img-EXC058000

| | Z | Y | J | Н | Ks |
|---|---|----------|---|----------|----------|
| Time & depth on sky in coadded Tiles | | _ | , i i i i i i i i i i i i i i i i i i i | | |
| Depth (Vega) required | | 20.3 | 19.9 | 19.0 | 17.9 |
| Depth(AB) required | | 20.9 | 20.9 | 20.3 | 19.8 |
| Sigma required | | 5.0 | 5.0 | 5.0 | 5.0 |
| Assumptions | | | | | |
| SED assumed in ETC | | K | K | K | K |
| Aperture assumed in ETC - arcsec | | 2.0 | 2.0 | 2.0 | 2.0 |
| In band sky brightness assumed - Vega mag/arcsec | | 17.2 | 16.0 | 14.1 | 13.0 |
| Airmass assumed in ETC | | 12 | 12 | 12 | 12. |
| In band on-chin image size assumed - arcsec | | 1.2 | 1.2 | 1.2 | 1.2 |
| Extra extinction assumed | | 0.00 | 0.00 | 0.00 | 0.00 |
| Detector Integration Time (DIT) sec | | 15 | 15 | 7.5 | 7.5 |
| | | 10 | 10 | 7.0 | 7.0 |
| N.B. the DIT assumed will affect the number of seconds to reach a specified depth, because it affects the amount of read noise. | | | | | |
| | | | | | |
| Time required per object sec | | 60 | 60 | 60 | 60 |
| Area required sq. deg | | 5000 | 5000 | 5000 | 5000 |
| Tiles required to cover area(s) | | 3484.3 | 3484.3 | 3484.3 | 3484.3 |
| Effective useful sa deg/tile | | 1 44 | 1 44 | 1 44 | 1 44 |
| Priorities of different areas? | | ves | ves | ves | ves |
| | | | | | <i></i> |
| Single Tile Strategy | | | | | |
| Parameters set | | | | | |
| DIT already assumed above | | 15 | 15 | 7.5 | 7.5 |
| Exposure coadds (Ndit) # | | 1 | 1 | 2 | 2 |
| Exposure loops (Nexp) # | | 1 | 1 | 1 | 1 |
| $\frac{\text{Diposter roops}(\text{Newp})}{\text{Microstens}(\text{Newp})} \neq \text{stens} < 3 \text{ arcsec}$ | | 1 | 1 | 1 | 1 |
| Jitters (Niitter) # steps odd # of 0.5 pixels $<$ 30 arcsec | | 2 | 2 | 2 | 2 |
| Pawprints in tile (Npaw) | | 6 | 6 | 6 | 6 |
| Repeat tile in same OB how many times? | | 1 | 1 | 1 | 1 |
| Multiple filters in same OB? If so which? | | 2(YJ.HK) | 2(YJ.HK) | 2(YJ.HK) | 2(YJ.HK) |
| Mutiple tile positions in same OB? If so number? | | 4 | 4 | 4 | 4 |
| Resulting values | | | | | |
| Total Exposure sec/tile | | 180 | 180 | 180 | 180 |
| Total Elapsed sec/tile | | 293.7 | 293.7 | 305.7 | 305.7 |
| Total Elapsed br/tile | | 0.08 | 0.08 | 0.08 | 0.08 |
| Observing efficiency %/tile | | 61.3 | 61.3 | 58.9 | 58.9 |
| Time per object for s-to-n -single OB | | 60 | 60 | 60 | 60 |
| Signal to noise (at depth required in row 3) - single OB | | 5 | 5 | 5 | 5 |
| Depth[Vega] (to 5 sigma) - single OB | | 20.3 | 19.9 | 19.0 | 17.9 |
| | | 20.0 | 17.7 | 19.0 | 11.5 |
| Multiple Tile Strategy | | | | | |
| # of Tiles per filter for S/N | | 1 | 1 | 1 | 1 |
| Time links between OBs in same filter on a Tile? | | no | no | no | no |
| Priorities between OBs in same filter on a Tile? | | no | no | no | no |
| Time links between OBs on a Tile in different filters? | L | ves | ves | ves | ves |
| Priorities between OBs on a Tile in different filters? | | ves | ves | ves | ves |
| Time links between Tiles by position? | | ves | ves | ves | ves |
| Priorities between Tiles by position? | | ves | ves | ves | ves |
| | | , | , | , | , |
| Total Elapsed Hours per filter including ETC overheads | | 284 3 | 284 3 | 295.9 | 295 9 |
