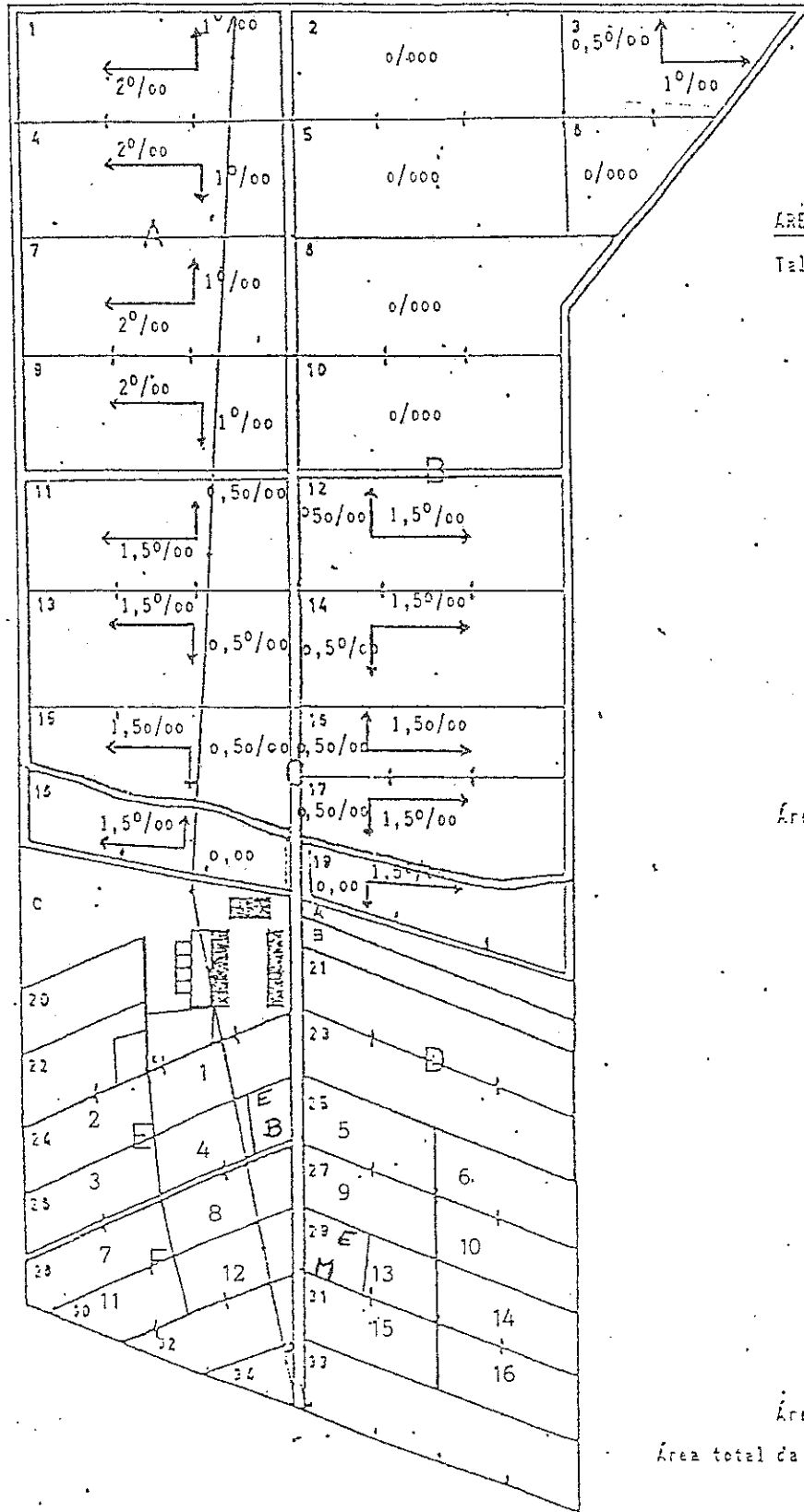


ANEXO 1



ESTAÇÃO EXPERIMENTAL ANTONIO TEIXEIRA



ÁREA DOS TALHÕES

Talhão	Área (m²)
1	17.660m²
2	17.660m²
3	13.060m²
4	17.660m²
5	17.660m²
6	6.865m²
7	17.660m²
8	13.650m²
9	17.660m²
10	17.660m²
11	17.660m²
12	17.660m²
13	17.660m²
14	17.660m²
15	14.858m²
16	10.400m²
17	14.858m²
18	8.390m²
19	7.948m²
Área da Várzea	23.951m²
20	5.000m²
21	13.057m²
22	5.000m²
23	10.057m²
24	9.890m²
25	10.057m²
26	9.890m²
27	10.057m²
28	9.815m²
29	8.457m²
30	7.807m²
31	10.057m²
32	4.849m²
33	10.057m²
34	1.728m²
A	4.107m²
B	4.050m²
C	4.459m²

Área do Arneiro = 13.5584m²

Área total da Estação = 42.4904m²

ANEXO 2

TALHAD 16

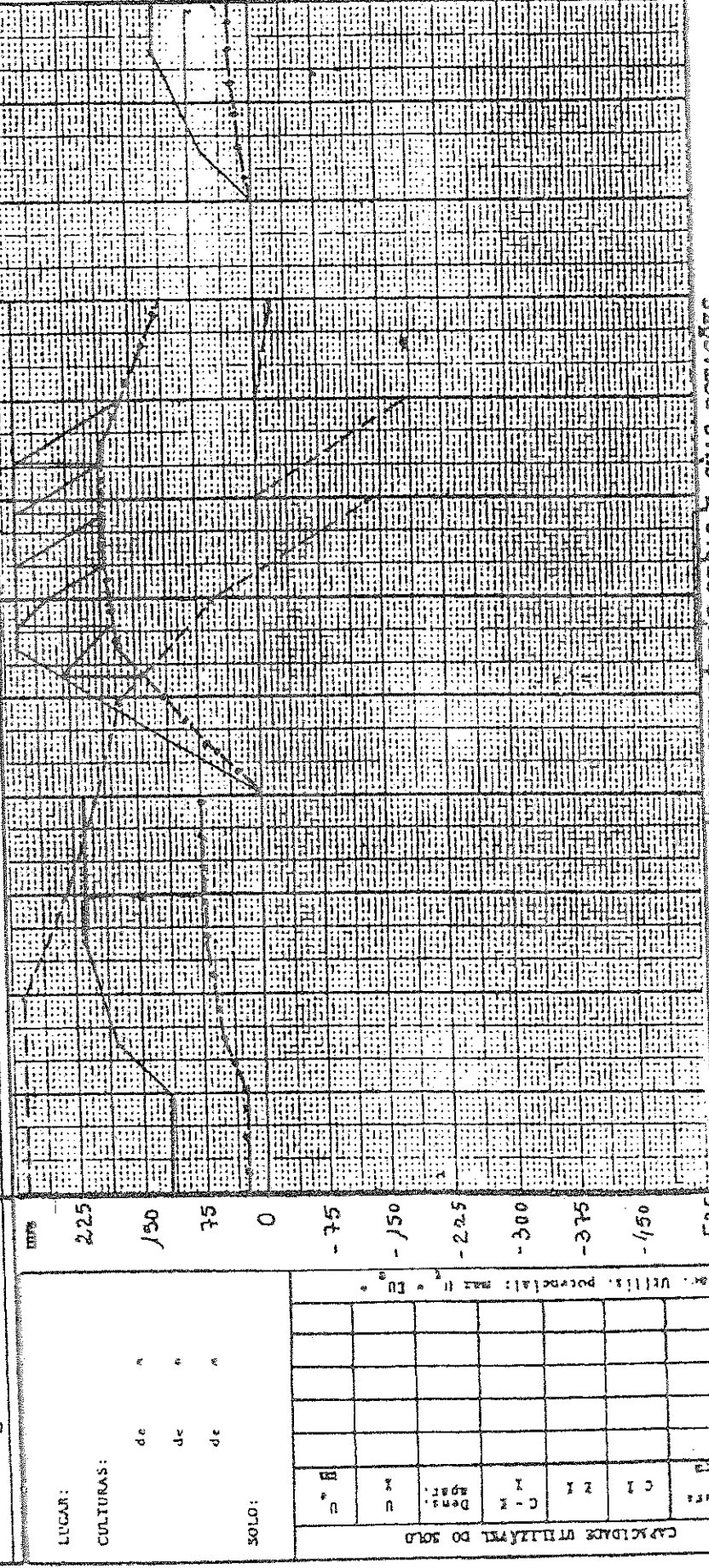
FAO (TOMATE)

