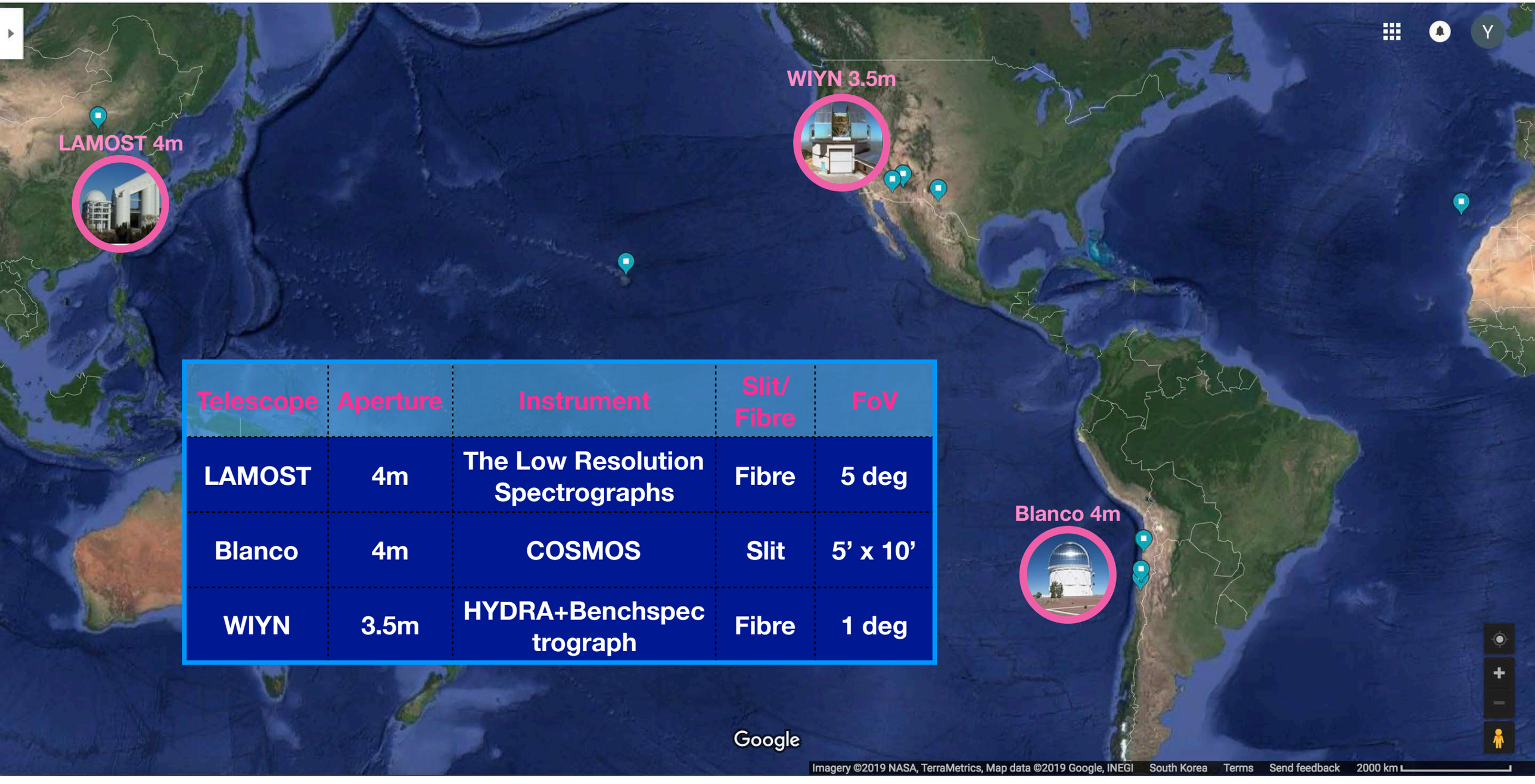
optical and moderate resolution

Current status of **Multi-Object Spectroscopy** facilities in the World

February 20-22, 2019
Survey Science Group Workshop 2019

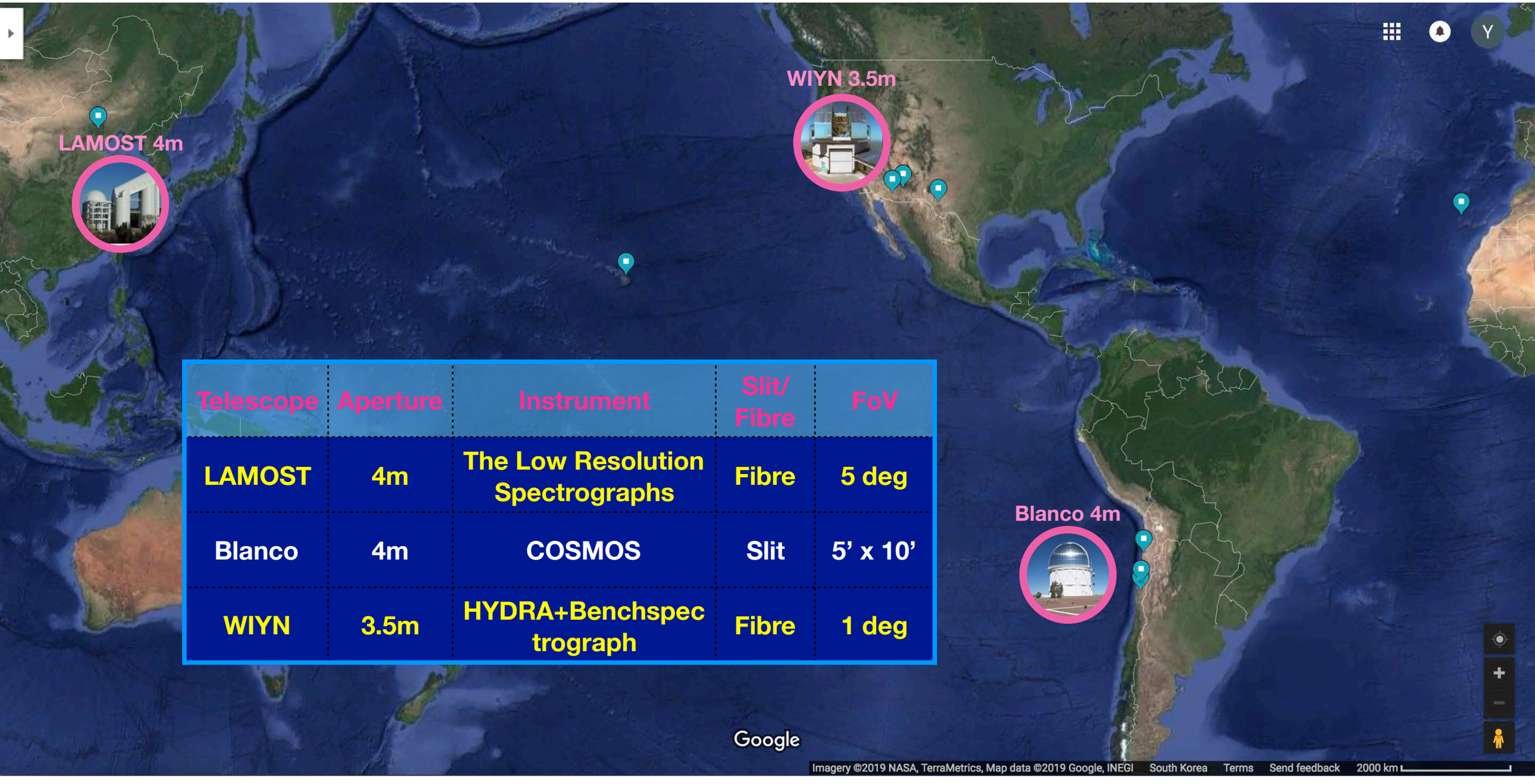
Yun-Kyeong Sheen (KASI)

