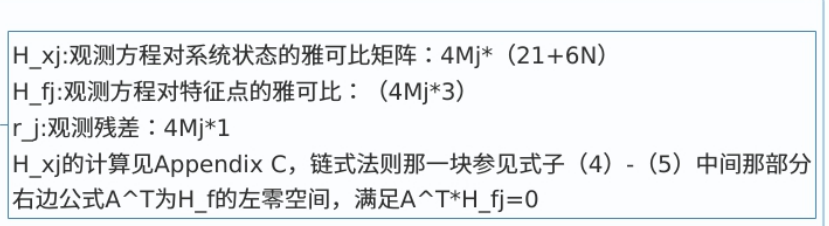
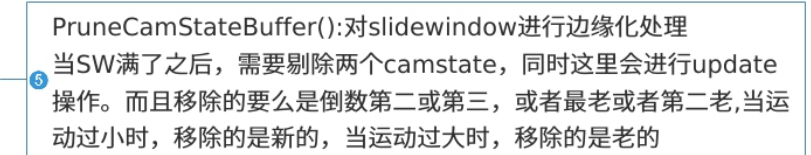
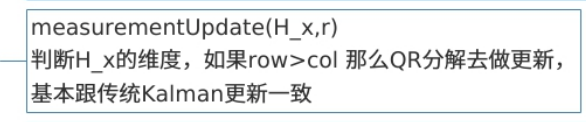
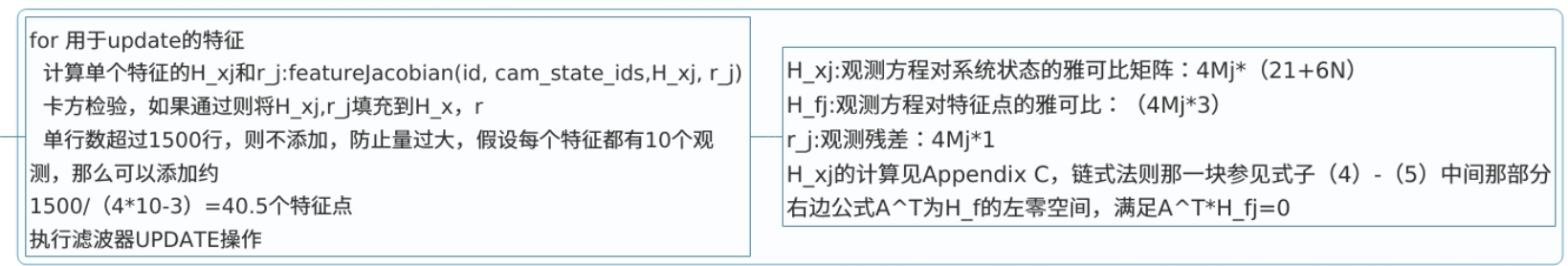
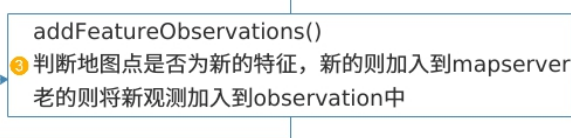


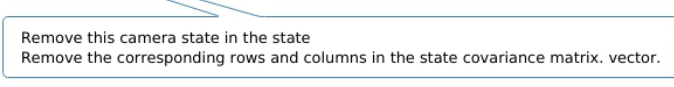
StateAugmentation

根据已知的imu与相机外参以及Imu的运动模型，推测出当前相机的位姿并加入msckf状态向量，同时对系统协方差矩阵进行增广 J的大小为6\*21+6N

$${}^G_G\hat{\mathbf{q}} = {}^G_I\hat{\mathbf{q}} \otimes {}^I_G\hat{\mathbf{q}}, \quad {}^G\hat{\mathbf{p}}_C = {}^G\hat{\mathbf{p}}_C + C \left( {}^I_G\hat{\mathbf{q}} \right)^T I \hat{\mathbf{p}}_C \quad \mathbf{P}_{k|k} = \begin{pmatrix} \mathbf{I}_{21+6N} \\ \mathbf{J} \end{pmatrix} \mathbf{P}_{k|k} \begin{pmatrix} \mathbf{I}_{21+6N} \\ \mathbf{J} \end{pmatrix}^T$$



$$\mathbf{K} = \mathbf{P} \mathbf{T}_H^T (\mathbf{T}_H \mathbf{P} \mathbf{T}_H^T + \mathbf{R}_n)^{-1}$$
$$\Delta \mathbf{X} = \mathbf{K} \mathbf{r}_n$$
$$\mathbf{P}_{k+1|k+1} = (\mathbf{I}_\zeta - \mathbf{K} \mathbf{T}_H) \mathbf{P}_{k+1|k} (\mathbf{I}_\zeta - \mathbf{K} \mathbf{T}_H)^T + \mathbf{K} \mathbf{R}_n \mathbf{K}^T$$



Publish 你想要的一切