	JAN	FEV	MAR	ABR	MAI	JUN	JUL	AGO	SET	OUT	NOV	DEZ
ETp (PENMAN)	26	41	79	113	151	173	191	172	117	70	34	21
Coef. cultural Kc	0.3	0.7	1.05	1.05	0.75	1.05	1.25	1.25	0.6	0.2	0.3	0.3
ETm=KcETp	7.8	28.7	82.95	118.7	113.3	181.7	238.8	215	70.2	14	10.2	6.3
Prof. radic. Z(mm)	330	495	600	600	275	000	000	000	000	0	165	330
Uz	118.6	177.5	214.4	214.4	98.53	284.7	284.7	284.7	284.7	0	58.74	118.6
Armaz. inicial Ai	284.7	284.7	284.7	233.3	179.4	126.7	-21.2	-250	-458	136.7	205.2	284.7
Precip. efect. Ri	89.3	58.9	31.5	64.8	60.5	33.8	18.1	6.9	43.8	82.5	94.9	111.2
Af=Ai+Ri-ETm	284.7	284.7	233.3	179.4	126.7	-21.2	-250	-458	-484	205.2	284.7	284.7
p	0.8	0.8	0.68	0.66	0.35	0.4	0.35	0.35	0.52	0	0.8	0.8
Uzt(1-p)	23.72	35.5	68.61	72.9	64.04	170.8	185.1	185.1	136.7	0	11.75	23.72

CÁLCULO DAS NECESSIDADES DE REGA (DOORENDS E KASSAM-FAO)

Efapi = ETmanc.EIP

	Jan	Feb	Mar	Abr	Mai	Jun	Jul	Ago	Set	Out	Nov	Dez
EIP												
Coeffic. cultural kc												
ETm = kc . EIP												
Prof. radicalar z (mm)	119	178	214	214	99	285	285	285	285	0	59	179
Uz												
Armazen. inicial Ai												
Precipitação efectiva Ri	285	285	237	200	171	58	-135	-314	-335	204	285	285
AF = Ai + Ri - ETm												
P												
Uz . (1 - P)	24	30	69	73	64	171	185	185	137	0	112	24



OPORTUNIDADE DAS REGAS E SUAS DOTACOES DOTAGAO total: 509 mm/ano

Número de regas: 5

LUGAR:	Capacidade Utilizável do Solo	Capac. Utiliz. potencial: max. EIP
CULTURAS:		
dc		
dc		
dc		
SOLO:		
1		
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98		
99		
100		

TALHAD 16

FAD (TOMATE)

	JAN	FEV	MAR	ABR	MAI	JUN	JUL	AGO	SET	OUT	NOV	DEZ
Etp (TURC)	35	44	75	97	128	148	162	149	188	76	43	34
Coef. cultural. Kc	0.3	0.7	1.05	1.05	0.75	1.05	1.25	1.25	0.6	0.2	0.3	0.3
Eta=KcEtp	10.5	30.8	78.75	101.9	96	147	202.5	186.3	64.8	15.2	12.9	10.2
Prof. radic. Z(m)	330	495	600	600	275	800	800	800	800	6	165	330
Uz	110.6	177.5	214.4	214.4	98.53	284.7	284.7	284.7	284.7	0	58.74	110.6
Armaz. inicial Ai	284.7	284.7	284.7	237.4	200.4	170.9	57.7	-135	-314	136.7	284	284.7
Precip. efct. Ri	89.3	58.9	31.5	64.8	60.5	33.8	10.1	6.9	43.8	82.5	94.9	111.2
Af=Ai+Ri-Eta	284.7	284.7	237.4	208.4	170.9	57.7	-135	-314	-335	284	284.7	284.7
P	0.8	0.8	0.68	0.66	0.35	0.4	0.35	0.35	0.52	0	0.8	0.8
Uz[i-p]	23.72	35.5	68.61	72.9	64.84	170.8	185.1	185.1	136.7	0	11.75	23.72

CÁLCULO DAS NECESSIDADES DE REGA (DOORENBOS E KASSAM - FAO)

Epoti = EYM + Kc . ETP

	Jan	Fev	Mar	Abr	Mai	Jun	Jul	Ago	Sep	Out	Nov	Dez
ETP												
Coefic. cultural k_c												
$ETM = k_c \cdot ETP$												
Prof. radicular z (mm)	27	27	27	27	25	27	27	27	27	0	16	27
U_z												
Armazen. inicial A_i												
Precipitação efectiva R_i												
$A_f = A_i + R_i - ETM$	27	27	-24	-78	-131	-279	-508	-716	-742	27	27	27
P												
$U_z \cdot (1 - p)$	5	5	9	9	16	16	18	18	13	0	3	5

	mm
LUGAR:	150
CULTURAS:	100
de	50
de	0
de	0

	mm
Capacidade Utilizável do Solo	-50
Cap. Utiliz. potencial: $ESK = E_p - ETM$	-100
E_p	-150
E_s	-200
E_{s1}	-250
E_{s2}	-300

OPORTUNIDADE DAS REGAS E SUAS DOTACIONES
 Dotagem total: 307 mm/ano

Número de regas: 66 61

TALHAD 28

FAD (TOKATE)

