

Supplementary Material of A Case Study of the Possible Meteorological Causes of Unexpected Fire Behavior in the Pantanal Wetland, Brazil

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Table S1. Mean Error (ME) and the Root Mean Squared Error (RMSE) for the 2 m air temperature and relative humidity, and wind gusts at 10 m. The scores are calculated for the nearest point of each weather station considering EXP1 simulation.

Variable	Weather station	ME	RMSE
Air temperature	A717	1,72	2,96
	A719	-1,65	2,34
	A732	-1,38	2,5
Relative humidity	A717	-3,64	12,49
	A719	12,95	15,96
	A732	11,25	16,97
Wind gusts	A717	0,48	2,57
	A719	-1,18	3,2
	A732	-1,17	3,93

Table S2. Mean Error (ME) and the Root Mean Squared Error (RMSE) for the 2 m air temperature and relative humidity, and wind gusts at 10 m. The scores are calculated for the nearest point of each weather station considering EXP2 simulation.

Variable	Weather station	ME	RMSE
Air temperature	A717	3,71	4,01
	A719	1,22	2,01
	A732	0,45	1,8
Relative humidity	A717	-12,64	15,09
	A719	-3,34	9,69
	A732	-0,84	10,46
Wind gusts	A717	1,68	3,57
	A719	0,67	2,7
	A732	-0,33	3,74

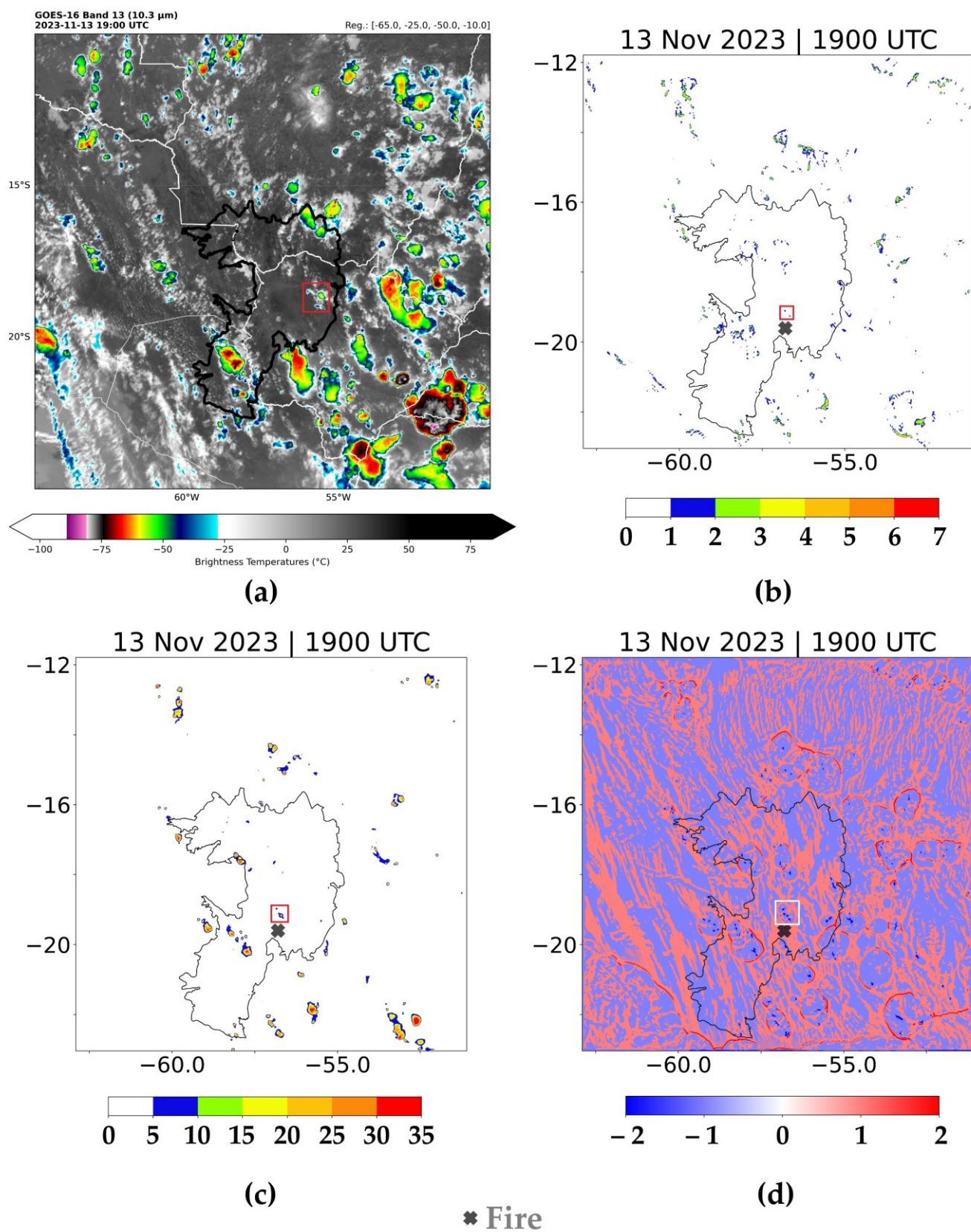


Figure S1. 13 November 2023, at 1900 UTC: **(a)** GOES-16 brightness temperature (unit: $^{\circ}\text{C}$) satellite image (Band 13 at $10.3\ \mu\text{m}$), a geostationary satellite disseminated by NOAA (National Oceanic & Atmospheric Administration); **(b)** Thickness of Cloud Water (unit: mm); **(c)** Thickness of frozen water (graupel + snow + ice; unit: mm); and **(d)** Vertical velocity at 1 km altitude (m.s^{-1}).