CFHTLS-Wide Survey Progress

Hervé Aussel

CFHTLS French National Meeting,
IAP, Feb 4, 2005

Wide Goals and Specifications

- Weak Lensing
  - 208 □º in g, r, i to i=25, with IQ ≤ 0.9"
- Clusters of galaxies
  - r, i, z. z needed for red sequence
- Galactic Studies
  - 2 epochs of r separated by 3 years for PM.
- QSOs / Photometric redshifts
  - u, g, r, i, z

Wide Allocation

- 162 Nights or 34% of the CFHTLS time
- 179 □º over 3 fields
  - W1 : 9ºx8º , W2 & W2 : 7ºx7º
  - ➢ Reduction from the original goal
- 2 epochs in r separated by 3 years
- pre-survey in r
- 5 filters

u*	g	r	i	z
6000s	2500s	2000s	4300s	7200s
26.4	26.6	25.9	25.5	24.8

Wide Programmation

- Dithering

u*	g	r	i	z	pre-r
6000	2500	2000	4300	7200	180
2xLDP5	LDP5	2xLDP2	LDP7	2xLDP6	1 shot
6400	2700	2160	4585	7680	220

- Total per Wide pointing: 23525 s or 06:32:05

Wide Scheduling

- Total Wide: 3999250s or 1110.9 hrs
- Total Pre-Survey: 170060s or 47.2 hrs
- Grand Total: 1158.1 hrs or 165.5 Nights*
  - Almost within the allocated 162 Nights*
  - Difference due to increase in the number of exposures in u (not longer than 600s)
- Descoping will have to be studied.

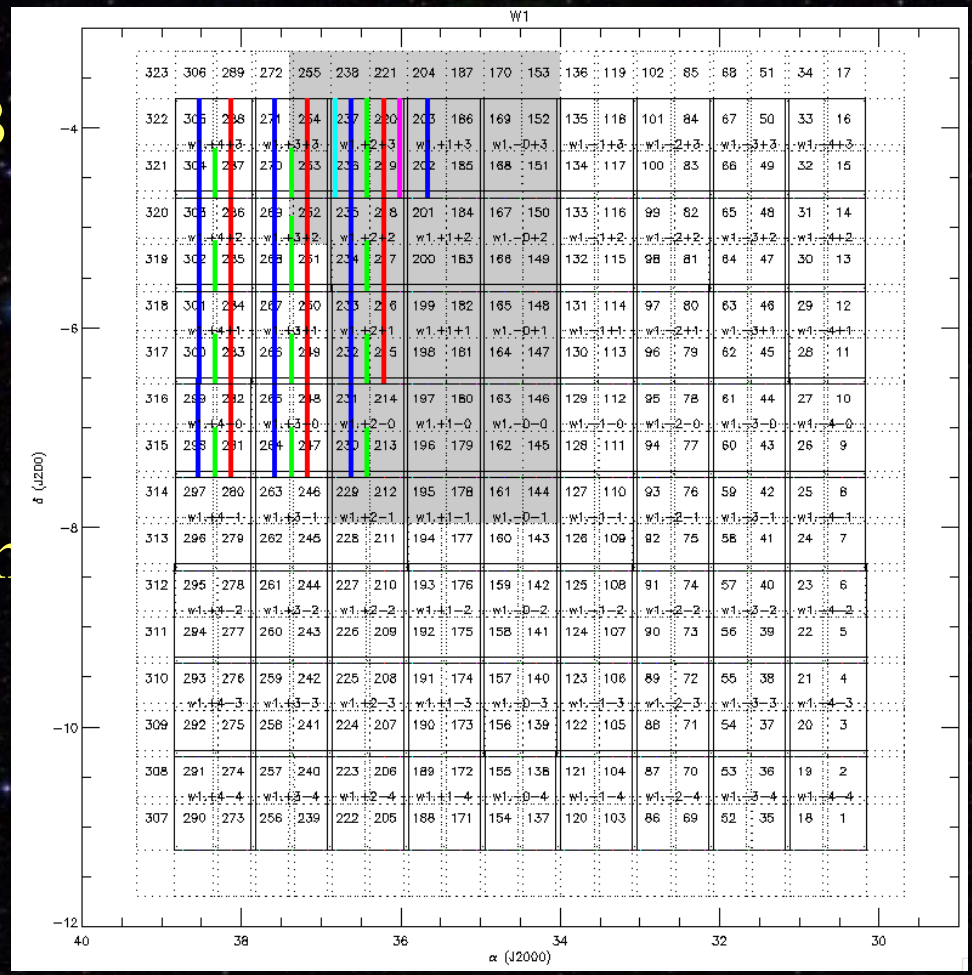
* : Assumes the 'canonical' 7 hours per night.

