If that window doesn’t meet the criteria, the window slides one bp to the right and evaluates again. If the window does meet the criteria, another window is created at the first’s boundary on the 3’ side and evaluated. If this second (or third, or fourth…) window does not meet the criteria, the window slides back toward the 5’ end until it does meet the criteria. Then the large CpG island is evaluated to make sure it, as a whole, meets the criteria. If it does not, base pairs are trimmed from either end until it does. Any two islands that are less than 200 bps apart on the contig are united into a single larger island

Criteria : five CpG site in a 200bp windows

Set a 200-base window in the beginning of each chrosome of the array, compute the number of the probe. Shift the window 1 probe after evaluation until the window meets the criteria of the pre-threshold.

(B) If the window meets the criteria, shift the window 200 bp and then evaluate again. (C and D) Repeat these 200-bp shifts until the window does not meet the criteria. (E) Shift the last window 1 bp toward the 5 end until it meets the criteria. (G) Evaluate total %GC and ObsCpGExpCpG. (H) If this large CpG island does not meet the criteria, trim 1 bp from each side until it meets the criteria. (I) Two individual CpG islands were connected if they were separated by less than 100 bp. (J) Values for ObsCpGExpCpG and %GC were recalculated to remain within the criteria.