

ROCKS2MODELS

LISA STRIGHT
AND CARI JOHNSON

<http://r2m.utah.edu/>



ConocoPhillips

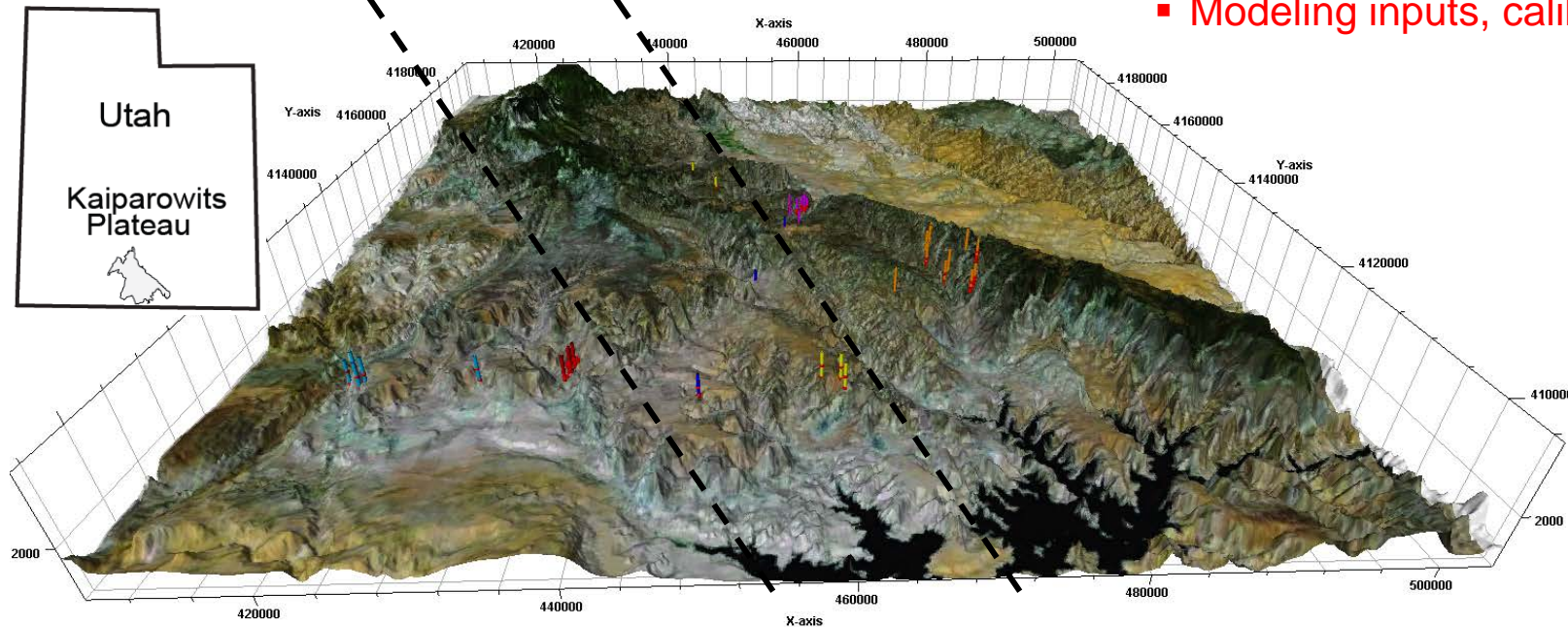


RECENT RESULTS

- Correlation of linked depositional systems:

Fluvial
Tidal/
lagoonal
Shoreface

- Detailed Facies Analysis →
Depositional Models →
Genetic / Sequence
Stratigraphy
- Controls on sedimentation
- Multi-scale architecture
- Modeling inputs, calibration