Wide Progress

- Beginning of the survey: June 1st, 2003
- Terapix Validation
  - grade A or B
  - seeing < 1.1" (1.3 in u*) - **worse than survey goal**
  - airmass < 1.5
  - skyprobe data available at CADC and less than 2 mags of extinction
  - exposure time > 60s
- Deficit of 186.6 hrs or 1.8 semester
  - ➢ Expected to increase less fast with the improved IQ

Wide progress on W1

- Good progress in 04B
- 10 □º fully covered with u/2, g, r/2, i, z
  - ➢ Full coverage of the Spitzer area
- 19 □º fully covered in i for weak lensing
- Pre-survey is lagging behind



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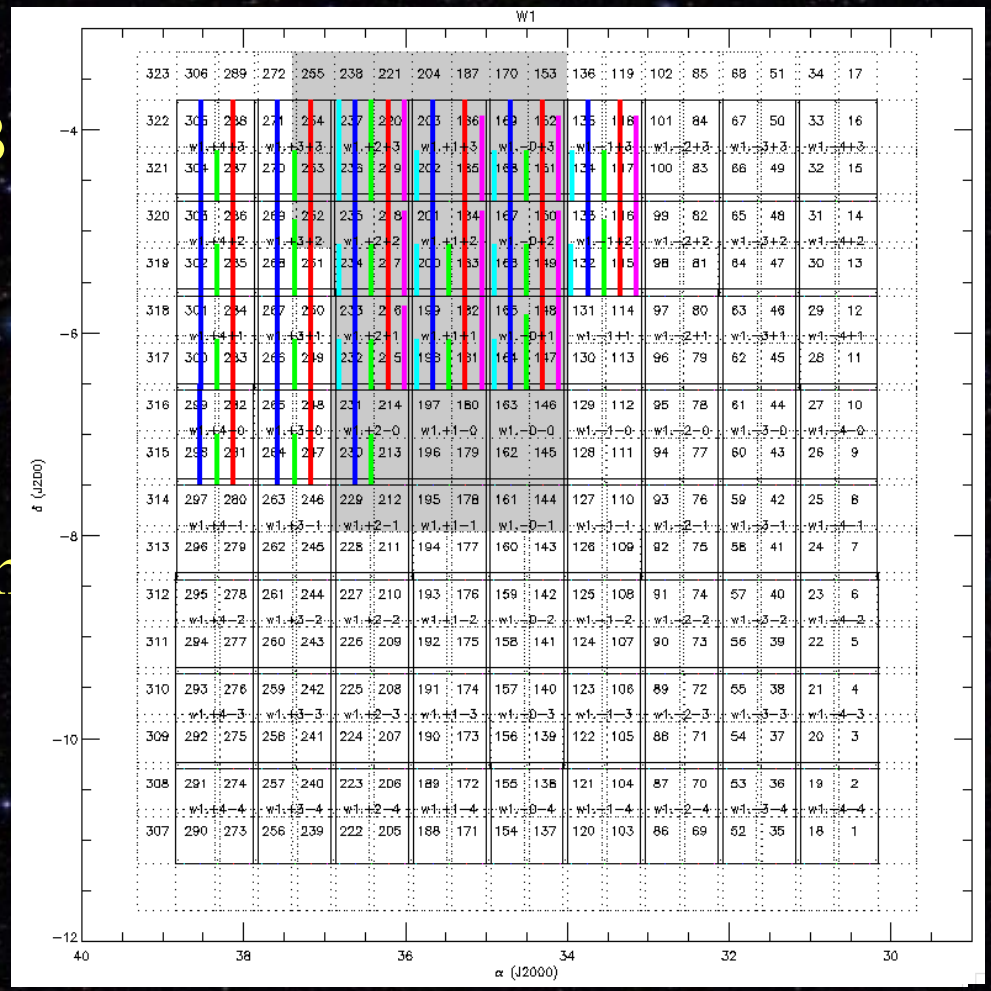
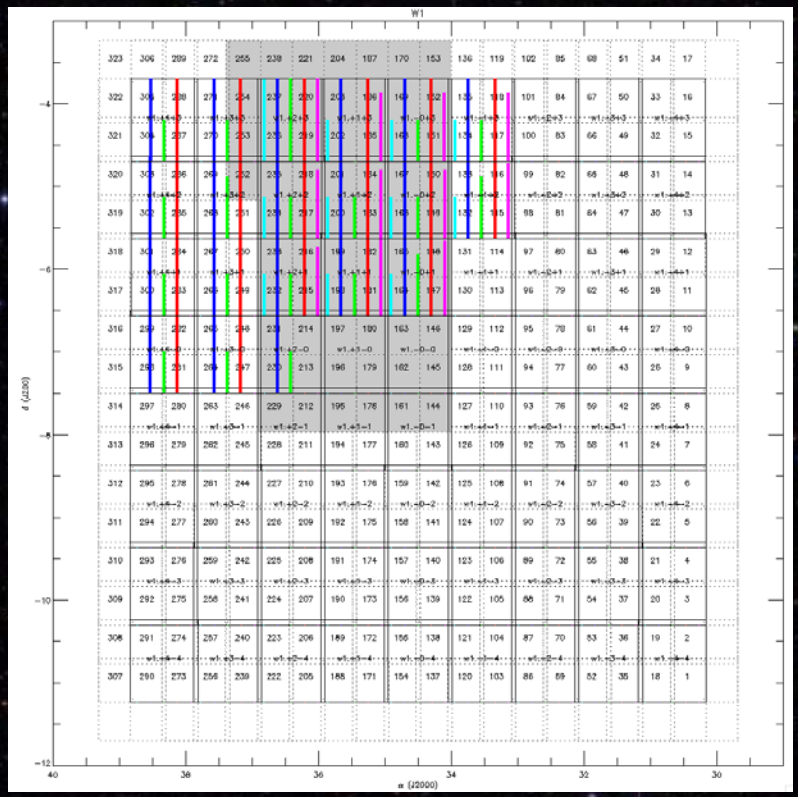
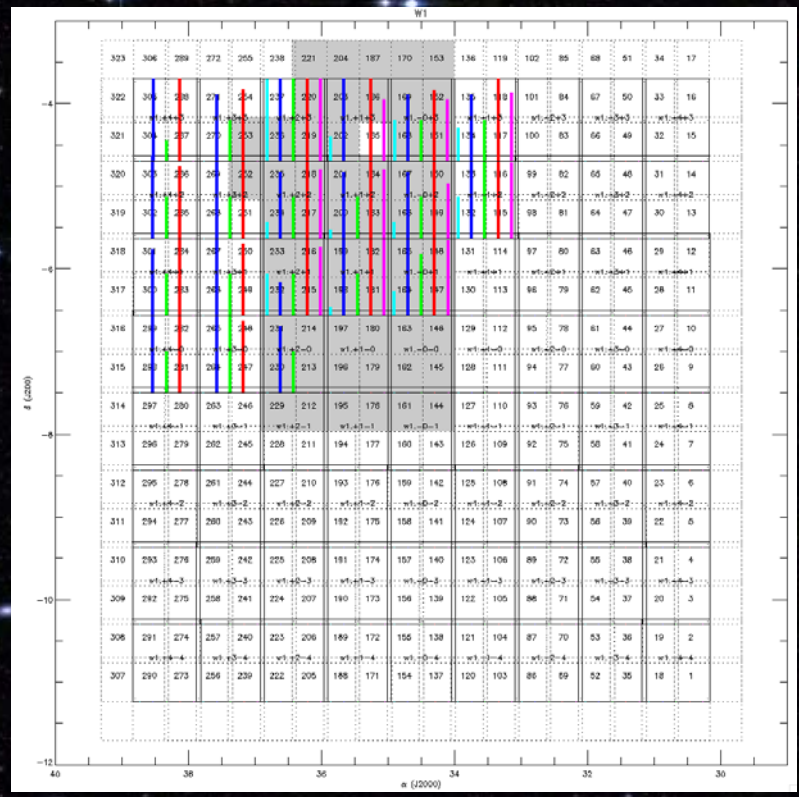


