Australian Government
Department of Industry
Innovation, Science, Research
and Tertiary Education

A MULTI OBJECT IFU FOR ULTIMATE on Subaru

Some thoughts for discussion…..

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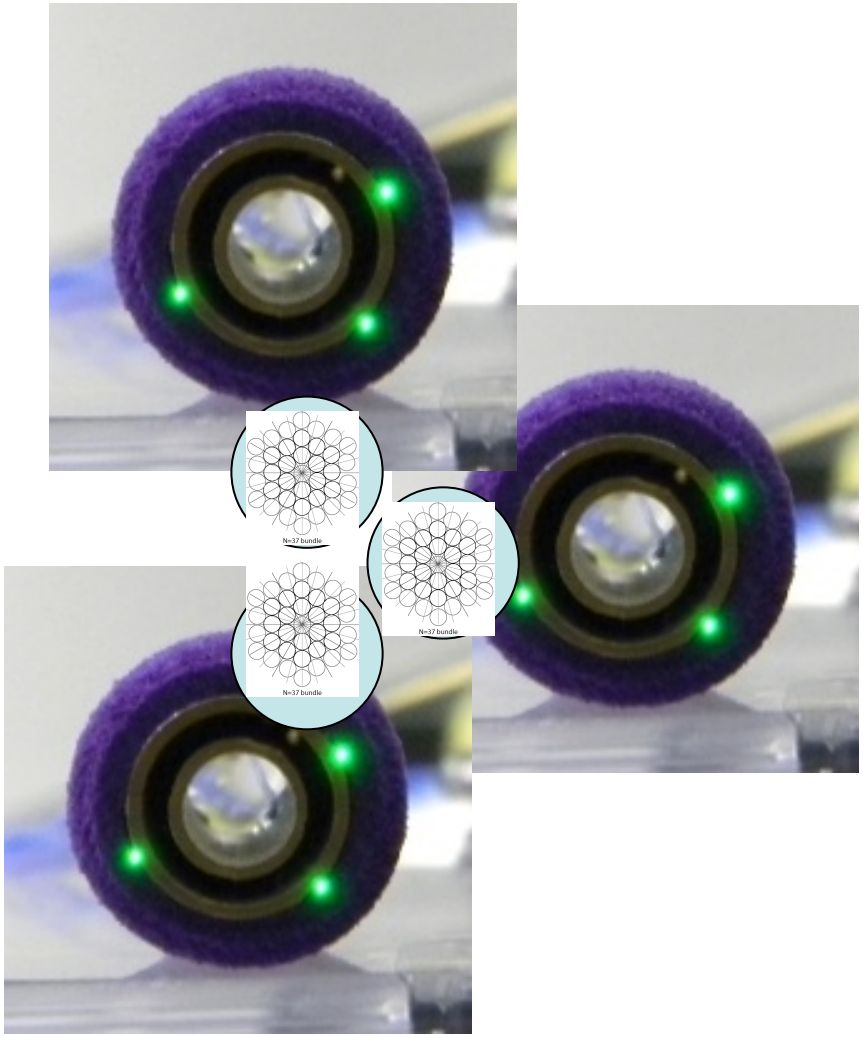
Issues

- Most people were Ok with:
- 0.2” sampling
- FOV possibilities (1.8”)
- Sensitivity (50-70% of Mosfire, 60-80% of KMOS)
- Resolution (R=1000-3000)

