# 2002A Gemini Data

## TIME AWARDED

Summary of Time awarded & Used
(US and UK combined, and including overheads)

| Instrument | Time | To Observe | Imaging/spect | Time used |
|---|---|---|---|---|
| GMOS | 36 hours | 6 SNe with $z > 0.8$ | both | $\sim 16hrs$ |
| NIRI | 36 hours | 2 SNe with $z > 1$ | imaging | $\sim 8hrs$ |

## ISSUES

- Poor weather at Mauna Kea
- We have used less than half our awarded time
- Contacting queue planner and keeping track of data is a lot of work!
- So is preparing all observations which may or may not be taken
- Future award for 2002B is disappointing (no NIRI time from UK)
- But GMOS + NIRI both provided crucial follow up for the last search.

# GMOS data

## APRIL 2002

- Used 7h45mins in April (incl. overheads).
- Objects observed listed below - comments may be out of date!

| | |
|---|---|
| C02-006 | z=0.677 Emission line at 6251A. No SN features? |
| S02-027 | looks flat and faint - but could possibly have a SN bump at $z \sim 0.76$ |
| S02-049 | z=0.876 Emission line in neighbor and in object Good SN features. |
| S02-055 | Not much obvious in this one. Continuum trace there Maybe a $\sim$ 0.75-ish bump? Airmass was hitting us? |

## MAY 2002

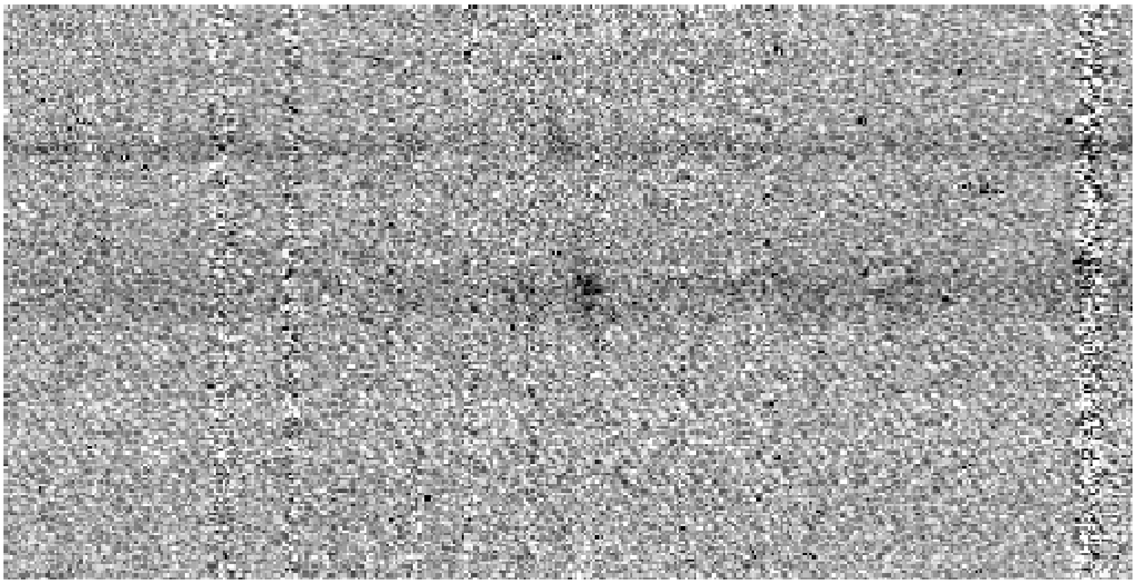
- Data Taken 2002may11

| | |
|---|---|
| S02-064 | Definitely a supernova. Either $z \sim 0.35$ or $z \sim 0.56$ Much debate about this one! |
| C02-027 | Strong line at 7409A but not sure what it is. Dont think its OII (no 4000A break). Could be OIII at z=0.481 or Ha at z=0.13. Guess 0.481 because of possible H&K break. No clear SN features. |
| T02-037 | z=0.490 OIII, OII, Hb etc. Clear Type Ia SN features including SiII |

