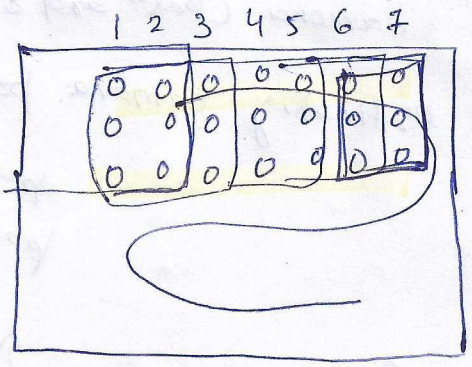
(2)

BA-2

The juggad



Set up
- 3 stripes
- 7 images / stripe
- 60% / 20% overlap
- 21 images
- 49 points
- 4 full CPs
- 45 new points

image - Formation 13

Coefficient matrix

- $\Delta l + v = A \Delta x$
- Split Δx — 3D point coordinates

$$\Delta x = \begin{bmatrix} \Delta q \\ \Delta t \end{bmatrix}$$

261 unknowns

6D orientation parameters (cam)

$$\rightarrow \quad \Delta l + v = \underbrace{\begin{bmatrix} C & B \end{bmatrix}}_{A} \underbrace{\begin{bmatrix} \Delta q \\ \Delta t \end{bmatrix}}_{\Delta x} = C \Delta q + B \Delta t$$

- Thus for every error equation

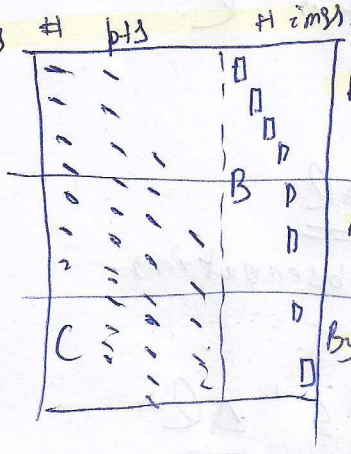
$$\underset{2\times 1}{\Delta l_{ij}} + \underset{2\times 1}{v_{ij}} = \underset{2\times U}{A_{ij}^T} \Delta x = \underset{2\times 3}{C_{ij}^T} \Delta q_i + \underset{2\times 6}{B_{ij}^T} \Delta t_j$$

- Coefficient matrix

$$A = \begin{bmatrix} A_{2,1}^T \\ A_{ij}^T \\ A_{18,21}^T \end{bmatrix}$$

$$\underset{2\times U}{A_{ij}^T} = [\, 0 \cdots 0, \underset{2\times 3}{C_{ij}^T}, 0, \cdots, 0 \; 1 \; 0, \cdots 0, \underset{2\times 6}{B_{ij}^T}, 0 \cdots, 0 \,]$$

- Sparse matrix : mostly 0 entries.



For 3 stripes with 7 images per stripe.