BerryQuest International 2022

INDUSTRY PARTNER

Hort Innovation

Australian Blueberry Growers' Association

STRAWBERRIES AUSTRALIA

raba Raspberries & Blackberries Australia

PLATINUM SPONSOR

MOUNTAIN BLUE

berries AUSTRALIA

25–28 July
Sea World Resort
& Conference Centre

BQI 22

BerryQuest International 2022

WEDNESDAY 27 JULY 2022

The Future of Berries: Knowing what you are going to grow, made easy with AI

Fiona Turner, Bitwise Agronomy

berries AUSTRALIA

25–28 July
Sea World Resort
& Conference Centre

BQI 22

bitwise
Agronomy

Global Problems

Visibility
of farms is distributed and complex

Operations
are inefficient and costly

Management
lacks insight and overview

Unpredictable
yield loss & human error

Logistics
lack real-time information and forward planning

High Production Costs

Bitwise Approach - How it works

SIMPLE | POWERFUL | SCALABLE

GoPro

Use a GoPro camera to capture side-on, plant-by-plant video footage of your crops

Upload

Upload the video footage to the Bitwise GreenView portal

AI

GreenView will analyse the video, count and measure the growth stages of your vines and berries, an generate tailored insights reports about your crop health.

Decisions

Make data-driven decisions to improve the yield and profitability of your crops.

Berry Collection

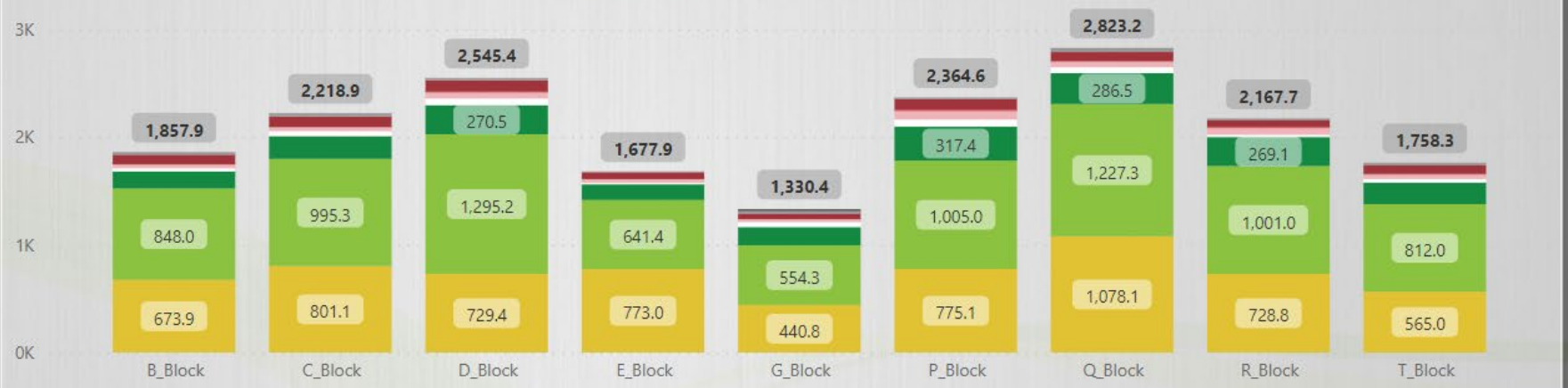
0_25_coloured: 149
25_50_coloured: 24
50_75_coloured: 51
75_100_coloured: 581
Flower: 1302
Immature green: 3036
Mature green: 863
Overripe: 179
Runner: 4
White: 57
web: bitwiseag.com
email: info@bitwiseag.com

