



# DANIEL K. INOUE SOLAR TELESCOPE



*The Daniel K. Inouye Solar Telescope*

## The Most Powerful Solar Telescope in the World

The National Science Foundation's (NSF) **Daniel K. Inouye Solar Telescope (DKIST)** is the most powerful solar telescope in the world. This four-meter class observatory is located at Haleakalā Observatories on the island of Maui, Hawai'i. With a focus on understanding the Sun's explosive behavior, observations of magnetic fields are at the forefront of this flagship facility.

DKIST's **4-meter mirror** and cutting-edge instruments will gather unprecedented observations throughout the solar atmosphere. DKIST will reveal features three times smaller than anything we have seen on the Sun to date, and will do so multiple times a second. Not only will the world-class instruments and optical assembly allow spectacular imagery, but they will also enable incredible **spectroscopic and polarimetric capabilities**. This powerful capability will facilitate the daily measurement of solar magnetic field strengths in the corona for the very first time.

DKIST has the spatial, temporal, spectral resolution and dynamic range that is needed to observe the most fundamental solar magnetic structures. This gives us the ability to observe physical processes occurring on their natural scales. This will provide an insight into the role magnetic fields play in **space weather** and solar activity. The new spatial scales that DKIST will allow us to resolve, along with the new spectral windows now available are ripe for the discovery of processes we had no idea existed!

[www.nso.edu/dkist](http://www.nso.edu/dkist)

DKIST is the most powerful solar telescope in the world. It will facilitate the regular measurement of magnetic fields in the solar corona for the very first time.



The National Solar Observatory and the Daniel K. Inouye Solar Telescope are operated by AURA under a cooperative agreement with the National Science Foundation.



### DKIST Investigators

Principal Investigator  
National Solar Observatory/AURA

#### Co-Investigators

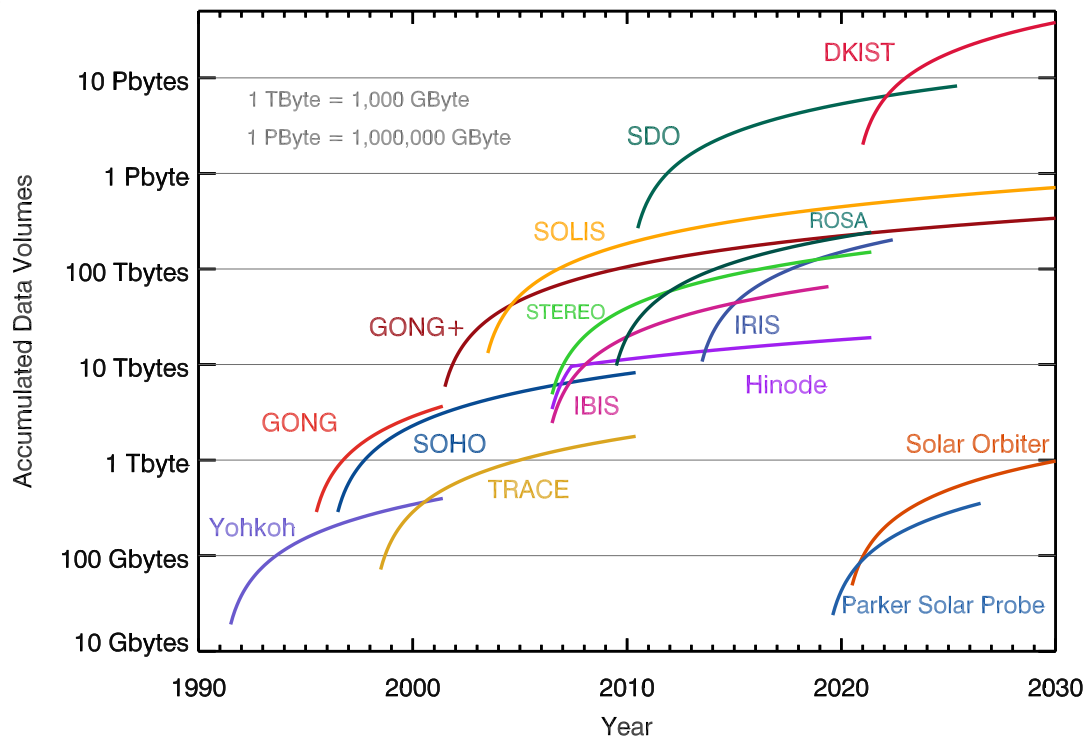
High Altitude Observatory  
New Jersey Institute of Technology  
University of Hawaii Institute for Astronomy  
University of Chicago Department of Astronomy and Astrophysics



