



Paraboctys (part 3)

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Abstract: This study is a continuation of paraboctys part 2 and continues in paraboctys part 4.

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1 Introduction

This study is a continuation of paraboctys part 2 and continues in paraboctys part 4.

Please, as reference consult the *Conventions, notations, and abbreviations* study [2]. The latest version at <https://1drv.ms/b/s!Arslv070x3WjYUpsGLsNeWwfH6OdA?e=K1C4q5>

As we saw before, all the vertical and diagonal sequence lines in the specific paraboctys represent quadratic sequences. This is because the specific paraboctys is a parabolic lattice-grid.

Now we will see what the parabolic curves (parabolas) represent when drawn in a specific paraboctys lattice-grid.

We will start with the specific paraboctys $PS[x + 2, x, x]$ that was the first paraboctys that we arrived because of our reasoning. Next, we will analyze the specific paraboctys $PS[x + 1, x, x + 1]$. With this, we study all the possibilities of specific paraboctys with coefficient $a = 1$.

For your reference, see the main topics that we will cover here:

- 2.1 The D-Destroyer parabolas with offset Zero in $PS[x + 2, x, x]$
- 2.2 The D-Destroyer parabolas with variable offset on a vertical of $PS[x + 2, x, x]$
- 2.3 The D-Submarine parabolas with variable offset on a vertical of $PS[x + 2, x, x]$
- 2.4 The D-Destroyer and D-Submarine interleaving parabolas with a varying offset in $PS[x + 2, x, x]$
- 2.5 Dividing the specific trianz $TZ[x + 2, x, x]$ according to the value of $\lfloor \sqrt{n} \rfloor$
- 3.1 The C-Destroyer parabolas with offset Zero in $PS[x + 2, x, x]$
- 3.2 The C-Destroyer parabolas with variable offset on a vertical of $PS[x + 2, x, x]$
- 3.3 The C-Submarine parabolas with variable offset on a vertical of $PS[x + 2, x, x]$
- 3.4 The C-Destroyer and C-Submarine interleaving parabolas with a varying offset in $PS[x + 2, x, x]$
- 4.1 The D-Submarine parabolas with offset Zero in $PS[x + 1, x, x + 1]$
- 4.2 The D-Destroyer parabolas with variable offset on a vertical of $PS[x + 1, x, x + 1]$

4.3 The D-Submarine parabolas with a varying offset in $PS[x + 1, x, x + 1]$

4.4 The D-Destroyer and D-Submarine interleaving parabolas with a varying offset in $PS[x + 1, x, x + 1]$

5.1 The C-Submarine parabolas with offset Zero in $PS[x + 1, x, x + 1]$

5.2 The C-Destroyer parabolas with variable offset on a vertical of $PS[x + 1, x, x + 1]$

5.3 The C-Submarine parabolas with variable offset on a vertical of $PS[x + 1, x, x + 1]$

5.4 The C-Destroyer and C-Submarine interleaving parabolas with a varying offset in $PS[x + 1, x, x + 1]$

6 Conclusions

2 Study of the sequences produced by the elements in D parabolic formation in the $PS[x + 2, x, x]$

2.1 The D-Destroyer parabolas with offset Zero in $PS[x + 2, x, x]$

See the picture:

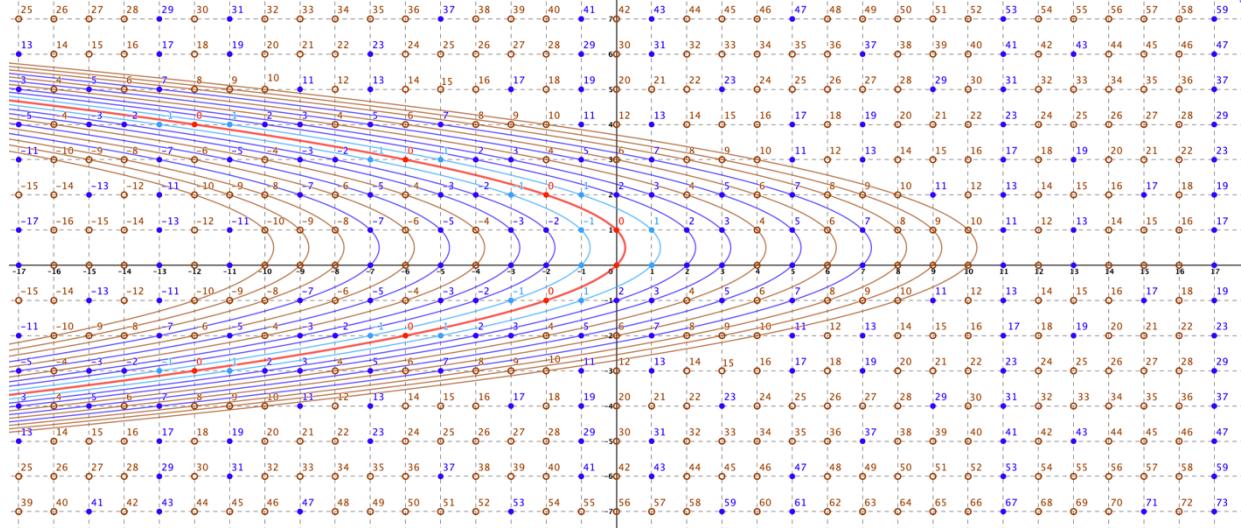


Figure 1. The D-Destroyer parabolas of the form $x = -y^2 + y + c$ for $-10 \leq c \leq 10$ with offset $f = 0$ in lattice-grid $PS[x + 2, x, x]$. They produce the paraboctys $PS[x, x, x]$.

Thus, the D-Destroyer parabolas of the form $x = -y^2 + y + c$ for $-10 \leq c \leq 10$ with offset $f = 0$ in lattice-grid $PS[x + 2, x, x]$ produce paraboctys with coefficient $a = 0$. The coefficient b will depend on the offset and vice-versa. Each D-Destroyer parabola with offset $f = 0$ has sequence $Y[y]$ only the constant value of its coefficient c .

Column -->	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
c	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
15	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
14	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
13	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
12	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
10	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
9	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
8	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
7	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
6	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
5	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
4	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
3	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
2	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
Y[1]	1	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Y[0]	0	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Y[-1]	-1	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
-2	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-3	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-4	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-5	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-6	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-7	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-8	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-9	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-10	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-12	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-13	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-14	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-15	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	

Figure 1. Paraboctys $PS[x, x, x]$. Initial vertical lines to form any specific paraboctys.

Thus, we can imagine the construction of the $PS[x + 2, x, x]$ starting from infinite vertical lines, each vertical with a constant value according to the table above.

Then, we mold these vertical lines according to the D-Destroyer parabolas of the form $x = -y^2 + y + c$, where $Y[y] = c$ with offset Zero.

This procedure produces the specific paraboctys $PS[x + 2, x, x]$:

Column -->	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
x_ip	-9,8	-8,8	-7,8	-6,8	-5,8	-4,8	-3,8	-2,8	-1,8	-0,8	-0,3	0,75	1,75	2,75	3,75	4,75	5,75	6,75	7,75	8,75	9,75	
x_focus	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
LR	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Δ	-39	-35	-31	-27	-23	-19	-15	-11	-7	-3	1	-3	-7	-11	-15	-19	-23	-27	-31	-35	-39	
$ \sqrt{\Delta} $	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	1	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	
C. G.	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	
Root1	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	1	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	
Root2	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	
Root2-Root1	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	-1	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	
Classif.	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES										
y_ip	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	
f	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
a	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	
b	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
c	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
15	-220	-219	-218	-217	-216	-215	-214	-213	-212	-211	210	211	212	213	214	215	216	217	218	219	220	
14	-192	-191	-190	-189	-188	-187	-186	-185	-184	-183	182	183	184	185	186	187	188	189	190	191	192	
13	-166	-165	-164	-163	-162	-161	-160	-159	-158	-157	156	157	158	159	160	161	162	163	164	165	166	
12	-142	-141	-140	-139	-138	-137	-136	-135	-134	-133	132	133	134	135	136	137	138	139	140	141	142	
11	-120	-119	-118	-117	-116	-115	-114	-113	-112	-111	110	111	112	113	114	115	116	117	118	119	120	
10	-100	-99	-98	-97	-96	-95	-94	-93	-92	-91	90	91	92	93	94	95	96	97	98	99	100	
9	-82	-81	-80	-79	-78	-77	-76	-75	-74	-73	72	73	74	75	76	77	78	79	80	81	82	
8	-66	-65	-64	-63	-62	-61	-60	-59	-58	-57	56	57	58	59	60	61	62	63	64	65	66	
7	-52	-51	-50	-49	-48	-47	-46	-45	-44	-43	42	43	44	45	46	47	48	49	50	51	52	
6	-40	-39	-38	-37	-36	-35	-34	-33	-32	-31	30	31	32	33	34	35	36	37	38	39	40	
5	-30	-29	-28	-27	-26	-25	-24	-23	-22	-21	20	21	22	23	24	25	26	27	28	29	30	
4	-22	-21	-20	-19	-18	-17	-16	-15	-14	-13	12	13	14	15	16	17	18	19	20	21	22	
3	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	6	7	8	9	10	11	12	13	14	15	16	
2	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	2	3	4	5	6	7	8	9	10	11	12	
Y[1]	1	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Y[0]	0	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Y[-1]	-1	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	2	3	4	5	6	7	8	9	10	11	12
-2	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	6	7	8	9	10	11	12	13	14	15	16	
-3	-22	-21	-20	-19	-18	-17	-16	-15	-14	-13	12	13	14	15	16	17	18	19	20	21	22	
-4	-30	-29	-28	-27	-26	-25	-24	-23	-22	-21	20	21	22	23	24	25	26	27	28	29	30	
-5	-40	-39	-38	-37	-36	-35	-34	-33	-32	-31	30	31	32	33	34	35	36	37	38	39	40	
-6	-52	-51	-50	-49	-48	-47	-46	-45	-44	-43	42	43	44	45	46	47	48	49	50	51	52	
-7	-66	-65	-64	-63	-62	-61	-60	-59	-58	-57	56	57	58	59	60	61	62	63	64	65	66	
-8	-82	-81	-80	-79	-78	-77	-76	-75	-74	-73	72	73	74	75	76	77	78	79	80	81	82	
-9	-100	-99	-98	-97	-96	-95	-94	-93	-92	-91	90	91	92	93	94	95	96	97	98	99	100	
-10	-120	-119	-118	-117	-116	-115	-114	-113	-112	-111	110	111	112	113	114	115	116	117	118	119	120	
-11	-142	-141	-140	-139	-138	-137	-136	-135	-134	-133	132	133	134	135	136	137	138	139	140	141	142	
-12	-166	-165	-164	-163	-162	-161	-160	-159	-158	-157	156	157	158	159	160	161	162	163	164	165	166	
-13	-192	-191	-190	-189	-188	-187	-186	-185	-184	-183	182	183	184	185	186	187	188	189	190	191	192	
-14	-220	-219	-218	-217	-216	-215	-214	-213	-212	-211	210	211	212	213	214	215	216	217	218	219	220	
-15	-250	-249	-248	-247	-246	-245	-244	-243	-242	-241	240	241	242	243	244	245	246	247	248	249	250	

Figure 1. The specific paraboctys $PS[x + 2, x, x]$ in table format. The central column is the Oblong numbers sequence A002378 $\equiv [2,0,0] \equiv Y[y] = y^2 - y$. Only lines Y[0] and Y[1] remain unshifted from $PS[x, x, x]$ to $PS[x + 2, x, x]$.

2.2 The D-Destroyer parabolas with variable offset on a vertical of $PS[x + 2, x, x]$

See the picture:

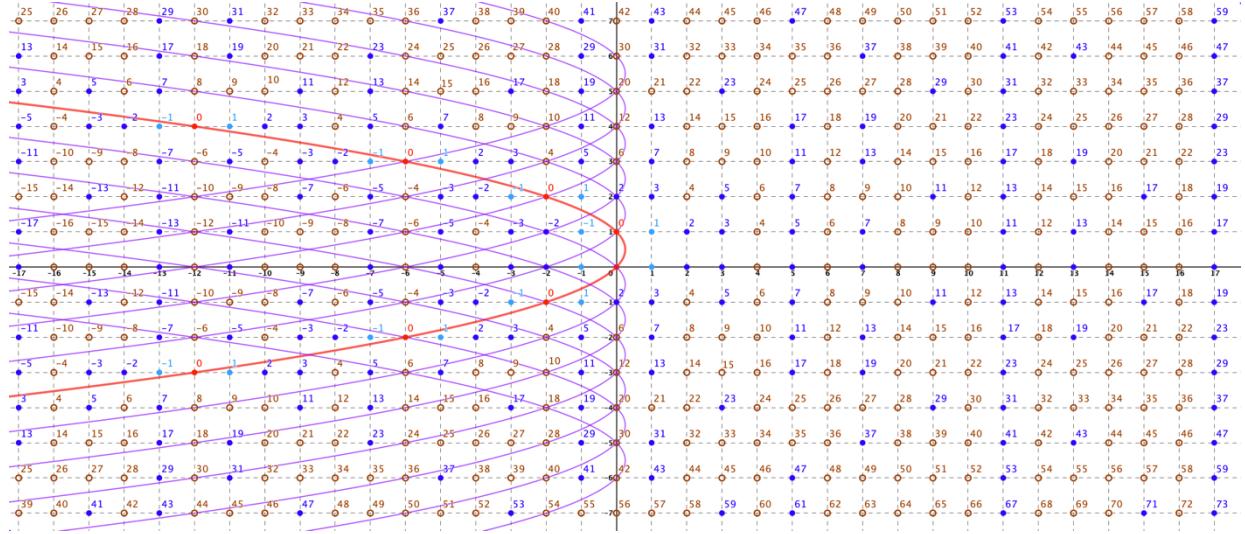


Figure 1. The D-Destroyer parabolas in column $x = 0$ of the lattice-grid $PS[x + 2, x, x]$. They have offset following the staircase function with the step of a unit. These parabolas have equations in the XY plane of the form $x = -y^2 + \text{Odd} * y - \text{Oblong}$. In terms of the offset value: $x = -y^2 + (2f + 1)y - (f^2 + f)$.

Each parabola $x = -y^2 + (2f + 1)y - (f^2 + f)$ in lattice-grid $PS[x + 2, x, x]$ will produce a quadratic sequence of the form $Y[y] = ay^2 + by + c$. Now, to determine the coefficients a, b, c , for each sequence we have to determine three consecutive elements.

Over each parabola, we can choose 3 consecutive elements from top to bottom or from bottom to top. Because we are synchronizing the y index with the Y-axis, we will choose 3 consecutive bottom-up elements which is the increasing index direction: $[Y[-1], Y[0], Y[1]]$.

The elements of row $y = -1$ in the new paraboctys will be noted as $@Y[-1]$.

The elements of row $y = 0$ in the new paraboctys will be noted as $@Y[0]$.

The elements of row $y = 1$ in the new paraboctys will be noted as $@Y[1]$.

So, let's create the new paraboctys $PS[@Y[-1], @Y[0], @Y[1]]$. This new paraboctys will contain all the sequences formed by the D-Destroyer parabolas with a variable offset in a vertical of lattice-grid $PS[x + 2, x, x]$.

As we have D-Destroyer parabolas, we can understand each sequence as being made of one element of the vertical column $x = -2$ to assume the $@Y[-1]$ elements position and two elements of the vertical column $x = 0$ to assume the $@Y[0]$ and $@Y[1]$ elements positions.

