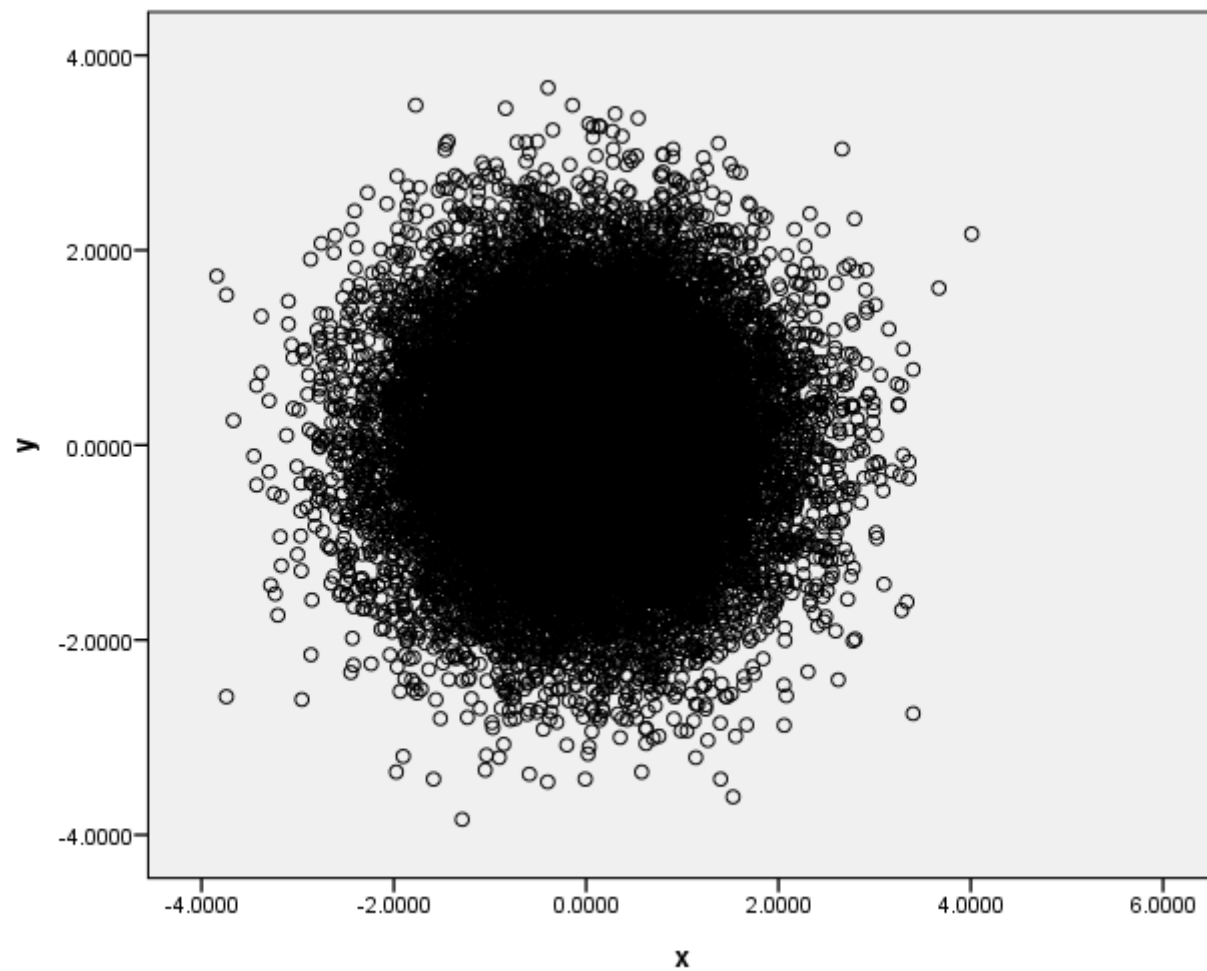


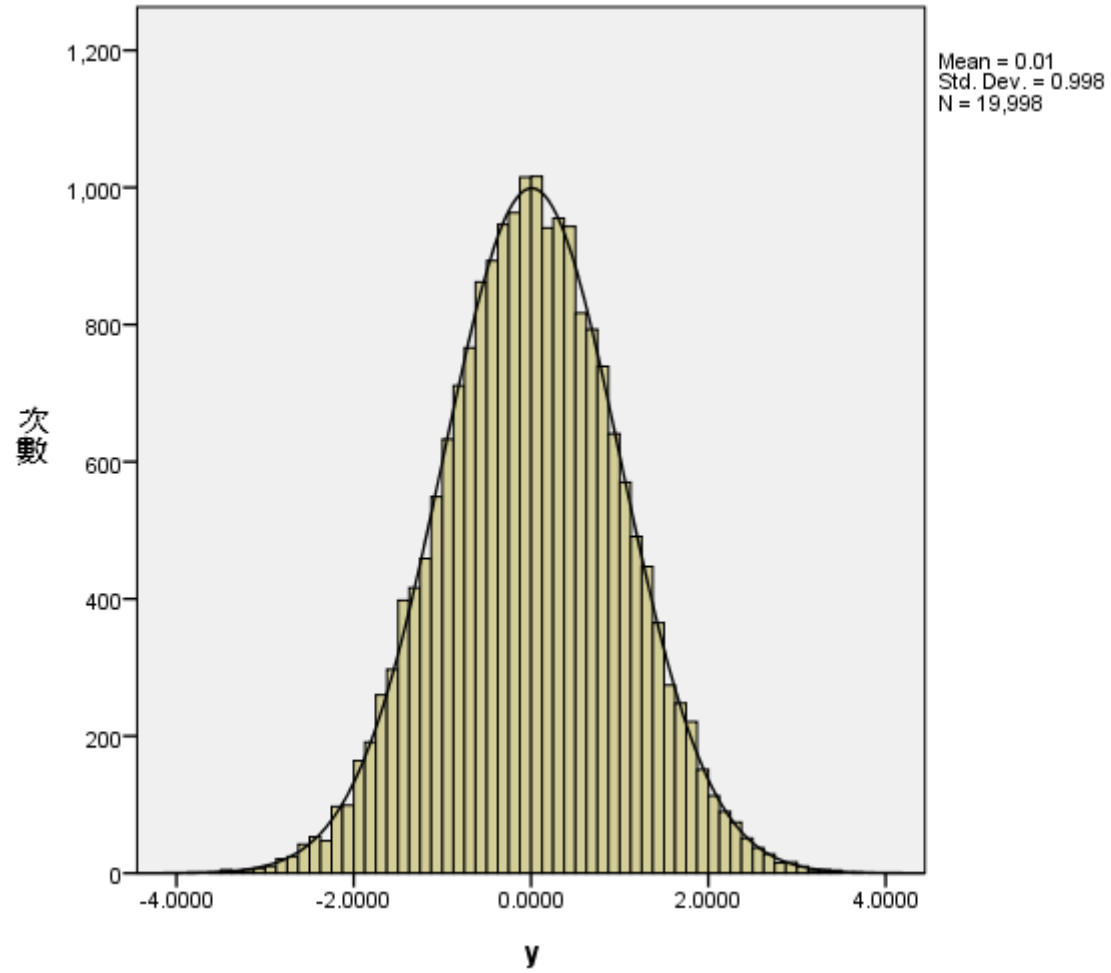
虛無假設與顯著性

3/23

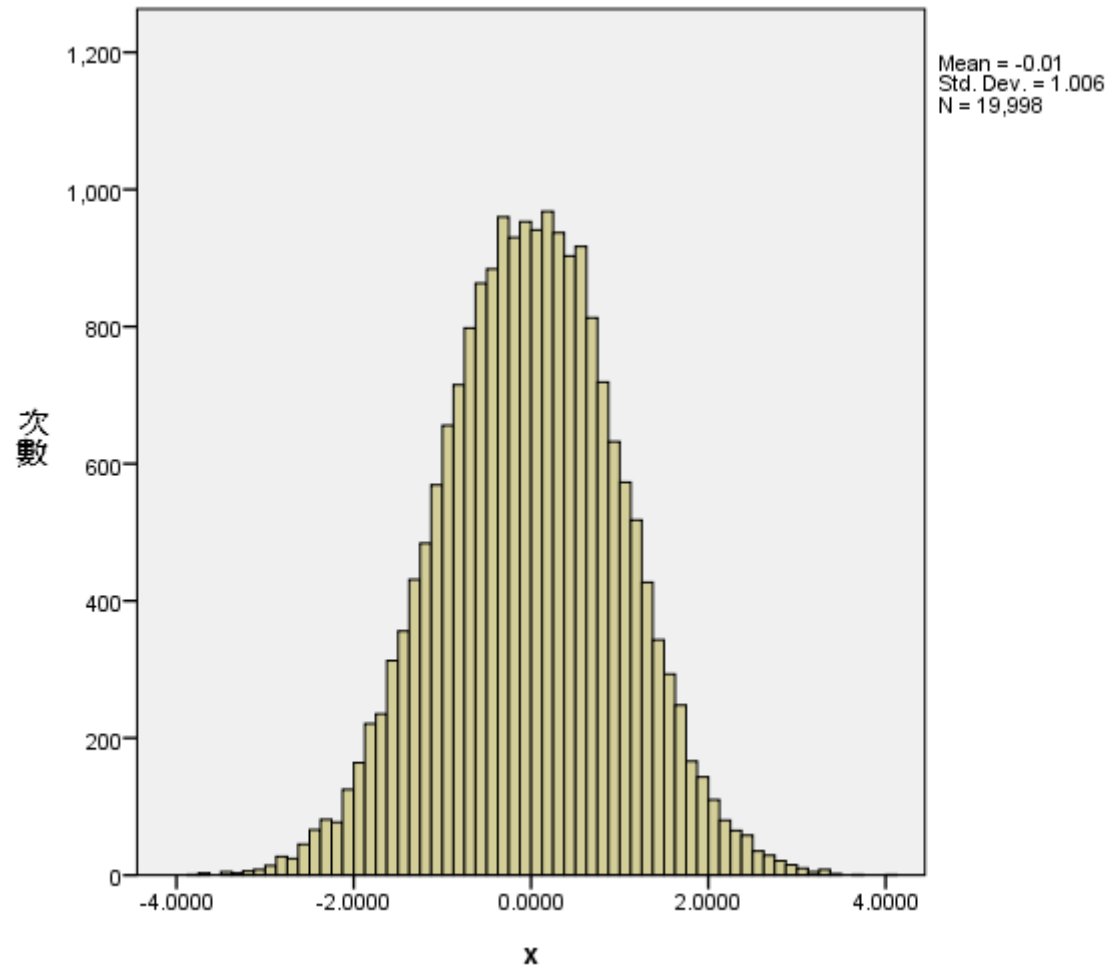
