

UNOFFICIAL VCT 2022 REFERENCE BOOK



**DATA FROM ALL INTERNATIONAL VCT EVENTS
CUSTOM METRICS, PLAYER AND TEAM RANKINGS,
INDIVIDUAL AND TEAM STATISTICS, 5 ARTICLES**

CREATED BY: JAYDEN CHRZANOWSKI



EMEA



TEAM LIQUID



NA



THE
GUARD



XSET

APAC



XERXIA ESPORTS

LATAM



BR



NINJAS IN
PYJAMAS

LOUD

JP



KR



CHINA



UNOFFICIAL VALORANT REFERENCE BOOK

CREATED BY: JAYDEN CHRZANOWSKI

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This book was created as an independent study at Northern Arizona University

Note: Since data was acquired from an external site and analyzed using the R programming language and the project was made by a single party, there may be some errors in statistics presented. Please email any issues or corrections to shoodieinquiries@gmail.com

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MATCHES

VALORANT CHAMPIONS TOUR STAGE 1: MASTERS REYKJAVÍK

APRIL 10-24, 2022 REYKJAVÍK, ICELAND 12 TEAMS

















































VALORANT CHAMPIONS TOUR STAGE 2: MASTERS COPENHAGEN

JULY 10-23, 2022 COPENHAGEN, DENMARK 12 TEAMS

VALORANT CHAMPIONS 2022

AUGUST 31-SEPTEMBER 18, 2022 İSTANBUL, TÜRKIYE 16 TEAMS

MASTERS 1 REYKJAVÍK MATCHES


DATE/TIME †	STAGE	BRACKET	TEAM 1	TEAM 2	TEAM 1 SCORE	TEAM 2 SCORE
4/10/2022, 08:00:00	Group	Opening (A)	 DRX	 ZETA	2	0
4/10/2022, 10:55:00	Group	Opening (B)	 KRU	 TL	0	2
4/10/2022, 13:45:00	Group	Opening (B)	 OPTC	 XIA	0	2
4/11/2022, 10:00:00	Group	Opening (A)	 FNTC	 NIP	0	2
4/11/2022, 12:50:00	Group	Winner's (B)	 XIA	 TL	1	2
4/12/2022, 08:00:00	Group	Winner's (A)	 NIP	 DRX	0	2
4/12/2022, 11:30:00	Group	Elimination (B)	 OPTC	 KRU	2	0
4/12/2022, 14:40:00	Group	Elimination (A)	 FNTC	 ZETA	0	2
4/13/2022, 10:00:00	Group	Decider (B)	 XIA	 OPTC	0	2
4/13/2022, 12:30:00	Group	Decider (A)	 NIP	 ZETA	1	2
4/14/2022, 10:00:00	Playoffs	Upper Quarterfinals	 G2	 ZETA	2	0
4/14/2022, 12:30:00	Playoffs	Upper Quarterfinals	 LOUD	 TL	2	1
4/15/2022, 10:00:00	Playoffs	Upper Quarterfinals	 PRX	 DRX	1	2
4/15/2022, 14:00:00	Playoffs	Upper Quarterfinals	 TGRD	 OPTC	1	2
4/16/2022, 10:00:00	Playoffs	Lower Round 1	 ZETA	 TL	2	1
4/16/2022, 13:30:00	Playoffs	Lower Round 1	 PRX	 TGRD	2	0
4/17/2022, 10:00:00	Playoffs	Upper Semifinals	 DRX	 OPTC	1	2
4/17/2022, 14:00:00	Playoffs	Upper Semifinals	 G2	 LOUD	0	2
4/18/2022, 10:00:00	Playoffs	Lower Round 2	 DRX	 ZETA	1	2
4/18/2022, 14:00:00	Playoffs	Lower Round 2	 G2	 PRX	0	2
4/22/2022, 10:00:00	Playoffs	Upper Final	 LOUD	 OPTC	2	1
4/22/2022, 13:25:00	Playoffs	Lower Round 3	 ZETA	 PRX	2	1
4/23/2022, 10:00:00	Playoffs	Lower Final	 OPTC	 ZETA	3	0
4/24/2022, 10:00:00	Playoffs	Grand Final	 LOUD	 OPTC	0	3

- TIME IN MST

- ALL MATCHES BO3 EXCEPT FINALS, BO5

@SHOODIENA

MASTERS 2 COPENHAGEN MATCHES

DATETIME †	STAGE	BRACKET	TEAM 1	TEAM 2	TEAM 1 SCORE	TEAM 2 SCORE
7/10/2022, 08:00:00	Group	Opening (B)	 DRX	 NTH	2	0
7/10/2022, 10:45:00	Group	Opening (A)	 LOUD	 KRU	1	2
7/10/2022, 14:35:00	Group	Opening (A)	 OPTC	 GLD	0	2
7/11/2022, 10:00:00	Group	Opening (B)	 FPX	 XIA	2	1
7/11/2022, 13:50:00	Group	Winner's (A)	 GLD	 KRU	2	1
7/12/2022, 08:00:00	Group	Winner's (B)	 FPX	 DRX	1	2
7/12/2022, 11:35:00	Group	Elimination (B)	 XIA	 NTH	1	2
7/12/2022, 15:00:00	Group	Elimination (A)	 OPTC	 LOUD	2	1
7/13/2022, 10:00:00	Group	Decider (B)	 FPX	 NTH	2	0
7/13/2022, 13:00:00	Group	Decider (A)	 KRU	 OPTC	0	2
7/14/2022, 10:00:00	Playoffs	Upper Quarterfinals	 PRX	 GLD	2	0
7/14/2022, 12:35:00	Playoffs	Upper Quarterfinals	 FNTC	 FPX	2	0
7/15/2022, 10:00:00	Playoffs	Upper Quarterfinals	 LEV	 DRX	1	2
7/15/2022, 13:45:00	Playoffs	Upper Quarterfinals	 XSET	 OPTC	0	2
7/16/2022, 10:00:00	Playoffs	Lower Round 1	 GLD	 FPX	1	2
7/16/2022, 13:25:00	Playoffs	Lower Round 1	 LEV	 XSET	2	1
7/17/2022, 10:00:00	Playoffs	Upper Semifinals	 PRX	 FNTC	2	0
7/17/2022, 13:00:00	Playoffs	Upper Semifinals	 DRX	 OPTC	1	2
7/18/2022, 10:00:00	Playoffs	Lower Round 2	 FNTC	 LEV	2	1
7/18/2022, 14:25:00	Playoffs	Lower Round 2	 DRX	 FPX	0	2
7/22/2022, 10:00:00	Playoffs	Upper Final	 PRX	 OPTC	2	1
7/22/2022, 13:15:00	Playoffs	Lower Round 3	 FPX	 FNTC	2	1
7/23/2022, 10:00:00	Playoffs	Lower Final	 OPTC	 FPX	1	3
7/24/2022, 10:00:00	Playoffs	Grand Final	 PRX	 FPX	2	3

