

# NAIP IMAGE QUALITY 2003

USDA FSA APFO

USDA Planning Meeting

February 3<sup>rd</sup> & 4<sup>th</sup>, 2004

# Presentation Themes

- Review Film Quality for NAIP03.
- Compare Digital and Film Capture.
- Define a New Hard Copy Process From Color Positive Films.

# Film Quality

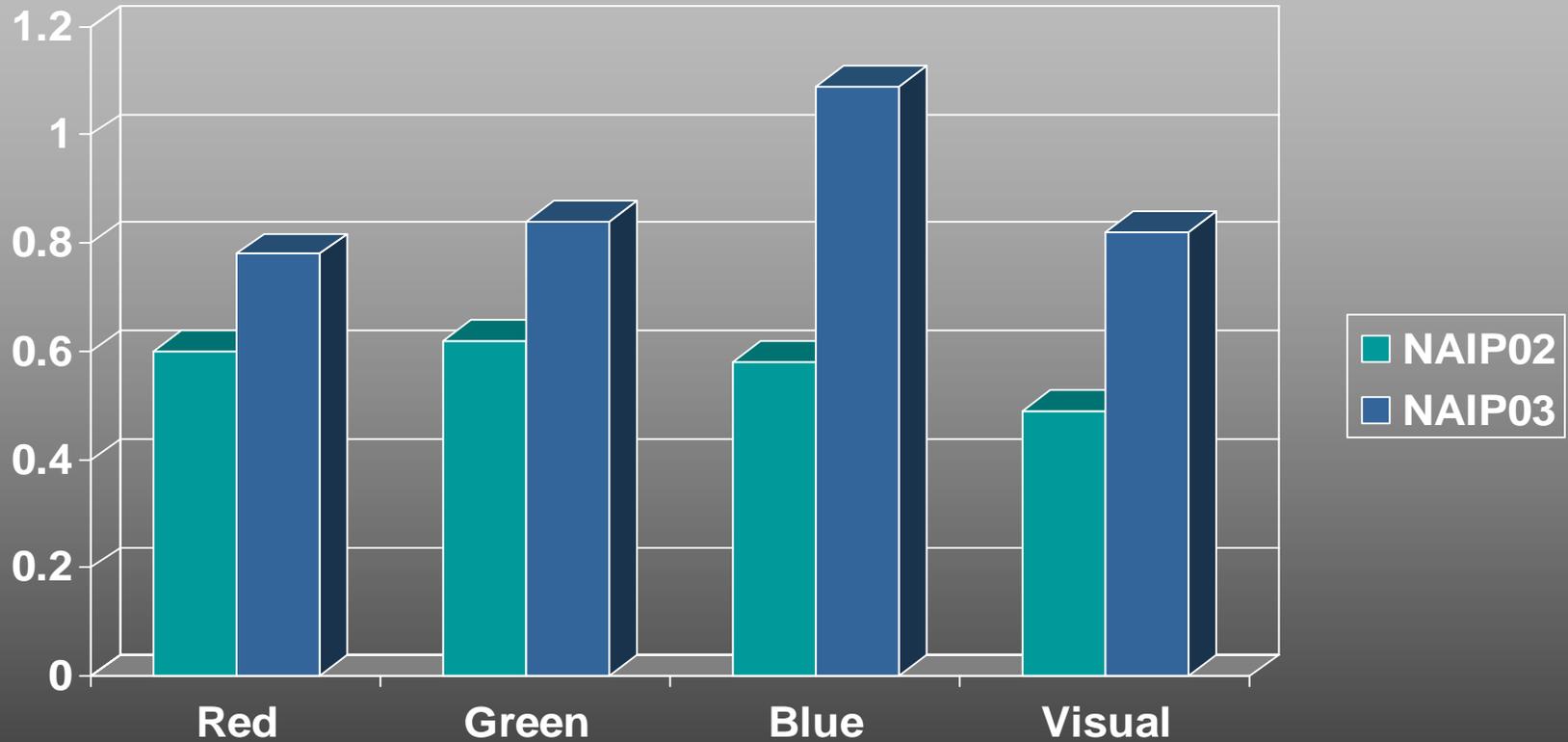


*NAIP02*

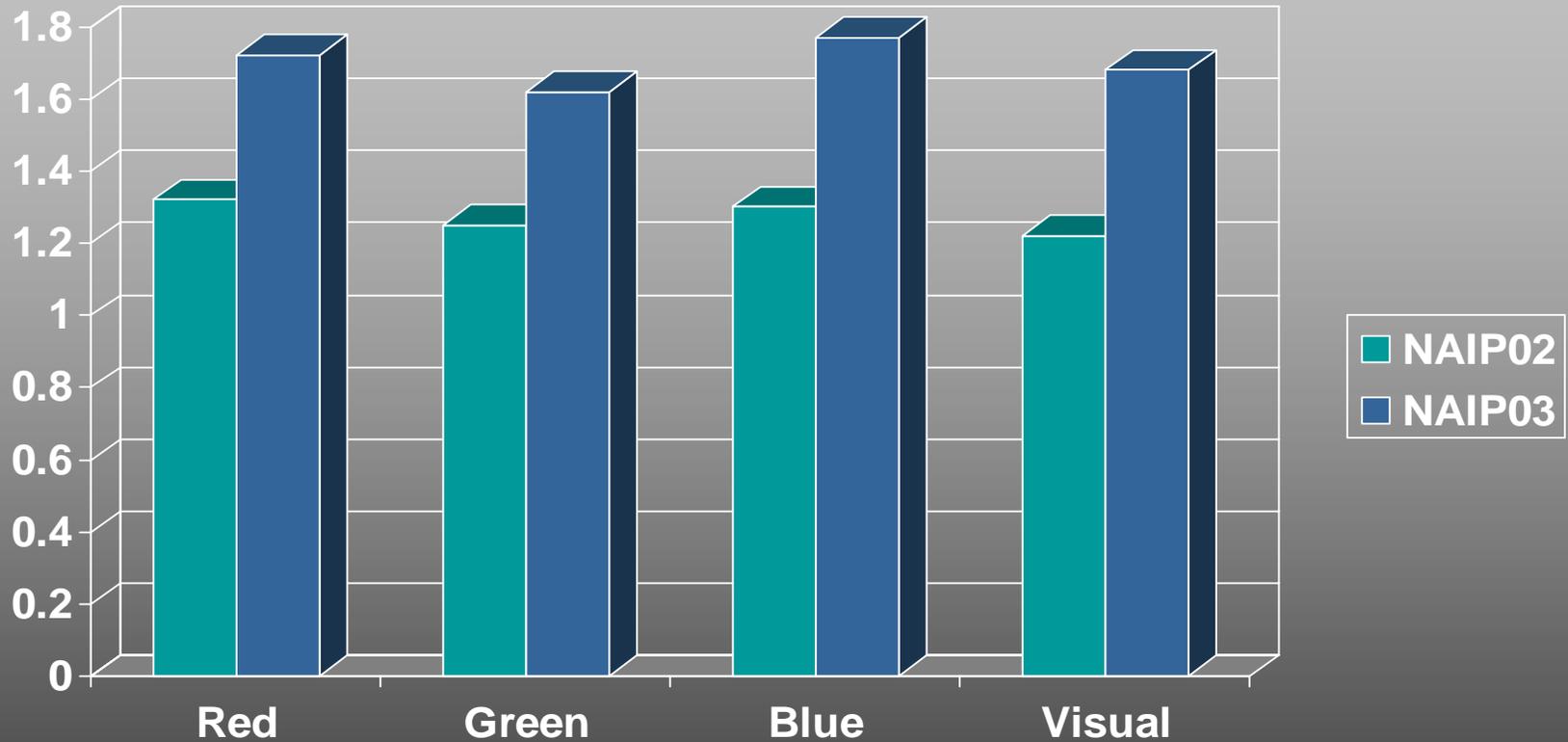


*NAIP03*

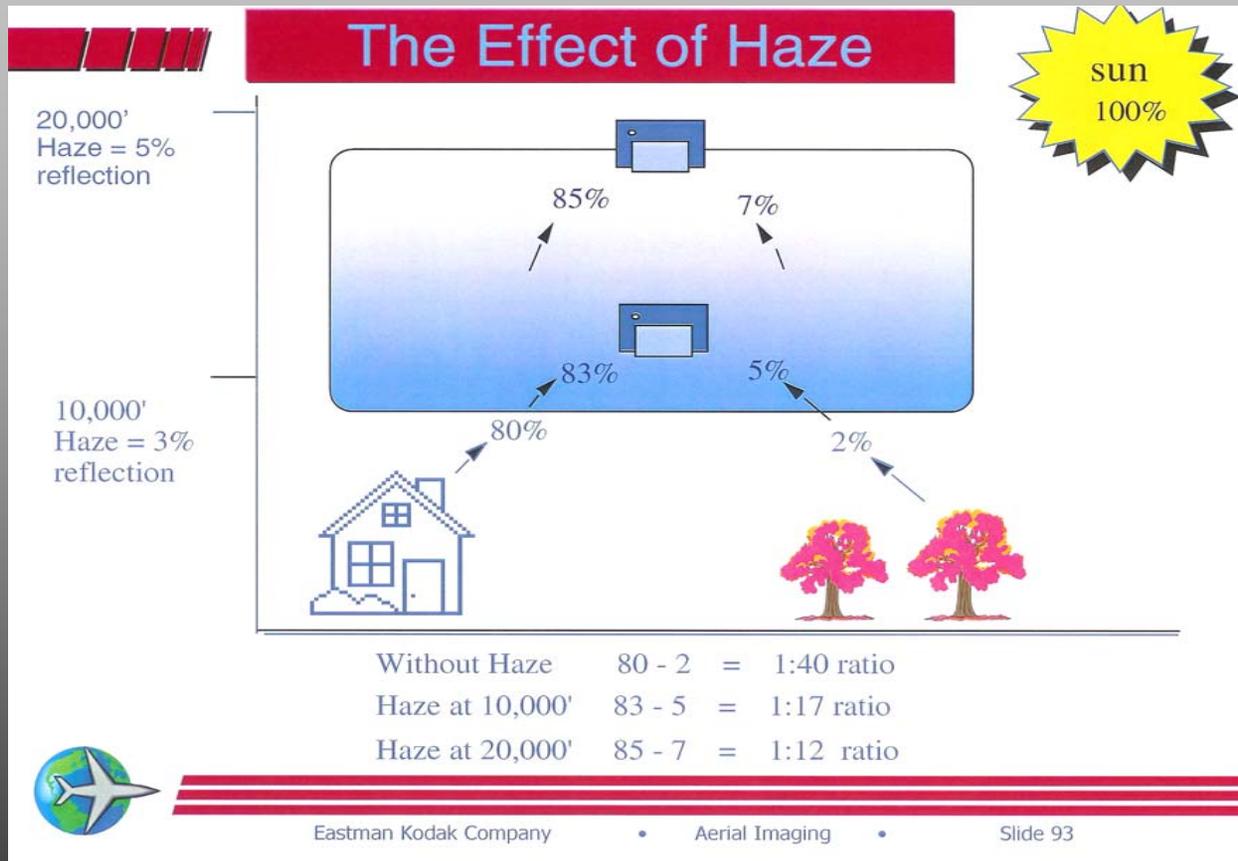
