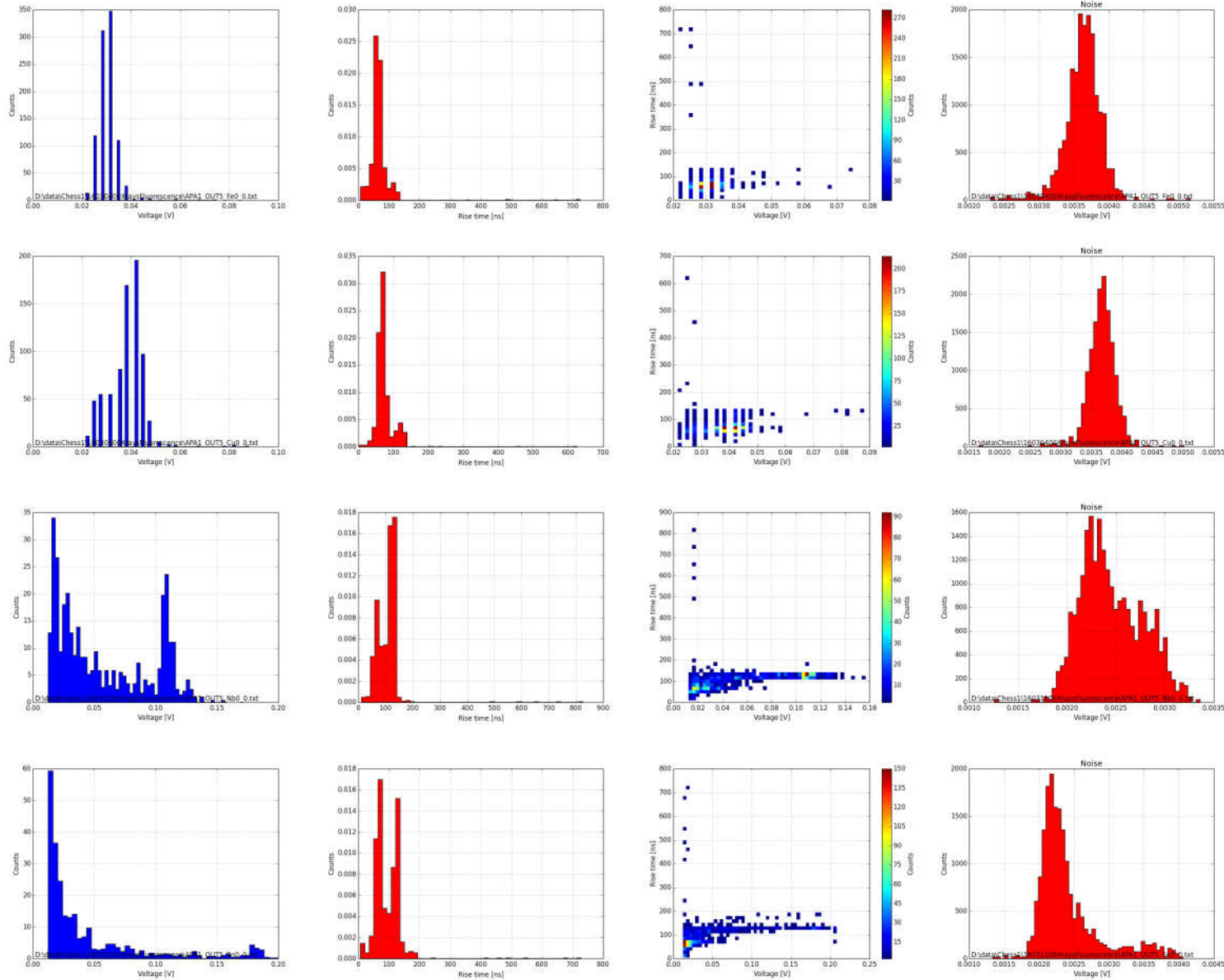
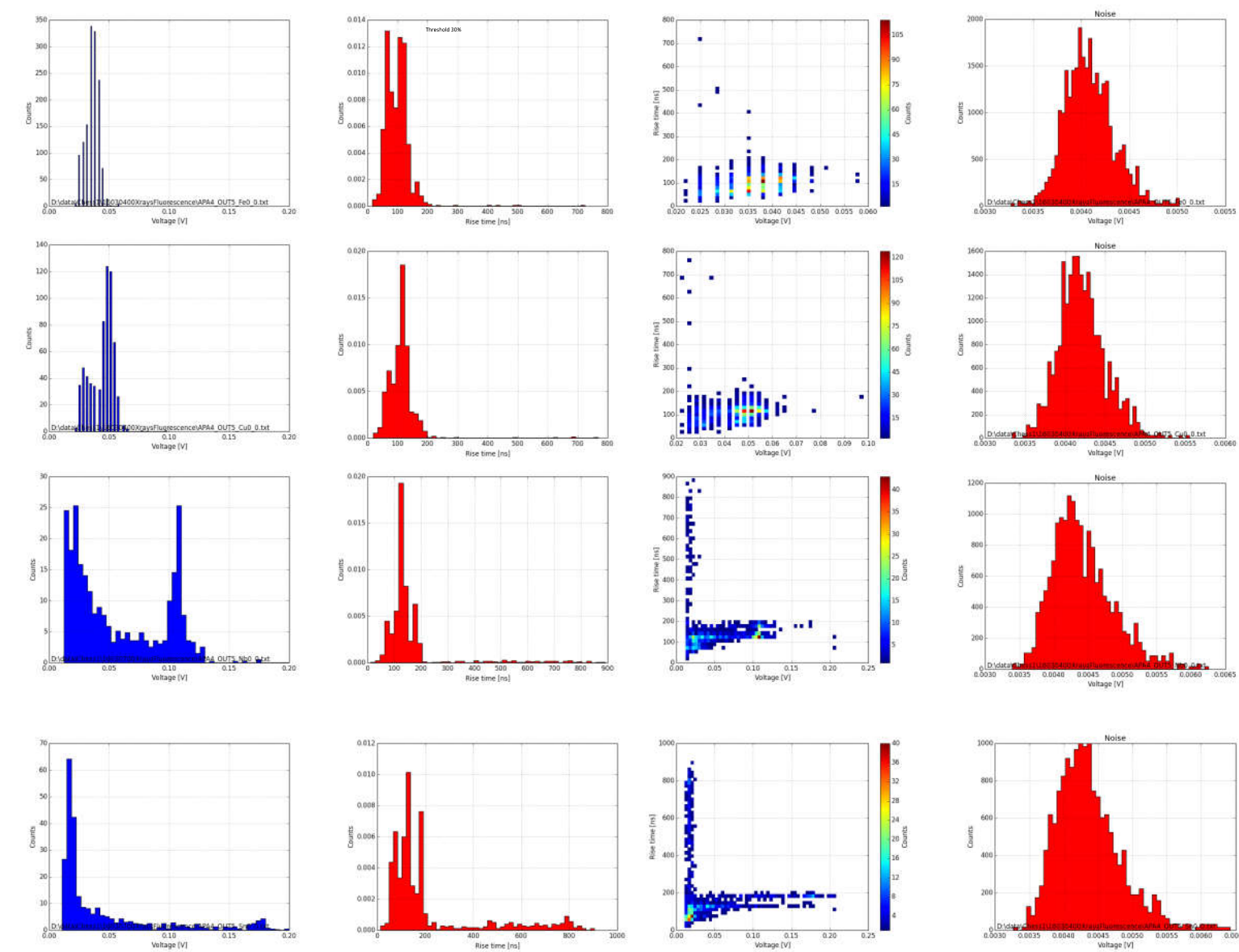
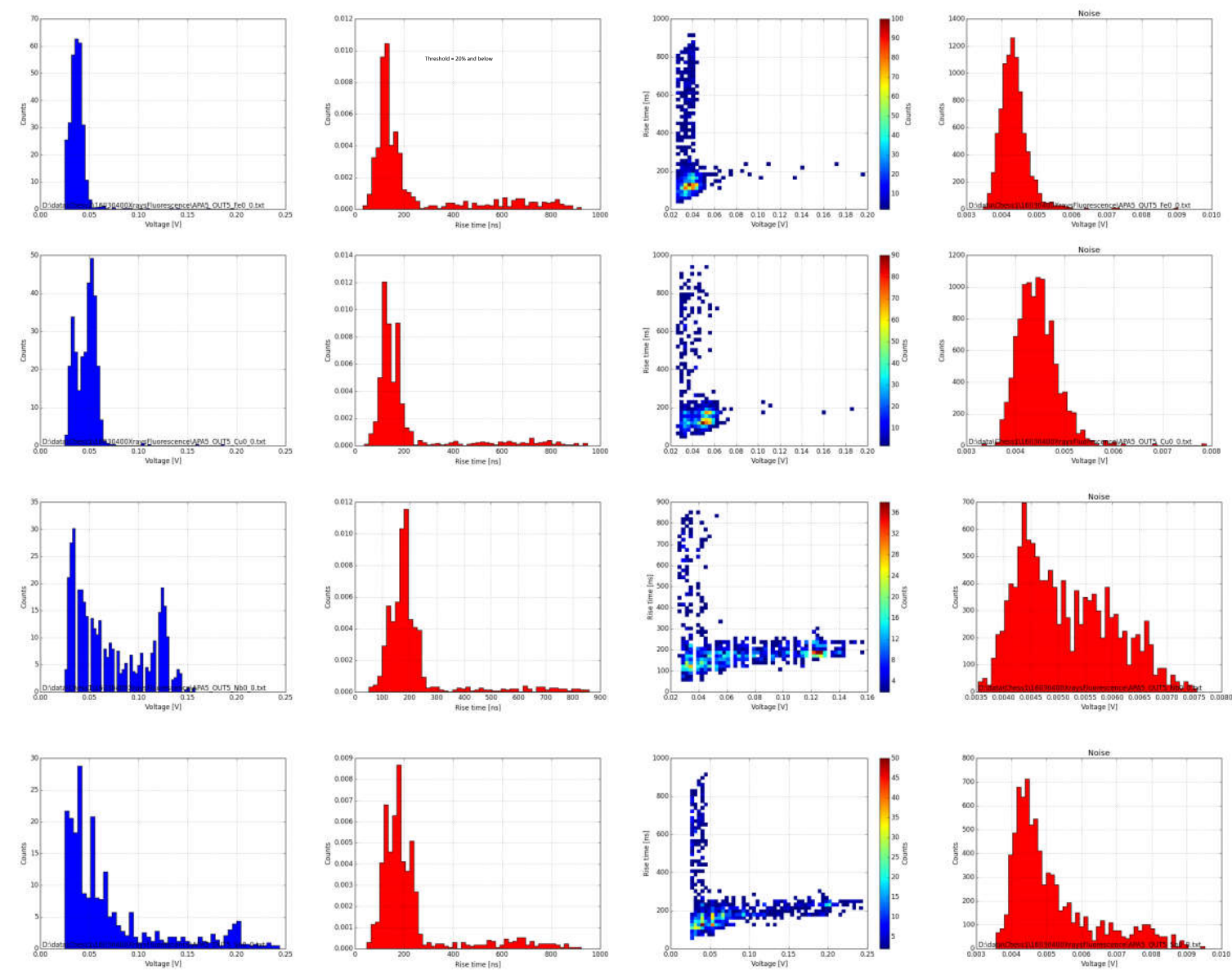