母體YX散佈圖



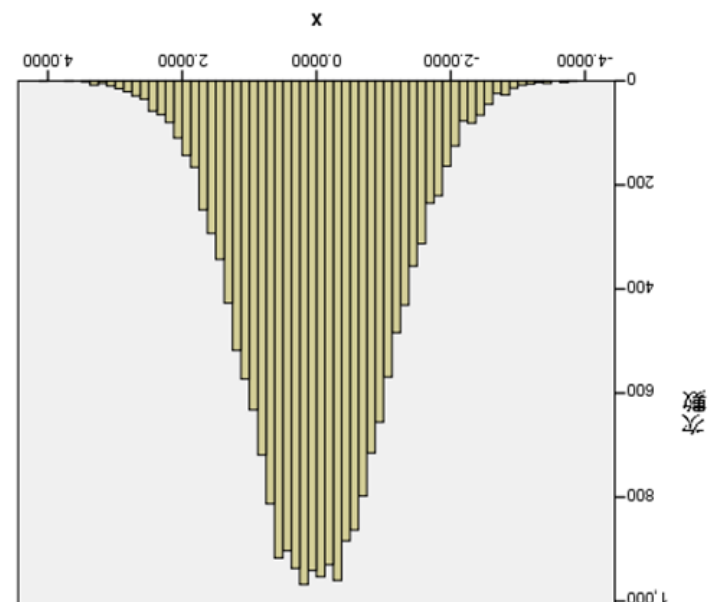
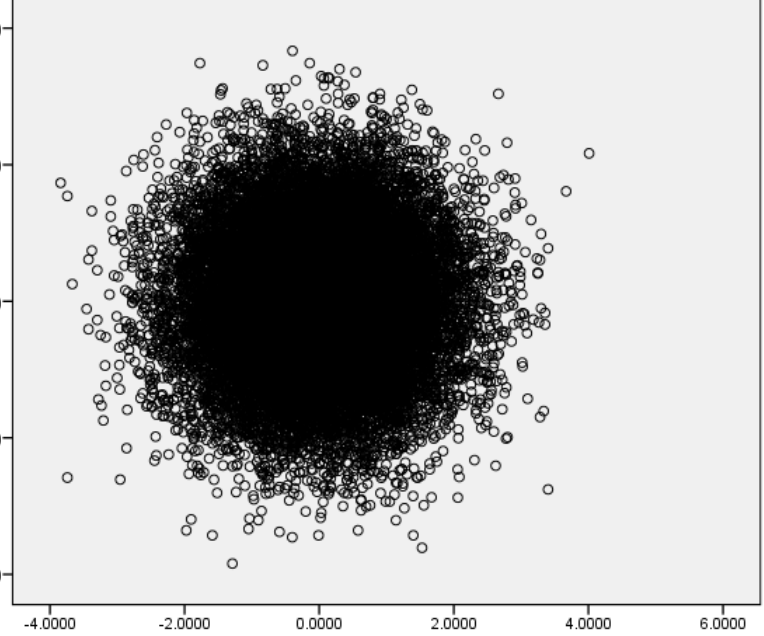
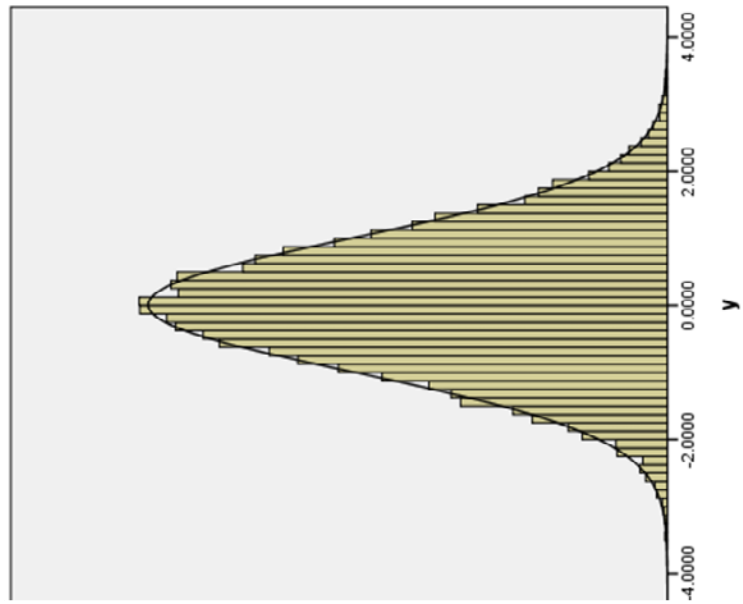
母體Y直方圖

