DATA VISUALIZATION IN VIRTUAL REALITY

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WHAT IS VIRTUAL REALITY (VR) ?

Reality +

NASA

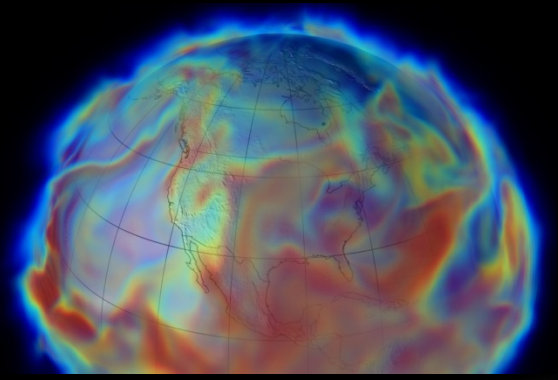
ARE WE IN THE FUTURE YET?

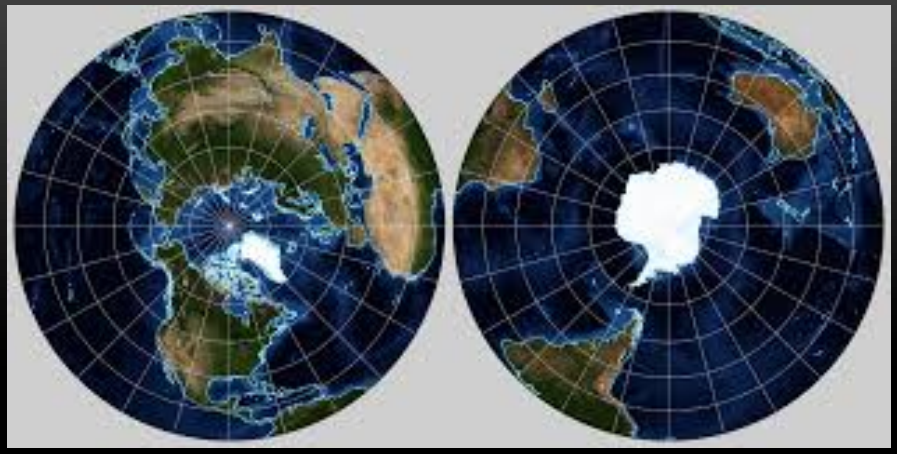
HEAD MOUNTED DISPLAYS

DON’T WORRY, THEY’LL GET COOLER

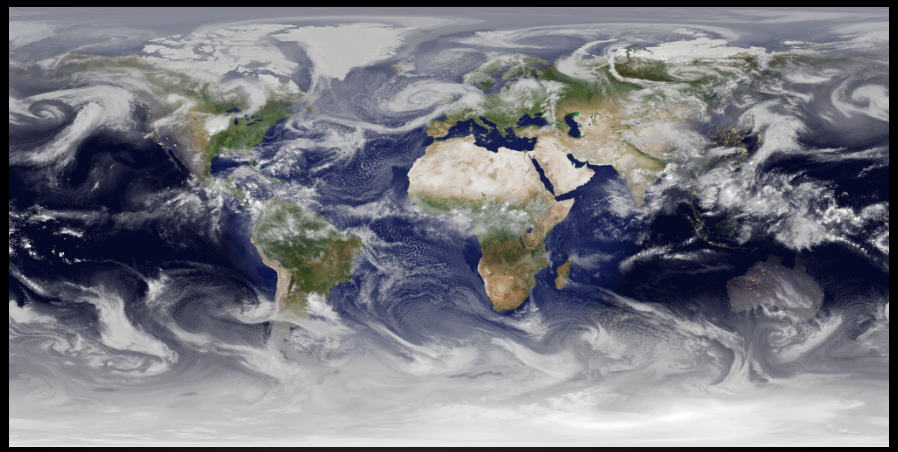
THIS IS COOL…..WHERE'S THE DATA?