- TIME IN MST

- ALL MATCHES BO3 EXCEPT FINALS, BO5

@SHOODIENA

CHAMPIONS ISTANBUL MATCHES

DATE/TIME †	STAGE	BRACKET	TEAM 1	TEAM 2	TEAM 1 SCORE	TEAM 2 SCORE
8/31/2022, 09:00:00	Group	Opening (A)	PRX	EDG	2	1
8/31/2022, 12:35:00	Group	Opening (A)	LEV	TL	2	0
9/1/2022, 07:00:00	Group	Opening (B)	ZETA	LOUD	0	2
9/1/2022, 09:45:00	Group	Opening (B)	OPTC	BOOM	2	1
9/1/2022, 13:35:00	Group	Winner's (A)	PRX	LEV	0	2
9/2/2022, 07:00:00	Group	Opening (D)	DRX	FUR	2	0
9/2/2022, 10:10:00	Group	Opening (D)	FNTC	100T	1	2
9/2/2022, 14:00:00	Group	Winner's (B)	OPTC	LOUD	2	1
9/3/2022, 07:00:00	Group	Opening (C)	XSET	XIA	2	0
9/3/2022, 10:00:00	Group	Opening (C)	FPX	KRU	2	0
9/3/2022, 12:45:00	Group	Winner's (D)	DRX	100T	2	0
9/4/2022, 07:00:00	Group	Elimination (B)	BOOM	ZETA	1	2
9/4/2022, 10:45:00	Group	Elimination (A)	EDG	TL	0	2
9/5/2022, 07:00:00	Group	Elimination (C)	KRU	XIA	2	1
9/5/2022, 10:20:00	Group	Elimination (D)	FUR	FNTC	1	2
9/5/2022, 14:10:00	Group	Winner's (C)	FPX	XSET	1	2
9/7/2022, 09:00:00	Group	Decider (A)	PRX	TL	1	2
9/7/2022, 11:35:00	Group	Decider (B)	LOUD	ZETA	2	0
9/8/2022, 09:00:00	Group	Decider (C)	FPX	KRU	2	0
9/8/2022, 11:35:00	Group	Decider (D)	100T	FNTC	0	2
9/9/2022, 09:00:00	Playoffs	Upper Quarterfinals	LEV	LOUD	0	2
9/9/2022, 12:00:00	Playoffs	Upper Quarterfinals	DRX	FPX	2	0
9/10/2022, 09:00:00	Playoffs	Upper Quarterfinals	OPTC	TL	2	1
9/10/2022, 12:50:00	Playoffs	Upper Quarterfinals	XSET	FNTC	2	0
9/11/2022, 09:00:00	Playoffs	Lower Round 1	FPX	LEV	2	0
9/11/2022, 11:55:00	Playoffs	Lower Round 1	TL	FNTC	0	2
9/12/2022, 09:00:00	Playoffs	Upper Semifinals	DRX	LOUD	0	2
9/12/2022, 11:40:00	Playoffs	Upper Semifinals	OPTC	XSET	2	1
9/13/2022, 09:00:00	Playoffs	Lower Round 2	DRX	FNTC	2	1
9/13/2022, 13:10:00	Playoffs	Lower Round 2	XSET	FPX	1	2
9/16/2022, 09:15:00	Playoffs	Upper Final	LOUD	OPTC	2	0
9/16/2022, 11:45:00	Playoffs	Lower Round 3	FPX	DRX	0	2
9/17/2022, 09:00:00	Playoffs	Lower Final	OPTC	DRX	3	2
9/18/2022, 09:10:00	Playoffs	Grand Final	LOUD	OPTC	3	1

@SHOOD/ENNA

ALL MATCHES BO3 EXCEPT FINALS BO5

TIMES IN MST

TOP PERFORMERS

TOP 5 TEAMS

TOP 5 PLAYERS

TOP 5 ATTACKERS

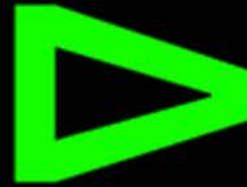
TOP 5 DEFENDERS

TOP 5 PLAYERS PER ROLE

CHAMBER, DUELIST, CONTROLLER, INITIATOR*

TOP 5 TEAMS

1. LOUD



2. FPX



3. OPTIC



4. DRX



5. PRX



ROUNDS > 700
TOP 5 PLAYERS

PLAYER	RATING	
1. YAY	1.12	
2. SHAO	1.09	
3. MAKO	1.06	
4. PANCADA	1.05	
5. SACY	1.05	

*RANKINGS BASED ON @SHOODIENA RATING METRIC

- 1. YAY, 1353 ROUNDS PLAYED
- 2. SHÁO, 917 ROUNDS PLAYED
- 3. MAKO, 940 ROUNDS PLAYED
- 4. PANCÁDA, 742 ROUNDS PLAYED
- 5. SACY, 742 ROUNDS PLAYED

TOP 5 ATTACKERS

ROUNDS > 700

PLAYER	RATING	
1. MAKO	1.23	
2. SHAO	1.20	
3. STAX	1.17	
4. SUYGETSU	1.10	
5. SACY	1.08	

*RANKINGS BASED ON @SHOODIENA ATTACK METRIC

1. MAKO, 940 ROUNDS PLAYED
2. SHAO, 917 ROUNDS PLAYED
3. STAX, 940 ROUNDS PLAYED
4. SUYGETSU, 703 ROUNDS PLAYED
5. SACY, 742 ROUNDS PLAYED

TOP 5 DEFENDERS

ROUNDS > 700

PLAYER	RATING	
1. SHAO	1.11	
2. SACY	1.10	
3. YAY	1.09	
4. PANCADA	1.07	
5. CRASHIES	1.07	

*RANKINGS BASED ON @SHOODIENA DEFENSE METRIC

1. SHAO, 917 ROUNDS PLAYED
2. SACY, 742 ROUNDS PLAYED
3. YAY, 1353 ROUNDS PLAYED
4. PANCADA, 742 ROUNDS PLAYED
5. CRASHIES, 1353 ROUNDS PLAYED

SNUBS

These are players who i feel deserve a spot on the rankings, but I decided not to put them in the ranking due to a lack of rounds played OR were igls and undermined by the way the metric was calculated OR are players that barely missed the list.

Best Controller

SSCARY - SNUBBED DUE TO LACK OF ROUNDS

BOASTER - SNUBBED DUE TO IGL ROLE

Best Initiator

ADVERSO - SNUBBED DUE TO LACK OF ROUNDS

BCJ - SNUBBED DUE TO LACK OF ROUNDS

FNS - SNUBBED DUE TO IGL ROLE

Best Duelist

ZEKKEN - SNUBBED DUE TO LACK OF ROUNDS

VICTOR - SELFLESSNESS CANT BE MEASURED

KEZNIT - RANKED 6TH

Best Chamber

CRYOCELLS - SNUBBED DUE TO LACK OF ROUNDS

NAGZ - SNUBBED DUE TO LACK OF ROUNDS

TOP CONTROLLERS

	TEAM	RATING	ATK	DEF
1. MAKO	DRX	1.06	1.19	1.08
2. PANCADA	LOUD	1.05	1.08	1.07
3. SUYGETSU	FPX	1.05	1.17	0.97
4. LESS	LOUD	1.01	1.03	1.04
5. MARVED	OPTIC	0.99	1.05	1.05

TOP INITIATORS

	TEAM	RATING	ATK	DEF
1. SHAO	FPX	1.09	1.19	1.08
2. SACY	LOUD	1.05	1.08	1.07
3. STAX	DRX	1.03	1.17	0.97
4. CRASHIES	OPTIC	1.02	1.03	1.04
5. ENZO	FNATIC	1.01	1.05	1.05

WHERE ARE THE IGLS?

A KEY LIMITATION OF USING IN-GAME DATA FOR METRIC CREATION IS THE BIAS AGAINST IGLS. OFTEN, IGLS DO NOT PERFORM AS WELL AS PLAYERS NOT UNDER THE LEADERSHIP ROLE. UNTIL WE CAN FIGURE OUT A WAY TO MEASURE AN IGLS IMPACT, THEY WILL CONTINUE TO BE UNDERMINED BY CREATED METRICS





















TOP CHAMBERS

	TEAM	RATING	ATK	DEF
1. YAY	OPTIC	1.12	1.04	1.05
2. DERKE	FNATIC	1.16	1.18	1.06
3. ARDIIS	FPX	1.05	1.00	0.96
4. LAZ	ZETA	1.02	0.95	0.94
5. TACOLILLA	LEV	1.02	0.88	1.02

TOP DUELISTS

	TEAM	RATING	ATK	DEF
1. ALFAJER	FNATIC	1.07	1.22	0.91
2. ASPAS	LOUD	1.05	0.97	1.04
3. BUZZ	DRX	1.03	1.08	0.98
4. ZYPPAN	FPX	1.02	1.02	1.03
5. FORSAKEN	PRX	1.01	1.03	0.91