Elixir/Terapix views on the Wide progress on W1

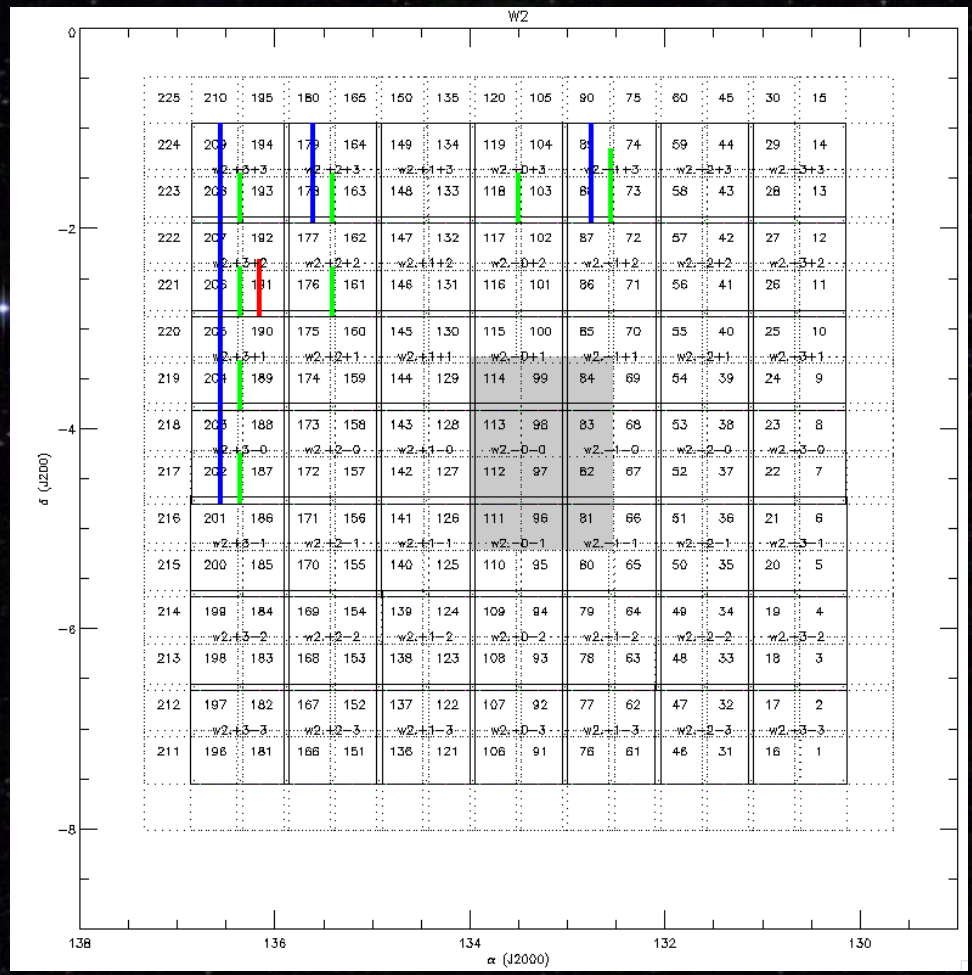




- Loss of a lot of u band data

Wide progress on W2

- Little progress on 04B
- Nothing usable for weak lensing
