

Machine Homogeneity Check on EMPv5

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1 Experiment Notes

Machine	Task Length	Description	Time Length
sodb8	INC1~INC128	Runs of 300 samples	2017-02-09 ~ 2017-02-10
sodb9	INC1~INC128	Runs of 300 samples	2017-02-09 ~ 2017-02-10
sodb10	INC1~INC128	Runs of 300 samples	2017-02-09 ~ 2017-02-10
sodb12	INC1~INC128	Runs of 300 samples	2017-02-09 ~ 2017-02-10

Table 1: Detailed description of INC data used for histograms

The following sections presents experimental results on a machine basis. We used four nodes in a cluster. Each section exhibits histograms of elapsed time (ET) and process time (PT) over increasing INC's task lengths on each individual machine.

2 sodb8

This section exhibits histograms on the EMPv5 data obtained on `sodb8`. The detailed description of the base data are from Table 1.

2.1 ET

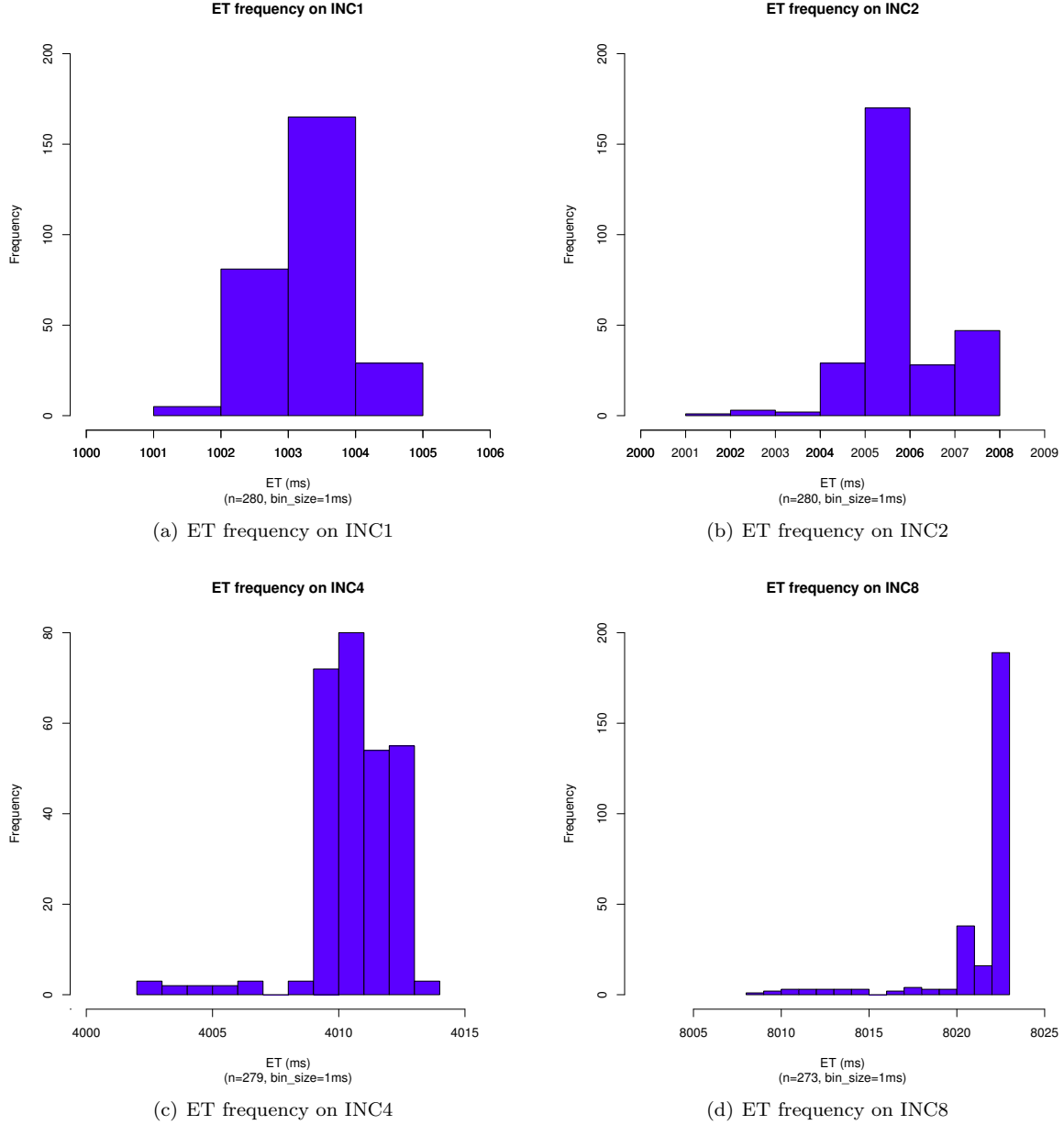
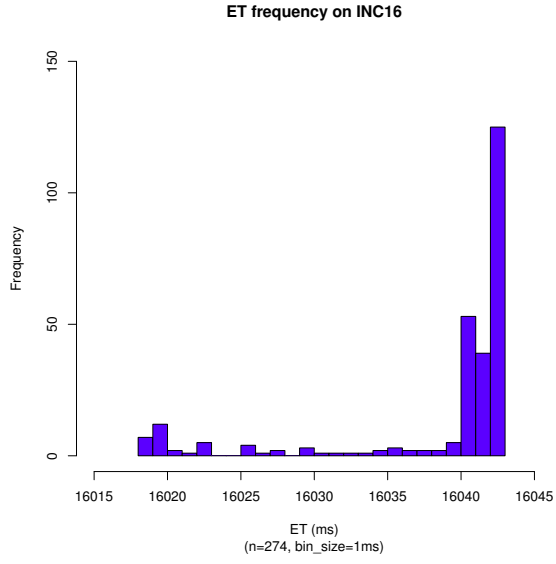
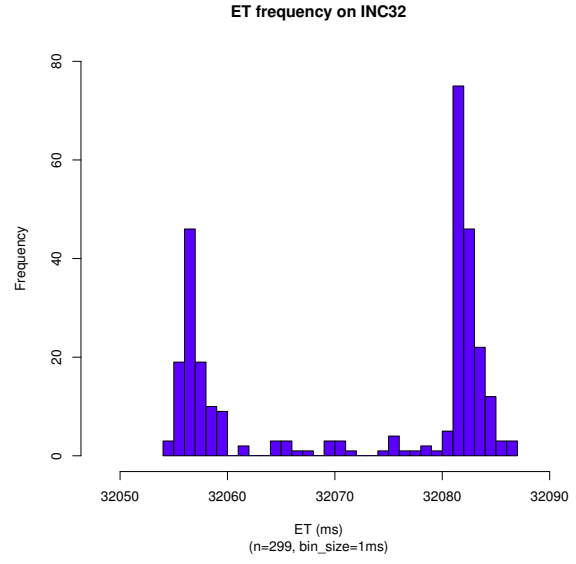


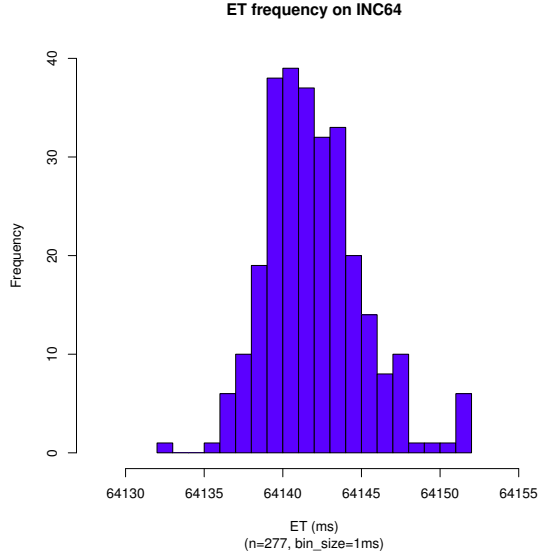
Figure 1: ET Histograms of INC1 ... INC8