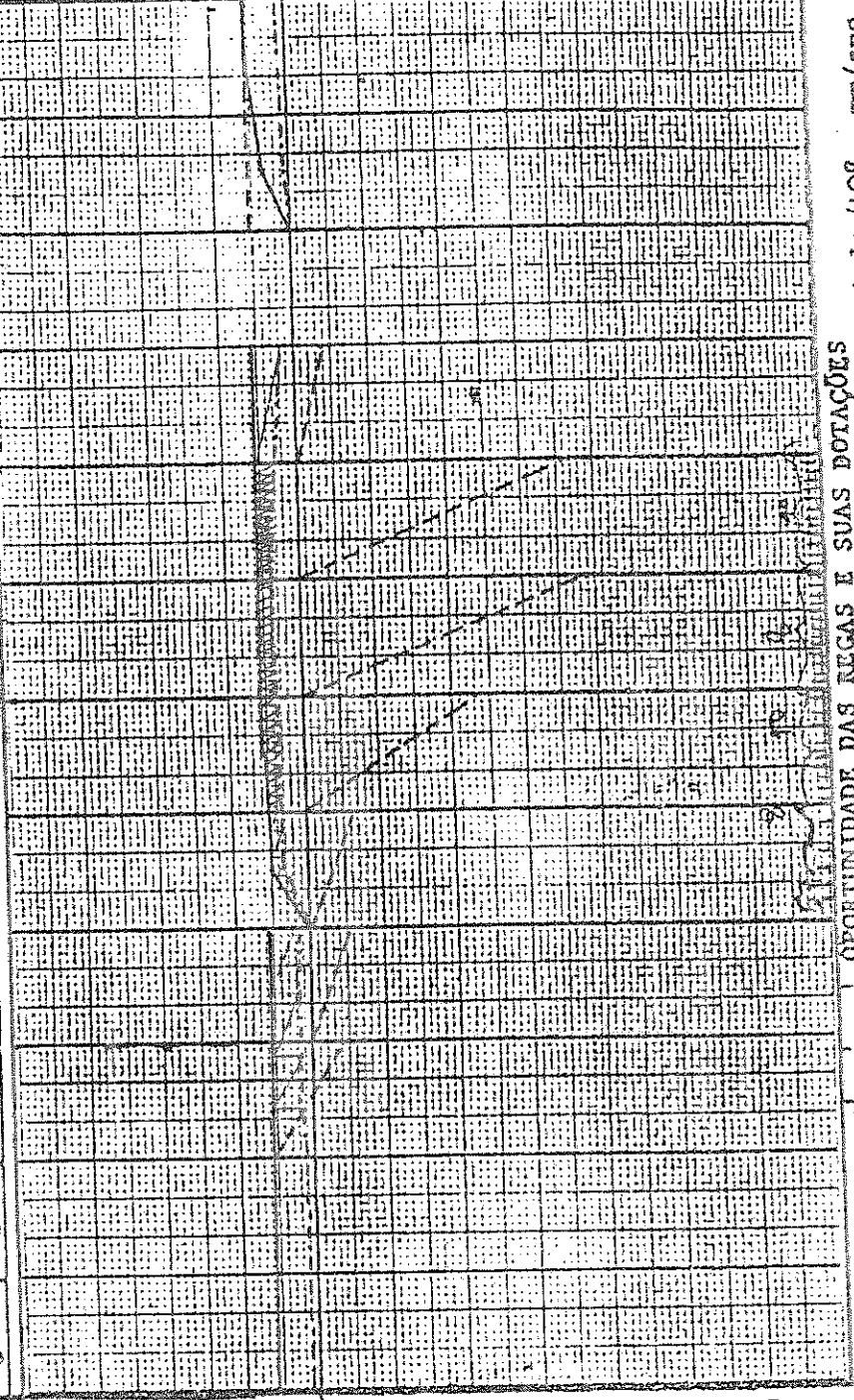
	JAN	FEV	MAR	ABR	MAI	JUN	JUL	AGO	SET	OUT	NOV	DEZ
ETp (PENMAN)	26	41	79	113	151	173	191	172	117	78	34	21
Coef. cultural Kc	0.3	0.7	1.05	1.05	0.75	1.05	1.25	1.25	0.6	0.2	0.3	0.3
ETa=Kc*ETp	7.8	28.7	82.95	118.7	113.3	181.7	238.8	215	70.2	14	10.2	6.3
Prof. radiç. Z(m)	300	300	300	300	275	300	300	300	300	0	165	300
Uz	27.04	27.04	27.04	27.04	25.1	27.04	27.04	27.04	27.04	0	15.09	27.04
Armaz. inicial Ai	27.04	27.04	27.04	-24.4	-70.3	-131	-279	-500	-716	12.98	27.04	27.04
Predip. efect. Ri	09.3	58.9	31.5	64.8	80.5	33.8	10.1	6.9	43.8	82.5	94.9	111.2
Af=Ai+Ri-ETa	27.04	27.04	-24.4	-70.3	-131	-279	-500	-716	-742	27.04	27.04	27.04
p	0.8	0.8	0.68	0.66	0.35	0.4	0.35	0.35	0.52	0	0.8	0.8
Uz*(1-p)	5.408	5.408	8.653	9.194	16.32	16.22	17.50	17.50	12.98	0	1.178	5.408

CÁLCULO DAS NECESSIDADES DE REGA (DOORENBOS E KASSAM - FAO)

Efept = ETm - kc . ETP

	Jan	Fev	Mar	Abr	Mai	Jun	Jul	Ago	Set	Out	Nov	Dez
ETp												
Coefic. cultural kc												
ETm = kc . ETP												
Prof. radicular z (mm)	27	27	27	27	25	27	27	27	27	0	16	27
Uz												
Armazen. inicial Ai												
Precipitação efectiva Ri	27	27	-20	-57	-87	-200	-392	-572	-593	27	27	27
Af = Ai + Ri - ETm												
P	5	5	9	9	16	16	16	16	13	0	3	5
Uz . (1 - p)												

mm
150
100
50
0



mm	150	100	50	0	-50	-100	-150	-200	-250	-300
LUGAR:										
CULTURAS:										
de a										
de z										
de A										
SOLO:										
Capacidade Utilizável do Solo										
Capacidade Utiliz. potencial: max = E _p										
Capacidade Utiliz. potencial: min = E _s										
Capacidade Utiliz. potencial: max = E _p										
Capacidade Utiliz. potencial: min = E _s										
Capacidade Utiliz. potencial: max = E _p										
Capacidade Utiliz. potencial: min = E _s										

Número de regas: 408
Oportunidade das Regas e suas Dotações
Dotação total: 408 mm/ano

TALHAO 28

FÃO (TOMATE)

	JAN	FEV	MAR	ABR	MAI	JUN	JUL	AGO	SET	OUT	NOV	DEZ
ETp (TURC)	35	44	75	97	128	148	162	149	188	76	43	34
Coef. cultural Kc	0.3	0.7	1.05	1.05	0.75	1.05	1.25	1.25	0.6	0.2	0.3	0.3
ETa=Kc*ETp	10.5	30.8	78.75	101.9	96	147	202.5	186.3	64.8	15.2	12.9	10.2
Prof. radic. l(ae)	300	300	300	300	275	300	300	300	300	0	165	300
Uz	27.04	27.04	27.04	27.04	25.1	27.04	27.04	27.04	27.04	0	15.89	27.04
Armaz. inicial Ai	27.04	27.04	27.04	-20.2	-57.3	-86.8	-200	-392	-572	12.98	27.04	27.04
Precip. efect. -RI	89.3	58.9	31.5	64.8	68.5	33.8	10.1	6.9	43.8	82.5	94.9	111.2
Af=Ai+RI-ETa	27.04	27.04	-20.2	-57.3	-86.8	-200	-392	-572	-593	27.04	27.04	27.04
p	0.8	0.8	0.68	0.66	0.35	0.4	0.35	0.35	0.52	0	0.8	0.8
Uz*(1-p)	5.408	5.408	8.653	9.194	16.32	16.22	17.58	17.58	12.98	0	3.178	5.408

ANEXO 3

Dados de entrada e resultados do CROPWAT

Monthly ETo Penman-Monteith - C:\ProgramData\CROPWAT\data\climate\coruche.PEM

Country: Station: coruche

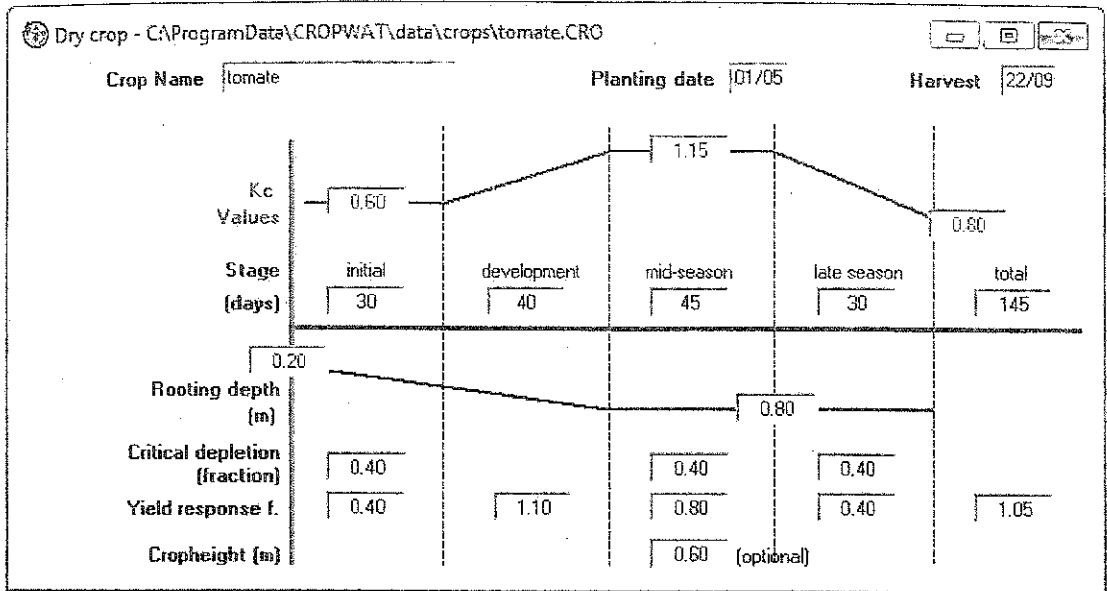
Altitude: 25 m. Latitude: 38.96 °N Longitude: 8.30 °W