Multi-Object Spectrographs on 4-m Telescopes



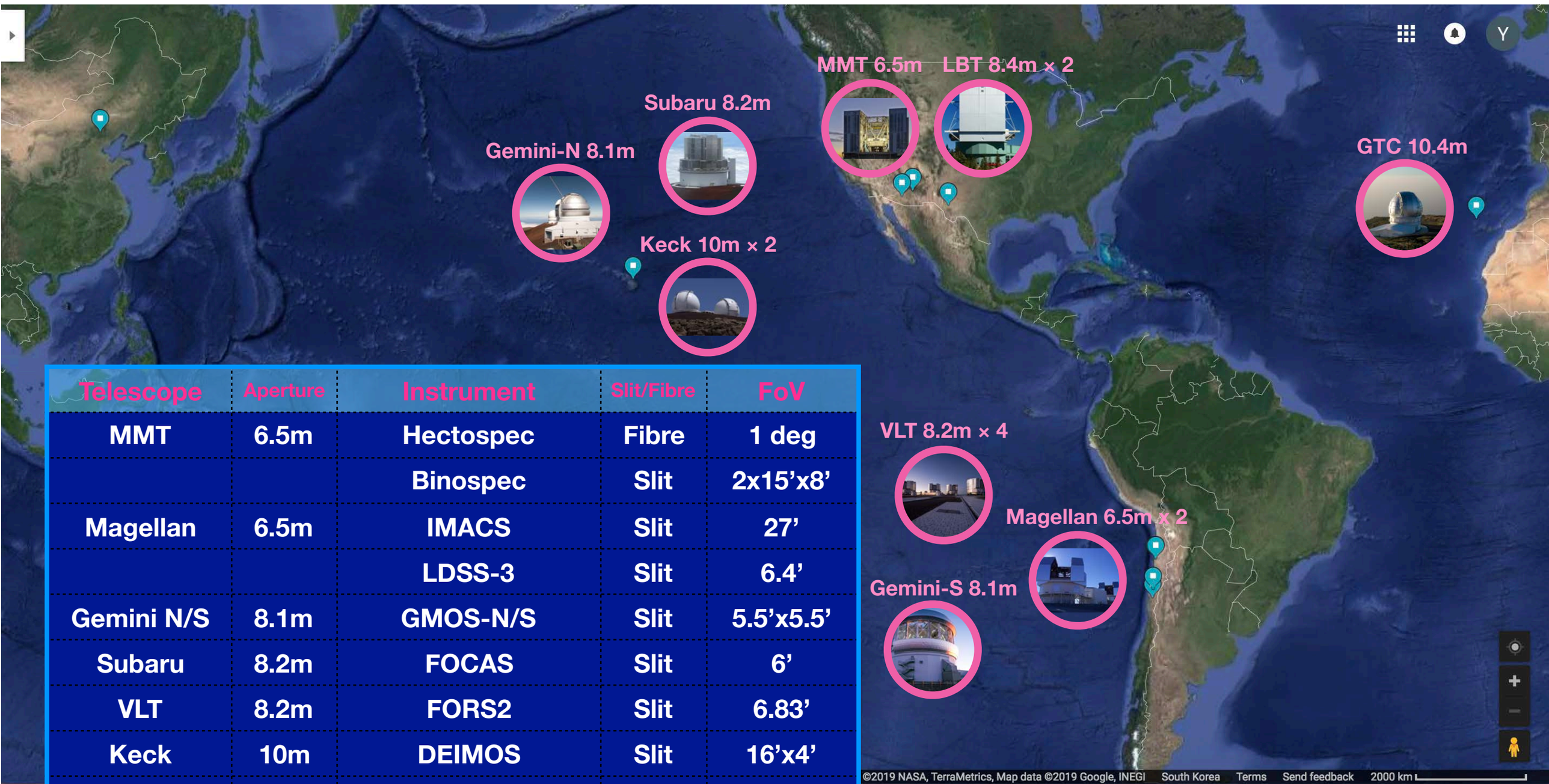
Telescope	Aperture	Instrument	Slit/ Fibre	FoV
LAMOST	4m	The Low Resolution Spectrographs	Fibre	5 deg
Blanco	4m	COSMOS	Slit	5’ x 10’
WIYN	3.5m	HYDRA+Benchspec trograph	Fibre	1 deg