- Nothing usable for photo-z, clusters or QSOs
- Pre-survey OK



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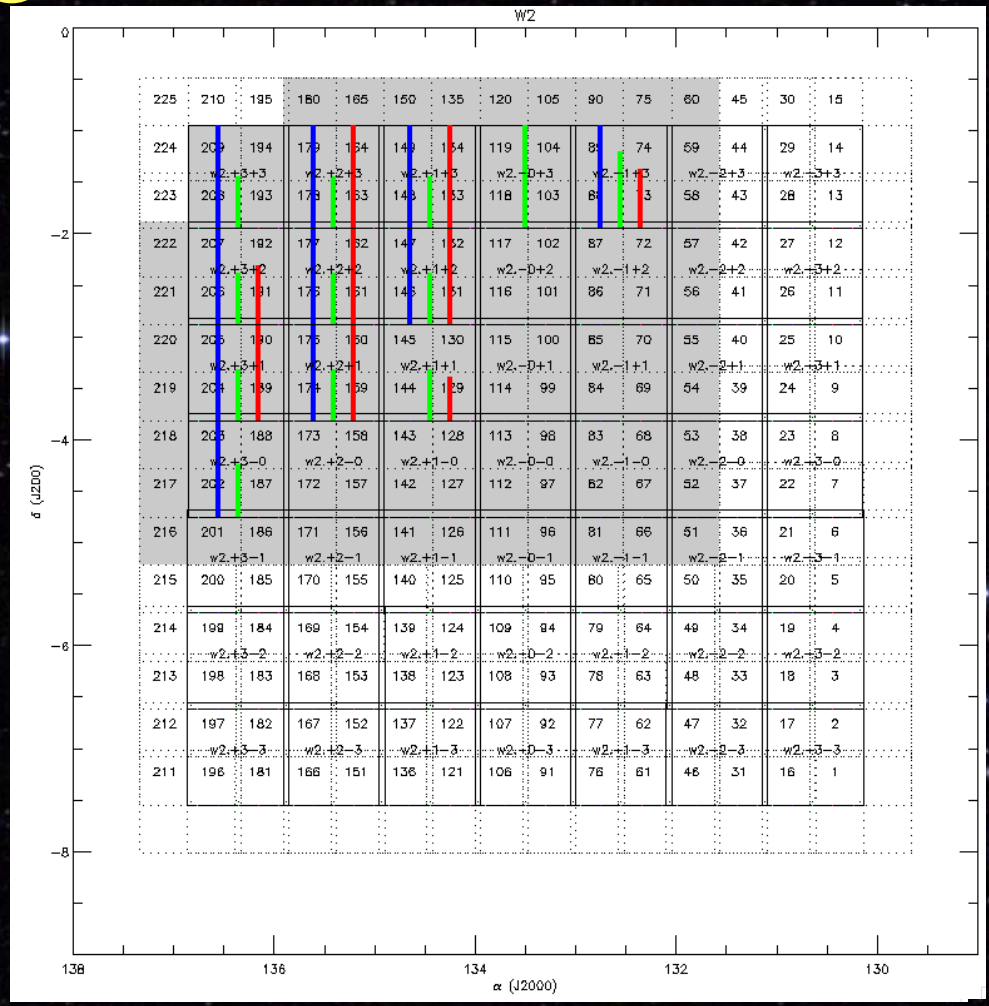
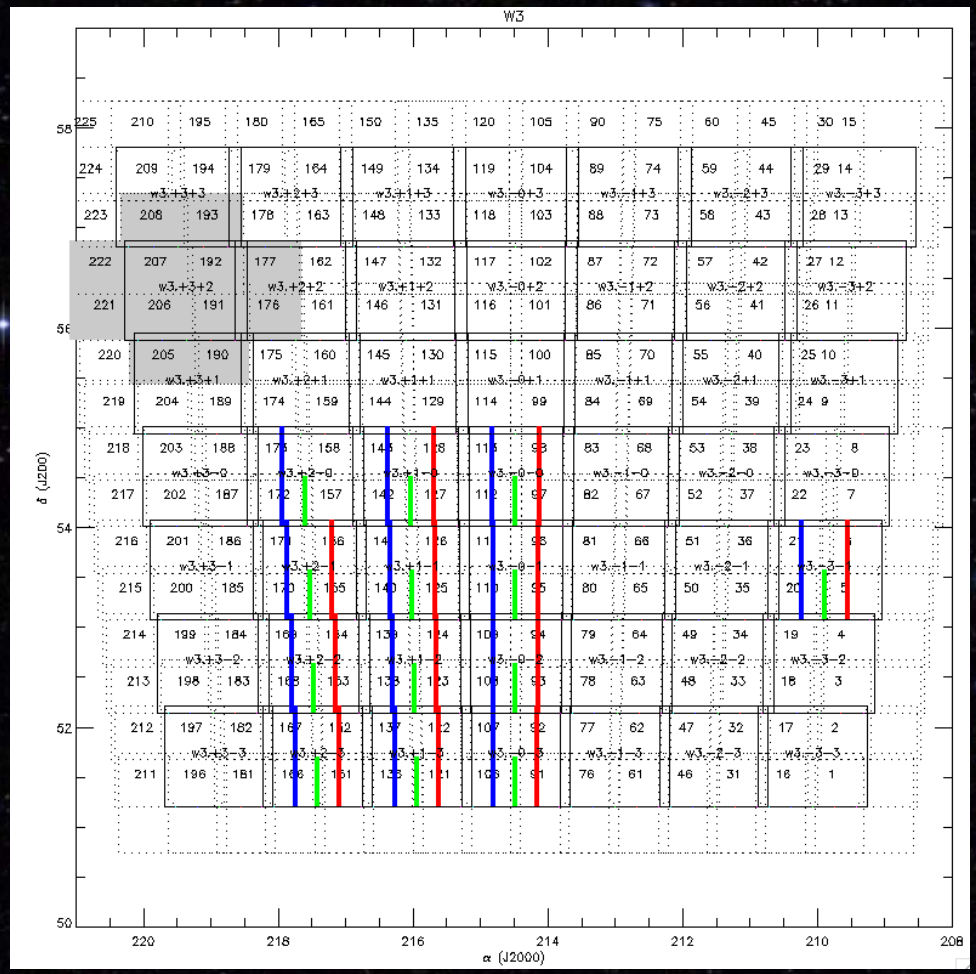