Month	Avg Temp °C	Humidity %	Wind km/day	Sun hours	Rad MJ/m ² /day	ETo mm/day
January		90	144	4.3	7.5	0.70
February	11.1	87	185	4.7	9.9	1.15
March	12.3	80	180	6.6	14.8	1.97
April	14.3	77	199	6.4	17.3	2.66
May	16.7	70	187	8.1	21.3	3.62
June	20.4	70	178	9.1	23.3	4.33
July	22.7	69	151	10.4	24.8	4.81
August	22.0	70	151	10.0	22.7	4.32
September	21.5	73	127	7.6	16.9	3.23
October	17.5	83	118	6.1	12.1	1.93
November	13.2	89	151	4.1	7.8	1.01
December	11.1	90	146	3.6	6.4	0.71
Average	16.0	79	160	6.8	15.4	2.54

Monthly rain - C:\ProgramData\CROPWAT\data\rain\coruche.CRM

Station: coruche Eff. rain method: Fixed percentage

	Rain mm	Eff rain mm
January		71.2
February	59.0	47.2
March	32.0	25.6
April	65.0	52.0
May	61.0	48.8
June	34.0	27.2
July	10.0	8.0
August	7.0	5.6
September	44.0	35.2
October	83.0	66.4
November	95.0	76.0
December	111.0	88.8
Total	690.0	552.0



Soil - C:\ProgramData\CROPWAT\data\soils\talhao16.SOI

Soil name:

General soil data

Total available soil moisture (FC - WP)	<input type="text" value="220.0"/>	mm/meter
Maximum rain infiltration rate	<input type="text" value="40"/>	mm/day
Maximum rooting depth	<input type="text" value="80"/>	centimeters
Initial soil moisture depletion (as % TAM)	<input type="text" value="19"/>	%
Initial available soil moisture	<input type="text" value="178.2"/>	mm/meter

Soil - C:\ProgramData\CROPWAT\data\soils\talhao28.SOI

Soil name:

General soil data

Total available soil moisture (FC - WP)	<input type="text" value="51.0"/>	mm/meter
Maximum rain infiltration rate	<input type="text" value="40"/>	mm/day
Maximum rooting depth	<input type="text" value="30"/>	centimeters
Initial soil moisture depletion (as % TAM)	<input type="text" value="60"/>	%
Initial available soil moisture	<input type="text" value="20.4"/>	mm/meter

☉ Crop irrigation schedule



ETo station
 Rain station

Crop
 Soil

Planting date
 Harvest date

Yield red.

Table format

- Irrigation schedule
- Daily soil moisture balance

Timing: Irrigate at critical depletion
 Application: Refill soil to field capacity
 Field eff. 70 %

Date	Day	Stage	Rain	Ks	Eta	Depl	Net Irr	Deficit	Loss	Gr. Irr	Flow
			mm	fract.	%	%	mm	mm	mm	mm	l/s/ha
15 Jun	46	Dev	0.0	1.00	100	42	55.2	0.0	0.0	78.9	0.20
5 Jul	66	Dev	0.0	1.00	100	41	69.3	0.0	0.0	99.0	0.57
21 Jul	82	Mid	0.0	1.00	100	41	72.9	0.0	0.0	104.1	0.75
6 Aug	98	Mid	0.0	1.00	100	41	71.5	0.0	0.0	102.2	0.74
24 Aug	116	End	0.0	1.00	100	42	73.9	0.0	0.0	105.5	0.68
22 Sep	End	End	0.0	1.00	0	31					

Totals					
Total gross irrigation	489.6	mm	Total rainfall	137.4	mm
Total net irrigation	342.7	mm	Effective rainfall	136.7	mm
Total irrigation losses	0.0	mm	Total rain loss	0.7	mm
Actual water use by crop	500.9	mm	Moist deficit at harvest	54.9	mm
Potential water use by crop	500.9	mm	Actual irrigation requirement	364.2	mm
Efficiency irrigation schedule	100.0	%	Efficiency rain	99.5	%
Deficiency irrigation schedule	0.0	%			

Crop irrigation schedule

ETo station
 Rain station

Crop
 Soil

Planting date
 Harvest date

Yield red.

Table format

- Irrigation schedule
 Daily soil moisture balance

Timing: Irrigate at critical depletion
 Application: Refill soil to field capacity
 Field eff. 90 %

Date	Day	Stage	Rain	Ks	Eta	Depl	Net Irr	Deficit	Loss	Gr. Irr	Flow
			mm	fract.	%	%	mm	mm	mm	mm	l/s/ha
1 May	1	Init	0.0	0.67	67	73	7.5	0.0	0.0	8.3	0.96
5 May	5	Init	0.0	1.00	100	56	5.9	0.0	0.0	6.6	0.19
9 May	9	Init	0.0	1.00	100	55	5.9	0.0	0.0	6.6	0.19
12 May	12	Init	0.0	1.00	100	57	6.3	0.0	0.0	7.0	0.27
15 May	15	Init	0.0	1.00	100	58	6.5	0.0	0.0	7.2	0.28
19 May	19	Init	0.0	1.00	100	56	6.5	0.0	0.0	7.2	0.21
22 May	22	Init	0.0	1.00	100	58	6.8	0.0	0.0	7.6	0.29
25 May	25	Init	0.0	1.00	100	58	7.0	0.0	0.0	7.7	0.30
29 May	29	Init	0.0	1.00	100	56	7.0	0.0	0.0	7.7	0.22
1 Jun	32	Dev	0.0	1.00	100	59	7.4	0.0	0.0	8.2	0.32
4 Jun	35	Dev	0.0	1.00	100	43	5.5	0.0	0.0	6.1	0.23
6 Jun	37	Dev	0.0	1.00	100	42	5.5	0.0	0.0	6.1	0.35
8 Jun	39	Dev	0.0	1.00	100	42	5.5	0.0	0.0	6.1	0.35
10 Jun	41	Dev	0.0	1.00	100	41	5.5	0.0	0.0	6.1	0.35
12 Jun	43	Dev	0.0	1.00	100	50	6.7	0.0	0.0	7.4	0.43

14 Jun	45	Dev	0.0	1.00	100	49	6.7	0.0	0.0	7.4	0.43
16 Jun	47	Dev	0.0	1.00	100	49	6.7	0.0	0.0	7.4	0.43
18 Jun	49	Dev	0.0	1.00	100	48	6.7	0.0	0.0	7.4	0.43
20 Jun	51	Dev	0.0	1.00	100	48	6.7	0.0	0.0	7.4	0.43
22 Jun	53	Dev	0.0	1.00	100	56	7.8	0.0	0.0	8.7	0.50
24 Jun	55	Dev	0.0	1.00	100	55	7.8	0.0	0.0	8.7	0.50
26 Jun	57	Dev	0.0	1.00	100	54	7.8	0.0	0.0	8.7	0.50
28 Jun	59	Dev	0.0	1.00	100	54	7.8	0.0	0.0	8.7	0.50
30 Jun	61	Dev	0.0	1.00	100	53	7.8	0.0	0.0	8.7	0.50
2 Jul	63	Dev	0.0	1.00	100	62	9.2	0.0	0.0	10.2	0.59
4 Jul	65	Dev	0.0	1.00	100	61	9.2	0.0	0.0	10.2	0.59
6 Jul	67	Dev	0.0	1.00	100	61	9.2	0.0	0.0	10.2	0.59
8 Jul	69	Dev	0.0	1.00	100	60	9.2	0.0	0.0	10.2	0.59