Multi-Object Spectrographs on 4-m Telescopes



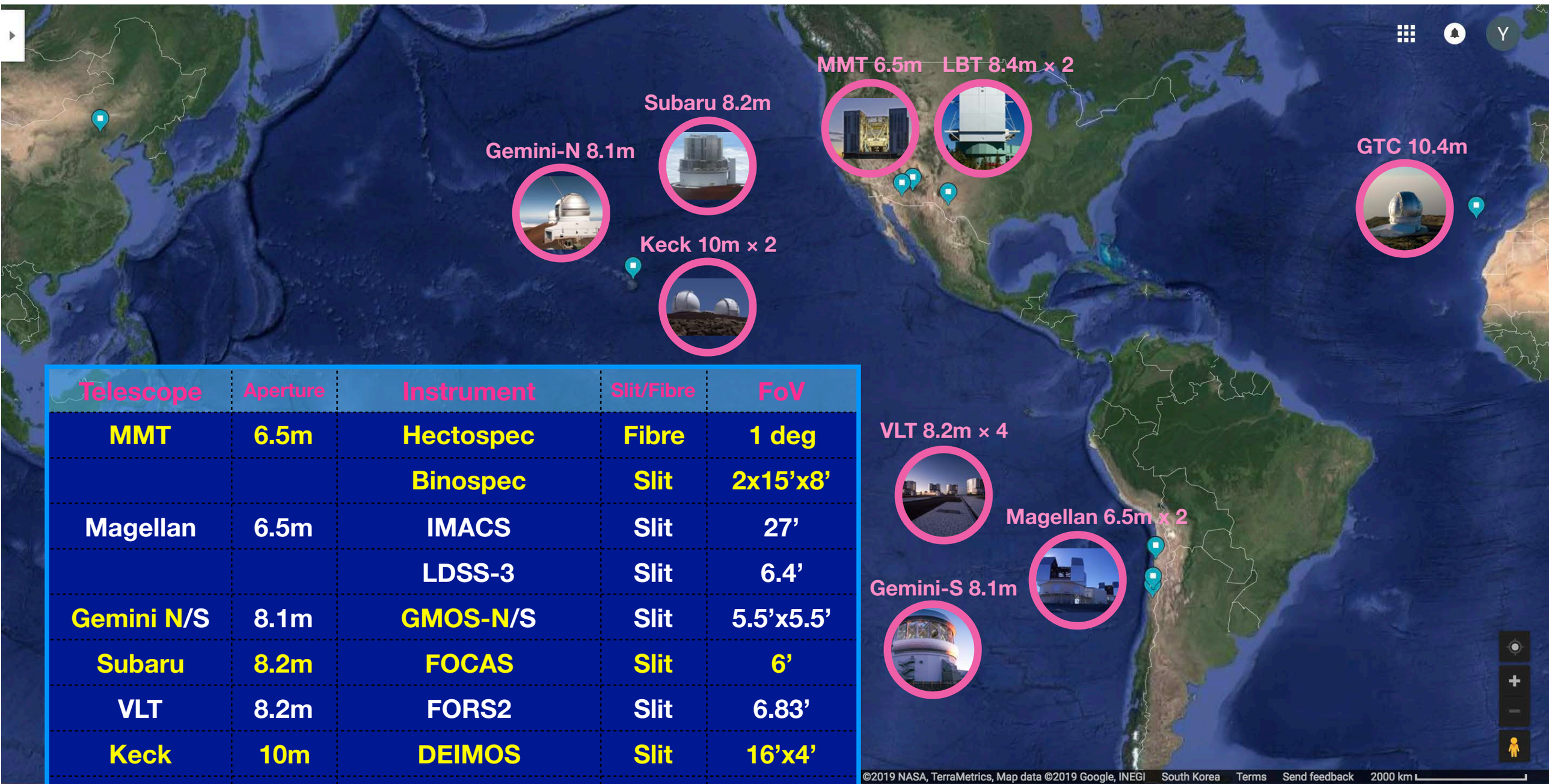
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Multi-Object Spectrographs on Large Telescopes (> 6m)



