is it necessary to reset the stats register after every strike interrupt?

It is **not necessary** to reset the statistics register after every strike interrupt on the AS3935 lightning detector for normal operation. The internal statistics, which are used by the distance estimation algorithm, are managed automatically by the sensor. When a lightning event is detected, the AS3935 updates its internal statistics and distance estimation accordingly [1] [2] [3].

However, **you can manually clear the statistics** if you want to reset the storm tracking or start fresh for a new monitoring session. This is done by toggling a specific bit in register 0x02 (high-low-high), but it is not required after every interrupt [1] [2] [4]. The sensor will continue to function and provide distance estimates without manual clearing.

Summary:

- **Not required**: Resetting the stats register after every strike interrupt is not necessary for normal operation.

- **Optional**: Manual reset is only needed if you want to clear previous storm data and start new tracking [1] [2] [4].

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1. https://cdn.sparkfun.com/assets/learn_tutorials/9/2/1/AS3935_Datasheet_EN_v2.pdf

2. https://media.digikey.com/pdf/Data Sheets/Austriamicrosystems PDFs/AS3935.pdf

3. https://www.mouser.com/datasheet/2/588/ams_AS3935_Datasheet_EN_v5-1214568.pdf

4. https://wiki.seeedstudio.com/grove-lightning-sensor-as3935/