## Role of FOCAS

### Takashi Hattori (as FOCAS SA) 12/9/2014

## FOCAS

- not unique
- better scores in stability/work-load (but there is a long history of repair/improvement ...)
- <u>decreasing demand?</u>
  - high demand
  - low success rate (fraction of accepted proposals)
  - unavoidable for a utility instrument?

## FOCAS submitted proposals

	S08A	S08B	S09A	S09B	S10A	S10B	S11B	S12A	S12B	S13A	S13B	S14A	S14B	S15A
IMAG	2	2	2	1	1	1	2	1	0	1	0	1	1	1
LS	15	15	12	13	8	8	9	8	6	6	6	7	5	12
MOS	12	9	6	7	7	11	15	6	5	5	7	10	10	9
POL	1	3	2	2	2	2	1	3	3	2	5	6	2	5
TOTL	30	29	22	23	18	22	27	18	14	13	18	24	18	27



## FOCAS submitted proposals

- trend in recent proposals
  - decrease in <u>true</u> multi-object spectroscopy
    - single primary target in the field
    - reference stars, secondary targets, secure alignment for a faint target
  - increase in polarimetry?
    - S13B to S15A
  - follow-up spectroscopy of rare objects (SN/QSO) found in HSC data (S14B, S15A)

## Role of FOCAS

- "versatile optical instrument with multi-object capability"
- before
  - multi-object spectroscopy
    - follow-up spectroscopy of deep fields
    - SDF, SXDS, ...
- now
  - versatility/utility
    - variety of observing mode
    - follow-up/detailed-observation of interesting targets
      - deep spectroscopy, polarimetry, etc.
    - test of new observation technique

## to reduce work-load

- usage of IRM2
  - still want to use ADC
    - need to modify Mitsubishi software
  - buffle for IRM2
- stop operation
  - and to see how it goes

charge

- special observing mode
  - fast photometry (~1sec)
    - PI : Andrea Richichi
    - put a star on the slit
    - exposure
    - charge transfer
    - exposure
    - charge transfer



- special observing mode
  - on-chip folding
    - PI : Mikio Morii
    - phase resolved imagingpolarimetry of pulsars



#### • IFU for FOCAS

- PI : Ozaki (TMT Project Office)
- supported by grant-in-aid (FY2014-)



#### • IFU for FOCAS

- fabrication of components
- test and installation in 2015







