

$??$   
 $systemprocess.jpg3D$   
 $?$   
 $R_{in}$   
 $R_{in}$   
 $R_{best}$   
 $W^n1-$   
 $W^n$   
 $1-$   
 $p_n)^k$   
 $p=$   
 $1-$   
 $(1-$   
 $w^n)^k$   
 $k=\frac{\log(1-p)}{\log(1-w^n)}$   
 $cloud_Map.jpg$   
 $XY$   
 $Box.jpg$   
 $\tan\theta$   
 $\theta$   
 $\theta$   
 $\tan\theta_{Pose.jpg}[[width=0.33]figures/RotationResult.jpg$   
 $virtual_{Camera}.jpg$   
 $image.jpg[[width=0.45]figures/odepth_iinterpolation.jpg$   

$$\begin{pmatrix} \frac{2near}{right-left} & 0 & \frac{right+left}{right-left} & 0 \\ 0 & \frac{2near}{top-bottom} & \frac{top+bottom}{top-bottom} & 0 \\ 0 & 0 & -\frac{far+near}{far-near} & -\frac{2far\times near}{far-near} \\ 0 & 0 & -1 & 0 \end{pmatrix}$$
  
 $[-1,1]$   
 $\frac{1}{\tilde{z}}$   
 $\frac{1}{z}$   
 $??$   
 $\overline{z\times x}$   
 $y\equiv$   
 $ax+$   
 $b$   
 $a(\frac{x}{b}-1)$   
 $p_3=$   
 $tp_2+$   
 $(1-$   
 $t)p_1$   
 $\frac{a(\frac{b}{z_3}-1)=t\frac{n}{a}(\frac{b}{z_1}-1)+(1-t)\frac{n}{a}(\frac{b}{z_2}-1)}{z_3=t\frac{1}{z_1}+(1-t)\frac{1}{z_2}}$   
 $(x,y,z,w)(x',y',z',w')(P_x,P_y,P_z,P_w)$   
 $??$   
 $zy'=\frac{-ny}{z}$   
 $[-1,1]$   
 $x\frac{1-(-1)}{r-t}=\frac{r-x'}{r-t}\frac{1-P_y}{1-(-1)}=\frac{t-y'}{t-b}$   
 $x=$   
 $\frac{2x'}{r-l}-$   
 $\frac{r+l}{r-l}P_y=$   
 $\frac{2y'}{t-b}-$   
 $\frac{t-b}{t+b}$   
 $t-b$   
 $=x',y'$   
 $x=$   
 $\frac{2n}{r-l}(-\frac{x}{z})-$   
 $\frac{r+l}{r-l}P_y=$   
 $\frac{2n}{t-b}(-\frac{y}{z})-$   
 $\frac{t-b}{t+b}$   
 $t-b$   
 $P_Z\frac{1}{z}P_z=$   
 $\frac{a}{z}+$   
 $b(-n,-1),(-f,1)$   
 $\frac{f-nb=\frac{f+n}{f-n}P_z=\frac{2nf}{f-n}(\frac{1}{z})+\frac{f+n}{f-n}}{P_x,P_yP_Z}$   

$$\begin{cases} -zP_x=\frac{2n}{r-l}x+\frac{r-l}{r+l}z \\ -zP_x=\frac{2n}{t-b}x+\frac{t+b}{t-b}z \\ -zP_z=-\frac{2nf}{f-n}-\frac{f+n}{f-n}z \\ w=-z \end{cases}$$
  
 $Filter.jpg$   
 $(x,y,z,w)(x',y',z')??$   
 $\begin{cases} x'=x/w \\ y'=y/w \\ z'=z/w \end{cases}$   
 $??Z_n=$   
 $nearZ_\epsilon=$