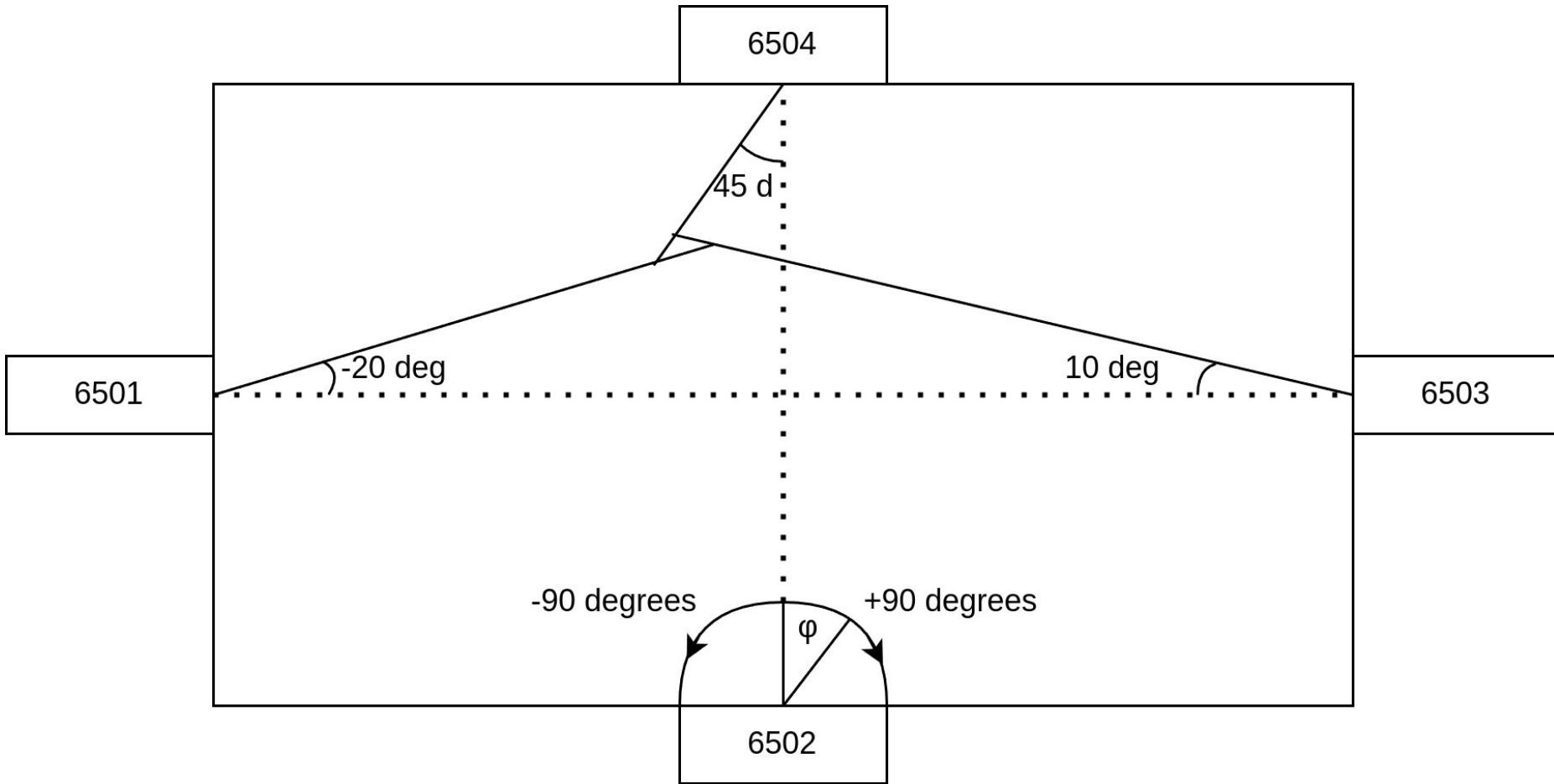


Angle Reading



Intersection between two points

- Inputs are $p(x_0, y_0)$ anchor position and φ , the angle reading
- Convert the line representation to $y = m*x + b$
 $m = \tan(\varphi)$, $b = y_0 - m*x_0$
- Two line point intersection is solved by
 $x = (b_2 - b_1) / (m_1 - m_2)$
 $y = m_1*x + b_1$

Finding Average Point

- Due to noise, more than two lines never intersect
- Find common point of line pairs
p_6501_6502, p_6502_6503, etc...
- Find Average point between those to get an estimation