

Data underlying the publication: **Effective integration of drone technology for mapping
and managing palm species in the Peruvian Amazon**

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Loreto Dataset (Training Data)

The study area (Fig. 1) is located in the Loreto region, in northeastern Peru. The area has a mean altitude of 280 m.a.s.l, characterized by a diverse topography that includes both alluvial and hilly terrain. There are a wide variety of forest types in this region including upland forest with clay-rich and white sand soils, seasonally flooded forests, pole forests and “aguajales”, the latter a palm swamp where the dominant species is *Mauritia flexuosa*, a palm tree that produces fruits highly consumed in the region due to their nutritious values. The region harvest and commercialize the different palm fruits such as *Mauritia flexuosa*, *Oenocarpus bataua* and *Euterpe precatoria*.



Fig. 1 Location of the Loreto region. Link in [Google maps](#)

A total of 55 sites across the Loreto region of northern Peruvian Amazonia were surveyed with RGB UAVs to train our model. Surveys were conducted in areas with *Mauritia flexuosa*, *Euterpe precatoria*, or *Oenocarpus bataua*. The focus was on seasonally flooded forests and palm swamps, with some sites including palm plantations to support model generalization. The selected sites represented varying palm densities and floristic compositions, including both protected natural areas and community-managed forests. Additionally, twenty sites included RAINFOR plots, providing palm GPS, DBH and height data, through the [ForestPlots.net](#) database.

The plantations surveyed aim to produce aguaje fruits from smaller palm trees (to harvest them easily, Fig.2). To study the aguaje plantations, aerial surveys were conducted, and ground measurements were collected, including DBH, total height, and crown diameter. One set of images was captured using a multispectral camera, the Parrot Sequoia, mounted on the DJI Phantom 4 Pro UAV. For more information about the plantations located in the Jenaro Herrera Research Station (CIJH) in Loreto region of Peru visit: <http://www.iiap.org.pe/web/ci-jenaro-herrera.aspx>.



Fig. 2. Picture of the aguaje (*Mauritia flexuosa*) plantation and its fruits

Flights using small commercial multi-rotors (DJI Phantom 4 Pro and DJI Phantom 4 RTK) were conducted from 2017 to 2019 over the 53 sites under varying sky conditions. The missions were conducted at various flying heights, ranging from 60 to 150 meters above ground level (AGL). The forward and side overlap ranged from 80 to 90% and the camera angle mostly at the nadir position (90°). The mission details can be found on Table 1 and mosaic details on Table 2.

Table 1. Mission details of the UAV flights conducted in the Loreto Region

Plot	Mission name	Aircraft	Flying Height ACL (m)	Sensor	No. Total Images	Acquisition Date	Cloud Cover	Wind Speed	Camera Angle
AGU-01	AGU-01	Phantom 4 Pro	180	RGB	319	18-10-2018	partially cloudy	calm	90
ALP-02	ALP-02_1	Phantom 4 Pro	90	RGB	82	18-7-2018	cloudy	calm	90
ALP-02	ALP-02_2	Phantom 4 Pro	65	RGB	98	18-7-2018	cloudy	calm	90
ALP-06	ALP-06_1	Phantom 4 Pro	90	RGB	43	12-9-2018	partially cloudy	calm	90
ALP-06	ALP-06_2	Phantom 4 Pro	60	RGB	70	12-9-2018	partially cloudy	calm	90
ALP-60	ALP-60_8	Phantom 4 Pro RTK	170	RGB	298	10-6-2019	partially cloudy	calm	90
ALP-60	ALP-60_9	Phantom 4 Pro RTK	170	RGB	299	10-6-2019	partially cloudy	calm	90
ALP-60	ALP-60_10	Phantom 4 Pro RTK	170	RGB	277	10-6-2019	partially cloudy	calm	90
ALP-60	ALP-60_11	Phantom 4 Pro RTK	170	RGB	257	10-6-2019	partially cloudy	calm	90
ALP-60	ALP-60_12	Phantom 4 Pro RTK	170	RGB	213	11-6-2019	partially cloudy	calm	90
ALP-60	ALP-60_13	Phantom 4 Pro RTK	170	RGB	285	11-6-2019	partially cloudy	calm	90
ALP-60	ALP-60_14	Phantom 4 Pro RTK	60	RGB	307	11-6-2019	partially cloudy	calm	45
ALP-60	ALP-60_21	Phantom 4 Pro RTK	170	RGB	284	12-6-2019	cloudy	moderate	90
ALP-60	ALP-60_22	Phantom 4 Pro RTK	170	RGB	117	12-6-2019	partially cloudy	moderate	90
AM_02	AM_02	Phantom 4 Pro RTK	170	RGB	371	8-7-2019	cloudy	calm	90
AMA-01	AMA-01	Phantom 4 Pro	150	RGB	96	24-2-2019			90
CHE-03	CHE-03_3	Phantom 4 Pro	77	RGB	38	13-3-2018	partially cloudy	moderate	90
CHE-04	CHE-04_1	Phantom 4 Pro	120-90	RGB	120	28-7-2018		moderate	90
CHE-04	CHE-04_2	Phantom 4 Pro	120-91	RGB	97	28-7-2018			90
CHE-04	CHE-04_3	Phantom 4 Pro	120-92	RGB	28	28-7-2018			90
CHE-05	CHE-05_1	Phantom 4 Pro	77	RGB	40	28-7-2018		moderate	90
CIE-01	CIE-01_1	Phantom 4 Pro	100	RGB	100	28-4-2018		moderate	90

