

SUPPLEMENTARY DATA

ESTIMATING WATER INFILTRATION RATE IN OXISOLS UNDER PASTURE AND AGRICULTURE MANAGEMENT IN THE BRAZILIAN SAVANNA WITH SUPPORT OF A DRONE-RGB ONBOARD SENSOR



Figure S1: Spatial distribution of the flight plans of the UAV Swinglet CAM shown on a 2016 satellite image obtained from the Google Earth platform.

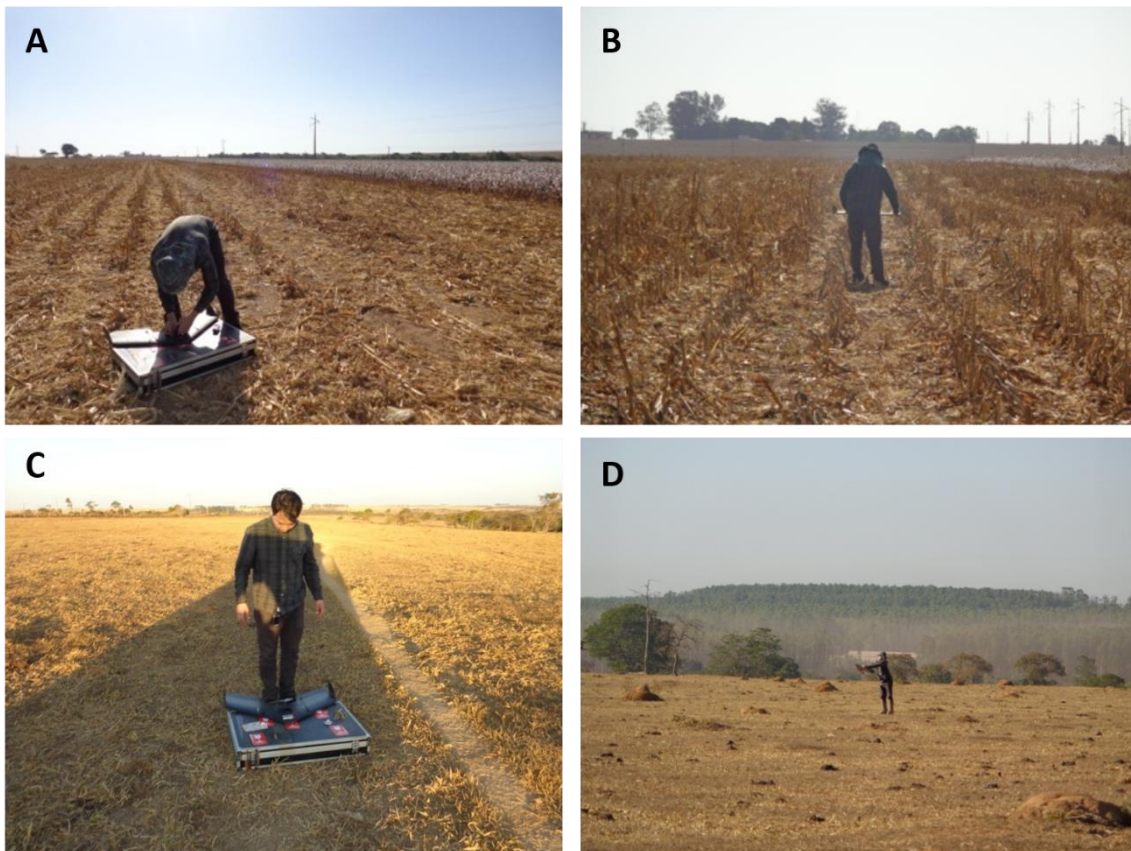


Figure S2: Flights with the UAV Swinglet CAM: (A and B) mechanized agriculture, and (C and D) extensive livestock ranching.

