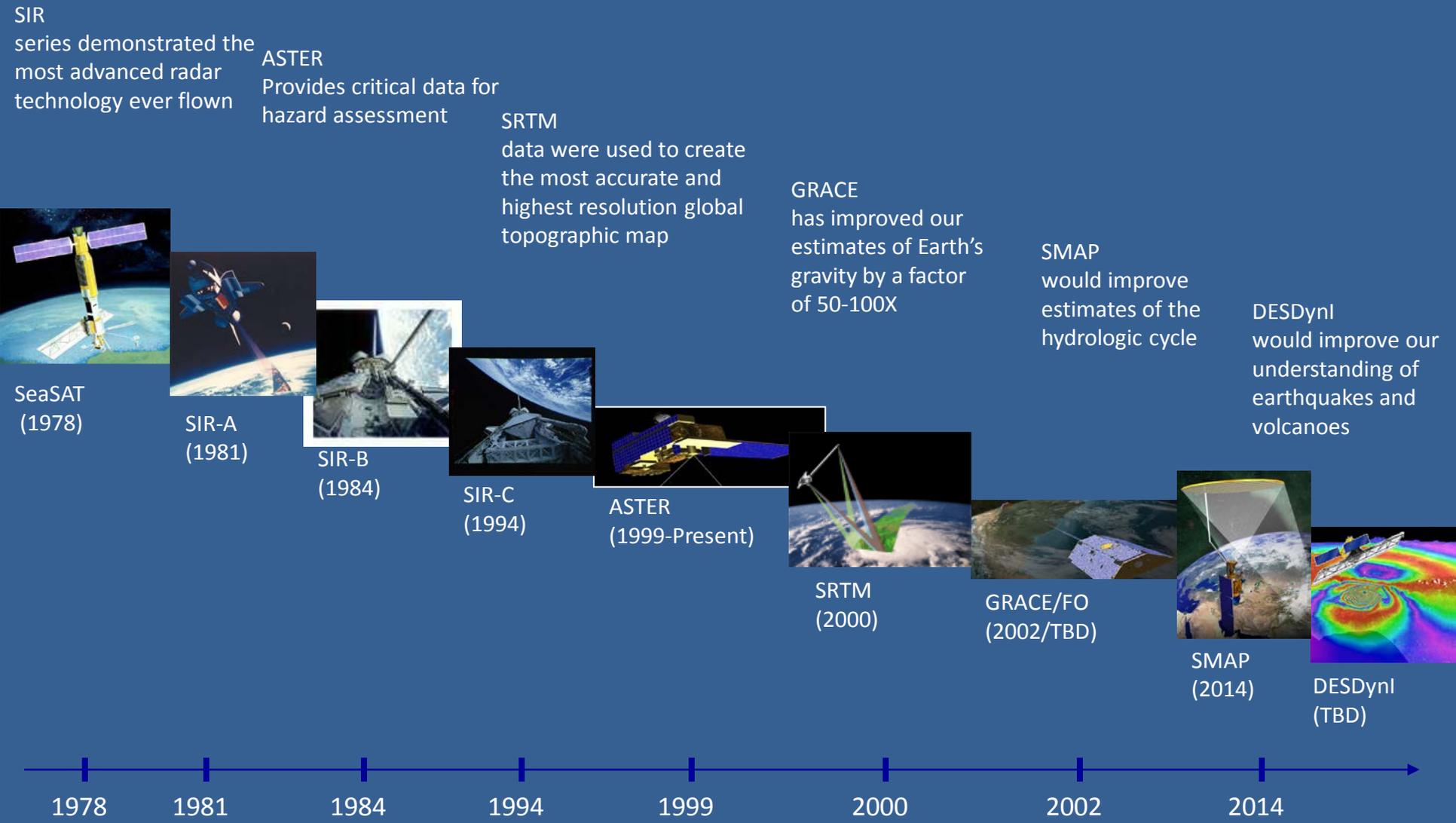
2008

2009





JPL Missions To Enable Solid Earth and Hydrology Science



SIR series demonstrated the most advanced radar technology ever flown

ASTER Provides critical data for hazard assessment

SRTM data were used to create the most accurate and highest resolution global topographic map

GRACE has improved our estimates of Earth's gravity by a factor of 50-100X

SMAP would improve estimates of the hydrologic cycle

DESDynI would improve our understanding of earthquakes and volcanoes

SeaSAT (1978)

SIR-A (1981)

SIR-B (1984)

SIR-C (1994)

ASTER (1999-Present)

SRTM (2000)

GRACE/FO (2002/TBD)

SMAP (2014)

DESDynI (TBD)

1978 1981 1984 1994 1999 2000 2002 2014