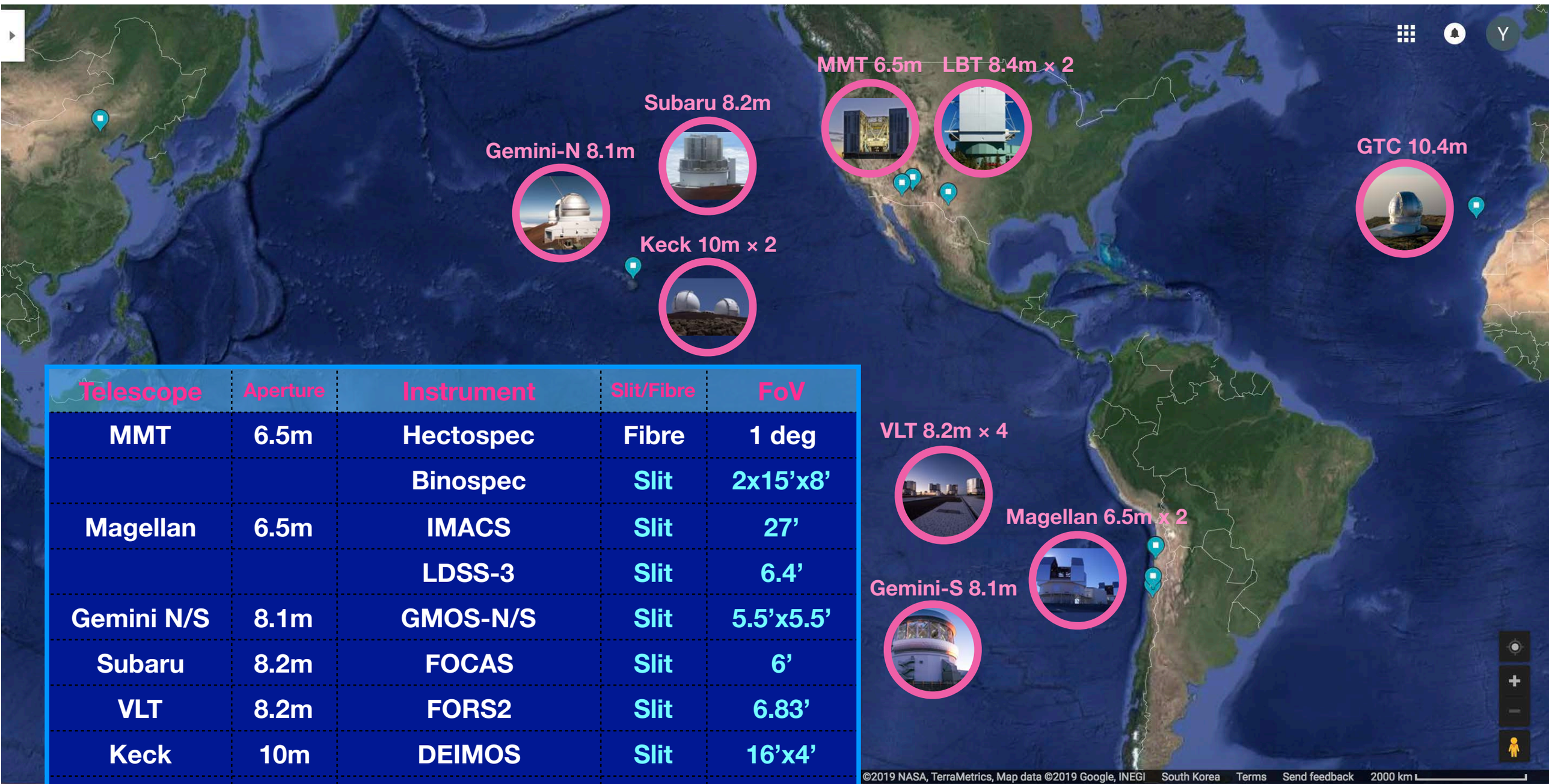
Telescope	Aperture	Instrument	Slit/Fibre	FoV
MMT	6.5m	Hectospec	Fibre	1 deg
		Binospec	Slit	2x15'x8'
Magellan	6.5m	IMACS	Slit	27'
		LDSS-3	Slit	6.4'
Gemini N/S	8.1m	GMOS-N/S	Slit	5.5'x5.5'
Subaru	8.2m	FOCAS	Slit	6'
VLT	8.2m	FORS2	Slit	6.83'
Keck	10m	DEIMOS	Slit	16'x4'
GTC	10.4m	OSIRIS	Slit	7.5'x6'
LBT	11.8m	MODS	Slit	6'

Multi-Object Spectrographs on Large Telescopes (> 6m)