Wide progress on W3

- Little progress in 04B
- 11 □° for weak lensing
- Nothing for photo-z, clusters or QSOs
- Pre-survey not observed on Wide pontings



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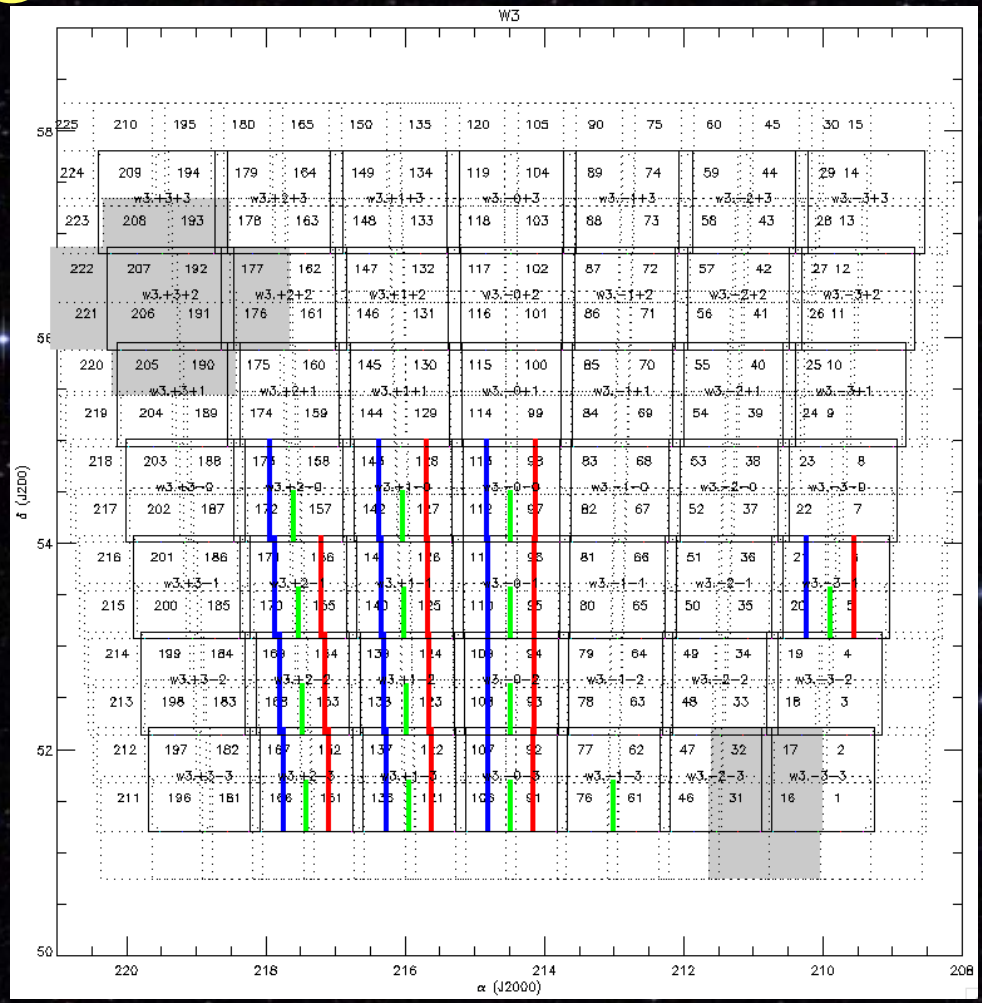


