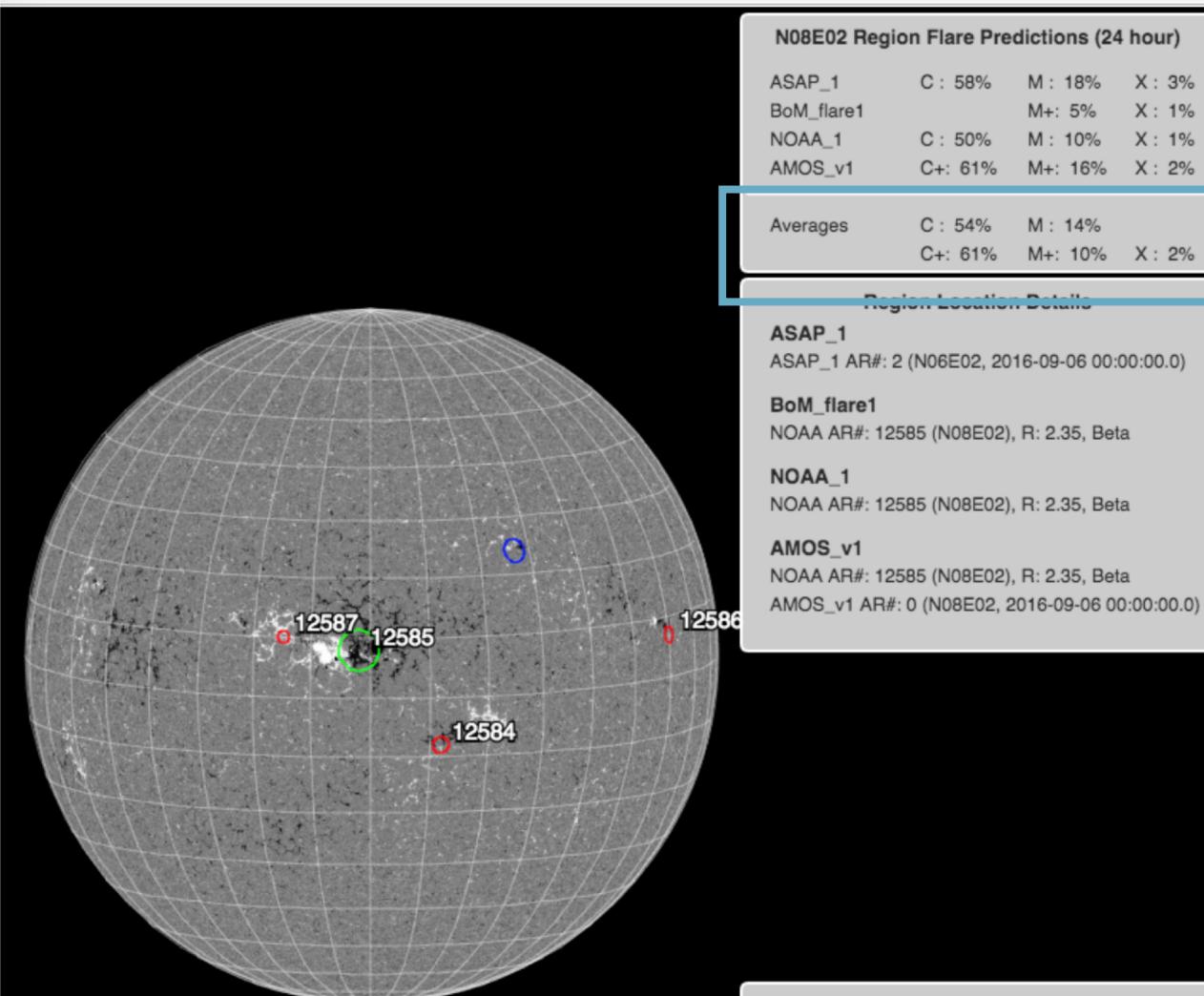


## Solar Flare Scoreboard



EC/HMI Quick Look Magnetogram: 2016-09-06\_000000

Legend:

- NOAA Active Regions (Red)
- Other Active Regions (Blue)

Region Location Details

Model	C	M	X
ASAP_1	58%	18%	3%
BoM_flare1		5%	1%
NOAA_1	50%	10%	1%
AMOS_v1	61%	16%	2%
Averages	54%	14%	
	61%	10%	2%

N08E02 Region Flare Predictions (24 hour)

