

Collaboration with Ground-based Telescopes

Science Topic/GB Capability	wide field	higher spatial res.	height in atmosphere	higher cadence	higher sensitivity	wavelengths	long time base
magnetic connectivity and dynamics							
footpoints		K-line spectroscopy, H α images,	10830, 8542 vector mag., Doppler			CO?	
sunspot fields	vector for extrapolation		10830, 8542 vector mag., Doppler			1.56 μ m vector, Mnl, molecular lines, OI triplet	field strength, temperature over solar cycle
large filaments	whole filaments		10830, 8542 vector mag., Doppler	chromospheric images, Doppler	He 1083 Hanle, H β		helicity with cycle
polar plumes, flux band			10830, 8542 vector mag., Doppler			1.56 μ m vector, Hanle?	
coronal holes	full-disk vector magnetogram		10830, 8542 vector mag., Doppler		?		coronal hole rotation
polar fields			10830, 8542 vector mag., Doppler		extreme magnetograms		solar cycle
CME starting point	full disk He10830, vector-magnetograms for extrapolation		10830, 8542 vector mag., Doppler				
flux emergence, cancellation							
small filaments			10830, 8542 vector mag., Doppler		photospheric magnetograms		
ephemeral regions		magnetograms, Doppler maps	10830, 8542 vector mag., Doppler		vector field with high accuracy	1.56 μ m, Mnl	statistics
intranetwork fields		magnetograms, mixed polarities?	8542 mag		all lines	1.56 μ m, Mnl, 2.2 μ m,	solar cycle variation
structure of temperature minimum						CO 4.8 μ m	

Operations

- Only issue are large telescopes in the US and the Canary Islands
- Smaller and synoptic telescopes are flexible enough
- May and October of every year will be preferred collaboration months
- Discussion between TACs to allocate observing time
- Advertisement of opportunities
- Best teams: Solar-B people + ground-based people + numerical modelers