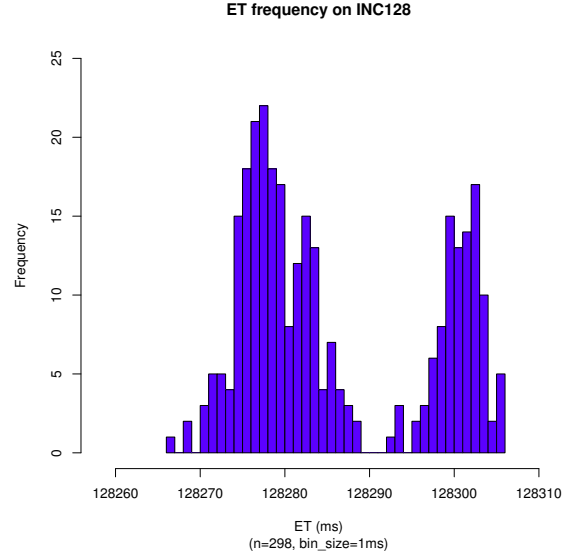
(a) ET frequency on INC16



(b) ET frequency on INC32



(c) ET frequency on INC64



(d) ET frequency on INC128

Figure 2: ET Histograms of INC16 ... INC128

2.2 PT

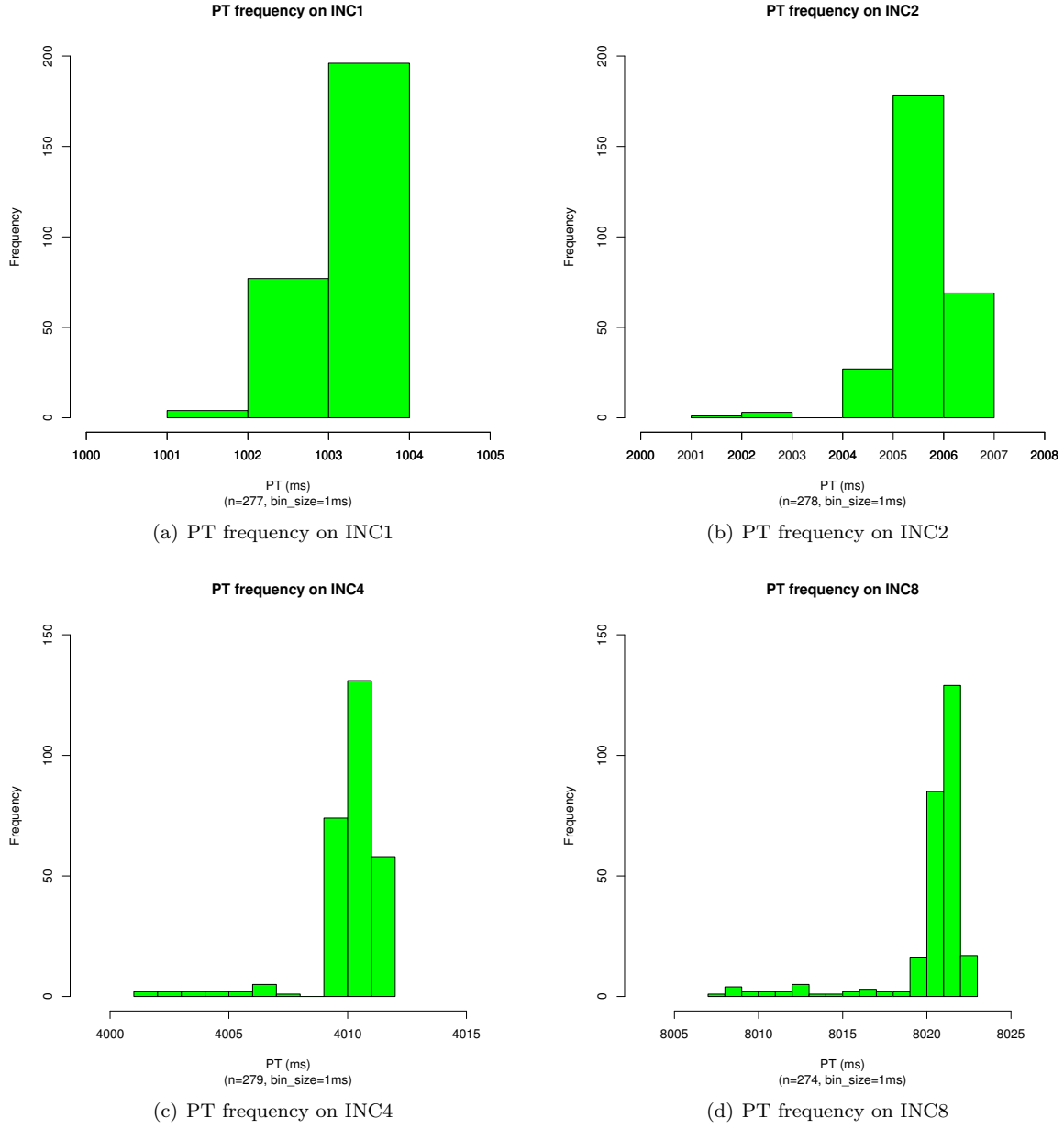
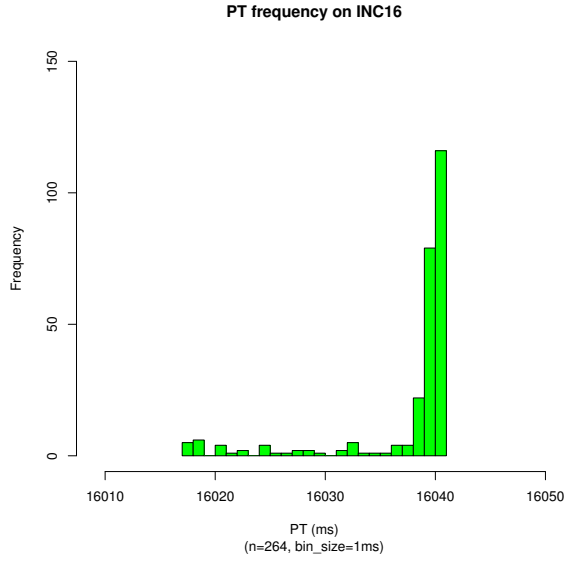
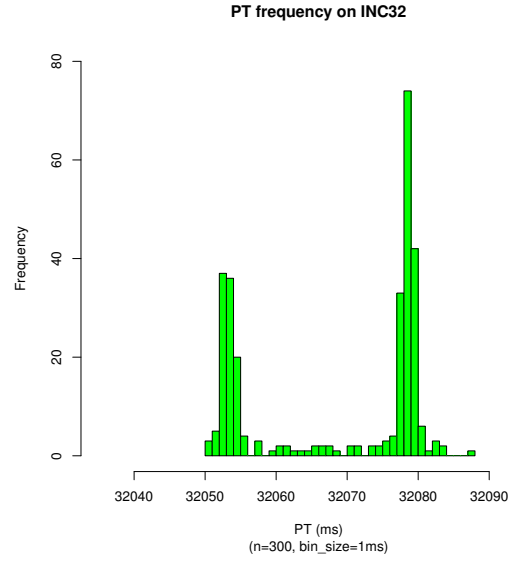


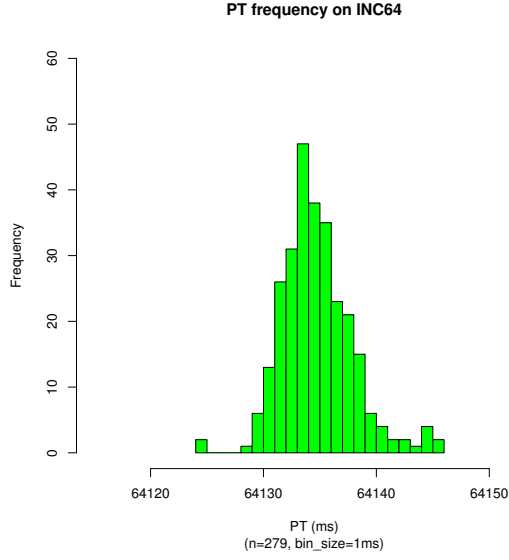
Figure 3: PT Histograms of INC1 ... INC8



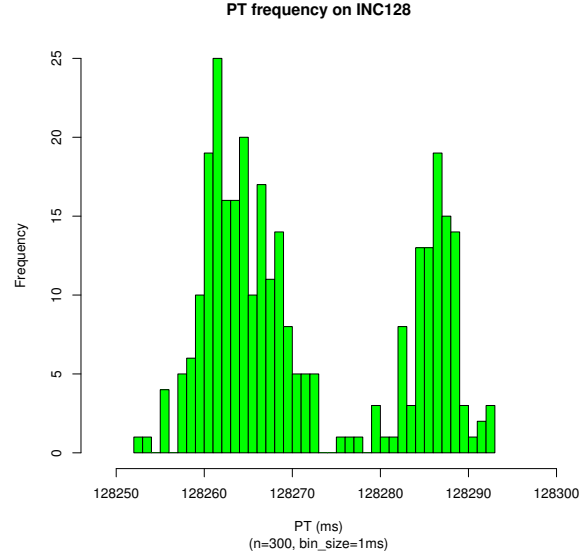
(a) PT frequency on INC16



(b) PT frequency on INC32



(c) PT frequency on INC64



(d) PT frequency on INC128

Figure 4: PT Histograms of INC16 ... INC64

3 sodb9

This section exhibits histograms on the EMPv5 data obtained on `sodb9`. The detailed description of the base data are from Table 1.