# NAIP02 & NAIP03 Highlight Comparison



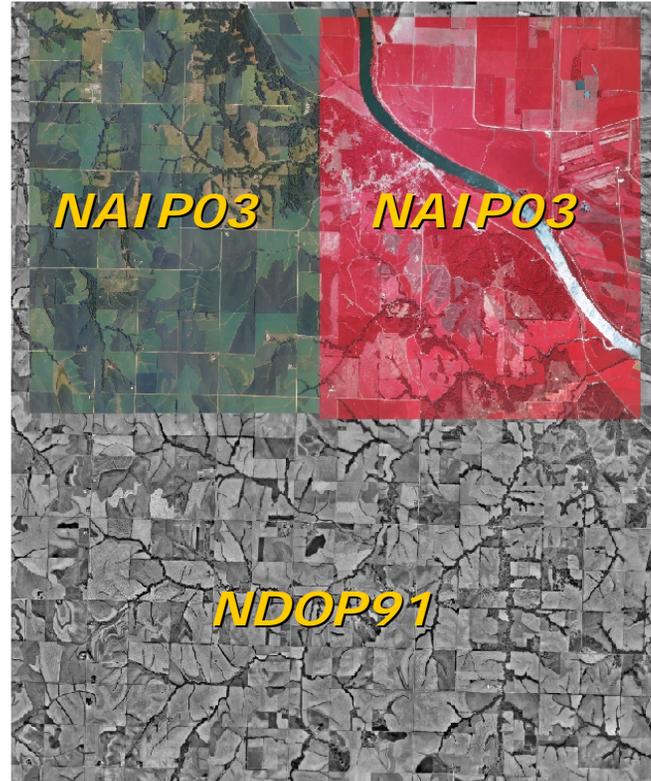
# NAIP02 & NAIP03 Shadow Comparison



# Lighting Ratio



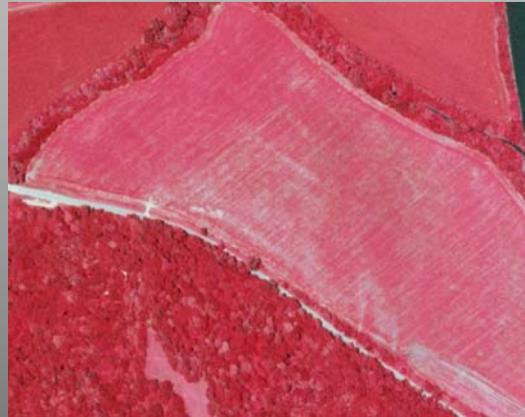
# Digital and Film to Digital Options



*3<sup>rd</sup> Generation Image*



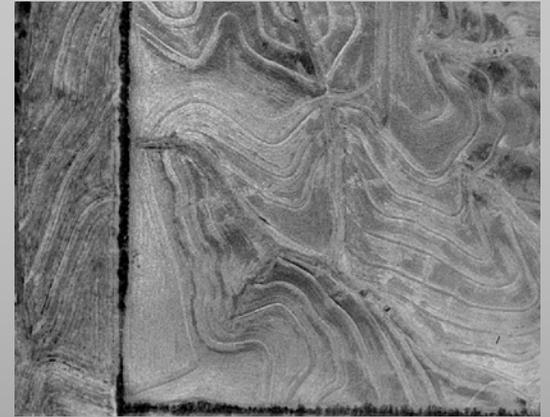
*2<sup>nd</sup> Generation Image*



*1<sup>st</sup> Generation Image*



*3rd Generation Image*



*2nd Generation Image*



*1st Generation Image*



