

the hyperwall

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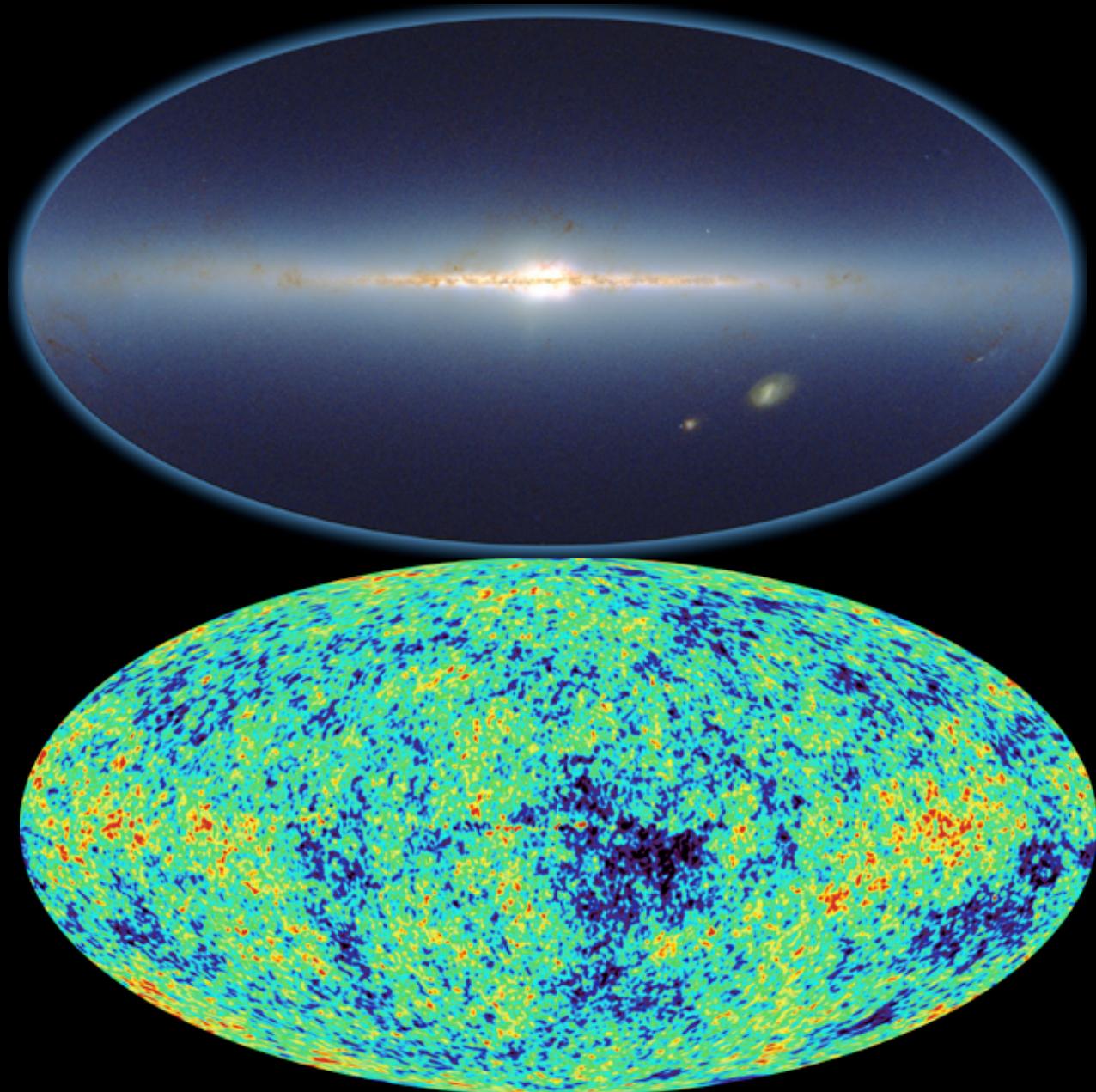
interactive, collaborative, immersive, high-bandwidth-
visualization of a 5-dimensional parameter study of 3D flow
simulations (32,928 datasets)

visualization cluster
7x7 array of fast PCs
+ one master
each PC has:
2 CPUs
1GB M, 100G
100Mbit ethernet
LCD display
Fast 3D graphics

Used for
large data
high dimensional data
multiple views
coupled sim. + vis.
example applications
aerospace design
quantum chemistry
astrophysics
remote sensing

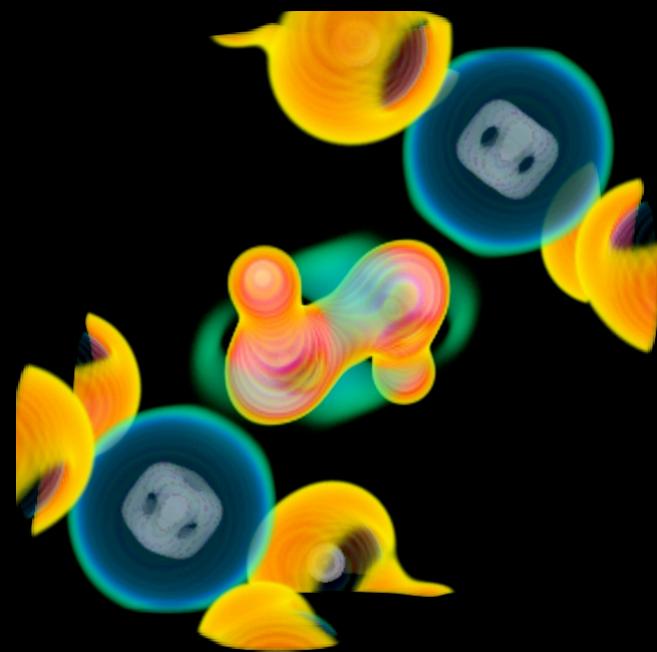
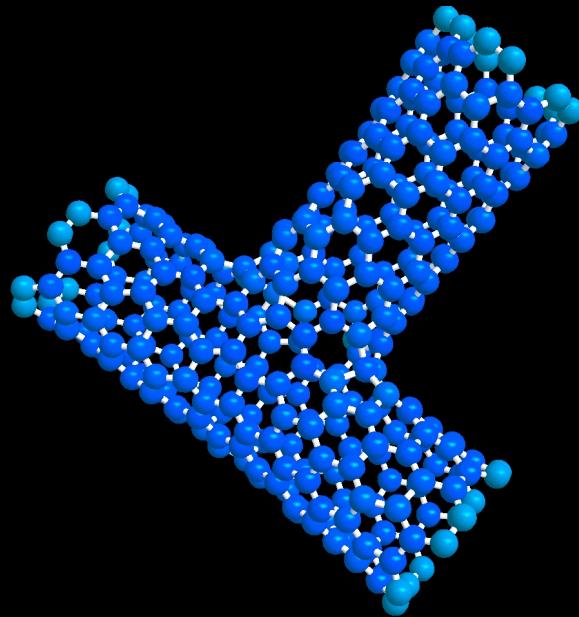
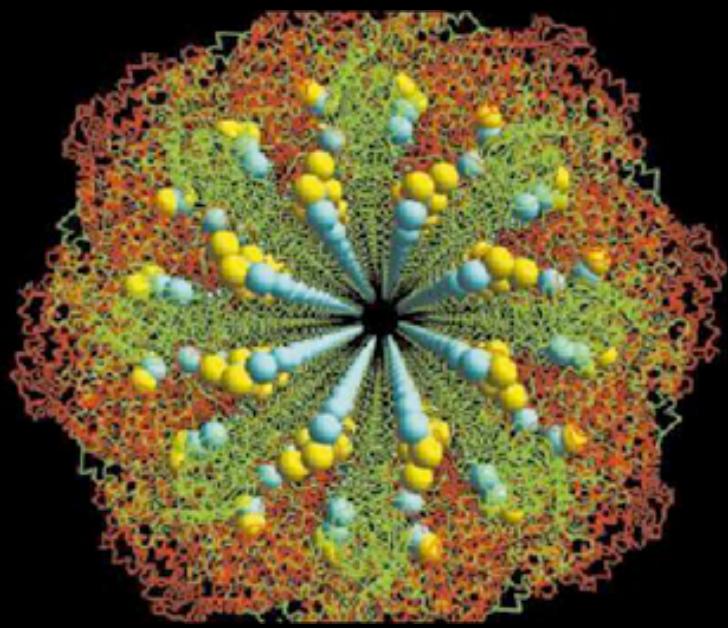
contemporary data

- automated instruments
- computer simulation
- characteristics of data:
 - large (TBs / day)
 - multidimensional (>3, >>3)
 - costly
 - MER, EOS, NGST
 - sky surveys, field campaigns, BABAR, supercomputers...