3.1 ET

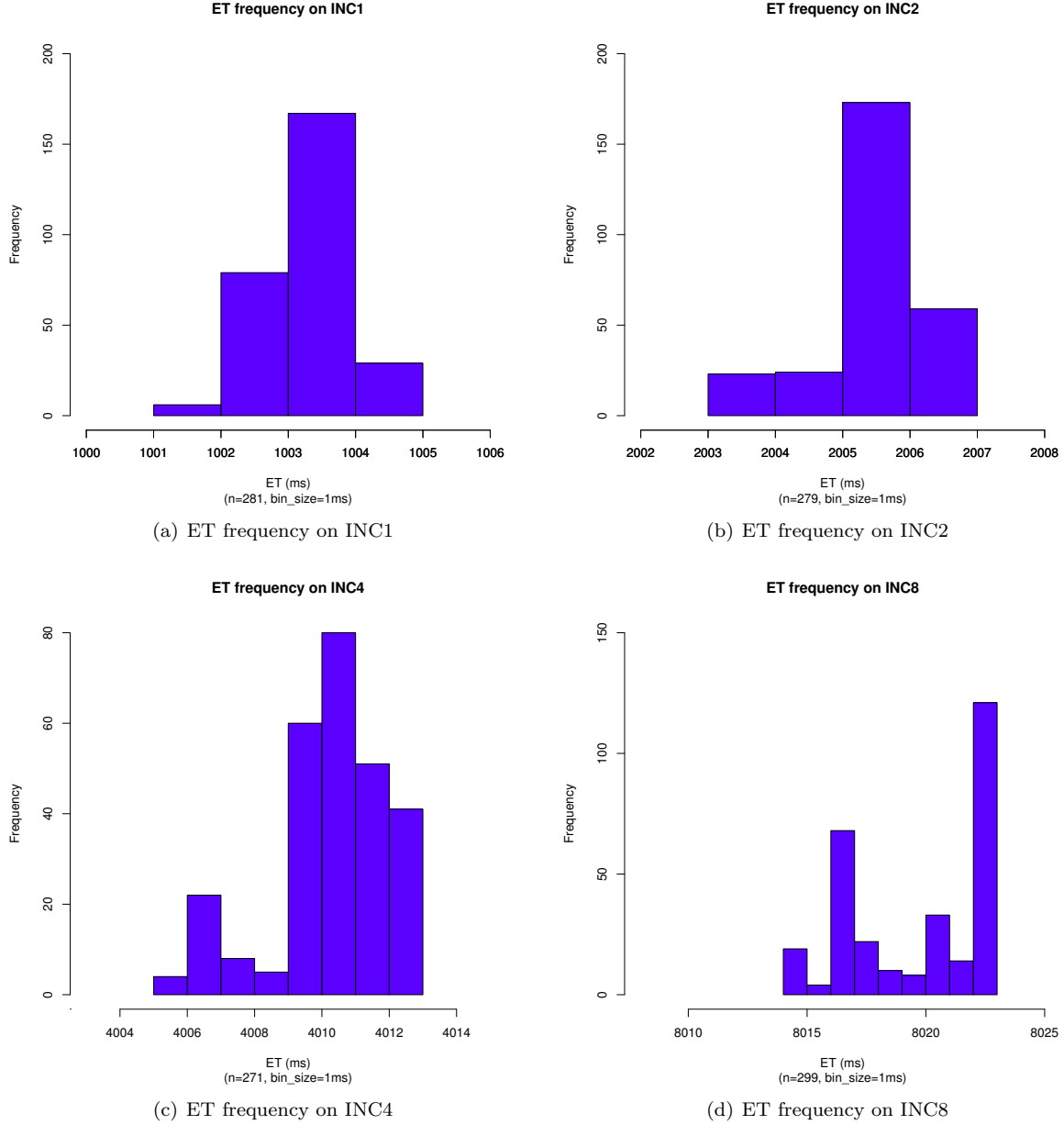
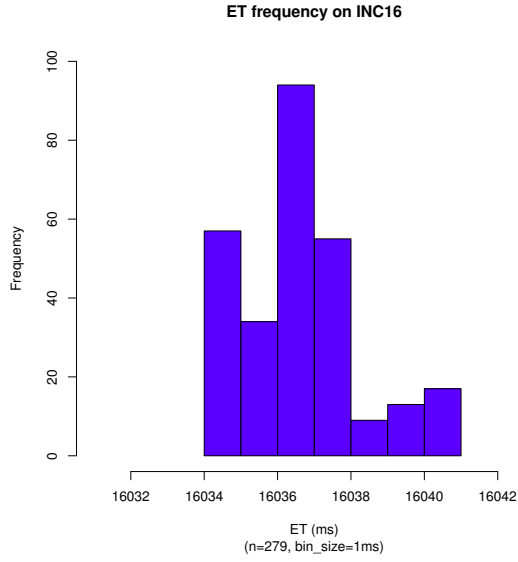
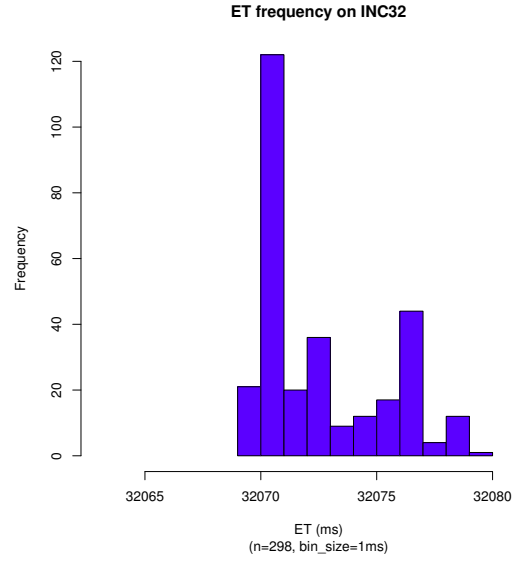


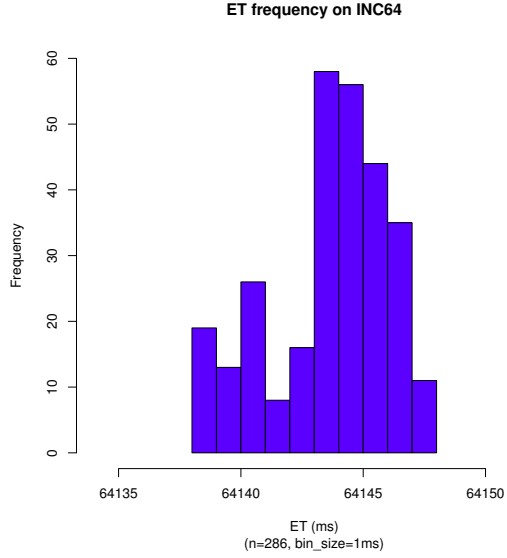
Figure 5: ET Histograms of INC1 ... INC8