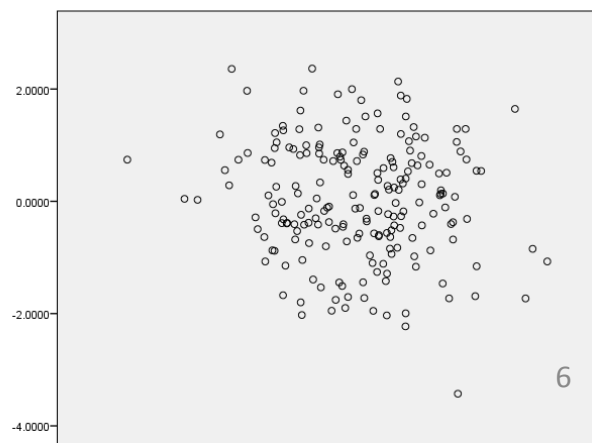
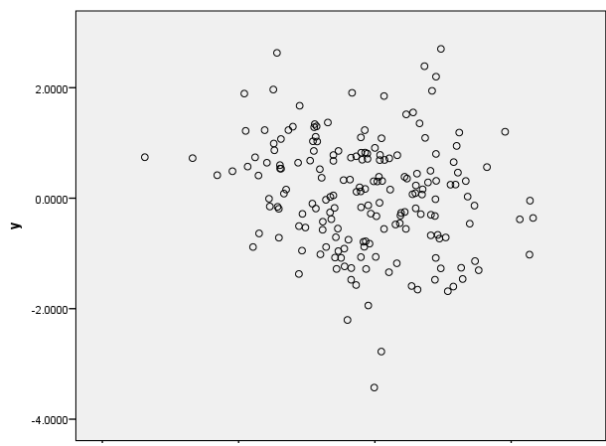
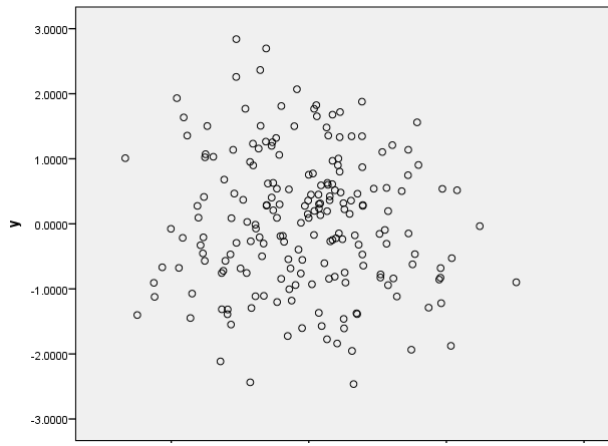
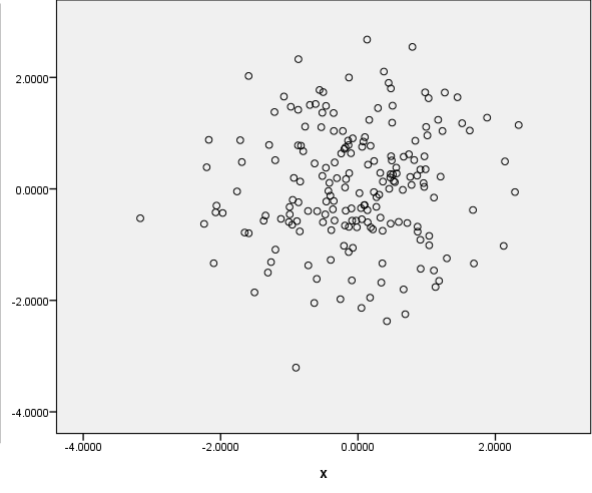
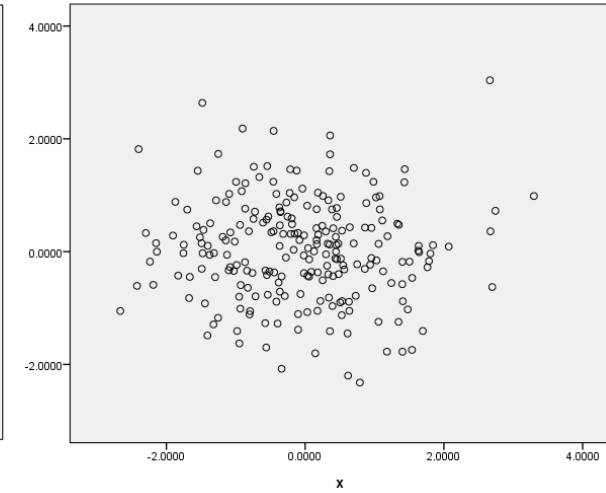
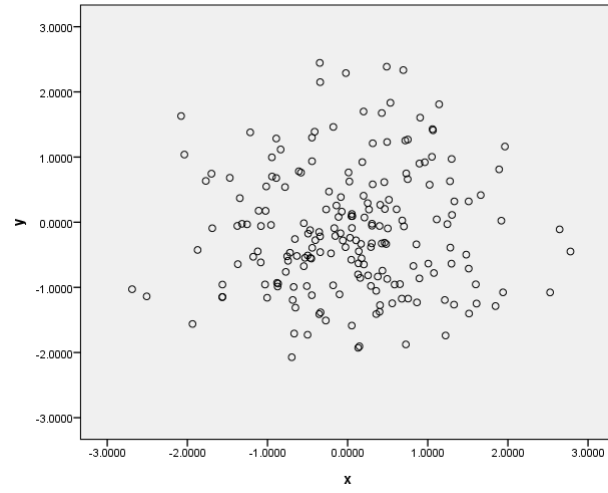
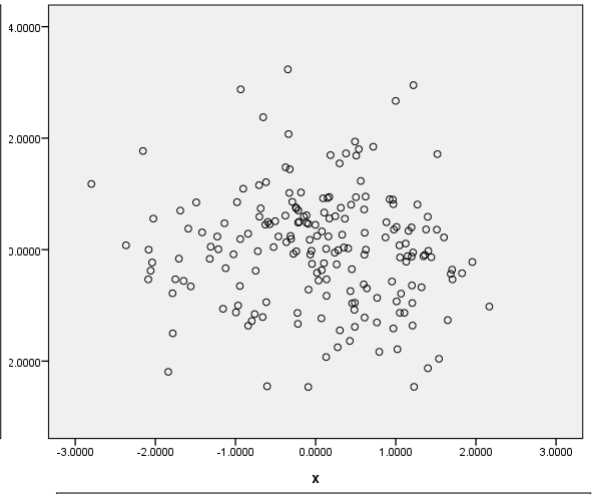
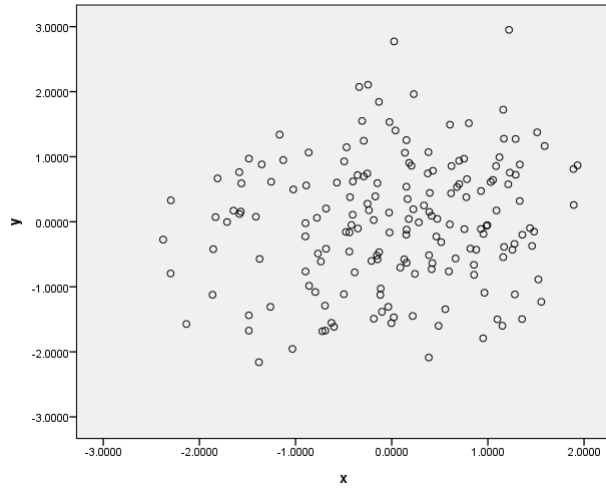
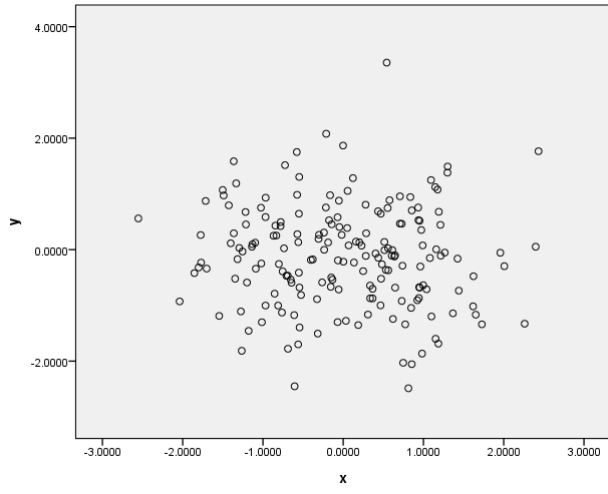