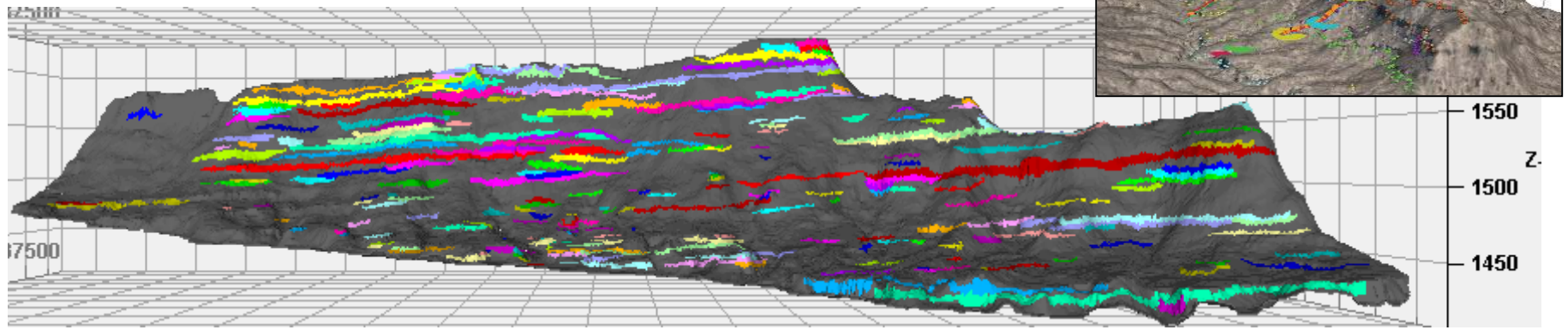


QUANTITATIVE GEOLOGY: DIGITAL OUTCROPS

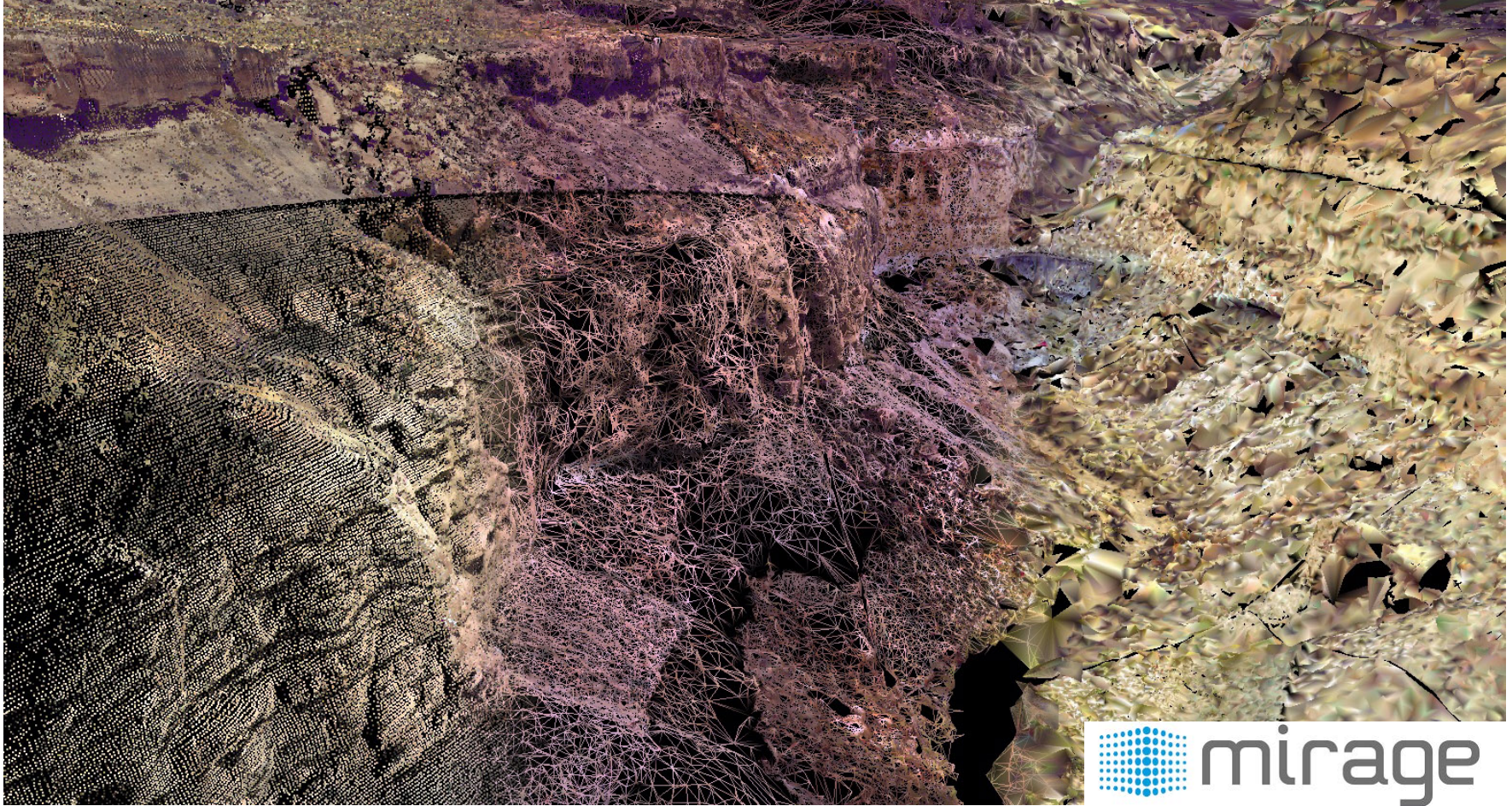
Digital Databases:
Equipment: dGPS
and Laser
Rangefinder +
Gigapan.