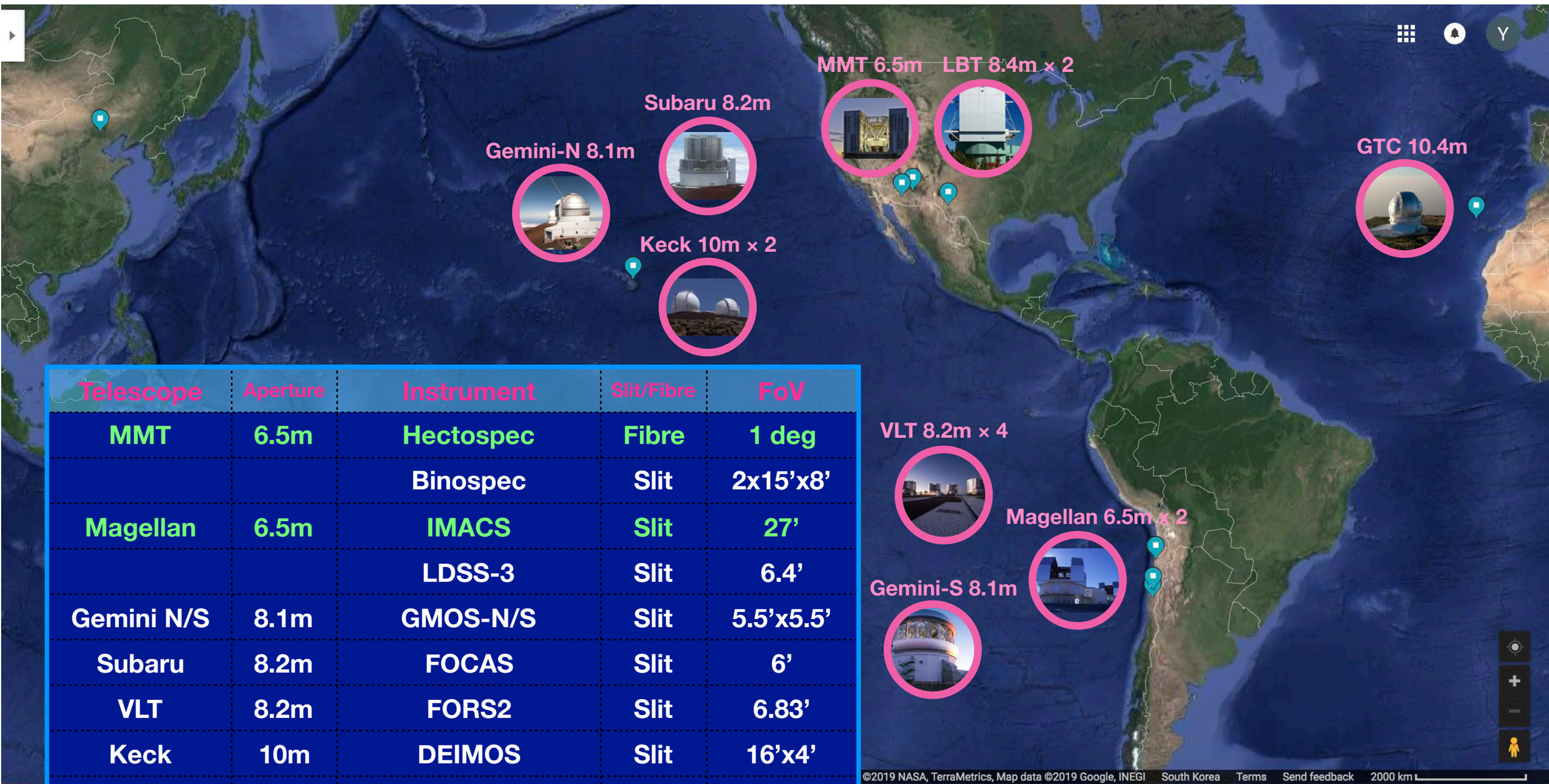
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Multi-Object Spectrographs on Large Telescopes (> 6m)



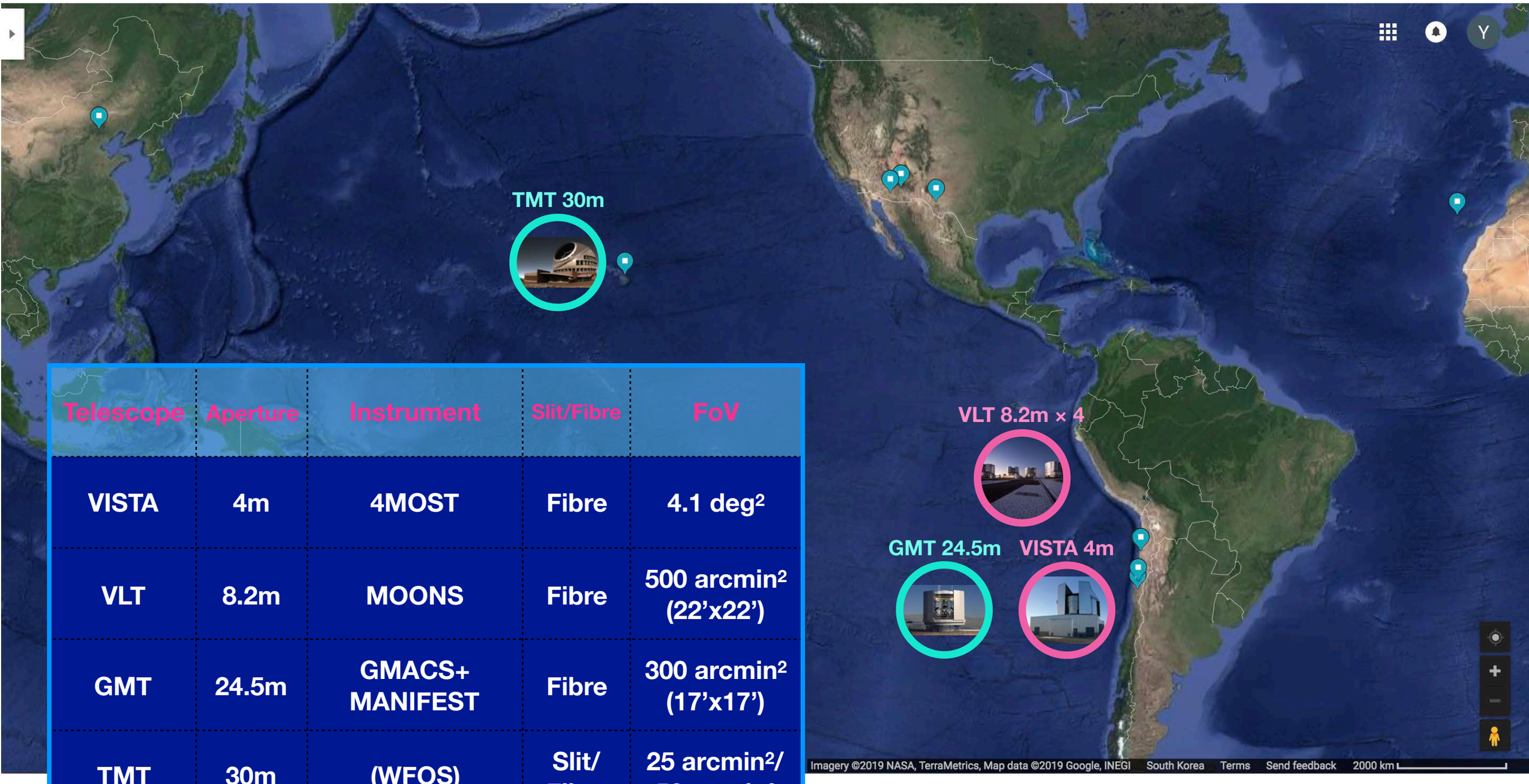
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Multi-Object Spectrographs on Large Telescopes (> 6m)