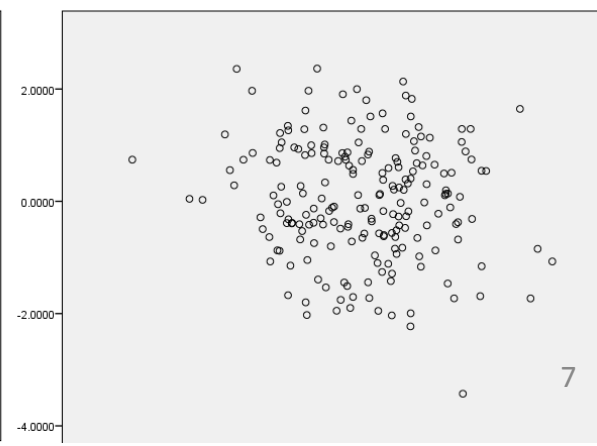
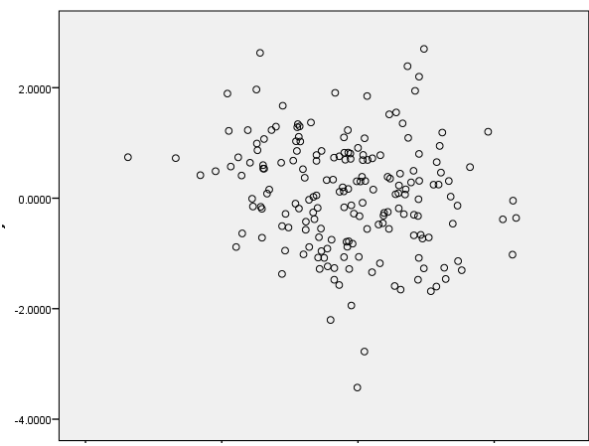
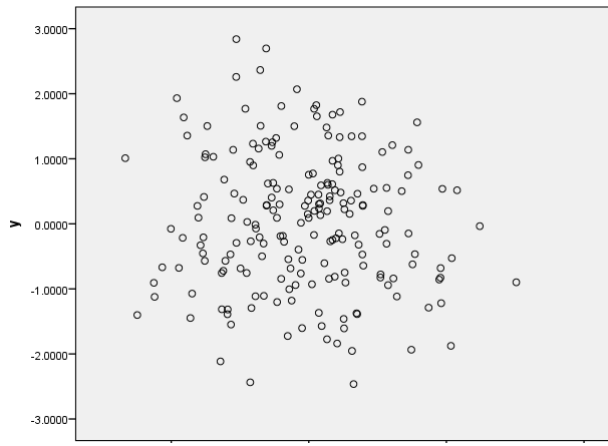
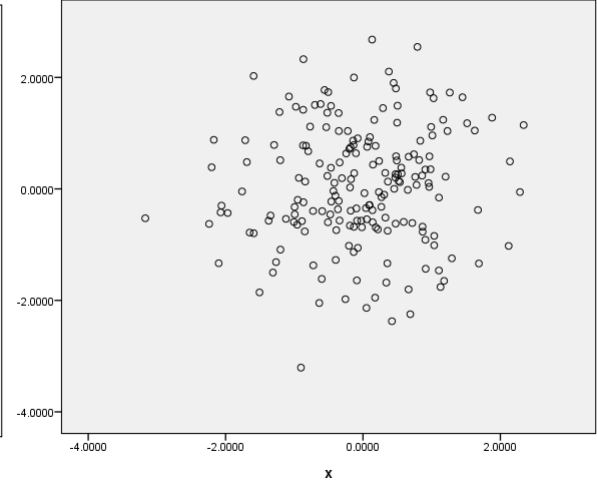
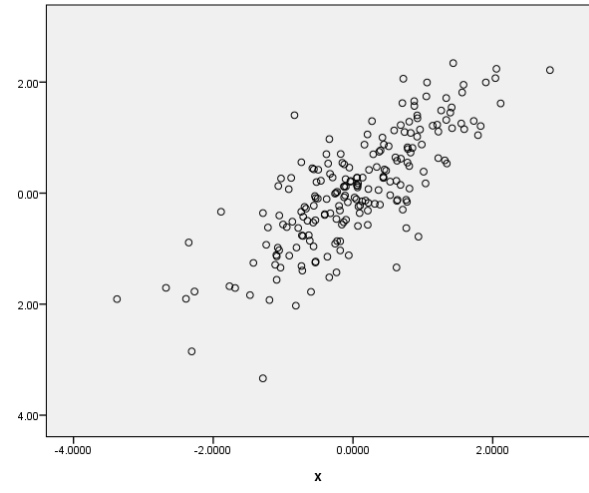
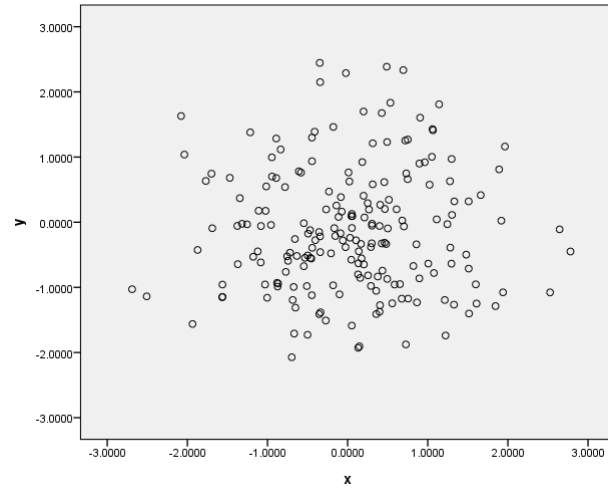
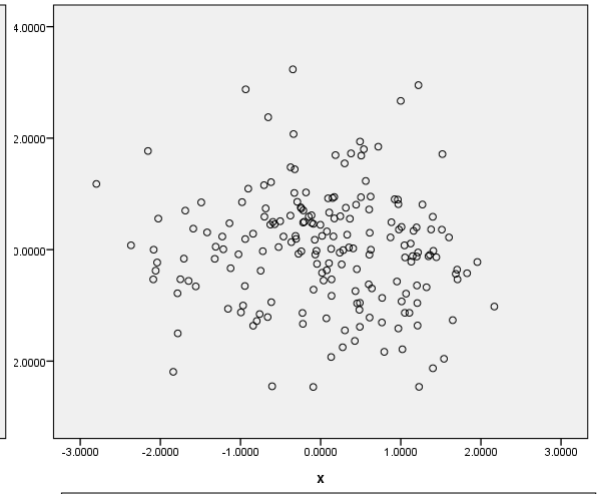
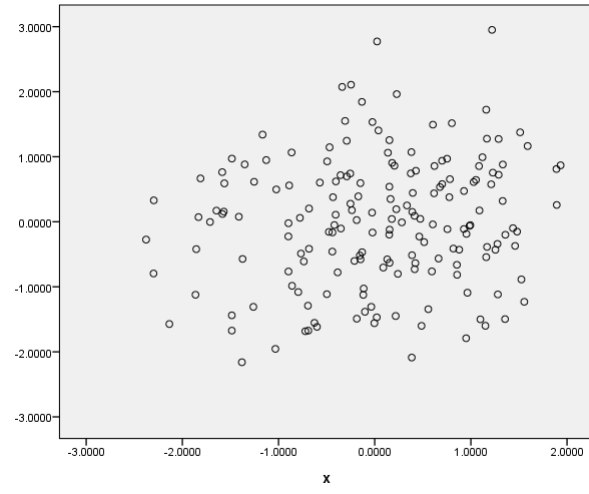
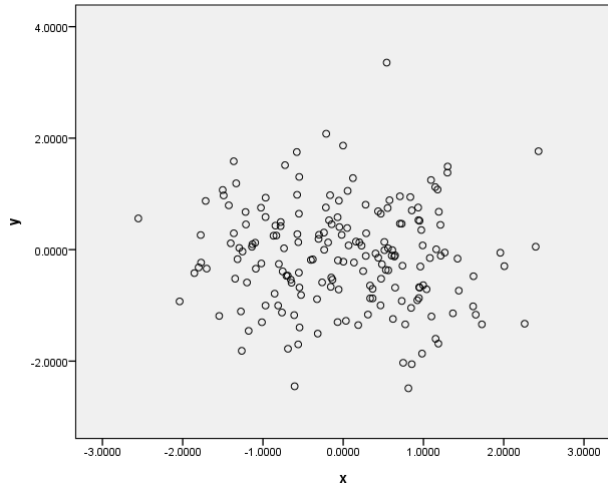
母體X直方圖

