A Study of INC Runs in Sequence

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1   Description

In this document we discuss characteristics of INC runs in sequence.

There are two big subjects included in the document. Specifically, the first subject relates running a series of INCs in a batch, pausing the run, and then resuming the run, rather than repeating the same INC multiple times. That is, INC1, ..., INC16384 are consecutively run as a batch, and then the entire batch run sleeps for an hour, and then another batch run of INC1, ..., INC16384 begins, stops, and resumes, and so forth.

The second subject concerns breaking up a whole run of 1000 samples into 200 samples, thereby yielding five different histograms.

1.1   Experiment Notes

Table 1 provides a short description of our experimental runs, on which the following histograms are based.

| Machine	Task Length (sec)	Description	Experiment Period
sodb9	INC16	Each run with 1,000 samples	2017-03-02 ∼ 2017-03-07
sodb9	INC1 INC16384	One run in which each INC has 30 samples	2018-11-17 ∼ 2018-12-02

Table 1: Notes on experiment runs used for histograms

2 INC Run in Sequence
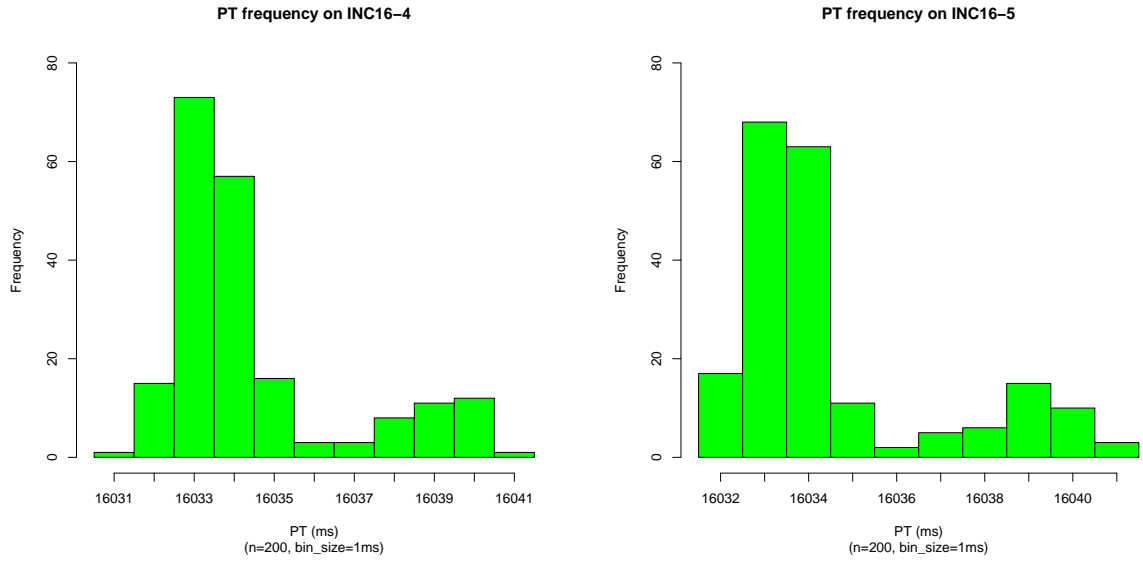
3 Decomposition of INC16 Samples
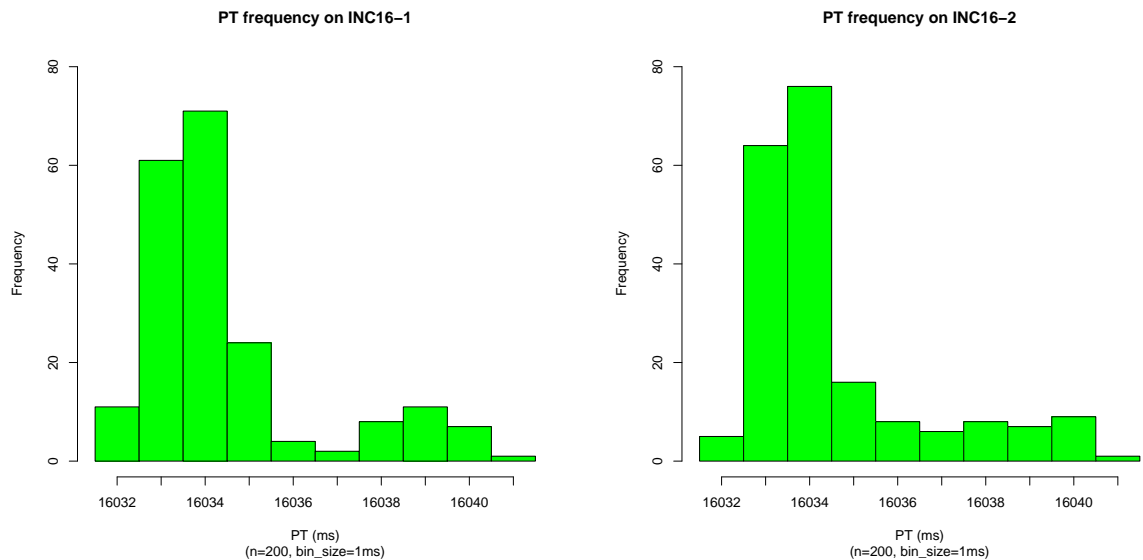
(a) PT frequency on INC16 with the first 200 samples on sodb9

(b) PT frequency on INC16 with the next 200 samples on sodb9
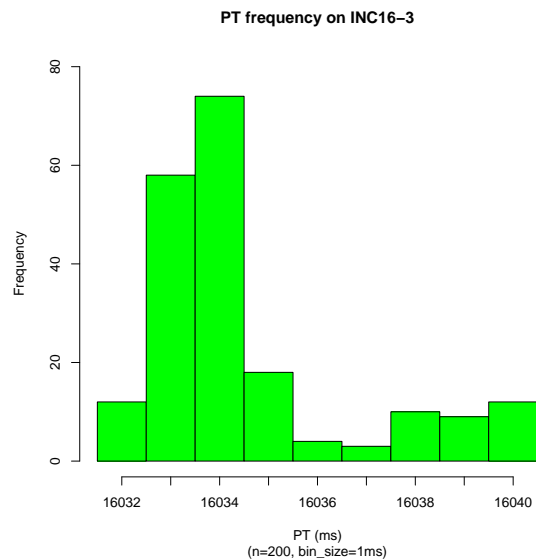
(c) PT frequency on INC16 with the next 200 samples on sodb9

Figure 1: PT Histograms of INC16-1   INC16-3

PT frequency on INC16–4

Frequency

PT (ms)
(n=200, bin_size=1ms)

PT frequency on INC16–5

Frequency

PT (ms)
(n=200, bin_size=1ms)

(a) PT frequency on INC16 with the next 200 samples on `sodb9`

(b) PT frequency on INC16 with the next 200 samples on `sodb9`

Figure 2: PT Histograms of INC16-4 INC16-5