PLAYER RATINGS TABLE ^{>700 ROUNDS}

PLAYER	ROLE	RP	TEAM	ATK	DEF	RATING ↓
yay	Chamber	1353	 OPTC	1.06	1.09	1.12
Shao	Initiator	917	 FPX	1.2	1.11	1.09
MaKo	Controller	940	 DRX	1.22	0.94	1.06
SUYGETSU	Controller	703	 FPX	1.1	1.01	1.05
Sacy	Initiator	742	 LOUD	1.08	1.1	1.05
pANcada	Controller	742	 LOUD	1.08	1.07	1.05
aspas	Duelist	742	 LOUD	0.96	1.03	1.05
ardiis	Chamber	917	 FPX	1.02	1	1.05
stax	Initiator	940	 DRX	1.17	1	1.03
BuZz	Duelist	940	 DRX	1.07	0.97	1.03
Zyppan	Duelist	917	 FPX	1.01	1.01	1.02
crashies	Initiator	1353	 OPTC	1.03	1.07	1.02
Less	Controller	742	 LOUD	0.99	1	1.01
Zest	Initiator	940	 DRX	1.04	1.01	0.99
Victor	Duelist	1353	 OPTC	1.04	0.95	0.99
Saadhak	Initiator	742	 LOUD	0.99	1.03	0.99
Marved	Controller	1353	 OPTC	1.02	0.92	0.99
Rb	Duelist	940	 DRX	0.96	1.03	0.98
FNS	Initiator	1353	 OPTC	0.95	1.03	0.92
ANGE1	Controller	917	 FPX	1.02	0.93	0.91

SELECT PLAYER STATS

PLAYER	TEAM	RP	KD	KDA	ACS	KAST	ADR	KMAX	FKFD	TFKTFD	K	D	A	PLANTS	DEFUSES	HS.PCT	CL.PCT	MK
BuZz	DRX	940	1.06	1.33	219.05	0.68	142.61	36	1.06	1.11	710	667	174	26	8	0.25	0.15	57
MaKo	DRX	940	1.18	1.86	218.69	0.78	140.44	28	1.26	1.43	705	598	407	57	20	0.27	0.11	53
Rb	DRX	940	0.95	1.22	196.82	0.66	124.72	27	0.88	0.79	637	674	185	55	13	0.25	0.14	51
stax	DRX	940	1.07	1.55	190.75	0.72	126.5	27	0.91	0.96	656	614	296	169	14	0.36	0.21	40
Zest	DRX	940	1	1.39	188.19	0.71	123.88	31	0.98	0.96	623	625	246	53	13	0.32	0.18	38
Alfajer	FNC	553	1.15	1.48	236.96	0.72	159.15	27	1.04	1.06	445	387	128	17	15	0.28	0.14	32
Booster	FNC	638	0.86	1.43	181.24	0.69	118.66	31	0.58	0.63	377	440	251	37	10	0.18	0.1	14
Derke	FNC	553	1.26	1.47	245.68	0.7	162.97	31	1.28	1.32	487	386	79	17	12	0.3	0.14	47
Enzo	FNC	638	0.95	1.49	173.84	0.71	114.68	24	0.87	0.8	383	404	217	55	13	0.23	0.13	17
Mistic	FNC	638	0.94	1.46	178.16	0.71	115.75	24	1.02	0.89	404	431	224	92	17	0.27	0.15	20
ANGE1	FPX	917	0.74	1.11	162.85	0.65	109.25	20	0.62	0.56	516	693	254	35	12	0.31	0.07	25
ardis	FPX	917	1.16	1.47	226.18	0.72	143.76	30	1.59	1.63	754	651	203	30	14	0.22	0.14	55
Shao	FPX	917	1.15	1.72	203.97	0.78	138.45	29	1.26	1.12	667	579	331	139	21	0.33	0.22	46
SUYGETSU	FPX	703	1.18	1.58	206.37	0.75	137.13	30	1.44	1.5	542	460	187	37	11	0.33	0.16	37
Zyppan	FPX	917	1.04	1.37	220.18	0.7	145.94	30	1.1	1.1	703	673	217	39	26	0.27	0.15	51
Delz1k	KRU	415	0.81	1.2	165.88	0.69	109.5	24	0.77	0.85	237	294	117	26	7	0.26	0.14	8
keznit	KRU	415	1.01	1.36	230.01	0.66	150.37	28	1.1	1.05	319	315	108	5	5	0.23	0.15	22
Klaus	KRU	415	0.79	1.3	171.73	0.66	112.95	19	0.56	0.52	241	306	156	40	7	0.23	0.12	17
Mazino	KRU	415	0.94	1.36	206.87	0.68	136.23	29	0.91	0.94	291	311	133	48	8	0.25	0.12	25
NagZ	KRU	415	0.99	1.16	195.61	0.69	128.1	24	0.97	0.98	294	297	50	9	6	0.26	0.12	17
adverso	LEV	401	0.92	1.3	200.18	0.67	131.42	29	1.18	1.22	270	292	111	34	8	0.26	0.04	15
kiNgg	LEV	401	1.05	1.44	222.72	0.7	141.7	26	1.36	1.28	296	283	112	15	8	0.21	0.18	24
Melser	LEV	401	1.02	1.53	189.03	0.68	123.48	29	0.54	0.57	267	263	136	40	11	0.28	0.15	22
Shyy	LEV	401	0.91	1.5	178.24	0.72	114.94	28	0.74	0.66	248	274	163	19	10	0.27	0.21	13
Tacolilla	LEV	401	1.07	1.31	198.25	0.67	125.72	26	1.39	1.42	286	268	64	12	14	0.26	0.15	16
aspas	LOUD	742	1.14	1.38	229.08	0.71	146.22	29	0.98	1.14	594	523	128	14	8	0.24	0.08	47
Less	LOUD	742	1.12	1.45	208.02	0.69	134.98	33	0.92	0.97	542	483	156	20	17	0.23	0.15	36
pANcada	LOUD	742	1.11	1.61	199.2	0.72	130.64	22	1.06	1.12	537	483	241	55	19	0.35	0.15	35
Saadhak	LOUD	742	0.93	1.47	199.02	0.69	128.79	26	0.63	0.74	484	523	284	73	14	0.21	0.08	27
Sacy	LOUD	742	1.04	1.59	190.48	0.75	126.57	32	1.29	1.46	490	472	260	76	28	0.27	0.12	31
crashies	OPTC	1353	1.02	1.55	191.41	0.72	126.1	28	0.96	1.07	901	882	463	153	26	0.25	0.15	57
FNS	OPTC	1353	0.8	1.22	162.18	0.68	108.56	22	0.87	0.72	741	922	384	134	18	0.2	0.1	42
Marved	OPTC	1353	1.06	1.54	210.14	0.72	136.38	35	1.17	1.28	997	939	450	84	23	0.31	0.18	76
Victor	OPTC	1353	0.98	1.36	207.03	0.7	135.13	28	0.98	0.96	942	966	376	62	25	0.24	0.16	57
yay	OPTC	1353	1.35	1.54	249.11	0.71	157.76	30	1.55	1.49	1210	896	166	22	27	0.25	0.14	114
Benkai	PRX	627	0.93	1.41	172.72	0.72	110.95	22	0.57	0.5	387	415	200	80	8	0.27	0.12	22
d4v41	PRX	627	0.98	1.51	188.56	0.72	121.67	23	1.17	1.26	414	424	225	75	12	0.24	0.15	21
f0rsakeN	PRX	627	1.07	1.27	231.21	0.68	147.62	29	0.94	1.01	511	479	97	23	9	0.29	0.21	46
Jinggg	PRX	627	1.05	1.33	250.78	0.69	161.41	30	1.12	1.08	533	510	146	25	7	0.19	0.04	48
mindfreak	PRX	627	0.94	1.41	175.53	0.71	114.14	28	0.65	0.67	394	417	194	24	10	0.3	0.22	28
Jamppi	TL	500	1.15	1.37	228.35	0.7	148.59	33	1.33	1.16	401	350	79	32	16	0.24	0.2	36
Nivera	TL	500	1	1.3	188.3	0.68	122.5	26	1.21	1.3	338	338	101	23	4	0.3	0.15	22
Scream	TL	500	1.17	1.54	239.55	0.7	157.78	24	1.43	1.41	398	341	128	18	14	0.31	0.11	27
soulcas	TL	500	0.9	1.38	185.1	0.7	125.04	22	0.58	0.44	310	345	165	36	9	0.27	0.11	20