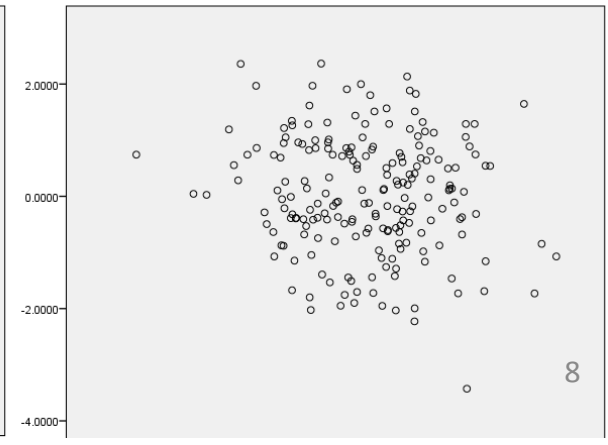
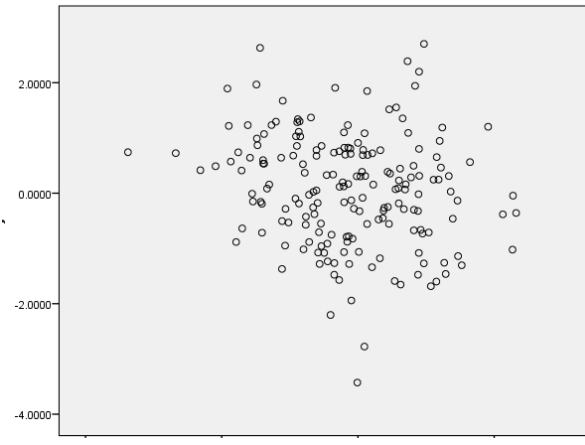
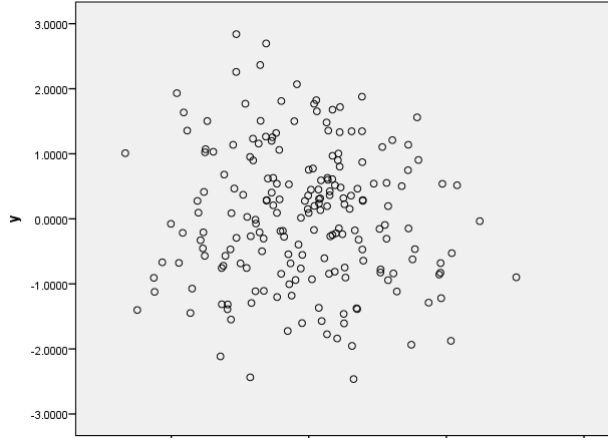
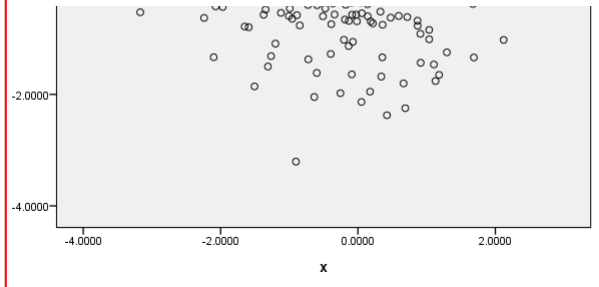
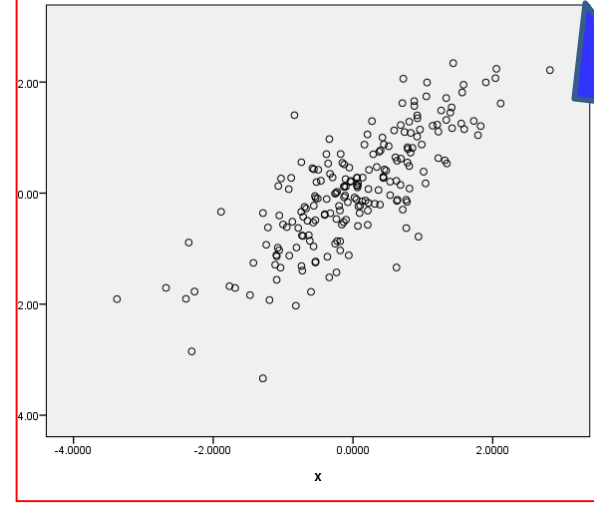
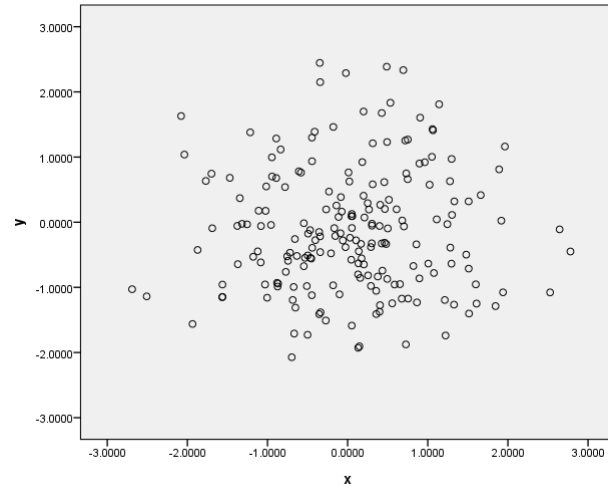
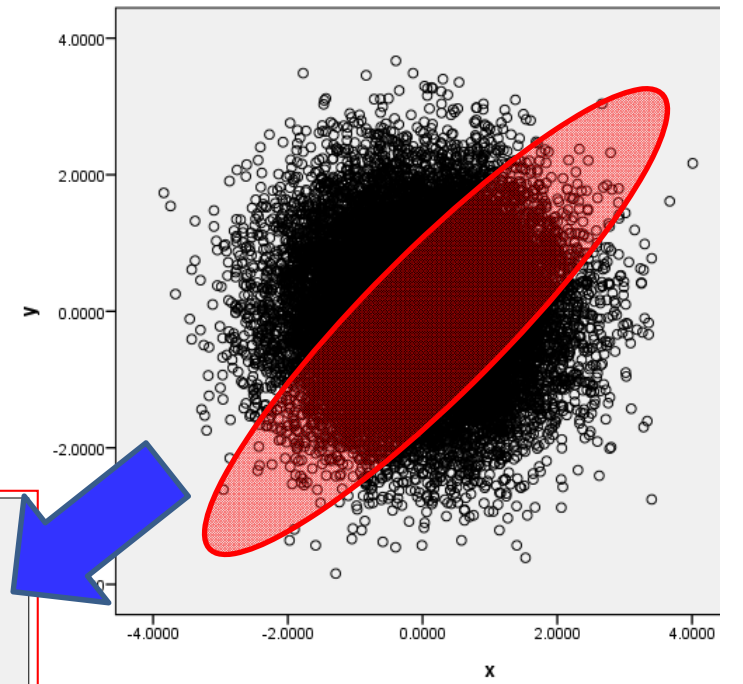
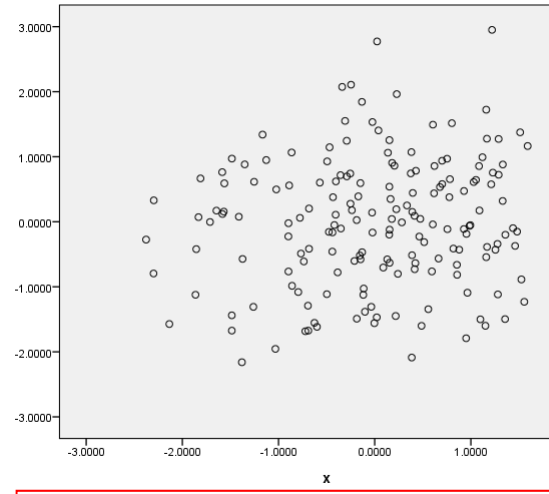
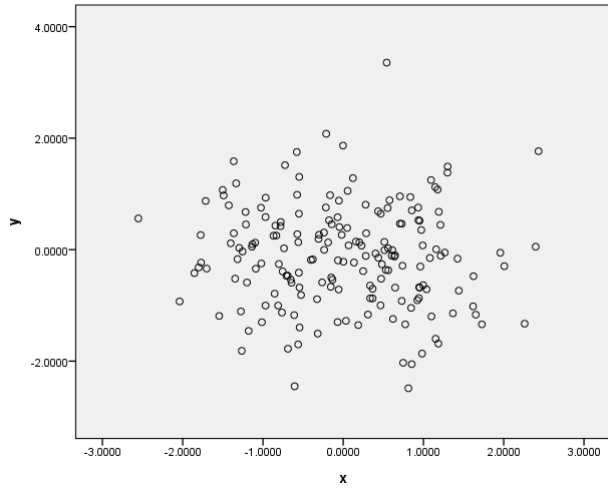