10 Jul	71	Mid	0.0	1.00	100	60	9.2	0.0	0.0	10.2	0.59
12 Jul	73	Mid	0.0	1.00	100	65	9.9	0.0	0.0	11.0	0.64
14 Jul	75	Mid	0.0	1.00	100	65	9.9	0.0	0.0	11.0	0.64
16 Jul	77	Mid	0.0	1.00	100	65	9.9	0.0	0.0	11.0	0.64
18 Jul	79	Mid	0.0	1.00	100	65	9.9	0.0	0.0	11.0	0.64
20 Jul	81	Mid	0.0	1.00	100	65	9.9	0.0	0.0	11.0	0.64
22 Jul	83	Mid	0.0	1.00	100	62	9.5	0.0	0.0	10.6	0.61
24 Jul	85	Mid	0.0	1.00	100	62	9.5	0.0	0.0	10.6	0.61
26 Jul	87	Mid	0.0	1.00	100	62	9.5	0.0	0.0	10.6	0.61
28 Jul	89	Mid	0.0	1.00	100	62	9.5	0.0	0.0	10.6	0.61
30 Jul	91	Mid	0.0	1.00	100	62	9.5	0.0	0.0	10.6	0.61
1 Aug	93	Mid	0.0	1.00	100	61	9.3	0.0	0.0	10.3	0.60
3 Aug	95	Mid	0.7	1.00	100	54	8.3	0.0	0.0	9.2	0.53
5 Aug	97	Mid	0.0	1.00	100	59	9.0	0.0	0.0	10.0	0.58
7 Aug	99	Mid	0.7	1.00	100	54	8.3	0.0	0.0	9.2	0.53

9 Aug	101	Mid	0.0	1.00	100	59	9.0	0.0	0.0	10.0	0.58
11 Aug	103	Mid	0.0	1.00	100	58	8.9	0.0	0.0	9.9	0.57
13 Aug	105	Mid	0.2	1.00	100	55	8.5	0.0	0.0	9.4	0.54
15 Aug	107	Mid	0.0	1.00	100	57	8.7	0.0	0.0	9.7	0.56
17 Aug	109	Mid	0.2	1.00	100	55	8.5	0.0	0.0	9.4	0.54
19 Aug	111	Mid	0.0	1.00	100	57	8.7	0.0	0.0	9.7	0.56
21 Aug	113	Mid	0.0	1.00	100	54	8.2	0.0	0.0	9.1	0.53
24 Aug	116	End	0.0	1.00	100	58	8.9	0.0	0.0	9.9	0.38
26 Aug	118	End	0.0	1.00	100	50	7.7	0.0	0.0	8.5	0.49
28 Aug	120	End	0.0	1.00	100	50	7.7	0.0	0.0	8.5	0.49
30 Aug	122	End	0.0	1.00	100	50	7.7	0.0	0.0	8.5	0.49
1 Sep	124	End	0.0	1.00	100	45	6.9	0.0	0.0	7.6	0.44
5 Sep	128	End	0.0	1.00	100	60	9.1	0.0	0.0	10.2	0.29
9 Sep	132	End	0.0	1.00	100	60	9.1	0.0	0.0	10.2	0.29
12 Sep	135	End	0.0	1.00	100	51	7.8	0.0	0.0	8.6	0.33

15 Sep	138	End	0.0	1.00	100	46	7.1	0.0	0.0	7.8	0.30
19 Sep	142	End	0.0	1.00	100	46	7.1	0.0	0.0	7.8	0.23
22 Sep	End	End	0.0	1.00	0	27					

Totals											
Total gross irrigation			531.2	mm	Total rainfall			137.4	mm		
Total net irrigation			478.1	mm	Effective rainfall			27.2	mm		
Total irrigation losses			0.0	mm	Total rain loss			110.2	mm		
Actual water use by crop			500.2	mm	Moist deficit at harvest			4.2	mm		
Potential water use by crop			500.9	mm	Actual irrigation requirement			473.7	mm		
Efficiency irrigation schedule			100.0	%	Efficiency rain			19.8	%		
Deficiency irrigation schedule			0.1	%							

ANEXO 4

INFILTRACAO CUMULATIVA

		K	a	if	T _{0.5}	SD.
R1	KOSTIAKOV	53.754	0.097	0	0.958	43
	LEWIS	59.225	0.054	0.068	0.667	155
	PHILIP	19.063	0.5	-0.896	0	3031
R2	KOSTIAKOV	23.335	0.01	0	0.212	5
	LEWIS	25.113	-0.025	0.02	0.682	3
	PHILIP	7.578	0.5	-0.455	0	520
MEDIA (min,mm)	KOSTIAKOV	38.5445	0.0535	0	0.585	24
	LEWIS	42.169	0.0145	0.044	0.6745	79
	PHILIP	13.3205	0.5	-0.6755	0	1775.5
MEDIA (h,mm)	KOSTIAKOV	139.6983	0.0535	0	0.585	24
	LEWIS	88.66001	0.0145	2.64	0.6745	79
	PHILIP	103.1801	0.5	-40.53	0	1775.5

(min,mm)	TEMPO	KOSTIAKOV INFILTR.	LEWIS INFILTR.	PHILIP INFILTR.
0	0	0	0	0
30	46.23687	49.35383	16.25180	0
60	47.90360	49.52466	15.00066	0
90	49.03593	49.66600	14.37586	0
120	49.79640	49.77833	13.85002	0
150	50.39453	49.75505	13.40394	0
180	50.88848	49.80118	13.01164	0
210	51.30999	49.84133	12.64949	0
240	51.67778	49.87571	12.60325	0

TAXA DE INFILTRACAO

		K	a	if
R1	KOSTIAKOV	5.214138	-0.903	0
	LEWIS	3.19819	-0.946	0.068
	PHILIP	9.5315	0.5	-0.896
R2	KOSTIAKOV	0.23335	-0.99	0
	LEWIS	-0.62783	-1.025	0.02
	PHILIP	3.789	0.5	-0.455
MEDIA (min,mm)	KOSTIAKOV	2.723744	-0.9465	0
	LEWIS	1.285162	-0.9855	0.044
	PHILIP	8.66025	0.5	-0.6755
MEDIA (h,mm)	KOSTIAKOV	0.164529	-0.9465	0
	LEWIS	0.045034	-0.9855	0.044
	PHILIP	0.559835	0.5	-0.6755

(min,mm)	TEMPO	KOSTIAKOV INFILTR.	LEWIS INFILTR.	PHILIP INFILTR.
0	0	0	0	0
30	0.108911	0.089004	0.54049	0
60	0.056513	0.06673	0.184035	0
90	0.038501	0.059242	0.026552	0
120	0.029324	0.05548	-0.06751	0
150	0.023741	0.053213	-0.13169	0
180	0.019978	0.051690	-0.17907	0
210	0.017266	0.050613	-0.21557	0
240	0.015216	0.049798	-0.24558	0

INFILTRACAO CUMULATIVA

		K	a	if	f ²	SOD
R1	KOSTIAKOV	28.197	0.246	0	0.970	153
	LEWIS	36.333	0.119	-0.254	0.870	127
	PHILIP	15.105	0.5	-0.574	0	800
R2	KOSTIAKOV	25.285	0.232	0	0.982	89
	LEWIS	33.427	0.095	-0.223	0.711	141
	PHILIP	13.039	0.5	-0.505	0	715
MEDIA (min,mm)	KOSTIAKOV	26.741	0.239	0	0.98	121
	LEWIS	34.88	0.107	-0.230	0.7915	134
	PHILIP	14.072	0.5	-0.5395	0	767.5
MEDIA (h,mm)	KOSTIAKOV	371.2272	0.239	0	0.98	121
	LEWIS	52.63573	0.107	-14.20	0.7915	134
	PHILIP	109.0012	0.5	-32.07	0	767.5