Model	C	M	X
ASAP_1	58%	18%	3%
BoM_flare1		5%	1%
NOAA_1	50%	10%	1%
AMOS_v1	61%	16%	2%
Averages	54%	14%	
	61%	10%	2%

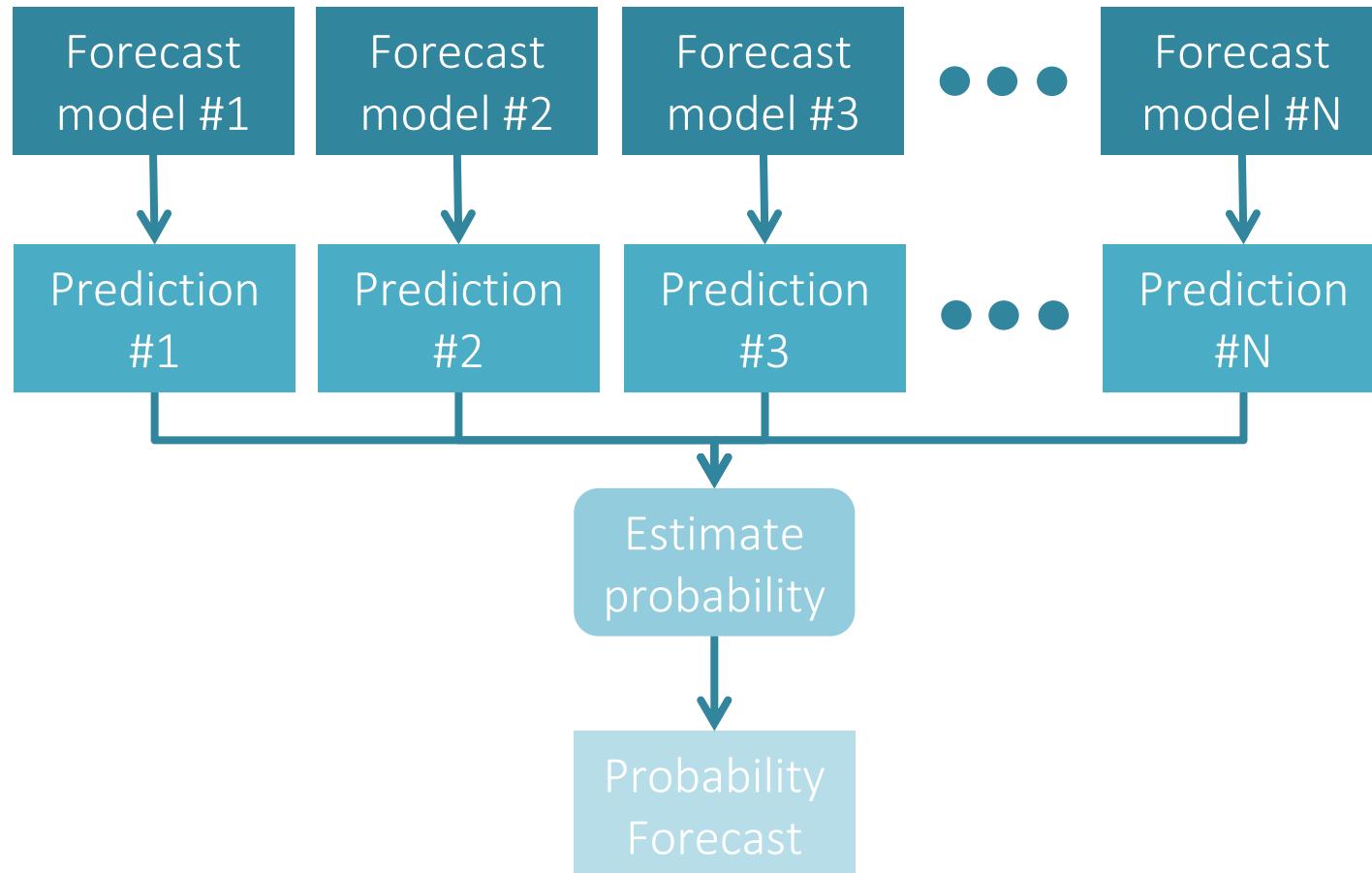
Full Disk Predictions (24 hour)

Model	C+	M+	X
UFCORIN_1	43%	0%	0%
MO_TOT1		5%	1%
ASSA_24H_1	81%	29%	6%
BoM_flare1		5%	1%
AMOS_v1	64%	17%	2%
NOAA_1		10%	1%
Averages	81%	15%	
	53%	7%	2%