ROUNDS > 300

SELECT PLAYER STATS

PLAYER	TEAM	RP	KD	KDA	ACS	KAST	ADR	KMAX	FKFD	TFKTFD	K	D	A	PLANTS	DEFUSES	HS.PCT	CL.PCT	MK
crws	XER	408	0.86	1.21	182.29	0.65	119.1	24	0.6	0.56	260	304	108	76	6	0.25	0.17	17
foxz	XER	408	0.92	1.22	194.04	0.67	129.8	21	0.72	0.71	275	298	90	16	10	0.24	0.12	12
sScary	XER	408	1.03	1.57	205.23	0.71	136.49	28	0.61	0.64	283	276	151	14	7	0.21	0.2	17
Surf	XER	408	0.96	1.13	206.32	0.65	133.88	23	0.89	0.89	291	303	50	9	4	0.23	0.06	27
sushiboys	XER	408	0.81	1.08	182.03	0.66	124.94	21	1.03	1.19	248	307	84	15	3	0.19	0.13	18
AYRIN	XSET	410	0.83	1.21	155	0.7	100.82	22	0.73	0.65	236	286	111	22	11	0.2	0.09	15
BeJ	XSET	410	0.98	1.47	183.61	0.75	118.88	24	0.81	0.86	273	279	138	48	10	0.16	0.21	12
Cryocells	XSET	410	1.31	1.49	223.81	0.73	140.3	29	1.59	1.74	354	271	49	8	12	0.25	0.16	27
dephh	XSET	410	0.82	1.3	161.45	0.72	105.55	23	0.62	0.5	240	294	141	26	9	0.26	0.03	11
zekken	XSET	410	1.04	1.32	214.85	0.7	142.17	30	0.98	1.04	322	310	87	15	8	0.24	0.13	23
crow	ZETA	579	0.78	1.19	157.81	0.7	106.87	19	0.85	0.8	316	407	170	82	12	0.27	0.1	16
Dep	ZETA	579	0.96	1.26	202.88	0.66	128.36	26	1.29	1.33	412	427	127	22	8	0.28	0.05	31
Laz	ZETA	579	1.11	1.39	223.05	0.7	144.05	29	1.45	1.34	455	410	113	9	16	0.26	0.15	29
SugarZ3ro	ZETA	579	1.09	1.57	215.16	0.73	139.96	25	0.92	0.81	442	406	194	23	13	0.29	0.19	35
TENN	ZETA	579	0.95	1.24	214.22	0.66	141.27	27	0.98	0.95	416	438	127	31	17	0.27	0.12	29



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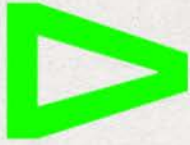
TEAMS

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INDIVIDUAL TEAM STATS
AVERAGE TEAM STATISTICS

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LOUD (LOUD)

ASPAS • LESS • SAADHAK • SACY • PANCADA

GENERAL STATS

REGION: BR

ROUNDS PLAYED: 742

LOCATION: BRAZIL

ROUNDS WON: 389

DATE FORMED: 1/30/2022

ROUND WP: 52%

2022 WINNINGS: \$470,387

RANKING: 1

TOTAL WINNINGS: \$470,387

TEAM STATS

PISTOL: 50%

5V4: 75%

KPR: 3.57

SWING: 58%

4V5: 32%

DPR: 3.35

GUN: 53%

1V1: 45%

APR: 1.44

ECO: 0%


FKPR: 0.47

ANTI-ECO: 94%

FDPR: 0.53

COACH: BZKA

KEY:

 WELL ABOVE AVERAGE

 AVERAGE

 BELOW AVERAGE

 ABOVE AVERAGE

 WELL BELOW AVERAGE



FUNPLUS PHOENIX (FPX)

SUYGETSU • ARDIIS • ANGE1 • ZYPPAN • SHAO

GENERAL STATS

REGION: EMEA

LOCATION: CHINA

DATE FORMED: 8/11/2020

2022 WINNINGS: \$380,571

TOTAL WINNINGS: \$477,292

ROUNDS PLAYED: 917

ROUNDS WON: 479

ROUND WP: 52%

RANKING: 2

TEAM STATS

PISTOL: 50%

5V4: 70%

KPR: 3.51

SWING: 51%

4V5: 34%

DPR: 3.4

GUN: 51%

1V1: 54%

APR: 1.31

ECO: 10%

FKPR: 0.51

ANTI-ECO: 91%

FDPR: 0.47

COACH: DOOMBROS

KEY:



WELL ABOVE AVERAGE



AVERAGE



BELOW AVERAGE



ABOVE AVERAGE



WELL BELOW AVERAGE



OPTC GAMING (OPTC)

CRASHIES • YAY • FNS • MARVED • VICTOR

GENERAL STATS

REGION: NA

LOCATION: UNITED STATES

DATE FORMED: 2/9/2022

2022 WINNINGS: \$499,000

TOTAL WINNINGS: \$499,000

ROUNDS PLAYED: 1353

ROUNDS WON: 709

ROUND WP: 52%

RANKING: 3

TEAM STATS

PISTOL: 50%

5V4: 72%

KPR: 3.54

SWING: 49%

4V5: 32%

DPR: 3.4

GUN: 52%

1V1: 50%

APR: 1.36

ECO: 12%

FKPR: 0.53

ANTI-ECO: 97%

FDPR: 0.47

COACH: CHET

KEY:



WELL ABOVE AVERAGE



AVERAGE



BELOW AVERAGE



ABOVE AVERAGE



WELL BELOW AVERAGE



DRX (DRX)

ZEST • BUZZ • STAX • MAKO • RB

GENERAL STATS

REGION: KR

LOCATION: SOUTH KOREA

DATE FORMED: 1/6/2022

2022 WINNINGS: \$244,750

TOTAL WINNINGS: \$244,750

ROUNDS PLAYED: 940

ROUNDS WON: 505

ROUND WP: 54%

RANKING: 4

TEAM STATS

PISTOL: 57%

5V4: 73%

KPR: 3.54

SWING: 56%

4V5: 35%

DPR: 3.38

GUN: 55%

1V1: 57%

APR: 1.39

ECO: 6%

FKPR: 0.5

ANTI-ECO: 89%

FDPR: 0.5

COACH: TERMI

KEY:



WELL ABOVE AVERAGE



AVERAGE



BELOW AVERAGE



ABOVE AVERAGE



WELL BELOW AVERAGE



PAPER REX (PRX)

MINDFREAK • FORSAKEN • BENKAI • DF4V41 • JINGGG

GENERAL STATS

REGION: APAC

ROUNDS PLAYED: 627

LOCATION: SINGAPORE

ROUNDS WON: 323

DATE FORMED: 7/19/2020

ROUND WP: 52%

2022 WINNINGS: \$282,822

RANKING: 5

TOTAL WINNINGS: \$338,369

TEAM STATS

PISTOL: 57%

5V4: 74%

KPR: 3.57

SWING: 50%

4V5: 27%

DPR: 3.58

GUN: 50%

1V1: 52%

APR: 1.37

ECO: 12%


FKPR: 0.48

ANTI-ECO: 86%

FDPR: 0.52

COACH: ALECKS

KEY:

 WELL ABOVE AVERAGE











































 AVERAGE

 BELOW AVERAGE

 ABOVE AVERAGE

 WELL BELOW AVERAGE

TEAM STATS PT. 1

ORGANIZATION	TEAM	REGION	LOCATION	FORMED	2022 WINNINGS	TOTAL WINNINGS	RND	RW	RWP
OpTic Gaming	 OPTC	NA	 United States	2/10/2022	\$499,000.00	\$499,000.00	1353	709	0.52
LOUD	 LOUD	BR	 Brazil	1/31/2022	\$470,387.00	\$470,387.00	742	389	0.52
FunPlus Phoenix	 FPX	EMEA	 China	8/12/2020	\$380,571.00	\$477,292.00	917	479	0.52
Paper Rex	 PRX	APAC	 Singapore	7/20/2020	\$282,822.00	\$338,369.00	627	323	0.52
DRX	 DRX	KR	 South Korea	1/7/2022	\$244,750.00	\$244,750.00	940	505	0.54
FNATIC	 FNC	EMEA	 United Kingdom	2/3/2021	\$203,089.00	\$399,634.00	638	318	0.5
XSET	 XSET	NA	 United States	7/16/2020	\$180,500.00	\$248,750.00	410	202	0.49
Leviatán	 LEV	LATAM	 Argentina	11/18/2021	\$129,500.00	\$131,500.00	401	196	0.49
ZETA DIVISION	 ZETA	JP	 Japan	4/7/2020	\$118,214.00	\$260,448.00	579	275	0.48
KRŪ Esports	 KRU	LATAM	 Argentina	1/11/2021	\$101,933.00	\$277,934.00	415	185	0.45
Team Liquid	 TL	EMEA	 Netherlands	8/7/2020	\$100,572.00	\$376,028.00	500	251	0.5
XERXIA Esports	 XER	APAC	 Thailand	1/17/2022	\$99,662.00	\$99,662.00	408	189	0.46
The Guard	 GRD	NA	 United States	11/5/2021	\$85,750.00	\$85,750.00	108	49	0.45
G2	 G2	EMEA	 Germany	6/16/2020	\$73,197.00	\$320,799.00	128	59	0.46
Guild Esports	 GLD	EMEA	 United Kingdom	10/21/2020	\$69,647.00	\$127,033.00	229	114	0.5
BOOM Esports	 BOOM	APAC	 Indonesia	7/15/2020	\$51,000.00	\$89,092.00	131	52	0.4
Ninjas in Pyjamas	 NIP	BR	 Sweden	4/8/2020	\$45,290.00	\$104,474.00	147	73	0.5
FURIA Esports	 FUR	BR	 Brazil	1/23/2021	\$40,361.00	\$106,038.00	113	49	0.43
100 Thieves	 100T	NA	 United States	6/4/2020	\$39,000.00	\$264,000.00	157	70	0.45
Northeption	 NTN	JP	 Japan	2/6/2021	\$24,851.00	\$27,133.00	150	64	0.43
Edward Gaming	 EDG	China	 China	4/1/2020	\$15,000.00	\$22,262.00	107	49	0.46

TEAM STATS PT. 2

TEAM	RND	PISTOLS	SWING	GUN	ANTI-ECO	ECO	5V4	4V5	1V1	KPR	DPR	APR	FKPR
OPTC	1353	0.5	0.49	0.52	0.97	0.12	0.72	0.3	0.5	3.54	3.4	1.36	0.53
DRX	940	0.57	0.56	0.55	0.89	0.06	0.73	0.35	0.57	3.54	3.38	1.39	0.5
FPX	917	0.5	0.51	0.51	0.91	0.1	0.7	0.34	0.54	3.51	3.4	1.31	0.51
LOUD	742	0.5	0.58	0.53	0.94	0	0.75	0.32	0.45	3.57	3.35	1.44	0.47
FNC	638	0.48	0.56	0.52	1	0.06	0.68	0.32	0.44	3.47	3.43	1.48	0.5
PRX	627	0.57	0.5	0.5	0.86	0.12	0.74	0.27	0.52	3.57	3.58	1.37	0.48
ZETA	579	0.45	0.56	0.48	0.85	0.1	0.67	0.26	0.41	3.53	3.6	1.26	0.54
TL	500	0.35	0.49	0.51	0.94	0.26	0.7	0.29	0.61	3.5	3.41	1.24	0.53
KRU	415	0.55	0.44	0.43	0.9	0	0.64	0.26	0.48	3.33	3.67	1.36	0.48
XSET	410	0.36	0.49	0.51	0.89	0.15	0.73	0.26	0.38	3.27	3.31	1.22	0.46
XER	408	0.47	0.43	0.47	0.82	0.1	0.74	0.24	0.55	3.33	3.65	1.18	0.44
LEV	401	0.68	0.41	0.45	0.9	0	0.69	0.28	0.52	3.41	3.44	1.46	0.53
GLD	229	0.4	0.48	0.52	1	0.09	0.68	0.24	0.44	3.62	3.43	1.5	0.51
100T	157	0.43	0.32	0.44	0.86	0	0.59	0.3	0.43	3.36	3.63	1.49	0.49
NTN	150	0.36	0.53	0.48	1	0	0.71	0.16	0.5	3.23	3.67	1.21	0.48
NIP	147	0.57	0.3	0.42	1	0	0.76	0.3	0.76	3.36	3.62	1.29	0.46
BOOM	131	0.58	0.5	0.39	0.67	0	0.66	0.2	0.47	3.15	3.76	1.09	0.43
G2	128	0.58	0.33	0.42	1	0	0.62	0.3	0.59	3.38	3.75	1.23	0.46
FUR	113	0.5	0.52	0.41	1	0	0.57	0.33	0.5	3.3	3.63	1.14	0.45
GRD	108	0.6	0.47	0.44	0.83	0	0.69	0.23	0.29	3.42	3.6	1.03	0.46
EDG	107	0.5	0.55	0.45	0.8	0.17	0.63	0.31	0.39	3.33	3.63	1.18	0.51

2022 AVERAGES

PISTOL: 50%

5V4: 69%

KPR: 3.41

SWING: 48%

4V5: 28%

DPR: 3.54

GUN: 47%

1V1: 49%

APR: 1.30

ANTI-ECO: 91%

FKPR: 0.49

ECO: 6%

FDPR: 0.51

Artistic Interpretation of Stats: Who's actually making an impact?

While statistics on their own can tell us a lot about a team or an individual player, there is so much that they can't tell us. This calls for the need to eye-test before making decisions based on statistics.

To outline this, I will bring up two examples: creative decisions that went into my rankings and what statistics can't capture about team players.

Creativity in my rankings

Valorant is a tough game to use statistics to rank players for during a single season because of the variation of rounds played from player to player. One critical decision I had to make was in my "Top 5 Chambers" list where Fnatic's chamber, Derke, posted a higher overall rating than Optic's chamber, yay. The main difference—yay had almost 2.5x more rounds than Derke (1353 v 553). I needed to weight differences in rounds and do some deeper analysis than taking the statistic at face value. I also had to realize that my overall statistic was based on how many rounds they helped their team win.

Ultimately, after weighing by rounds, I chose yay as the best chamber due to his consistency throughout the event. He rarely had an "off game", which can also be attributed to FNS' shotcalling and ability to set up yay in most situations—another variable that cannot be factored in with current statistics.

Another issue I ran into with my rankings was for my "Top 5 Duelists" list where Team Liquid's (TL) duelist, ScreaM, ranked the highest. I decided not to put ScreaM into my rankings because of the way I perceived his gameplay through watching VODs. While ScreaM was a major reason TL was able to win a fair amount of rounds according to my statistics, he was also the reason why I believe they struggled, after reviewing previous games.

2022/9/10	OpTic Gaming	8/13	DEF 2/10	ATK 6/3	Upper Quarterfinals Playoffs		
2022/9/07	Paper Rex	13/8	DEF 8/4	ATK 5/4	Decider (A) Group Stage		
2022/8/31	Leviatán	10/13	DEF 6/6	ATK 4/7	Opening (A) Group Stage		

Team Liquid's team composition on Bind during VCT Champions (vlr.gg)

2022/9/10	OpTic Gaming	13/7	DEF 9/3	ATK 4/4	Upper Quarterfinals Playoffs		
2022/9/04	EDward Gaming	14/12	DEF 7/5	ATK 5/7	OT 2/0	Elimination (A) Group Stage	

Team Liquid's team composition on Breeze during VCT Champions (vlr.gg)

While ScreaM excelled at getting kills and keeping his team in the game, it often felt like the team had to play around him, which could be seen in their agent compositions. TL would opt for a Phoenix on maps where an alternative would be stronger, which altered playcalling to work with ScreaM rather than to work with the highest win probability macro ideas.

After reviewing these matches, I perceived that TL having to *play around* ScreaM, rather than with him, lessened the team's performance more than it led the team to wins. This scenario also raised the question of how can we tell when a player is playing to work with the team to win rounds or playing for better statistics.

These are only a couple of the decisions I had to make using the statistics I had, but it also emphasized the importance of viewing matches and that you can't solely rely on statistics.