T = 0.000000



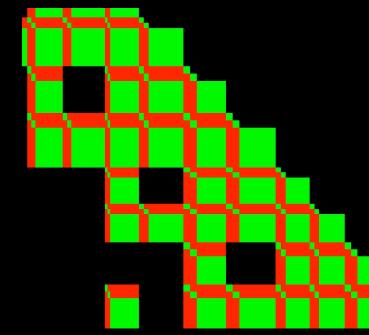
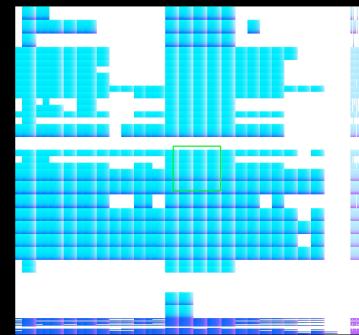
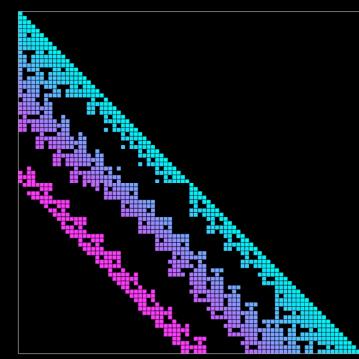
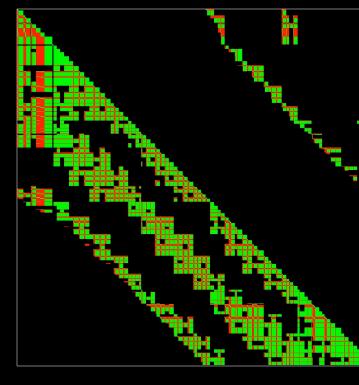
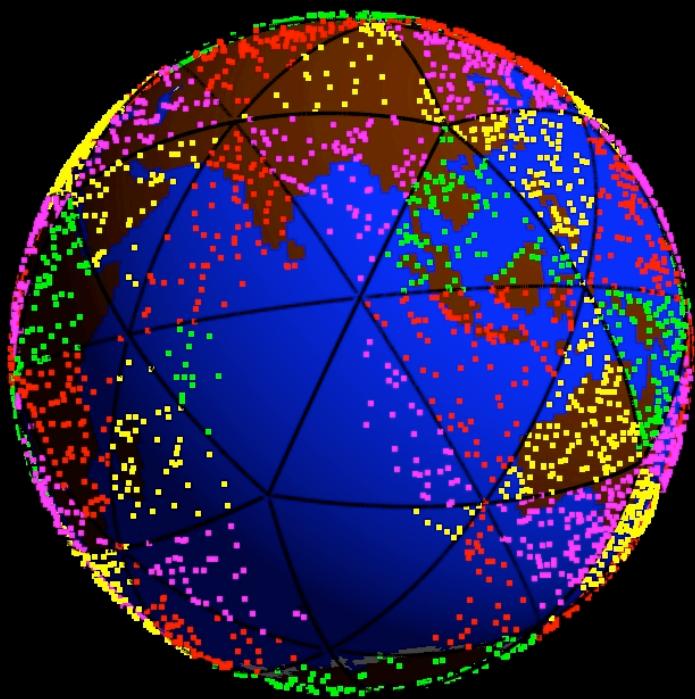
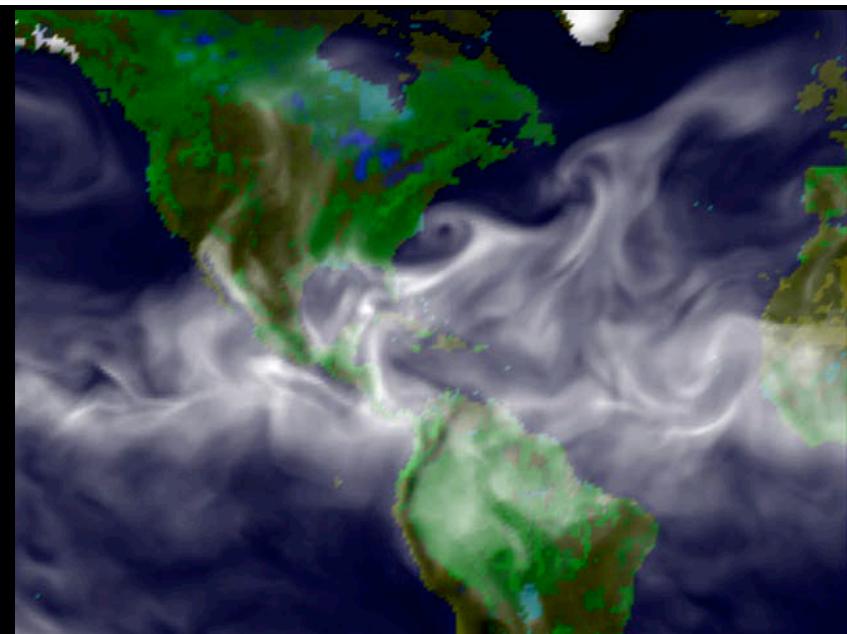
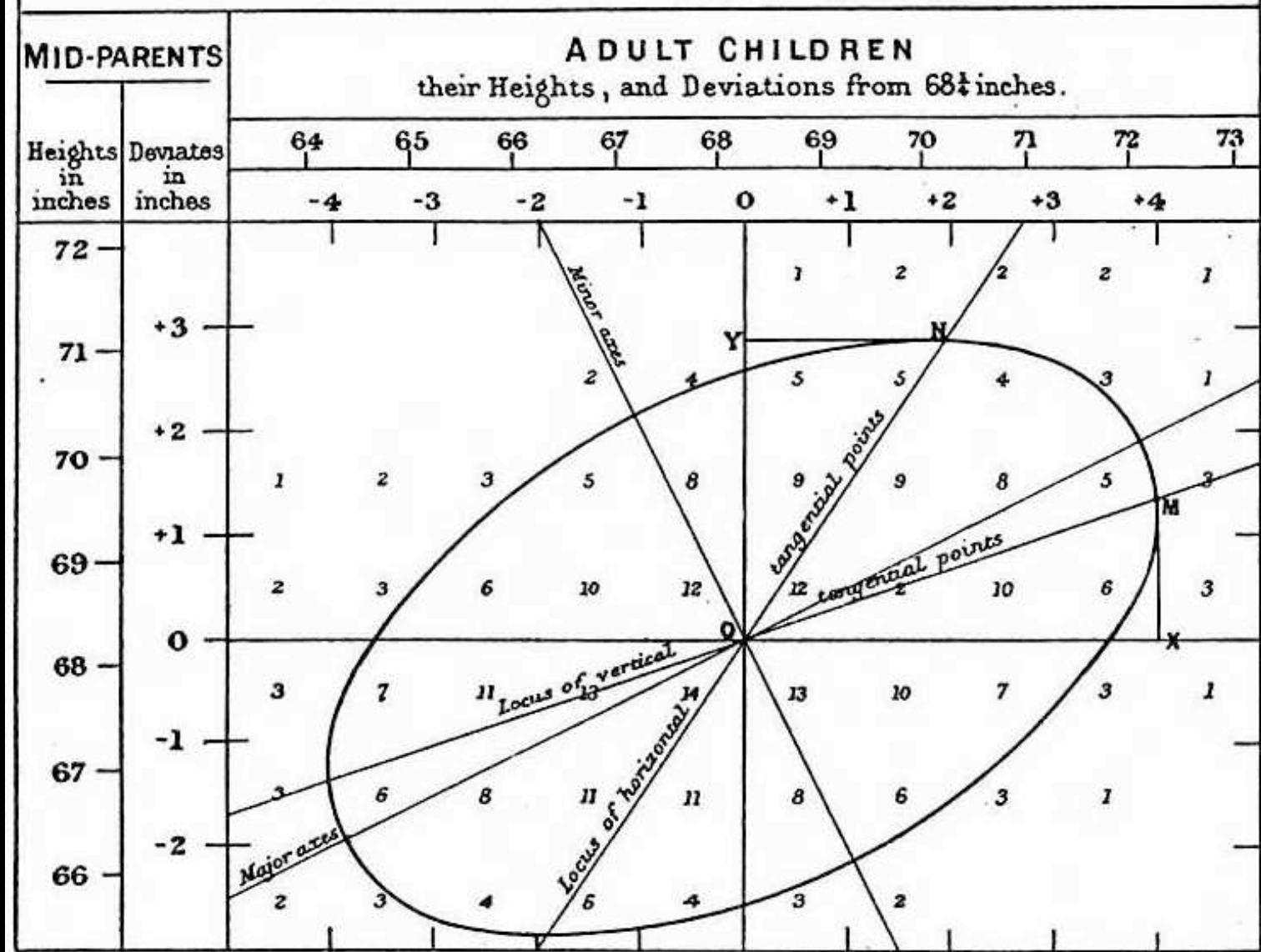
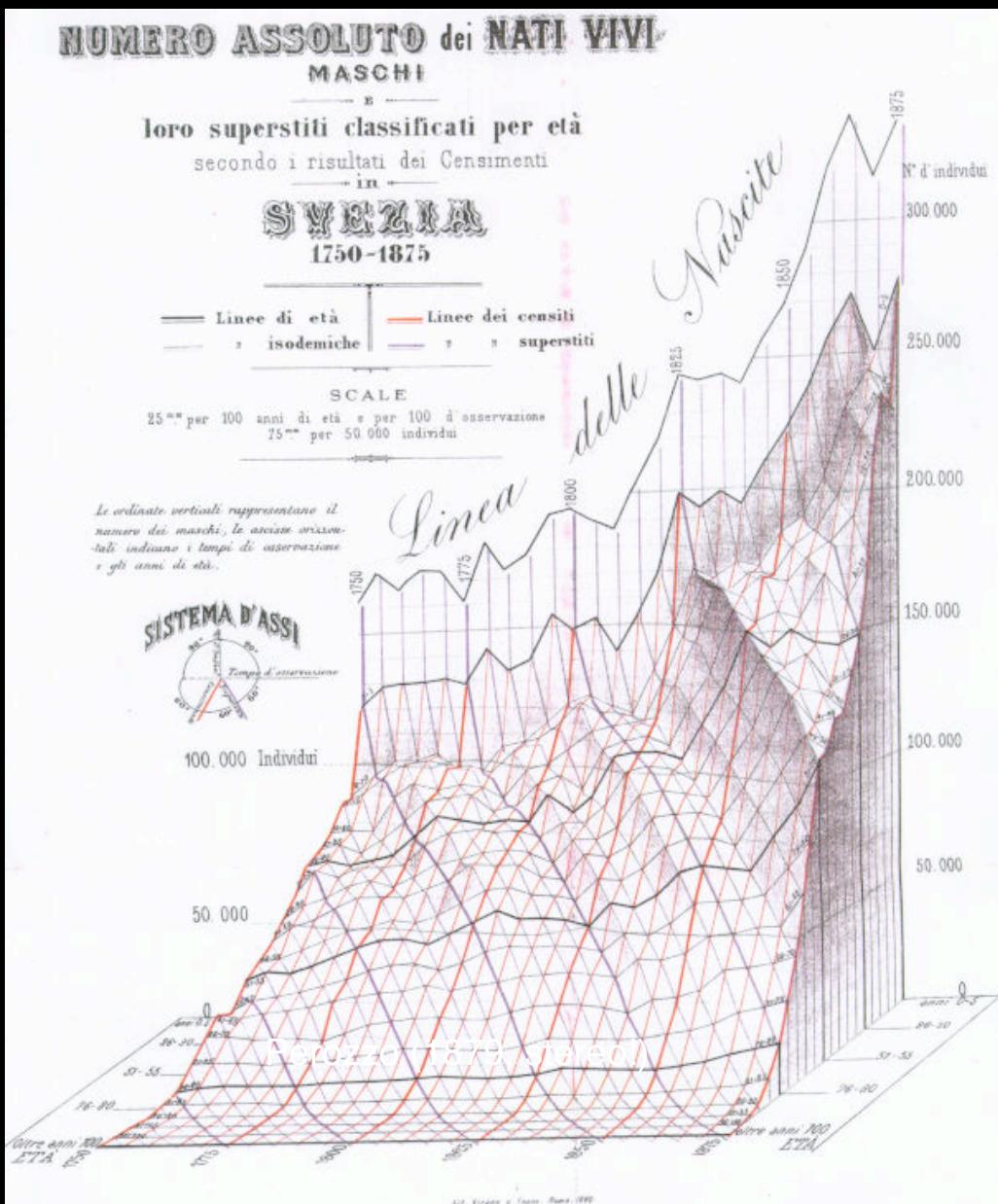


DIAGRAM BASED ON TABLE I.
 (all female heights are multiplied by 1.08)



Galton (1885)



first US grant for data visualization (1872)

Hollerith Machine (1884)

first university course (1913)

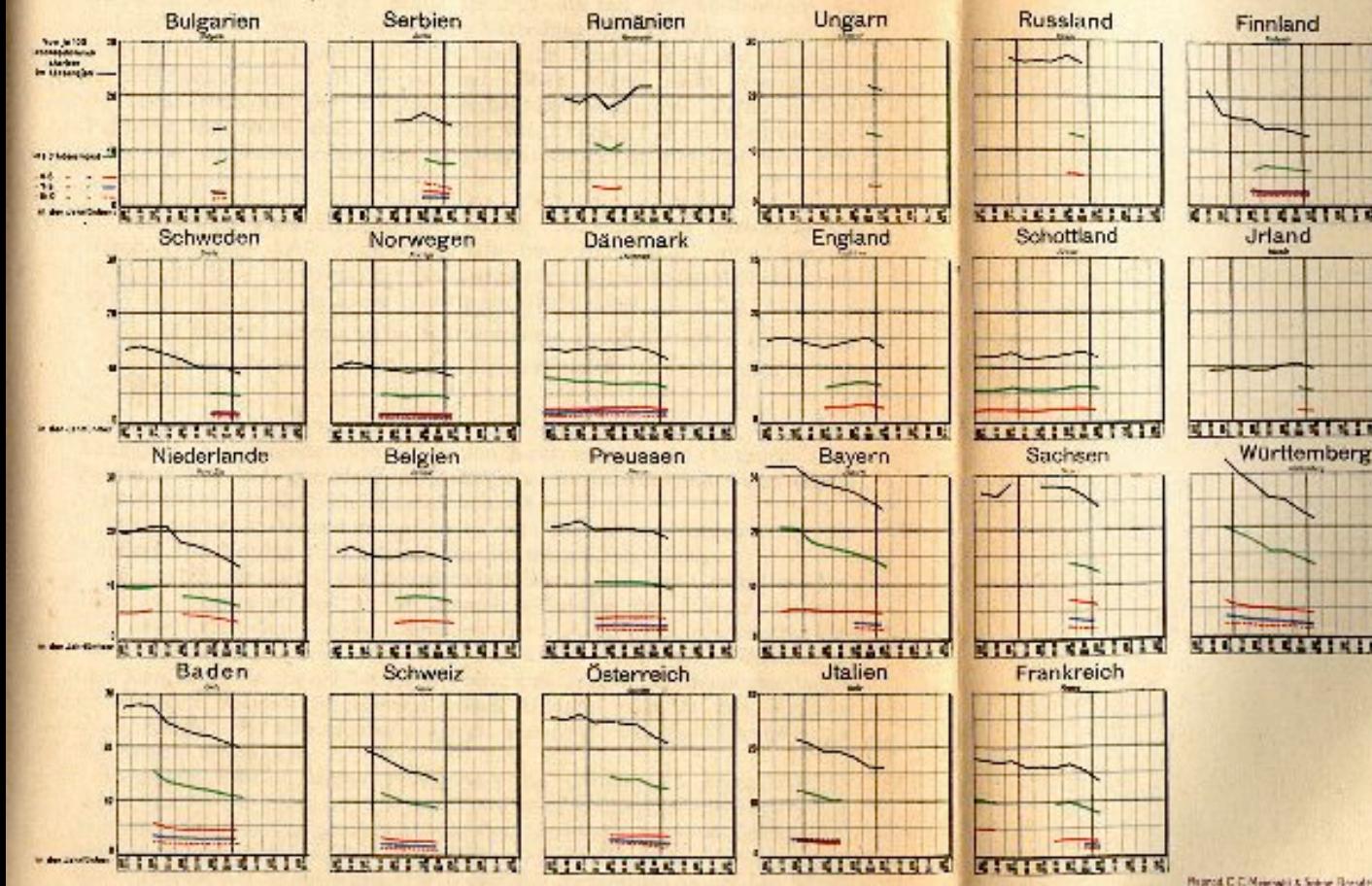
Die Säuglingssterblichkeit in den ersten vier Lebensquartalen

in den europäischen Staaten im Durchschnitt von je 5 Jahren seit 1861

Mortalité infantile pendant les 4 premières trimestres de la vie dans les Etats européens — Mortalidad en los primeros cuatrimestres de la vida en los Estados europeos depuis 1861

Von je 100 Lebendgeborenen starben im Durchschnitt jährlich:

— im 1., — im 2., — im 3., — im 4. Lebensquartal
— im 1.-4. Lebensquartal = 1 Lebensjahr



Rudolf C. C. Meyerholt, Sohn (Berlin)

First plot matrix, first data visualization conference (1911)



