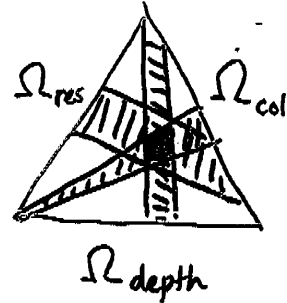


Remarkable consensus

- High resolution
- Multiple colors
- Wider than deeper



Why? People want to count things accurately

- Precision cosmology $\rightarrow \pm 10\%$

↳ links epochs!!!

clear priorities

★ Galaxy evolution

- AGNs

← optimize for this

★ Added value programs

- Weak lensing

- Supernovae

- Stars/Galactic structure

← tweak for these

A "new" element: other wavebands } Total
other instruments } SEDs

A SUMMARY OF PARAMETERS + CRITERIA

FILTERS

PHOTO Z'S

FIT WITH WF3

WIDE SED

WIDE Z-RANGE

EXPOSURE TIMES

TIMING SEQUENCE

SUPERNOVAE, VARIABLES

AREA

TOTAL: STATISTICS

SUBAREAS: COSMIC VARIANCE

OBSERVABILITY FROM GROUND
BUT... WK LENSING CONTIGUOUS

AREA SHAPE

WEAK LENSING (ROUND)

GALAXIES/LSS (LONG + THIN)

DITHERS / COSMIC RAY EXPOSURES / ROTATED PAs

CALIBRATIONS

PSF / GLOBULAR CLUSTER

PHOTOMETRY / ZEROPOINTS

ASTROMETRY / FIELD DISTORTION

CTE

SAMPLE LSS ← HARD!

COORDINATES

LOW CIRRUS

SOME EQUATORIAL FIELDS →

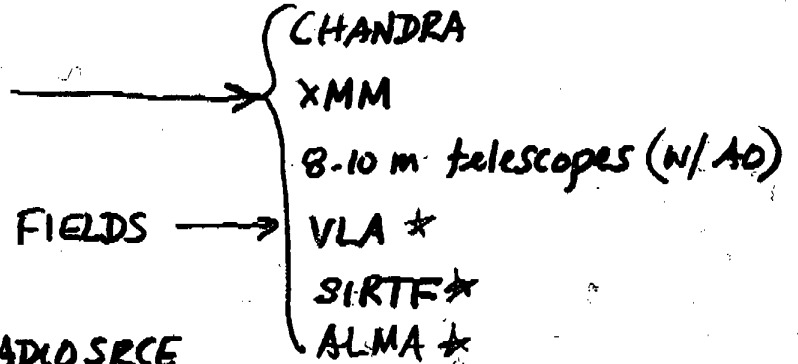
$\delta > 20^\circ$ VLA

AVOID BRIGHT RADIOSRCE

AVOID BRIGHT STARS ↔ HAVE SOME, FOR $AD \cdot m < 15$

AVOID BRIGHT GALAXIES?

QSO IN FIELD



HST LEGALY FIELDS FOR COSMOLOGY

- A unique moment: HST, Chandra, XMM, SIRTf

- Pick best fields ... other data will come

- Minimum program

- No. of fields: (10) → { Cosmic variance
Ground observability
Early return

- Field area: 100-200 \square'
NOT ALL SAME ↑ chandra

- No. filters: 4 (griz)

- No. orb/filter: 1-2

- No. orb/pointing: 6

- Total orbits: 10 areas $\times \frac{15 \text{ point}}{\text{area}} \times \frac{6 \text{ orb}}{\text{point}} = \underline{900 \text{ orbits}}$

- Add: 1 HDF level/area

4 filters \times 8 orb/filter = $10 \times 4 \times 8 = \underline{320 \text{ orbits}}$

- Add: WF3

Total coverage is 1500 orbits ← scale back
a bit

DD time?

↓
1 ~~DEEP~~ field
~300 orbits



IMPLEMENTATION

- Urgent: homogeneity is paramount
"surveys" start this cycle
- Whole thing too big for DD time
 - DD time kick off?
 - How to get community buy-in
- Other legacy datasets may be needed
in other fields - cosmology seen as
getting special treatment?
- KEY PROJECTS? ← revive an old idea?

DECIDE SOON!