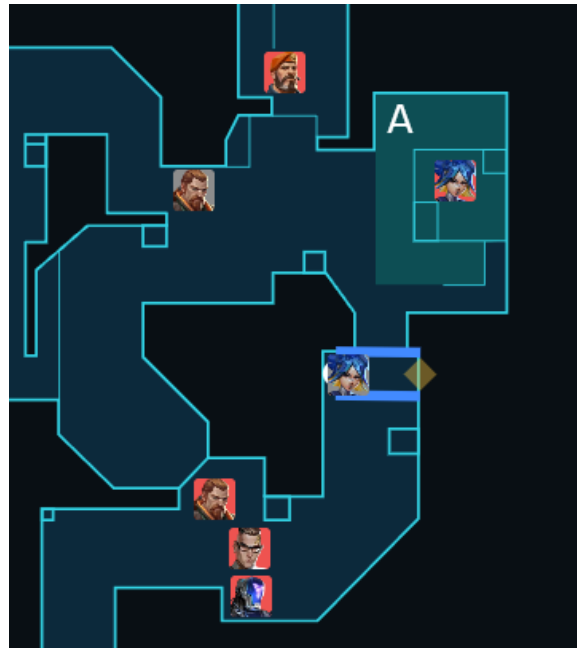
What The Statistics Can't See

Furthermore, players who make their impact through means that aren't captured by stats, such as space creation, calling plays, and setting the pace for rounds, are often undermined in statistics painting them as a bad player.

PLAYER	TEAM	RP	KD	KDA	ACS	KAST	ADR	KMAX	FKFD	TFKTFD
Victor	OPTC	1353	0.98	1.36	207.03	0.7	135.13	28	0.98	0.96

Victor's stats during the VCT 2022 International Events

Victor is one of the best duelists in the world, but his stats don't align with that idea. His kill and damage stats such as ACS, KPR, and ADR are below average for the duelist role when comparing him to other duelists with 100+ rounds in the VCT 2022 International Events. What's missing is the impact Victor has on attack with the space he gains for his team, which is greatly supported by his team's utility usage. Victor is the catalyst for Optic's attack side and when they support him well with utility, he gets them the advantage they need to win rounds.



Victor's (Neon) positioning on a defensive Fracture round during VCT Champions.
Note: THIS WAS ON OLD FRACTURE

Victor is also a selfless player often taking the risky positioning to set his team up for a greater play. While his location in the screenshot above seems doomed, he's there for a reason. After a quick attack hit from Boom Esports within the first 20 seconds of the round, Victor's role here was to stall enough time for Optic's B players to rotate over for the site retake. Victor walled himself off from the site to focus on the 3 players coming from main and was able to get a kill, which set his team up for a 3v3 retake on the site after the carnage (enemy Breach was alive, but outside of a position to help). This was only a glimpse of Victor's impact on both attack and defense side, which can't really be gauged from just looking at statistics.

Another issue I observed was around in-game leaders (IGLs). While utility assists are accounted for, they don't fully capture the impact of player's in the support role,

especially the IGLs. It's currently impossible to gauge an IGL's performance statistically when we cannot measure the impact of their shotcalling numerically besides manually counting round wins after a mid-round call. Another issue occurs with how IGL's set up rounds and utility placement such as smokes.

Fnatic's IGL, Boaster, failed to make my "Top 5 Controllers" list due to statistics not capturing his full impact. Often, the controller main will set up his team and their pacing for the round with his smokes, which enables the team's fraggers like their chamber, Derke, to get into advantageous situations and get the important kills. For now, statistics will continue to undermine those players in leadership roles who actually have a bigger impact on the game than their stats will communicate.

Breaking Down Valorant Statistics: Counting Stats

A statistic can be called a counting stat if it's able to be summed. Often, they are used to develop statistics more relevant for comparison such as rate stats.

There are many counting statistics in Valorant, but I'll be listing some common ones that I used throughout this project.

Kills, Deaths, Assists + Derivatives

Kill (K) - A kill is counted each time a player kills an enemy player with a weapon or ability or is said to be the reason why someone died if their final HP was lost due to an indirect cause (ex. A player falling to death, but only reached the damage threshold to die from the fall due to damage from another player)

Trade Kills - Trade kills are counted each time a player kills an enemy that had killed one of their teammates within the past 3 seconds.

Traded Kills - Traded kills are counted each time a player kills an enemy, but was traded out by another enemy within 3 seconds of the initial kill.

Untraded Kills - Untraded kills are counted each time a player kills an enemy and was not traded by another enemy within 3 seconds.

Death (D) - A death is counted each time a player dies whether from another player, ability, or an indirect cause such as fall damage.

Assist (A) - An assist is recorded each time a player assists a teammate in achieving a kill whether through damage or ability.

Damage Assist - Damage assists are recorded when a player deals 50+ damage to an enemy, but a teammate or teammate's ability finishes the kill

Utility Assist - Utility assists are recorded when utility from a player helps a teammate get a kill with an ability such as a smoke that obscured an enemy's line of sight of the killer or a flash that blinded the enemy that was killed.

First Kill (FK) - A first kill is rewarded if the player gets a kill and it is the first kill of the round

First Death (FD) - A first death is rewarded if the player dies and it is the first death of the round

True First Kill (TFK) - A true first kill is recorded when the first kill is not traded within 3 seconds.

True First Death (TFD) - A true first death is recorded when the first death is not traded within 3 seconds.

Clutch - A clutch is rewarded when the player who is last alive wins the round. These can be recorded in any 1vX situation.

Multikill (MK) - A multikill is counted when a player achieves 3 or more kills during a round

Other

Plants - A plant is counted when the player plants the spike while attacking

Defuses - A defuse is counted when the player defuses the spike while defending

Breaking Down Valorant Statistics: Rate Stats

Rate statistics are typically presented as proportions or percentages and are calculated using division.

There can be an infinite amount of rate stats you could calculate. Usually they're calculated per round, match, series, or throughout a player's career, but they can also be statistics that compare the ratio between two counting statistics such as kill/death ratio. I'm going to present some common ones I used throughout my analysis.

Per Round Stats

All of these stats are calculated by dividing the statistic of interest by rounds played.

$$\text{per round Rate Stat} = \frac{\textit{Statistic of Interest}}{\textit{Rounds Played}}$$

Kills per Round (KPR) - Calculated using total kills

Deaths per Round (DPR) - Calculated using total deaths

Assists per Round (APR) - Calculated using total assists

Average Damage per Round (ADR) - Calculated using total damage

Kill Assist Survived Traded (KAST) - Calculated using total KAST points. A KAST point is recorded if a player got a kill, an assist, survived, or was traded within 3 seconds during a round. A player can receive one KAST point maximum per round.

(True) First Kill per Round (FKPR & TFKPR) - Calculated using total (true) first kills.

(True) First Death per Round (FDPR & TFDPR) - Calculated using total (true) first deaths

Ratio Stats

Kill Death (KD) - Kill death ratio is calculated by taking total kills and dividing by total deaths.

$$KD = \frac{\textit{Total Kills}}{\textit{Total Deaths}}$$

Kill Death Assist (KDA) - Kill death assist ratio is calculated by taking total kills plus total assists and dividing by total deaths

$$KDA = \frac{\textit{Total Kills} + \textit{Total Assists}}{\textit{Total Deaths}}$$

(True) First Kill (True) First Death (FKFD & TFKTFD) - This ratio is calculated by taking the total (true) first kills and dividing by the total (true) first deaths.

$$(T)FKFD = \frac{\textit{(True) First Kill}}{\textit{(True) First Death}}$$

First Kill Success Rate (FKSR) - This ratio is calculated by taking the total first kills and dividing it by all first kill attempts

$$FKSR = \frac{\textit{Total First Kills}}{\textit{Total First Kill Attempts}}$$

Headshot Percentage (HS.PCT) - Headshot percentage is calculated by taking the total number of headshots and dividing it by the total number of landed shots (headshots, bodyshots, legshots).

$$HS.PCT = \frac{\textit{Total Headshots}}{\textit{Total Headshots} + \textit{Total Bodyshots} + \textit{Total Legshots}}$$

Clutch Percentage (CL.PCT) - Clutch percentage is calculated by taking the total number of clutches and dividing by the total number of clutch attempts.

$$CL.PCT = \frac{\textit{Total Clutches}}{\textit{Total Clutch Attempts}}$$

Some other interesting rate stats for analysis can measure a player's efficiency with a certain weapon or a player's proportion of kills or kills + assists that come from ability usage.

Breaking Down Valorant Statistics: Advanced Stats

Advanced statistics aim to explain many areas of the game with one number. These statistics often use complex formulas to capture an insight about the overall game or an element of the game.

While Valorant is still newer, there are still some well known advanced stats. As the game and esports scene continues to grow, I expect the number of advanced stats to increase as well.