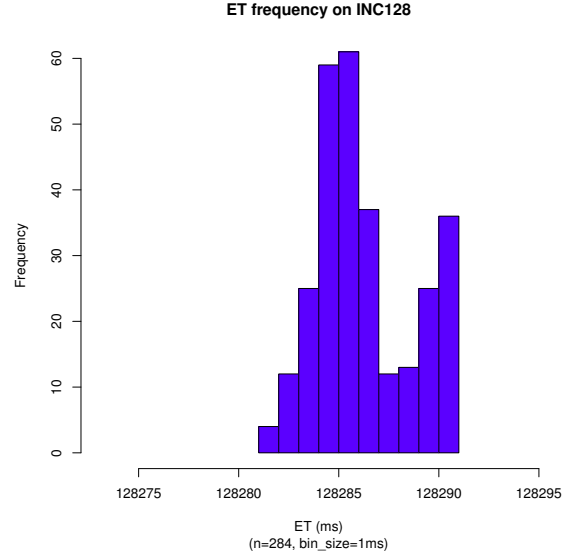
(a) ET frequency on INC16



(b) ET frequency on INC32



(c) ET frequency on INC64



(d) ET frequency on INC128

Figure 6: ET Histograms of INC16 ... INC128

3.2 PT

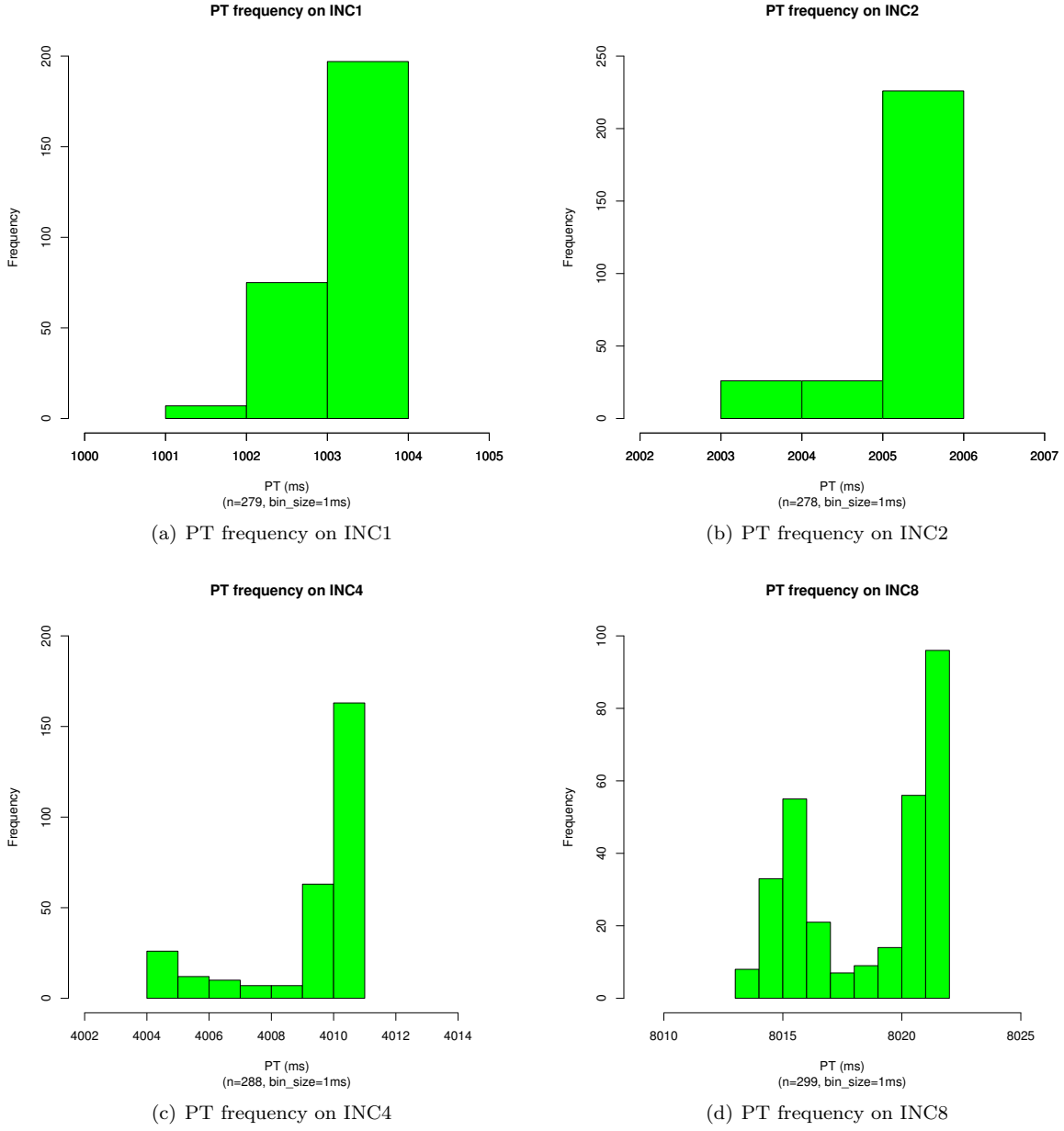
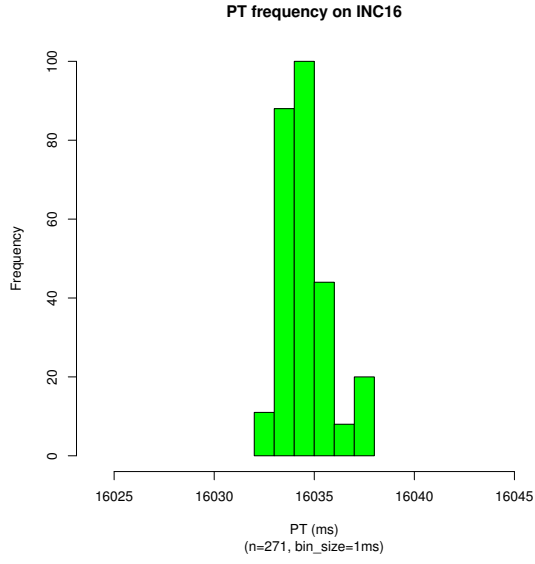
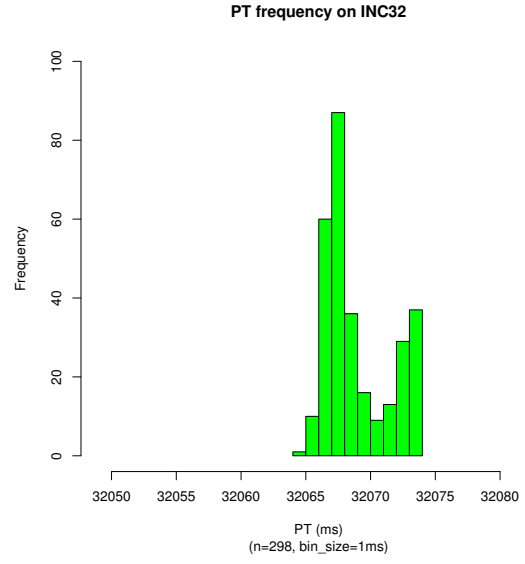


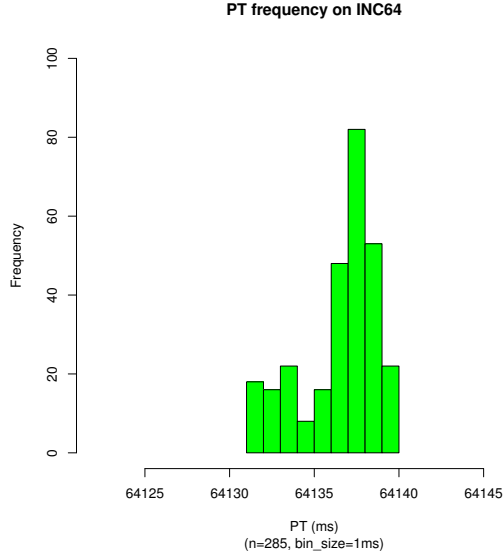
Figure 7: PT Histograms of INC1 ... INC8



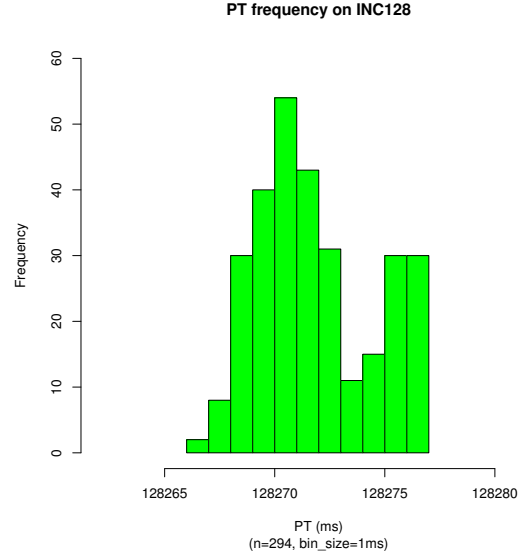
(a) PT frequency on INC16



(b) PT frequency on INC32



(c) PT frequency on INC64



(d) PT frequency on INC128

Figure 8: PT Histograms of INC16 ... INC64

4 sodb10

This section exhibits histograms on the EMPv5 data obtained on `sodb10`. The detailed description of the base data are from Table 1.