Consequently,

- The elements on the vertical column $x = -2$ with offset $f = -1$ of the current paraboctys $PS[x + 2, x, x]$ is:

$$A028552 \equiv [-2, -2, 0] \equiv @Y[-1] = x^2 + x - 2$$

- The elements on the vertical column $x = 0$ with offset $f = 0$ of the current paraboctys $PS[x + 2, x, x]$ is:

$$A002378 \equiv [2, 0, 0] \equiv @Y[0] = x^2 - x$$

- The elements on the vertical column $x = 0$ with offset $f = 1$ of the current paraboctys $PS[x + 2, x, x]$ is:

$$A002378 \equiv [6, 2, 0] \equiv @Y[1] = x^2 - 3x + 2$$

Finally, we create the new paraboctys $PS[@Y[-1], @Y[0], @Y[1]] = PS[x^2 + x - 2, x^2 - x, x^2 - 3x + 2]$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
b	32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0	-2	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	-26	-28	
c	240	210	182	156	132	110	90	72	56	42	30	20	12	6	2	0	2	6	12	20	30	42	56	72	90	110	132	156	182	210		
15	720	660	602	546	492	440	390	342	296	252	210	170	132	96	62	30	0	-28	-54	-78	-100	-120	-138	-154	-168	-180	-190	-198	-204	-208	-210	
14	688	630	574	520	468	418	370	324	280	238	198	160	124	90	58	28	0	-26	-50	-72	-92	-110	-126	-140	-152	-162	-170	-176	-180	-182	-182	-182
13	656	600	546	494	444	396	350	306	264	224	186	150	116	84	54	26	0	-24	-46	-66	-84	-100	-114	-126	-136	-144	-150	-154	-156	-154	-154	
12	624	570	518	468	420	374	330	288	248	210	174	140	108	78	50	24	0	-22	-42	-60	-76	-90	-102	-112	-120	-126	-130	-132	-130	-126		
11	592	540	490	442	396	352	310	270	232	196	162	130	100	72	46	22	0	-20	-38	-54	-68	-80	-90	-98	-104	-108	-110	-110	-108	-104	-98	
10	560	510	462	416	372	330	290	252	216	182	150	120	92	66	42	20	0	-18	-34	-48	-60	-70	-78	-84	-88	-90	-90	-84	-78	-70		
9	528	480	434	390	348	308	270	234	200	168	138	110	84	60	38	18	0	-16	-30	-42	-52	-60	-66	-70	-72	-70	-66	-60	-52	-42		
8	496	450	406	364	324	286	250	216	184	154	126	100	76	54	34	16	0	-14	-26	-36	-44	-50	-54	-56	-56	-54	-50	-44	-36	-26	-14	
7	464	420	378	338	300	264	230	198	168	140	114	90	68	48	30	14	0	-12	-22	-30	-36	-40	-42	-42	-36	-30	-22	-12	0	14		
6	432	390	350	312	276	242	210	180	152	126	102	80	60	42	26	12	0	-10	-18	-24	-28	-30	-28	-24	-18	-10	0	12	26	42		
5	400	360	322	286	252	220	190	162	136	112	90	70	52	36	22	10	0	-8	-14	-18	-20	-20	-18	-14	-8	0	10	22	36	52	70	
4	368	330	294	260	228	198	170	144	120	98	78	60	44	30	18	8	0	-6	-10	-12	-12	-10	-6	0	8	18	30	44	60	78	98	
3	336	300	266	234	204	176	150	126	104	84	66	50	36	24	14	6	0	-4	-6	-6	-4	0	6	14	24	36	50	66	84	104	126	
2	304	270	238	208	180	154	130	108	88	70	54	40	28	18	10	4	0	-2	-2	0	4	10	18	28	40	54	70	88	108	130	154	
Y[1]	1	272	240	210	182	156	132	110	90	72	56	42	30	20	12	6	2	0	0	2	6	12	20	30	42	56	72	90	110	132	156	182
Y[0]	0	240	210	182	156	132	110	90	72	56	42	30	20	12	6	2	0	0	2	6	12	20	30	42	56	72	90	110	132	156	182	210
Y[-1]	-1	208	180	154	130	108	88	70	54	40	28	18	10	4	0	-2	-2	0	4	10	18	28	40	54	70	88	108	130	154	180	208	238
-2	176	150	126	104	84	66	50	36	24	14	6	4	0	-4	-6	-6	-4	0	6	14	24	36	50	66	84	104	126	150	176	204	234	266
-3	144	120	98	78	60	44	30	18	8	0	-6	-10	-12	-12	-10	-6	0	8	18	30	44	60	78	98	120	144	170	198	228	260	294	
-4	112	90	70	52	36	22	10	0	-8	-14	-18	-20	-20	-18	-14	-8	0	10	22	36	52	70	90	112	136	162	190	220	252	286	322	
-5	80	60	42	26	12	0	-10	-18	-24	-28	-30	-30	-28	-24	-18	-10	0	12	26	42	60	80	102	126	152	180	210	242	276	312	350	
-6	48	30	14	0	-12	-22	-30	-36	-40	-42	-42	-40	-36	-30	-22	-12	0	14	30	48	68	90	114	140	168	198	230	264	300	338	378	
-7	16	0	-14	-26	-36	-44	-50	-54	-56	-54	-50	-44	-36	-26	-14	0	16	34	54	76	100	126	154	184	216	250	286	324	364	406		
-8	-16	-30	-42	-52	-60	-66	-70	-72	-72	-70	-66	-60	-52	-42	-30	-16	0	18	38	60	84	110	138	168	200	234	270	308	348	390	434	
-9	-48	-60	-70	-78	-84	-88	-90	-90	-88	-84	-78	-70	-60	-48	-34	-18	0	20	42	66	92	120	150	182	216	252	290	330	372	416	462	
-10	-80	-90	-98	-104	-108	-110	-110	-108	-104	-98	-90	-80	-68	-54	-38	-20	0	22	46	72	100	130	162	196	230	270	310	352	396	442	490	
-11	-112	-120	-126	-130	-132	-132	-130	-126	-120	-112	-102	-90	-76	-60	-42	-22	0	24	50	78	108	140	174	210	248	288	330	374	420	468	518	
-12	-144	-150	-154	-156	-156	-154	-150	-144	-136	-126	-114	-100	-84	-66	-46	-24	0	26	54	84	116	150	186	224	264	306	350	396	444	494	546	
-13	-176	-180	-182	-180	-176	-170	-162	-152	-140	-126	-110	-92	-72	-50	-26	0	28	58	90	124	160	198	238	280	324	370	418	468	520	574		
-14	-208	-210	-210	-208	-204	-198	-190	-180	-168	-154	-138	-120	-100	-78	-54	-28	0	30	62	96	132	170	210	252	296	342	390	440	492	546	602	
-15	-240	-240	-238	-234	-228	-220	-210	-198	-184	-168	-150	-130	-108	-84	-58	-30	0	32	66	102	140	180	222	266	312	360	410	462	516	572	630	

Figure 1. Paraboctys $PS[x^2 + x - 2, x^2 - x, x^2 - 3x + 2]$. The verticals represent the sequences produced by D-Destroyer parabolas with variable offset on the vertical $x = 0$ of the $PS[x + 2, x, x]$.

The coefficients a, b, c of the vertical quadratic equations of the $PS[x^2 + x - 2, x^2 - x, x^2 - 3x + 2]$ are calculated using our general equation:

$$PS[x^2 + x - 2, x^2 - x, x^2 - 3x + 2]$$

$$= \left(\frac{(@Y[-1] - 2@Y[0] + @Y[1])}{2} \right) y^2 + \left(\frac{(@Y[1] - @Y[-1])}{2} \right) y + @Y[0]$$

$$= \left(\frac{(x^2 + x - 2) - 2(x^2 - x) + (x^2 - 3x + 2)}{2} \right) y^2$$

$$+ \left(\frac{(x^2 - 3x + 2) - (x^2 + x - 2)}{2} \right) y + (x^2 - x)$$

$$PS[x^2 + x - 2, x^2 - x, x^2 - 3x + 2] = (0)y^2 + (-2x + 2)y + (x^2 - x)$$

Due to the equations of the formation sequences of this paraboctys, the vertical of the zeros is produced in column 1 and not in column 0.

The D-Destroyer parabolas with positive offset produce the vertical sequences on the left side of this table. The D-Destroyer parabolas with negative offset produce the vertical sequences on the right side of this table.

If we turn the paraboctys $PS[x^2 + x - 2, x^2 - x, x^2 - 3x + 2]$ clockwise 90° around the central point (0,0), we get:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES				
Y_ip	-14,5	-13,5	-12,5	-11,5	-10,5	-9,5	-8,5	-7,5	-6,5	-5,5	-4,5	-3,5	-2,5	-1,5	-0,5	0,5	1,5	2,5	3,5	4,5	5,5	6,5	7,5	8,5	9,5	10,5	11,5	12,5	13,5	14,5	15,5	
f	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
b	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	-1	-3	-5	-7	-9	-11	-13	-15	-17	-19	-21	-23	-25	-27	-29	-31	
c	-30	-28	-26	-24	-22	-20	-18	-16	-14	-12	-10	-8	-6	-4	-2	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	
-15	-240	-208	-176	-144	-112	-80	-48	-16	16	48	80	112	144	176	208	240	272	304	336	368	400	432	464	496	528	560	592	624	656	688	720	
-14	-240	-210	-180	-150	-120	-90	-60	-30	0	30	60	90	120	150	180	210	240	270	300	330	360	390	420	450	480	510	540	570	600	630	660	
-13	-238	-210	-182	-154	-126	-98	-70	-42	-14	42	70	98	126	154	182	210	238	266	294	322	350	378	406	434	462	490	518	546	574	602		
-12	-234	-208	-182	-156	-130	-104	-78	-52	-26	0	26	52	78	104	130	156	182	208	234	260	286	312	338	364	390	416	442	468	494	520	546	
-11	-228	-204	-180	-156	-132	-108	-84	-60	-36	-12	12	36	60	84	108	132	156	180	204	228	252	276	300	324	348	372	396	420	444	468	492	
-10	-220	-198	-176	-154	-132	-110	-88	-66	-44	-22	0	22	44	66	88	110	132	154	176	198	220	242	264	286	308	330	352	374	396	418	440	
-9	-210	-190	-170	-150	-130	-110	-90	-70	-50	-30	-10	10	30	50	70	90	110	130	150	170	190	210	230	250	270	290	310	330	350	370	390	
-8	-198	-180	-162	-144	-126	-108	-90	-72	-54	-36	-18	0	18	36	54	72	90	108	126	144	162	180	198	216	234	252	270	288	306	324	342	
-7	-184	-168	-152	-136	-120	-104	-88	-72	-56	-40	-24	-8	8	24	40	56	72	88	104	120	136	152	168	184	200	216	232	248	264	280	296	
-6	-168	-154	-140	-126	-112	-98	-84	-70	-56	-42	-28	-14	0	14	28	42	56	70	84	98	112	126	140	154	168	182	196	210	224	238	252	
-5	-150	-138	-126	-114	-102	-90	-78	-66	-54	-42	-30	-18	-6	6	18	30	42	54	66	78	90	102	114	126	138	150	162	174	186	198	210	
-4	-130	-120	-110	-100	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	
-3	-108	-100	-92	-84	-76	-68	-60	-52	-44	-36	-28	-20	-12	-4	-4	4	12	20	28	36	44	52	60	68	76	84	92	100	108	116	124	132
-2	-84	-78	-72	-66	-60	-54	-48	-42	-36	-30	-24	-18	-12	-6	-6	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	
Y[-1]	-1	-58	-54	-50	-46	-42	-38	-34	-30	-26	-22	-18	-14	-10	-6	-2	6	10	14	18	22	26	30	34	38	42	46	50	54	58	62	
Y[0]	0	-30	-28	-26	-24	-22	-20	-18	-16	-14	-12	-10	-8	-6	-4	-2	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
Y[1]	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Figure 1. Paraboctys $PS[4x + 2, 2x, 0]$. The vertical ones here are the horizontal ones of $PS[x^2 + x - 2, x^2 - x, x^2 - 3x + 2]$. Because of the clockwise 90° rotation the indexes y increase from top to bottom (opposite direction of the Y-axis).

Simplifying all verticals for offset $f = 0$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES									
Y^*_{ip}	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5				
$\#^*$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
a ^o	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
b ^o	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
c ^o	-240	-210	-182	-156	-132	-110	-90	-72	-56	-42	-30	-20	-12	-6	-2	0	0	-2	-6	-12	-20	-30	-42	-56	-72	-90	-110	-132	-156	-182	-210	
15	-30	0	28	54	78	100	120	138	154	168	180	190	198	204	208	210	210	208	204	198	190	180	168	154	138	120	100	78	54	28	0	
14	-58	-28	0	26	50	72	92	110	126	140	152	162	170	176	180	182	182	180	176	170	162	152	140	126	110	92	72	50	26	0	-28	
13	-84	-54	-26	0	24	46	66	84	100	114	126	136	144	150	154	156	156	154	150	144	136	126	114	100	84	66	46	24	0	-26	-54	
12	-108	-78	-50	-24	0	22	42	60	76	90	102	112	120	126	130	132	132	130	126	120	112	102	90	76	60	42	22	0	-24	-50	-78	
11	-130	-100	-72	-46	-22	0	20	38	54	68	80	90	98	104	108	110	110	108	104	98	90	80	68	54	38	20	0	-22	-46	-72	-100	
10	-150	-120	-92	-66	-42	-20	0	18	34	48	60	70	78	84	88	90	90	88	84	78	70	60	48	34	18	0	-20	-42	-66	-92	-120	
9	-168	-138	-110	-84	-60	-38	-18	0	16	30	42	52	60	66	70	72	72	70	66	60	52	42	30	16	0	-18	-38	-60	-84	-110	-138	
8	-184	-154	-126	-100	-76	-54	-34	-16	0	14	26	36	44	50	54	56	56	54	50	44	36	26	14	0	-16	-34	-54	-76	-100	-126	-154	
7	-198	-168	-140	-114	-90	-68	-48	-30	-14	0	12	22	30	36	40	42	42	40	36	30	22	12	0	-14	-30	-68	-90	-114	-140	-168		
6	-210	-180	-152	-126	-102	-80	-60	-42	-26	-12	0	10	18	24	28	30	30	28	24	18	10	0	-12	-26	-42	-60	-80	-102	-126	-152	-180	
5	-220	-190	-162	-136	-112	-90	-70	-52	-36	-22	-10	0	8	14	18	20	20	18	14	8	0	-10	-22	-36	-52	-70	-90	-112	-136	-162	-190	
4	-228	-198	-170	-144	-120	-98	-78	-60	-44	-30	-18	-8	0	6	10	12	12	10	6	0	-8	-18	-30	-44	-60	-78	-98	-120	-144	-170	-198	
3	-234	-204	-180	-152	-126	-104	-84	-66	-50	-36	-24	-14	-6	0	4	6	6	4	0	-6	-14	-24	-36	-50	-68	-84	-104	-126	-150	-176	-204	
2	-238	-208	-180	-154	-130	-108	-88	-70	-54	-40	-28	-18	-10	-4	0	2	2	0	-4	-10	-18	-28	-40	-54	-70	-88	-108	-130	-154	-180	-208	
Y[1]	1	-240	-210	-182	-156	-132	-110	-90	-72	-56	-42	-30	-20	-12	-6	-2	0	0	-2	-6	-12	-20	-30	-42	-56	-72	-90	-110	-132	-156	-182	-210
Y[0]	0	-240	-210	-182	-156	-132	-110	-90	-72	-56	-42	-30	-20	-12	-6	-2	0	0	-2	-6	-12	-20	-30	-42	-56	-72	-90	-110	-132	-156	-182	-210
Y[-1]	-1	-238	-208	-180	-154	-130	-108	-88	-70	-54	-40	-28	-18	-10	-4	0	2	2	0	-4	-10	-18	-28	-40	-54	-70	-88	-108	-130	-154	-180	-208
-2	-234	-204	-176	-150	-126	-104	-84	-66	-50	-36	-24	-14	-6	0	4	6	6	4	0	-6	-14	-24	-36	-50	-66	-84	-104	-126	-150	-176	-204	
-3	-228	-198	-170	-144	-120	-98	-78	-60	-44	-30	-18	-8	0	6	10	12	12	10	6	0	-8	-18	-30	-44	-60	-78	-98	-120	-144	-170	-198	
-4	-220	-190	-162	-136	-112	-90	-70	-52	-36	-22	-10	0	8	14	18	20	20	18	14	8	0	-10	-22	-36	-52	-70	-90	-112	-136	-162	-190	
-5	-210	-180	-152	-126	-102	-80	-60	-42	-26	-12	0	10	18	24	28	30	30	28	24	18	10	0	-12	-26	-42	-60	-80	-102	-126	-152	-180	
-6	-198	-168	-140	-114	-90	-68	-48	-30	-14	0	12	22	30	36	40	42	42	40	36	30	22	12	0	-14	-30	-48	-68	-90	-114	-140	-168	
-7	-184	-154	-126	-100	-76	-54	-34	-16	0	14	26	36	44	50	54	56	56	54	50	44	36	26	14	0	-16	-34	-54	-76	-100	-126	-154	
-8	-168	-138	-110	-84	-60	-38	-18	0	16	30	42	52	60	66	70	72	72	70	66	60	52	42	30	16	0	-18	-38	-60	-84	-110	-138	
-9	-150	-120	-92	-66	-42	-20	0	18	34	48	60	70	78	84	88	90	90	88	84	78	70	60	48	34	18	0	-20	-42	-66	-92	-120	
-10	-130	-100	-72	-46	-22	0	20	38	54	68	80	90	98	104	108	110	110	108	104	98	90	80	68	54	38	20	0	-22	-46	-72	-100	
-11	-108	-78	-50	-24	0	22	42	60	76	90	102	112	120	126	130	132	132	130	126	120	112	102	90	76	60	42	22	0	-24	-50	-78	
-12	-84	-54	-26	-24	0	24	66	84	100	114	126	136	144	150	154	156	156	154	150	144	136	126	114	100	84	66	46	24	0	-26	-54	
-13	-58	-28	0	26	50	72	92	110	126	140	152	162	170	176	180	182	182	180	176	170	162	152	140	126	110	92	72	50	26	0	-28	
-14	-30	0	28	54	78	100	120	138	154	168	180	190	198	204	208	210	210	208	204	198	190	180	168	154	138	120	100	78	54	28	0	
-15	0	30	58	84	108	130	150	168	184	198	210	220	228	234	238	240	240	238	234	228	220	210	198	184	168	150	130	108	84	58	30	