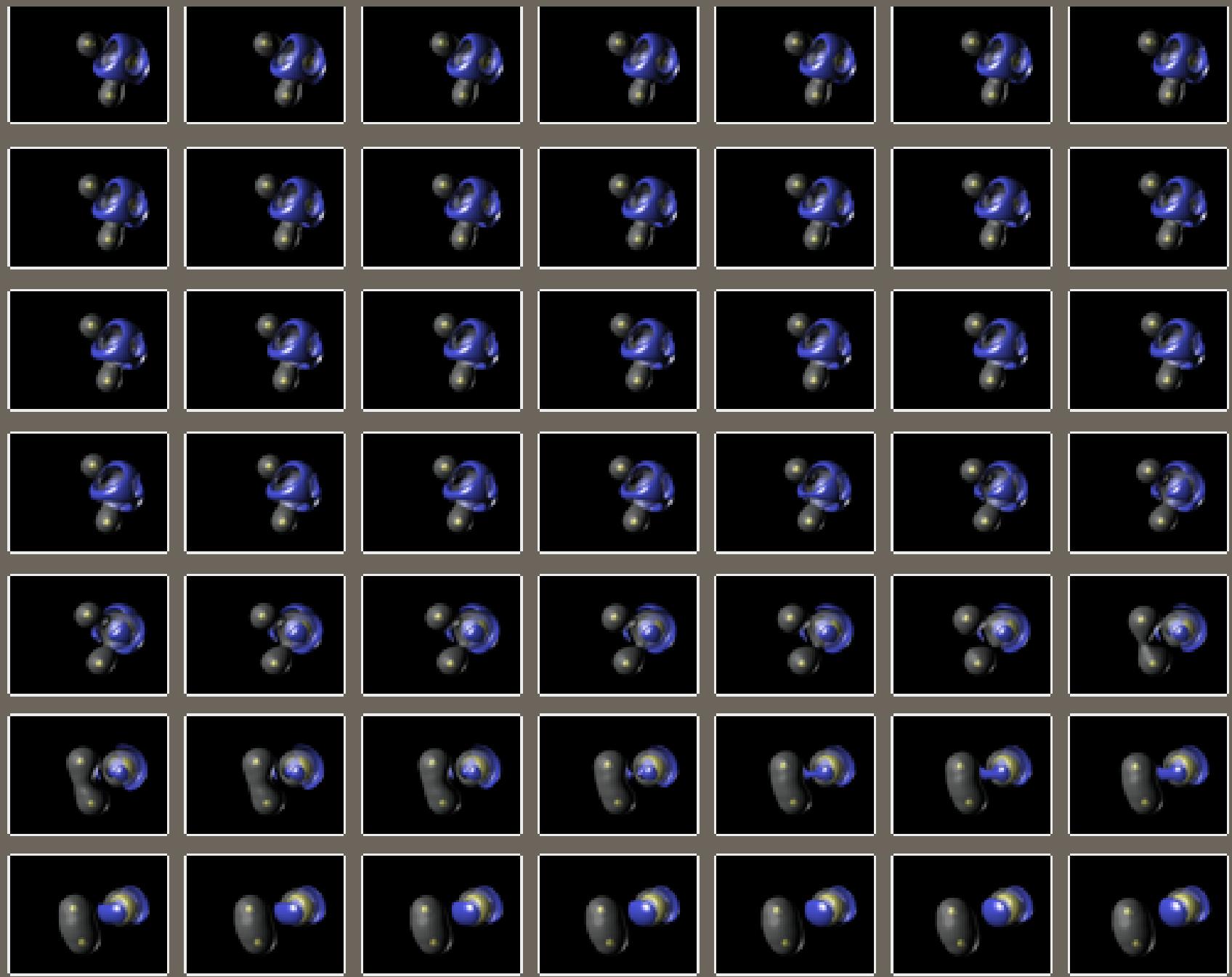
Stanford “iRooms” “post-brainstorming”

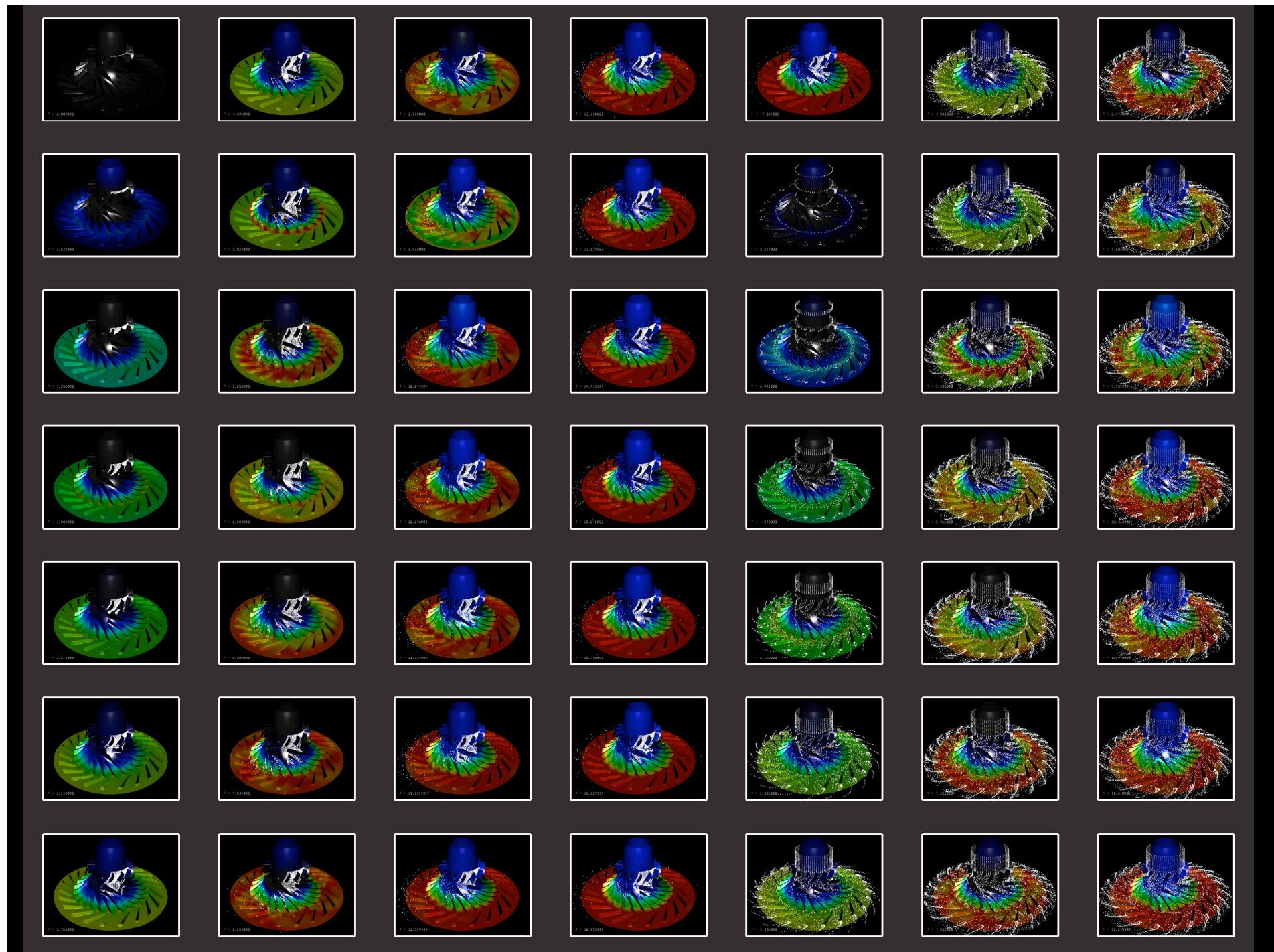


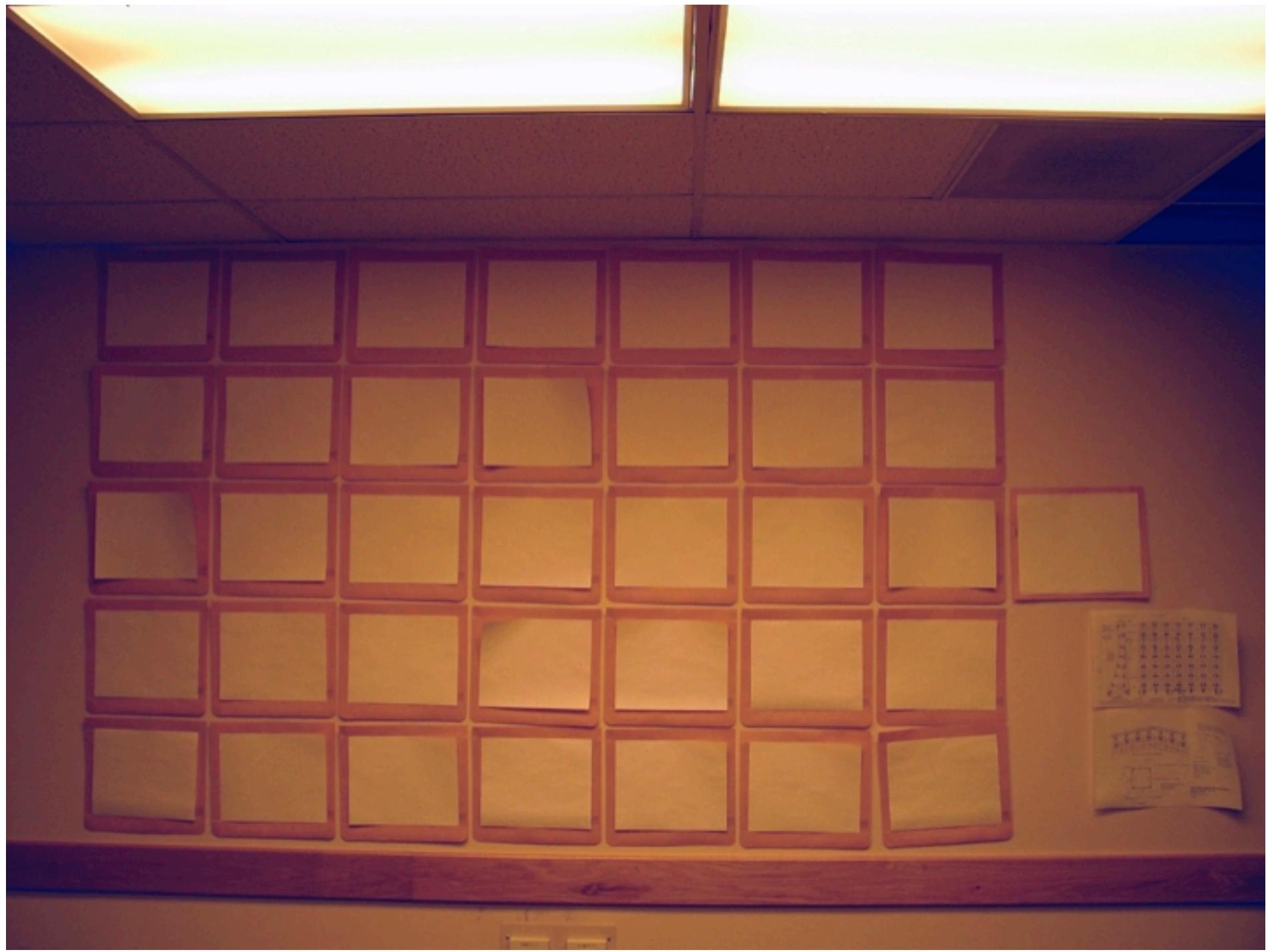
Stanford “photo-piles”



