

S2S Sub-seasonal to Seasonal prediction project

Météo-France contribution

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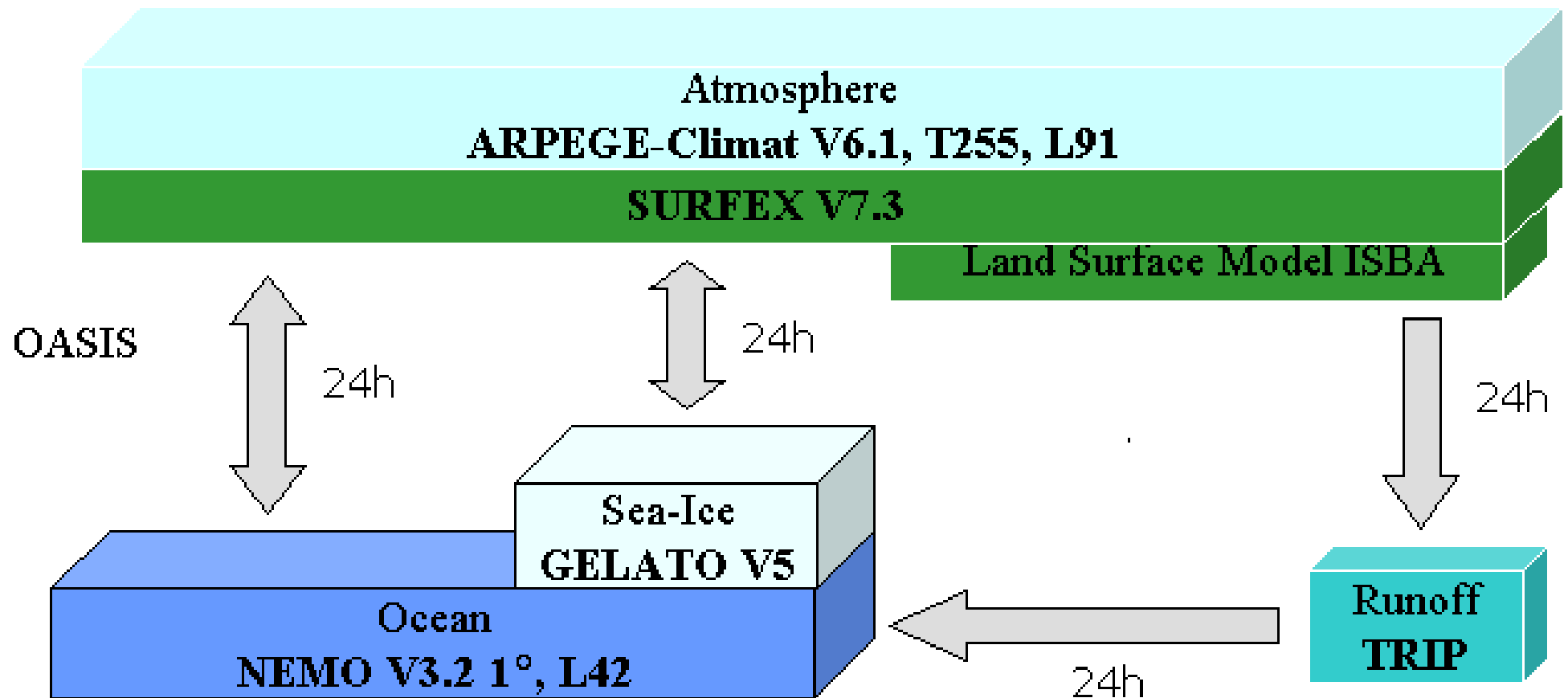
History and current status

- 2013 : MF solicited to contribute to the S2S project
Opportunity to explore the gap between NWP and Seasonal Prediction
- 2014 : test data set production
- Winter/spring 2015 : Model resolution upgrade and hindcast production
- May 2015 : First forecast production

To date : ready to go 'operational'
(currently in touch with Ioannis Mallas)

Meteo France S2S System

CNRM-CM (Voldoire et al., 2013)



Meteo France S2S System

	Hindcast	Forecast
Frequency/Length	Monthly / 1993-2014	Monthly
Ensemble size	15	51
Initial Conditions	Atm./surf : ERA-Interim Ocean/sea-ice: Mercator PSY2G2V3 reanalysis	Atm./surface: IFS analyses Ocean/sea-ice : Mercator upscaled PSY2G2V3 analyses
Status	Completed	Start : May. 2015

- Ensemble generation : stochastic dynamics (Batté and Déqué, 2012)