05A Schedule : Two Opposite Goals

- Steering Group decision:
  - 34% of LS time for the wide or 85.8 hrs .

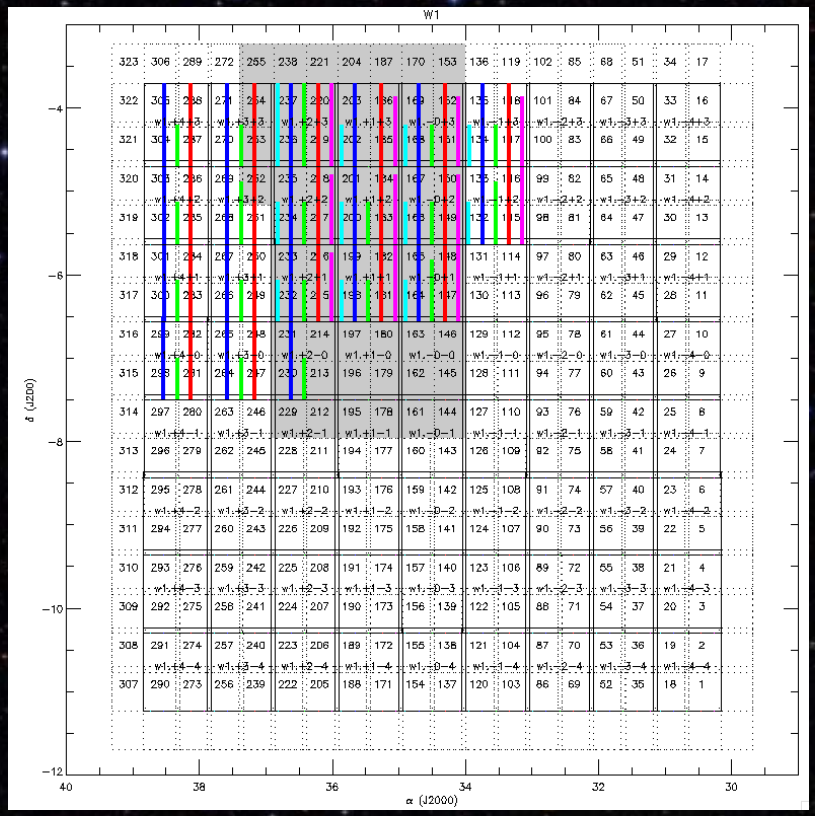
- Quick Wide Coverage for WL
  - g, r/2, i
  - 2.3 hrs per pointing
  - 37 □° in 85.8 hrs

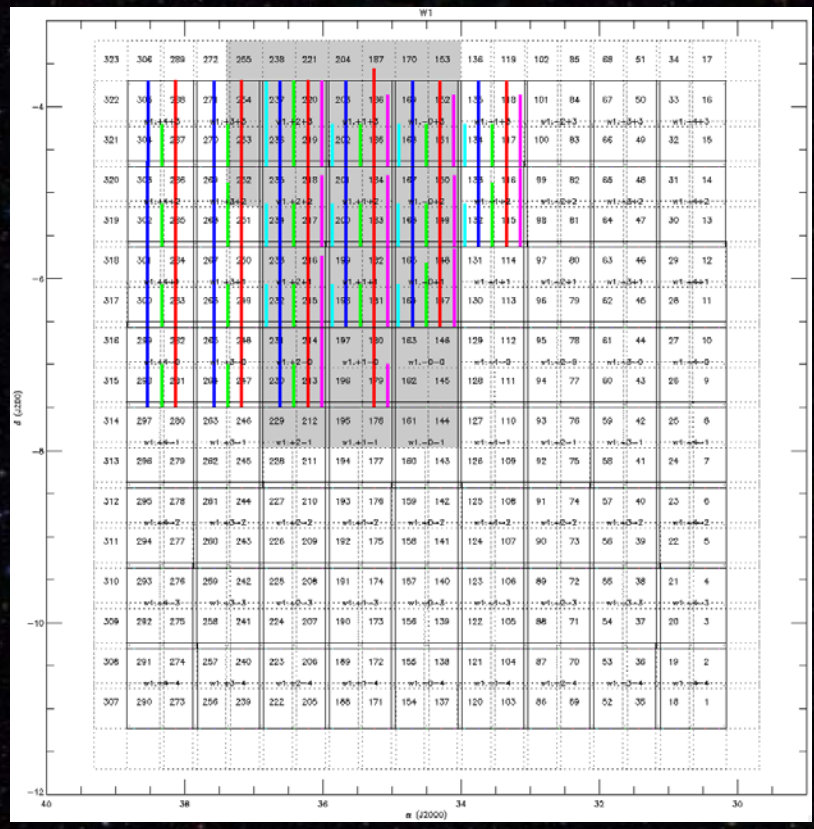
- Full color coverage for phot-z
  - u, g, r/2, i, z
  - 6.2 hrs per pointing
  - 13 □° in 85,8 hrs