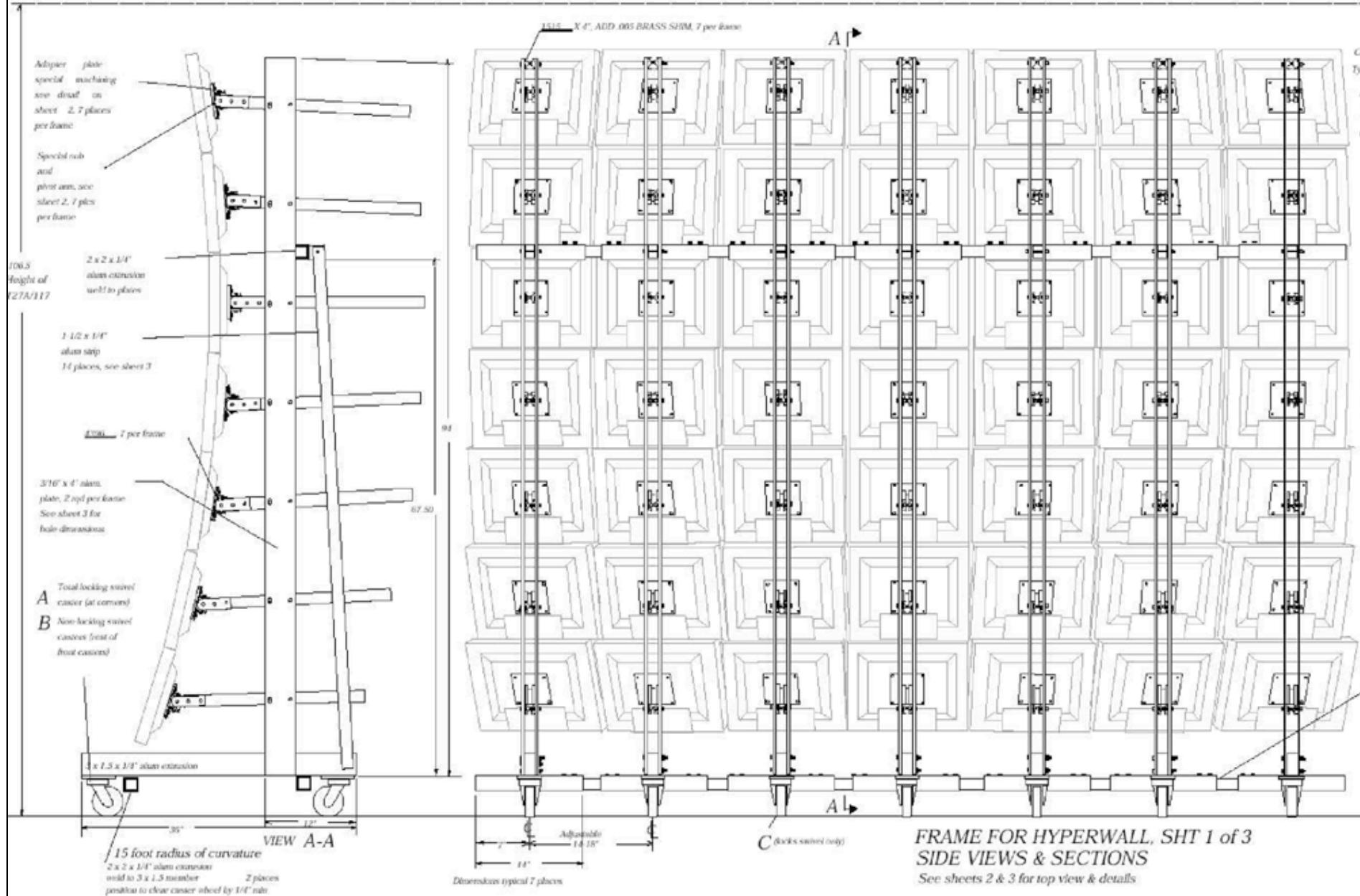
LLNL







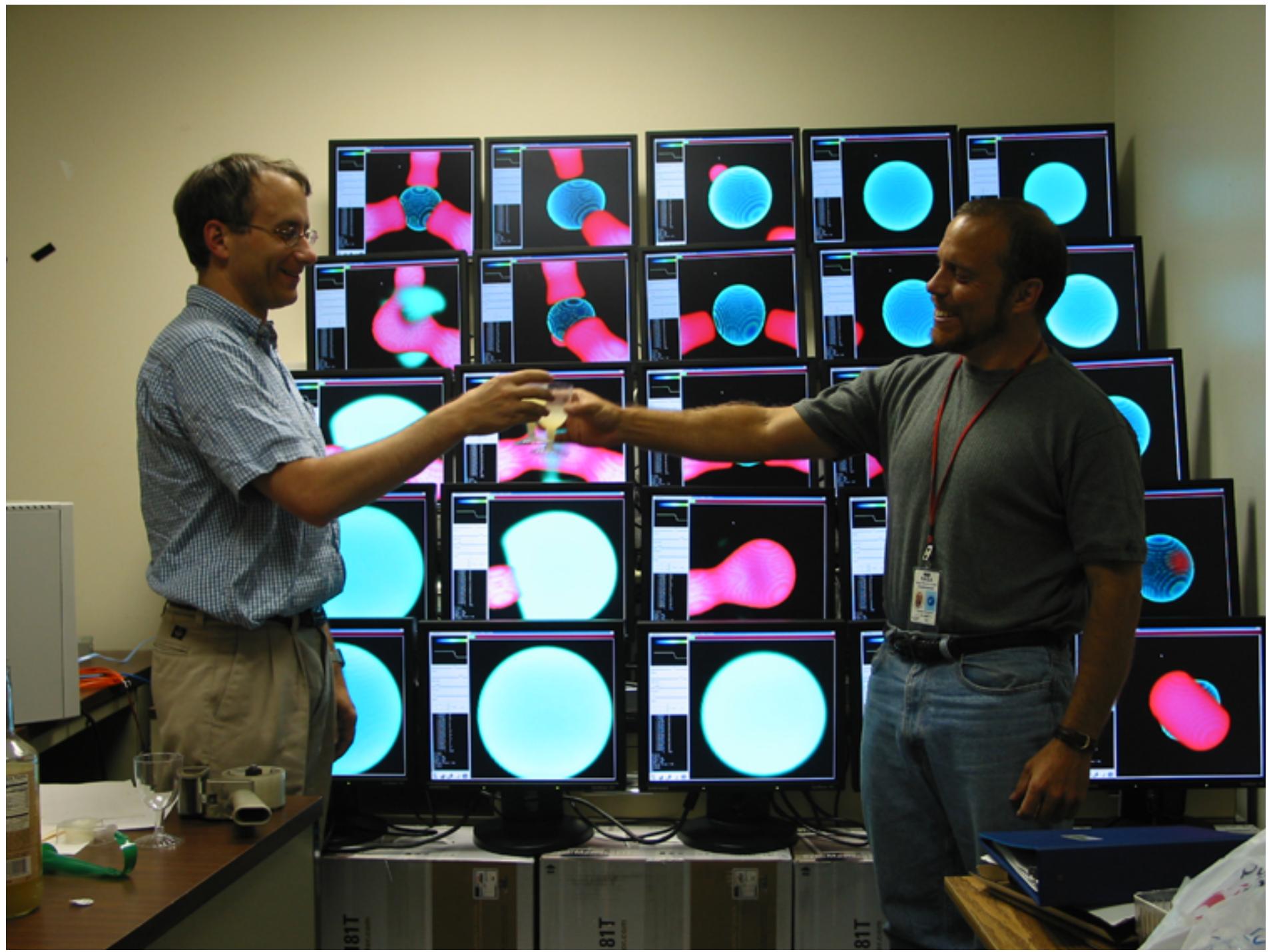
Suspended ceiling of T27A/117















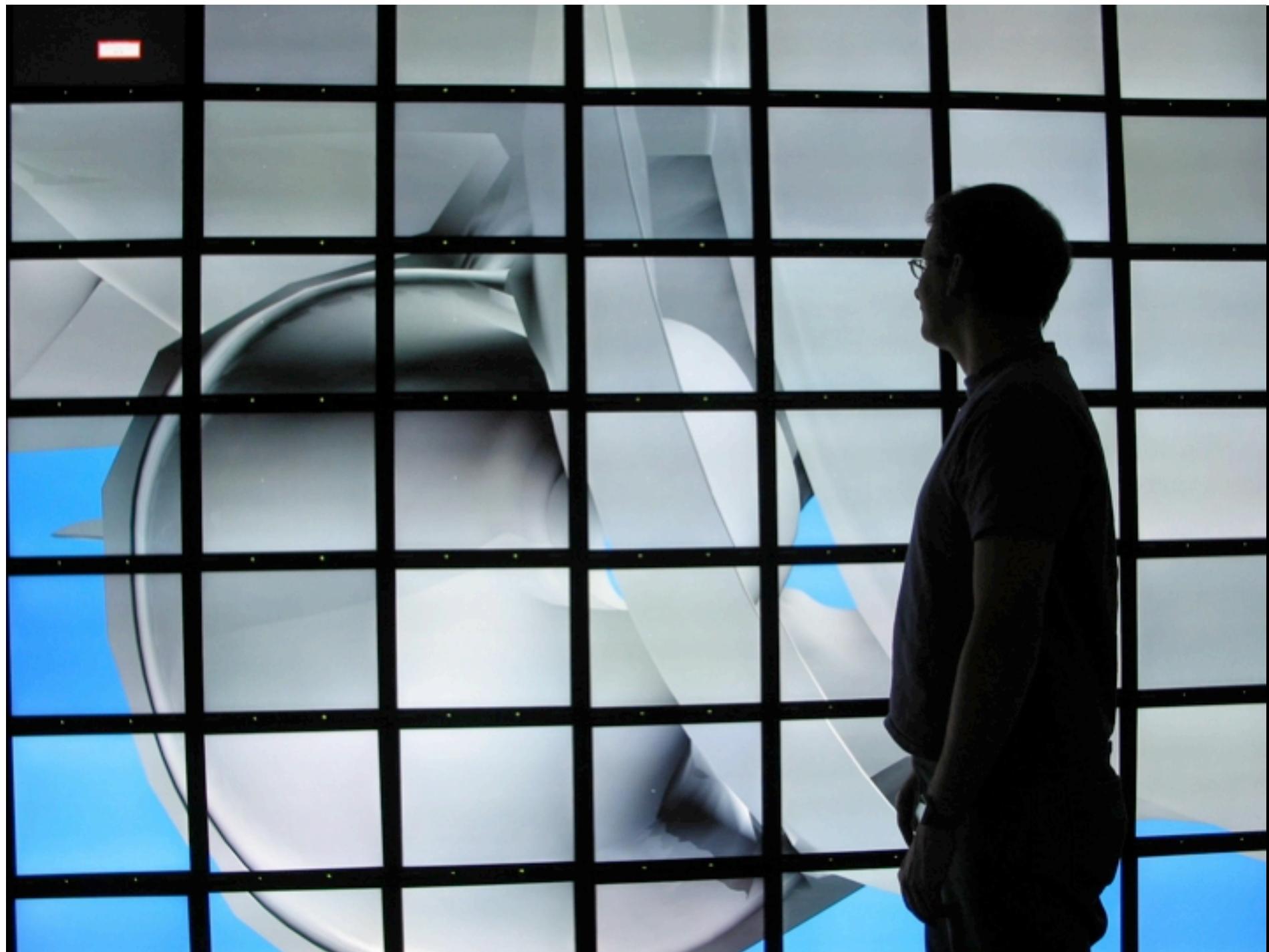


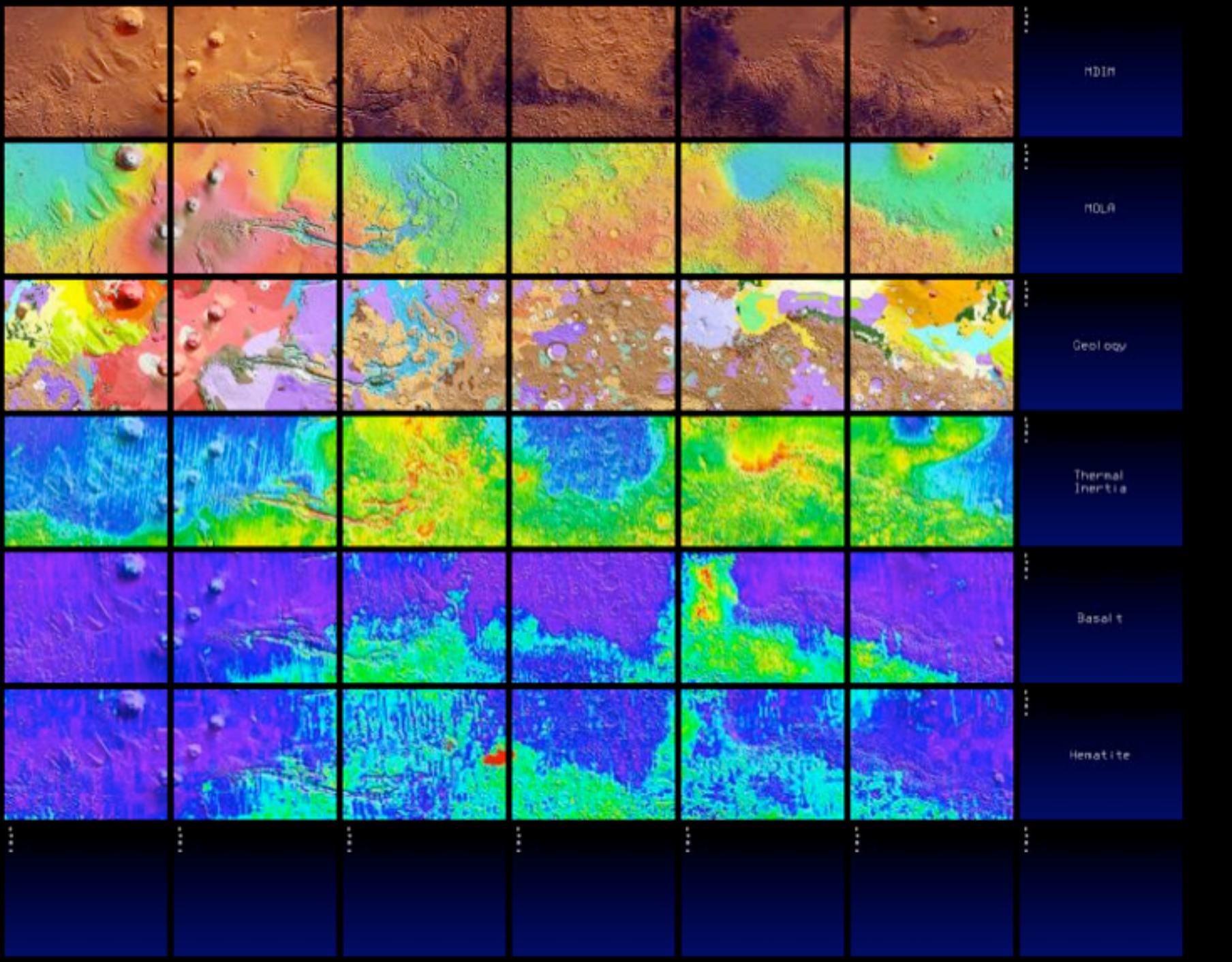