TRADITIONAL 2D VISUALIZATIONS



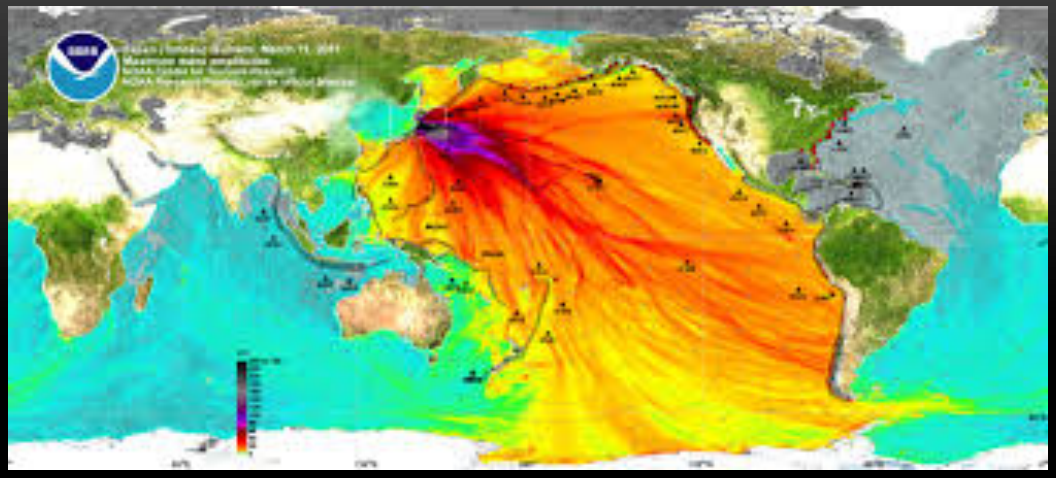


BIG DATA, EARTH-SPANNING DATA



WHAT IF DATA COLLECTED IN A SPHERE COULD BE VIEWED IN A SPHERE?

YIKES

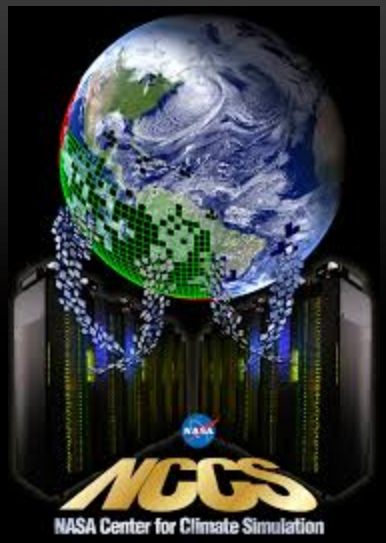


INITIAL FEEDBACK FROM NOAA

“The VR Visualization Tool provides a natural way of visualizing model outputs without any of the distortions that occur when transforming a 3 dimensional surface into a 2 dimensional plane. All the geographical features visualized through the device represent a depiction very close to the real system conserving the original proportions.”

