About Signal Sampling Frequency

Question 1.

In the figure on the right, all Transmit frequency values are set to 1000 kHz, and Signal Sampling Frequency values are set to 3700, 3800, 3900, and 4000, respectively. Which of the waveforms from (1) to (4) is the most suitable for our measurement that we should choose? Currently we have chosen (1).
Is this the right choice?

Question 2

I understand that changing the value of Signal Sampling Frequency changes the shape of the waveform. However, when I compare (1) and (2), the start position of the waveform has changed (at the position of the red line).
I do not understand why the start position changes just by changing the number of sampling.
Please teach us.
(In fact, the absoluteTOF value output from "SaveWaveforms" is about 2.5 μ s smaller in case of (2).)

Question 3

The Quick Start User Guide for the Signal Sampling Frequency value recommends setting it at 3600 for 1MHz and 8000 for 2MHz. Is there any reason for this? I am aware that increasing the value will increase the measurement accuracy, but is it possible to use a value higher than 6800 for a 1MHz transducer? Are there any advantages or disadvantages to using it?

①Signal Sampling Frequency:4000

②Signal Sampling Frequency:3900

③Signal Sampling Frequency:3800

④Signal Sampling Frequency:3700