CIJH_2018	CIJH_2018	Phantom 4 Pro	90	RGB	75	10-4-2018	clear sky	moderate	90
CIJH_VIV_1	CIJH_VIV_1	Phantom 4 Pro	90	RGB	142	21-10-2017		moderate	90
DMM-01	DMM-01_10	Phantom 4 Pro RTK	170	RGB	242	27-5-2019	partially cloudy	calm	90
DMM-02	DMM-02_1	Phantom 4 Pro RTK	90	RGB	126	28-5-2019	cloudy	calm	90
FDJH-01	FDJH-01_1	Phantom 4 Pro RTK	130	RGB	384	8/30/2019	clear sky	calm	90
FDJH-01	FDJH-01_2	Phantom 4 Pro RTK	130	RGB	428	8/30/2019	clear sky	calm	90
GAL-01	GAL-01_1	Phantom 4 Pro	150	RGB	74	21-4-2019			90
HUA-01	HUA-01_1	Phantom 4 Pro	100	RGB	92	28-4-2018		moderate	90
HUA-01	HUA-01_2	Phantom 4 Pro	100	RGB	93	28-4-2018		moderate	90
HUA-01	HUA-01_3	Phantom 4 Pro	100	RGB	95	28-4-2018		moderate	90
HUA-01	HUA-01_4	Phantom 4 Pro	100	RGB	65	28-4-2018		moderate	90
HUA-01	HUA-01_5	Phantom 4 Pro	100	RGB	37	28-4-2018		moderate	90
JEN-11	JEN_11_1	Phantom 4 Pro	90	RGB	54	27-8-2018	partially cloudy	moderate	90
JEN-11	JEN_11_2	Phantom 4 Pro	65	RGB	64	27-8-2018	partially cloudy	moderate	90
JEN-11	JEN_11_3	Phantom 4 Pro	65	RGB	30	27-8-2018	partially cloudy	calm	90
JEN-11	JEN_11_4	Phantom 4 Pro	80	RGB	69	27-8-2018	partially cloudy	moderate	85
JEN-11	JEN_11_5	Phantom 4 Pro	80	RGB	72	27-8-2018	partially cloudy	moderate	85
JEN-12	JEN-12_1	Phantom 4 Pro	90	RGB	50	27-8-2018	clear sky	moderate	90
JEN-12	JEN-12_2	Phantom 4 Pro	65	RGB	121	27-8-2018	clear sky	moderate	90
JEN-14	JEN-14_4	Phantom 4 Pro	90	RGB	25	23-8-2018	partially cloudy	calm	90
JEN-14	JEN-14_5	Phantom 4 Pro	60	RGB	32	23-8-2018	partially cloudy	calm	90
JEN-14	JEN-14_6	Phantom 4 Pro	65	RGB	47	23-8-2018	partially cloudy	calm	30
JEN-14	JEN-14_7	Phantom 4 Pro	65	RGB	53	23-8-2018	partially cloudy	calm	30
JEN-14	JEN-14_30	Phantom 4 Pro RTK	170	RGB	132	20-5-2019		moderate	90