- Issues: some people wanted:
- Better Fiber to fiber separation
- K-Band

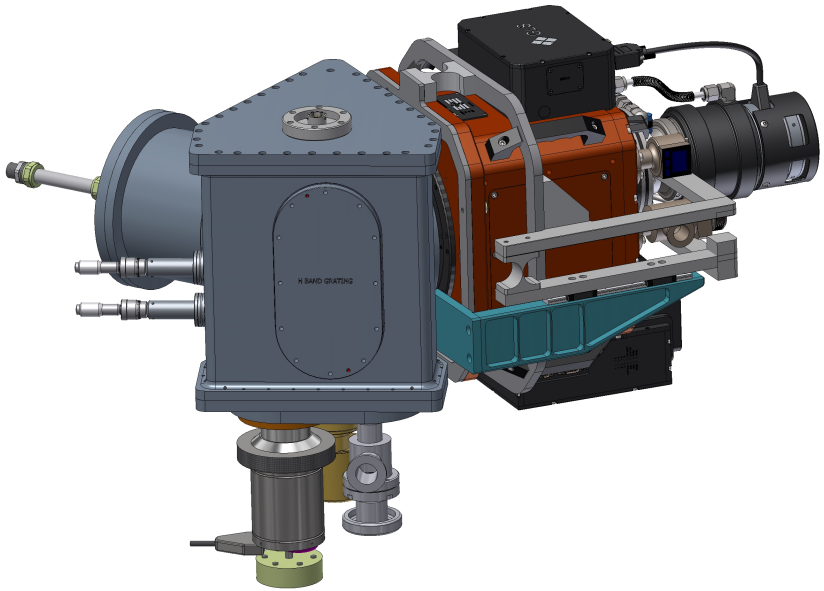
Closest approach-1-5”

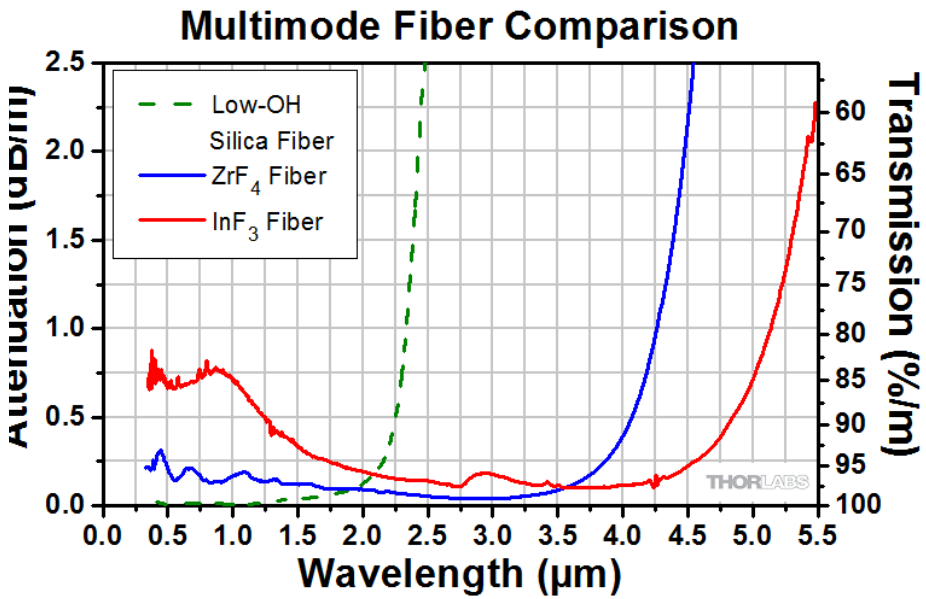
Use outboard IFU’s
Allows for 3 IFU’s to “contact”
Complicates targeting algorithm
Collision avoidance as well
No change to metrology
No change to stargbug drive/motion