Data used for statistical metrics for model
inputs and direct model generation

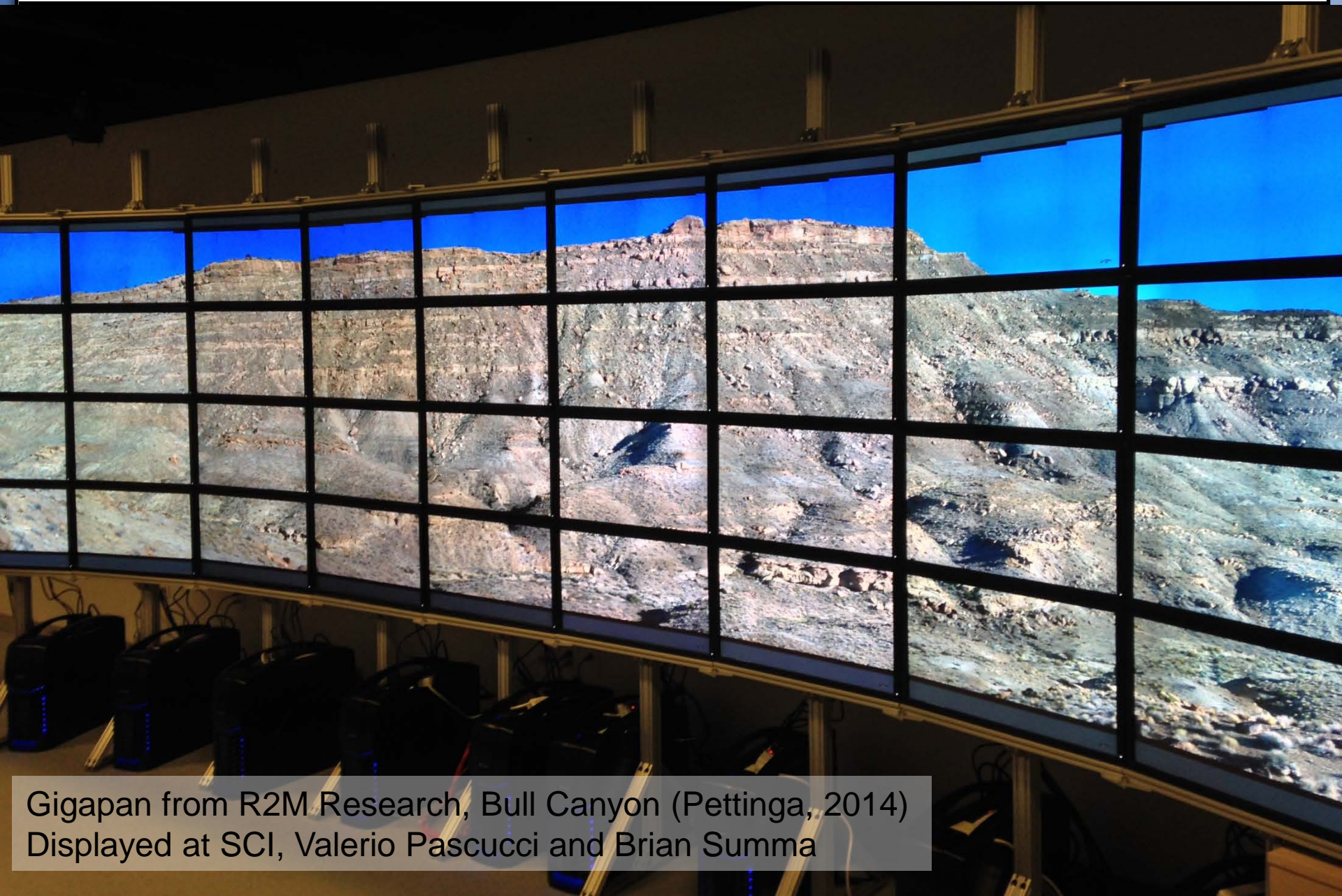


DOCUMENT: LIDAR



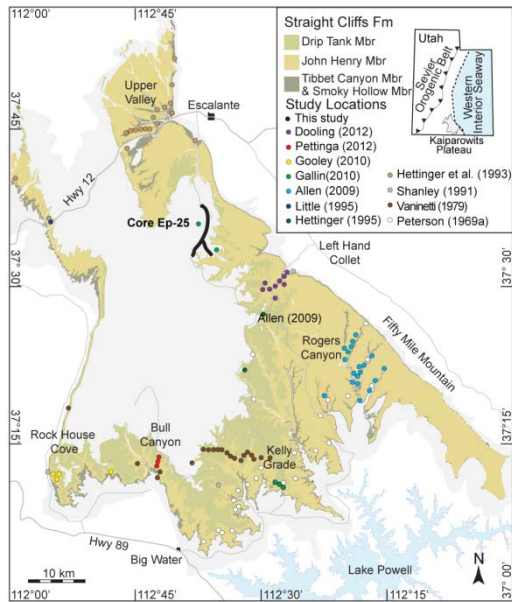
1) multi-resolution zoom, file caching, and 2) gridding, and 3) photo projections

FULL INTEGRATION: COLLABORATION WITH SCI

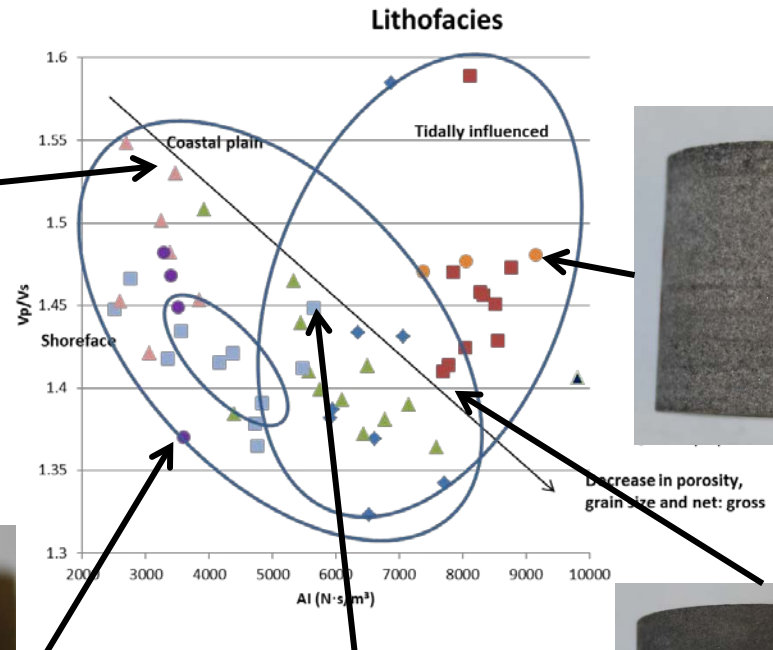


Gigapan from R2M Research, Bull Canyon (Pettinga, 2014)
Displayed at SCI, Valerio Pascucci and Brian Summa

NEW APPROACHES TO FILL DATA GAP



- ◆ Carbonaceous shale
- ▲ Paleosol
- Bioturbated mudstone
- ▲ Flaser/wavy/lenticular bedding
- Planar bedded sandstone
- Trough cross-bedded sandstone
- ▲ Structureless sandstone
- Mud rip-up clasts



Dworksky, *in progress*