4.1 ET

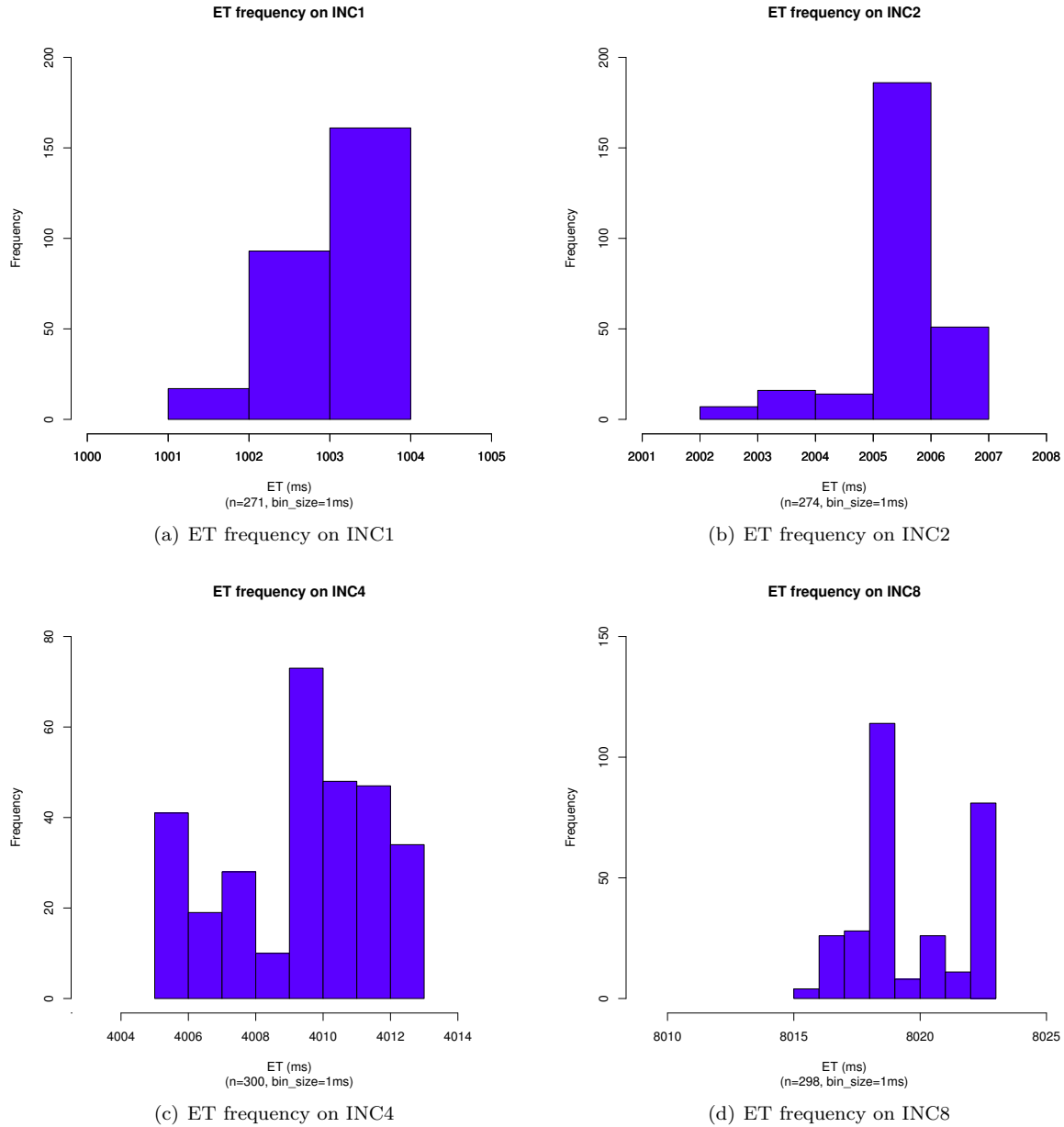
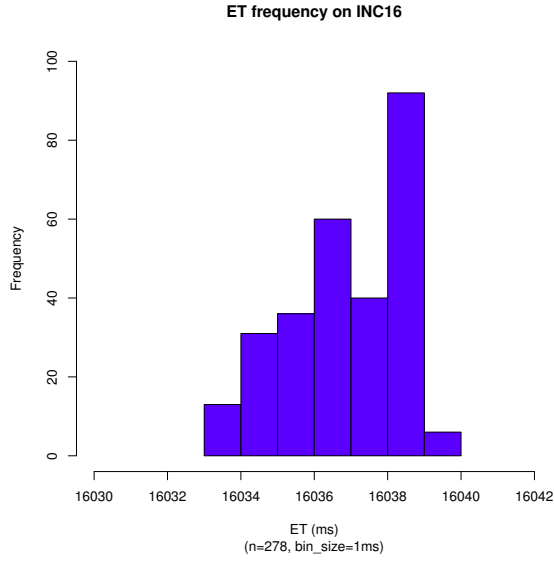
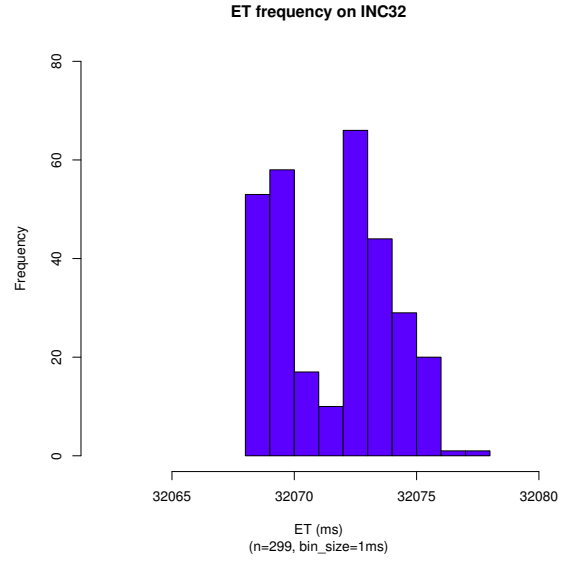


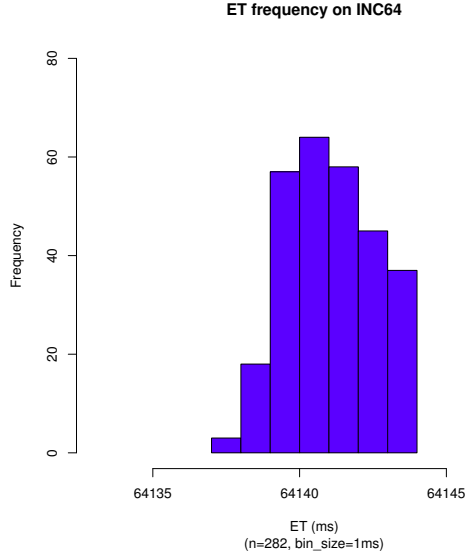
Figure 9: ET Histograms of INC1 ... INC8



