## Instrumental Throughput $S(\lambda, \mathbf{x})$ Per filter, one set for every "observing epoch" "Hobbled Flat-Field Full CBP? Laser? Hedgehog"; Screen? -No\_Yes Dithered **Partial** Lab QE Full System CBP Monochromatic → Detector QE Point-by-System Throughput Measurements Analysis Point Flats Throughput CBP (illuminating Analysis small part of Vendor(?) Filter M1) Filter **Pupil Ghost** (Precise $S(\lambda, \mathbf{x})$ ) Transmission Measurements Correction Dithered Dithered starfield Starfield for Reflectance of $M_1/M_2/M_3$ Analysis Normalization Sufficiently Reflectance new coating? Precise $S(\lambda, \mathbf{x})$ Mostly Precise $S(\lambda, \mathbf{x})$ Approximate $S(\lambda, \mathbf{x})$ Initial scans: every 10Å; 2-4 spots per detector; s/n > 300 per spot (better than 0.5%)