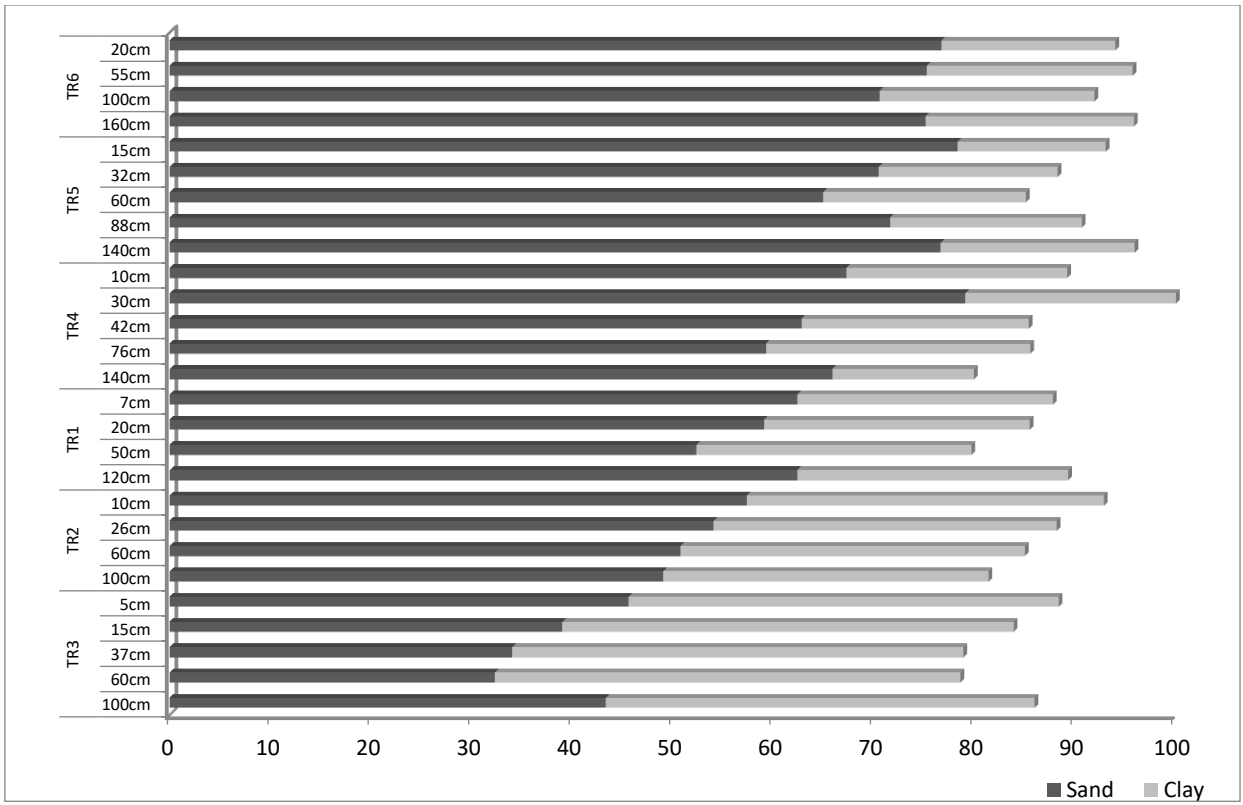


Figure S3: Relationship between sand and clay contents in the areas of mechanized agriculture and livestock.

Table S1: Soil texture for control points.

Agriculture Points	Sand %	Silt %	Clay %	Textural Class
<i>PA100: 00–20 cm</i>	77.7	21	1.3	<i>Sandy loam</i>
<i>PA100: 20–40 cm</i>	76.25	22.5	1.25	<i>Sandy loam</i>
<i>PA100: 40–60 cm</i>	73.24	25.47	1.27	<i>Sandy loam</i>
<i>PA200: 00–20 cm</i>	82.09	17.07	0.82	<i>Sandy loam</i>
<i>PA200: 20–40 cm</i>	80.14	18.65	1.2	<i>Sandy loam</i>
<i>PA200: 40–60 cm</i>	79.34	19.6	1	<i>Sandy loam</i>
<i>PA300: 00–20 cm</i>	79.85	18.6	1.55	<i>Sandy loam</i>
<i>PA300: 20–40 cm</i>	78.35	20.45	1.2	<i>Sandy loam</i>
<i>PA300: 40–60 cm</i>	73.75	24.95	1.3	<i>Sandy loam</i>
<i>PA400: 00–20 cm</i>	72.85	24.85	2.3	<i>Sandy loam</i>
<i>PA400: 20–40 cm</i>	69.92	27.15	2.92	<i>Loamy sand</i>
<i>PA400: 40–60 cm</i>	70.35	26.35	3.3	<i>Sandy loam</i>
Pasture Points	Sand %.	Silt %	Clay %	Textural Class
<i>P100: 00–20 cm</i>	77.68	20.38	1.95	<i>Sandy loam</i>
<i>P100: 20–40 cm</i>	72.5	25.45	2.05	<i>Sandy loam</i>
<i>P100: 40–60 cm</i>	88.95	8.4	2.65	<i>Sand</i>
<i>P200: 00–20 cm</i>	75.63	21.18	2.3	<i>Sandy loam</i>
<i>P200: 20–40 cm</i>	72.46	24.95	2.38	<i>Sandy loam</i>
<i>P200: 40–60cm</i>	70.2	27.75	2.05	<i>Sandy loam</i>
<i>P300: 00–20 cm</i>	74.75	23.1	2.15	<i>Sandy loam</i>
<i>P300: 20–40 cm</i>	67.15	29.95	2.9	<i>Loamy sand</i>
<i>P300: 40–60 cm</i>	66.35	30.75	2.9	<i>Loamy sand</i>
<i>P400: 00–20 cm</i>	77.51	18.18	2.3	<i>Sandy loam</i>
<i>P400: 20–40 cm</i>	71.45	25.75	2.8	<i>Sandy loam</i>
<i>P400: 40–60 cm</i>	66.74	28.9	3.03	<i>Loamy sand</i>
<i>P500: 00–20 cm</i>	68.35	28.75	2.9	<i>Loamy sand</i>
<i>P500: 20–40 cm</i>	64.43	32.6	2.98	<i>Loamy sand</i>
<i>P500: 40–60 cm</i>	62.75	32.45	2.15	<i>Loamy sand</i>
<i>P600: 00–20 cm</i>	46.26	53.65	4.58	<i>Silt loam</i>
<i>P600: 20–40 cm</i>	33.15	58.7	6.13	<i>Silt loam</i>
<i>P600: 40–60 cm</i>	32.29	62.33	5.4	<i>Silt loam</i>

Source: Field data collected.