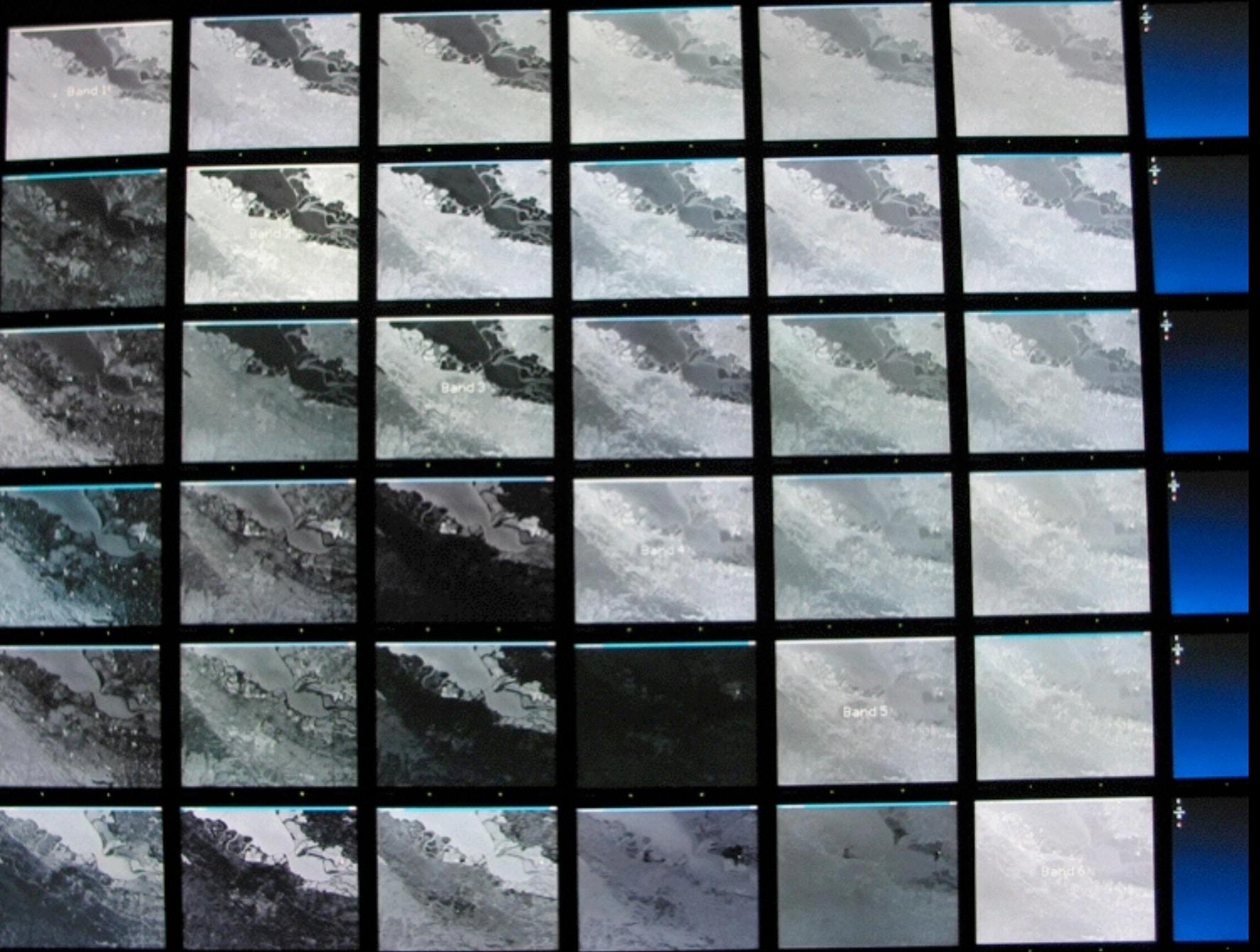


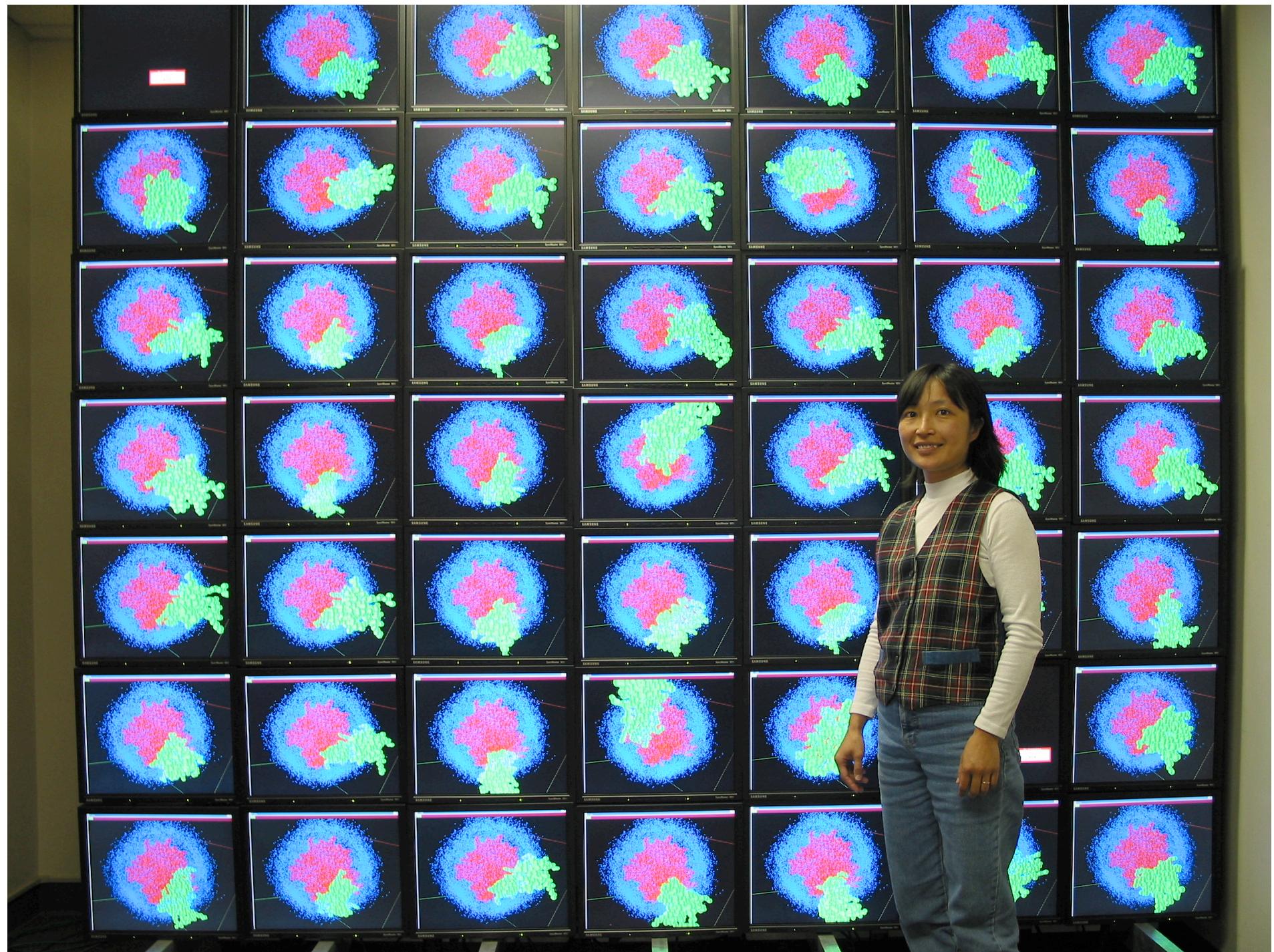






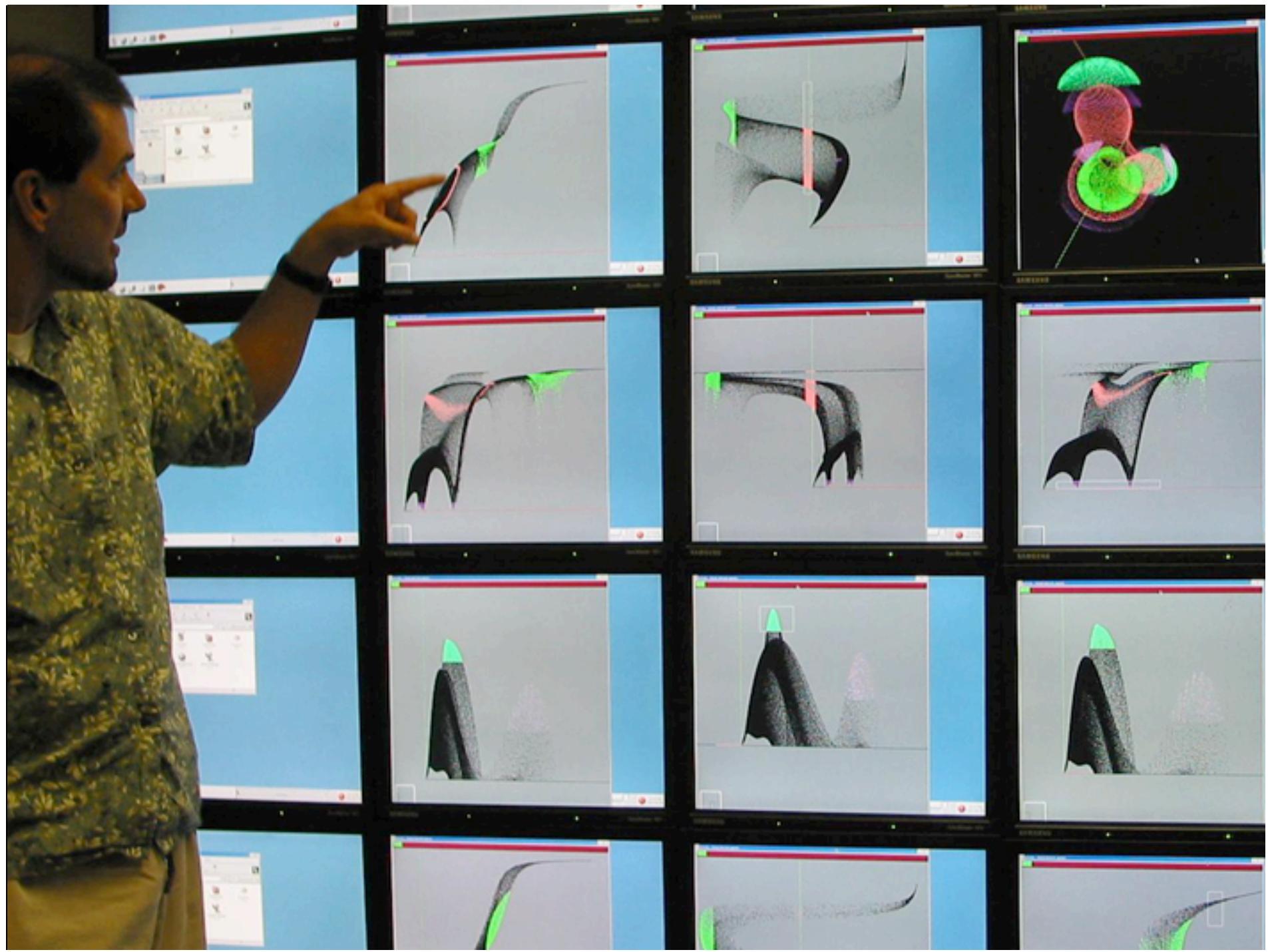


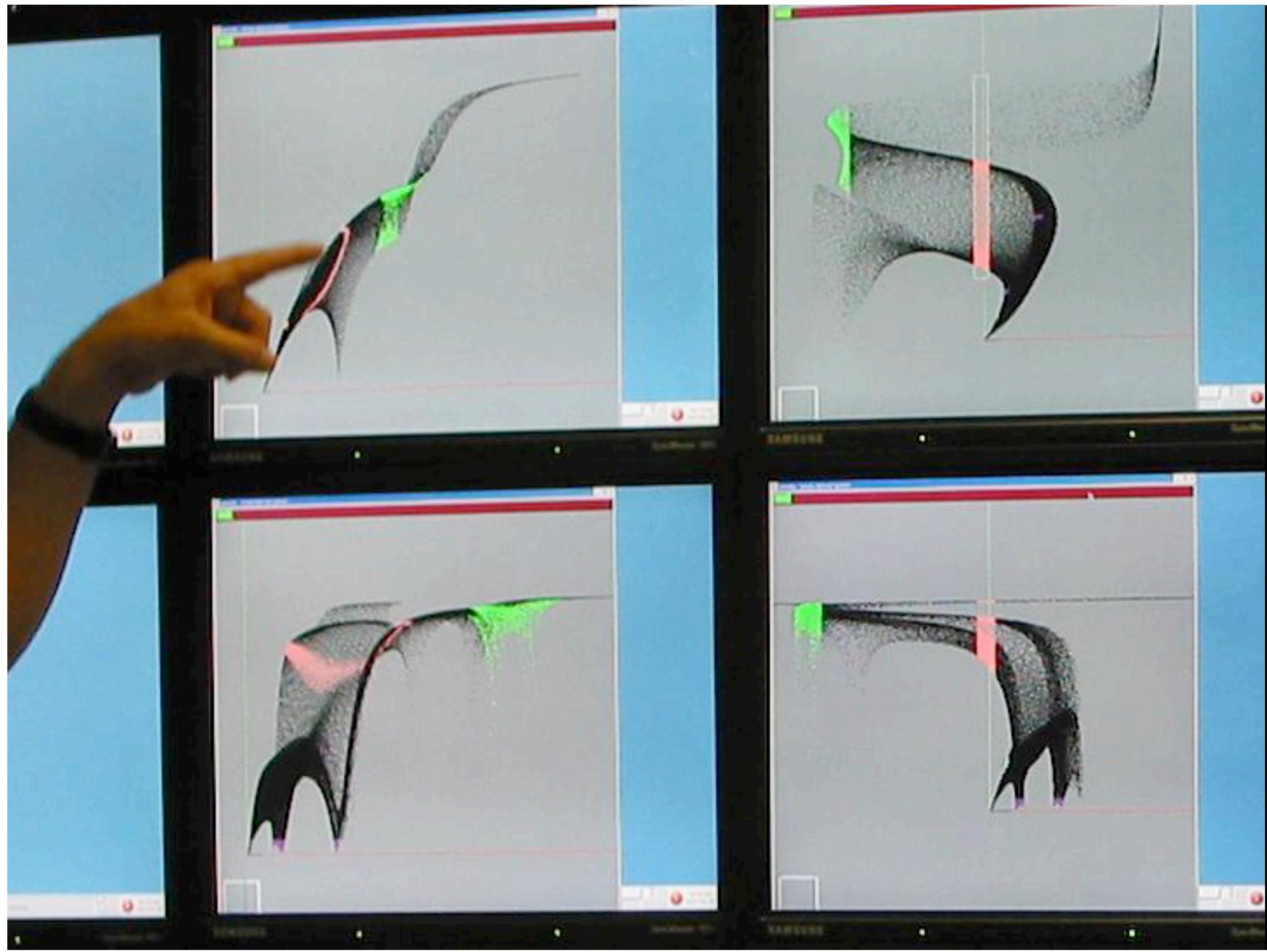


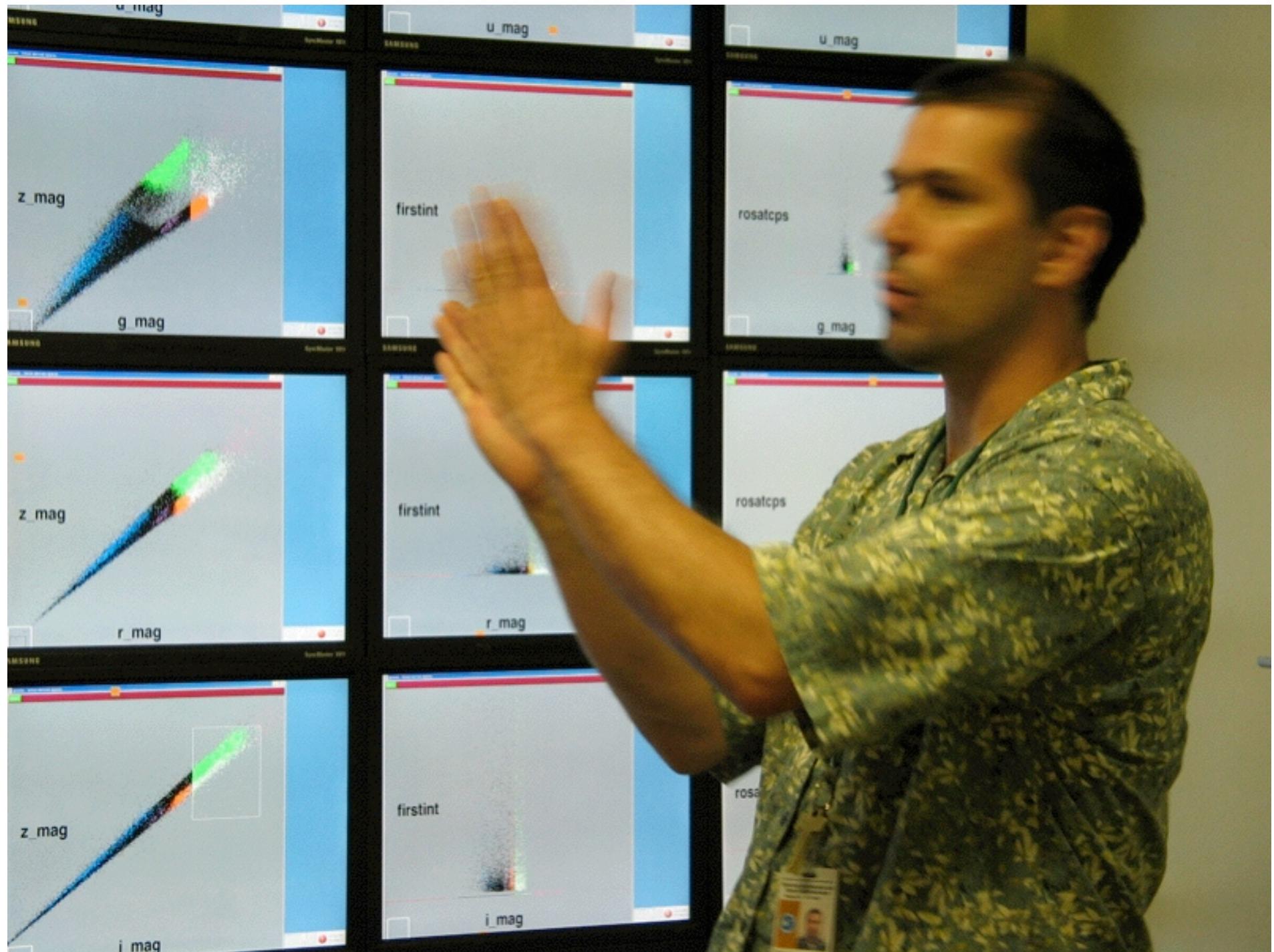