05A Schedule

- 50-50 split between the two options proposed on the cfhtls-w mailing list
  - Canadian only response !
- Final decision:
  - 40 hrs on W2 with u/2, g, r/2, i, z/2 with 2 pointing at full u and z
  - 40 hrs on W2 with g, r/2, i
  - 6 hrs on W1 r/2, i, z

W1 Forecast for 05A





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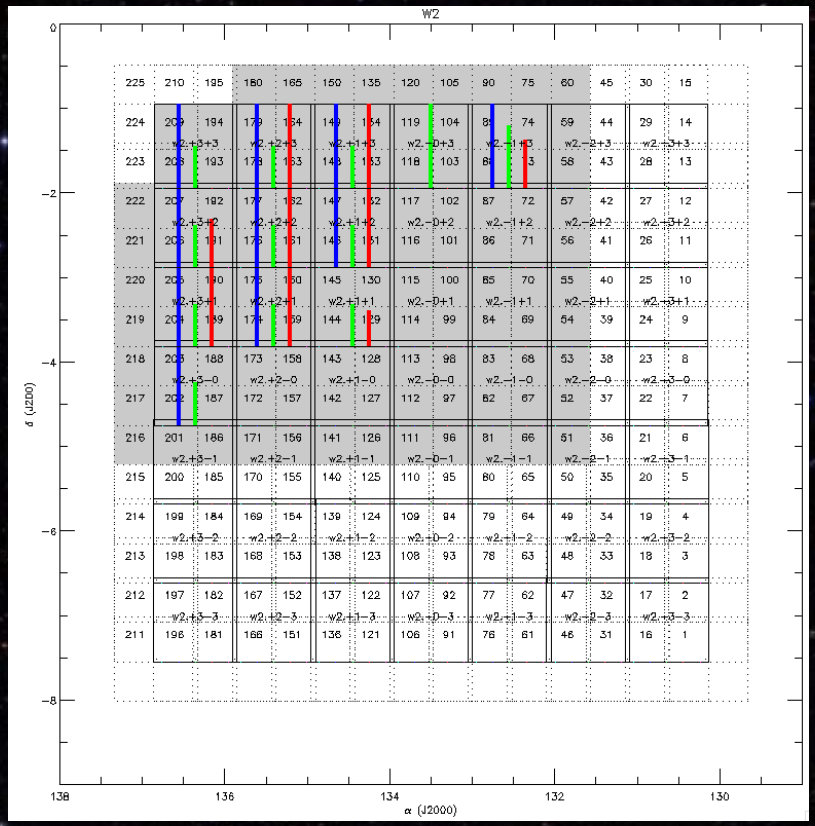
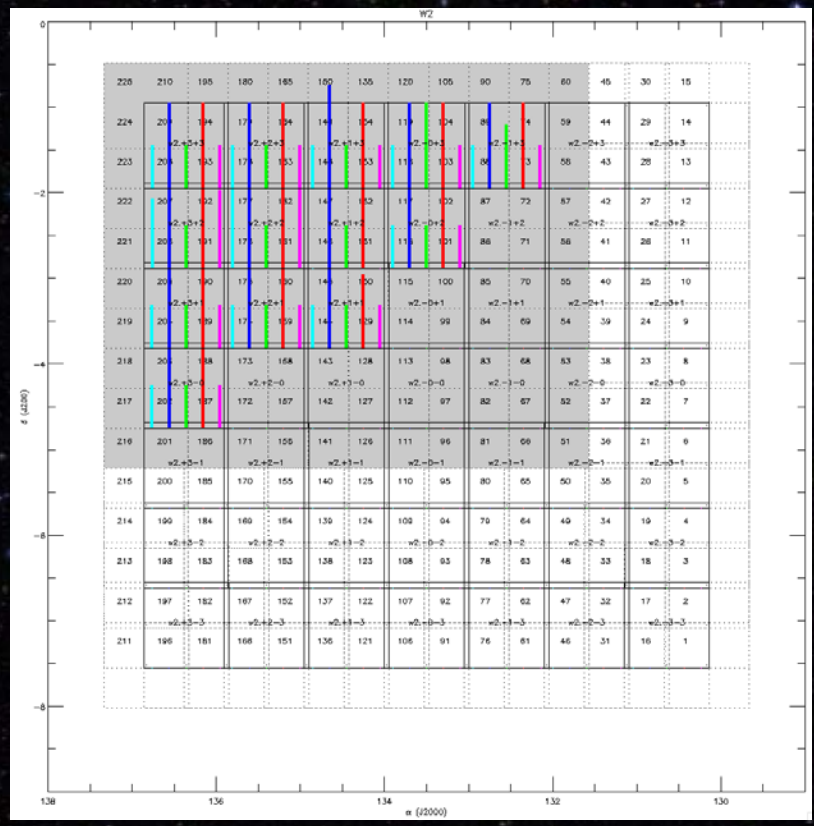
W2 Forecast for 05A