NASA CCMC  
Flare Scoreboard

# Ensembles



Met Office



Trinity  
College  
Dublin

The University of Dublin

[www.SolarMonitor.org](http://www.SolarMonitor.org)



KOREAN SPACE  
WEATHER CENTER

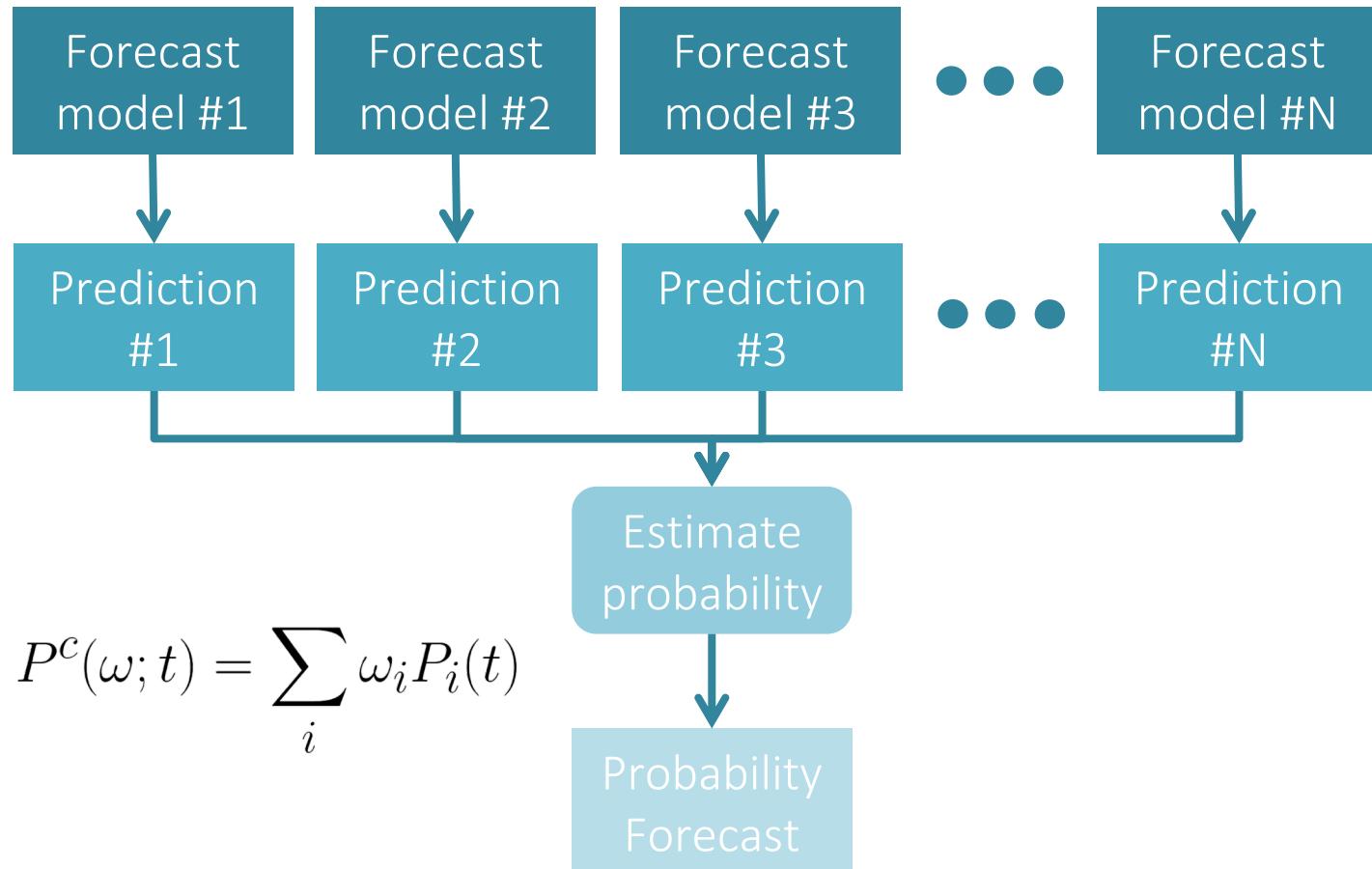


THE UNIVERSITY OF  
ALABAMA IN HUNTSVILLE



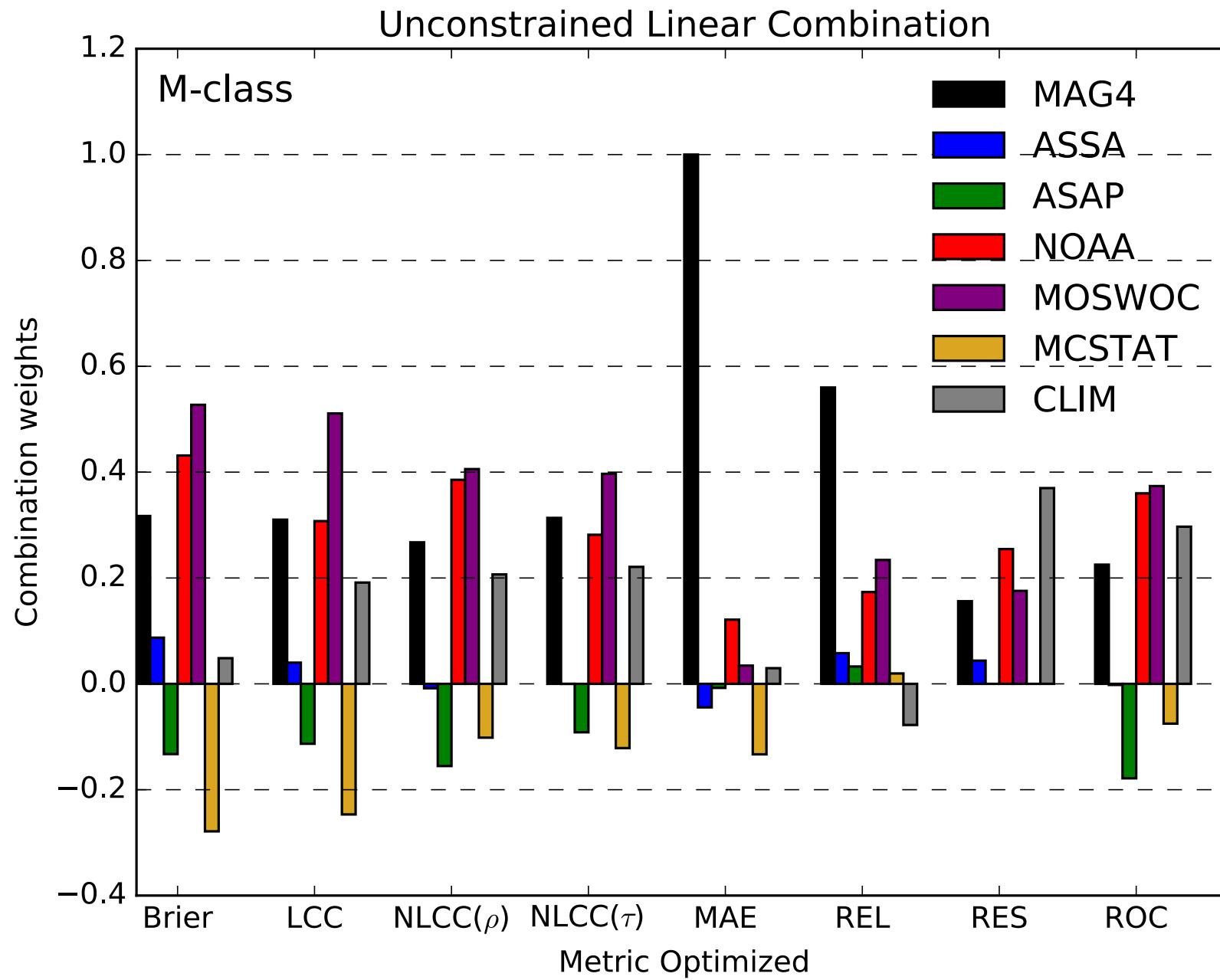
UNIVERSITY of  
BRADFORD

# Ensembles



Data set:  
2014 – 2016  
- 1096 days  
- 24 hour forecasts

Flares:  
- 348 M-class  
  - 189 days  
- 18 X-class  
  - 17 days



$$P^c(\omega; t) = \sum_i \omega_i P_i(t)$$

Weighted ensemble >  
average ensemble >  
machine

Brier score  
(unconstrained) is the  
top performing  
ensemble (averaged)