Data and AI

Strawberries Count

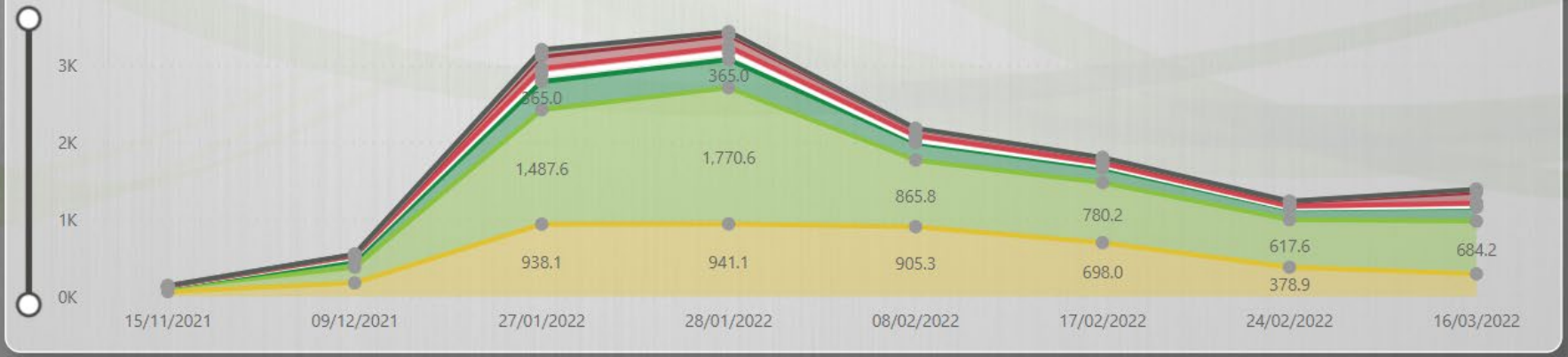
Qtd | **Avg. 10m** | Percentage

Average Count per Block - 10 meters



Total | Class | **Avg. 10m** | Percentage

Class Progression - Average 10 meters



Block & Date

- [x] Select all
- [x] B_Block
- [x] C_Block
- [x] D_Block
- [x] E_Block
  - [x] 15/11/2021
  - [x] 08/02/2022
  - [x] 17/02/2022
- [x] G_Block
- [x] P_Block
- [x] Q_Block

Class

- [ ] Select all
- [ ] Flower
- [ ] Immature Green
- [ ] Mature Green
- [ ] White
- [ ] 0_25_Coloured
- [ ] 25_50_Coloured
- [ ] 50_75_Coloured
- [ ] 75_100_Coloured
- [ ] Overripe
- [ ] Runner

Last update: 3/21/2022 10:59:01 PM

Powered by

Strawberries Map

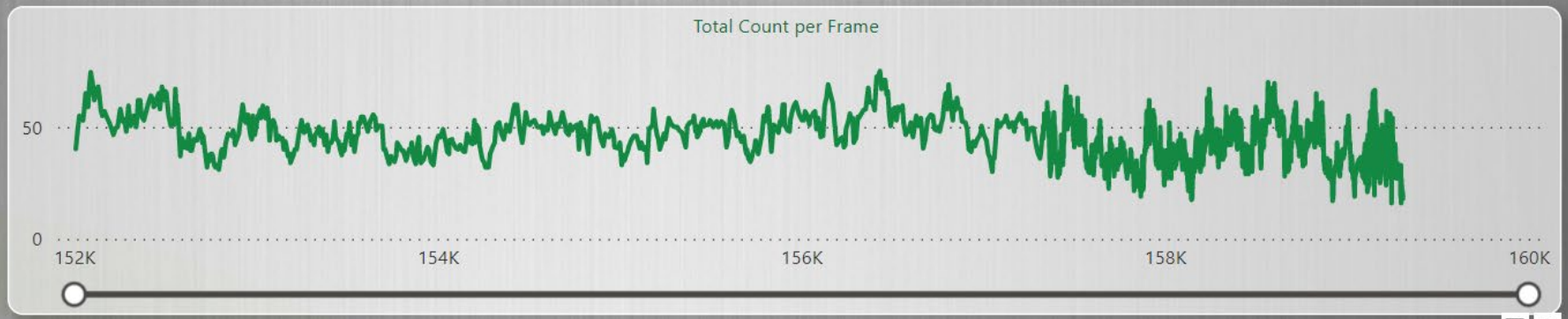
Block & Date

- B_Block
- C_Block
- D_Block
- E_Block
  - 15/11/2021
  - 08/02/2022
  - 17/02/2022
- G_Block
- P_Block
- Q_Block
- R_Block
- T_Block
  - 09/12/2021
  - 08/02/2022
  - 17/02/2022

