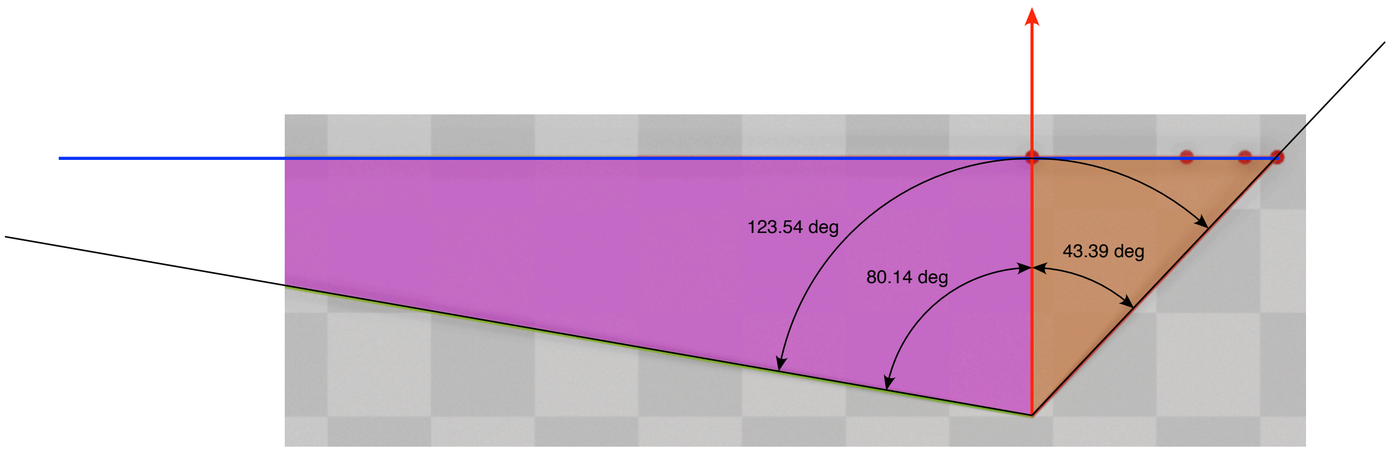
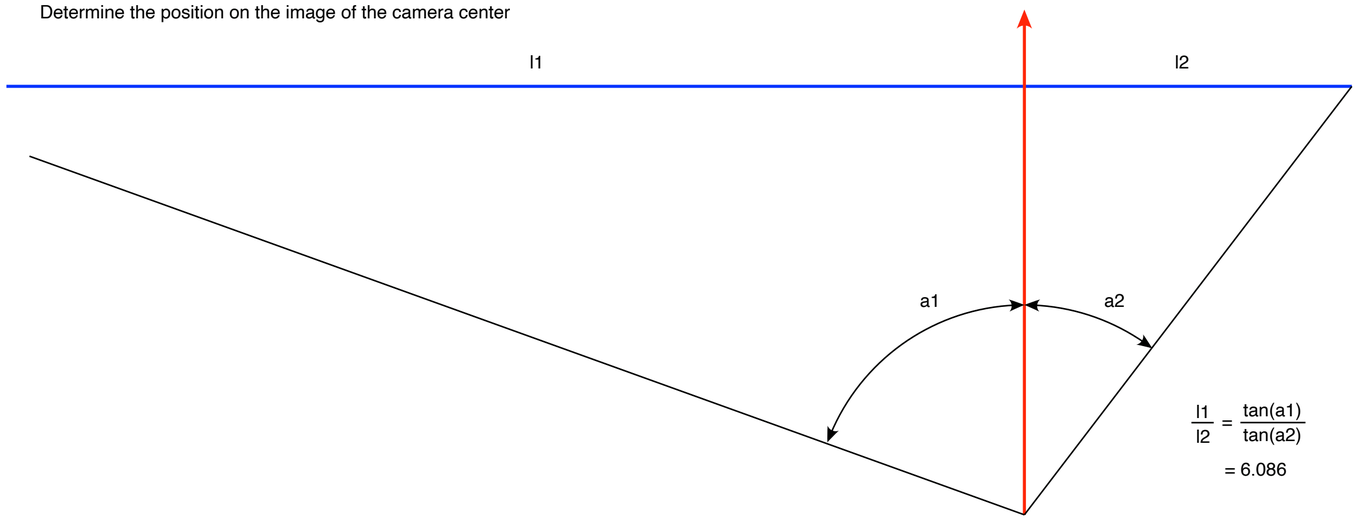
## Geometry