| Total Elapses Hours per filter with no overheads | | 174.2 | 174.2 | 174.2 | 174.2 |
| Efficency for each waveband | L | 61.3 | 61.3 | 58.9 | 58.9 |

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| | Z | Y | J | H | Ks |
|--|---|---|-----------|-----------|-----------------|
| Time & depth on sky in coadded Tiles | | | | | |
| Depth (Vega) required | | | 20.3 | 19.4 | 18.3 |
| Depth(AB) required | | | 21.2 | 20.8 | 20.2 |
| microJy [SI] | | | 11.6 | 17.7 | 30.2 |
| Sigma required | | | 5.0 | 5.0 | 5.0 |
| Assumptions | | | | | |
| SED assumed | | | K | K | K |
| Aperture assumed - arcsec | | | 2.0 | 2.0 | 2.0 |
| In band sky brightness assumed - Vega mag/arcsec | | | 16.0 | 14.1 | 13.0 |
| Airmass assumed | | | 12 | 12 | 12 |
| In band on-chin image size assumed - arcsec | | | 1.2 | 1.2 | 1.2 |
| Extra extinction assumed | | | 0.00 | 0.00 | 0.00 |
| Detector Integration Time (DIT) sec | | | 15 | 10 | 10 |
| N.B. the DIT assumed will affect the number of seconds to | | | 15 | 10 | 10 |
| reach a specified depth. because it affects the amount of read | | | | | |
| noise. | | | | | |
| | | | | | |
| Time required per object sec | | | 120 | 120 | 120 |
| Area required so deg | | | 4500 | 4500 | 4500 |
| Tiles required to cover area(s) | | | 3135.9 | 3135.9 | 3135.9 |
| Effective useful sa deg/tile | | | 1 44 | 1 44 | 1 44 |
| Priorities of different areas? | | | | | VAS |
| | | | yes | yes | yes |
| Single Tile Strategy | | | | | |
| Parameters set | | | | | |
| DIT already assumed above | | | 15 | 10 | 10 |
| Exposure coadds (Ndit) # | | | 2 | 3 | 3 |
| Exposure loops (Nexp) # | | | 1 | 1 | 1 |
| Microsteps (Nmicro) # steps <3 arcsec | | | 1 | 1 | 1 |
| $\frac{1}{1}$ | | | 2 | 2 | 2 |
| Pawprints in tile (Npaw) | | | 6 | 6 | 6 |
| Repeat tile in same OB how many times? | | | 1 | 1 | 1 |
| Multiple filters in some OP? If so which? | | | 3(1 H K) | 3(1 H K) | 3(1 H K) 1 |
| Multiple file positions in some OP2 If so number? | | | ג(ג) כ | ג(ג) כ | ג(ג,רו,וג) ר |
| Pasulting values | | | Z | Z | 2 |
| Total Exposure soc/tile | | | 260 | 260 | 260 |
| Total Exposure sec/tile | | | 485.7 | 407.7 | 407.7 |
| Total Elapsed sec/file | | | 0.12 | 497.7 | 497.7 |
| Observing officiency %//tile | | | 74.1 | 72.2 | 72.2 |
| Time per chiest for a to n_single OP | | | 120 | 12.5 | 12.5 |
| Signal to poise (at double required in row 2) single OP | | | 5 | 5 | 5 |
| Denth (Scieme) Vage, single OP | | | 21.2 | 20.8 | 20.2 |
| Deptil (Jsigina) Vega - single OB | | | 21.2 | 20.8 | 20.2 |
| Multiple Tile Strategy | | | | | |
| # of Tiles per filter for S/N | | | 1 | 1 | 1 |
| Time links between OBs in same filter on a Tile? | | | no | no | no |
| Priorities between OBs in same filter on a Tile? | | | no | no | no |
| Time links between OBs on a Tile in different filters? | | | no | no | no |
| Priorities between OBs on a Tile in different filters? | | | no | no | no |
| Time links between Tiles by position? | | | Ves | Ves | Ves |
| Priorities between Tiles by position? | | | Ves | ves | Ves |
| | | | ,05 | ,05 | ,00 |
| Total Elapsed Hours per filter | | | 423 1 | 433 5 | 433 5 |