Link

Web Image

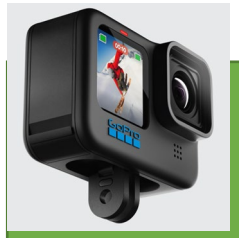
Total



Powered by

Class
<10
10 - 20
20 - 30
30 - 40
40 - 50
>50
Microsoft Bing

Inputs into calculator



Bitwise Process

Class Counts

Trends

Yield Estimates

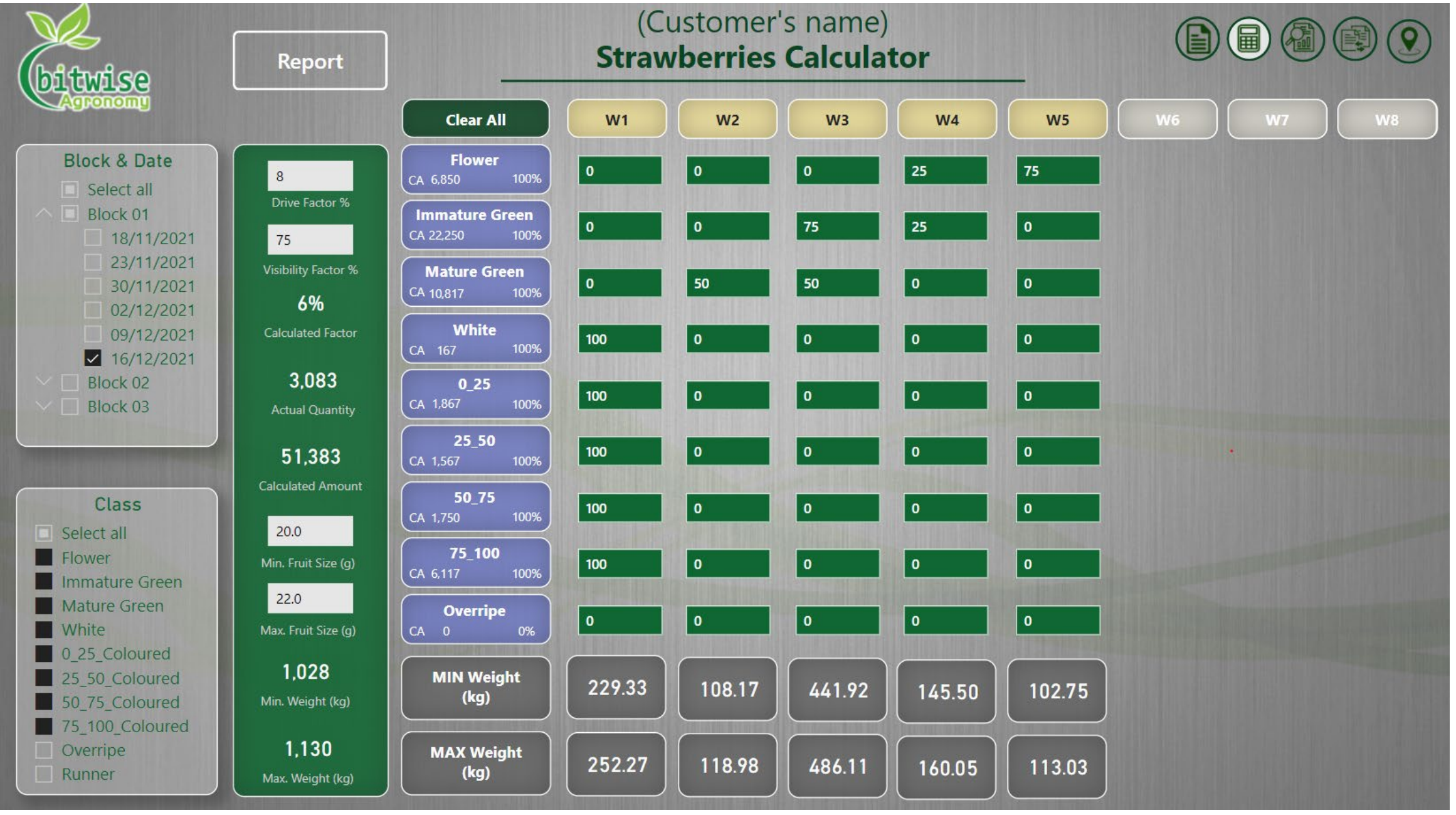
Yield Forecast

Drive + visibility Factor

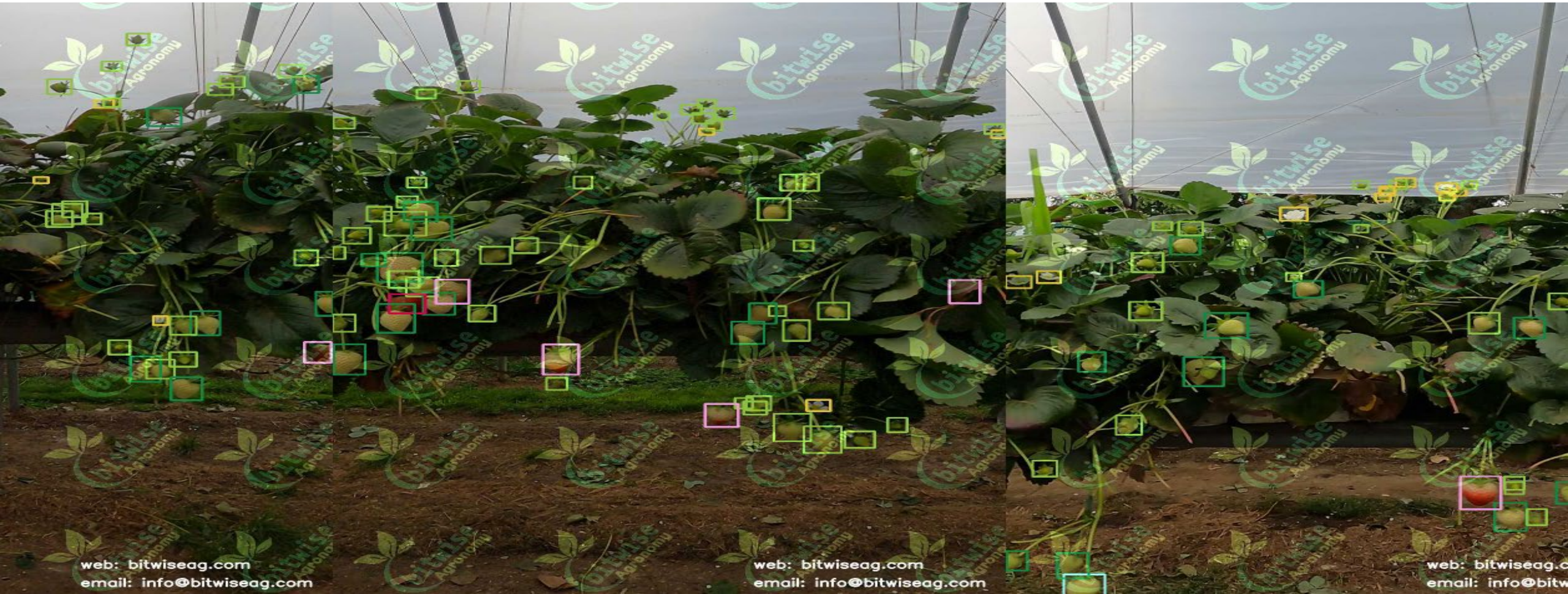
Average weights

Weather Data + Historical

Bitwise Yield Calculator Tool


bitwise Agronomy
Report
(Customer's name)
Strawberries Calculator
Block & Date
Select all
Block 01
18/11/2021
23/11/2021
30/11/2021
02/12/2021
09/12/2021
16/12/2021
Block 02
Block 03
Class
Select all
Flower
Immature Green
Mature Green
White
0_25_Coloured
25_50_Coloured
50_75_Coloured
75_100_Coloured
Overripe
Runner
8
Drive Factor %
75
Visibility Factor %
6%
Calculated Factor
3,083
Actual Quantity
51,383
Calculated Amount
20.0
Min. Fruit Size (g)
22.0
Max. Fruit Size (g)
1,028
Min. Weight (kg)
1,130
Max. Weight (kg)
Clear All
W1
W2
W3
W4
W5
W6
W7
W8
Flower CA 6,850 100%
0 0 0 25 75
Immature Green CA 22,250 100%
0 0 75 25 0
Mature Green CA 10,817 100%
0 50 50 0 0
White CA 167 100%
100 0 0 0 0
0_25 CA 1,867 100%
100 0 0 0 0
25_50 CA 1,567 100%
100 0 0 0 0
50_75 CA 1,750 100%
100 0 0 0 0
75_100 CA 6,117 100%
100 0 0 0 0
Overripe CA 0 0%
0 0 0 0 0
MIN Weight (kg)
229.33 108.17 441.92 145.50 102.75
MAX Weight (kg)
252.27 118.98 486.11 160.05 113.03

What's Next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email: info@bitwiseag.com
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email: info@bitwiseag.com

