## Supplement

5

The following Figures S1 and S2 show, for both case studies 1 and 2 and for all simulations carried out, the skin SST fields in the Domain D02 with time steps of 6 and 24 hours (for case study 1 and 2, respectively).

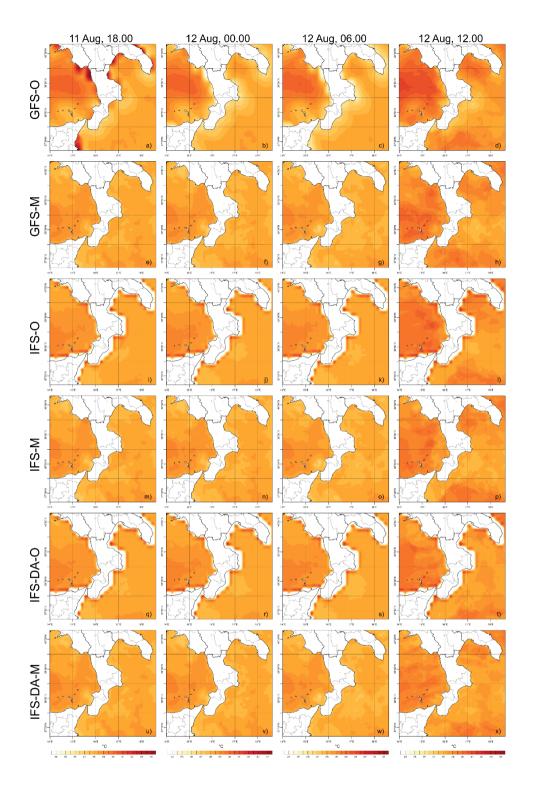


Fig. S1: Case study 1: maps of SSTSK (°C) in the domain D02, for the six simulations listed in Table 2, from 18 UTC 11 August 2015 to 18 UTC 12 August 2015, every 6 hours.

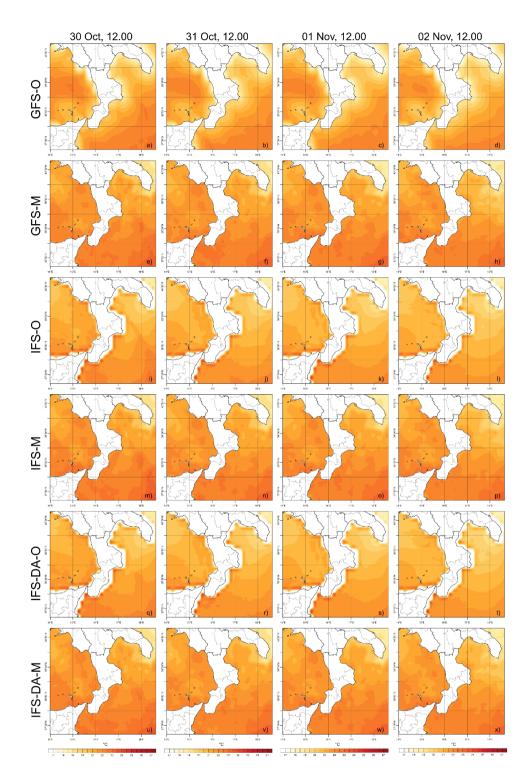


Fig. S2: Case study 2: maps of SSTSK (°C) in the domain D02, for the six simulations listed in Table 2, from 12 UTC 30 October 2015 to 12 UTC 02 November 2015, every 24 hours.