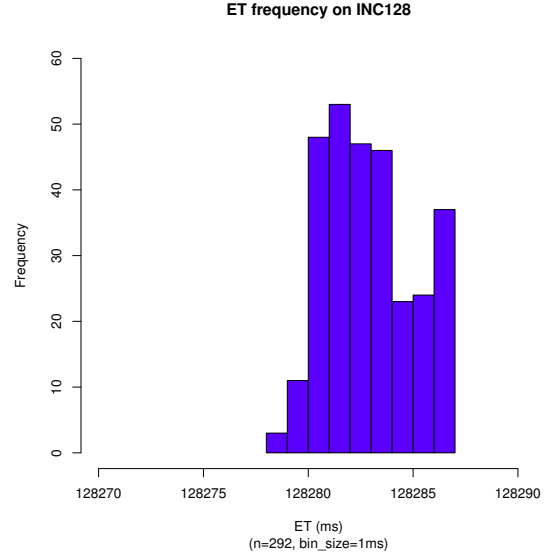
(a) ET frequency on INC16



(b) ET frequency on INC32



(c) ET frequency on INC64



(d) ET frequency on INC128

Figure 10: ET Histograms of INC16 ... INC128

4.2 PT

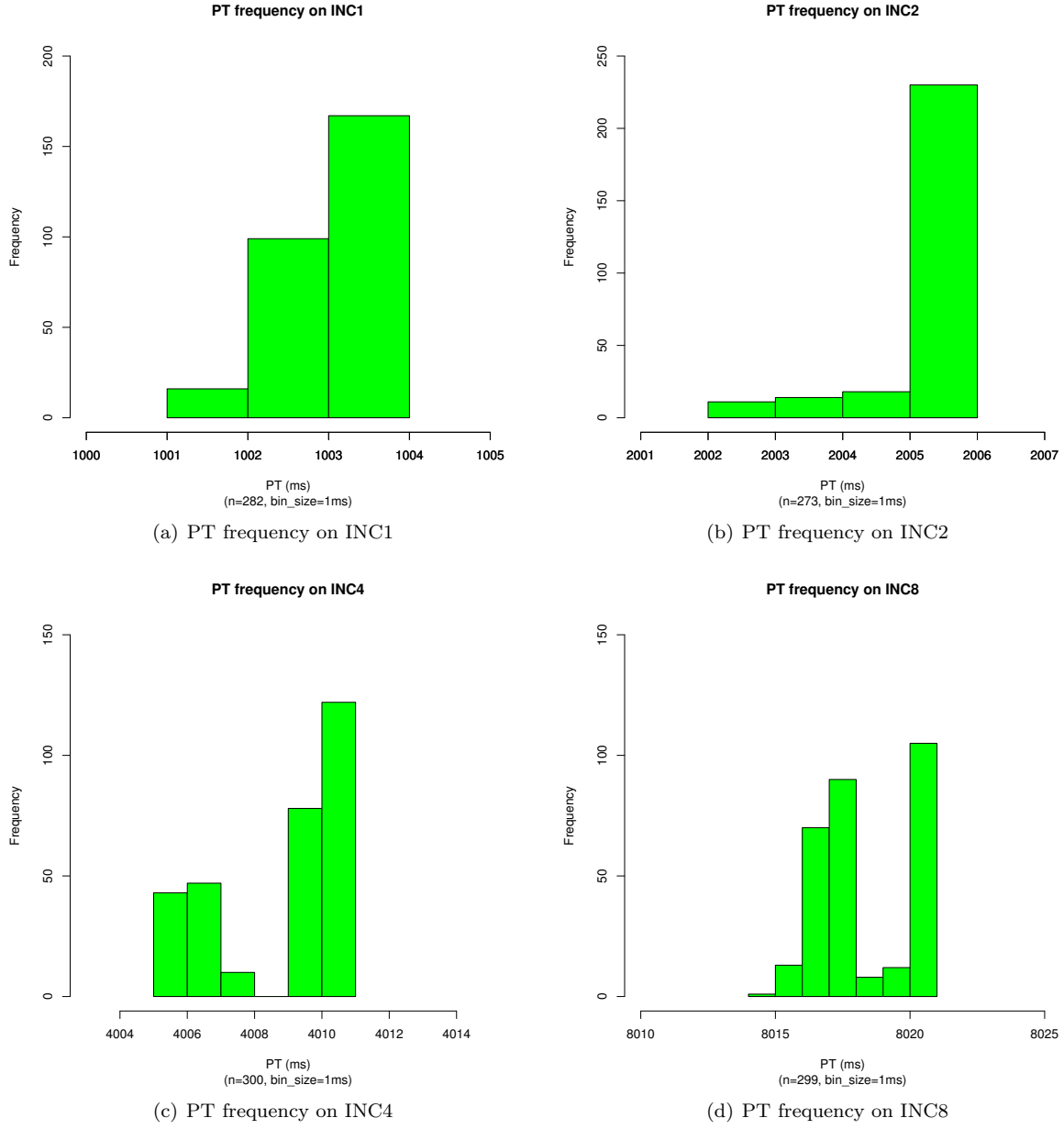
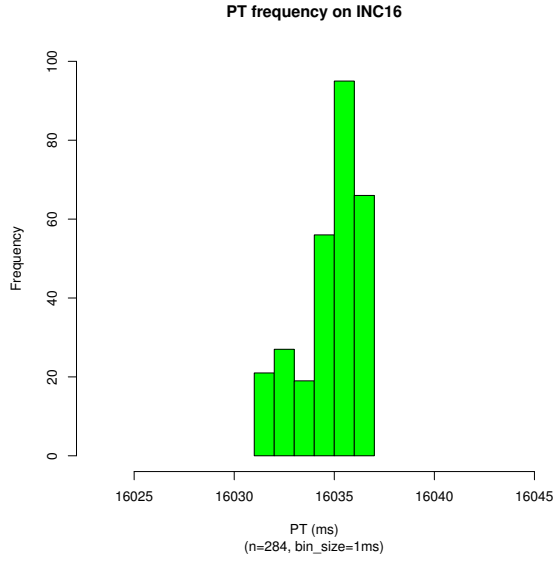
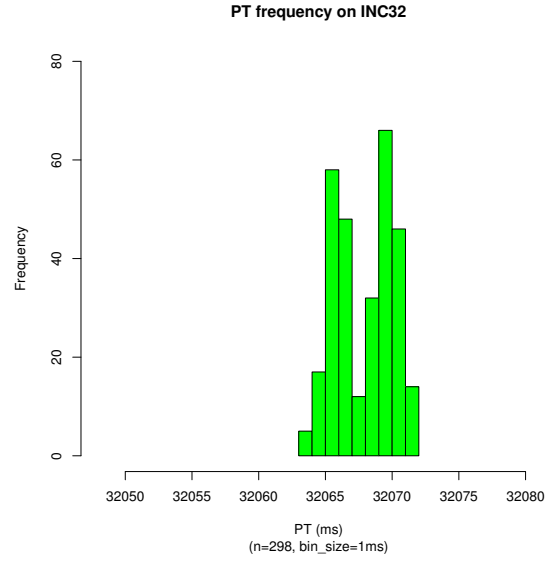


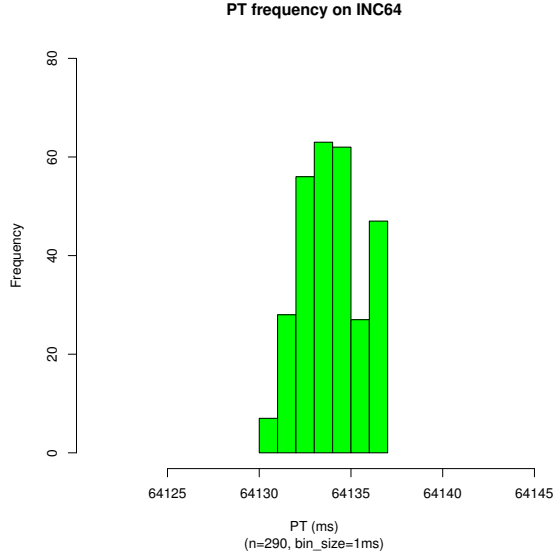
Figure 11: PT Histograms of INC1 ... INC8



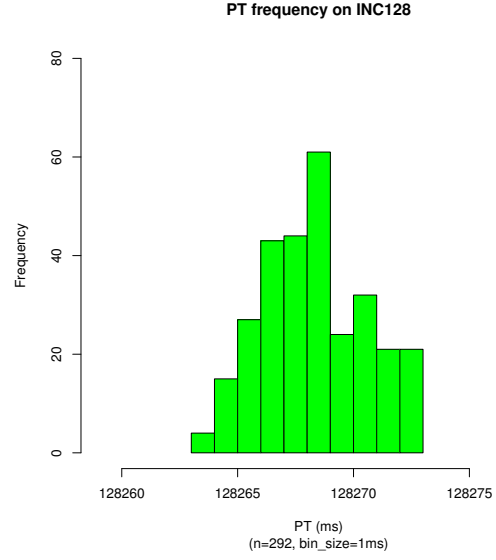
(a) PT frequency on INC16



(b) PT frequency on INC32



(c) PT frequency on INC64



(d) PT frequency on INC128

Figure 12: PT Histograms of INC16 ... INC64

5 sodb12

This section exhibits histograms on the EMPv5 data obtained on `sodb12`. The detailed description of the base data are from Table 1.