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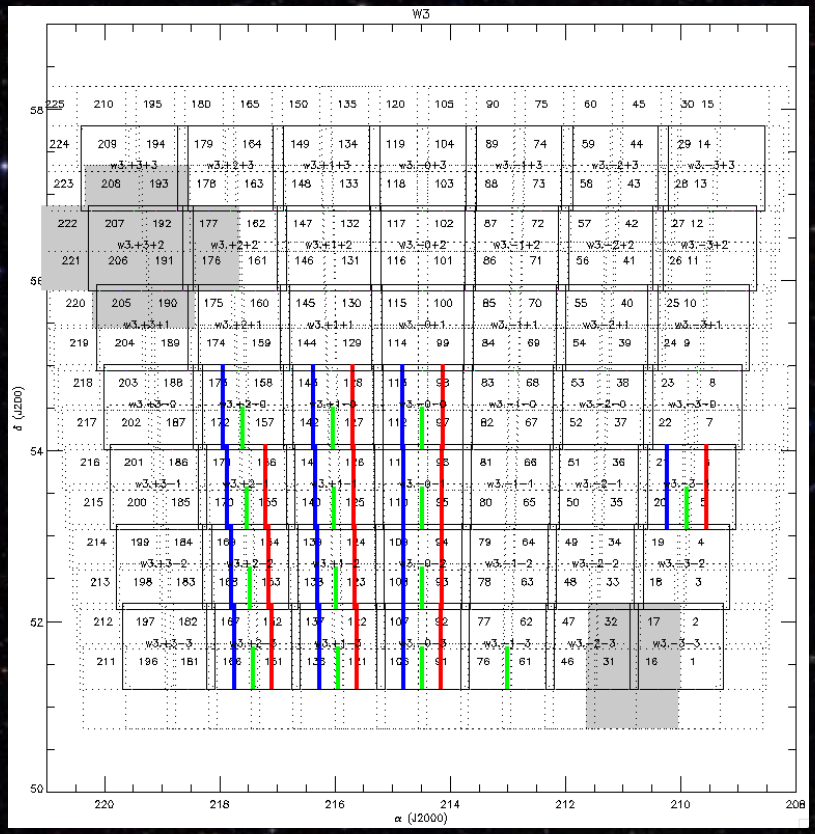

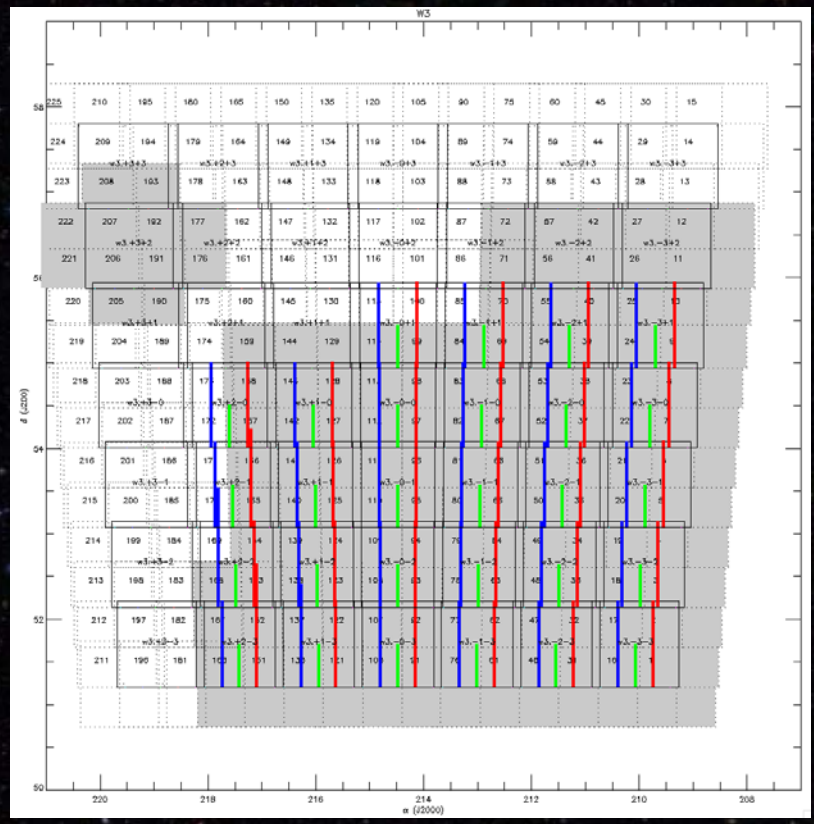

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