



# Fire the Laser!

Working with the Laser  
Clearinghouse  
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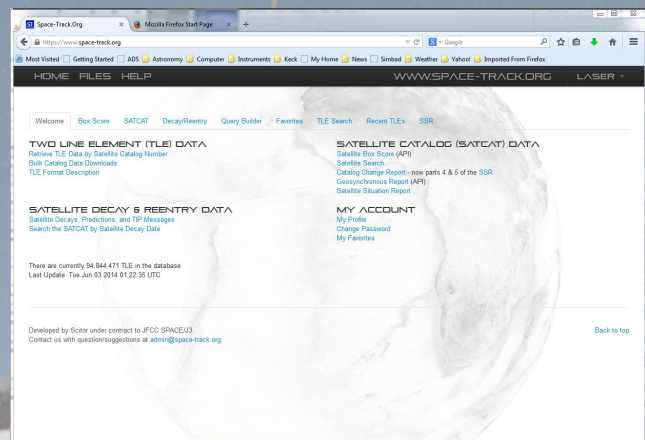
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# We've come a long way, baby

## Then

- Coordinates by fax
  - typos
- Nearly zero closures

## Now



# Keck Changes

- 2004: 127 nights AO
  - 25 nights LGS
  - 73 nights NGS
  - 29 nights IF
- 2014: 226 nights AO
  - 159 nights LGS
  - 67 nights NGS
  - No IF

# LCH Changes

- More nights, more lasers
- [www.space-track.org](http://www.space-track.org)
  - Eliminates human-generated emails
- 30-day “lookout”
  - Allows personnel scheduling

# LCH Communication

- Develop relationships
- Unique protect lists
- Appreciate perspective
  - Effects of whole-night, blanket closures
  - Became 10 minute “space events”

# Effects

- Lots more computer-generated emails
- Anecdotally, more missed nights
  - Send in PRMs, never get PAMs
- More admin time (lookout)

# Future

- Hybrid Classical/Robo-AO
  - Most of the sky, every night
  - Specific targets
- Allows
  - Real ToO
  - Cadence observing