Figure 1. Paraboctys $PS[-x^2 + x + 2, -x^2 + x, -x^2 + x]$. All verticals of Paraboctys $PS[4x + 2, 2x, 0]$ in offset $f = 0$.

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
b	32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0	-2	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	-26	-28
c	257	227	199	173	149	127	107	89	73	59	47	37	29	23	19	17	17	19	23	29	37	47	59	73	89	107	127	149	173	199	227
15	737	677	619	563	509	457	407	359	313	269	227	187	149	113	79	47	17	-11	-37	-61	-83	-103	-121	-137	-151	-163	-173	-181	-191	-193	
14	705	647	591	551	511	461	413	367	323	281	241	203	167	133	101	71	43	17	-9	-33	-55	-73	-93	-123	-135	-145	-153	-159	-163	-165	
13	673	617	563	511	461	413	367	323	281	241	2																				

If we turn the paraboctys clockwise 90° around the central point $(0,0)$, we get:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Classif.	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES			
y_ip	-14.5	-13.5	-12.5	-11.5	-10.5	-9.5	-8.5	-7.5	-6.5	-5.5	-4.5	-3.5	-2.5	-1.5	-0.5	0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5	12.5	13.5	14.5	15.5		
f	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
b	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	-1	-3	-5	-7	-9	-11	-13	-15	-17	-19	-21	-23	-25	-27	-29	-31		
c	-13	-11	-9	-7	-5	-3	-1	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47		
-15	-223	-191	-159	-127	-95	-63	-31	1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481	513	545	577	609	641	673	705	737		
-14	-223	-193	-163	-133	-103	-73	-43	-13	17	47	77	107	137	167	197	227	257	287	317	347	377	407	437	467	497	527	557	587	617	647	677		
-13	-221	-193	-163	-133	-109	-81	-53	-25	3	31	59	87	115	143	171	199	227	255	283	311	339	367	395	423	451	479	507	533	563	591	619		
-12	-217	-191	-165	-139	-113	-87	-61	-35	-9	17	43	69	95	121	147	173	199	225	251	277	303	329	355	381	407	433	459	485	511	537	563		
-11	-211	-187	-163	-139	-115	-91	-67	-43	-19	5	29	53	77	101	125	149	173	197	221	245	269	293	317	341	365	389	413	437	461	485	509		
-10	-203	-181	-159	-137	-115	-93	-71	-49	-27	5	17	39	61	83	105	127	149	171	193	215	237	259	281	303	325	347	369	391	413	435	457		
-9	-193	-173	-153	-133	-113	-93	-73	-53	-33	-13	17	27	47	67	87	107	127	147	167	187	207	227	247	267	287	307	327	347	367	387	407		
-8	-181	-163	-145	-127	-109	-91	-73	-55	-37	-19	-1	17	35	53	71	89	107	125	143	161	179	197	215	233	251	269	287	305	323	341	359		
-7	-167	-151	-135	-119	-103	-87	-71	-55	-39	-23	-9	25	41	57	73	89	105	121	137	153	169	185	201	217	233	249	265	281	297	313			
-6	-151	-137	-123	-109	-95	-81	-67	-53	-39	-25	-11	3	17	31	45	59	73	87	101	115	129	143	157	171	185	199	213	227	241	255	269		
-5	-133	-121	-109	-97	-85	-73	-61	-49	-37	-25	-13	-1	11	23	35	47	59	71	83	95	107	119	131	143	155	167	179	191	203	215	227		
-4	-113	-103	-93	-83	-73	-63	-53	-43	-33	-23	-13	-3	7	17	27	37	47	57	67	77	87	97	107	117	127	137	147	157	167	177	187		
-3	-91	-83	-75	-67	-59	-51	-43	-35	-27	-19	-11	-3	5	13	21	29	37	45	53	61	69	77	85	93	101	109	117	125	133	141	149		
-2	-67	-61	-55	-49	-43	-37	-31	-25	-19	-13	-7	-1	5	11	17	23	29	35	41	47	53	59	65	71	77	83	89	95	101	107	113		
-1	-41	-37	-33	-29	-25	-21	-17	-13	-9	-5	-1	3	7	11	15	19	23	27	31	35	39	43	47	51	55	59	63	67	71	75	79		
Y[1]	0	-13	-11	-9	-7	-5	-3	-1	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	
Y[0]	0	-13	-11	-9	-7	-5	-3	-1	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	
Y[1]	1	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17		
2	49	47	45	43	41	39	37	35	33	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	-1	-3	-5	-7	-9	-11		
3	83	79	75	71	67	63	59	55	51	47	43	39	35	31	27	23	19	15	11	7	3	-1	-5	-9	-13	-17	-21	-25	-29	-33	-37		
4	119	113	107	101	95	89	83	77	71	65	59	53	47	41	35	29	23	17	11	5	1	-7	-13	-19	-25	-31	-37	-43	-49	-55	-61		
5	157	149	141	133	125	117	109	101	93	85	77	69	61	53	45	37	29	21	13	5	-3	-11	-19	-27	-35	-43	-51	-59	-67	-75	-83		
6	197	187	177	167	157	147	137	127	117	107	97	87	77	67	57	47	37	27	17	7	-3	-13	-23	-33	-43	-53	-63	-73	-83	-93	-103		
7	239	227	215	203	191	179	167	155	143	131	119	107	95	83	71	59	47	35	23	11	1	-13	-25	-37	-49	-61	-73	-85	-97	-105	-121		
8	283	269	255	241	227	213	199	185	171	157	143	129	115	101	87	73	59	45	31	17	3	-11	-25	-39	-53	-67	-81	-95	-109	-123	-137		
9	329	313	297	281	265	249	233	217	201	185	169	153	137	121	105	89	73	57	41	25	9	-7	-23	-39	-55	-71	-87	-103	-119	-135	-151		
10	377	359	341	323	305	287	269	251	233	215	197	179	161	143	125	107	89	71	53	35	17	-1	-19	-37	-55	-73	-91	-109	-127	-145	-163		
11	427	407	387	367	347	327	307	287	267	247	227	207	187	167	147	127	107	87	67	47	27	7	-13	-33	-53	-73	-93	-113	-133	-153	-173		
12	479	457	435	413	391	369	347	325	303	281	259	237	215	193	171	149	127	105	83	61	39	17	-5	-27	-49	-71	-93	-115	-137	-159	-181		
13	533	509	485	461	437	413	389	365	341	317	293	269	245	221	197	173	149	125	101	77	53	29	-5	-19	-43	-67	-91	-115	-139	-163	-187		
14	589	563	537	511	485	459	433	407	381	355	329	303	277	251	225	199	173	147	121	95	69	43	17	-9	-35	-67	-81	-97	-109	-123	-139	-165	-191
15	647	616	591	563	535	507	479	451	423	395	367	339	311	283	255	227	199	171	143	115	87	59	31	-3	-25	-53	-81	-107	-135	-167	-193		

Figure 1. Paraboctys $PS[4x + 19, 2x + 17, 17]$. The vertical ones here are the horizontal ones of $PS[x^2 + x + 15, x^2 - x + 17, x^2 - 3x + 19]$. Because of the clockwise 90° rotation the indexes y increase from top to bottom.

Simplifying all verticals for offset $f = 0$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES			
Y ^o	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5			
F ^o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
a ^o	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
b ^o	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
c ^o	-223	-193	-165	-139	-115	-93	-73	-55	-39	-25	-13	-3	5	11	15	17	17	15	11	5	-3	-13	-25	-39	-55	-73	-93	-115	-139	-165	-193	
15	-13	17	45	71	95	117	137	155	171	185	197	207	215	221	225	227	227	225	221	215	207	197	185	171	155	137	117	95	71	45	17	
14	-41	-11	-17	43	67	89	109	127	143	157	169	179	187	193	197	199	193	187	179	169	157	143	127	109	89	67	43	17	-11			
13	-67	-37	-9	17	41	63	83	101	117	131	143	153	161	167	171	173	173	171	167	161	153	143	131	117	101	83	63	41	17	-9	-37	
12	-91	-61	-33	-7	17	39	59	77	93	107	119	129	137	143	147	149	147	143	137	129	119	107	93	77	59	39	17	-7	-33	-61		
11	-113	-83	-55	-29	-5	17	37	55	71	85	97	107	115	121	127	127	125	121	115	107	97	85	71	55	37	17	-5	-29	-55	-83		
10	-133	-103	-75	-49	-25	-3	17	35	51	65	77	87	95	101	105	107	107	105	101	95	87	77	65	51	35	17	-3	-25	-49	-75	-103	
9	-151	-121	-93	-67	-43	-21	-1	17	33	47	59	69	77	83	87	89	89	87	83	77	69	59	47	33	17	-1	-21	-43	-67	-93	-121	
8	-167	-137	-109	-83	-59	-37	-17	1	17	31	43	53	61	67	71	73	73	71	67	61	53	43	31	17	1	-17	-37	-59	-83	-109	-137	
7	-181	-151	-123	-97	-73	-51	-31	-13	3	17	29	39	47	53	57	59	59	57	53	47	39	29	17	3	-13	-31	-51	-73	-97	-123	-151	
6	-193	-163	-135	-109	-85	-63	-43	-25	-9	5	17	27	35	41	45	47	45	41	35	27	17	5	-9	-25	-43	-63	-85	-109	-135	-163		
5	-203	-173	-145	-119	-95	-73	-53	-35	-19	-5	7	17	25	31	35	37	37	35	31	25	17	7	-5	-19	-35	-53	-73	-95	-119	-145	-173	
4	-211	-181	-153	-127	-103	-81	-61	-43	-27	-13	-1	9	17	23	27	29	29	27	23	17	9	-1	-13	-27	-43	-61	-81	-103	-127	-153	-181	
3	-217	-187	-159	-133	-109	-87	-67	-49	-33	-19	-7	3	11	17	21	23	23	21	17	11	3	-7	-19	-33	-49	-67	-87	-109	-133	-159	-187	
2	-221	-191	-163	-137	-113	-91	-71	-53	-37	-23	-11	-1	7	13	17	19	19	17	13	7	-1	-11	-23	-37	-53	-71	-91	-113	-137	-163	-191	
Y[1]	1	-223	-193	-165	-139	-115	-93	-73	-55	-39	-25	-13	-3	5	11	15	17	17	15	11	5	-3	-13	-25	-39	-55	-73	-93	-115	-139	-165	-193
Y[0]	0	-223	-193	-165	-139	-115	-93	-73	-55	-39	-25	-13	-3	5	11	15	17	17	15	11	5	-3	-13	-25	-39	-55	-73	-93	-115	-139	-165	-193
Y[-1]	-1	-221	-191	-163	-137	-113	-91	-71	-53	-37	-23	-11	-1	7	13	17	19	19	17	13	7	-1	-11	-23	-37	-53	-71	-91	-113	-137	-163	-191
-2	-217	-187	-159	-133	-109	-87	-67	-49	-33	-19	-7	3	11	17	21	23	23	21	17	11	3	-7	-19	-33	-49	-67	-87	-109	-133	-159	-187	
-3	-211	-181	-153	-127	-103	-81	-61	-43	-27	-13	-1	9	17	23	27	29	29	27	23	17	9	-1	-13	-27	-43	-61	-81	-103	-127	-153	-181	
-4	-203	-173	-145	-119	-95	-73	-53	-35	-19	-5	7	17	25	31	35	37	37	35	31	25	17	7	-5	-19	-35	-53	-73	-95	-119	-145	-173	
-5	-193	-163	-135	-109	-85	-63	-43	-25	-9	5	17	27	35	41	45	47	47	45	41	35	27	17	5	-9	-25	-43	-63	-85	-109	-135	-163	
-6	-181	-151	-123	-97	-73	-51	-31	-13	3	17	29	39	47	53	57	59	59	57	53	47	39	29	17	3	-13	-31	-51	-73	-97	-123	-151	
-7	-167	-137	-109	-83	-59	-37	-17	1	17	31	43	53	61	67	71	73	73	71	67	61	53	43	31	17	1	-17	-37	-59	-83	-109	-137	
-8	-151	-121	-93	-67	-43	-21	-1	17	33	47	59	69	77	83	89	89	87	83	73	69	59	47	33	17	-1	-21	-43	-67	-93	-121		
-9	-133	-103	-75	-49	-25	-3	17	35	51	65	77	87	95	101	105	107	107	105	101	95	87	77	65	51	35	17	-3	-25	-49	-75	-103	
-10	-113	-83	-55	-29	-5	17	37	55	71	85	97	107	115	121	125	127	125	121	115	107	97	85	71	55	37	17	-5	-29	-55	-83		
-11	-91	-61	-33	-7	17	39	59	77	93	107	119	129	137	143	147	149	149	147	143	137	129	119	107	93	77	59	39	17	-7	-33	-61	
-12	-67	-37	-9	17	41	63	83	101	117	131	143	153	161	167	171	173	173	171	167	161	153	143	131	117	101	83	63	41	17	-9	-37	
-13	-41	-11	-17	43	67	89	109	127	143	157	169	179	187	193	197	199	197	193	187	179	169	157	143	127	109	89	67	43	17	-11		
-14	-13	-17	45	71	95	117	137	155	171	185	197	207	215	221	225	227	227	225	221	215	207	197	185	171	155	137	117	95	71	45	17	
-15	17	47	75	101	125	147	167	185	201	215	227	237	245	251	255	257	255	251	245	237	227	215	201	185	167	147	125	101	75	47		

Figure 1. Paraboctys $PS[-x^2 + x + 19, -x^2 + x + 17, -x^2 + x + 17]$. All verticals of Paraboctys $PS[4x + 19, 2x + 17, 17]$ in offset $f = 0$.

