Discussion questions

What is Swift's future role?

(a) Gamma-ray burst observatory?

or

(b) General purpose, flexible, rapid-reaction multiwavelength observatory?

- At some level optimal exploitation of these two concepts is mutually exclusive
- Must make sure we don't fall between stools!

What is the case for further GRB observations?

- Burst detection rate lower than original estimates
  - That's how the Universe is!
  - Original proposal: several hundred GRB in 2 years
  - Does it matter? Do we need a larger sample?
- Minority population numbers still low
  - Short bursts
  - XRRs & XRFs
  - High redshift bursts
  - Bright bursts
- Role in GLAST GRB follow-up

Should we modify our GRB approach?

- Completeness is important (e.g. redshift)
- Should we pay the price of reduced efficiency?
- E.g. concentrate on anti-Sun (plus 90^{o} for satellite follow-up)
  - Only observe intensively if in this area?
  - Bursts outside this zone minimal coverage unless ‘special’
  - Only observe late-time light curves extensively if optical afterglow?
- Important to understand selection effects
  - Clear flagging of changes in observatory policy
  - Ground-based: must ensure ‘null observations’ are recorded and publicised.

Should we modify BAT triggers?

- Potential increased sensitivity to new parameter space
  - E.g. high-redshift bursts
- Price likely to be increase in false positive triggers
- How can we ensure that this does not conflict with desire for more completeness
  - E.g. by undermining confidence of follow-up teams.

Do we need better liaison with ground-based follow-up?

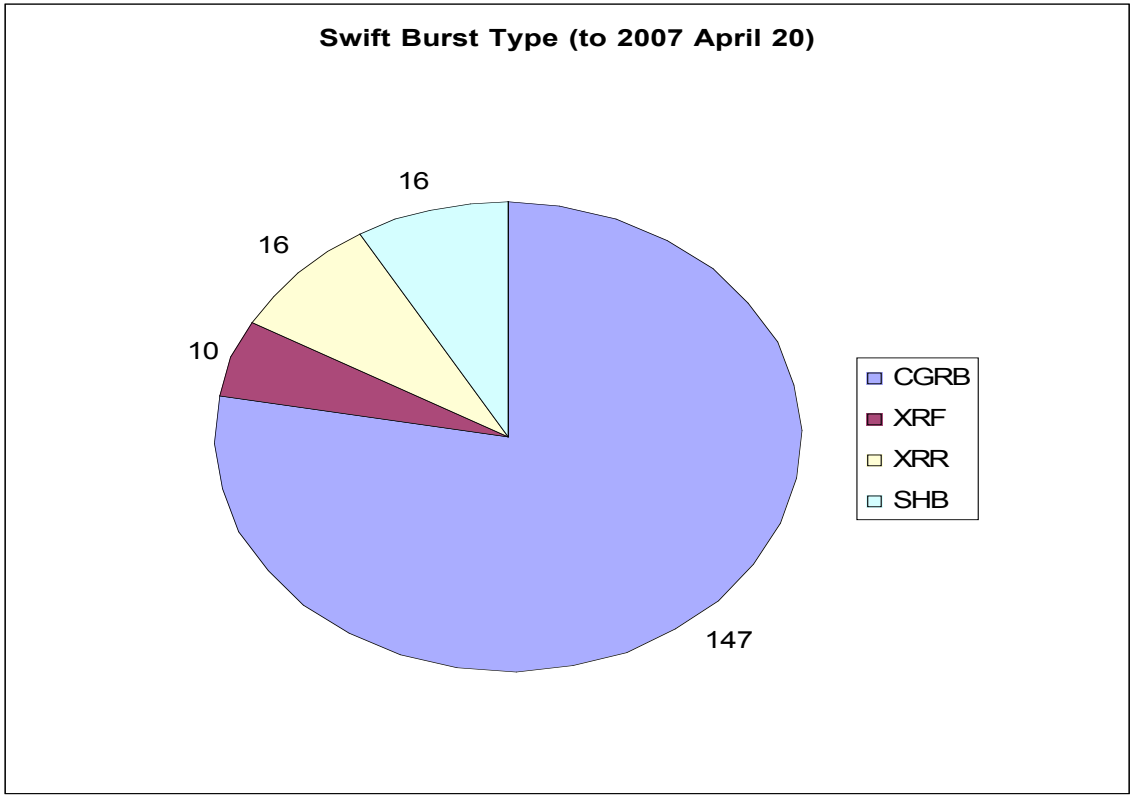
- Completeness a challenge
- High-z difficult, limited IR facilities
- Should intensive co-operation replace friendly competition?
- History will judge us unkindly if we get it wrong! (not to mention our funding masters!!)
- Infrastructure exists to support this.

