

Help Topic: Pavilion Coordinates

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project-pavlab/helpdocs/help_pav_coords
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Pavilion Coordinates

The MIT Sailing Pavilion is the center of operations for the Pavlab, or Marine Autonomy Lab. The (0,0) coordinates, or datum, is located at: 42.358456, -71.087589. These datum coordinates are declared in the top of every .moos file in missions run at the MIT Sailing Pavilion, and set in the plug file plug_origin.warp.moos:

```
// MIT Sailing Pavilion
LatOrigin = 42.358456
LongOrigin = -71.087589
```

All other coordinates are usually configured in local coordinates relative to the above datum.

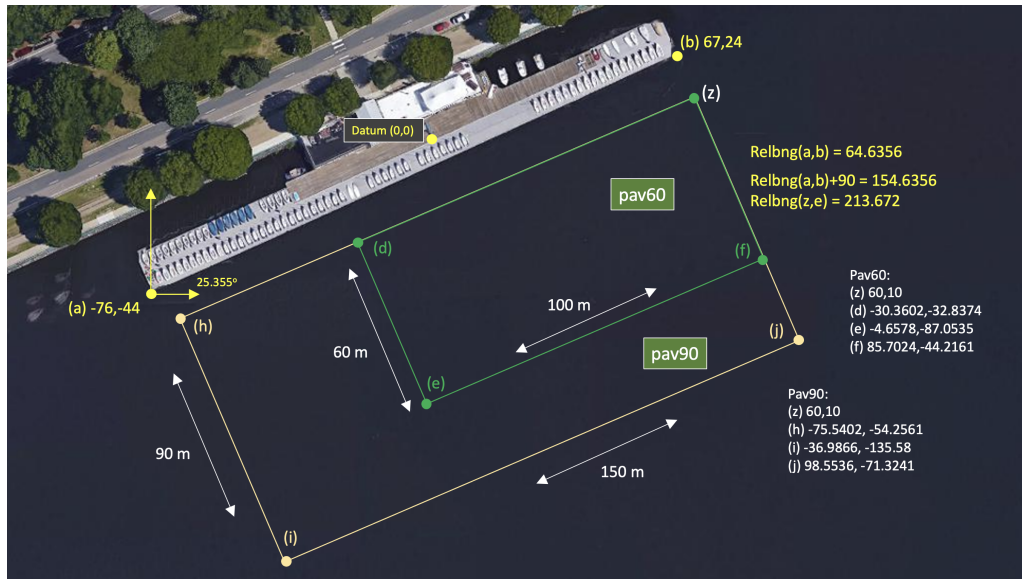


Figure 1: Useful coordinates related to the rescue lab. There are two playing field rectangles, a large one ("pav90") roughly the extent of the docks, and a smaller region ("pav60") closer to the Pavlab doors on the East end of the dock.

Note there are two rectangles representing a small and large operation area. The smaller area (pav60) is typically used for in-water tests involving one or two vehicles. The larger area (pav90) is

typically used for in-water tests involving more vehicles.

```
pav60: pts={60,10:-30.3602,-32.8374:-4.6578,-87.0535:85.7024,-44.2161}  
pav90: pts={60,10:-75.5402,-54.2561:-36.9866,-135.58:98.5536,-71.3241}
```

Coordinates are generated with the support of the `pavop.sh` script, found in `moos-ivp-pavlab/scripts/`.