Kband

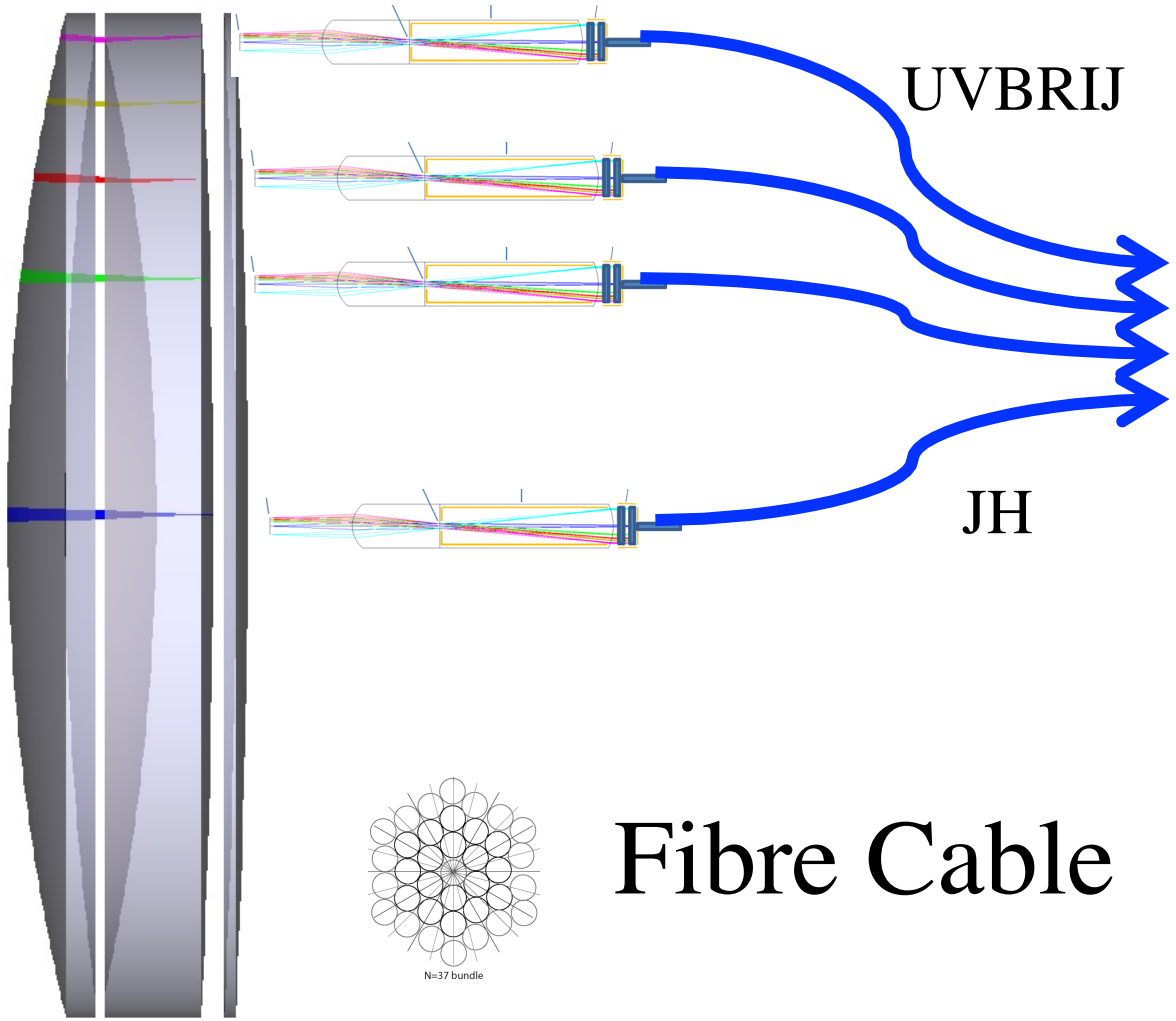
- Could proceed with a K-band experiment on AAT using Praxis in parallel on one or two fibers
- Look at self emission, losses, system issues etc…
- Measure SNR vs temperature, bends etc….





Topic for discussion

New Phase1



MOIRCS
+PFS
+FMOS

Fibre Cable

WFC IFU/Starbug

New PHASE II and Phase III

- New JH spectrograph on floor x2? 64 IFU's) (Phase II)
- OH suppression (Phase IIb)
- PhaseIII
  - Small (Lower-R?) dedicated K-band spectrograph on telescope 16-64 K-band IFU's
  - Short k-band fibres,cooled, vacuum clad
  - With or without central imager (J,H,K)

Domo arigato
Mahalos!