2.3 The D-Submarine parabolas with variable offset on a vertical of $PS[x + 2, x, x]$

See the picture:

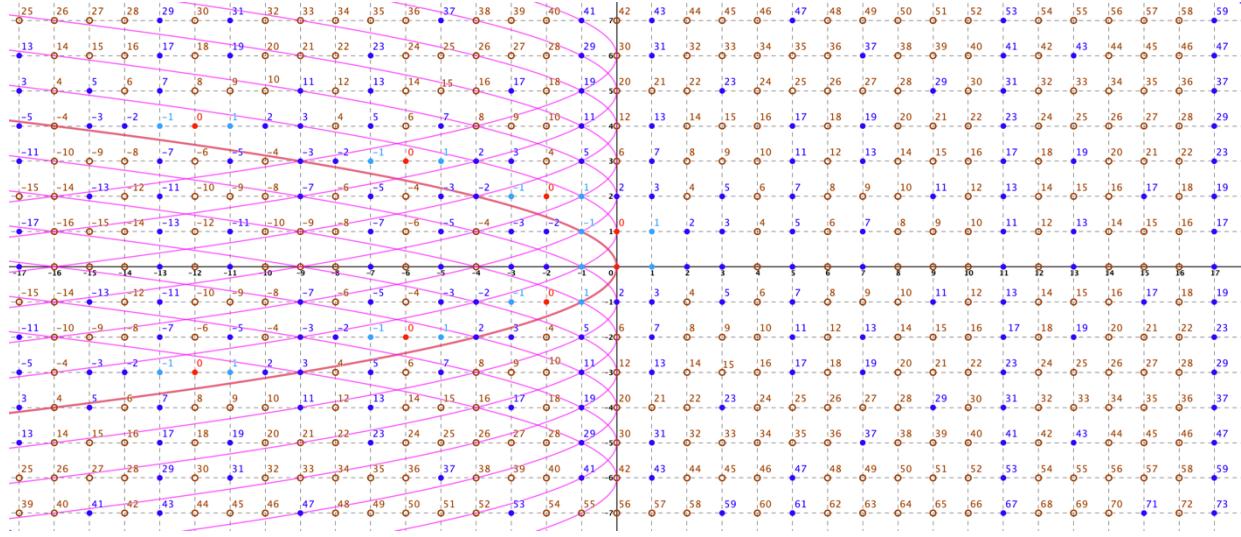


Figure 1. The D-Submarine parabolas in column $x = 0$ of the lattice-grid $PS[x + 2, x, x]$. They have offset following the staircase function with the step of a unit. These parabolas have equations in the XY plane of the form $x = -y^2 + Even * y - Square$. In terms of the offset value $x = -y^2 + 2fy - f^2$.

Each parabola $x = -y^2 + 2fy - f^2$ in lattice-grid $PS[x + 2, x, x]$ will produce a quadratic sequence of the form $Y[y] = ay^2 + by + c$. Now, to determine the coefficients a, b, c , for each sequence we have to determine three consecutive elements.

Over each parabola, we can choose 3 consecutive elements from top to bottom or from bottom to top. Because we are synchronizing the y index with the Y-axis, we will choose 3 consecutive bottom-up elements which is the increasing index direction: $[Y[-1], Y[0], Y[1]]$.

The elements of row $y = -1$ in the new paraboctys will be noted as $@Y[-1]$.

The elements of row $y = 0$ in the new paraboctys will be noted as $@Y[0]$.

The elements of row $y = 1$ in the new paraboctys will be noted as $@Y[1]$.

So, let's create the new paraboctys $PS[@Y[-1], @Y[0], @Y[1]]$. This new paraboctys will contain all the sequences formed by the D-Submarine parabolas with a variable offset in a vertical of lattice-grid $PS[x + 2, x, x]$.

As we have D-Submarine parabolas, we can understand each sequence as being made of two elements of the vertical column $x = -1$ to assume the $@Y[-1]$ and $@Y[1]$ elements position and one element of the vertical column $x = 0$ to assume the $@Y[0]$ elements positions.

Consequently,

- The elements on the vertical column $x = -1$ with offset $f = -1$ of the current paraboctys $PS[x + 2, x, x]$ is:

$$A165900 \equiv [-1, -1, 1] \equiv @Y[-1] = x^2 + x - 1$$

- The elements on the vertical column $x = 0$ with offset $f = 0$ of the current paraboctys $PS[x + 2, x, x]$ is:

$$A002378 \equiv [2, 0, 0] \equiv @Y[0] = x^2 - x$$

- The elements on the vertical column $x = -1$ with offset $f = 1$ of the current paraboctys $PS[x + 2, x, x]$ is:

$$A165900 \equiv [5, 1, -1] \equiv @Y[1] = x^2 - 3x + 1$$

Finally, we create the new paraboctys $PS[x^2 + x - 1, x^2 - x, x^2 - 3x + 1]$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
b	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	-1	-3	-5	-7	-9	-11	-13	-15	-17	-19	-21	-23	-25	-27	-29	
c	240	210	182	156	132	110	90	72	56	42	30	20	12	6	2	0	0	2	6	12	20	30	42	56	72	90	110	132	156	182	210	
15	705	645	587	531	477	425	375	327	281	237	195	155	117	81	47	15	-15	-43	-69	-93	-115	-135	-153	169	183	-195	-205	-213	-219	-223	-225	
14	674	616	560	506	454	404	356	310	266	224	184	146	110	76	44	14	-14	-40	-64	-86	-106	-124	-140	-154	-166	-176	-184	-190	-194	-196	-196	
13	643	587	533	481	431	383	337	293	251	211	173	137	103	71	41	13	-13	-37	-59	-79	-97	-113	-127	-139	149	-157	-163	-167	-169	-169	-167	
12	612	558	506	456	408	362	318	276	236	198	162	128	96	66	38	12	-12	-34	-54	-72	-88	-102	-114	-124	-132	-138	-142	-144	-144	-142	-138	
11	581	529	479	431	385	341	299	259	221	185	151	119	89	61	35	11	-11	-31	-49	-65	-79	-91	-101	-109	-115	-119	-121	-121	-119	-115	-109	
10	550	500	452	406	362	320	280	242	206	172	140	110	82	56	32	10	-10	-28	-44	-58	-70	-80	-88	-94	-98	-100	-100	-98	-94	-88	-80	
9	519	471	425	381	339	299	261	225	191	159	129	101	75	51	29	9	-9	-25	-39	-51	-61	-69	-75	-79	-81	-79	-75	-69	-61	-51		
8	488	442	398	356	316	278	242	208	176	146	118	92	68	46	26	8	-8	-22	-34	-44	-52	-58	-62	-64	-64	-62	-58	-52	-44	-34	-22	
7	457	413	371	331	293	257	223	191	161	133	107	83	61	41	23	7	-7	-19	-29	-37	-43	-47	-49	-49	-47	-43	-37	-29	-19	-7	7	
6	426	384	344	306	270	236	204	174	146	120	96	74	54	36	20	6	-6	-16	-24	-30	-34	-36	-36	-34	-30	-24	-16	-6	6	20	36	
5	395	355	317	281	247	215	185	157	131	107	85	65	47	31	17	5	-5	-13	-19	-23	-25	-25	-23	-19	-13	-5	5	17	31	47	65	
4	364	326	296	256	224	194	166	140	116	94	74	56	40	26	14	4	-4	-10	-14	-16	-16	-14	-10	-4	4	14	26	40	56	74	94	
3	333	297	263	231	201	173	147	123	101	81	63	47	33	21	11	3	-3	-7	-9	-9	-7	-3	3	11	21	33	47	63	81	101	123	
2	302	268	236	206	178	152	128	106	86	68	52	38	26	16	8	2	-2	-4	-4	-2	2	8	16	26	38	52	68	86	106	128	152	
Y[1]	1	271	239	209	181	155	131	109	89	71	55	41	29	19	11	5	1	-1	-1	1	5	11	19	29	41	55	71	89	109	131	155	181
Y[0]	0	240	210	182	156	132	110	90	72	56	42	30	20	12	6	2	0	2	6	12	20	30	42	56	72	90	110	132	156	182	210	
Y[-1]	-1	209	181	155	131	109	89	71	55	41	29	19	11	5	1	-1	-1	1	5	11	19	29	41	55	71	89	109	131	155	181	209	239
-2	178	152	128	106	86	68	52	38	26	16	8	2	-2	-4	-4	-2	2	8	16	26	38	52	68	86	106	128	152	178	206	236	268	
-3	147	123	101	81	63	47	33	21	11	3	-3	-7	-9	-9	-7	-3	3	11	21	33	47	63	81	101	123	147	173	201	231	263	297	
-4	116	94	74	56	40	26	14	4	-4	-10	-14	-16	-16	-14	-10	-4	4	14	26	40	56	74	94	116	140	166	194	224	256	290	326	
-5	85	65	47	31	17	5	-5	-13	-19	-23	-25	-25	-23	-19	-13	-5	5	17	31	47	65	85	107	131	157	185	215	247	281	317	355	
-6	54	36	20	6	-6	-16	-24	-30	-34	-36	-36	-34	-30	-24	-16	-6	6	20	36	54	74	96	120	146	174	204	236	270	306	344	384	
-7	23	7	-7	-19	-29	-37	-43	-47	-49	-49	-47	-43	-37	-29	-19	-7	7	23	41	61	83	107	133	161	191	223	257	293	331	371	413	
-8	-8	-22	-34	-44	-52	-58	-62	-64	-64	-62	-58	-52	-44	-34	-22	-8	8	26	46	68	92	118	146	176	202	242	278	316	356	398	442	
-9	-39	-51	-61	-69	-75	-75	-81	-81	-79	-75	-69	-61	-51	-39	-25	-9	9	29	51	75	101	129	159	191	225	261	299	339	381	425	471	
-10	-70	-80	-88	-94	-98	-100	-100	-98	-94	-88	-80	-70	-58	-44	-28	-10	10	32	56	82	110	140	172	206	242	280	320	362	406	452	500	
-11	-101	-109	-115	-119	-121	-121	-119	-115	-109	-101	-91	-79	-65	-49	-31	-11	11	35	61	89	119	151	185	211	259	299	341	385	431	479	529	
-12	-132	-138	-142	-144	-144	-142	-138	-132	-124	-114	-102	-88	-72	-54	-34	-12	12	38	66	96	128	162	198	236	276	318	362	408	456	506	558	
-13	-163	-167	-169	-167	-163	-157	-149	-139	-127	-113	-97	-79	-59	-37	-13	13	41	71	103	137	173	211	251	293	337	383	431	481	533	587		
-14	-194	-196	-196	-194	-190	-184	-176	-166	-154	-140	-124	-106	-86	-64	-40	-14	14	44	76	110	146	184	224	266	310	356	404	454	506	560	616	
-15	-225	-225	-223	-219	-213	-205	-195	-183	-169	-153	-135	-115	-93	-69	-43	-15	15	47	81	117	155	195	237	281	327	375	425	477	531	587	645	

Figure 1. Paraboctys $PS[x^2 + x - 1, x^2 - x, x^2 - 3x + 1]$. The verticals represent the sequences produced by D-Submarine parabolas with variable offset on the vertical $x = 0$ of the $PS[x + 2, x, x]$. The D-Submarine parabolas with positive offset produce the vertical sequences on the left side of this table. The D-Submarine parabolas with negative offset produce the vertical sequences on the right side of this table.