5.1 ET

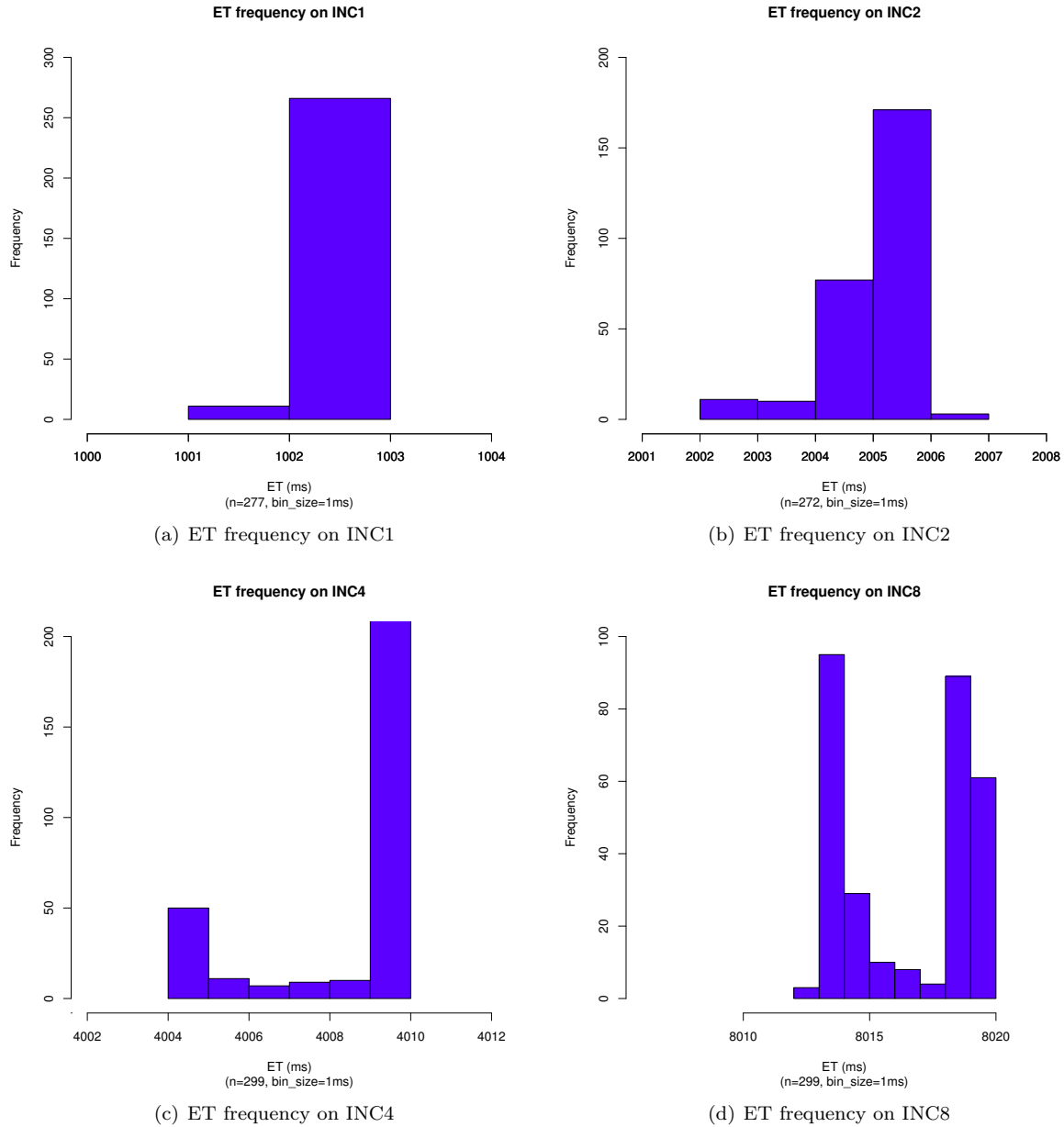
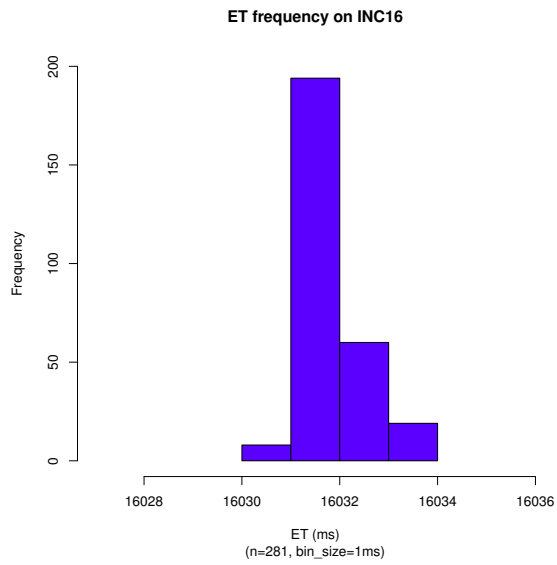
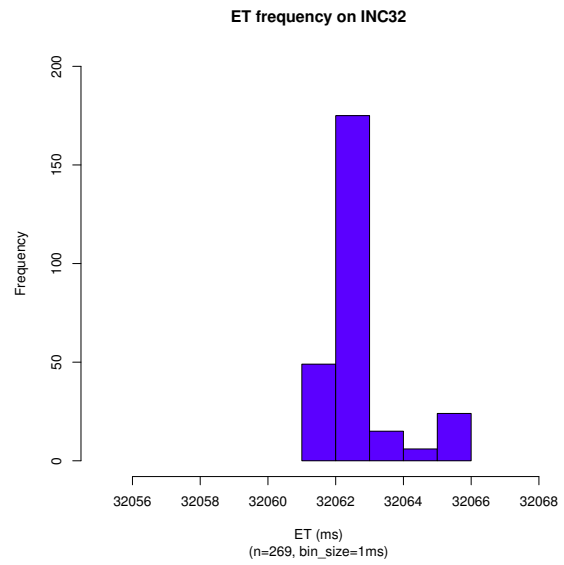


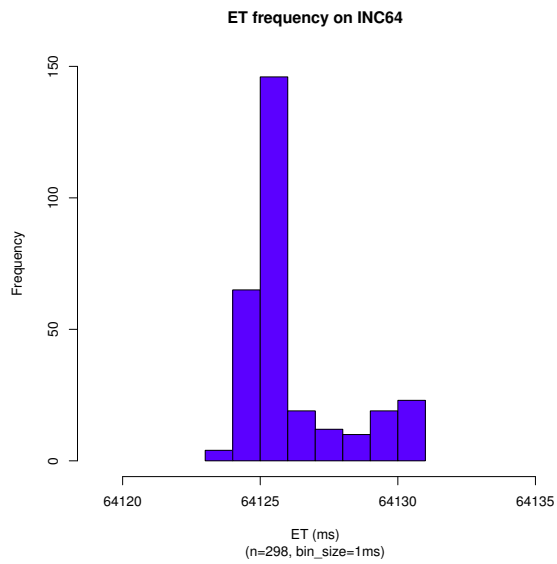
Figure 13: ET Histograms of INC1 ... INC8