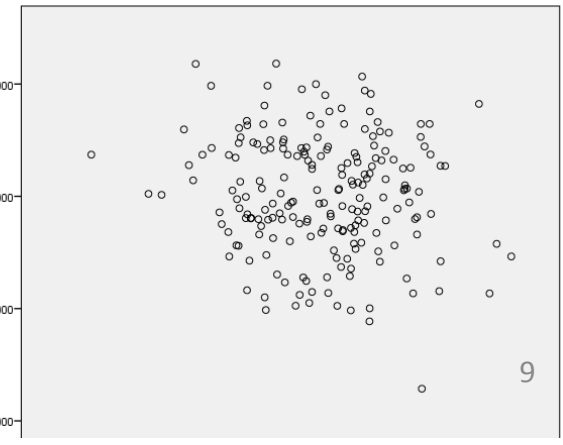
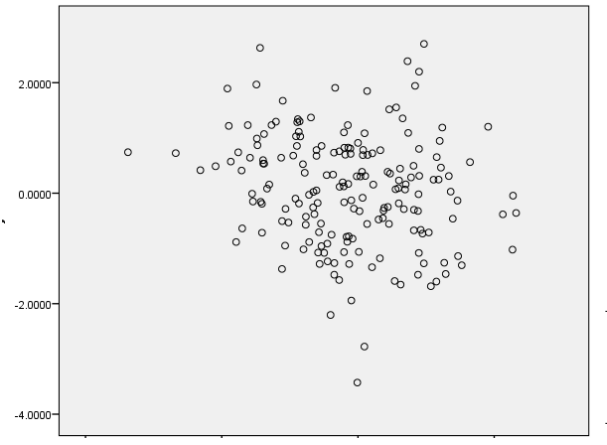
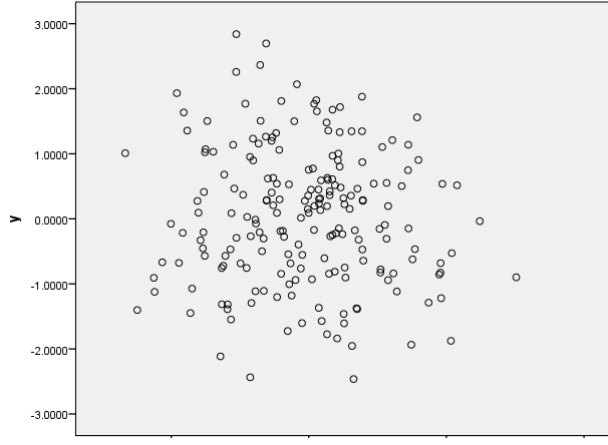
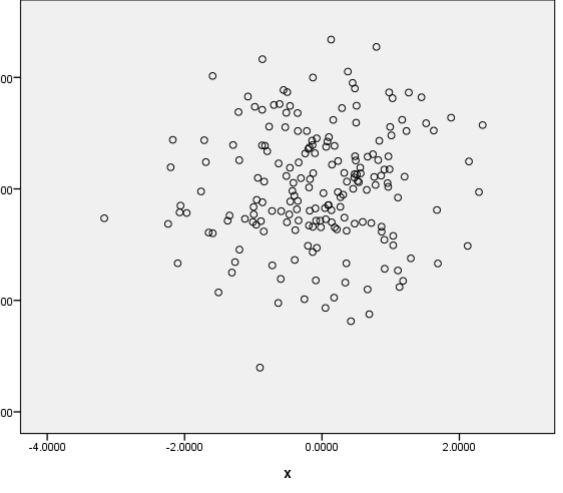
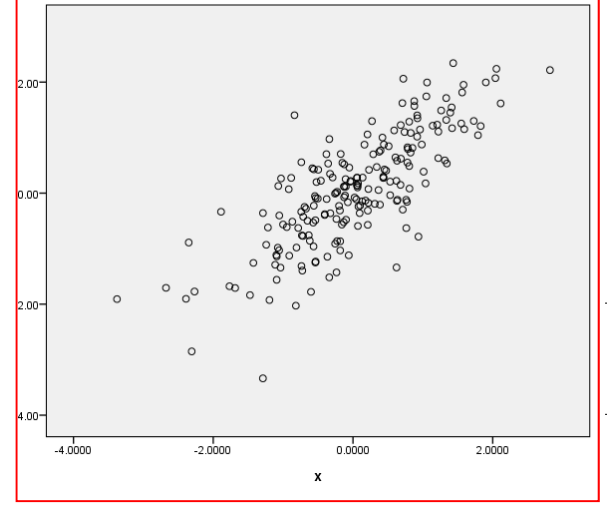
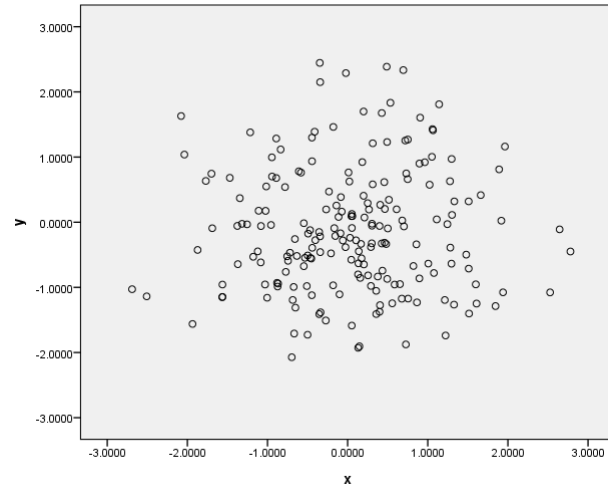
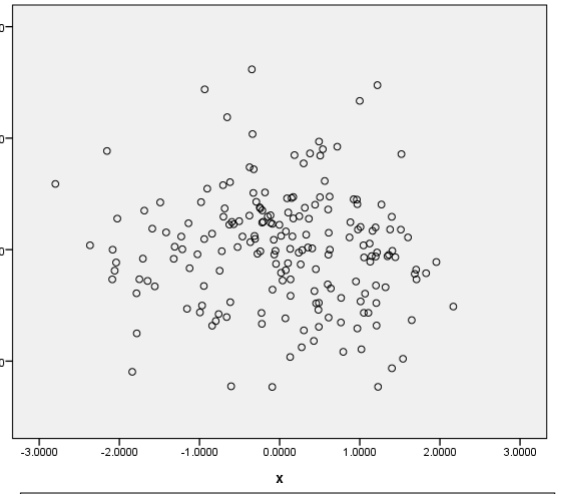
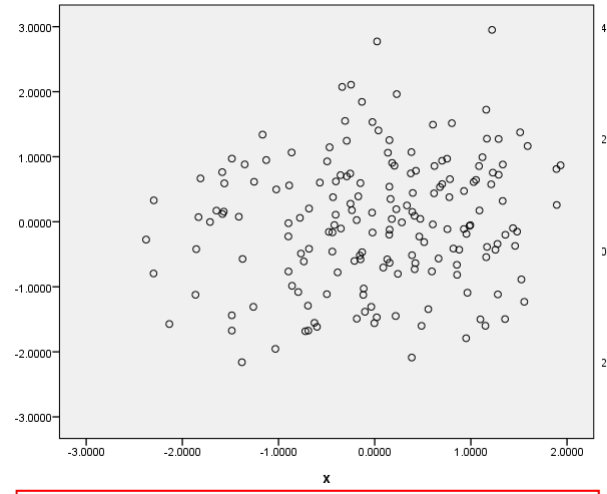
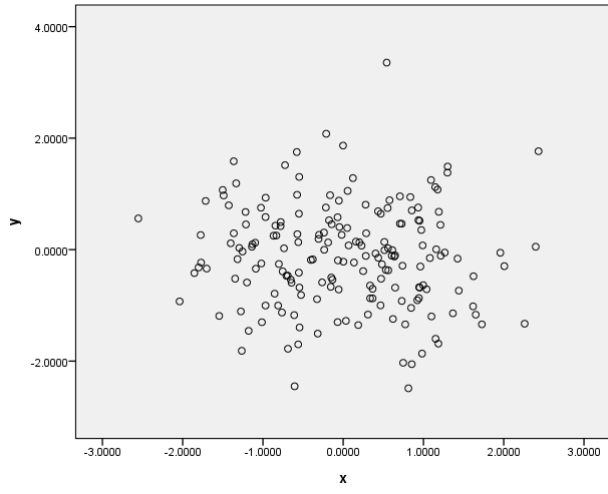
母體YX散佈圖