JEN-15	JEN-15_1	Phantom 4 Pro	90	RGB	43	1-11-2017	clear sky	calm	90
JEN-15	JEN-15_4	Phantom 4 Pro	65	RGB	32	24-8-2018	clear sky	calm	90
JEN-15	JEN-15_10	Phantom 4 Pro RTK	60	RGB	236	20-6-2019	partially cloudy	moderate	45
JEN-15	JEN-15_11	Phantom 4 Pro RTK	60	RGB	126	20-6-2019	partially cloudy	moderate	45
JEN-18	JEN-18_1	Phantom 4 Pro	90	RGB	81	18-10-2017	cloudy	calm	90
JEN-18	JEN-18_5	Phantom 4 Pro	90	RGB	51	24-8-2018	cloudy	calm	90
JHU-01	JHU-01_09	Phantom 4 Pro	65-35	RGB	248	7-9-2019		calm	90
JHU-01	JHU-01_10	Phantom 4 Pro	65-36	RGB	121	7-9-2019		calm	90
JHU-01	JHU-01_9	Phantom 4 Pro	65-35	RGB	248	7-9-2019		calm	90
JHU-01	JHU-01_10	Phantom 4 Pro	65-35	RGB	121	7-9-2019		calm	90
JHU-01	JHU-01_11	Phantom 4 Pro	65-35	RGB	305	7-9-2019		calm	90
JHU-01	JHU-01_12	Phantom 4 Pro	65-35	RGB	240	7-9-2019		calm	90
JHU-02	JHU-02_11	Phantom 4 Pro	80-60	RGB	57	7-9-2019		calm	90
JHU-02	JHU-02_12	Phantom 4 Pro	80-60	RGB	31	7-9-2019		calm	90
JHU-02	JHU-02_13	Phantom 4 Pro	80-60	RGB	47	7-9-2019		calm	90
JHU-02	JHU-02_18	Phantom 4 Pro RTK	100	RGB	308	20/17/2019		moderate	90
JHU-02	JHU-02_19	Phantom 4 Pro RTK	100	RGB	160	20/17/2019		moderate	90
KIN-01	KIN-01	Phantom 4 Pro	170	RGB	40	3-3-2019	clear sky	moderate	90
MIL-01	MIL-01_1	Phantom 4 Pro	66	RGB	30	13-4-2019	partially cloudy		90
MSH-01	MSH-01_1	Phantom 4 Pro	170	RGB	42	13-6-2019	partially cloudy	moderate	90
NAR-01	NAR-01_1	Phantom 4 Pro RTK	110	RGB	207	5-7-2019	cloudy	calm	90
NAR-01	NAR-01_2	Phantom 4 Pro RTK	170	RGB	365	5-7-2019	partially cloudy	calm	90
NAR-01	NAR-01_3	Phantom 4 Pro RTK	170	RGB	366	5-7-2019	partially cloudy	calm	90

NAR-01	NAR-01_4	Phantom 4 Pro RTK	170	RGB	373	5-7-2019	partially cloudy	calm	90
NAR-01	NAR-01_5	Phantom 4 Pro RTK	170	RGB	363	5-7-2019	partially cloudy	calm	90
NJN-01	NJN-01_4	Phantom 4 Pro	70	RGB	217	6-9-2019		moderate	90
NJN-01	NJN-01_5	Phantom 4 Pro	70	RGB	208	6-9-2019		moderate	90
NJN-01	NJN-01_6	Phantom 4 Pro	70	RGB	213	6-9-2019		moderate	90
NYO-00	NYO-00_1	Phantom 4 Pro RTK	100	RGB	26	3-7-2019	partially cloudy	moderate	90
NYO-03	NYO-03_1	Phantom 4 Pro RTK	90-60	RGB	295	4-7-2019	partially cloudy	calm	90-45
NYO-03	NYO-03_2	Phantom 4 Pro RTK	90-60	RGB	313	4-7-2019	partially cloudy	calm	90-45
NYO-03	NYO-03_3	Phantom 4 Pro RTK	90-60	RGB	278	4-7-2019	partially cloudy	calm	90-45
NYO-03	NYO-03_4	Phantom 4 Pro RTK	90-60	RGB	66	4-7-2019	partially cloudy	calm	90-45
PISC-01	PISC-01_5	Phantom 4 Pro	90-60	RGB	273	18-11-2019		moderate	90-45
PISC-02	PISC-02_5	Phantom 4 Pro	65	RGB	93	21-7-2018	cloudy	calm	90
PISC-02	PISC-02_6	Phantom 4 Pro	40	RGB	440	21-7-2018	cloudy	calm	90
PISC-02	PISC-02_9	Phantom 4 Pro	100	RGB	263	18-11-2019		moderate	90
PIU-00	PIU-00_1	Phantom 4 Pro RTK	170	RGB	322	2-7-2019	partially cloudy	moderate	90
PIU-00	PIU-00_2	Phantom 4 Pro RTK	170	RGB	164	2-7-2019	partially cloudy	moderate	90
PIU-00	PIU-00_3	Phantom 4 Pro RTK	170	RGB	158	2-7-2019	partially cloudy	moderate	90
PIU-00	PIU-00_4	Phantom 4 Pro RTK	170	RGB	49	2-7-2019	partially cloudy	moderate	90
PIU-00	PIU-00_5	Phantom 4 Pro RTK	170	RGB	190	2-7-2019	partially cloudy	moderate	90
PIU-02	PIU-02_3	Phantom 4 Pro	90	RGB	32	9-9-2018	clear sky	calm	90
PIU-02	PIU-02_4	Phantom 4 Pro	65	RGB	64	9-9-2018	partially cloudy	calm	90
PIU-02	PIU-02_13	Phantom 4 Pro RTK	170	RGB	337	1-7-2019	partially cloudy	calm	90
PIU-03	PIU-03_1	Phantom 4 Pro RTK	170	RGB	338	2-7-2019	cloudy	calm	90
PIU-03	PIU-03_5	Phantom 4 Pro RTK	170	RGB	108	2-7-2019	partially cloudy	calm	90
POL-01	POL-01_1	Phantom 4 Pro	170	RGB	57	20-4-2019	partially cloudy	moderate	90