Average Combat Score (ACS)

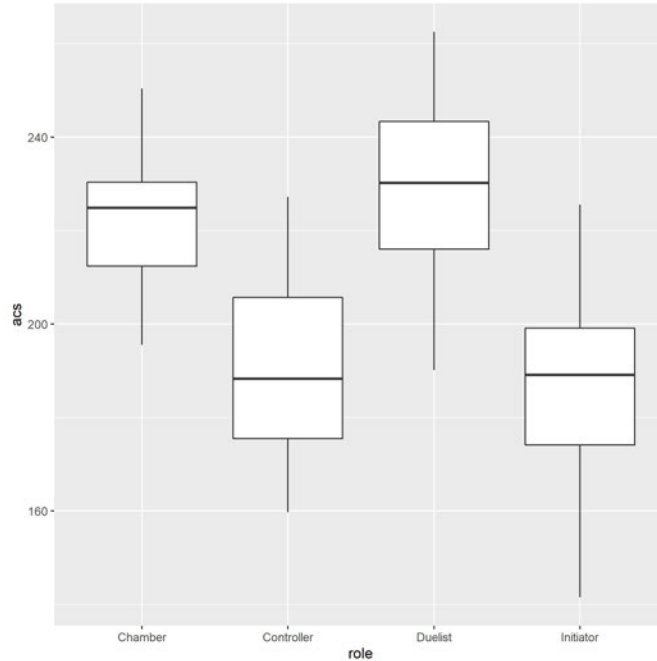
Average combat score is a stat that is available in-game. Valorant calculates combat score every round of the game and is displayed to the player as the average over all rounds at the end.

While this stat aims to showcase a player's strength in comparison to the lobby, its elements tend to be biased towards duelists and chamber players. Thus, when using ACS to compare players, it's important to consider the agents the player is on and comparing it to the average ACS on those roles.

The four components of ACS are: damage, kills, multikills, and non-damaging assists.

- Damage: one point per damage dealt
- Kills based on how many enemies are alive (ordered 5 enemies-1 enemy):
150/130/110/90/70
- Multikills: +50 per additional kill
- Non-damaging assists: 25

It's easy to see how duelists and chambers are more likely to have a higher combat score due to their playstyle: they typically get the first engagements and deal more damage per round. We can further confirm this by running an ANOVA to compare ACS across different roles.



ACS by role boxplot using player data from VCT 2022.

From this boxplot, you can see that there appears to be a difference between chambers and duelists ACS versus controllers and initiators ACS. Due to the data I had collected for the VCT 2022 season, I decided to leave out the sentinel role as there were few “pure sentinel” players. I then ran an ANOVA test followed by a Tukey’s HSD to get the differences between roles.

```

          Df Sum Sq Mean Sq F value Pr(>F)
role      3  52536    17512    52.1 <2e-16 ***
Residuals 135  45377     336
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

$emmeans
  role      emmean    SE    df lower.CL upper.CL
Chamber    223  4.10  135     215     231
Controller 191  3.14  135     185     197
Duelist    230  3.24  135     224     237
Initiator  186  2.52  135     181     191

Confidence level used: 0.95

$contrasts
  contrast      estimate    SE    df t.ratio p.value
Chamber - Controller    32.08  5.17  135    6.208 <.0001
Chamber - Duelist      -7.32  5.23  135   -1.401  0.5007
Chamber - Initiator    37.21  4.81  135    7.735 <.0001
Controller - Duelist   -39.40  4.52  135   -8.725 <.0001
Controller - Initiator  5.14  4.03  135    1.276  0.5800
Duelist - Initiator    44.54  4.10  135   10.851 <.0001

P value adjustment: tukey method for comparing a family of 4 estimates

```

ANOVA summary, 95% confidence intervals, and Tukey Adjustment results

The results of the ANOVA (above) confirm that chambers and duelists have significantly greater ACS compared to controllers and initiators. It also confirms that Chamber and Duelists have similar ACS and controllers and initiator have similar ACS.

So, we should be wary when using ACS as a comparison stat between players and should average it around whether a player is a duelist/chamber or on a support role.

Average Damage per Round adjusted (ADRa)

$$ADRa = \frac{\text{Total Damage} - \text{Damage Per Kill}}{\text{Total Rounds}}$$

Average damage per round adjusted is a stat developed by FeraghoTheGreat (<https://twitter.com/FerahgoTheGreat>) and is described in VLR's player rating explained article (<https://www.vlr.gg/160667/vlr-gg-player-rating-explained>). Since average damage per round is so heavily correlated with kills, to use it as a standalone statistic for other advanced stats it must be modified.

Rating Stats

There are currently two primary rating stats that seek to measure a player's impact on a game through one number. Rating stats aim to take into account many areas of the

game to create an easy to reference number for comparing player impact.

Spike Rating

The Spike rating was the first all-encompassing Valorant rating that sought to serve as a better alternative to ACS due to its biases. Their formula is based on kills, deaths, assists, first kills and first deaths, multikills, clutches, plants and defuses, and the economy of each team at the beginning of each round. Their statistic is normalized around 1 so a rating above 1 would be above average while a rating below 1 would be below average. Please refer to the Spike article for more information

(<https://www.thespike.gg/news/player-ratings-matches-results-notifications-vods-pages-and-more-website-update-1-05/733>).

VLR Rating

VLR's rating statistic is relatively new and seeks to rate players on a more situational basis rather than end-of-round statistics at their face value. Their rating aims to weight kills, deaths, damage, assists, and surviving to measure a player's impact during a game. VLR's statistic is also normalized around 1 so interpreting it is similar to interpreting a player's Spike rating. Please refer to the VLR article for more information

(<https://www.vlr.gg/160667/vlr-gg-player-rating-explained>).

RIB Impact

Run It Back's (RIB) impact value statistic aims to rate player's impact based on round-by-round and event-by-event situations similar to VLR. Impact takes into account how much a player's event impacted the round's win probability based on the scenario the player is in. Impact value is represented as a percentage and is cumulative so the higher the percentage, the greater the impact a player had. For more information, please read the Run It Back article (<https://rib.gg/article/measuring-impact-value-most-impactful-players-of-vct-heading-to-champions/>).

Behind the Metrics: ATK, DEF, Rating

Going into this project, I wanted to create encompassing metrics to gauge player performance on attack and defense as well as overall impact. Due to the limited data I was working with in both depth and sample size, the metrics I've created are less sophisticated compared to other rating metrics such as VLR's player rating.

Developing the Metrics

I scraped 305 VCT 2022 matches (15056 rounds) from rib.gg to calculate statistics I would use to weight my linear model. I created linear models using a variety of variables to get my variable weights to calculate my statistics, which I will not reveal the coefficients or response variables for.

ATK

The attack metric is made up of 5 components: Attack kill contribution, attack death contribution, attack assists, attack ADRa, and attack KAST.

Attack kill contribution is a mixture of attack stats such as kills per round, true first kills per round, and damage assists. Attack death contribution combines attack deaths and true first deaths per round while attack assists are made up of attack assists and utility assists per round. Attack ADRa and attack KAST are standalone statistics that are individually weighted.

DEF

The defense metric is made up of the same 5 components as attack, but for defense statistics.

The defense kill contribution is made up of less stats, mainly first kills per round and damage assists. Defense death contribution accounts for defense deaths and first deaths per round. I surmise first deaths appeared more significant in my model than true first deaths because of the nature of defensive play. For example, if a player dies first on defense holding A site, but gets traded by his teammate on site, the site still most likely has less numbers, creating a disadvantageous position for defenders.

Defense assists and utility assists per round make up the defense assists statistic. Defense ADRa and KAST standalone for this metric as well.

Rating

The rating metric is also made up of the same 5 components, but involves more information due to my focus on a player's impact towards any round.

Some additional factors include the impact of traded and untraded kills as well as team loadouts.

Future

If I had access to more in-depth data, I would love to further develop my ideas for metric creation in Valorant. For the scope of this project, I understand the limitations of my created metrics in gauging player performance and hope future models can improve upon those.

What are my next steps with this project?

I do want to make a 2023 version of this book now that franchising is in action. Given the chance to start from the beginning of the season rather than after all the events will give me the time I need to improve my methods and release a more in-depth, thoughtful, and accurate version for next year with more information.