(min,mm)	TEMPO	KOSTIAKOV INFILTR.	LEWIS INFILTR.	PHILIP INFILTR.
0	0	0	0	0
30	60	28.197	57.333	60.890
60	120	71.146	80.255	76.831
90	180	78.338	77.872	84.943
120	240	86.955	86.776	89.411
150	300	95.365	95.303	91.435
180	360	98.998	100.634	91.638
210	420	98.981	111.789	88.272
240	480	94.418	119.018	88.249

TAXA DE INFILTRACAO

		K	a	if
R1	KOSTIAKOV	6.936462	-0.754	0
	LEWIS	4.32637	-0.881	0.254
	PHILIP	7.50020	-0.5	-0.574
R2	KOSTIAKOV	5.86612	-0.768	0
	LEWIS	3.175568	-0.905	0.223
	PHILIP	6.5195	-0.5	-0.505
MEDIA (min,mm)	KOSTIAKOV	6.401291	-0.761	0
	LEWIS	3.749595	-0.893	0.230
	PHILIP	7.036	-0.5	-0.5395
MEDIA (h,mm)	KOSTIAKOV	1.48108	-0.761	0
	LEWIS	0.094306	-0.893	0.230
	PHILIP	0.908344	-0.5	-0.5395

(min,mm)	TEMPO	KOSTIAKOV INFILTR.	LEWIS INFILTR.	PHILIP INFILTR.
15	0	0.815196	0.571971	1.277187
30	0	0.481037	0.417852	0.745092
60	0	0.283854	0.334849	0.368844
90	0	0.206452	0.265439	0.28816
120	0	0.167498	0.240153	0.182795
150	0	0.141339	0.228073	0.034987
180	0	0.123028	0.227431	-0.016007
210	0	0.10941	0.226964	-0.05397
240	0	0.098839	0.226684	-0.08833

DATA	TUBO	a	b	r2
28/06/98	TUBO 1	41.20272	-0.21559	0.578288
29/06/98	TUBO 1	46.25733	-0.23583	0.382199
04/07/98	TUBO 1	54.73153	-0.33889	0.551423
13/07/98	TUBO 1	53.27699	-0.50199	0.528758
18/07/98	TUBO 1	43.91823	-0.28324	0.442521
01/08/98	TUBO 1	32.65384	0.251531	0.01443
02/08/98	TUBO 1	42.96976	-0.21189	0.34541
03/08/98	TUBO 1	40.13475	-0.16575	0.193396

MEDIA = 44.39215 -0.20271 0.379553
 D.PAD. = 6.686397 0.199112 0.181798

DATA	TUBO	a	b	r2
28/06/98	TUBO 5	41.53841	-0.16657	0.284718
29/06/98	TUBO 5	44.13528	-0.18182	0.433673
04/07/98	TUBO 5	30.90862	0.075927	0.066178
13/07/98	TUBO 5	43.38445	-0.18366	0.384282
18/07/98	TUBO 5	46.81135	-0.28943	0.696238
01/08/98	TUBO 6	47.12919	-0.44875	0.955598
02/08/98	TUBO 5	47.26452	-0.4261	0.981811
03/08/98	TUBO 5	47.86182	-0.43613	0.974283

MEDIA = 43.5182 -0.25597 0.596428
 D.PAD. = 5.178293 0.167951 0.332439

TALHAD 29

11/06/90

TUBO 1

HUM. TEN.

3.87	8	Regression Output:	
7.39	11	Constant	7.486471
8.12	6	Std Err of Y Est	2.482464
8.12	8	R Squared	0.885651
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) -0.07412
Std Err of Coef. 0.695229

TUBO 4

HUM. TEN.

17.6	23	Regression Output:	
17.6	5	Constant	14.71905
14.3	6	Std Err of Y Est	2.85366
14.2	7	R Squared	0.262542
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) 0.117166
Std Err of Coef. 0.138853

13/06/90

TUBO 1

HUM. TEN.

4.47	5.5	Regression Output:	
8.97	6	Constant	3.275085
8.64	6	Std Err of Y Est	2.370631
7.98	8	R Squared	0.126729
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) 0.665085
Std Err of Coef. 1.234519

TUBO 4

HUM. TEN.

16.8	7	Regression Output:	
20.5	2	Constant	20.8098
15.2	5	Std Err of Y Est	2.567343
14.1	5	R Squared	0.426166
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) -0.87627
Std Err of Coef. 0.719

15/06/90

TUBO 1

HUM. TEN.

4.31	71	Regression Output:	
6.01	52	Constant	7.766151
7.19	6	Std Err of Y Est	8.588666
7.67	6	R Squared	0.922914
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) -0.04359
Std Err of Coef. 0.088908

TUBO 4

HUM. TEN.

15	12	Regression Output:	
18.6	3	Constant	17.75083
14	7	Std Err of Y Est	2.134364
14.3	6	R Squared	0.32811
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) -0.32548
Std Err of Coef. 0.329339

19/06/90

TUBO 1

HUM. TEN.

1.84	82	Regression Output:	
4.68	80	Constant	7.585979
7.86	7	Std Err of Y Est	1.368864
7.23	6	R Squared	0.884287
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) -0.05265
Std Err of Coef. 0.01837

TUBO 4

HUM. TEN.

11.1	48	Regression Output:	
14.6	9	Constant	14.38348
13.2	6	Std Err of Y Est	0.857157
13.8	4	R Squared	0.778428
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) -0.07735
Std Err of Coef. 0.029182

20/06/90

TUBO 1

HUM. TEN.

2.98	20	Regression Output:	
6.89	10	Constant	0.867436
7.1	8	Std Err of Y Est	0.525389
6.94	5	R Squared	0.949922
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) -0.28744
Std Err of Coef. 0.846667

20/06/90

TUBO 1

HUM. TEN.

5.61	2	Regression Output:	
9.86	3	Constant	5.611429
11.1	4	Std Err of Y Est	2.212347
10.1	6	R Squared	0.444573
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) 0.946286
Std Err of Coef. 0.74791

22/06/90

TUBO 1

HUM. TEN.

5.37	3	Regression Output:	
9.21	5	Constant	4.05
9.05	5	Std Err of Y Est	1.529444
0.57	7	R Squared	0.522534
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) 0.8
Std Err of Coef. 0.54874

27/06/90

TUBO 1

HUM. TEN.

4.52	60	Regression Output:	
6.62	20	Constant	7.923463
8.84	6	Std Err of Y Est	0.413021
7.43	3	R Squared	0.9518
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) -0.85712
Std Err of Coef. 0.889889

TUBO 4

HUM. TEN.

10.1	70	Regression Output:	
15	9	Constant	14.87128
12.7	7	Std Err of Y Est	1.262717
13.5	4	R Squared	0.758774
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) -0.85639
Std Err of Coef. 0.822974

TUBO 4

HUM. TEN.

11.5	82	Regression Output:	
15.6	10	Constant	14.31384
12.8	7	Std Err of Y Est	1.432756
13.8	6	R Squared	0.536977
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) -0.85386
Std Err of Coef. 0.822233

TUBO 4

HUM. TEN.

13.6	23	Regression Output:	
17.2	10	Constant	14.33826
12.5	8	Std Err of Y Est	2.548345
13.2	7	R Squared	0.817182
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) -0.88732
Std Err of Coef. 0.839264

TUBO 4

HUM. TEN.