If we turn the paraboctys clockwise 90° around the central point $(0,0)$, we get:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES			
Y _[1]	-14,5	-13,5	-12,5	-11,5	-10,5	-9,5	-8,5	-7,5	-6,5	-5,5	-4,5	-3,5	-2,5	-1,5	-0,5	1,5	2,5	3,5	4,5	5,5	6,5	7,5	8,5	9,5	10,5	11,5	12,5	13,5	14,5	15,5		
f	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
b	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	-1	-3	-5	-7	-9	-11	-13	-15	-17	-19	-21	-23	-25	-27	-29	-31	
c	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
-15	-225	-194	-163	-132	-101	-70	-39	-8	23	54	85	116	147	178	209	240	271	302	333	364	395	426	457	488	519	550	581	612	643	674	705	
-14	-225	-196	-167	-138	-109	-80	-51	-22	7	36	65	94	123	152	181	210	239	268	297	326	355	384	413	442	471	500	529	558	587	616	645	
-13	-223	-196	-169	-142	-115	-88	-61	-34	-7	20	47	74	101	128	155	182	209	236	263	290	317	344	371	398	425	452	479	506	533	560	587	
-12	-219	-194	-169	-144	-119	-94	-69	-44	-19	6	31	56	81	106	131	156	181	206	231	256	281	306	331	356	381	406	431	456	481	506	531	
-11	-213	-190	-167	-144	-121	-98	-75	-52	-37	-6	17	40	63	86	109	132	155	178	201	224	247	270	293	316	339	362	385	408	431	454	477	
-10	-205	-184	-163	-142	-121	-100	-79	-58	-37	-16	5	26	47	68	89	110	131	152	173	194	215	236	257	278	299	320	341	362	383	404	425	
-9	-195	-176	-157	-138	-119	-100	-81	-62	-43	-24	-5	14	33	52	71	90	109	128	147	166	185	204	223	242	261	280	299	318	337	356	375	
-8	-183	-166	-149	-132	-115	-98	-81	64	-47	-30	-13	4	21	38	55	72	89	106	123	140	157	174	191	208	225	242	259	276	293	310	327	
-7	-169	-154	-139	-124	-109	-94	-79	64	-49	-34	-19	-4	11	26	41	56	71	86	101	116	131	146	161	176	191	206	221	236	251	266	281	
-6	-153	-140	-127	-114	-101	-88	-75	-62	-49	-36	-23	-10	3	16	29	42	55	68	81	94	107	120	133	146	159	172	185	198	211	224	237	
-5	-135	-124	-113	-102	-91	-80	-69	-58	-47	-36	-25	-14	-3	8	19	30	41	52	63	74	85	96	107	118	129	140	151	162	173	184	195	
-4	-115	-106	-97	-88	-79	-70	-61	-52	-43	-34	-25	-16	-7	2	11	20	29	38	47	56	65	74	83	92	101	110	119	128	137	146	155	
-3	-93	-86	-79	-72	-65	-58	-51	-44	-37	-30	-23	-16	-9	-2	5	12	19	26	33	40	47	54	61	68	75	82	89	96	103	110	117	
-2	-69	64	-59	-54	-49	-44	-39	-34	-29	-24	-19	-14	-9	-4	1	6	11	16	21	26	31	36	41	46	51	56	61	66	71	76	81	
Y[1]	-1	-43	-40	-37	-34	-31	-28	-25	-22	-19	-16	-13	-10	-7	-4	-1	2	5	8	11	14	17	20	23	26	29	32	35	38	41	44	47
Y[0]	0	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Y[1]	1	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15
2	47	44	41	38	35	32	29	26	23	20	17	14	11	8	5	2	-1	-4	-7	-10	-13	-16	-19	-22	-25	-28	-31	-34	-37	-40	-43	
3	81	76	71	66	61	56	51	46	41	36	31	26	21	16	11	6	1	-4	-9	-14	-19	-24	-29	-34	-39	-44	-49	-54	-59	-64	-69	
4	117	110	103	96	89	82	75	68	61	54	47	40	33	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93	
5	155	146	137	128	119	110	101	92	83	74	65	56	47	38	29	20	11	2	-7	-16	-25	-34	-43	-52	-61	-70	-79	-88	-97	-106	-115	
6	195	184	173	162	151	140	129	118	107	96	85	74	63	52	41	30	19	8	-3	-14	-25	-36	-47	-58	-69	-80	-91	-102	-113	-124	-135	
7	237	224	211	198	185	172	159	146	133	120	107	94	81	68	55	42	29	16	3	-10	-23	-36	-49	-62	-75	-88	-101	-114	-127	-140	-153	
8	281	266	251	236	221	206	191	176	161	146	131	116	101	86	71	56	41	26	11	-4	-19	-34	-49	-64	-79	-94	-109	-124	-139	-154	-169	
9	327	310	293	276	259	242	225	208	191	174	157	140	123	106	89	72	55	38	21	4	-13	-30	-47	-64	-81	-98	-115	-132	-149	-166	-183	
10	375	356	337	318	299	280	261	242	223	204	185	166	147	128	109	90	71	52	33	14	-5	-24	-43	-62	-81	-100	-119	-138	-157	-176	-195	
11	425	404	383	362	341	320	299	278	257	236	215	194	173	152	131	110	89	68	47	26	-5	-16	-37	-58	-79	-100	-121	-142	-163	-184	-205	
12	477	454	431	408	385	362	339	316	293	270	247	224	201	178	155	132	109	86	63	40	17	-6	-29	-52	-75	-98	-121	-144	-167	-190	-213	
13	531	506	481	456	431	406	381	356	331	306	281	256	231	206	181	156	131	106	81	56	31	6	-19	-44	-69	-94	-119	-144	-169	-194	-219	
14	587	560	533	506	479	452	425	398	371	344	317	290	263	236	209	182	155	128	101	74	47	20	-7	-34	-61	-88	-115	-142	-169	-196	-223	
15	645	616	587	558	529	500	471	442	413	384	355	326	297	268	239	210	181	152	123	94	65	36	7	-22	-51	-80	-109	-138	-167	-196	-225	

Figure 1. Paraboctys $PS[3x + 2, x, -x]$. The vertical ones here are the horizontal ones of $PS[x^2 + x - 1, x^2 - x, x^2 - 3x + 1]$. Because of the clockwise 90° rotation the indexes y increase from top to bottom (opposite direction of the Y-axis).

Simplifying all verticals for offset $f = 0$:

Root ⁰¹	15,5	14,5	13,5	12,5	11,5	10,5	9,5,1	8,5,2	7,5,2	6,5,2	5,5,2	4,5,3	3,5,4	2,5,6	1,6,2	2,5,6	3,5,4	4,5,3	5,5,2	6,5,2	7,5,2	8,5,2	9,5,1	10,5	11,5	12,5	13,5	14,5	15,5					
Root ⁰²	-15	-14	-13	-12	-11	-9,5	-8,5,1	-7,5	-6,5	-5,5	-4,5	-3,5	-2,5	-1,6	-0,6	-0,6	-1,6	-2,5	-3,5	-4,5	-5,5	-6,5	-7,5	-8,5	-9,5	-11	-12	-13	-14	-15				
Root ^{2-Root⁰¹}	-30	-28	-26	-24	-22	-20	-18	-16	-14	-12	-10	-8,1	-6,1	-4,1	-2,2	-1	-2,2	-4,1	-6,1	-8,1	-10	-12	-14	-16	-18	-20	-22	-24	-26	-28	-30			
Classif.	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES											
y ⁰ -Ip	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5					
P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
a ⁰	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
b ⁰	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1					
c ⁰	-225	-196	-169	-144	-121	-100	-81	-64	-49	-36	-25	-16	-9	-4	-1	0	-1	-4	-9	-16	-25	-36	-49	-64	-81	-100	-121	-144	-169	-196	-225			
30	645	674	701	726	749	770	789	806	821	834	845	854	861	866	869	870	869	866	861	854	845	834	821	806	789	770	749	726	701	674	645			
29	587	616	643	668	691	712	731	748	763	776	787	796	803	808	811	812	811	808	803	796	787	776	776	748	731	712	691	668	643	616	587			
28	531	560	587	612	635	656	675	692	707	720	731	740	747	752	755	756	755	752	747	740	731	720	707	692	675	656	635	612	587	560	531			
27	477	506	533	558	581	602	621	638	653	666	677	686	693	698	701	702	701	698	693	686	677	666	653	638	621	602	581	558	533	506	477			
26	425	454	481	506	529	550	569	586	601	614	625	634	641	646	649	650	649	646	641	634	625	614	601	586	569	550	529	506	481	454	425			
25	375	404	431	456	479	500	519	536	551	564	575	584	591	596	599	596	591	584	575	564	551	536	519	500	479	456	431	404	375					
24	327	356	383	408	431	452	471	488	503	516	527	536	543	548	551	552	551	548	543	540	527	516	503	488	471	452	431	408	383	327				
23	281	310	337	362	385	406	425	442	457	470	481	490	497	502	505	505	502	497	490	481	470	457	442	425	406	385	362	337	310	281				
22	237	266	293	318	341	362	381	398	413	426	437	446	453	458	461	462	461	458	453	446	443	426	411	398	381	362	341	318	293	237				
21	195	224	251	276	299	320	339	356	371	384	395	404	411	416	419	420	419	416	411	404	395	384	371	356	339	320	299	276	251	224	195			
20	155	184	211	236	259	280	299	316	331	344	355	364	371	376	379	380	379	376	371	364	355	344	331	316	299	280	259	236	211	184	155			
19	117	146	173	198	221	242	261	278	293	306	317	326	333	338	341	342	341	338	333	326	317	309	298	281	270	257	242	225	206	185	162	137	110	81
18	81	110	137	162	185	206	225	242	257	270	281	290	297	302	305	305	302	297	290	281	270	257	242	225	206	185	162	137	110	81				
17	47	76	103	128	152	172	191	208	223	246	256	263	268	271	272	271	268	266	257	256	247	236	233	208	191	172	151	128	103	76	47			
16	15	44	71	96	119	140	159	176	191	204	215	224	231	236	239	240	239	236	231	224	215	204	197	176	159	140	119	96	71	44	15			
15	-15	14	41	66	89	110	129	146	161	174	185	194	201	206	209	210	209	206	201	194	185	174	161	146	129	110	89	66	41	14	-15			
14	-43	-14	-13	61	81	101	118	133	146	157	166	173	178	181	182	181	178	173	166	157	146	133	118	101	82	61	38	13	-43	-43				
13	-69	-40	-13	12	35	56	75	92	107	120	131	140	147	152	155	156	155	152	147	140	131	120	107	92	75	56	35	12	-13	-69				
12	-93	-64	-37	-12	11	32	51	68	83	96	107	116	123	128	131	132	131	128	123	113	106	97	83	68	51	32	11	-12	-37	-64	-93			
11	-115	-86	-59	-34	-11	10	29	46	61	74	85	94	101	106	109	110	109	106	101	94	85	74	61	46	29	10	-11	-34	-59	-86	-115			
10	-135	-106	-79	-54	-31	-10	9	26	41	54	65	74	81	86	89	90	89	86	81	74	65	54	41	26	9	-10	-31	-54	-79	-106	-135			
9	-153	-124	-97	-72	-49	-28	-9	23	36	47	56	63	68	71	72	71	68	63	56	47	36	23	8	-9	-28	-49	-72	-97	-124	-153				
8	-169	-140	-113	-88	-65	-44	-25	-8	7	20	31	40	47	52	55	56	55	52	47	40	31	20	7	-8	-25	-44	-65	-88	-113	-140	-169			
7	-183	-154	-127	-102	-79	-58	-39	-22	-7	6	17	26	33	38	41	42	41	38	33	26	17	6	-7	-22	-39	-58	-79	-102	-127	-154	-183			
6	-195	-166	-139	-114	-91	-70	-51	-34	-19	-6	5	14	21	26	29	30	29	26	21	14	5	-6	-19	-34	-51	-70	-91	-114	-139	-166	-195			
5	-205	-176	-149	-124	-101	-80	-61	-44	-29	-16	-5	4	11	16	19	20	19	16	15	11	4	-5	-16	-29	-44	-61	-80	-101	-124	-149	-176			
4	-213	-184	-157	-132	-109	-88	-69	-52	-37	-24	-13	-4	3	8	11	12	11	8	3	4	-13	-24	-37	-52	-69	-88	-109	-132	-157	-184				
3	-219	-190	-163	-138	-115	-94	-75	-58	-43	-30	-19	-10	-3	2	5	6	5	2	-3	-10	-19	-30	-43	-58	-75	-94	-115	-138	-163	-190	-219			
2	-213	-187	-165	-142	-119	-98	-76	-52	-37	-24	-13	-4	3	8	11	12	11	8	3	4	-13	-24	-37	-52	-68	-88	-109	-132	-157	-183				
-4	-205	-176	-149	-124	-101	-80	-61	-44	-29	-16	-5	4	11	16	19	20	19	16	15	11	4	-5	-16	-29	-44	-61	-80	-101	-124	-149	-176			
-5	-195	-166	-139	-114	-91	-70	-51	-34	-19	-6	5	14	21	26	29	30	29	26	21	14	5	-6	-19	-34	-51	-70	-91	-114	-139	-166	-195			
-6	-183	-154	-127	-102	-79	-58	-39	-22	-7	6	17	26	33	38	41	42	41	38	33	26	17	6	-7	-22	-39	-58	-79	-102	-127	-154	-183			
-7	-169	-140	-113	-88	-65	-44	-25	-8	7	20	31	40	47	52	55	56	55	52	47	40	31	20	7	-8	-25	-44	-65	-88	-113	-140	-169			
-8	-153	-124	-97	-72	-49	-28	-9	8	23	36	47	56	63	68	71	72	71	68	63	56	47	36	23	8	-9	-28	-49	-72	-97	-124	-153			
-9	-135	-106	-79	-54	-31	-10	9	26	41	54	65	74	81	86	89	90	89	86	81	74	65	54	41	26	9	-10	-31	-54	-79	-106	-135			
-10	-115	-86	-59	-34	-11	10	29	46	61	74	85	94	101	106																				

Here the sequence next to the A002378 Oblong numbers is A165900 Values of Fibonacci polynomial $Y[y] = y^2 - y - 1^2$. At A014556 Euler's "Lucky" numbers the sequence next to the A002378 Oblong numbers is A002061 Central polygonal numbers: $Y[y] = y^2 - y + 1$.

See that all prime number sequences in zero offset start with two primes squared elements and all ends at the composite generator $Y[y] = 3y^2 \pm 2y$. This composite generator has two classifications in the OEIS:

- A000567 Octagonal numbers: $n^*(3*n-2)$. Also called star numbers.
- A045944 Rhombic matchstick numbers: $a(n) = n^*(3*n+2)$.

y	3y	3y-1	3y-2	Produt	Sum	A000567	y	3y	3y+1	3y+2	Produt	Sum	A045944
10	30	29	28	24360	87	280	10	30	31	32	29760	93	320
9	27	26	25	17550	78	225	9	27	28	29	21924	84	261
8	24	23	22	12144	69	176	8	24	25	26	15600	75	208
7	21	20	19	7980	60	133	7	21	22	23	10626	66	161
6	18	17	16	4896	51	96	6	18	19	20	6840	57	120
5	15	14	13	2730	42	65	5	15	16	17	4080	48	85
4	12	11	10	1320	33	40	4	12	13	14	2184	39	56
3	9	8	7	504	24	21	3	9	10	11	990	30	33
2	6	5	4	120	15	8	2	6	7	8	336	21	16
1	3	2	1	6	6	1	1	3	4	5	60	12	5
0	0	-1	-2	0	-3	0	0	0	1	2	0	3	0
-1	-3	-4	-5	-60	-12	5	-1	-3	-2	-1	-6	-6	1
-2	-6	-7	-8	-336	-21	16	-2	-6	-5	-4	-120	-15	8
-3	-9	-10	-11	-990	-30	33	-3	-9	-8	-7	-504	-24	21
-4	-12	-13	-14	-2184	-39	56	-4	-12	-11	-10	-1320	-33	40
-5	-15	-16	-17	-4080	-48	85	-5	-15	-14	-13	-2730	-42	65
-6	-18	-19	-20	-6840	-57	120	-6	-18	-17	-16	-4896	-51	96
-7	-21	-22	-23	-10626	-66	161	-7	-21	-20	-19	-7980	-60	133
-8	-24	-25	-26	-15600	-75	208	-8	-24	-23	-22	-12144	-69	176
-9	-27	-28	-29	-21924	-84	261	-9	-27	-26	-25	-17550	-78	225
-10	-30	-31	-32	-29760	-93	320	-10	-30	-29	-28	-24360	-87	280

Figure 1. A000567 and A045944 are the same composite generator $Y[y] = 3y^2 \pm 2y$ which is the product of 3 consecutive integers divided by the sum of them.

$$\begin{aligned}
 Y[y] &= \frac{3y(3y-1)(3y-2)}{3y + (3y-1) + (3y-2)} = \frac{3y(9y^2 - 9y + 2)}{9y - 3} = \frac{9y^3 - 9y^2 + 2y}{3y - 1} \\
 &= \frac{(3y^2 - 2y)(3y - 1)}{3y - 1} = 3y^2 - 2y \\
 Y[y] &= \frac{3y(3y+1)(3y+2)}{3y + (3y+1) + (3y+2)} = \frac{3y(9y^2 + 9y + 2)}{9y + 3} = \frac{9y^3 + 9y^2 + 2y}{3y + 1} \\
 &= \frac{(3y^2 + 2y)(3y + 1)}{3y + 1} = 3y^2 + 2y
 \end{aligned}$$