I hope to access better methods of gathering and analyzing data from these events to build upon my ideas for metrics as well as keep the project updated for live viewing as the 2023 season occurs. I want to also continue to write more articles and generate statistics to help analysts and coaches within the esports scene.

Thank you for checking out my project.

Jayden Chrzanowski | @ShoodieNA on Twitter

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All team logos were obtained from <https://liquipedia.net/> and <https://www.vlr.gg/>.
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All images used including team logos and Valorant logos are copyrighted. However, it is asserted that this file's transformative educational use for this project is covered by the U.S. fair use laws because: (1) it illustrates an educational article regarding the subject the file represents, (2) the image is used as a primary means of visual identification of the article topic, (3) it is a low-resolution image and thus not suitable for production of counterfeit goods, and (4) it is not replaceable with a non-copyrighted or freely copyrighted image of comparable educational value.

GLOSSARY

Terms from Matches section

Group Stage – The VCT International group events utilized a double-elimination, GSL Group Stage Format. Four teams make up each group and each team has two chances to qualify for the playoffs stage.

Opening (A) (B) (C) (D)– The opening matches consist of two matches in each group leading into the winner's and elimination matches. Group letter is indicated by the group letter within parentheses.

Winner's (A) (B) (C) (D)– The winner's match is an upper bracket match within the group stage. Both winning teams from the opening matches play to qualify for playoffs with the loser being sent to the decider. Group letter is indicated by the group letter within parentheses.

Elimination (A) (B) (C) (D)– The elimination match is a lower bracket match between the losers of the opening matches. The loser of this match is eliminated from the event while the winner moves on to the decider. Group letter is indicated by the group letter within parentheses.

Decider (A) (B) (C) (D)– The decider match is a lower bracket match between the winner of the elimination match and the winner of the winner's match. The winner qualifies for playoffs while the loser is eliminated from the event. Group letter is indicated by the group letter within parentheses.

Playoffs Stage – The top 8 teams (4 from groups in Masters 1 and Masters 2; 8 from groups in Champions) compete to win it all in a double elimination format.

Upper Quarterfinals– The opening matches consist of four matches with the top 8 teams randomly placed into the bracket. In Masters 1 and Masters 2, those coming from the group stage are paired against a team who received a bye round to the playoffs via qualification. In Champions, those coming from the winner's match are paired up against a team coming from the decider match.

Lower Rounds– The lower rounds occur in the lower bracket where teams who lose here are eliminated from the event. As teams drop to the lower bracket, they are fighting to make it to the lower final to get to the grand final.

Upper Semifinals– The upper semifinals make up the second round of matches in the upper bracket. Consisting of four teams and two matches, teams compete to get to the last stage of the upper bracket: the upper final.

Upper Final– The upper final is the last round of matches in the upper bracket. The team who wins moves on to the grand final while the loser is knocked down to the lower final.

Lower Final– The lower final is the last round of matches in the lower bracket. The team who wins moves on to the grand final while the loser takes 3rd place in the event.

Grand Final– The grand final is the last match of the event. The winner takes home the trophy while the loser settles for 2nd place.

Score – Score is counted by map wins; In a Bo3, the first to 2 maps wins the series; In a Bo5, the first to 3 maps wins the series.

GLOSSARY

Terms from Top Performers section

Rating – A metric created for the purpose of this project meant to be an all-encompassing statistic for a player's performance and impact during all 3 events.

ATK – A metric created for the purpose of this project meant to be a measure of attack-side performance and impact during all 3 events.

DEF – A metric created for the purpose of this project meant to be a measure of defense-side performance and impact during all 3 events.

Role – A player's position on their team, based on the player's selected agent.

Chamber– As the Chamber meta completely took over the 2022 VCT season, pure sentinel players did not appear as much in favor of the gunplay-centered sentinel, Chamber. Due to the pick rate of the agent, I have decided to set the agent as its own role because of the unique playstyle and high pick rate versus other sentinel agents.

Duelist– Duelists agents consist of Neon, Raze, Reyna, Phoenix, Jett, and Yoru. These players are typically the entry on attack-side and are characterized statistically as typically having the highest FK and KPR rate (bar Chamber) and ability-wise with having an escape tool to take fights and reposition from more aggressive positions.

Controller– Controller agents consist of Brimstone, Viper, Omen, and Astra. These players are characterized by a smoke and/or wall ability to block enemy line of sight and tend to pace the offensive and defensive parts of the game.

Initiator– Initiator agents consist of Sova, Breach, Skye, KAY/O, and Fade. These players are characterized by their valuable utility that help a team take fights and gather info.

IGL– In Game Leader. IGLs lead the team by making the pre-round and mid-round calls. While usually one IGL is mainly appointed, many teams run multi-IGL setups such as designating a pre-round and mid-round caller or an attack-side and defense-side caller.

RP – Rounds Played.

KD – Kill Death. KD is a rate statistic calculated by dividing the player's kills by their deaths.

KDA – Kill Death Assist. KDA is a rate statistic calculated by dividing the player's kills and assists by their deaths.

ACS – Average Combat Score. ACS is a statistic calculated in-game through damage dealt, kills, multi-kills, and non-damaging assists.

KAST – Kill Assist Survived Traded. KAST is a percentage statistic calculated per game as a proportion of rounds where a player got a kill, an assist, survived the round, or was traded within 3 seconds by the total number of rounds.

ADR – Average Damage per Round.

KMAX – Kill Maximum. The highest number of kills a player achieved in a single match throughout the 3 events.

FKFD – First Kill First Death. A proportion calculated by dividing the player's first kills by their first deaths (getting or being the first kill in a round, respectively)

GLOSSARY

TFKTFD – True First Kill True First Death. A proportion calculated by dividing the player's true first kills by their true first deaths. A true first kill or first death is given if the kill was not traded within 3 seconds.

K – Total Kills. Counting stat.

D – Total Deaths. Counting stat.

A – Total Assists. Counting stat.

Plants – Total plants. Counting stat.

Defuses – Total defuses. Counting stat.

HS.PCT – Headshot percentage. A percentage calculated by dividing the total number of headshots by the total number of shots that hit (headshot, bodyshot, legshot).

CL.PCT – Clutch percentage. A percentage calculated by dividing the total number of clutches by the total number of clutch attempts.

MK – Total Multikills. A multikill is rewarded if a player gets 3 or more kills within a round.

Terms from Team section

Formed – Date the team was created under the specific organization.

RND – Rounds played.

RW – Rounds won.

RWP – Round Win Percentage. Calculated by dividing rounds won by rounds played.

PISTOLS – Pistol Round Win Percentage. The amount of pistol rounds (first round of each half) that are won by a team.

SWING – Swing Round Win Percentage. The amount of gun rounds where either team will be forced to have worse economy the next round if they lose that are won by a team.

GUN – Gun Round Win Percentage. The amount of gun rounds (characterized by a minimum loadout of 3 rifles from each team) that are won by a team.

ANTI-ECO – Anti-Eco Round Win Percentage. The amount of anti-eco rounds (characterized by the tracked team having 3 or more rifles and the enemy team having 0-5k loadout worth) that are won by a team.

ECO – Eco Round Win Percentage. The amount of eco rounds (characterized by the tracked team having 0-5k loadout worth and the enemy team having 3 or more rifles) that are won by a team.

5v4 – 5v4 Round Win Percentage. The percentage a team won when they had the first kill advantage.

4v5 – 4v5 Round Win Percentage. The percentage a team won when they were down the first kill advantage.

1v1 – 1v1 Round Win Percentage. The percentage a team won when the round came down to a 1v1 situation.

KPR – Kills Per Round. A rate statistic calculated by dividing a team's total kills by total rounds.

DPR – Deaths Per Round. A rate statistic calculated by dividing a team's total deaths by total rounds.

GLOSSARY

APR – Assists Per Round. A rate statistic calculated by dividing a team's total assists by total rounds.

FKPR – First Kills Per Round. A rate statistic calculated by dividing a team's total first kills by total rounds.

FDPR – First Deaths Per Round. A rate statistic calculated by dividing a team's total first deaths by total rounds.



EMEA



TEAM LIQUID



NA



THE GUARD



XSET

APAC



XERXIA ESPORTS

LATAM



BR



NINJAS IN PYJAMAS

LOUD

JP



KR



CHINA



