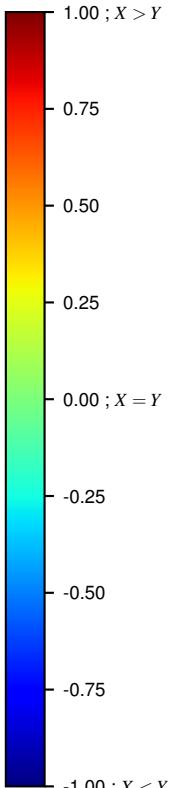


Figure 10 displays heatmaps of normalized latency difference for IPv4, IPv6, and Dual-Stack networks. The heatmaps are organized into a 3x3 grid for each network type, comparing PMTUD and no PMTUD scenarios across three path lengths (1500, 1280, and Path 1280). The color scale ranges from -1.00 (blue) to 1.00 (red), with 0.00 (green) representing $X=Y$. The formula for the normalized latency difference is provided on the right:

$$f(V) = \frac{(\text{latency}(X)_{\text{median}} - \text{latency}(Y)_{\text{median}})}{\max(\text{latency}(X)_{\text{median}}, \text{latency}(Y)_{\text{median}})}$$

The heatmaps show that the normalized latency difference is generally positive (red/orange) for PMTUD scenarios and negative (blue) for no PMTUD scenarios, indicating that PMTUD tends to result in higher latency than no PMTUD in these scenarios.

$$f(V) = \frac{(\text{latency}(X)_{\text{median}} - \text{latency}(Y)_{\text{median}})}{\max(\text{latency}(X)_{\text{median}}, \text{latency}(Y)_{\text{median}})}$$



$$(V) = \frac{(\text{latency}(X)_{\text{median}} - \text{latency}(Y)_{\text{median}})}{\max(\text{latency}(X)_{\text{median}}, \text{latency}(Y)_{\text{median}})}$$

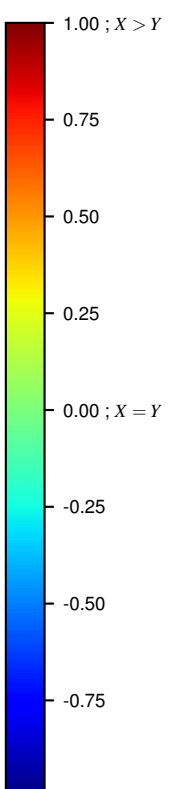


Figure 10 displays heatmaps of the normalized difference of the median latency of the paths, $f(V) = \frac{(\text{latency}(X)_{\text{median}} - \text{latency}(Y)_{\text{median}})}{\max(\text{latency}(X)_{\text{median}}, \text{latency}(Y)_{\text{median}})}$, for various network configurations and path types. The figure is organized into three main sections: IPv4, IPv6, and Dual-Stack. Each section contains a grid of heatmaps for different network configurations (EDNS0:512, EDNS0:1232, EDNS0:4096) and path types (1500, 1280 (PMTUD), 1280 (no PMTUD), Path 1280 (no PMTUD)). The color bar on the right indicates the value of $f(V)$, ranging from -1.00 (blue) to 1.00 (red), with 0.00 (green) representing $X=Y$.

$$(V) = \frac{(\text{latency}(X)_{\text{median}} - \text{latency}(Y)_{\text{median}})}{\max(\text{latency}(X)_{\text{median}}, \text{latency}(Y)_{\text{median}})}$$