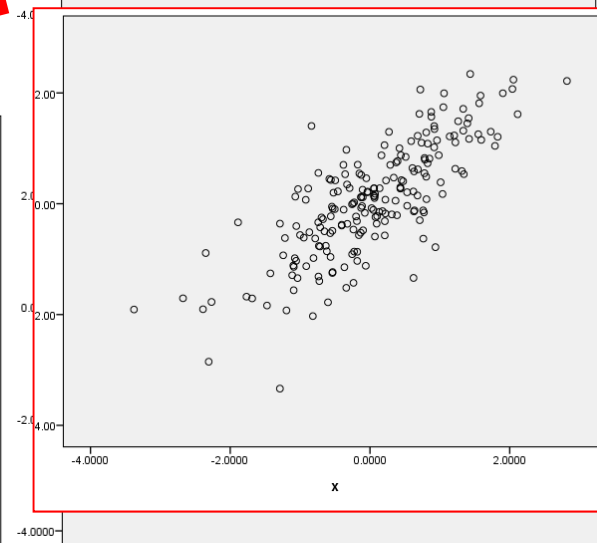
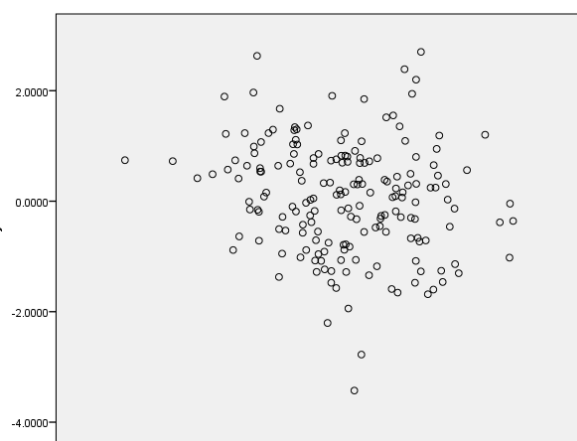
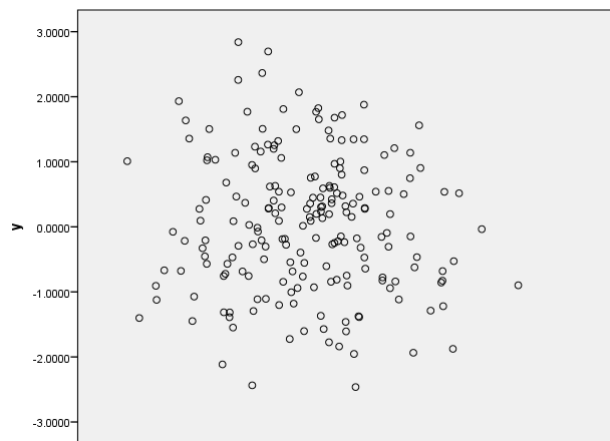
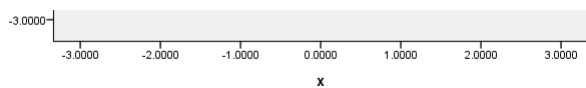
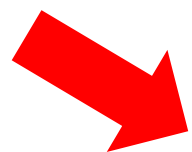
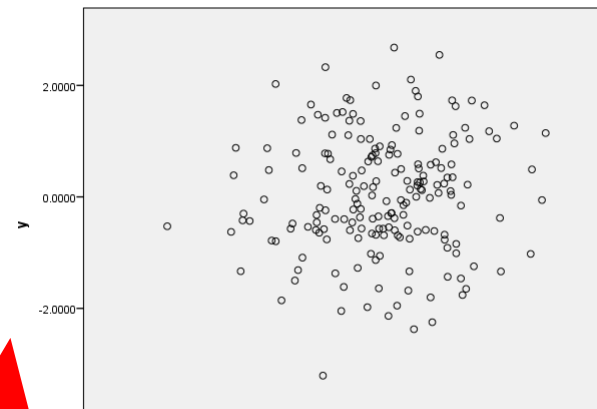
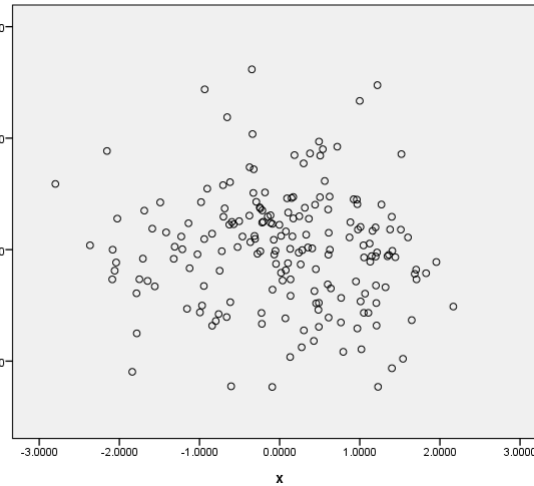
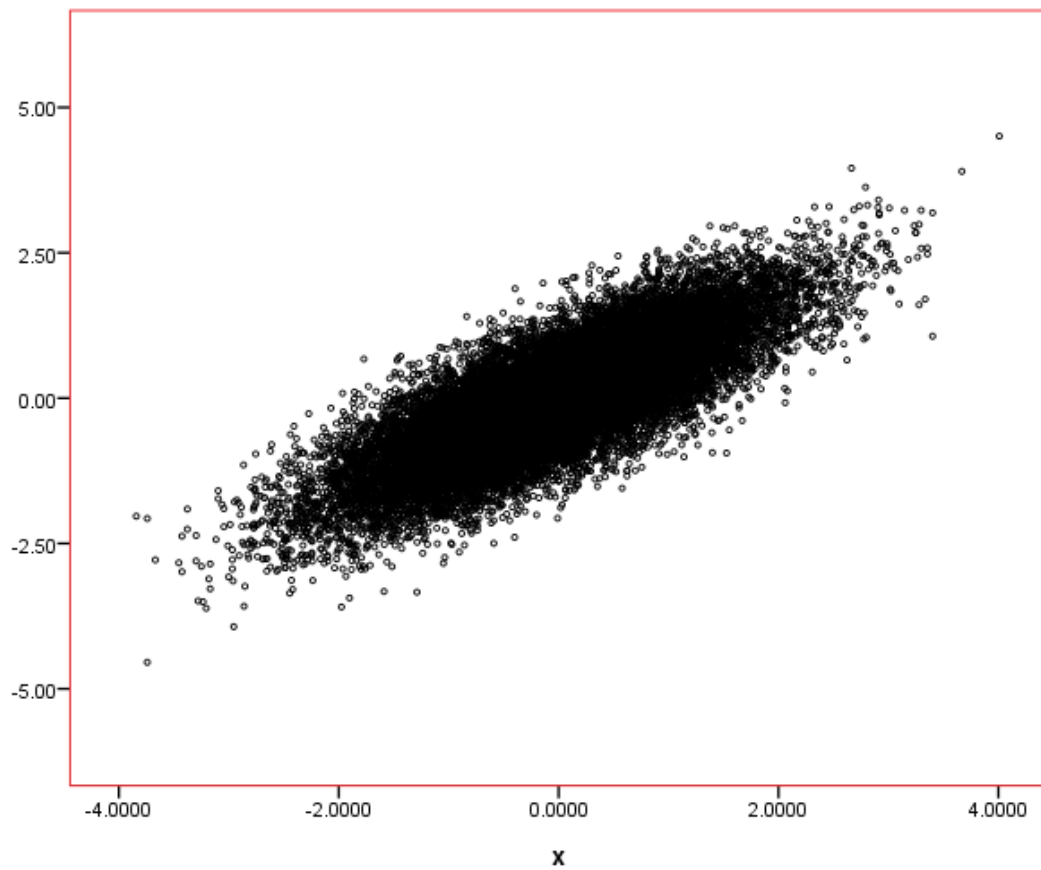