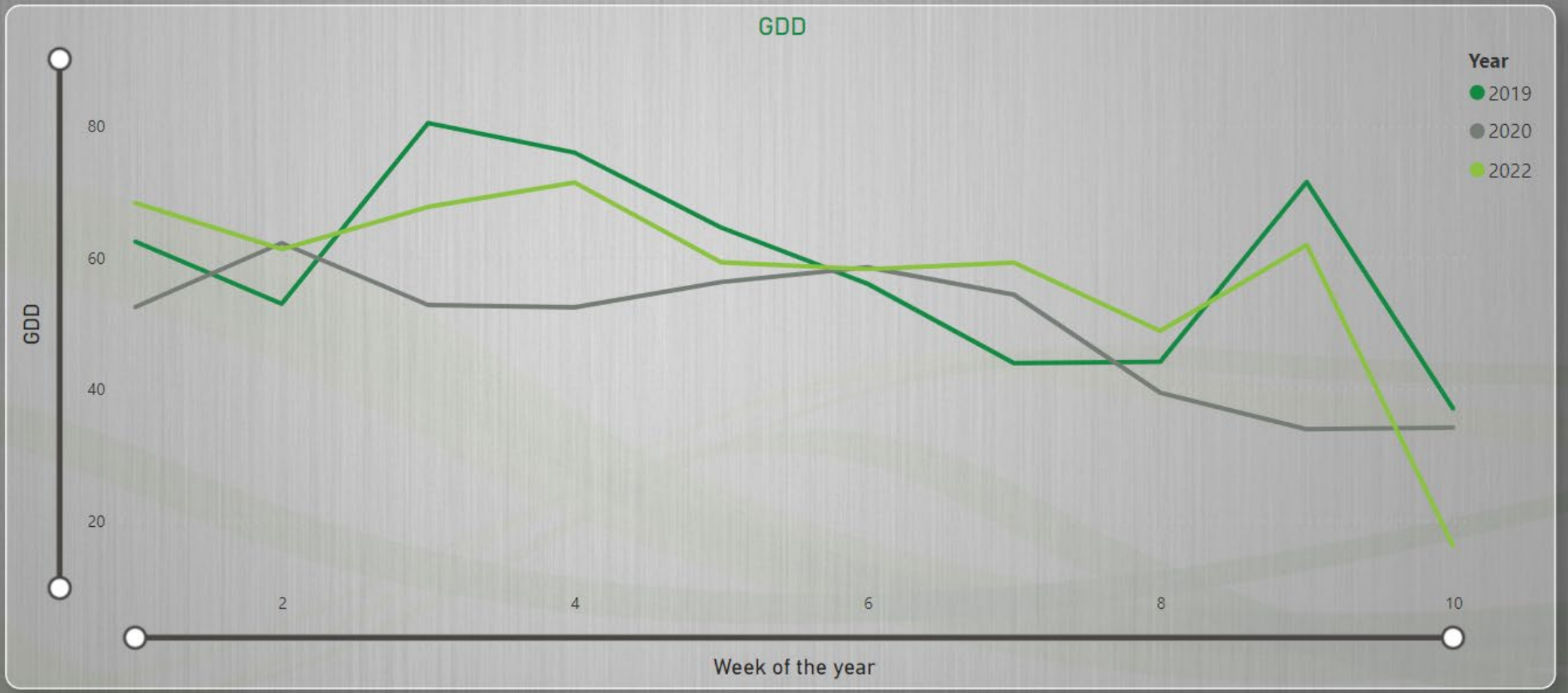
GDD

(Customer's name)

GDD - Season Overview

Block & Date

- Block 1
  - 30/09/2021
- Block A
  - 09/11/2021
  - 11/11/2021
  - 13/12/2021
  - 10/01/2022
  - 24/01/2022
  - 07/02/2022
  - 22/02/2022
  - 08/03/2022
- Block A&B
  - 18/10/2021
  - 24/10/2021
  - 19/11/2021



2

Week of the Year

Week of Year

1 — 10

Year

Select all | 2018 | 2019 | 2020 | 2021 | 2022

GDD | Report

(Customer's name)

Strawberries Calculator & GDD

Block & Date

- Block 1
- Block A
  - 09/11/2021
  - 11/11/2021
  - 13/12/2021
  - 10/01/2022
  - 24/01/2022
  - 07/02/2022
  - 22/02/2022
  - 08/03/2022

8
Week of the Year

Class

- Flower
- Immature Green
- Mature Green
- White
- 0_25_Coloured
- 25_50_Coloured
- 50_75_Coloured
- 75_100_Coloured

40
Drive Factor %

60
Visibility Factor %

310,369
Actual Quantity

1,293,204
Calculated Amount

20.0
Weight 1 (g)

25.0
Weight 2 (g)

25,864
Total Weight 1 (kg)

32,330
Total Weight 2 (kg)