*3rd Generation Image*



*2nd Generation Image*



*1st Generation Image*



# Digital Camera Flaw



# Film to Direct Digital Printer Process

**4. Process the Paper**



**1. Scan Film**



**3. Print the File**

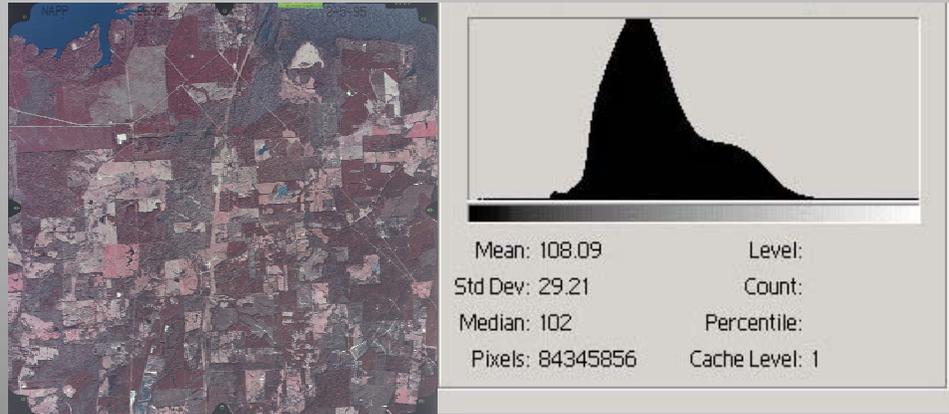


**2. Image Enhancement**

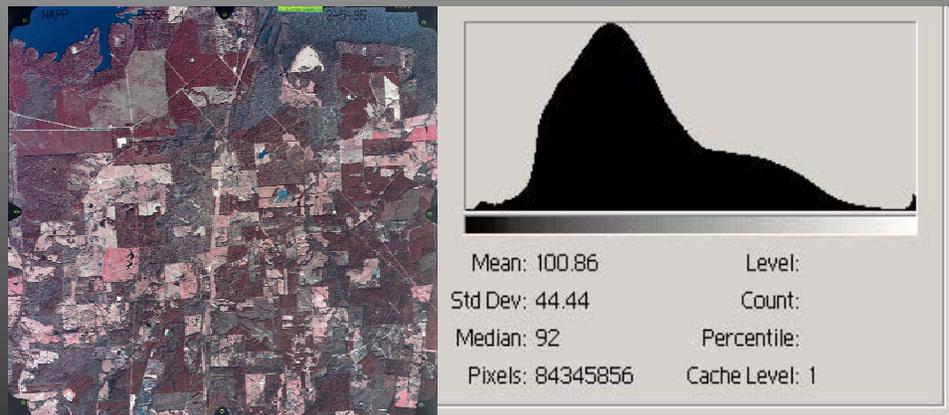


# NAIP IMAGE QUALITY 2003

*Scanned Image*



*Enhanced Image*



# COLOR BALANCE

RED



MAGENTA



NATURAL COLOR



YELLOW



BLUE



GREEN



CYAN



# Is This a Fair Test?

*Film/Digital*



*Digital Capture*



# Conclusions

- Film Quality is Better Than Last Year.
- First Generation Digital Performs Better Throughout the Visible Spectrum.
- New Digital Imaging Processes will Continue to Replace Analog Photographic Processes.
- Updated Imaging Standards Will Provide Improved Imaging to Our Customers.
- The Greatest Need is to Conduct Controlled Imaging Tests.