=> applying randomly drawn model error corrections to atmospheric model state fields

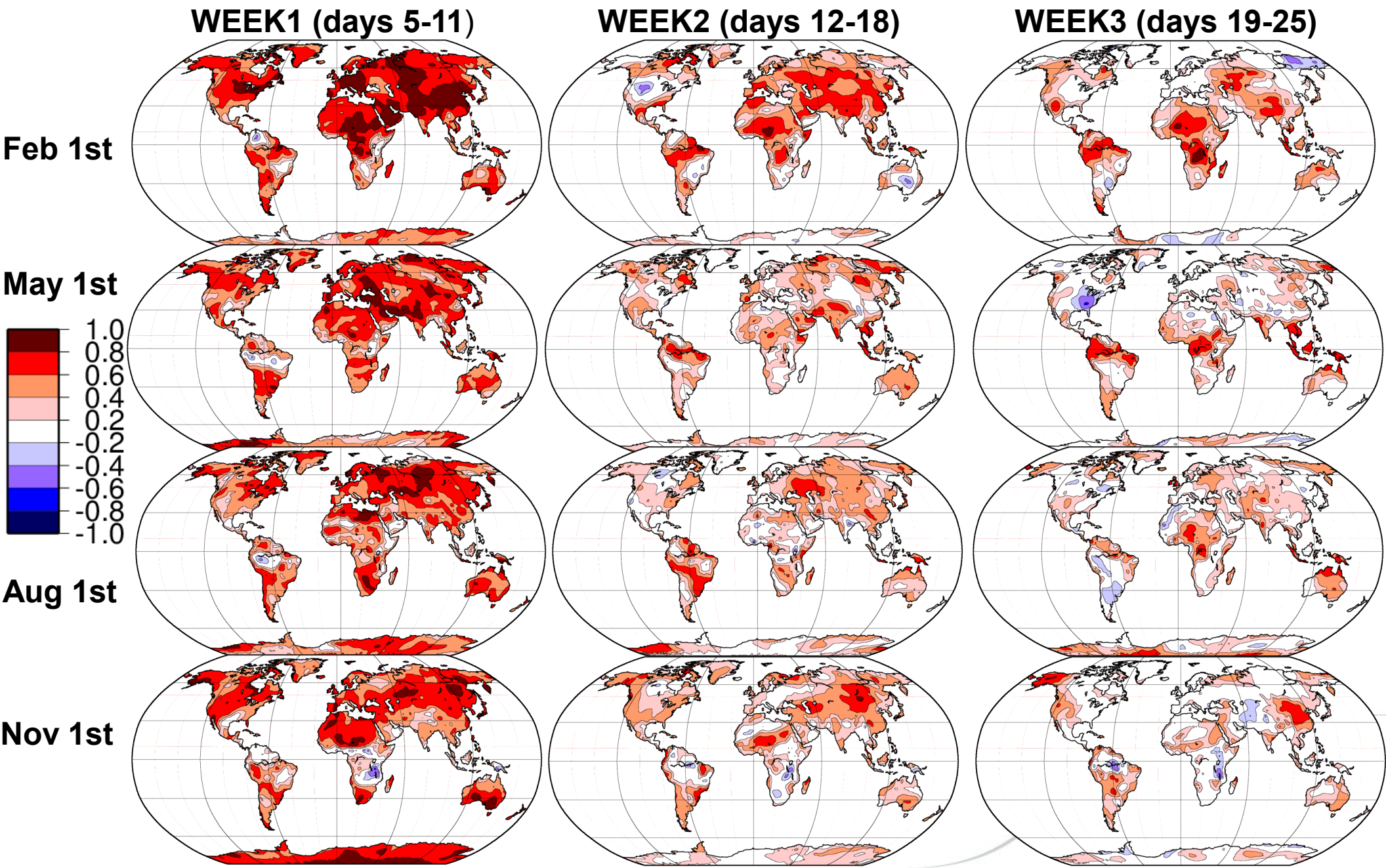
List of provided parameters

77 parameters out of 85

Missing parameters :

- CAPE
- Surface water runoff
- Soil Type
- Soil Moisture (20 and 100 cm)
- Soil Temperature (20 and 100 cm)
- Skin Temperature

Anomaly correlations 2m Temperature



Future plans

-Short term :

Move from monthly to bi-monthly frequency:

=> First monthly set : Day 1 of each calendar month

=> Second monthly set : Day 15 of each calendar month

Planned : end of third trimester 2015

-Longer term :

Initialization : land surface focus

Ensemble generation : test of other stochastic methods