Clear All

	W1	W2	W3	W4	W5	W6	W7	W8
Flower CA261,275 100%	0	0	0	0	25	75		
Immature Green CA666,100 100%	0	0	0	50	50	0		
Mature Green CA162,538 100%	0	25	75	0	0	0		
White CA 41,792 100%	75	25	0	0	0	0		
0_25 CA 65,096 100%	100	0	0	0	0	0		
25_50 CA 5,483 100%	100	0	0	0	0	0		
50_75 CA 5,467 100%	100	0	0	0	0	0		
75_100 CA 85,454 100%	100	0	0	0	0	0		
Weight 1 (kg)	3,856.88	1,021.65	2,438.06	6,661.00	7,967.38	3,919.13		
Weight 2 (kg)	4,821.09	1,277.06	3,047.58	8,326.25	9,959.22	4,898.91		

Week of Year

8

13

Actual Year

2022

Trend Year

2019

Actual GDD

Year	8	9	10	Total
2022	48.85	61.95	16.20	127.00

Reference GDD

Year	8	9	10	11	12	13	Total
2019	44.15	71.55	37.05	32.05	56.15	16.20	257.15

GDD Target

200

GDD Remaining

73.00

The Ask …..

- Industry support
- Feedback on likes and dislikes

Interest in our products …. Come and see us or email fiona@bitwiseag.com

Questions?
bitwise
Agronomy
Fiona Turner
+61 416 739 903
fiona@bitwiseag.com
www.bitwiseag.com