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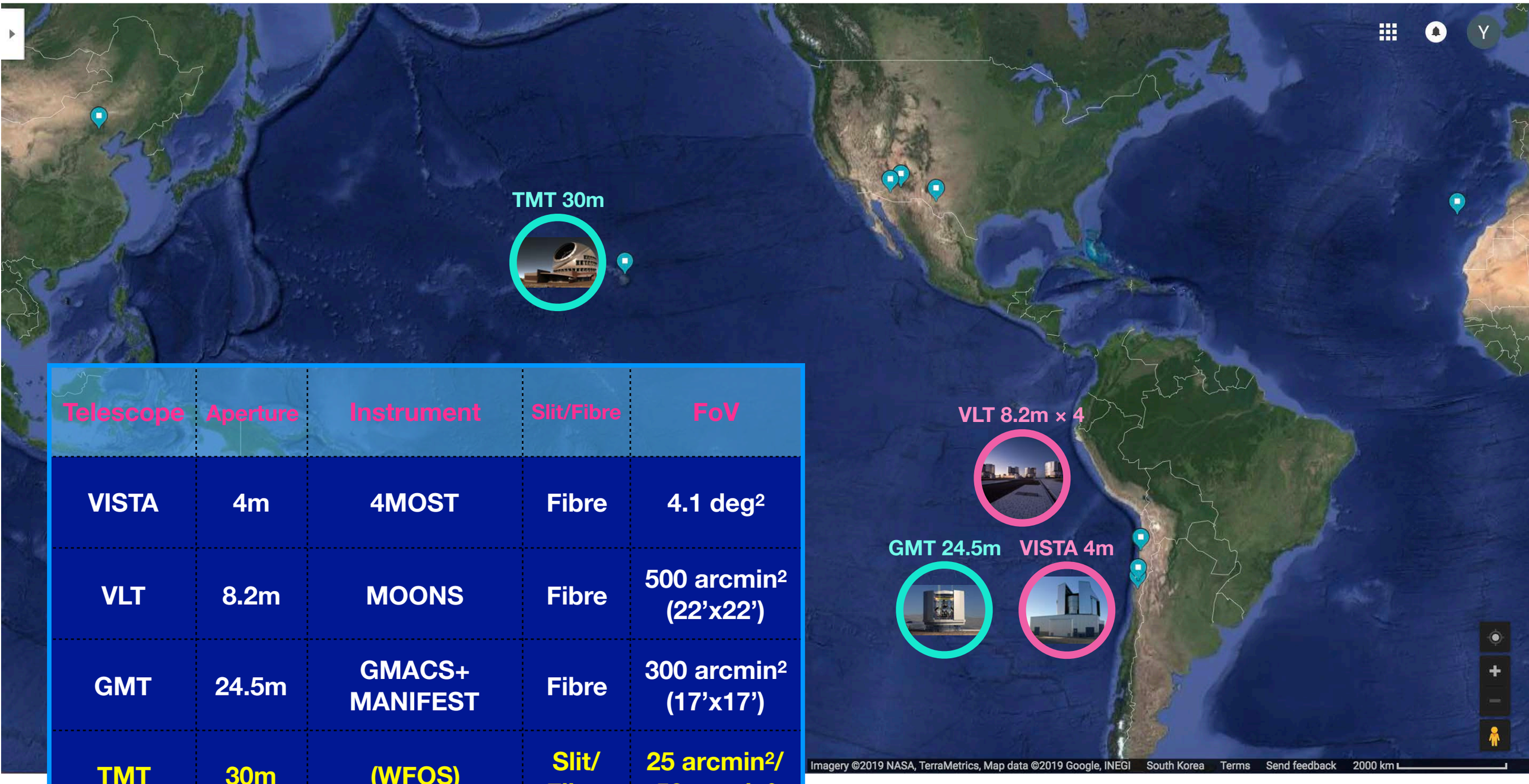
Multi-Object Spectrographs
under development



