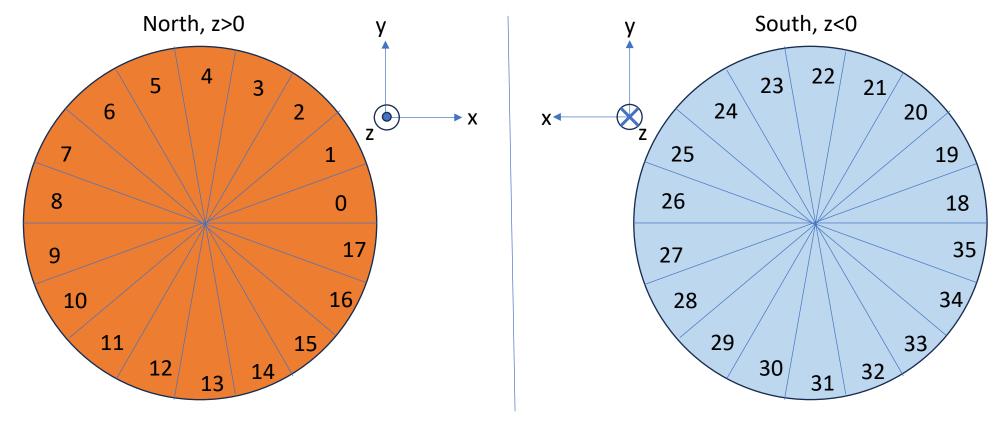
Central Membrane Numbering Scheme

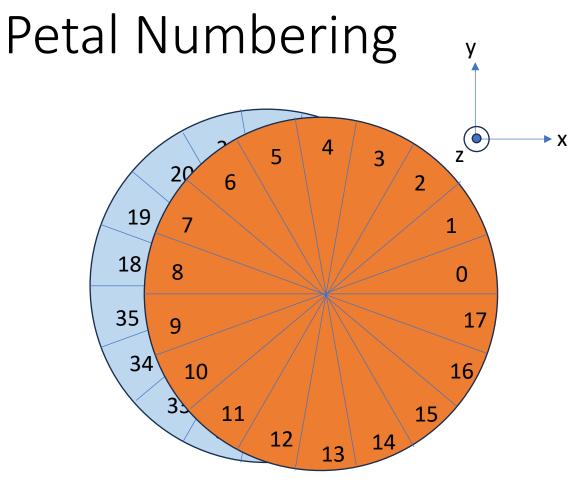
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Vanderbilt University
July 7, 2023

Petal Numbering



Petals 0 and 26 align in space in opposite sides of the CM, petals 0 and 18 are rotations of each other. From the perspective of each endcap toward z=0, the numbering starts at 3 o'clock and continues CCW (increasing φ for North and decreasing φ for South)

One side has petals rotated by half a petal compared to the other. Unsure which, need survey data and will adjust)

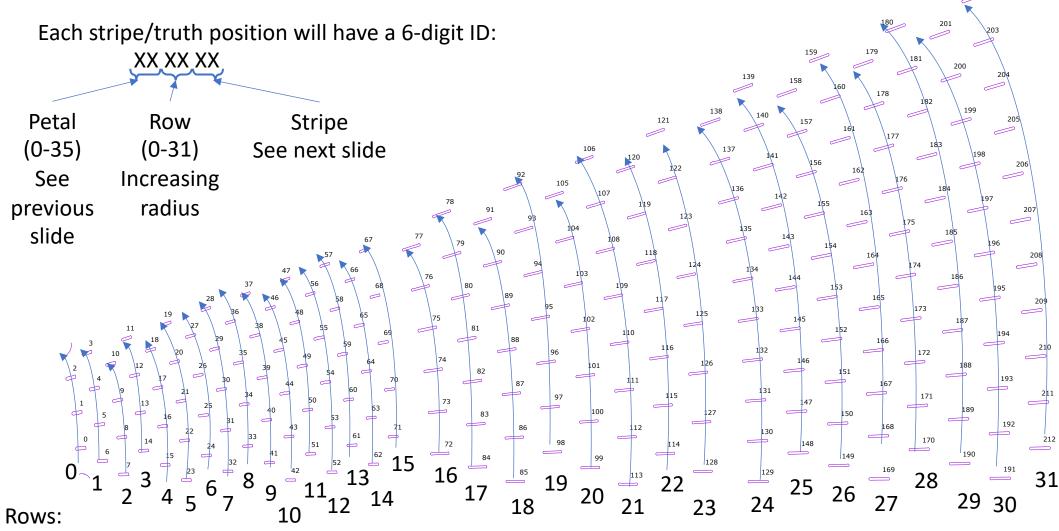


Looking from fixed perspective (North toward z=0), petals 0 and 26 align, 8 and 18 align. North numbering increases from 3 o'clock CCW. South numbering starts from 9 o'clock and increases CW

Petals 0 and 26 align in space in opposite sides of the CM, petals 0 and 18 are rotations of each other. From the perspective of each endcap toward z=0, the numbering starts at 3 o'clock and continues CCW (increasing φ for North and decreasing φ for South)

One side has petals rotated by half a petal compared to the other. Unsure which, need survey data and will adjust)

Row IDs



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Stripe IDs

All petals are identical, just rotations of each other, so regardless of which side, stripe numbering is always CCW. If a row has fewer than 11 stripes, stripe ID maximum is number of stripes in row



Summary

- Proposal of numbering scheme for CM petals and ID for each stripe
- ID is 6-digit number (XX XX XX), first two digits are petal, second two are row (radius), last two are number on row
 - Petal numbering is starting at 3 o'clock from perspective of endcap to z=0 and increasing in CCW direction (z>0 is 0-17, z<0 is 18-35)
 - Row numbers increase from smallest to largest radius along petal (0-31)
 - Stripe numbers increase from smallest to largest going CCW (0-10)
 - Each petal is identical, so regardless of which side, numbering is always CCW when looking at face of petal
 - If a row has fewer than 11 stripes, stripe ID goes from 0 to maximum is number of stripes in row
- Scheme is not most efficient (only 7668 stripes, which could be stored in short if simple counting), but this scheme is human readable and only needs an int for stripe ID