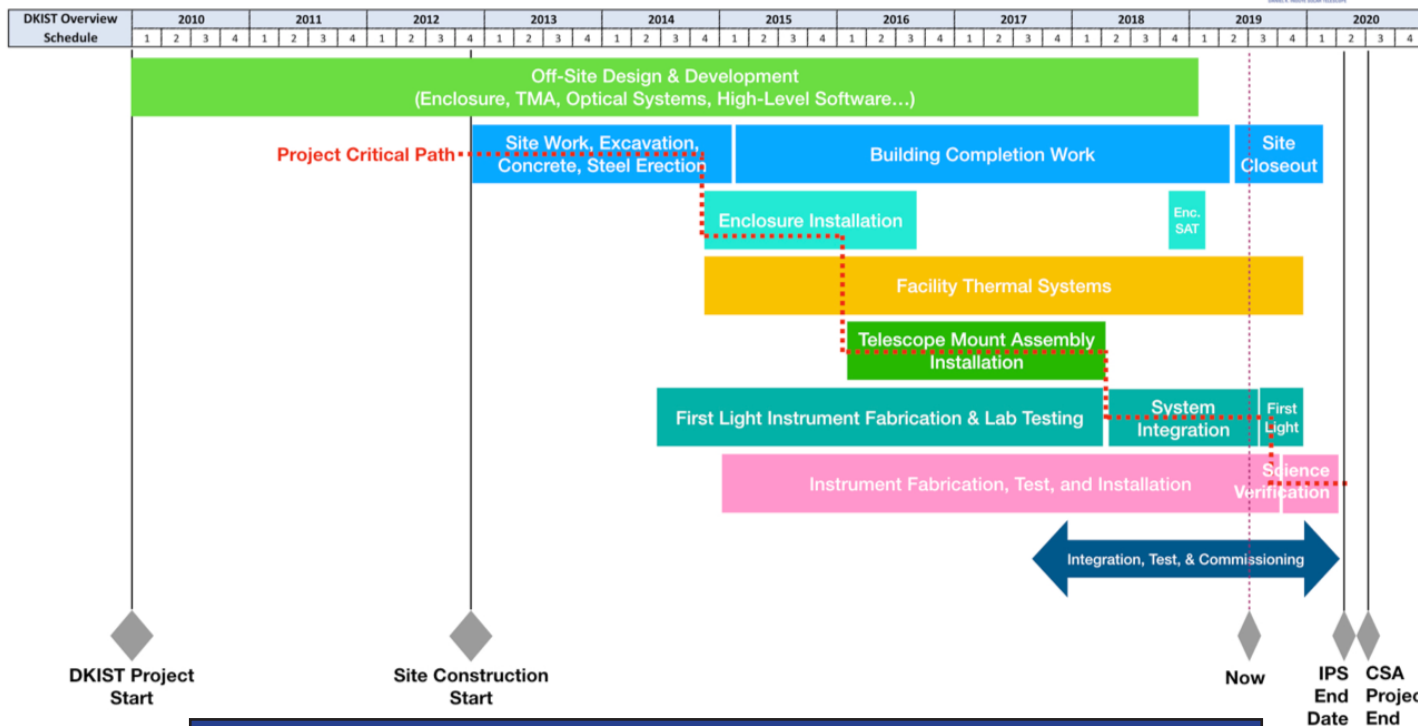
## Accumulated Solar Telescope Data Volumes

### DKIST Data

The Daniel K. Inouye Solar Observatory will collect the same amount of data in one day as found in the entire Library of Congress.



## Daniel K. Inouye Solar Telescope (DKIST) Project Schedule



DKIST is on time and on budget