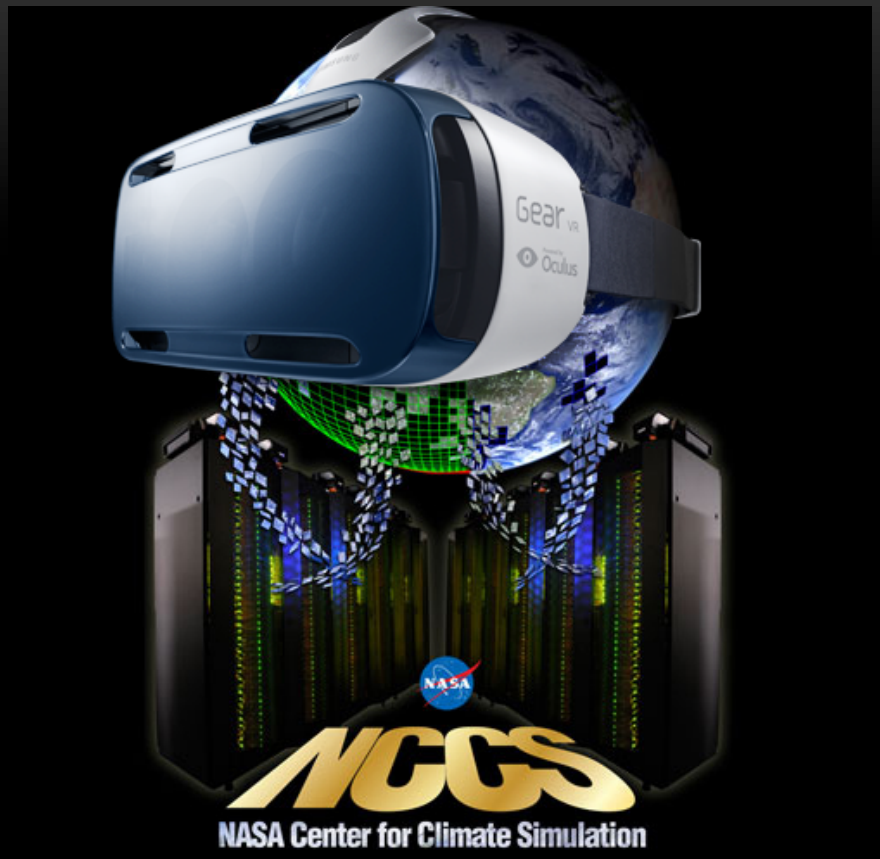
Ariel Stein, Ph.D.

NOAA / Air Resources Laboratory



ESTO
Earth Science Technology Office

NASA ESTO PROJECT

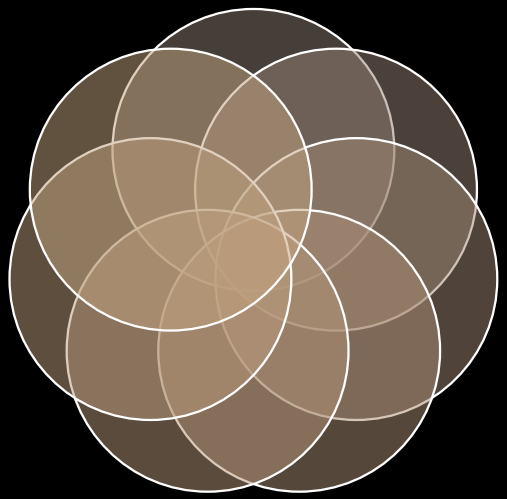

Gear VR
Oculus
NASA
NCCS
NASA Center for Climate Simulation

+ 9.0
= 27.6
Million Tons
+ 24.5
- 5.0
- 0.9
Dust deposited into the Amazon Basin
NASA
NASA

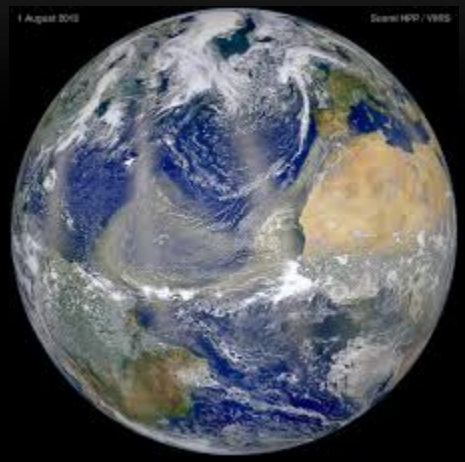
AGU FEEDBACK

- Lightweight
- Portable
- Adaptable
- The WOW factor
- Huge driver of booth traffic
- Engaged the public (both scientists and muggles)
- Inspired ideas for science and collaboration

WHAT'S NEXT?


Interact with the data
Real-time data visualization
Discover AQ Project with ESTO
Zoom, fly-through volumetric data
Overlay datasets
Automation, collaboration
Combine data and 360 video

THANK YOU!
STAY FOR DEMOS…….



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@navteca @shaynaskolnik #VR #datavisualization