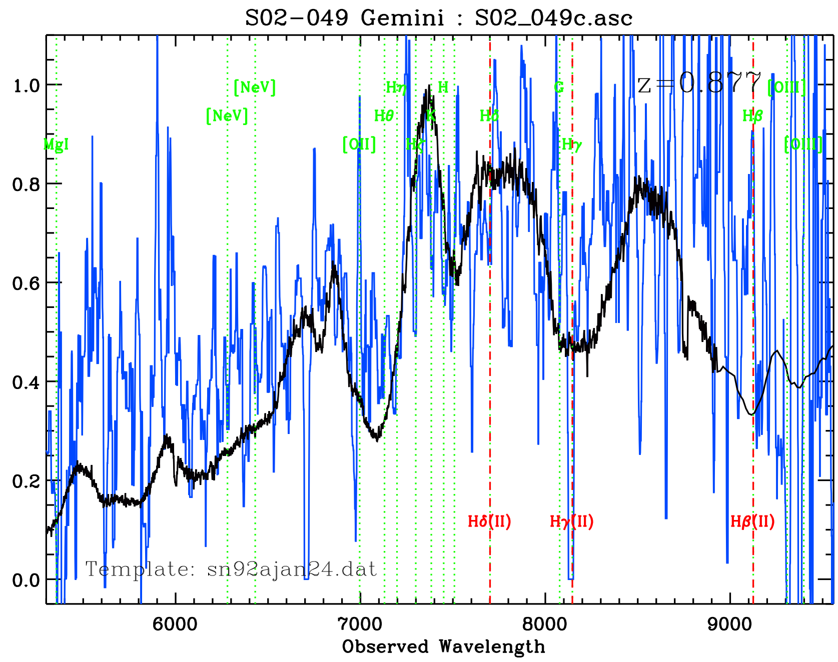
## JUNE 2002

| | |
|---|---|
| S02-075 | red object, no clear features |

# GMOS data example



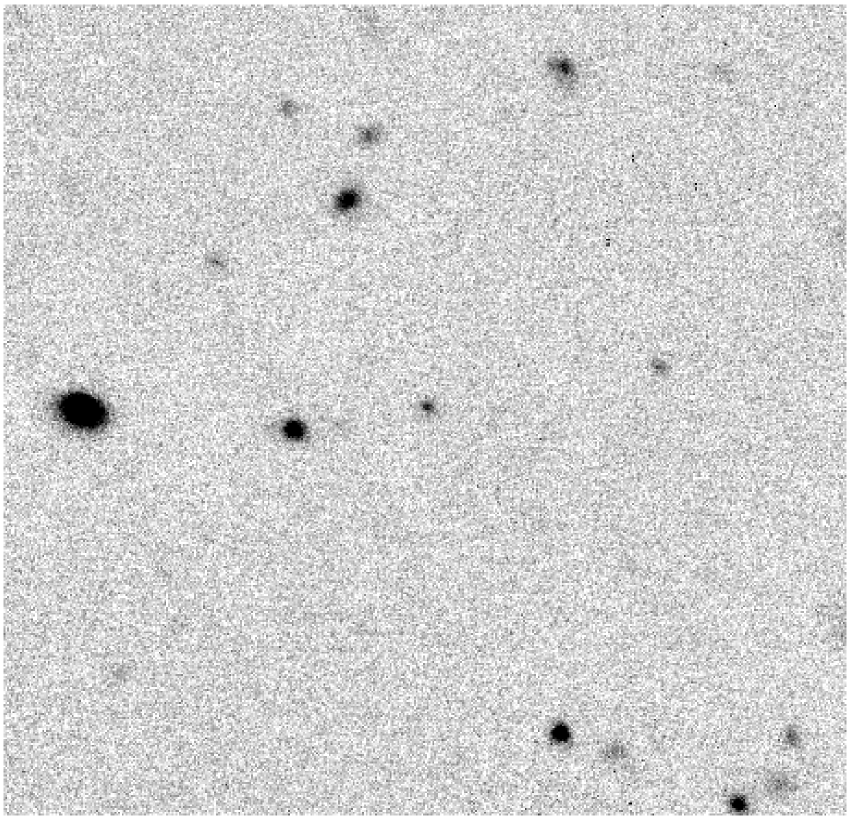
- S02-049
- Exposure time $= 3 \times 1800$s
- Faint emission line and continuum (see 2D spectrum - upper trace)
- $z = 0.88$
- HST follow up being obtained



# NIRI data

| | |
|---|---|
| S02-002 | (new SN at z=1.08) observed for $\sim$ 5 hrs (exp time)<br>IQ= 0.6”<br>A further short exposure (20 mins)<br>obtained later for phot. calibration |
| Satie | (old SN at z=1.1)<br>final ref started : about 3hrs obtained |

S02-002, $z = 1.08$



- Approx 1 arcmin x 1 arcmin image section, centered on S02-002
- About 1/4 of the full image area is shown
- Above image is the coadd of approx 2hrs data (less than half the data)
- Final signal-to-noise is $\sim$ 35 but much of this is host galaxy.
- Definitely need final ref for S02-002