PRN-01	PRN-01_3	Phantom 4 Pro	90	RGB	86	17-8-2018	partially cloudy	moderate	90
PRN-01	PRN-01_11	Phantom 4 Pro RTK	170	RGB	378	28-6-2019	partially cloudy	moderate	90
PRN-01	PRN-01_12	Phantom 4 Pro RTK	170	RGB	335	28-6-2019	partially cloudy	moderate	90
PRN-01	PRN-01_13	Phantom 4 Pro RTK	170	RGB	351	28-6-2019	partially cloudy	moderate	90
QUI-01	QUI-01_5	Phantom 4 Pro	65	RGB	127	18-7-2018	partially cloudy	calm	90
QUI-01	QUI-01_14	Phantom 4 Pro RTK	90-60	RGB	283	11-7-2019	partially cloudy	moderate	90-45
SAM-01	SAM-01_00all	Phantom 4 Pro	90-60	RGB	91	18-11-2017		moderate	90
SAM-01	SAM-01_4	Phantom 4 Pro	90	RGB	35	16-8-2018	partially cloudy	calm	90
SAM-01	SAM-01_13	Phantom 4 Pro RTK	170	RGB	151	5-6-2019	partially cloudy	moderate	90
SJO-00	SJO-00_1	Phantom 4 Pro RTK	100	RGB	150	30-5-2019	clear sky	calm	90
SJO-00	SJO-00_2	Phantom 4 Pro RTK	100	RGB	114	30-5-2019	partially cloudy	calm	90
SJO-01	SJO-01_1	Phantom 4 Pro RTK	60	RGB	272	31-5-2019	partially cloudy	moderate	45
SJO-01	SJO-01_2	Phantom 4 Pro RTK	60	RGB	147	31-5-2019	partially cloudy	moderate	45
SJO-01	SJO-01_3	Phantom 4 Pro RTK	60	RGB	8	31-5-2019	partially cloudy	calm	45
SJR-01	SJR-01_1	Phantom 4 Pro	170	RGB	93	12-6-2019	partially cloudy	moderate	90
SJR-01	SJR-01_6	Phantom 4 Pro	45	RGB	77	13-6-2019	partially cloudy	moderate	90
SNB-01	SNB-01	Phantom 4 Pro	150	RGB	14	9-2-2019	partially cloudy	moderate	90
VAP-01	VAP-01_1	Phantom 4 Pro RTK	120	RGB	298	17-7-2019	cloudy	calm	90
VAP-01	VAP-01_2	Phantom 4 Pro RTK	120	RGB	281	17-7-2019	cloudy	calm	90
VAP-02	VAP-02_1	Phantom 4 Pro RTK	170	RGB	305	17-7-2019	partially cloudy	calm	90
VAP-03	VAP-03_1	Phantom 4 Pro RTK	90-60	RGB	261	17-7-2019	cloudy	calm	90-45
VAP-03	VAP-03_2	Phantom 4 Pro RTK	90-60	RGB	321	17-7-2019	cloudy	calm	90-45
VAP-03	VAP-03_3	Phantom 4 Pro RTK	90-60	RGB	270	17-7-2019	cloudy	calm	90-45
VAP-03	VAP-03_4	Phantom 4 Pro RTK	90-60	RGB	123	17-7-2019	cloudy	calm	90-45
VEN-00	VEN-00_1	Phantom 4 Pro RTK	60	RGB	134	20-7-2019	clear sky	moderate	90
VEN-00	VEN-00_2	Phantom 4 Pro RTK	60	RGB	75	20-7-2019	clear sky	moderate	90
VEN-00	VEN-00_3	Phantom 4 Pro RTK	100	RGB	54	20-7-2019	partially cloudy	calm	90

