Research Plan
～Is trend-line applicable to predict CCA?～

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Purpose

We would like to evaluate the degree of consistent color appearance through a paired comparison method (z-score) of two different mapping algorithms.

We would also calculate the color difference of the reference colors converted using the same GMA and gamut from the trend-lines we obtained previously. We would check the correlation between two results. If we can get good correlations, then we may use the color difference from the trend-line as a metric to describe CCA.
Method: A paired comparison evaluation

Which pair of two sets has consistent appearance?
Stimuli

• Original Image: AdobeRGB samples (SCID, Roman16 etc.)
• Display White: D50
• Printer Gamut (3 different sizes: CRPC7, 5, 3?)
• Several mapping methods (Printer B2A)
Stimuli

- Origins
- Displays
- Printers
- Several mapping methods (Printer B2A)

Reference color

Test color

$\Delta E_{tr}$

Trend line

$\text{ce colors (7, 5, 3?)}$

$A_1$
Trend line (consistent color loci) (for CRPC7, CRPC5, and CRPC3)
Analysis

calculating Z-score

Example

\[ \Delta E_{tr} \]
## Schedule (Yamagata Univ.)

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*F2F Mtg.* refers to Face-to-Face Meeting.

*Web Mtg.* refers to Web Meeting.

*Experiment 1* and *Experiment 2* denote different experimental sessions.

*Modification* indicates iterative design changes or modifications.