New sequences of primes we find when adding Integers. For example, adding 6, turn the parabolocrys clockwise 90°, and we have on offset $f = 0$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES				
y^2_{ip}	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5					
i^p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
a^p	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
b^p	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1				
c^p	-219	-190	-163	-138	-115	-94	-75	-58	-43	-30	-19	-10	-3	2	5	6	5	2	-3	-10	-19	-30	-43	-58	-75	-94	-115	-138	-163	-190	-219	
15	-9	20	47	72	95	116	135	152	167	180	191	200	207	212	215	216	215	212	207	200	191	180	167	152	135	116	95	72	47	20	-9	
14	-37	-8	19	44	67	88	107	124	139	152	163	172	179	184	187	188	187	184	179	172	163	152	139	124	107	88	67	44	19	-8	-37	
13	-63	-34	-7	18	41	62	81	98	113	126	137	146	153	158	161	162	161	158	153	146	137	126	113	98	81	62	41	18	-7	-34	-63	
12	-87	-58	-31	-6	17	38	57	74	89	102	113	122	129	134	137	138	137	134	129	122	113	102	89	74	57	38	17	-6	-31	-58	-87	
11	-109	-80	-53	-28	-5	16	35	52	67	80	91	100	107	112	115	116	115	112	107	100	91	80	67	52	35	16	-5	-28	-53	-80	-109	
10	-129	-100	-73	-48	-25	-4	15	32	47	60	71	80	87	92	95	96	95	92	87	80	71	60	47	32	15	-4	-25	-48	-73	-100	-129	
9	-147	-118	-91	-66	-43	-22	-3	14	29	42	53	62	69	74	77	78	77	74	69	62	53	42	29	14	-3	-22	-43	-66	-91	-118	-147	
8	-163	-134	-107	-82	-59	-38	-19	-2	13	26	37	46	53	58	61	62	61	58	53	46	37	26	13	-2	-19	-38	-59	-82	-107	-134	-163	
7	-177	-148	-121	-96	-73	-52	-33	-16	-1	12	23	32	39	44	47	48	47	44	39	32	23	12	1	-16	-33	-52	-73	-96	-121	-148	-177	
6	-189	-160	-133	-108	-85	-64	-45	-28	-13	0	11	20	27	32	35	36	35	32	27	20	11	0	-13	-28	-45	-64	-85	-108	-133	-160	-189	
5	-199	-170	-143	-118	-95	-74	-55	-38	-23	-10	1	10	17	22	25	26	25	22	17	10	1	-10	-23	-38	-55	-74	-94	-115	-138	-163	-190	-219
4	-207	-178	-151	-126	-103	-82	-62	-46	-31	-18	-7	2	9	14	17	18	17	14	9	2	-7	-18	-31	-46	-63	-82	-103	-126	-151	-178	-207	
3	-213	-184	-157	-132	-109	-88	-69	-52	-37	-24	-13	-4	3	8	11	12	11	8	5	3	-4	-13	-24	-37	-52	-69	-88	-109	-132	-157	-184	-213
2	-217	-188	-161	-136	-113	-92	-73	-56	-41	-28	-17	-8	-1	4	7	8	7	4	1	-8	-17	-28	-41	-56	-73	-92	-113	-136	-161	-188	-217	
-2	-213	-184	-157	-132	-109	-88	-69	-52	-37	-24	-13	-4	3	8	11	12	11	8	5	3	-4	-13	-24	-37	-52	-69	-88	-109	-132	-157	-184	-213
-3	-207	-178	-151	-126	-103	-82	-63	-46	-31	-18	-7	2	9	14	17	18	17	14	9	2	-7	-18	-31	-46	-63	-82	-103	-126	-151	-178	-207	
-4	-199	-170	-143	-118	-95	-74	-55	-38	-23	-10	1	10	17	22	25	26	25	22	17	10	1	-10	-23	-38	-55	-74	-94	-115	-138	-163	-190	-219
-5	-189	-160	-133	-108	-85	-64	-45	-28	-13	0	11	20	27	32	35	36	35	32	27	20	11	0	-13	-28	-45	-64	-85	-108	-133	-160	-189	
-6	-177	-148	-121	-96	-73	-52	-33	-16	-1	12	23	32	39	44	47	48	47	44	39	32	23	12	1	-16	-33	-52	-73	-96	-121	-148	-177	
-7	-163	-134	-107	-82	-59	-38	-19	-2	13	26	37	46	53	58	61	62	61	58	53	46	37	26	13	-2	-19	-38	-59	-82	-107	-134	-163	
-8	-147	-118	-91	-66	-43	-22	-3	14	29	42	53	62	69	74	77	78	77	74	69	62	53	42	29	14	-3	-22	-43	-66	-91	-118	-147	
-9	-129	-100	-73	-48	-25	-4	15	32	47	60	71	80	87	92	95	96	95	92	87	80	71	60	47	32	15	-4	-25	-48	-73	-100	-129	
-10	-109	-80	-53	-28	-5	16	35	52	67	80	91	100	107	112	115	116	115	112	107	100	91	80	67	52	35	16	-5	-28	-53	-80	-109	
-11	-87	-58	-31	-6	17	38	57	74	89	102	113	122	129	134	137	138	137	134	129	122	113	102	89	74	57	38	17	-6	-31	-58	-87	
-12	-63	-34	-7	18	41	62	81	98	113	126	137	146	153	158	161	162	161	158	153	146	137	126	113	98	81	62	41	18	-7	-34	-63	
-13	-37	-8	19	44	67	88	107	124	139	152	163	172	179	184	187	188	187	184	179	172	163	152	139	124	107	88	67	44	19	-8	-37	
-14	-9	20	47	72	95	116	135	152	167	180	191	200	207	212	215	216	215	212	207	200	191	180	167	152	135	116	95	72	47	20	-9	
-15	21	50	77	102	125	146	165	182	197	210	221	230	237	242	245	246	245	242	237	230	221	210	197	182	165	146	125	102	77	50	21	

Figure 1. $PS[-x^2 + 8, -x^2 + 6, -x^2 + 6]$

2.4 The D-Destroyer and D-Submarine interleaving parabolas with a varying offset in $PS[x + 2, x, x]$

See the picture:

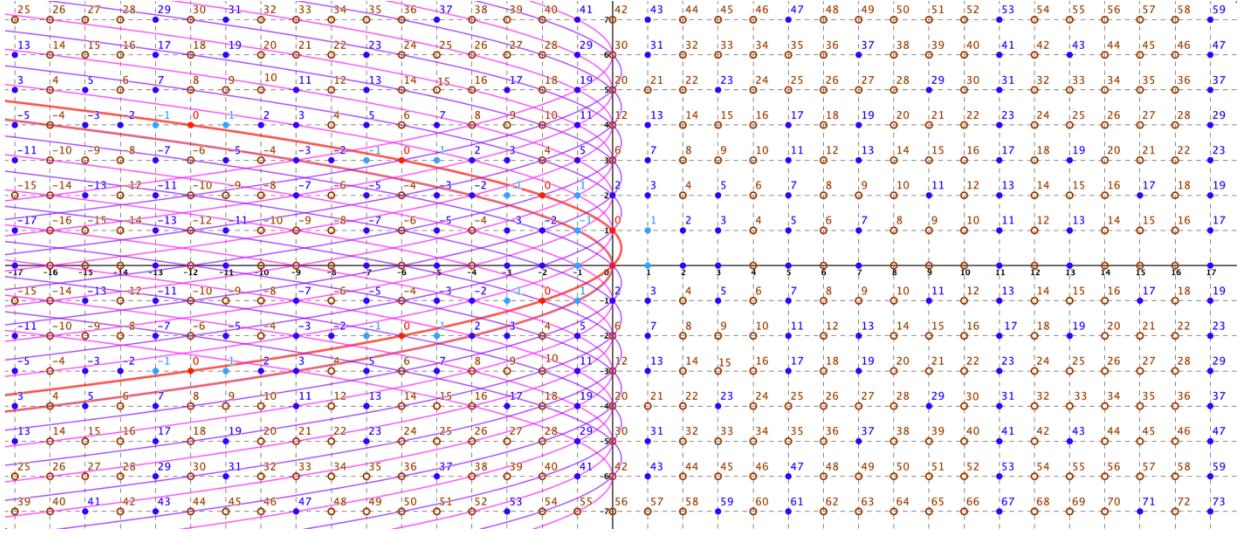


Figure 1. The combined D-Destroyers and D-Submarines vertical parabolas in column $x = 0$ of the lattice-grid $PS[x + 2, x, x]$. They have offset following the staircase function with the step of a unit.

	-20	-19	-18	-17	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
b	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
c	110	110	90	90	72	72	56	56	42	42	30	30	20	20	12	12	6	6	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
416	404	370	355	324	310	280	265	238	214	198	184	160	145	124	110	95	81	67	53	44	28	14	0	-14	-24	-40	-60	-80	-100	-120	-140	-154	-152	-150	-148	-146	-144	-142	-140	-138	-136	-134	-132	-130	-128	-126	-124	-122	-120	-118	-116	-114	-112	-110	-108	-106	-104	-102	-100	-98	-96	-94	-92	-90	-88	-86	-84	-82	-80	-78	-76	-74	-72	-70	-68	-66	-64	-62	-60	-58	-56	-54	-52	-50	-48	-46	-44	-42	-40	-38	-36	-34	-32	-30	-28	-26	-24	-22	-20	-18	-16	-14	-12	-10	-8	-6	-4	-2	-0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
13	396	387	350	337	306	293	264	235	224	213	193	170	150	137	116	103	84	71	54	41	26	13	0	-13	-24	-41	-60	-79	-98	-117	-134	-151	-168	-185	-202	-219	-236	-253	-270	-287	-304	-321	-338	-355	-372	-389	-406	-423	-440	-457	-474	-491	-508	-525	-542	-559	-576	-593	-610	-627	-644	-661	-678	-695	-712	-729	-746	-763	-780	-797	-814	-831	-848	-865	-882	-899	-916	-933	-950	-967	-984	-1001	-1018	-1035	-1052	-1069	-1086	-1103	-1120	-1137	-1154	-1171	-1188	-1205	-1222	-1239	-1256	-1273	-1290	-1307	-1324	-1341	-1358	-1375	-1392	-1409	-1426	-1443	-1460	-1477	-1494	-1511	-1528	-1545	-1562	-1579	-1596	-1613	-1630	-1647	-1664	-1681	-1698	-1715	-1732	-1749	-1766	-1783	-1800	-1817	-1834	-1851	-1868	-1885	-1902	-1919	-1936	-1953	-1970	-1987	-1904	-1921	-1938	-1955	-1972	-1989	-1906	-1923	-1940	-1957	-1974	-1991	-2008	-2025	-2042	-2059	-2076	-2093	-2110	-2127	-2144	-2161	-2178	-2195	-2212	-2229	-2246	-2263	-2280	-2297	-2314	-2331	-2348	-2365	-2382	-2399	-2416	-2433	-2450	-2467	-2484	-2501	-2518	-2535	-2552	-2569	-2586	-2603	-2620	-2637	-2654	-2671	-2688	-2705	-2722	-2739	-2756	-2773	-2790	-2807	-2824	-2841	-2858	-2875	-2892	-2909	-2926	-2943	-2960	-2977	-2994	-3011	-3028	-3045	-3062	-3079	-3096	-3113	-3130	-3147	-3164	-3181	-3198	-3215	-3232	-3249	-3266	-3283	-3300	-3317	-3334	-3351	-3368	-3385	-3402	-3419	-3436	-3453	-3470	-3487	-3504	-3521	-3538	-3555	-3572	-3589	-3606	-3623	-3640	-3657	-3674	-3691	-3708	-3725	-3742	-3759	-3776	-3793	-3810	-3827	-3844	-3861	-3878	-3895	-3912	-3929	-3946	-3963	-3980	-3997	-4014	-4031	-4048	-4065	-4082	-4099	-4116	-4133	-4150	-4167	-4184	-4201	-4218	-4235	-4252	-4269	-4286	-4303	-4320	-4337	-4354	-4371	-4388	-4405	-4422	-4439	-4456	-4473	-4490	-4507	-4524	-4541	-4558	-4575	-4592	-4609	-4626	-4643	-4660	-4677	-4694	-4711	-4728	-4745	-4762	-4779	-4796	-4813	-4830	-4847	-4864	-4881	-4898	-4915	-4932	-4949	-4966	-4983	-4900	-4917	-4934	-4951	-4968	-4985	-5002	-5019	-5036	-5053	-5070	-5087	-5104	-5121	-5138	-5155	-5172	-5189	-5206	-5223	-5240	-5257	-5274	-5291	-5308	-5325	-5342	-5359	-5376	-5393	-5410	-5427	-5444	-5461	-5478	-5495	-5512	-5529	-5546	-5563	-5580	-5597	-5614	-5631	-5648	-5665	-5682	-5699	-5716	-5733	-5750	-5767	-5784	-5791	-5808	-5815	-5822	-5839	-5846	-5853	-5860	-5877	-5884	-5891	-5908	-5915	-5922	-5939	-5946	-5953	-5960	-5977	-5984	-5991	-5998	-6005	-6012	-6029	-6036	-6043	-6050	-6057	-6064	-6071	-6078	-6085	-6092	-6099	-6106	-6113	-6120	-6127	-6134	-6141	-6148	-6155	-6162	-6169	-6176	-6183	-6190	-6197	-6204	-6211	-6218	-6225	-6232	-6239	-6246	-6253	-6260	-6267	-6274	-6281	-6288	-6295	-6302	-6309	-6316	-6323	-6330	-6337	-6344	-6351	-6358	-6365	-6372	-6379	-6386	-6393	-6390	-6397	-6404	-6411	-6418	-6425	-6432	-6439	-6446	-6453	-6460	-6467	-6474	-6481	-6488	-6495	-6502	-6509	-6516	-6523	-6530	-6537	-6544	-6551	-6558	-6565	-6572	-6579	-6586	-6593	-6590	-6597	-6604	-6611	-6618	-6625	-6632	-6639	-6646	-6653	-6660	-6667	-6674	-6681	-6688	-6695	-6692	-6699	-6696	-6693	-6690	-6687	-6684	-6681	-6678	-6675	-6672	-6669	-6666	-6663	-6660	-6657	-6654	-6651	-6648	-6645	-6642	-6639	-6636	-6633	-6630	-6627	-6624	-6621	-6618	-6615	-6612	-6609	-6606	-6603	-6600	-6597	-6594	-6591	-6588	-6585	-6582	-6579	-6576	-6573	-6570	-6567	-6564	-6561	-6558	-6555	-6552	-6549	-6546	-6543	-6540	-6537	-6534	-6531	-6528	-6525	-6522	-6519	-6516	-6513	-6510	-6507	-6504	-6501	-6498	-6495	-6492	-6489	-6486	-6483	-6480	-6477	-6474	-6471	-6468	-6465	-6462	-6459	-6456	-6453	-6450	-6447	-6444	-6441	-6438	-6435	-6432	-6429	-6426	-6423	-6420	-6417	-6414	-6411	-6408	-6405	-6402	-6409	-6406	-6403	-6400	-6397	-6394	-6391	-6388	-6385	-6382	-6379	-6376	-6373	-6370	-6367	-6364	-6361	-6358	-6355	-6352	-6349	-6346	-6343	-6340	-6337	-6334	-6331	-6328	-6325	-6322	-6319	-6316	-6313	-6310	-6307	-6304	-6301	-6298	-6295	-6292	-6289	-6286	-6283	-6280	-6277	-6274	-6271	-6268	-6265	-6262	-6259	-6256	-6253	-6250	-6247	-6244	-6241	-6238	-6235	-6232	-6229	-6226	-6223	-6220	-6217	-6214	-6211	-6208	-6205	-6202	-6199	-6196	-6193	-6190	-6187	-6184	-6181	-6178	-6175	-6172	-6169	-6166	-6163	-6160	-6157	-6154	-6151	-6148	-6145	-6142	-6139	-6136	-6133	-6130	-6127	-6124	-6121	-6118	-6115	-6112	-6109	-6106	-6103	-6100	-6097	-6094	-6091	-6088	-6085	-6082	-6079	-6076	-6073	-6070	-6067	-6064	-6061	-6058	-6055	-6052	-6049	-6046	-6043	-6040	-6037	-6034	-6031	-6028	-6025	-6022	-6019	-6016	-6013	-6010	-6007	-6004	-6001	-5998	-5995	-5992	-5989	-5986	-5983	-5980	-5977	-5974	-5971	-5968	-5965	-5962	-5959	-5956	-5953	-5950	-5947	-5944	-5941	-5938	-5935	-5932	-5929	-5926	-5923	-5920	-5917	-5914	-5911	-5908	-5905	-5902	-5909	-5906	-5903	-5900	-5897	-5894	-5891	-5888	-5885	-5882	-5879	-5876	-5873	-5870	-5867	-5864	-5861	-5858	-5855	-5852	-5849	-5846	-5843	-5840	-5837	-5834	-5831	-5828	-5825	-5822	-5819	-5816	-5813	-5810	-5807	-5804	-5801	-5798	-5795	-5792	-5789	-5786	-5783	-5780	-5777	-5774	-5771	-5768	-5765	-5762	-5759	-5756	-5753	-5750	-5747	-5744	-5741	-5738	-5735	-5732	-5729	-5726	-5723	-5720	-5717	-5714	-5711	-5708	-5705	-5702	-5709	-5706	-5703	-5700	-5697	-5694	-5691	-5688	-5685	-5682	-5679	-5676	-5673	-5670	-5667	-5664	-5661	-5658	-5655	-5652	-5649	-5646	-5643	-5640	-5637	-5634	-5631	-5628	-5625	-5622	-5619	-5616	-5613	-5610	-5607	-5604	-5601	-5598	-5595	-5592	-5589	-5586	-5583	-5580	-5577	-5574	-5571	-5568	-5565	-5562	-5559	-5556	-5553	-5550	-5547	-5544	-5541	-5538	-5535	-5532	-5529	-5526	-5523	-5520	-5517	-5514	-

2.4.1 The row $Y[-1] = X_1[x]$

The center of the row $Y[-1] \equiv \{ \dots, -2, -1, -2, -1, 0, 1, \dots \}$.