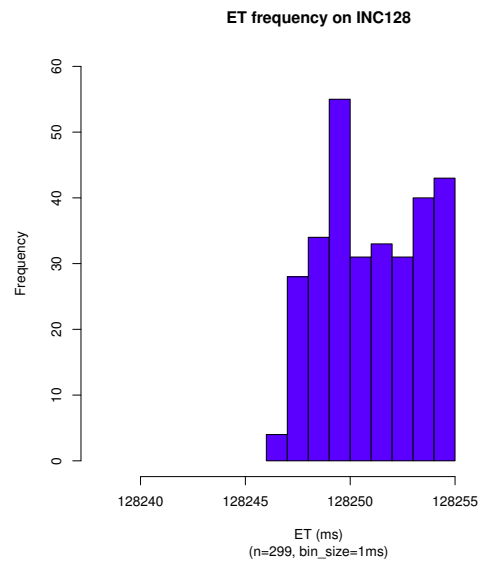
(a) ET frequency on INC16



(b) ET frequency on INC32



(c) ET frequency on INC64



(d) ET frequency on INC128

Figure 14: ET Histograms of INC16 ... INC128

5.2 PT

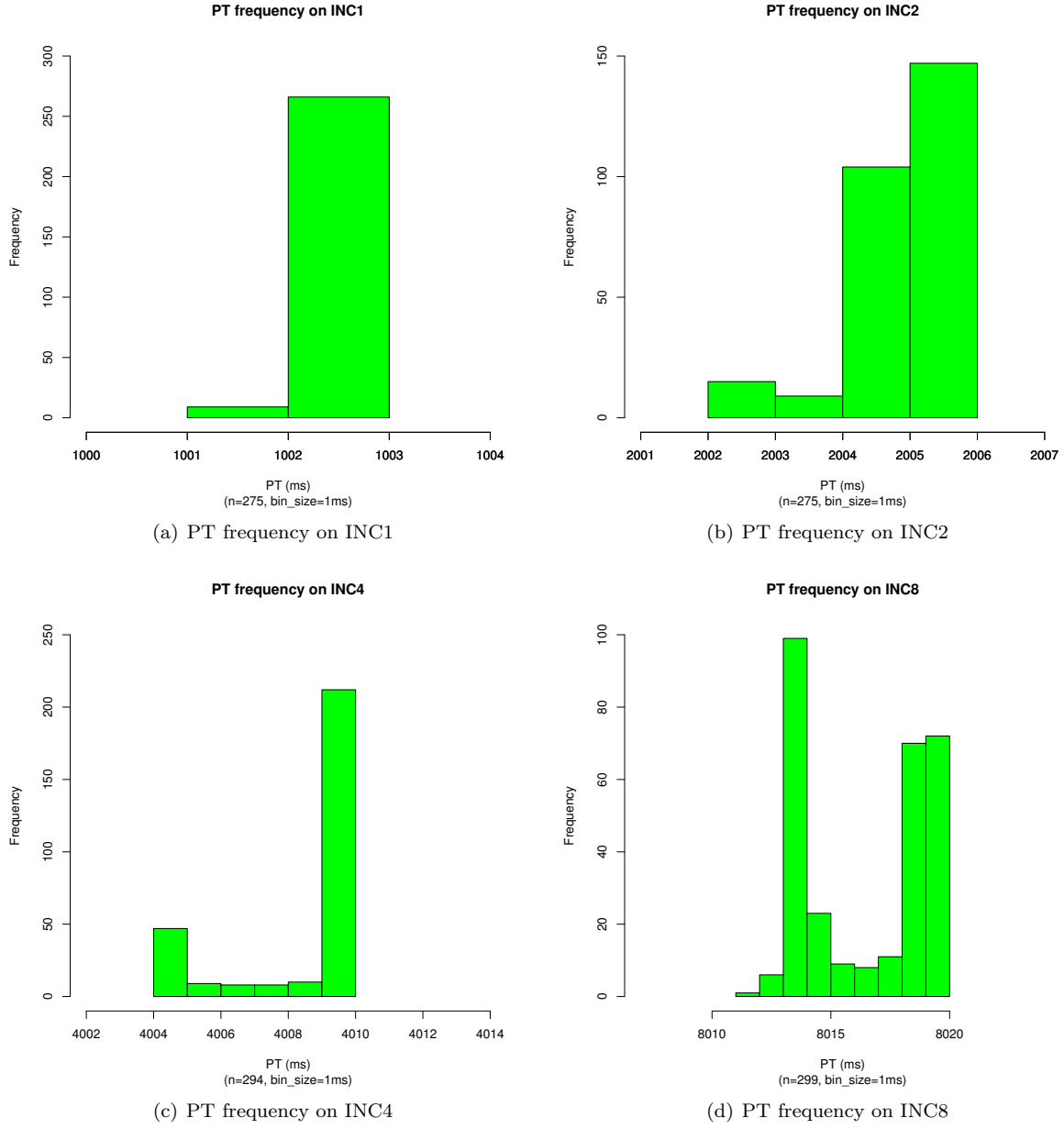
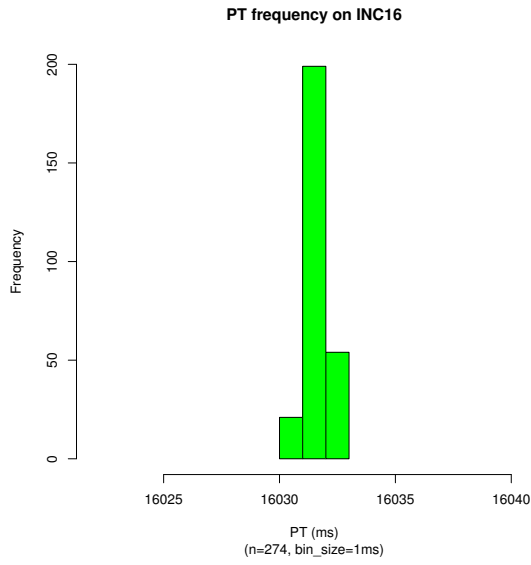
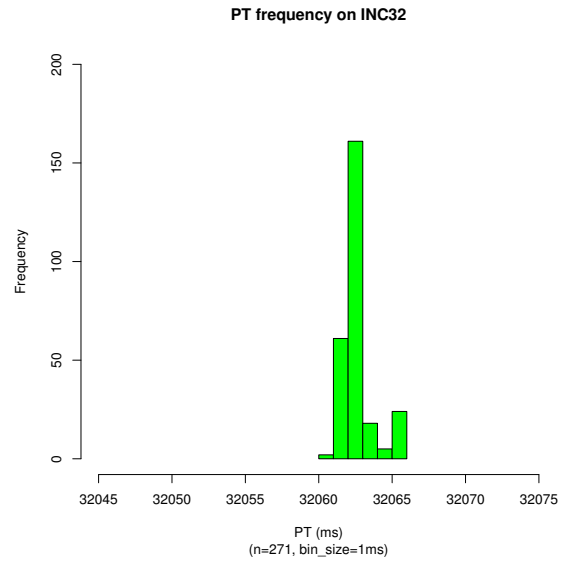


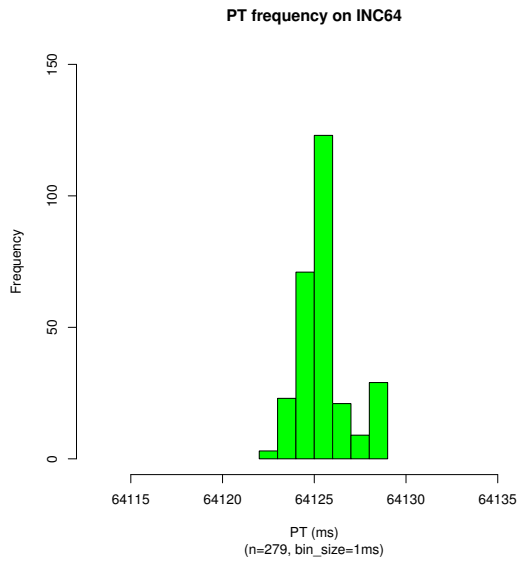
Figure 15: PT Histograms of INC1 ... INC8



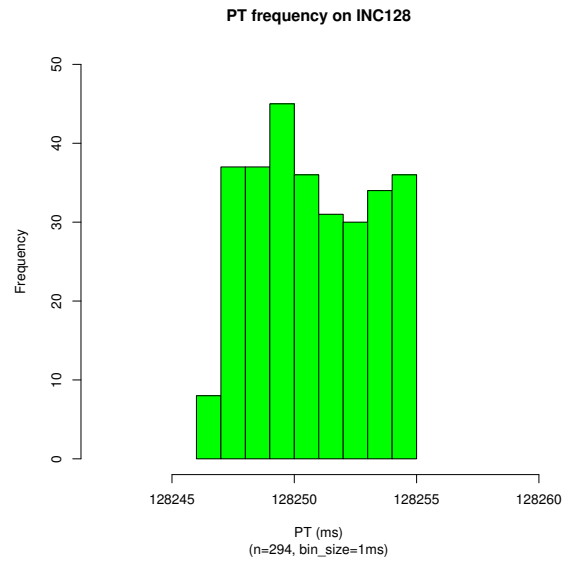
(a) PT frequency on INC16



(b) PT frequency on INC32



(c) PT frequency on INC64



(d) PT frequency on INC128

Figure 16: PT Histograms of INC16 ... INC64