**SIS GEOMETRY AND GLOBAL COORDINATE SYSTEM**

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To: CRIS/SIS Data Analysis Teams

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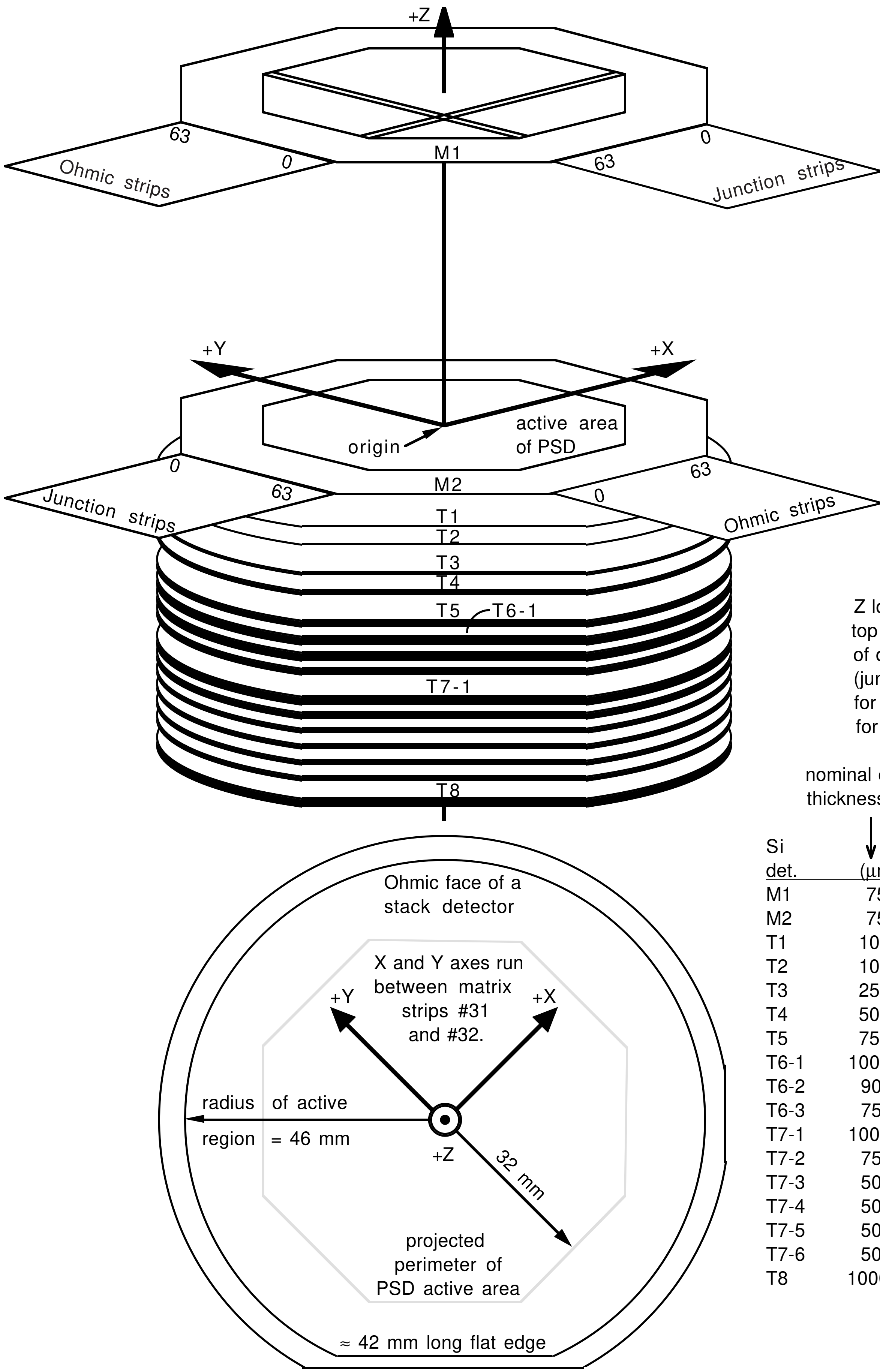
This memo announces changes to the convention for numbering matrix strips. We will here-after follow the numbering scheme used in the SIS firmware, as shown on the updated figure below.

Note that the coordinate system itself has not changed; the X, Y, and Z axes are still pointing in the same directions as before, and the origin is unmoved. A bit of text from the original SIS Geometry memo must be amended, however; and that follows...

The strips on a Matrix detector are 960 μm wide and spaced 1 mm apart; i.e the gap between strips is 40 μm wide. They vary in length as follows:

| | | | |
|---|---|---|---|
| | = | 25.5 + 2*(1 + strip No.) | , for strips No. 0 - 18 |
| strip length (mm) | = | 64 | , for strips No. 19 - 44 |
| | = | 25.5 + 2*(64 - strip No.) | , for strips No. 45 - 63 |

Strips less than 64 mm long are trapazoidal in outline, and their average length is calculated here. Note that strips are numbered from 0 to 63: i.e. the X and Y axes run between strips #31 and #32. The total active area of a Matrix detector is 34 $cm^2$.




Z location at top surfaces of detectors (junction face for M2, ohmic for all others)

nominal det. thickness

| Si det. | (µm) | (cm) |
|---|---|---|
| M1 | 75 | +6.00 |
| M2 | 75 | +0.00 |
| T1 | 100 | -0.64 |
| T2 | 100 | -0.96 |
| T3 | 250 | -1.59 |
| T4 | 500 | -1.91 |
| T5 | 750 | -2.48 |
| T6-1 | 1000 | -2.80 |
| T6-2 | 900 | -3.11 |
| T6-3 | 750 | -3.43 |
| T7-1 | 1000 | -4.03 |
| T7-2 | 750 | -4.35 |
| T7-3 | 500 | -4.67 |
| T7-4 | 500 | -4.99 |
| T7-5 | 500 | -5.43 |
| T7-6 | 500 | -5.74 |
| T8 | 1000 | -6.06 |