VEN-01	VEN-01_3	Phantom 4 Pro	90	RGB	40	1-9-2018	partially cloudy	calm	90
VEN-01	VEN-01_4	Phantom 4 Pro	65	RGB	92	1-9-2018	partially cloudy	calm	90
VEN-01	VEN-01_9	Phantom 4 Pro RTK	90-60	RGB	294	22-7-2019	partially cloudy	calm	90-45
VEN-01	VEN-01_10	Phantom 4 Pro RTK	90-60	RGB	302	22-7-2019	partially cloudy	moderate	90-45
VEN-01	VEN-01_11	Phantom 4 Pro RTK	90-60	RGB	257	22-7-2019	partially cloudy	moderate	90-45
VEN-02	VEN-02_8	Phantom 4 Pro RTK	90-60	RGB	297	22-7-2019	partially cloudy	calm	90-45
VEN-02	VEN-02_9	Phantom 4 Pro RTK	90-60	RGB	282	22-7-2019	partially cloudy	calm	90-45
VEN-02	VEN-02_10	Phantom 4 Pro RTK	90-60	RGB	269	22-7-2019	clear sky	calm	90-45
VEN-03	VEN-03_4	Phantom 4 Pro	90	RGB	44	2-8-2018	partially cloudy	calm	90
VEN-03	VEN-03_9	Phantom 4 Pro RTK	90-60	RGB	264	19-7-2019	cloudy	calm	90-45
VEN-03	VEN-03_10	Phantom 4 Pro RTK	90-60	RGB	282	19-7-2019	cloudy	calm	90-45
VEN-03	VEN-03_11	Phantom 4 Pro RTK	90-60	RGB	309	19-7-2019	partially cloudy	calm	90-45
VEN-04	VEN-04_4	Phantom 4 Pro	90	RGB	46	1-8-2018	partially cloudy	moderate	90
VEN-04	VEN-04_6	Phantom 4 Pro RTK	90-60	RGB	281	18-7-2019	cloudy	moderate	90-45
VEN-04	VEN-04_7	Phantom 4 Pro RTK	90-60	RGB	309	18-7-2019	cloudy	moderate	90-45
VEN-04	VEN-04_8	Phantom 4 Pro RTK	90-60	RGB	253	18-7-2019	cloudy	moderate	90-45
VEN-05	VEN-05_7	Phantom 4 Pro	90	RGB	56	1-8-2018	cloudy	moderate	90
VEN-05	VEN-05_8	Phantom 4 Pro RTK	90-60	RGB	248	16-7-2019	cloudy	moderate	90-45
VEN-05	VEN-05_9	Phantom 4 Pro RTK	90-60	RGB	294	16-7-2019	partially cloudy	calm	90-45
VEN-05	VEN-05_10	Phantom 4 Pro RTK	90-60	RGB	312	16-7-2019	partially cloudy	calm	90-45

