

D) Medium deep field resurveyed  
but fragmented. 7 days  $\sim$  140 pointings

$\rightarrow$  Want 1 mag deeper,  $\rightarrow$  6 visits  
1 visit from wide  $\rightarrow$  5 additional visits

in 1 day  $\sim$  20 RoS  $\sim$  20 fields.

SO can do 4(x5) fields in  $\beta \lesssim 2.8^\circ \times$  7 days strip

$\rightarrow$  want  $w = 0.7^\circ/\text{day}$

4 fields  $\uparrow$   
each 5 RoS  $\rightarrow$  1 day each

$$w = w_0 \cos(\beta) \rightarrow \beta = \arccos(0.7)$$

$$\beta = 40^\circ$$

$$2.8^\circ \uparrow \leftarrow 3.5^\circ$$

$$\beta = 60^\circ \quad w \approx 0.5^\circ/\text{day}$$

$$\beta = 70^\circ \quad w \approx 0.35^\circ/\text{day} \rightarrow 1 \text{ field} \sim 2 \text{ days}$$

$$7 \text{ days} \sim 2.5 \text{ fields}$$

$$7 \text{ days} \sim 3 \text{ fields} \Rightarrow w \sim 0.3 \Rightarrow \beta = 72^\circ$$

$$140/5 \sim 28 \text{ pointings}$$



5 fields along  $\beta$

"vertical tilted strips"  $2.1 \times 6.3$  1 mag deeper

area  $\sim 13.3 \square \rightarrow$  9 waiting times  $\rightarrow 119 \square$