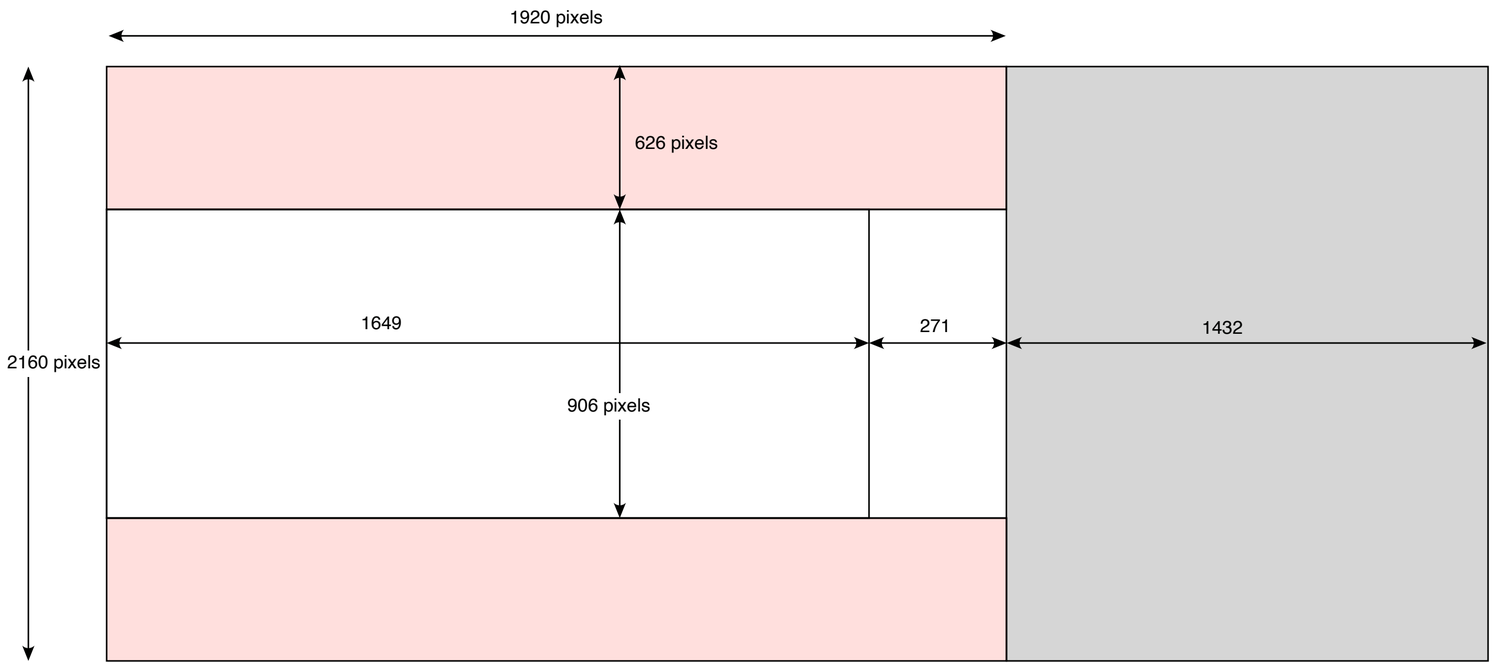

Determine the position on the image of the camera center




$$\frac{l1}{l2} = \frac{\tan(a1)}{\tan(a2)}$$

$$= 6.086$$

Crop and pad to make symmetric




New FOV of padded symmetric view is 2*80.14 = 160.28 deg

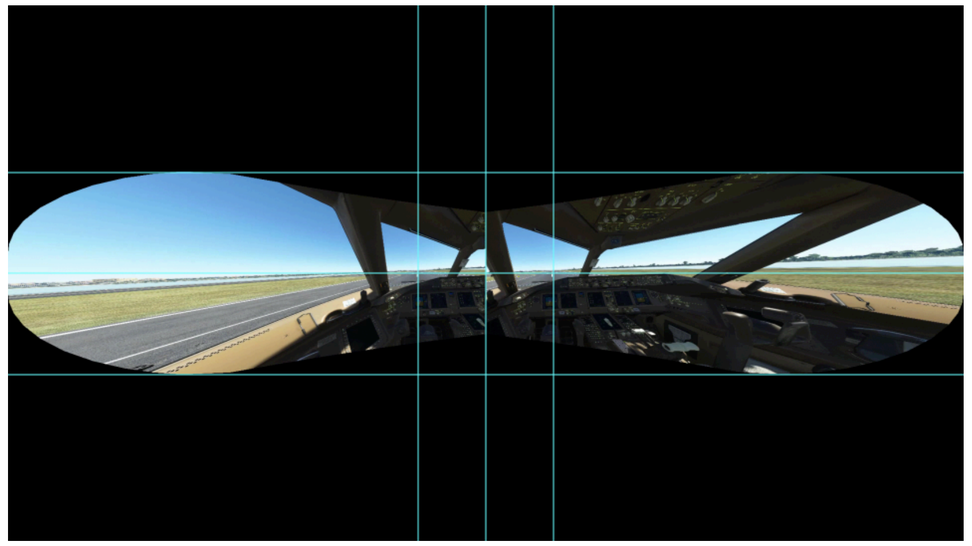
vfov = 2 atan[ height tan(hfov/2) / width]

so

vfov should be 2 atan(906 tan(160.28/2) / 3298) = 115 degrees

Note this is different to the quoted value

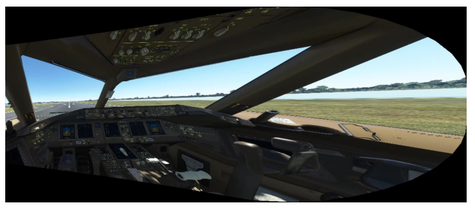
## Pipeline



Left

Right

Crop left and right view



Pad to symmetric frustum

Map to half equirectangular
including yaw rotation.

Combine to top and bottom frame