10.7	98	Regression Output:	
14.2	4	Constant	13.22816
12.2	9	Std Err of Y Est	1.884585
12.8	3	R Squared	0.698646
		No. of Observations	4
		Degrees of Freedom	2

X Coefficient(s) -0.82889
Std Err of Coef. 0.813673

DATA	TUBO	a	b	r2
11/06/90	TUBO 1	7.406471	-0.07412	0.005651
13/06/90	TUBO 1	3.275085	0.665085	0.126729
15/06/90	TUBO 1	7.766151	-0.04359	0.922914
18/06/90	TUBO 1	7.505979	-0.05265	0.804207
20/06/90	TUBO 1	0.867436	-0.20744	0.949922
20/06/90	TUBO 1	5.611429	0.946286	0.444573
22/06/90	TUBO 1	4.05	0.0	0.522534
27/06/90	TUBO 1	7.923463	-0.05712	0.9518

MEDIA = 6.560752 0.237057 0.591041
D.PAD. = 1.083543 0.450593 0.353365

DATA	TUBO	a	b	r2
11/06/90	TUBO 4	14.71905	0.117166	0.262542
13/06/90	TUBO 4	20.0090	-0.07627	0.426166
15/06/90	TUBO 4	17.75083	-0.32540	0.32811
18/06/90	TUBO 4	14.30348	-0.07735	0.778428
20/06/90	TUBO 4	14.07128	-0.05639	0.750774
20/06/90	TUBO 4	14.31384	-0.03386	0.536977
22/06/90	TUBO 4	14.33026	-0.00732	0.017102
27/06/90	TUBO 4	13.22616	-0.02889	0.690646

MEDIA = 15.44004 -0.16105 0.473043
D.PAD. = 2.378320 0.293943 0.249305

ANEXO 5

Equações do perímetro e áreas dos sulcos estudados

TALHAO 16

DEP.1REGA

LINHA I	PM			Ast		
	p	r	r2	l	q	r2
ESTACA 1	13.124	0.58	0.998	7.393	1.603	0.999
ESTACA 2	17.395	0.468	0.988	10.472	1.486	0.999
ESTACA 3	17.263	0.435	0.998	10.515	1.468	0.999
ESTACA 4	12.743	0.556	0.995	7.345	1.564	1
ESTACA 5	14.803	0.534	0.997	8.621	1.553	0.999
ESTACA 6	13.248	0.586	0.997	7.526	1.602	0.999
ESTACA 7	13.26	0.548	0.994	7.7	1.556	0.999
ESTACA 8	11.896	0.602	0.996	6.744	1.607	1
ESTACA 9	13.23	0.567	0.996	7.572	1.596	1

MEDIA = 14.10689 0.544 0.995 8.209778 1.5594 0.999
D.PAD. = 1.861762 0.054 0.003 1.303775 0.0465 0.000

DEP.1REGA

LINHA II	PM			Ast		
	p	r	r2	l	q	r2
ESTACA 1	11.139	0.601	0.991	6.409	1.508	1
ESTACA 2	10.72	0.65	0.996	5.994	1.646	1
ESTACA 3	12.404	0.604	0.999	6.955	1.62	1
ESTACA 4	12.532	0.584	0.995	7.188	1.588	1
ESTACA 5	12.434	0.563	0.995	7.188	1.577	1
ESTACA 6	12.922	0.581	0.998	7.243	1.585	0.999
ESTACA 7	11.046	0.593	0.995	6.294	1.589	1
ESTACA 8	12.53	0.591	0.995	7.167	1.595	1
ESTACA 9	12.112	0.618	0.995	6.872	1.62	1

MEDIA = 11.98211 0.598 0.995 6.803333 1.6031 1
D.PAD. = 0.750191 0.023 0.002 0.429988 0.0206 0.000

DEP.2REGA

LINHA I	PM			Ast		
	p	r	r2	l	q	r2
ESTACA 1	14.916	0.525	0.996	8.713	1.545	0.999
ESTACA 2	15.46	0.558	1	8.735	1.597	0.999
ESTACA 3	15.235	0.558	0.998	8.755	1.582	0.999
ESTACA 4	18.459	0.438	0.982	11.489	1.453	1
ESTACA 5	16.603	0.494	0.995	9.782	1.522	0.999
ESTACA 6	15.563	0.52	0.995	9.125	1.54	0.999
ESTACA 7	14.733	0.544	0.998	8.468	1.568	0.999
ESTACA 8	15.34	0.522	0.997	8.88	1.55	0.999
ESTACA 9	16.367	0.5	0.995	9.657	1.523	0.999

MEDIA = 15.85511 0.518 0.995 9.288444 1.5422 0.999
D.PAD. = 1.02596 0.035 7E-04 0.860509 0.0395 0.000

DEP.2REGA

LINHA II	PM			Ast		
	p	r	r2	l	q	r2
ESTACA 1	15.138	0.566	0.998	8.681	1.591	1
ESTACA 2	14.722	0.548	0.998	8.514	1.569	1
ESTACA 3	17.51	0.471	0.994	10.475	1.498	0.999
ESTACA 4	15.313	0.586	0.999	8.919	1.536	0.999
ESTACA 5	15.403	0.537	0.996	8.956	1.558	0.999
ESTACA 6	16.473	0.496	0.991	9.779	1.515	0.999
ESTACA 7	15.773	0.505	0.988	9.437	1.514	1

ESTACA 8	15.567	0.514	0.993	9.216	1.529	1
ESTACA 9	14.815	0.553	0.993	8.659	1.563	1
MEDIA = 15.63489 0.522 0.994 9.181778 1.5414 1						
D.PAD. = 0.026776 0.029 0.003 0.594926 0.0268 0.000						

DEP.3REGA

LINHA I	PK			Ast		
	p	r	r2	l	q	r2
ESTACA 1	15.81	0.545	0.998	9.043	1.577	0.999
ESTACA 2	16.75	0.521	0.999	9.617	1.562	0.999
ESTACA 3	16.121	0.528	0.999	9.248	1.565	0.999
ESTACA 4	15.477	0.547	0.999	8.867	1.578	0.999
ESTACA 5	16.398	0.515	0.998	9.514	1.548	0.999
ESTACA 6	15.113	0.566	0.997	8.676	1.587	1
ESTACA 7	15.762	0.538	0.998	9.078	1.568	0.999
ESTACA 8	16.395	0.506	0.997	9.617	1.535	0.999
ESTACA 9	15.764	0.538	0.998	9.068	1.569	0.999
MEDIA = 15.95444 0.534 0.998 9.192 1.5654 0.999						
D.PAD. = 0.480929 0.017 7E-04 0.314559 0.015 0.000						

DEP.3REGA

LINHA II	PK			Ast		
	p	r	r2	l	q	r2
ESTACA 1	15.541	0.547	0.999	8.856	1.581	0.999
ESTACA 2	16.295	0.545	0.999	9.327	1.579	0.999
ESTACA 3	16.369	0.517	0.999	9.509	1.551	0.999
ESTACA 4	15.471	0.549	0.999	8.814	1.582	0.999
ESTACA 5	15.728	0.532	0.999	9.034	1.566	0.999
ESTACA 6	15.762	0.538	0.998	9.253	1.565	0.999
ESTACA 7	16.002	0.535	0.998	9.253	1.565	0.999
ESTACA 8	15.685	0.541	0.999	8.975	1.574	0.999
ESTACA 9	18.465	0.476	0.993	11.858	1.583	0.999
MEDIA = 16.14644 0.531 0.998 9.342111 1.576 0.999						
D.PAD. = 0.878937 0.022 0.002 0.644845 495.74 6E-09						

		FM			Act		
		p	r	r2	l	q	r2
DEP.1REGA							
LINHA I	MEDIA	=14.10689	0.544	0.995	0.209778	1.5594	0.9993
	D.PAD.	=1.661762	0.054	0.003	1.303775	0.0485	0.0005
LINHA II	MEDIA	=11.98211	0.598	0.995	6.803333	1.6031	0.9999
	D.PAD.	=0.750191	0.023	0.002	0.429988	0.0206	0.0003
DEP.2REGA							
LINHA I	MEDIA	=15.85511	0.518	0.995	9.280444	1.5422	0.9991
	D.PAD.	=1.08596	0.035	0.005	0.060509	0.0395	0.0003
LINHA II	MEDIA	=15.63489	0.522	0.994	9.181778	1.5414	0.9996
	D.PAD.	=0.826776	0.029	0.003	0.594926	0.0200	0.0005
DEP.3REGA							
LINHA I	MEDIA	=15.95444	0.534	0.998	9.192	1.5654	0.9991
	D.PAD.	=0.480929	0.017	7E-04	0.314559	0.015	0.0003
LINHA II	MEDIA	=16.14644	0.531	0.998	9.342111	176.83	0.999
	D.PAD.	=0.870937	0.022	0.002	0.644045	495.74	6.4E-09

ANEXO 6

Regressão linear (tensiómetros)

TALHAD 16

28/06/90

TUBO 1

HUM. TEN.