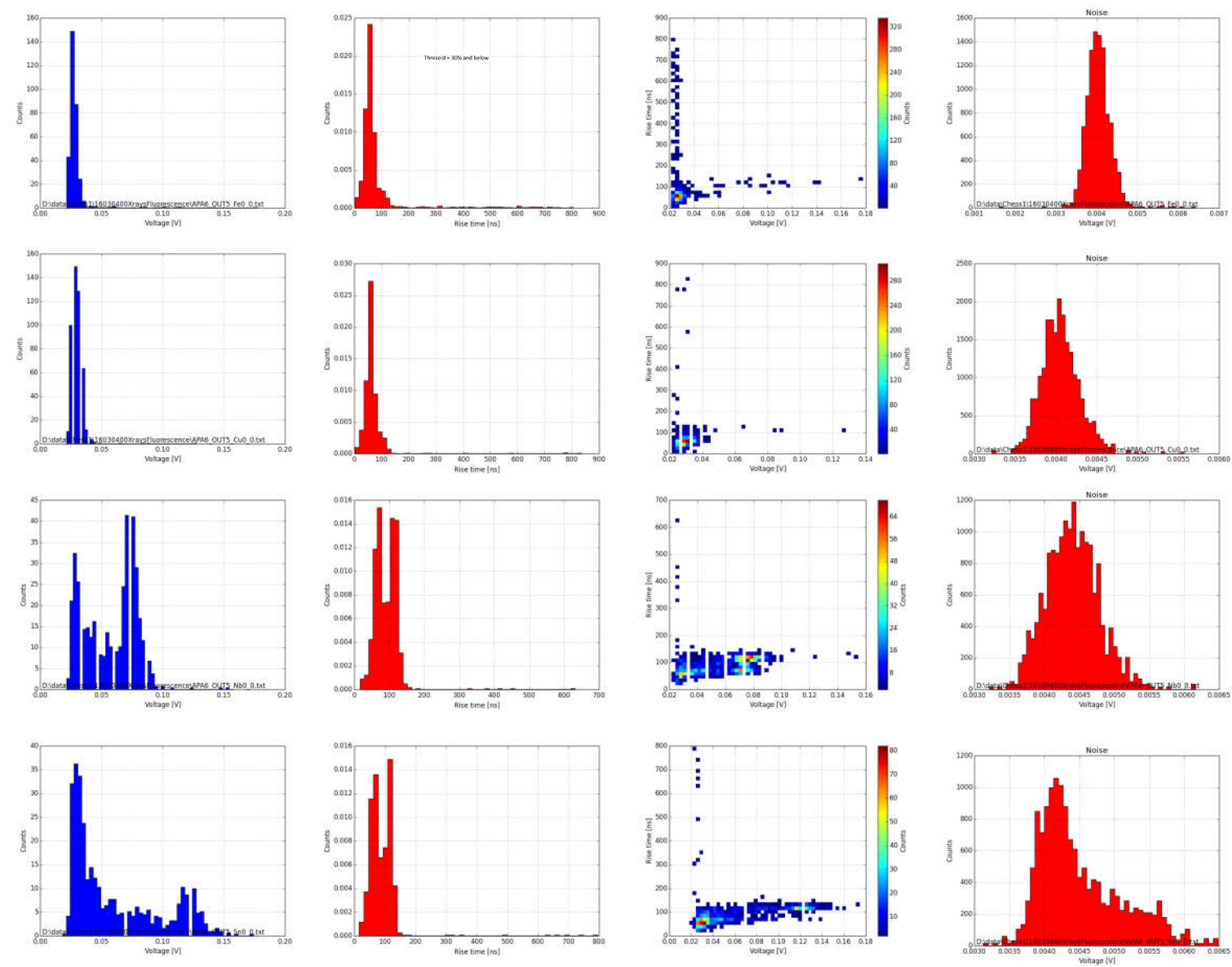
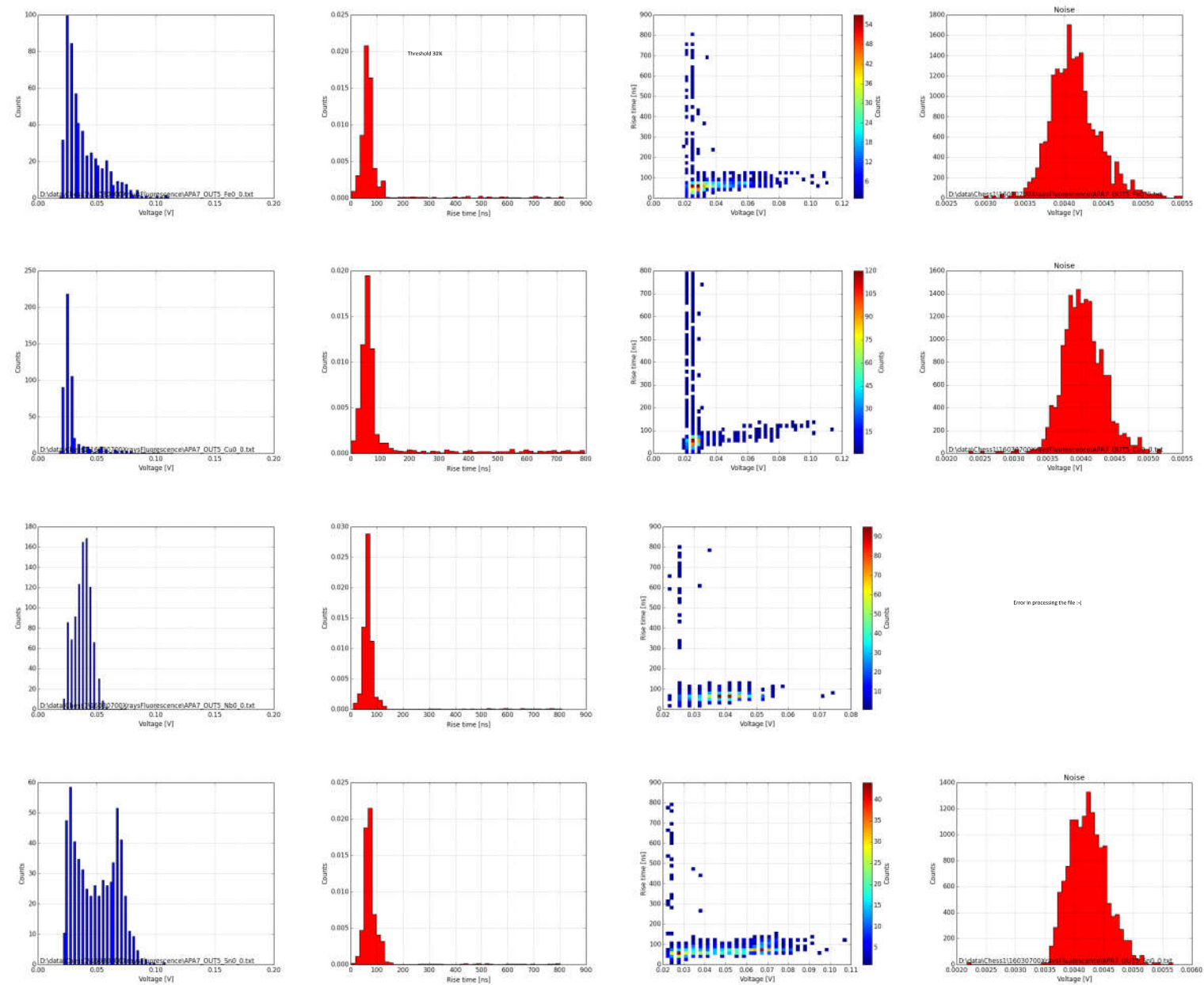


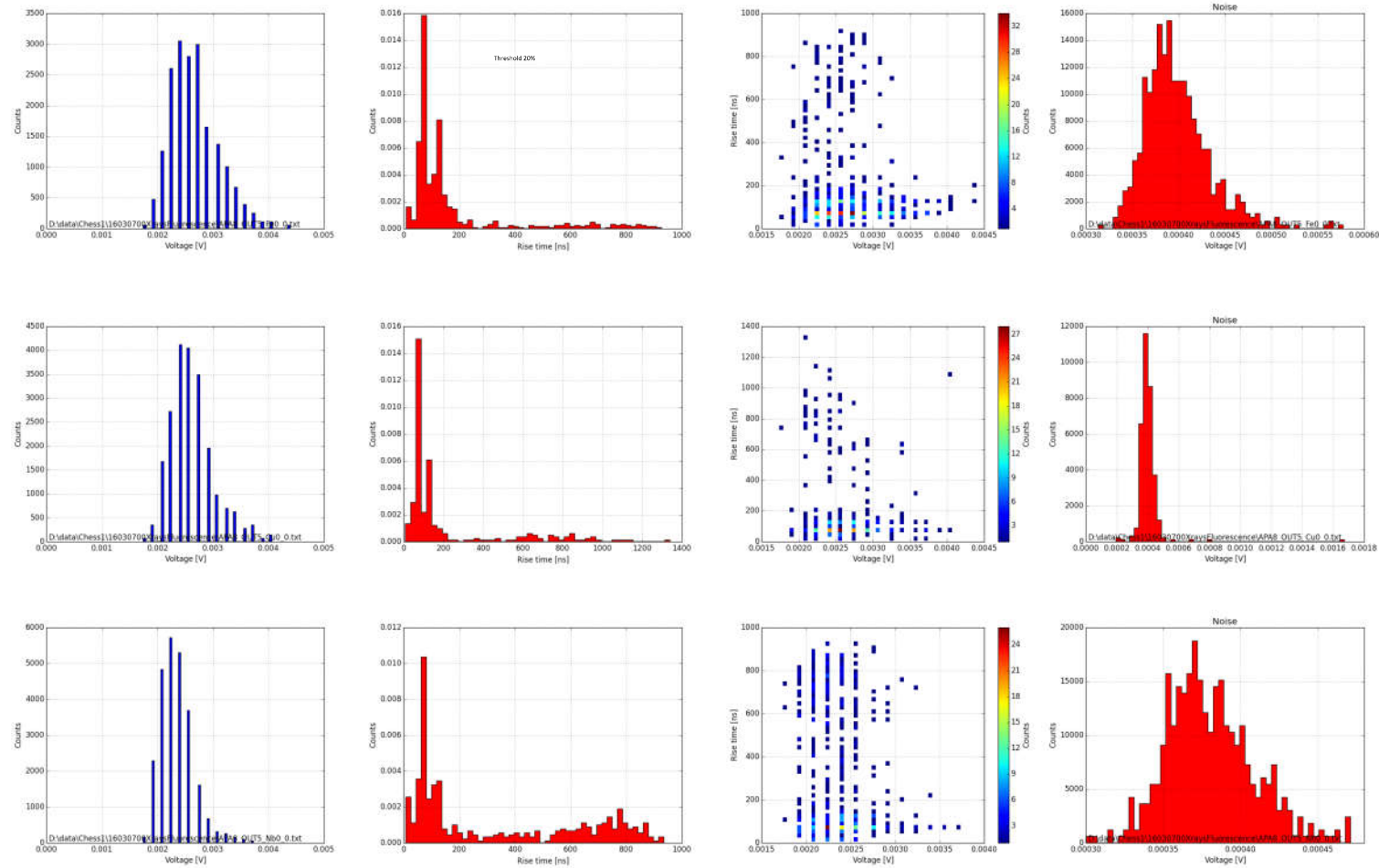