The row $Y[-1]$ is the result of the interlacing between two quadratics:

$$Y[-1] = X_1[x = even] + X_1[x = Odd]$$

$X_1[x = Even]$ is based on sequence $[-2, -2, 0] = n^2 + n - 2 \equiv A028552 \equiv n(n \pm 3)$

$$x = Even = 2n$$

$$n = \frac{x}{2}$$

$$\begin{aligned} X_1[x = Even] &\equiv Ao0o2o8o5o5o2 \equiv [-2, o, -2, o, 0, o] \equiv \left(\frac{x}{2}\right)^2 + \frac{x}{2} - 2 = \frac{x^2 + 2x - 8}{4} \\ &= 0.25x^2 + 0.5x - 2 \equiv \frac{A028560}{4} \equiv [-2, -2.25, -2] = \frac{x^2 - 3^2}{2^2} @f = 0 \end{aligned}$$

AXXXXXX

$$\equiv \{ \dots, 0, 54, 0, 40, 0, 28, 0, 18, 0, 10, 0, 4, 0, 0, 0, -2, 0, -2, 0, 0, 0, 4, 0, 10, 0, 18, 0, 28, 0, 40, 0, \dots \}$$

and

$X_1[x = Odd]$ is based on sequence $[-1, -1, 1] = n^2 + n - 1 \equiv A165900$

$$x = Odd = 2n - 1$$

$$n = \frac{x+1}{2}$$

$$\begin{aligned} X_1[x = Odd] &\equiv Ao1o6o5o9o0o0 \equiv [-1, o, -1, o, 1, o] = \left(\frac{x+1}{2}\right)^2 + \frac{x+1}{2} - 1 \\ &= \frac{x^2 + 2x + 1 + 2x + 2 - 4}{4} = \frac{x^2 + 4x - 1}{4} = 0.25x^2 + x - 0.25 \\ &\equiv \frac{A028875}{4} \equiv [-1, -1.25, -1] = \frac{x^2 - (\sqrt{5})^2}{2^2} @f = 0 \end{aligned}$$

AXXXXXX

$$\equiv \{ \dots, 71, 0, 55, 0, 41, 0, 29, 0, 19, 0, 11, 0, 5, 0, 1, 0, -1, 0, -1, 0, 1, 0, 5, 0, 11, 0, 19, 0, 29, 0, 41, \dots \}$$

$$X_1[-x = Even] = \frac{x^2 + 2x - 8}{4} \equiv \frac{A028560}{4}$$

$$X_1[-x = Odd] = \frac{x^2 + 4x - 1}{4} \equiv \frac{A028875}{4}$$

$$X_1[-x] = X_1[-x = even] + X_1[-x = Odd]$$

$$X_1[-x] = \frac{x^2 + (3x - x(-1)^x) - (4.5 + 3.5(-1)^x)}{4}$$

$$X_1[-x] = \frac{x^2 + 3x - 4.5 - (x + 3.5)(-1)^x}{4}$$

$$X_1[-x] = \frac{2x^2 + 6x - 9 - (2x + 7)(-1)^x}{8}$$

Process table to produce the row Y[-1]								
Classif.	DES	SUB		DES	SUB		X1 =	
y_ip	-0,5	-1		-0,5	-2		X1[Even]	X1[Odd]
f	-1	-1		-1	-2			
	A028552	X1[Even]		A165900	X1[Odd]			
a	1	0,25		1	0,25		X1 =	
b	1	0,5		1	1		X1[Even]	+X1[Odd]
c	-2	-2	AXXXXXX	-1	-0,25	AXXXXXX	A217571	
	15	238	61,75	0	239	71	71	
	14	208	54	54	209	62,75	54	
	13	180	46,75	0	181	55	55	
	12	154	40	40	155	47,75	40	
	11	130	33,75	0	131	41	41	
	10	108	28	28	109	34,75	28	
	9	88	22,75	0	89	29	29	
	8	70	18	18	71	23,75	18	
	7	54	13,75	0	55	19	19	
	6	40	10	10	41	14,75	10	
	5	28	6,75	0	29	11	11	
	4	18	4	4	19	7,75	4	
	3	10	1,75	0	11	5	5	
	2	4	0	0	5	2,75	0	
	Y[1]	1	0	-1,25	0	1	1	1
	Y[0]	0	-2	-2	-1	-0,25	0	-2
	Y[-1]	-1	-2	-2,25	0	-1	-1	-1
		-2	0	-2	1	-1,25	0	-2
		-3	4	-1,25	0	5	-1	-1
		-4	10	0	11	-0,25	0	0
		-5	18	1,75	19	1	1	1
		-6	28	4	29	2,75	4	
		-7	40	6,75	41	5	5	
		-8	54	10	55	7,75	10	
		-9	70	13,75	71	11	11	
		-10	88	18	89	14,75	18	
		-11	108	22,75	109	19	19	
		-12	130	28	131	23,75	28	
		-13	154	33,75	155	29	29	
		-14	180	40	181	34,75	40	
		-15	208	46,75	209	41	41	

Figure 1. Sequence A217571 is the row $Y[-1]$ of the combined D-Destroyers and D-Submarines parabolas in $PS[x+2, x, x]$. Because of the change of offset that occurs when we put the zeros, the direction of the final sequence is reversed.

The complete sequence in row $Y[-1]$ with positive, zero, and negative indexes is:

$A217571 \equiv \{ \dots, 271, 238, 239, 208, 209, 180, 181, 154, 155, 130, 131, 108, 109, 88, 89, 70, 71, 54, 55, 40, 41, 28, 29, 18, 19, 10, 11, 4, 5, 0, 1, -2, -1, -2, -1, 0, 1, 4, 5, 10, 11, 18, 19, 28, 29, 40, 41, 54, 55, 70, 71, 88, 89, 108, 109, 130, 131, 154, 155, 180, 181, 208, 209, 238, 239, 270, 271, 304, 305, 340, 341, \dots \}$.

2.4.2 The row $Y[0] = X_2[x]$

The center of the row $Y[0] \equiv \{\dots, 2, 2, 0, 0, 0, 0, \dots\}$.

The row $Y[0]$ is the result of the interlacing between two quadratics:

$$Y[0] = X_2[x = even] + X_2[x = Odd]$$

$X_2[x = Even]$ is based on sequence $[2, 0, 0] = n^2 - n \equiv A002378 \equiv n(n \pm 1)$

$$x = Even = 2n$$

$$n = \frac{x}{2}$$

$$\begin{aligned} X_2[x = Even] &\equiv A00002o3o7o8 \equiv [2, o, 0, o, 0, o] \equiv \left(\frac{x}{2}\right)^2 - \frac{x}{2} = \frac{x^2 - 2x}{4} \\ &= 0.25x^2 - 0.5x \equiv \frac{A005563}{4} \equiv [0, -0.25, 0] = \frac{x^2 - 1^2}{2^2} @f = 0 \end{aligned}$$

$AXXXXXX \equiv \{\dots, 0, 42, 0, 30, 0, 20, 0, 12, 0, 6, 0, 2, 0, 0, 0, 0, 2, 0, 6, 0, 12, 0, 20, 0, 30, 0, 42, 0, 56, 0, \dots\}$

and

$X_2[x = Odd]$ is based on sequence $[2, 0, 0] = n^2 - n \equiv A002378$

$$x = Odd = 2n - 1$$

$$n = \frac{x+1}{2}$$

$$\begin{aligned} X_2[x = Odd] &\equiv A00002o3o7o8 \equiv [o, 2, o, 0, o, 0] = \left(\frac{x+1}{2}\right)^2 - \frac{x+1}{2} \\ &= \frac{x^2 + 2x + 1 - 2x - 2}{4} = \frac{x^2 - 1}{4} = 0.25x^2 - 0.25 \equiv \frac{A005563}{4} \\ &\equiv [0, -0.25, 0] = \frac{x^2 - 1^2}{2^2} @f = 0 \end{aligned}$$

$AXXXXXX \equiv \{\dots, 56, 0, 42, 0, 30, 0, 20, 0, 12, 0, 6, 0, 2, 0, 0, 0, 0, 2, 0, 6, 0, 12, 0, 20, 0, 30, 0, 42, 0, 56, \dots\}$

$$X_2[-x = Even] = \frac{x^2 - 2x}{4} = 0.25x^2 - 0.5x \equiv \frac{A005563}{4}$$

$$X_2[-x = Odd] = \frac{x^2 - 1}{4} = 0.25x^2 - 0.25 \equiv \frac{A005563}{4}$$

$$X_2[-x] = X_2[-x = even] + X_2[-x = Odd]$$

$$X_2[-x] = \frac{x^2 - (x + x(-1)^x) - (0.5 - 0.5(-1)^x)}{4}$$

$$X_2[-x] = \frac{x^2 - x - 0.5 - (x + 0.5)(-1)^x}{4}$$

$$X_2[-x] = \frac{2x^2 - 2x - 1 - (2x + 1)(-1)^x}{8}$$

Process table to produce the row Y[0]								
Classif.	DES	SUB		DES	SUB		X2 =	
y_ip	0,5	1		0,5	0		X2[Even]	
f	0	1		0	0		X2[Odd]	
	A002378	X2[Even]		A002378	X2[Odd]			
a	1	0,25		1	0,25		X2 =	
b	-1	-0,5		-1	0		X2[Even]	+ X2[Odd]
c	0	0	AXXXXXX	0	-0,25	AXXXXXX	A110660	
	15	210	48,75	0	210	56	56	
	14	182	42	42	182	48,75	0	
	13	156	35,75	0	156	42	42	
	12	132	30	30	132	35,75	0	
	11	110	24,75	0	110	30	30	
	10	90	20	20	90	24,75	0	
	9	72	15,75	0	72	20	20	
	8	56	12	12	56	15,75	0	
	7	42	8,75	0	42	12	12	
	6	30	6	6	30	8,75	0	
	5	20	3,75	0	20	6	6	
	4	12	2	2	12	3,75	0	
	3	6	0,75	0	6	2	2	
	2	2	0	0	2	0,75	0	
Y[1]	1	0	-0,25	0	0	0	0	
Y[0]	0	0	0	0	0	-0,25	0	
Y[-1]	-1	2	0,75	0	2	0	0	
	-2	6	2	2	6	0,75	0	
	-3	12	3,75	0	12	2	2	
	-4	20	6	6	20	3,75	0	
	-5	30	8,75	0	30	6	6	
	-6	42	12	12	42	8,75	0	
	-7	56	15,75	0	56	12	12	
	-8	72	20	20	72	15,75	0	
	-9	90	24,75	0	90	20	20	
	-10	110	30	30	110	24,75	0	
	-11	132	35,75	0	132	30	30	
	-12	156	42	42	156	35,75	0	
	-13	182	48,75	0	182	42	42	
	-14	210	56	56	210	48,75	0	
	-15	240	63,75	0	240	56	56	

Figure 1. Sequence A110660 is the row $Y[0]$ of the combined D-Destroyers and D-Submarines parabolas in $PS[x + 2, x, x]$.

The complete sequence in row $Y[0]$ with positive, zero, and negative indexes is:

$$A110660 \equiv$$

$$\{ \dots, 56, 42, 42, 30, 30, 20, 20, 12, 12, 6, 6, 2, 2, 0, 0, 0, 0, 2, 2, 6, 6, 12, 12, 20, 20, 30, 30, 42, 42, 56, 56, \dots \}.$$

2.4.3 The row $Y[1] = X_3[x]$

The center of the row $Y[1] \equiv \{ \dots, 6, 5, 2, 1, 0, -1, \dots \}$.