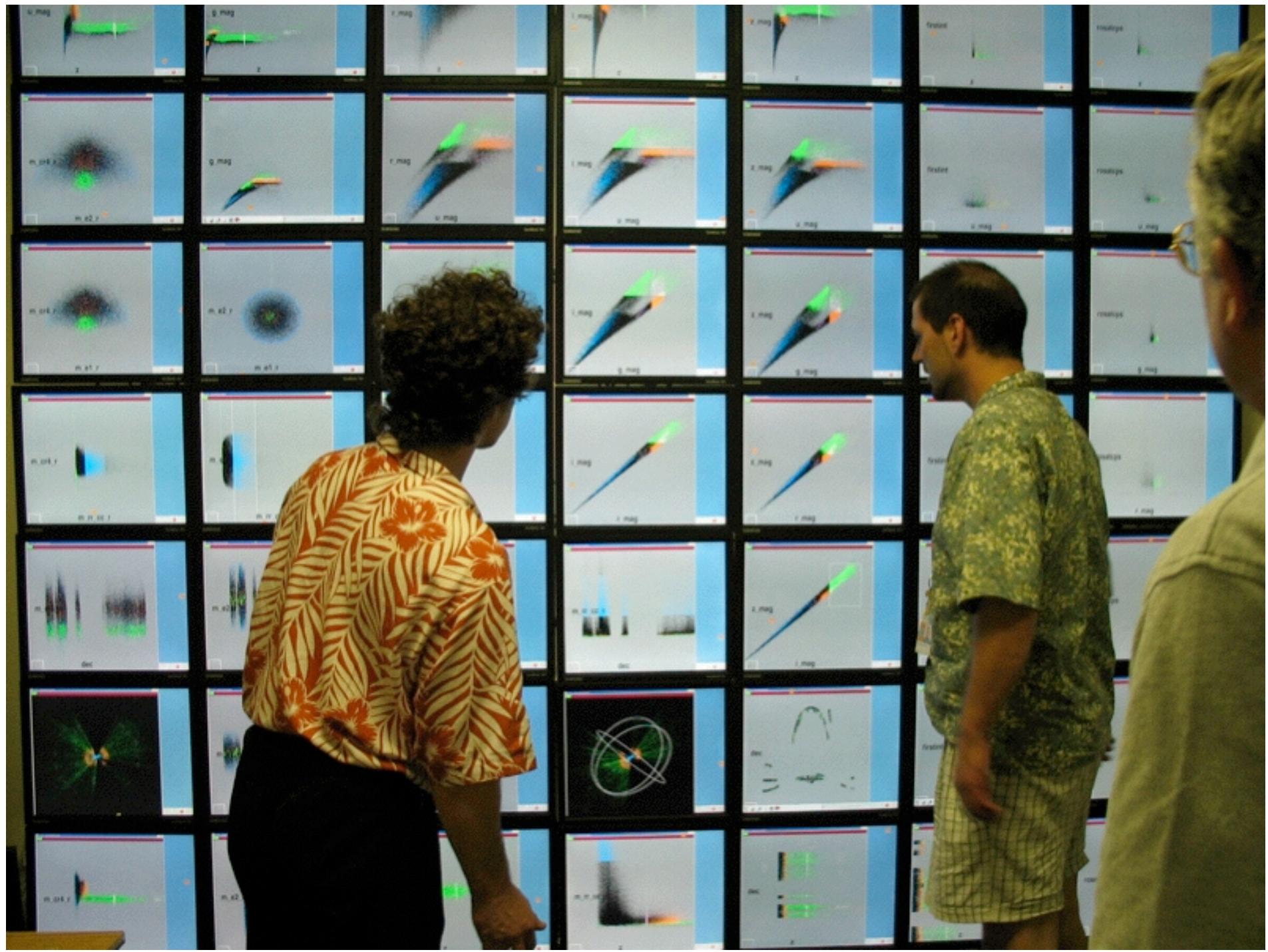


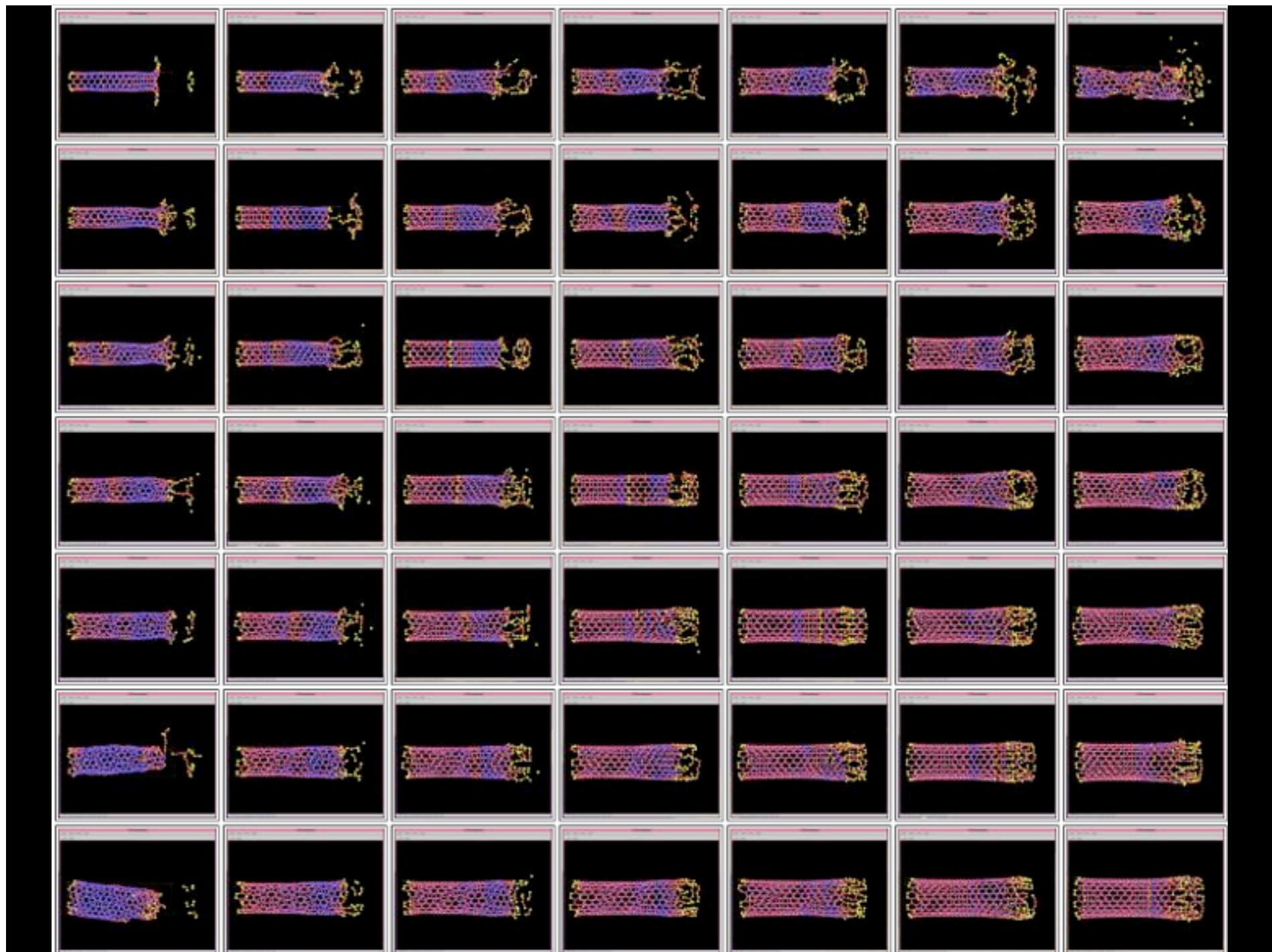


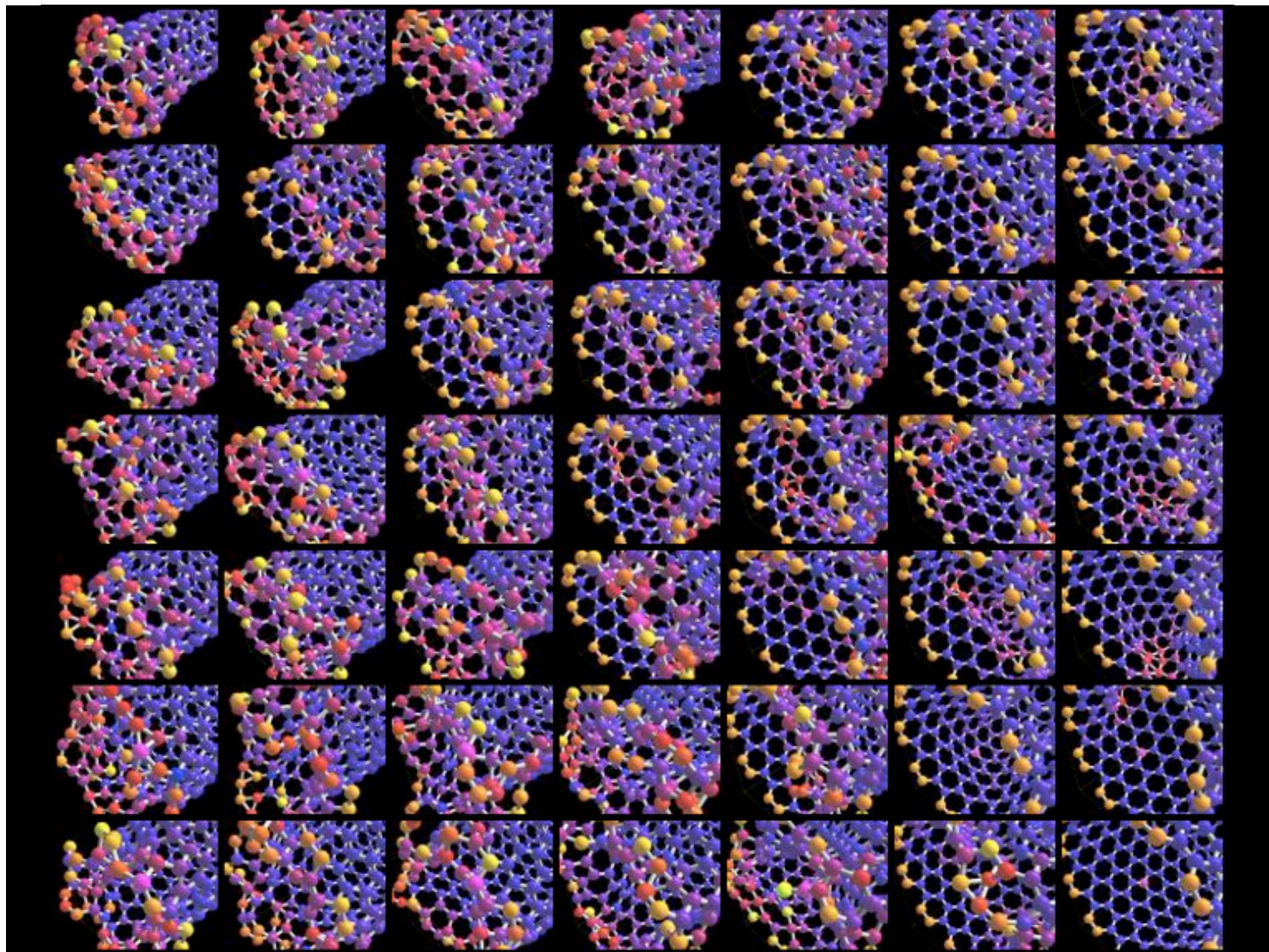






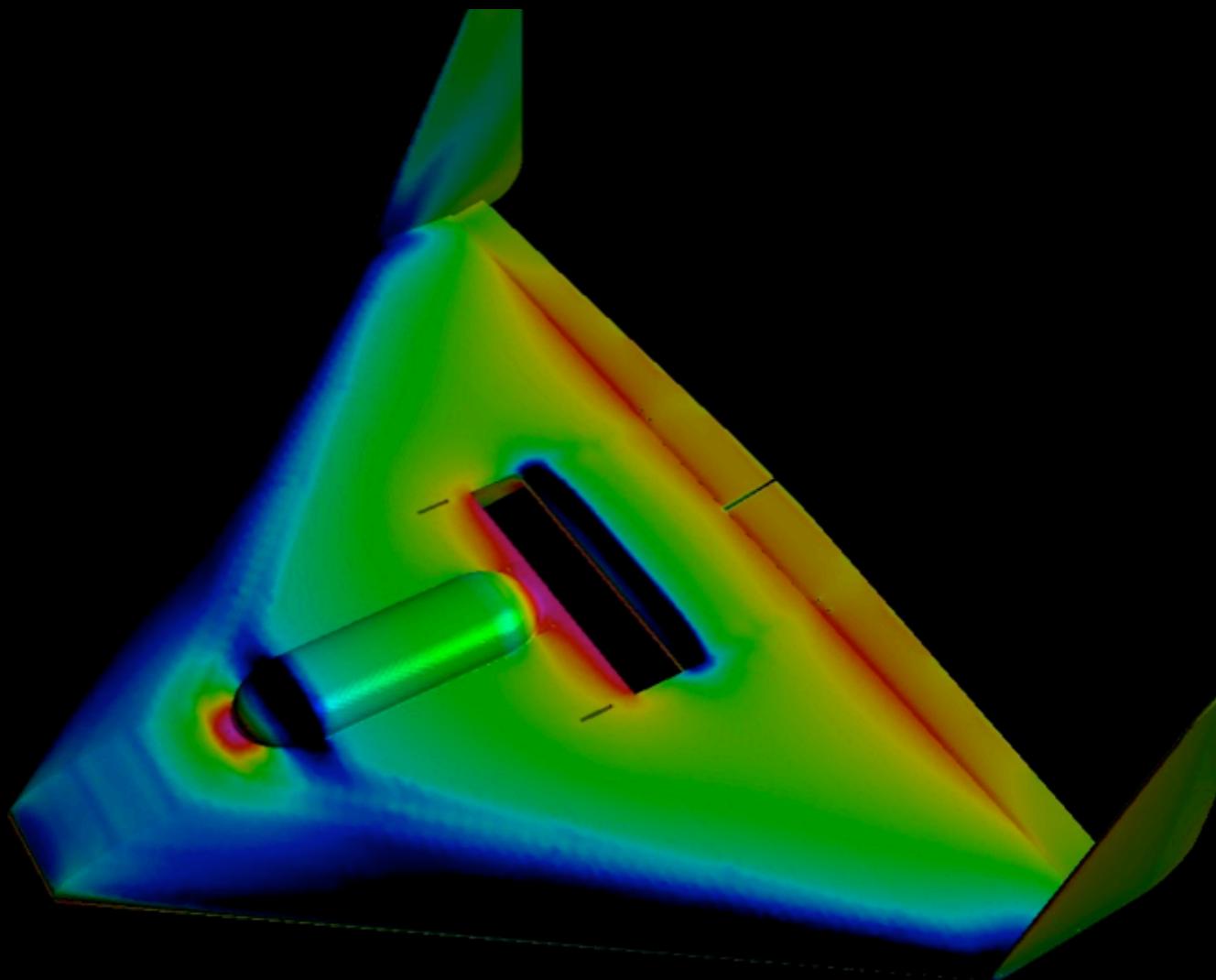


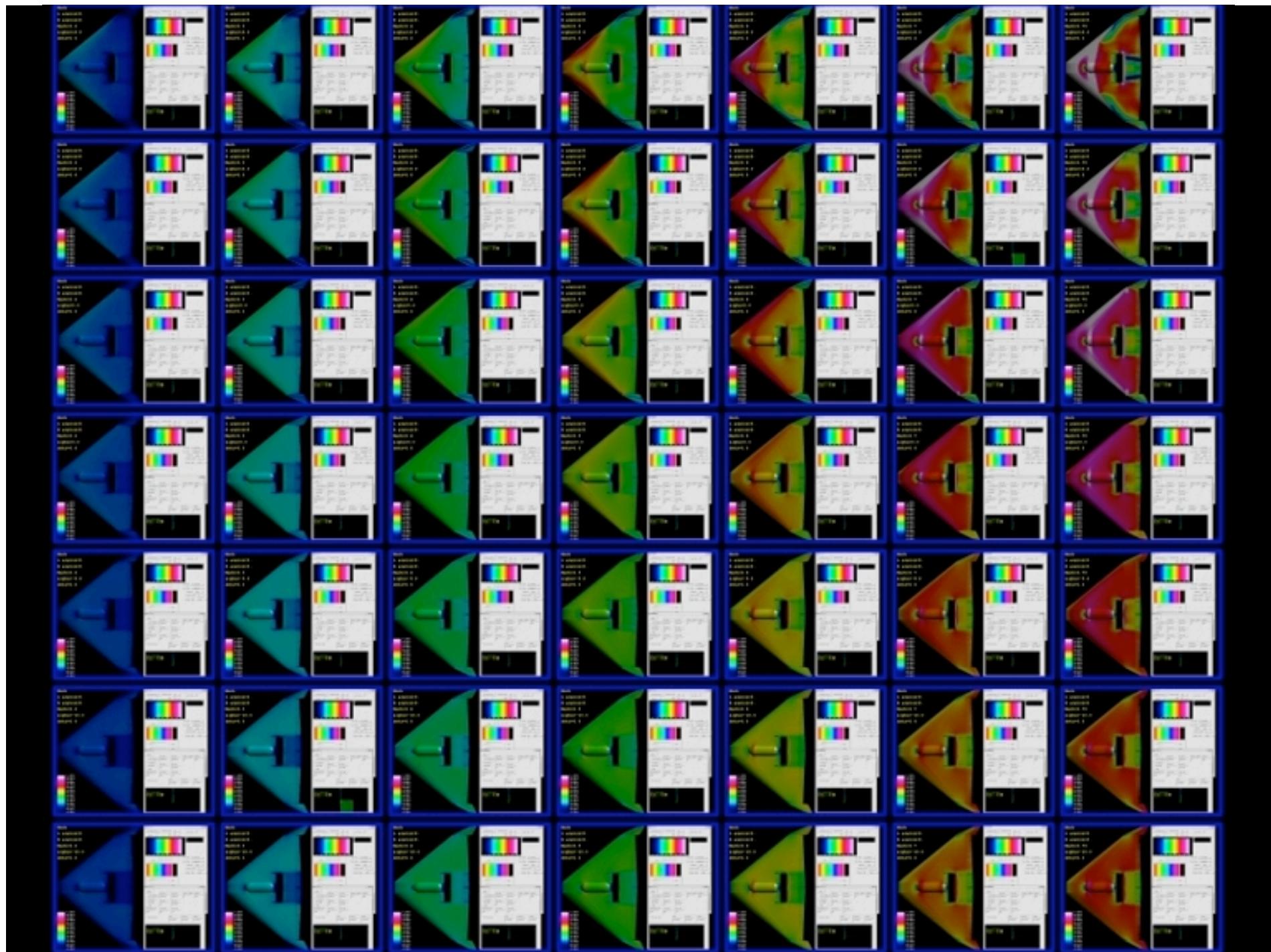


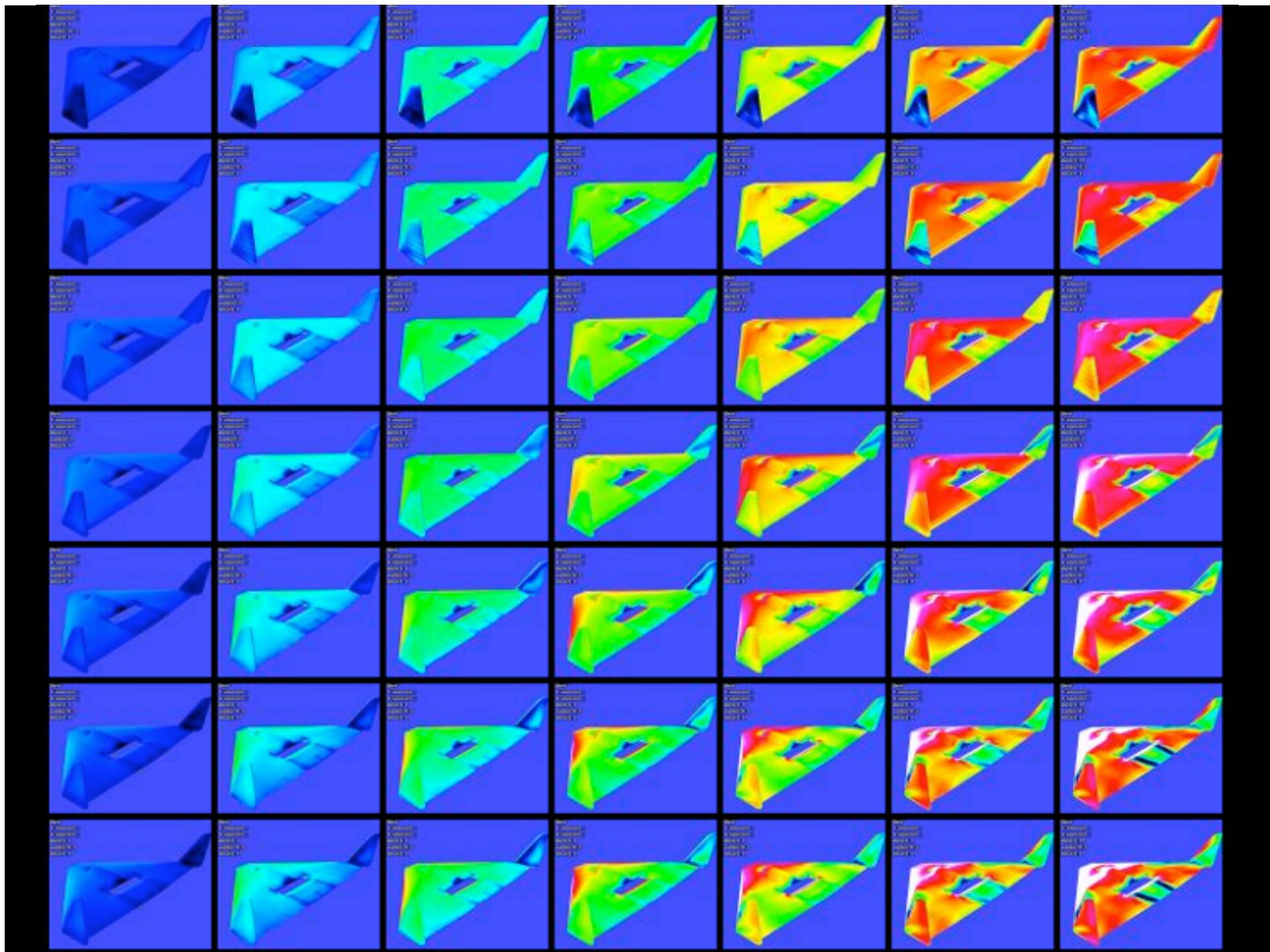