| Total Elapses Hours per filter with no overheads | | | 313.6 | 313.6 | 313.6 |
| Efficency for each waveband | | | 74.1 | 72.3 | 72.3 |
| | | | | | - |

img-EXC058000

| | Ζ | Y | J | Н | Ks |
|--|---|---|-------------|---|-------------|
| Time & depth on sky in coadded Tiles | | | | | |
| Depth (Vega) required | | | 20.5 | | 17.9 |
| Depth(AB) required | | | 21.1 | | 19.8 |
| uJy [SI units] | | | 13.3 | | 43.3 |
| Sigma required | | | 5.0 | | 5.0 |
| Assumptions | | | | | |
| SED assumed | | | BB10000K | | BB10000K |
| Aperture assumed - arcsec | | | 2.0 | | 2.0 |
| In band sky brightness assumed - Vega mag/arcsec | | | 16.0 | | 13.0 |
| Airmass assumed | | | 1.2 | | 1.2 |
| In band on-chip image size assumed - arcsec | | | 1.2 | | 1.2 |
| Extra extinction assumed | | | 0.00 | | 0.00 |
| Detector Integration Time (DIT) sec | | | 15 | | 7.5 |
| N.B. the DIT assumed will affect the number of seconds to | | | | | |
| reach a specified depth, because it affects the amount of read | | | | | |
| noise. | | | | | |
| | | | | | |
| Time required per object sec | | | 60 | | 60 |
| Area required sq. deg | | | 8200 | | 8200 |
| Tiles required to cover area(s) | | | 5714 | | 5714 |
| Effective useful so deg/tile | | | 1.44 | | 1.44 |
| Priorities of different areas? | | | Ves | | Ves |
| | | | | | <u>jes</u> |
| Single Tile Strategy | | | | | |
| Parameters set | | | | | |
| DIT already assumed above | | | 15 | | 7.5 |
| Exposure coadds (Ndit) # | | | 1 | | 2 |
| Exposure loops (Nexp) # | | | 1 | | 1 |
| Microsteps (Nmicro) # steps <3 arcsec | | | 1 | | 1 |
| Litters (Niitter) # steps odd # of 0.5 pixels < 30 arcsec | | | 2 | | 2 |
| Powerints in tile (New) | | | 6 | | 6 |
| Papart tile in same OP how many times? | | | 1 | | 1 |
| Multiple filters in some OP2 If so which? | | | 2(1K) | | 1 2(1K) |
| Multiple file positions in some OP2 If so number? | | | 2(J,K) E | | 2(J,K) E |
| Provide a series of the series | | | 5 | | 5 |
| Total Exposure soo/tile | | | 190 | | 190 |
| Total Exposure sec/tile | | | 202.7 | | 205.7 |
| Total Elapsed sec/life | | | 295.7 | | 503.7 |
| Observing a finiture | | | 0.082 | | 0.085 |
| Time per chiest for a to p_single OD | | | 60 | | 38.9 |
| Signal to poice (at donth required in row 2) single OB | | | 5 | | 5 |
| Denth (Scieme) Vage, single OB | | | | | 17.0 |
| Depth (Ssigma) vega - single OB | | | 20.3 | | 17.9 |
| Multiple Tile Strategy | | | | | |
| # of Tilos per filter for S/N | | | 1 | | 1 |
| Time links between OBs in same filter on a Tile? | | | 1 | | 1 |
| Priorities between OBs in same filter on a Tile? | | | no | | 110 |
| Time links between OBs in same filter of a Tite? | | | no | | 110 |
| Drighting between OBs on a Tile in different filters? | | | no | | 110 |
| Time links between Tiles by position? | | | | | |
| Driorition between Tiles by position? | | | yes | | yes |
| ritorities between thes by position? | | | yes | | yes |
| Total Elangad Hours per filter | | | 166.0 | | 195.2 |
| Total Elapsed Hours per filter with no everbands | | | 400.2 | | 403.2 |
| Efficiency for each wayshard | | | 283./ | | 203./ |
| Efficiency for each waveband | | | 61.3 | | 58.9 |