		Regression Output:	
20.6	68	Constant	41.20272
35.1	68	Std Err of Y Est	9.079263
39.5	4	R Squared	0.578208
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) -0.21559
Std Err of Coef. 0.184106

TUBO 5

HUM. TEN.

		Regression Output:	
19	72	Constant	41.53041
38.5	77	Std Err of Y Est	14.36542
41	8	R Squared	0.264718
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) -0.16657
Std Err of Coef. 0.264012

29/06/90

TUBO 1

HUM. TEN.

		Regression Output:	
19.9	78	Constant	46.25733
34.2	82	Std Err of Y Est	10.80491
38.5	36	R Squared	0.382199
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) -0.23503
Std Err of Coef. 0.299028

TUBO 5

HUM. TEN.

		Regression Output:	
20.1	85	Constant	44.13528
38.9	88	Std Err of Y Est	12.60414
42.1	8	R Squared	0.433673
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) -0.18102
Std Err of Coef. 0.206857

04/07/90

TUBO 1

HUM. TEN.

		Regression Output:	
19.4	86	Constant	54.73153
34.3	81	Std Err of Y Est	9.421117
38.3	46	R Squared	0.551423
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) -0.33089
Std Err of Coef. 0.305661

TUBO 5

HUM. TEN.

		Regression Output:	
20.6	20	Constant	30.90862
38.7	78	Std Err of Y Est	15.51249
41.5	9	R Squared	0.86178
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) 0.075927
Std Err of Coef. 0.295883

13/07/90

TUBO 1

HUM. TEN.

		Regression Output:	
20.1	54	Constant	53.27699
33.7	52	Std Err of Y Est	8.924856
37.7	30	R Squared	0.520758
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) -0.50199
Std Err of Coef. 0.473905

TUBO 5

HUM. TEN.

		Regression Output:	
18.5	83	Constant	43.30445
37.9	82	Std Err of Y Est	13.57486
41.1	11	R Squared	0.384202
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) -0.10366
Std Err of Coef. 0.232511

18/07/90

TUBO 1

HUM. TEN.

20.1	85	Regression Output:	
33.9	83	Constant	43.91023
36.9	33	Std Err of Y Est	9.504413
		R Squared	0.442521
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) -0.20324
Std Err of Coef. 0.228113

TUBO 5

HUM. TEN.

18.6	80	Regression Output:	
37.5	58	Constant	46.81135
40.9	12	Std Err of Y Est	9.38112
		R Squared	0.696238
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) -0.28943
Std Err of Coef. 0.191173

01/08/90

TUBO 1

HUM. TEN.

18.9	79	Regression Output:	
92.8	72	Constant	32.65384
35.3	44	Std Err of Y Est	54.44594
		R Squared	0.01443
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) 0.251531
Std Err of Coef. 2.078736

TUBO 5

HUM. TEN.

18.9	62	Regression Output:	
37.1	29	Constant	47.12919
40	12	Std Err of Y Est	3.415894
		R Squared	0.955598
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) -0.44075
Std Err of Coef. 0.095008

02/08/90

TUBO 1

HUM. TEN.

18.0	79	Regression Output:	
33.3	80	Constant	42.96976
35.5	36	Std Err of Y Est	10.36251
		R Squared	0.34541
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) -0.21189
Std Err of Coef. 0.291699

TUBO 5

HUM. TEN.

17.4	69	Regression Output:	
36.0	29	Constant	47.26452
39.9	14	Std Err of Y Est	2.383621
		R Squared	0.901011
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) -0.4261
Std Err of Coef. 0.059283

03/08/90

TUBO 1

HUM. TEN.

19.3	74	Regression Output:	
33.9	81	Constant	40.13475
35.4	37	Std Err of Y Est	11.31839
		R Squared	0.193396
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) -0.16575
Std Err of Coef. 0.338584

TUBO 5

HUM. TEN.

18.1	65	Regression Output:	
36.9	28	Constant	47.06102
39.4	14	Std Err of Y Est	2.644685
		R Squared	0.974283
		No. of Observations	3
		Degrees of Freedom	1

X Coefficient(s) -0.43613
Std Err of Coef. 0.07097

ANEXO 7

Dotações e tempos de rega no talhão 28 durante a campanha de rega

sector 7					sector 8				
Mês	dia	tempo	Dotação	Dotação	Mês	dia	tempo	Dotação	Dotação
Dotação		rega	aplicada	mensal	Dotação		rega	aplicada	mensal
mensal		(min)	(mm)	(mm)	Dotação		(min)	(mm)	(mm)
Maio	28	180	26.4		Maio	28	180	26.4	
	30	220	32.3	58.7		30	220	32.3	58.7
Junho	1	210	30.8		Junho	1	210	30.8	
	5	180	26.4			5	180	26.4	
	7	180	26.4			7	180	26.4	
	15	50	7.3			15	50	7.3	
	18	50	7.3			18	50	7.3	
	19	30	4.4			19	30	4.4	
	20	30	4.4			20	120	17.6	
	21	50	7.3			21	30	4.4	
	22	50	7.3			22	50	7.3	
	25	50	7.3			25	50	7.3	
	26	60	8.8			26	60	8.8	
	27	60	8.8			27	60	8.8	
	28	60	8.8			28	60	8.8	
	29	60	8.8	164.3		29	90	13.2	178.9
Julho	2	90	13.2		Julho	1	90	13.2	
	3	60	8.8			3	100	14.7	
	4	60	8.8			4	90	13.2	
	5	90	13.2			5	95	13.9	
	9	90	13.2			7	120	17.6	
	11	60	8.8			8	120	17.6	
	12	60	8.8			9	90	13.2	
	13	60	8.8			10	60	8.8	
	16	115	16.9			11	140	20.5	
	17	60	8.8			12	60	8.8	
	18	60	8.8			13	150	22.0	
	19	105	15.4			14	120	17.6	
	20	90	13.2			15	120	17.6	
	21	60	8.8			16	130	19.1	
	23	85	12.5			17	120	17.6	
	24	120	17.6			18	120	17.6	
	25	60	8.8			19	110	16.1	
	26	140	20.5			20	140	20.5	
	27	110	16.1			21	120	17.6	
	28	110	16.1	247.1		22	105	15.4	
Agosto	1	40	5.9			23	85	12.5	
	2	40	5.9			24	120	17.6	
	3	90	13.2			25	120	17.6	
	6	40	5.9			26	110	16.1	
	7	40	5.9			27	140	20.5	
	8	40	5.9			28	110	16.1	
	9	40	5.9			29	120	17.6	440.7
	10	40	5.9		Agosto	1	50	7.3	
	11	20	2.9			2	60	8.8	
	13	60	8.8			3	60	8.8	
	14	60	8.8			4	30	4.4	
	15	30	4.4			5	30	4.4	
	16	60	8.8			6	60	8.8	
	17	30	4.4			7	60	8.8	
	18	30	4.4			8	60	8.8	
	19	30	4.4			9	60	8.8	
	20	30	4.4	105.6		10	60	8.8	
						11	30	4.4	

total

575.7

12	30	4.4	
13	60	8.8	
14	60	8.8	
15	30	4.4	
16	60	8.8	
17	30	4.4	
18	30	4.4	
19	30	4.4	
20	30	4.4	134.9

total

813.3