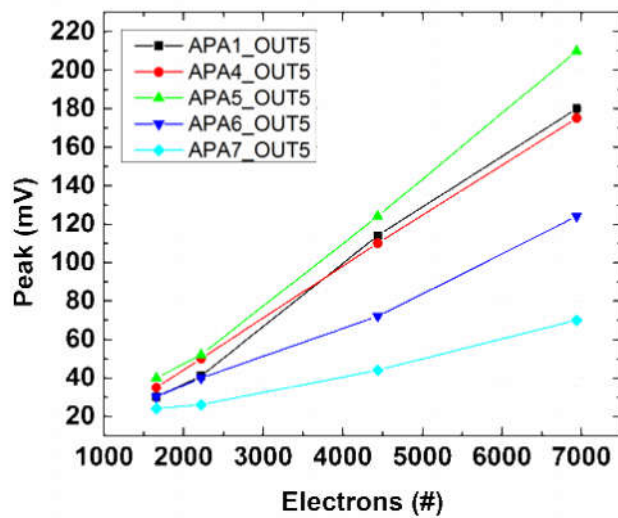




Analysis and comparison of APA's

10 March 2016 21:06

	APA1_OUT5	APA4_OUT5	APA5_OUT5	APA6_OUT5	APA7_OUT5	APA8_OUT5
Pixel size [μm]	45x100	45x200	45x400	45x400	45x800	45x800
Diode area [μm^2]	1350	4536	5400	9072	10800	18144
Noise [mV]	3.6	4.0	4.3	4.0	4.1	3.8
Rise time @ Fe [nS]	75	100	120	60	70	70
Gain [e/mV]	51	38	31	57	113	
Gain [mV/fC]	123	164	202	110	55	



$$1.6 \times 10^{-19} = q$$

$$1.6 \times 10^{-4} \text{ fC}$$

$$\text{Gain [mV/fC]} = 1 / (1.6 \times 10^{-4} \text{ [fC]} * \text{Gain [e/mV]})$$