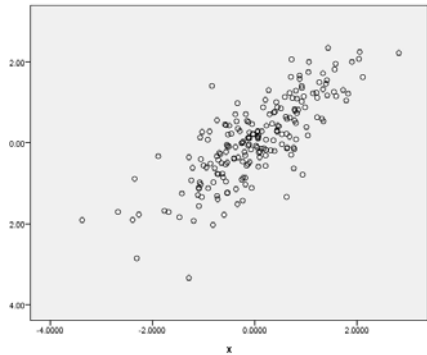






問題我們只有一個樣本

我們只有一個樣本的資訊，
根據樣本的統計量要去推論母體，

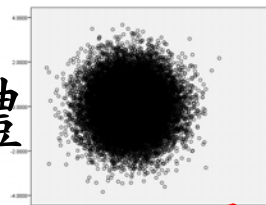


到底這個樣本是從哪一個母體出來？

最有可能是



但也有可能是從這個母體



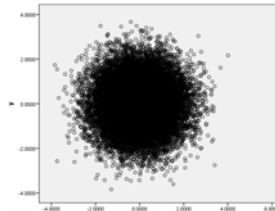
出來，

不過機率很小很小很小很小=>顯著性或 p 值

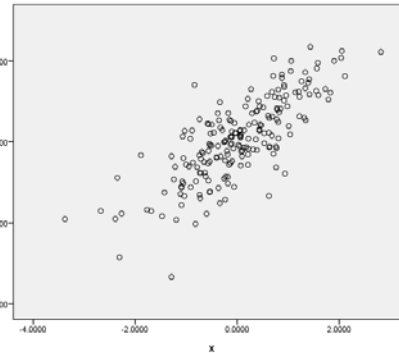
問題我們**只有一個**樣本

因為我們真的不知道母體，我們統計利用反證法，

先**假設**我們的母體是這樣



所以看到這個樣本的機率很小很小

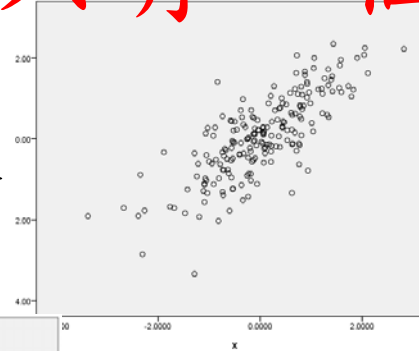


結果

既然從0相關的母體看到正相關的機率很小卻被我們看到這個樣本**(眼見為憑)**，所以母體不應該是它，拒絕**虛無假設為0的母體**

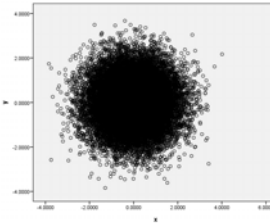
問題我們**只有一個**樣本

當我們從樣本結果

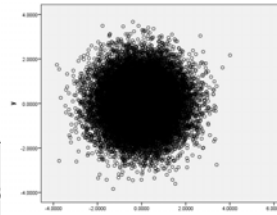


去拒絕母體

時



不要忘了這個
樣本



也可能產生這樣的

不過**機率是**很低很低很低，當我們做這樣
決策時：**母體是有相關**，有可能犯錯，犯
錯的機率就是這個很低很低很低的機率，
也就是之前的**顯著性或p值**