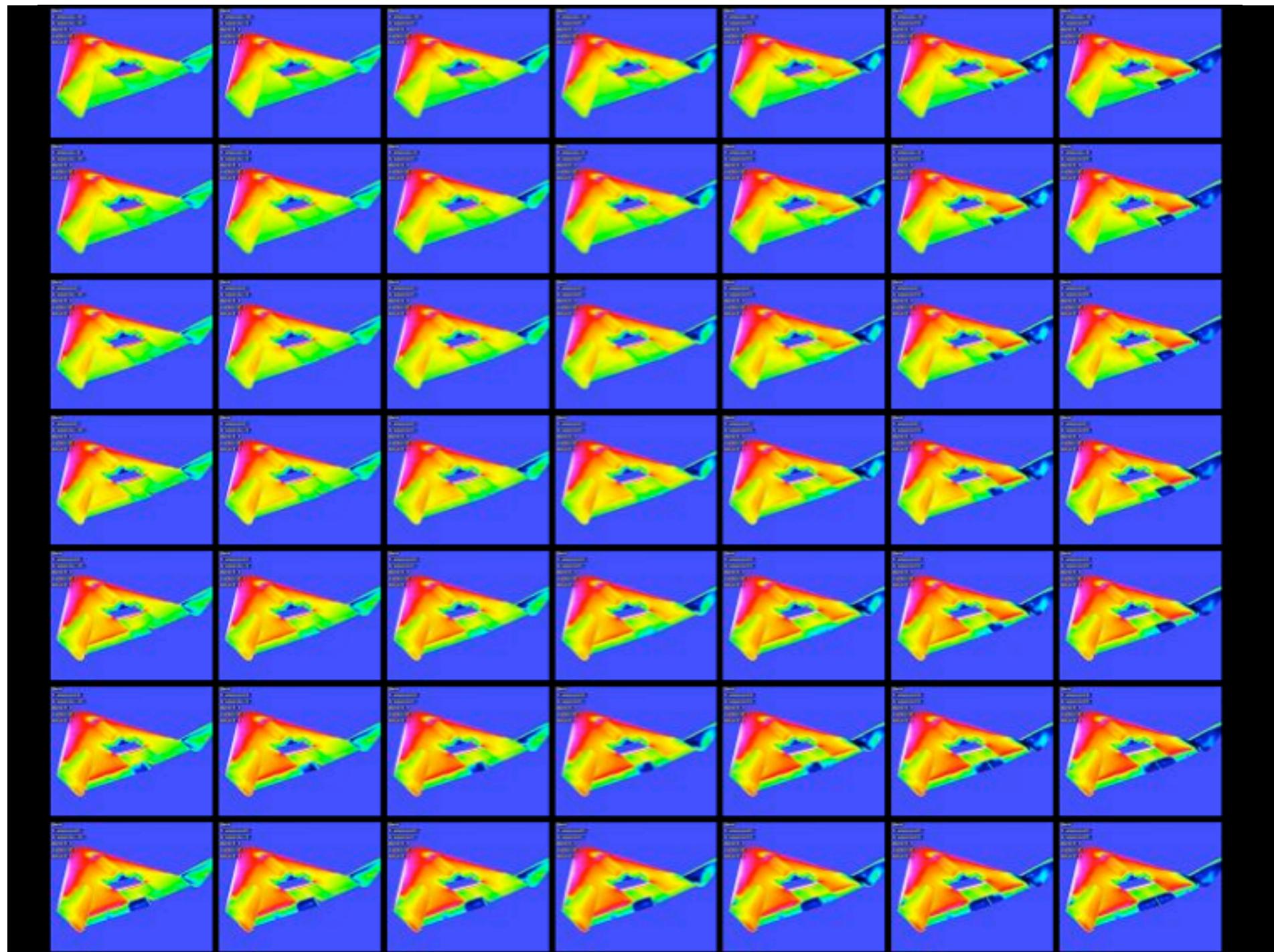
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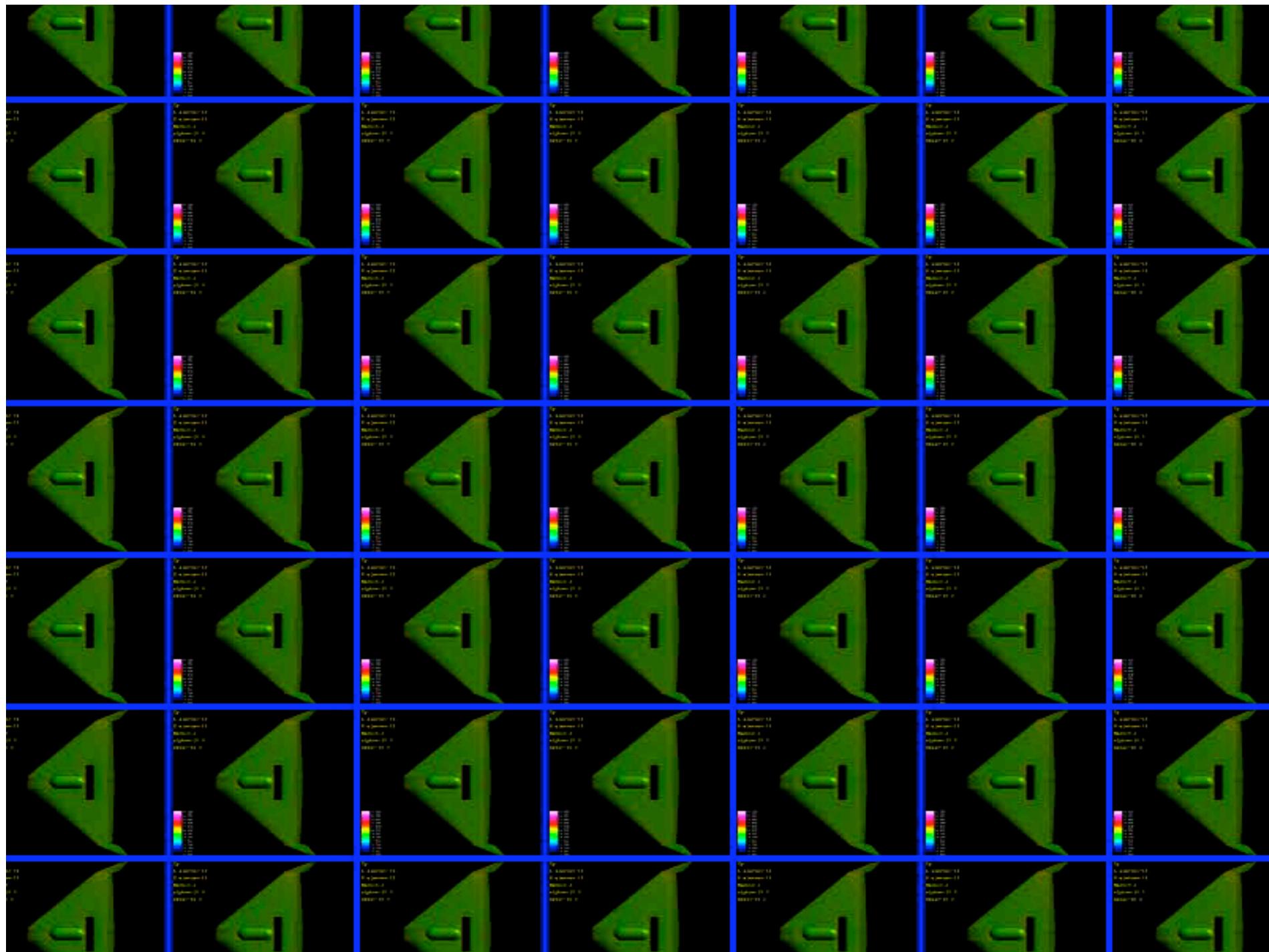
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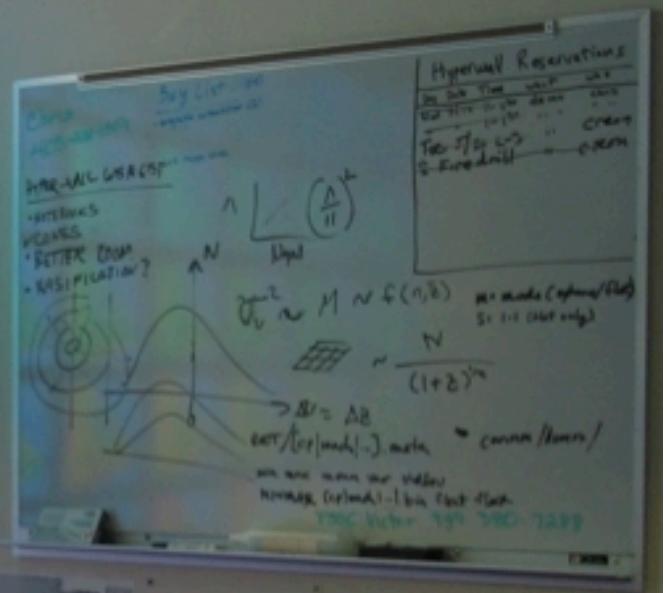