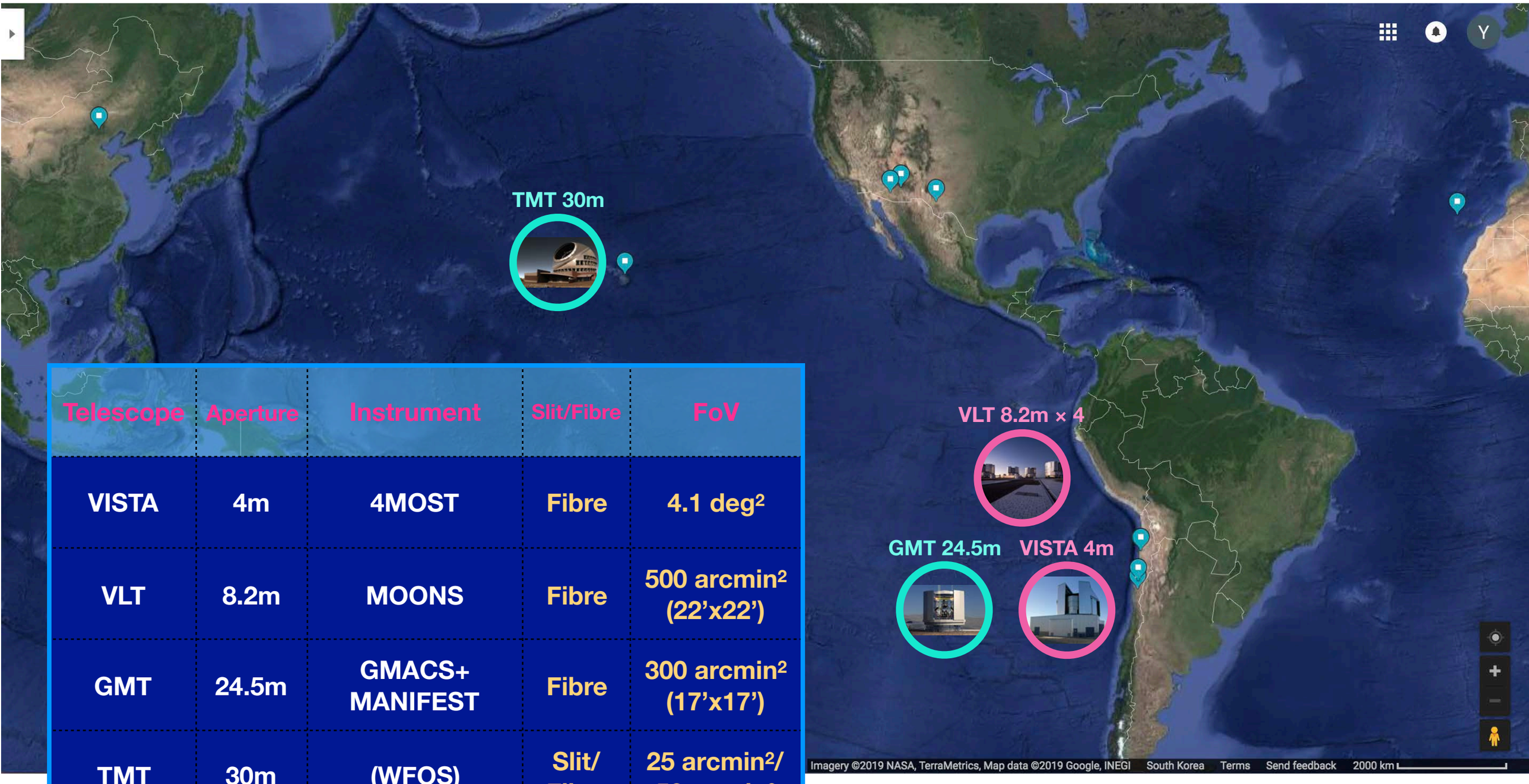
Telescope	Aperture	Instrument	Slit/Fibre	FoV
VISTA	4m	4MOST	Fibre	4.1 deg^2
VLT	8.2m	MOONS	Fibre	500 arcmin^2 (22'x22')
GMT	24.5m	GMACS+ MANIFEST	Fibre	300 arcmin^2 (17'x17')
TMT	30m	(WFOS)	Slit/ Fibre	25 arcmin^2/ 50arcmin^2

Multi-Object Spectrographs
under development

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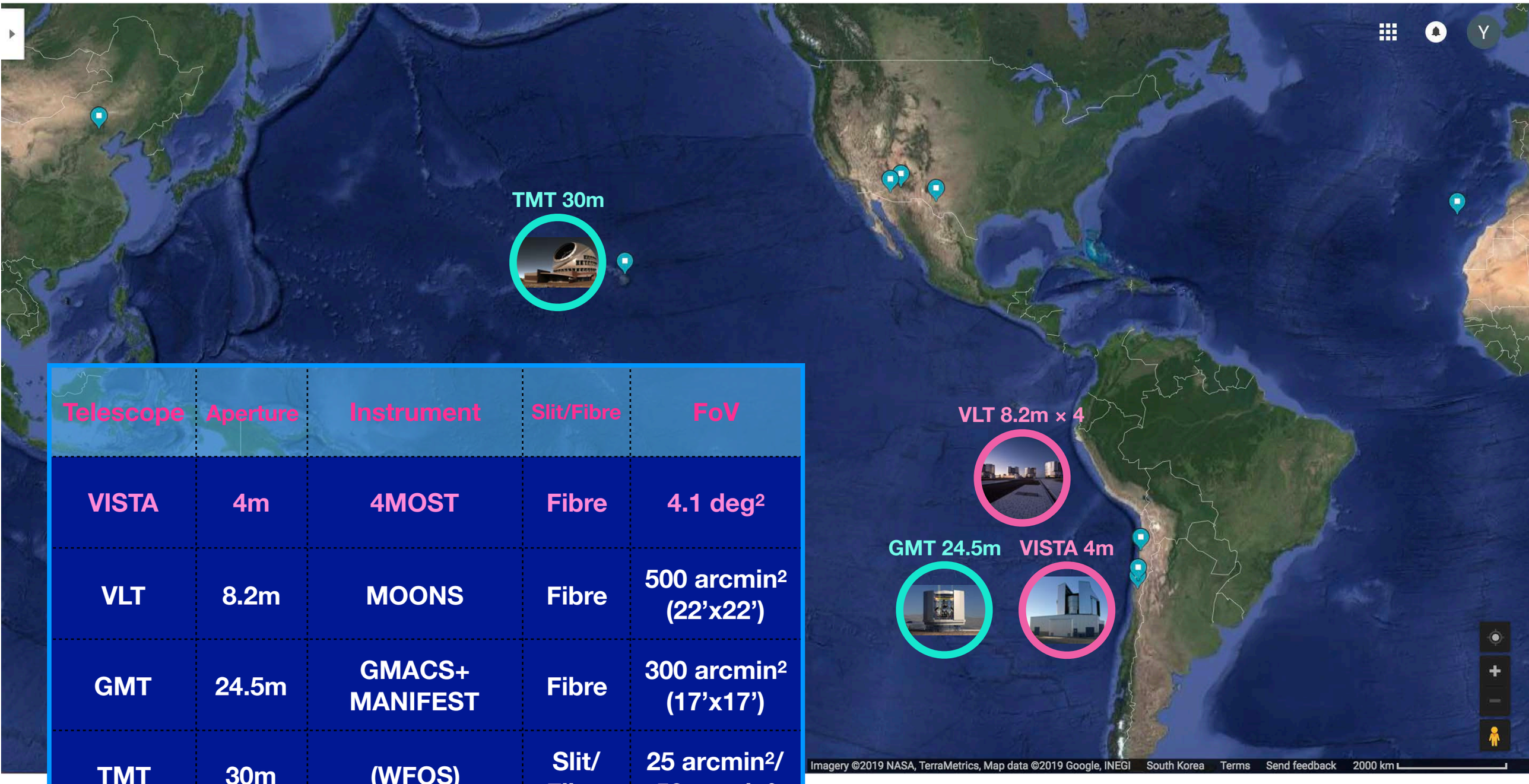