Table 2. Details of the generated mosaics

Mosaic name	No. Total Images	Area Total Mosaic (ha)	Area Training (ha)	Spatial Resolution (m)
AGU-01.tif	319	93,8	71,5	0,05
ALP-02_1_2.tif	180	2,5	1,7	0,02
ALP-06_1_2.tif	113	0,9	0,5	0,01
ALP-60_08_9_10_11_12_13_14_21_22.tif	2337	2,4	0,5	0,04
AM_02.tif	371	19,8	5,3	0,05
AMA-01.tif	96	9,1	1,6	0,04
CHE-03_3.tif	38	1,9	1,5	0,04
CHE-04_1_2_3.tif	245	21,2	10,0	0,03
CHE-05_1.tif	40	7,3	0,8	0,03
CIE-01_1.tif	100	25,7	3,7	0,03
CIJH_2018.tif	75	3,3	1,8	0,02
CIJH_VIV_1.tif	142	5,0	2,4	0,02
DMM-01_10.tif	242	16,2	0,5	0,05
DMM-02_1.tif	126	1,8	0,5	0,02
FDJH-01_1_2.tif	812	24,3	8,7	0,03
GAL-01_1.tif	74	19,8	1,8	0,05
HUA-01_1_2_3_4_5.tif	382	24,7	7,3	0,03
JEN-11_1_2_3_4_5.tif	289	2,0	0,5	0,02
JEN-12_1_2.tif	171	1,7	0,6	0,02
JEN-14_04_5_6_7.tif	157	1,0	0,6	0,04
JEN-14_30.tif	132	15,6	1,0	0,04
JEN-15_01_Tr.tif	43	1,2	1,1	0,02
JEN-15_04.tif	32	0,6	0,4	0,02
JEN-15_10_11.tif	362	3,7	0,4	0,03
JEN-18_1.tif	81	1,1	0,3	0,02
JEN-18_5.tif	51	1,6	0,3	0,02
JHU-01_09_10.tif	369	3,8	2,8	0,01
JHU-01_9_10_11_12.tif	914	27,3	14,5	0,03
JHU-02_111213CP.tif	135	2,6	1,0	0,02
JHU-02_18_19.tif	468	15,0	8,1	0,03
KIN-01.tif	40	10,6	5,1	0,05
MIL-01_1.tif	30	1,9	1,0	0,02
MSH-01_1.tif	42	4,5	2,9	0,04
NAR-01_1_2_3_4_5.tif	1674	0,9	0,5	0,05
NJN-01_4_5.tif	425	4,5	0,6	0,02
NJN-01_6.tif	213	3,3	0,6	0,02
NYO-00_1.tif	26	1,2	0,7	0,05
NYO-03_1_2_3_4.tif	952	1,7	0,6	0,03

PISC-01_5.tif	273	6,4	0,6	0,03
PISC-02_5_6.tif	533	1,5	0,5	0,01
PISC-02_9.tif	263	9,5	4,3	0,03
PIU-00_1_2_3_4_5.tif	883	0,6	0,5	0,60
PIU-02_03_04.tif	96	0,9	0,6	0,01
PIU-02_13.tif	337	0,9	0,6	0,05
PIU-03_1_5.tif	446	0,9	0,8	0,05
POL-01_1.tif	57	15,0	4,7	0,05
PRN-01_03.tif	86	1,4	0,7	0,02
PRN-01_11_12_13.tif	1064	27,2	0,7	0,05
QUI-01_05.tif	127	1,1	0,5	0,01
QUI-01_14.tif	283	1,1	0,5	0,01
SAM-01_00all.tif	91	1,7	1,1	0,02
SAM-01_04.tif	35	0,7	0,5	0,02
SAM-01_13.tif	151	3,8	0,5	0,05
SJO-00_01_2.tif	264	4,2	4,0	0,03
SJO-01_01_2_3.tif	427	1,2	0,5	0,01
SJR-01_1.tif	93	7,6	3,2	0,04
SJR-01_6.tif	77	0,2	0,2	0,01
SNB-01.tif	14	5,9	2,3	0,04
VAP-01_1_2.tif	579	18,1	0,5	0,03
VAP-02_1.tif	305	18,2	0,5	0,05
VAP-03_1_2_3_4.tif	975	2,9	0,5	0,03
VEN-00_1_2_3.tif	263	3,0	2,5	0,02
VEN-01_03_4.tif	132	1,8	0,5	0,01
VEN-01_09_10_11.tif	853	2,2	0,5	0,03
VEN-02_8_9_10.tif	848	2,3	0,5	0,03
VEN-03_04.tif	44	1,3	0,5	0,02
VEN-03_9_10_11.tif	855	3,2	0,5	0,03
VEN-04_04.tif	46	1,2	0,7	0,02
VEN-04_06_7_8.tif	843	3,3	0,5	0,03
VEN-05_07.tif	56	1,3	0,5	0,02
VEN-05_08_9_10.tif	854	3,3	0,5	0,03