TOF Upgrade Stacking Order

Planes are labeled X-# & Y-#

Number of modules in TOF2 plane: 50 modules

Stacking order [17 + 16 + 17 = 50 modules per plane]

- lower region [17 modules]
 - modules #1 #17 (first 17 of the original 6cm modules)
- inner region [16 modules]
 - IN-1 & IN-2 (4.5cm Asym)
 - IN-3 & IN-4 (3.0cm narrow)
 - IN-5L & IN-5R (Asym shorties)
 - IN-6L & IN-6R (sym shorties)
 - IN-7L & IN-7R (sym shorties)
 - IN-8L & IN-8R (Asym shorties)
 - IN-9 & IN-10 (3.0cm narrow)
 - IN-11 & IN-12 (4.5cm Asym)
- upper region [17 modules]
 - modules #30 #46 (last 17 of the original 6cm modules)

LOWER REGION

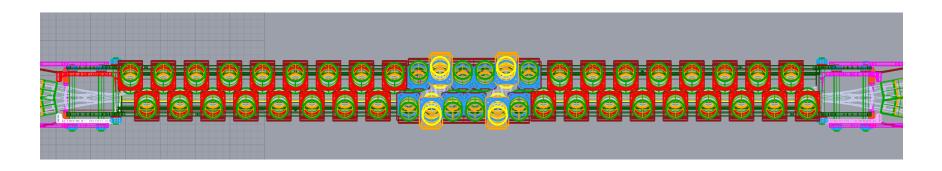
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| D | U | D | U | D | U | D | U | D | U | D | U | D | U | D | U | D |

INNER REGION

| 1 | 2 | 3 | 4 | 5L | 5R | 6L | 6R | 7L | 7R | 8L | 8R | 9 | 10 | 11 | 12 |
|---|---|---|---|----|----|----|----|----|----|----|----|---|----|----|----|
| U | D | U | D | U | U | D | D | U | U | D | D | U | D | U | D |

UPPER REGION

| 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| U | D | U | D | U | D | U | D | U | D | U | D | U | D | U | D | U |





This photo shows the UP/DOWN starting orientation for each TOF layer. At this corner, first modules are DOWN.

Up

| s | lacktriangle | 4.5 cm | s |
|---|---------------|--------|---|
| L | \otimes | 4.5 cm | R |
| | (•) <u> </u> | 3 cm | |
| | \mathcal{X} | 3 cm | |
| L | \bullet | 4.5 cm | R |
| s | \otimes | 4.5 cm | s |
| s | lacktriangle | 4.5 cm | s |
| L | \otimes | 4.5 cm | R |
| | (•) _ | 3 cm | |
| | (X) | 3 cm | |
| L | Õ | 4.5 cm | R |
| s | \bigotimes | 4.5 cm | s |

Ν

Down

PMT up

S

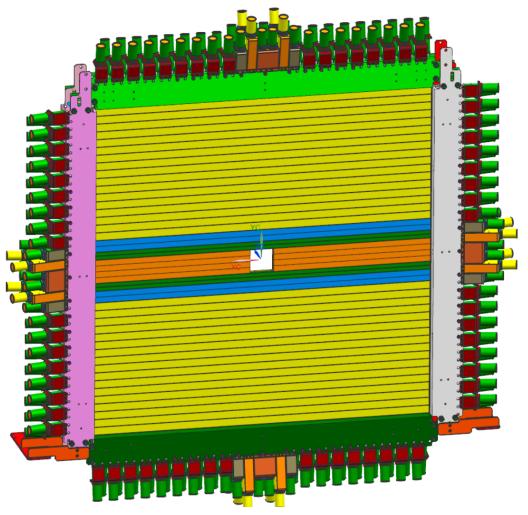
L : left asymmetry
R : right asymmetry

S: straight/symmetric



PMT down

Single TOF Plane Upgrade



Outer Region Modules

34 6cm x 254cm

Inner Region Modules

4 4.5cm x 254cm

4 3cm x 254cm

8 4.5 x 118cm

50 modules per plane 42 double ended 8 single ended 92 channels per plane

TOF 2 Plane Totals

100 modules 184 channels