**MercatorLat:**

[Earth Radius (miles)] \* LN(TAN((PI()/4) + (RADIANS([Latitude])/2)))

**MercatorLong:**

[Earth Radius (miles)] \* RADIANS([Longitude])

**HexLat Adjusted:**

HEXBINY([Mercator Long]/[Hexbin Size (miles)],[Mercator Lat]/[Hexbin Size (miles)])\*[Hexbin Size (miles)]

**HexLong Adjusted:**

HEXBINX([Mercator Long]/[Hexbin Size (miles)],[Mercator Lat]/[Hexbin Size (miles)])\*[Hexbin Size (miles)]

**MapLat Adjusted:**

DEGREES(2\*ATAN(EXP(((WINDOW\_AVG(AVG([HexLat Adjusted]))+SIN([Angle])\*[Hexbin Size (miles)])/[Earth Radius (miles)])))-PI()/2)

**MapLong Adjusted:**

DEGREES((WINDOW\_AVG(AVG([HexLong Adjusted]))+COS([Angle])\*[Hexbin Size (miles)])/[Earth Radius (miles)])

**Earth Radius (miles):**

3959