Multi-Object Spectrographs
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Multi-Object Spectrographs
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Future

> 6m

4m

❖ In terms of FoV,

- *4m:* balanced by 4MOST
- *> 6m:* vague
- *> 20m:* better in the South

LAMOST

VISTA

WIYN

MMT

Magellan

VLT

GMT

TMT

FoV (arcmin^2)

100000

10000

1000
(~30'x30')

100

10

1

0

5

10

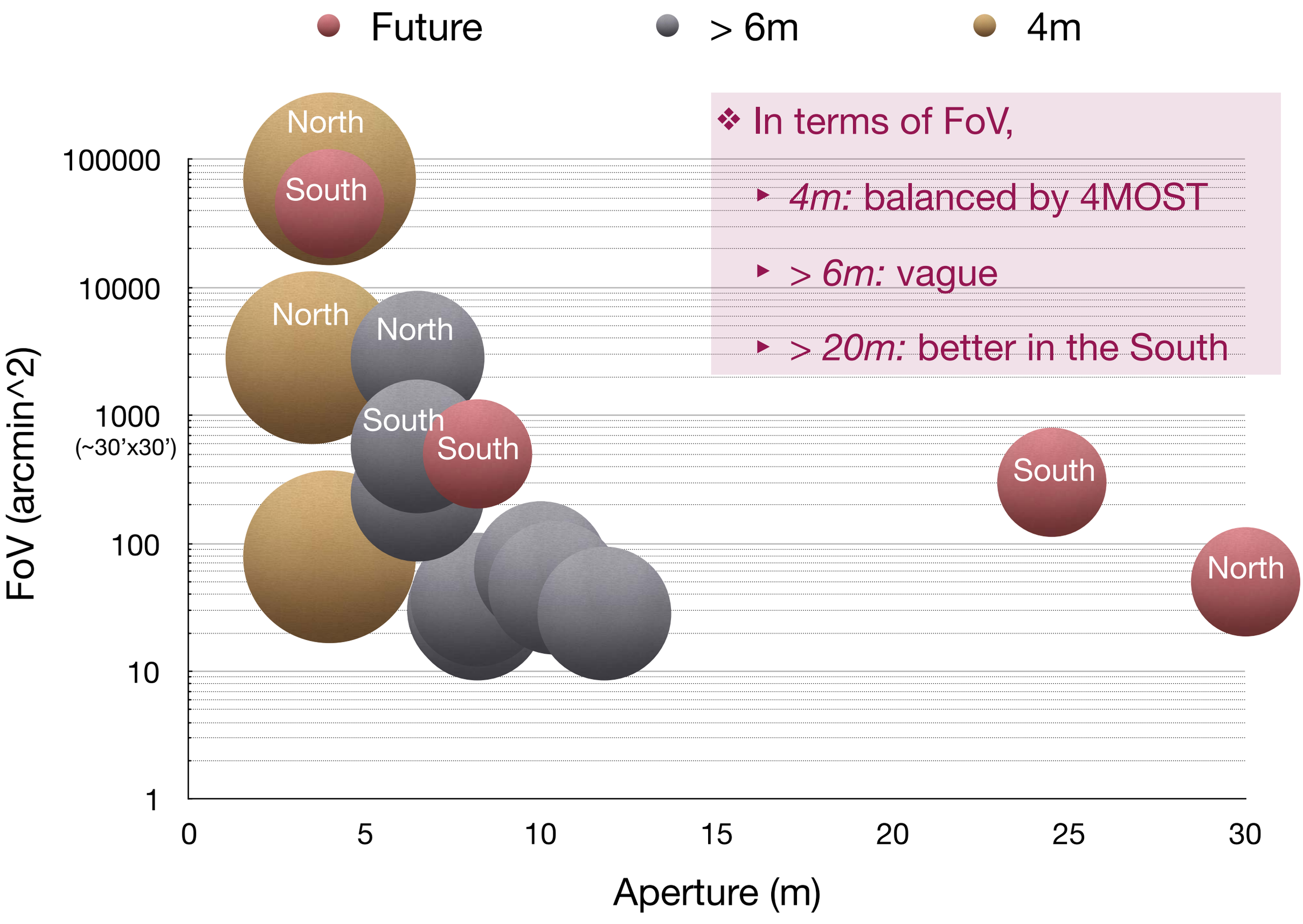
15

20

25

30

Aperture (m)



❖ In terms of FoV,

- *4m:* balanced by 4MOST
- *> 6m:* vague
- *> 20m:* better in the South