What should be the emphasis of non-GRB observations?

- Swift is a very capable observatory
- Many good ideas – could easily oversubscribe many times over
  - E.g. GLAST unidentified source follow-up
- MUST recognise operational and planning constraints and requirements
- Should we concentrate on specific ‘high-impact’ areas or do a bit of everything?

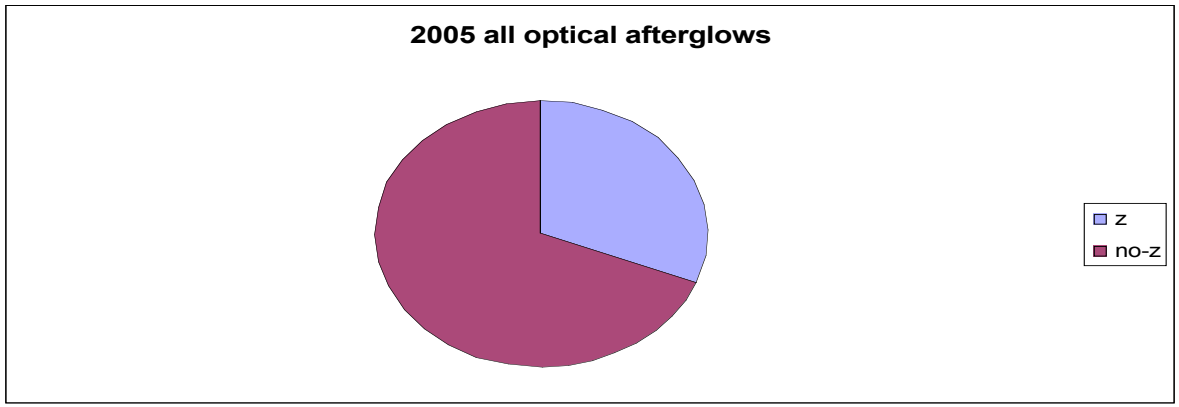
end

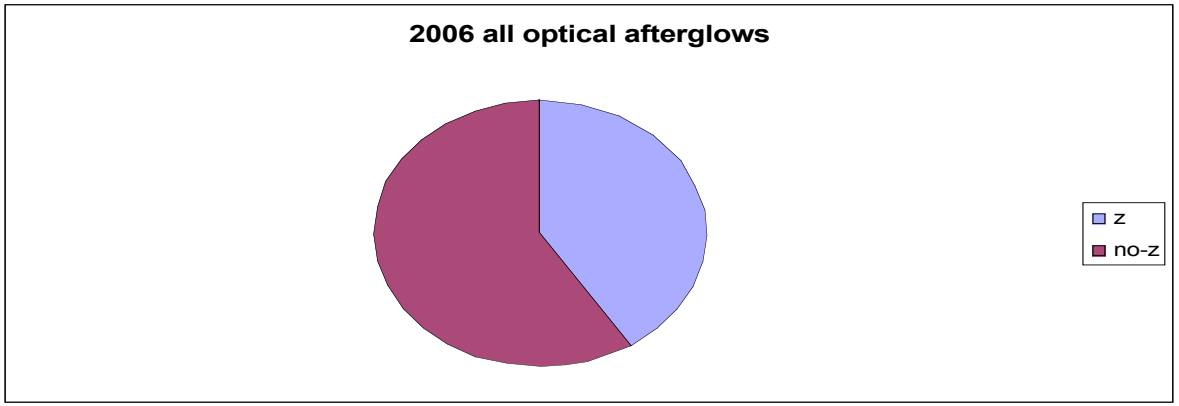
Burst Type



Redshift Fraction

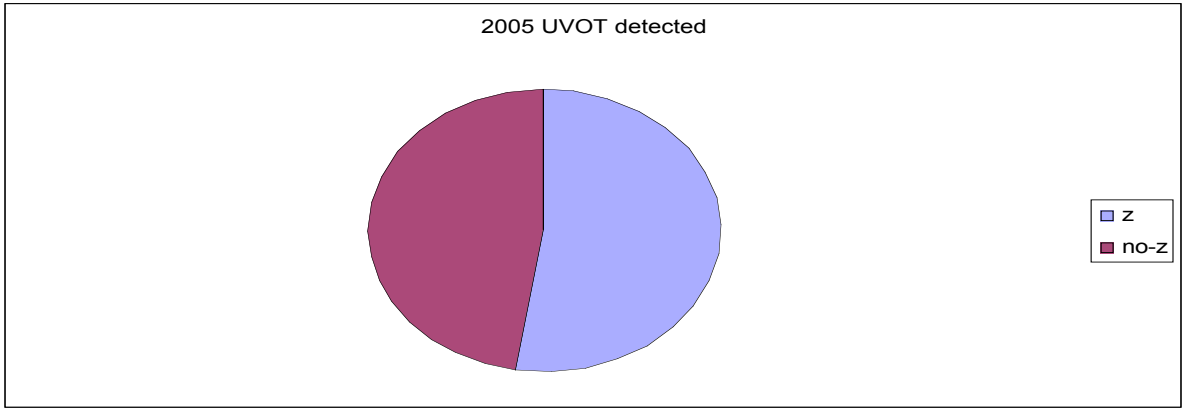
All optical afterglows

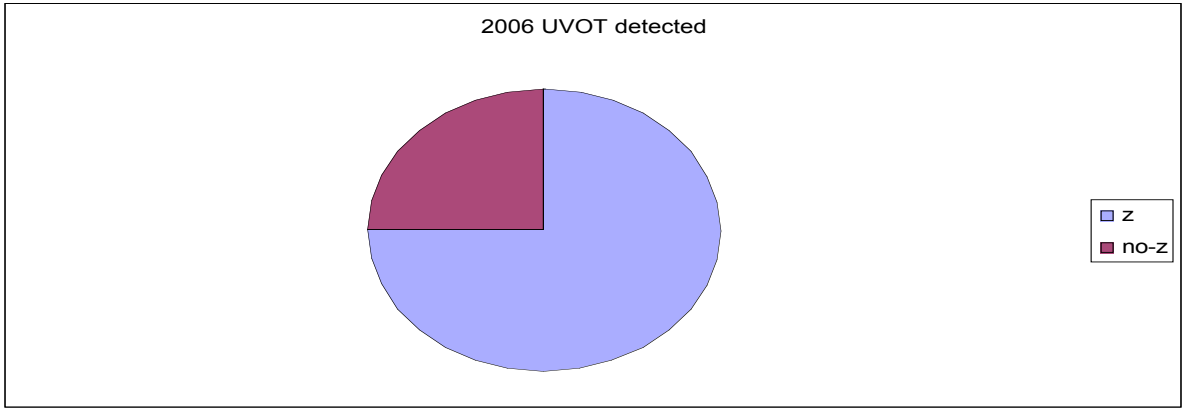




Redshift Fraction

UVOT detected bursts





Redshift Distribution