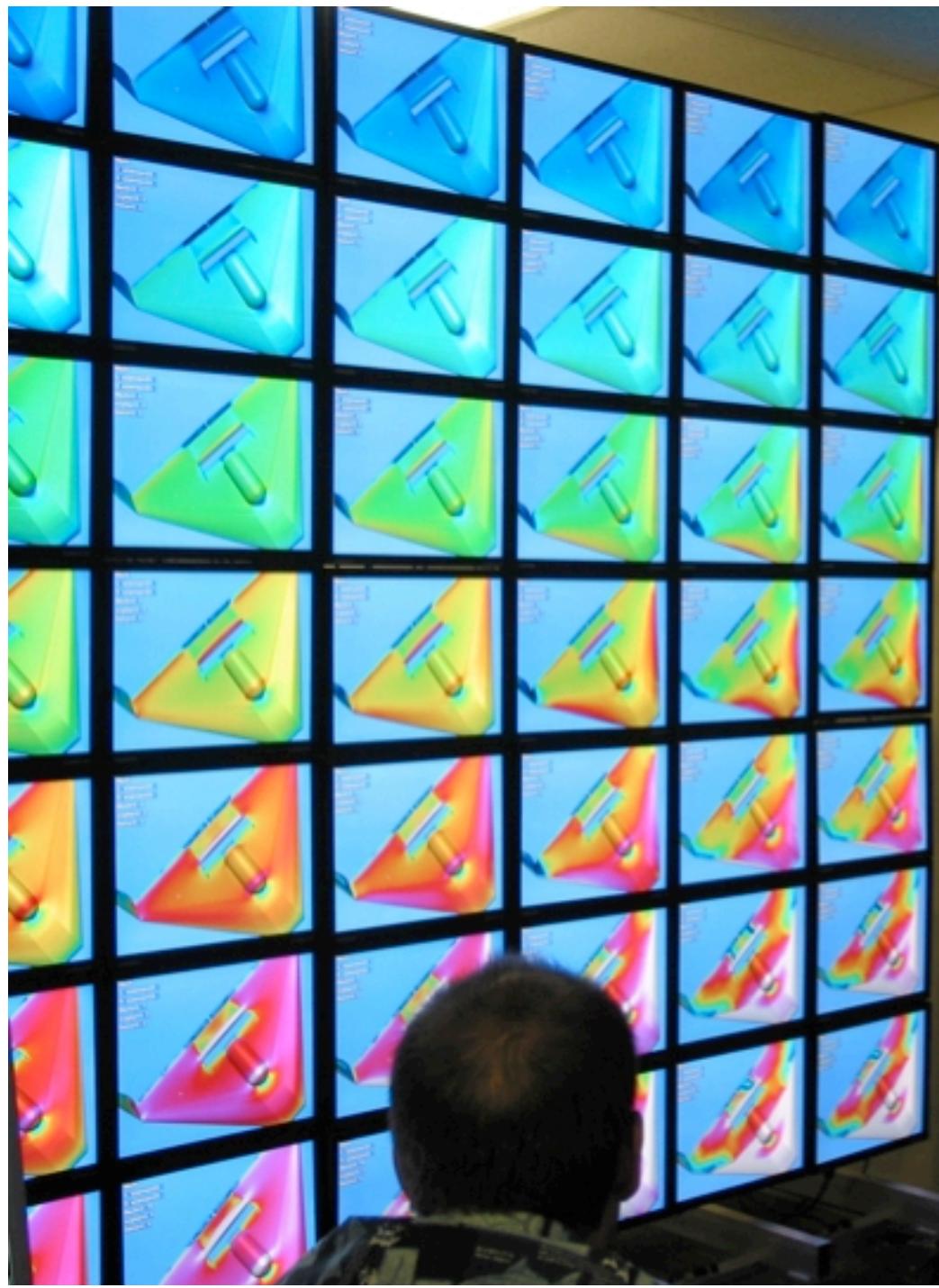














Fermilab "D-zero" main accelerator



SLAC



Burlington-Northern Santa Fe



One World internet hosting



Western Air Defense Sector



CNN Headline News