The row $Y[1]$ is the result of the interlacing between two quadratics:

$$Y[1] = X_3[x = even] + X_3[x = Odd]$$

$X_3[x = Even]$ is based on sequence $[6, 2, 0] = n^2 - 3n + 2 \equiv A002378 \equiv n(n \pm 1)$

$$x = Even = 2n$$

$$n = \frac{x}{2}$$

$$\begin{aligned} X_3[x = Even] &\equiv Ao0o0o2o3o7o8 \equiv [6, o, 2, o, 0, o] \equiv \left(\frac{x}{2}\right)^2 - \frac{3x}{2} + 2 = \frac{x^2 - 6x + 8}{4} \\ &= 0.25x^2 - 1.5x + 2 \equiv \frac{A005563}{4} \equiv [0, -0.25, 0] = \frac{x^2 - 1^2}{2^2} @f = 0 \end{aligned}$$

$AXXXXXX \equiv \{ \dots, 0, 42, 0, 30, 0, 20, 0, 12, 0, 6, 0, 2, 0, 0, 0, 0, 2, 0, 6, 0, 12, 0, 20, 0, 30, 0, 42, 0, 56, 0, \dots \}$

and

$X_3[x = Odd]$ is based on sequence $[5, 1, -1] = n^2 - 3n + 1 \equiv A165900$

$$x = Odd = 2n - 1$$

$$n = \frac{x+1}{2}$$

$$\begin{aligned} X_3[x = Odd] &\equiv A1o6o5o9o0o0 \equiv [o, 5, o, 1, o, -1] = \left(\frac{x+1}{2}\right)^2 - \frac{3x+3}{2} + 1 \\ &= \frac{x^2 + 2x + 1 - 6x - 6 + 4}{4} = \frac{x^2 - 4x - 1}{4} = 0.25x^2 - x - 0.25 \\ &\equiv \frac{A028875}{4} \equiv [-1, -1.25, -1] = \frac{x^2 - (\sqrt{5})^2}{2^2} @f = 0 \end{aligned}$$

$AXXXXXX$

$\equiv \{ \dots, 71, 0, 55, 0, 41, 0, 29, 0, 19, 0, 11, 0, 5, 0, 1, 0, -1, 0, -1, 0, 1, 0, 5, 0, 11, 0, 19, 0, 29, 0, 41, \dots \}$

$$X_3[-x = Even] = \frac{x^2 - 6x + 8}{4} \equiv \frac{A005563}{4}$$

$$X_3[-x = Odd] = \frac{x^2 - 4x - 1}{4} \equiv \frac{A028875}{4}$$

$$X_3[-x] = X_3[-x = even] + X_3[-x = Odd]$$

$$X_3[-x] = \frac{x^2 - (5x + x(-1)^x) - (4.5 + 3.5(-1)^x)}{4}$$

$$X_3[-x] = \frac{x^2 - 5x - 4.5 - (x + 3.5)(-1)^x}{4}$$

$$X_3[-x] = \frac{2x^2 - 10x - 9 - (2x + 7)(-1)^x}{8}$$

Process table to produce the row Y[1]								
Classif.	DES	SUB		DES	SUB		X3 =	
y_ip	1,5	3		1,5	2		X3[Even]	
f	1	3		1	2		X3[Odd]	
	A002378	X3[Even]		A165900	X3[Odd]		X3 = X3[Even] + X3[Odd]	
a	1	0,25		1	0,25			
b	-3	-1,5		-3	-1			
c	2	2	AXXXXXX	1	-0,25	AXXXXXX	A188652	
	15	182	35,75	0	181	41	41	
	14	156	30	30	155	34,75	30	
	13	132	24,75	0	131	29	29	
	12	110	20	20	109	23,75	20	
	11	90	15,75	0	89	19	19	
	10	72	12	12	71	14,75	12	
	9	56	8,75	0	55	11	11	
	8	42	6	6	41	7,75	6	
	7	30	3,75	0	29	5	5	
	6	20	2	2	19	2,75	2	
	5	12	0,75	0	11	1	1	
	4	6	0	0	5	-0,25	0	
	3	2	-0,25	0	1	-1	-1	
	2	0	0	0	-1	-1,25	0	
	Y[1]	1	0	0,75	0			
	Y[0]	0	2	2				
	Y[-1]	-1	6	3,75	0			
		-2	12	6	6			
		-3	20	8,75	0			
		-4	30	12	12			
		-5	42	15,75	0			
		-6	56	20	20			
		-7	72	24,75	0			
		-8	90	30	30			
		-9	110	35,75	0			
		-10	132	42	42			
		-11	156	48,75	0			
		-12	182	56	56			
		-13	210	63,75	0			
		-14	240	72	72			
		-15	272	80,75	0			

Figure 1. Sequence A188652 is the row $Y[1]$ of the combined D-Destroyers and D-Submarines parabolas in $PS[x + 2, x, x]$.

The complete sequence in row $Y[1]$ with positive, zero, and negative indexes is:

$A188652 \equiv$

$\{ \dots, 41, 30, 29, 20, 19, 12, 11, 6, 5, 2, 1, 0, -1, 0, -1, 2, 1, 6, 5, 12, 11, 20, 19, 30, 29, 42, 41, 56, 55, 72, 71, \dots \}$.

Approximately, the elements of row $Y[1]$ form the junction of the sequences:

A140144 $a(1)=1$, $a(n)=a(n-1)+n^1$ if n odd, $a(n)=a(n-1)+n^0$ if n is even. $\{1, 2, 5, 6, 11, 12, 19, 20, 29, 30, 41, 42, 55, 56, 71, 72, 89, 90, 109, 110, 131, 132, 155, 156, 181, 182, 209, 210, 239, 240, 271, 272, 305, 306, 341, 342, 379, 380, 419, 420, 461, 462, 505, 506, 551, 552, 599, 600, 649, 650, 701, 702, 755, 756, 811, 812, 869, \dots\}$ in the left side, and

A188652 First differences of A000463 $\{0, 1, 2, -1, 6, -5, 12, -11, 20, -19, 30, -29, 42, -41, 56, -55, 72, -71, 90, -89, 110, -109, 132, -131, 156, -155, 182, -181, 210, -209, 240, -239, 272, -271, 306, -305, 342, -341, 380, -379, 420, -419, 462, -461, 506, -505, 552, -551, 600, -599, 650, -649, 702, -701, 756, -755, 812, -811, 870, -869, 930, -929, 992, -991, 1056, -1055, 1122, -1121, 1190, -1189, 1260, -1259, 1332, -1331, 1406, \dots\}$ in the right side, where

- A000463 is n followed by $n^2 \{1, 1, 2, 4, 3, 9, 4, 16, 5, 25, 6, 36, 7, 49, 8, 64, 9, 81, 10, 100, 11, 121, 12, 144, 13, 169, 14, 196, 15, 225, 16, 256, 17, 289, 18, 324, 19, 361, 20, 400, 21, 441, 22, 484, 23, 529, 24, 576, 25, 625, 26, 676, 27, 729, 28, 784, 29, 841, 30, 900, 31, 961, 32, 1024, 33, 1089, 34, 1156, 35, 1225, 36, 1296, \dots\}$.

2.5 Dividing the specific trianz $TZ[x + 2, x, x]$ according to the value of $|\sqrt{n}|$

Because of the occurrence of sequence A217571 at $Y[-1]$, we noticed an interesting study by Takumi Sato at <http://vixra.org/pdf/1210.0025v7.pdf>. Linking this study to quadratics, we can divide each of the trianz $TZ[x + 2, x, x]$ at $PS[x + 2, x, x]$ into four parts according to the four sequences and colors:

A217570 Numbers n such that $\text{floor}(\sqrt{n}) = \text{floor}(n/(\text{floor}(\sqrt{n})-1))-1$.

9, 16, 17, 25, 26, 27, 36, 37, 38, 39, 49, 50, 51, 52, 53, 64, 65, 66, 67, 68, 69, 81, 82, 83, 84, 85, 86, 87, 100, 101, 102, 103, 104, 105, 106, 107, 121, 122, 123, 124, 125, 126, 127, 128, 129, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 169, 170, 171, 172, 173, ...

$$A217571 \ a(n) = (2*n*(n+5) + (2*n+1)*(-1)^n - 1)/8.$$

1, 4, 5, 10, 11, 18, 19, 28, 29, 40, 41, 54, 55, 70, 71, 88, 89, 108, 109, 130, 131, 154, 155, 180, 181, 208, 209, 238, 239, 270, 271, 304, 305, 340, 341, 378, 379, 418, 419, 460, 461, 504, 505, 550, 551, 598, 599, 648, 649, 700, 701, 754, 755, 810, 811, 868, ...

A217575 Numbers n such that $\lfloor \sqrt{n} \rfloor = \lfloor n / \lfloor \sqrt{n} \rfloor \rfloor - 1$.

2, 6, 7, 12, 13, 14, 20, 21, 22, 23, 30, 31, 32, 33, 34, 42, 43, 44, 45, 46, 47, 56, 57, 58, 59, 60, 61, 62, 72, 73, 74, 75, 76, 77, 78, 79, 90, 91, 92, 93, 94, 95, 96, 97, 98, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 132, 133, 134, 135, 136, ...

$$A005563 \ a(n) = n*(n+2) = (n+1)^2 - 1.$$

0, 3, 8, 15, 24, 35, 48, 63, 80, 99, 120, 143, 168, 195, 224, 255, 288, 323, 360, 399, 440, 483, 528, 575, 624, 675, 728, 783, 840, 899, 960, 1023, 1088, 1155, 1224, 1295, 1368, 1443, 1520, 1599, 1680, 1763, 1848, 1935, 2024, 2115, 2208, 2303, 2400, 2499, 2600, ...

We get:

Figure 1. Tetractyz divided into 4 regions according to sequences A217570, A217571, A217575, and A005563.

See amplified:

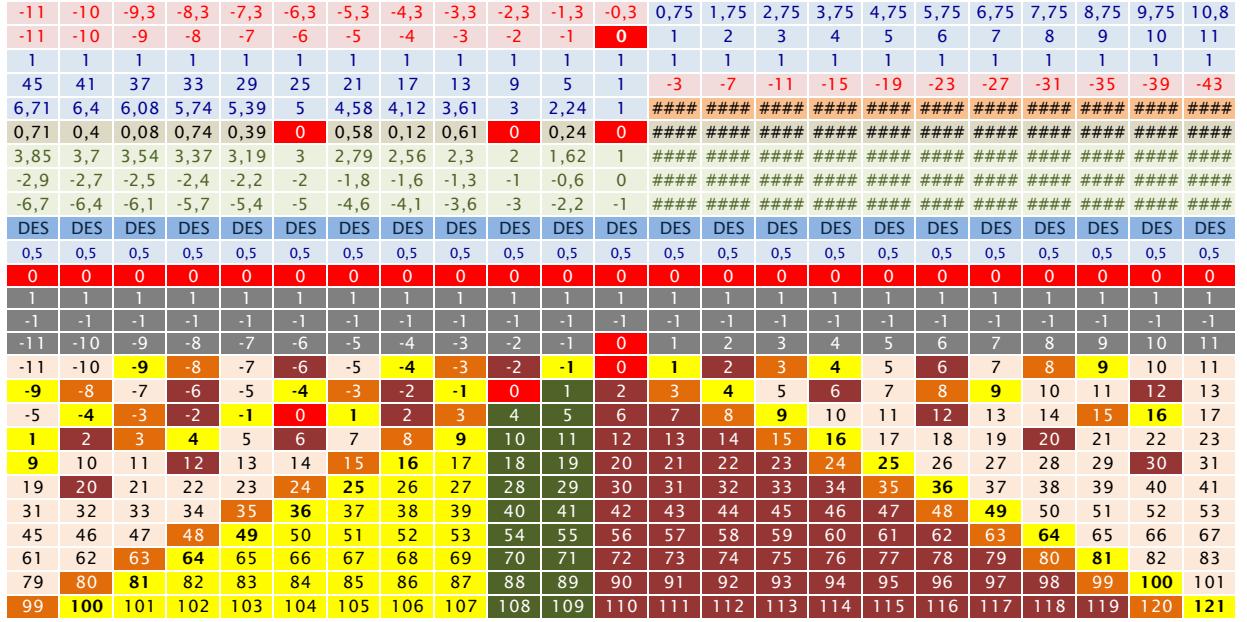


Figure 1. A larger view of the trianz $TZ[x + 2, x, x]$ when divided into the 4 regions according to sequences A217570, A217571, A217575, and A005563.

Except for the numbers 0,1,4 the sequence A217570 contains all A000290 the Square numbers. Let's call the area occupied by the sequence A217570 the *area of the squares*.

The sequence A217571 contains all the A165900 Values of Fibonacci polynomial and A028552 $Y[y] = y^2 - y - 2 \equiv y(y + 3)$. Let's call the area occupied by the sequence A217571 the *Fibonacci area*.

The sequence A217575 contains all the A002378 Oblong numbers. Let's call the area occupied by the sequence A217575 the *Oblong area*.

The sequence A005563 contains all the (Square minus One) numbers. Let's call the area occupied by the sequence A005563 (*Square minus One*) area.

Figure 1. Color map of the 4 areas.

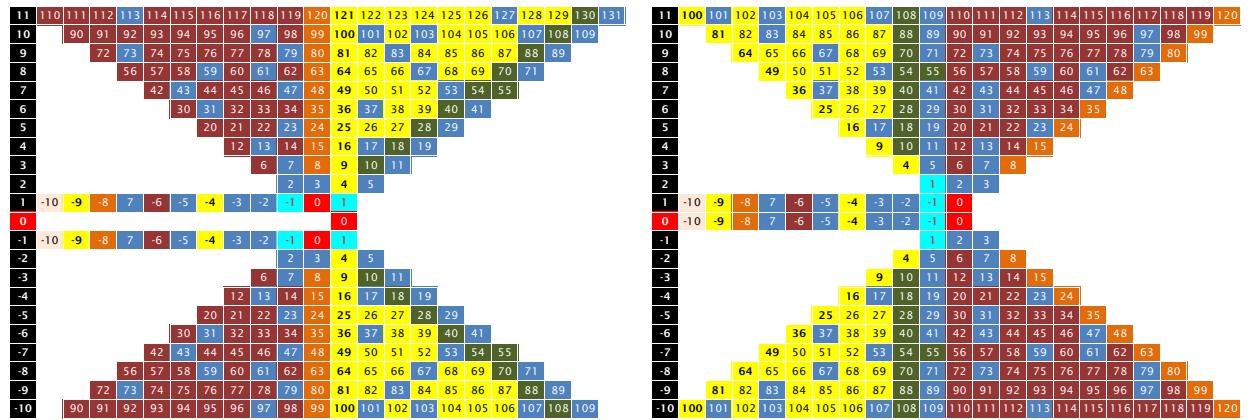


Figure 1. The square area, the oblong area, the (square minus 1) area, and the Fibonacci area in trianz $TZ[x + 1, x, x + 1]$ and $TZ[x + 2, x, x]$ when divided into the 4 regions according to sequences A217570, A217571, A217575, and A005563.

We can see that:

1. A334163 All primes located between an oblong number and its following square number $\{3, 7, 13, 23, 31, 43, 47, 59, 61, 73, 79, 97, 113, 137, 139, 157, 163, 167, 191, 193, 211, 223, 241, 251, 277, 281, 283, 307, 311, 313, 317, 347, 349, 353, 359, 383, 389, 397, 421, 431, 433, 439, 463, 467, 479, 509, 521, 523, 557, 563, 569, 571, 601, 607, 613, 617, 619, \dots\}$ are in the Oblong area. The only prime number in the Oblong area, but not in the sequence A334163 is Prime 2.
2. A307508 All primes that are located between a square number and its following oblong number $\{2, 5, 11, 17, 19, 29, 37, 41, 53, 67, 71, 83, 89, 101, 103, 107, 109, 127, 131, 149, 151, 173, 179, 181, 197, 199, 227, 229, 233, 239, 257, 263, 269, 271, 293, 331, 337, 367, 373, 379, 401, 409, 419, 443, 449, 457, 461, 487, 491, 499, 503, 541, 547, 577, 587, 593, 599, \dots\}$ are distributed between the Fibonacci and Squares areas. The only prime number in the sequence A307508 but not in the Fibonacci and Squares areas is Prime 2.

So, we can conclude that:

1. We should deepen the treatment of Prime 2 concerning sequences A334163 and A307508.
2. We can sub-divide the sequence A307508 into two parts:
 - a. Primes from A217571. They are all located between a square number and its following oblong which is the sequence A002327 Primes of the form $n^2 - n - 1$. $\{5, 11, 19, 29, 41, 71, 89, 109, 131, 181, 239, 271, 379, 419, 461, 599, 701, 811, 929, 991, 1259, 1481, 1559, 1721, 1979, 2069, 2161, 2351, 2549, 2861, 2969, 3079, 3191, 3539, 3659, 4159, 4289, 4421, 4691, 4969, 5851, 6971, 7309, 7481, 8009, 8741, 8929, \dots\}$. Also primes of form $Oblong \pm x \pm y$ or $xy \pm x \pm y$, where x and y are two consecutive numbers:

$$xy + x + y = x(x - 1) + x + (x - 1) = x^2 + x - 1$$

$$xy - x - y = x(x - 1) - x - (x - 1) = x^2 - 3x + 1 \equiv x^2 - x - 1$$
 - b. Axxxxxx Primes from A217570. They are all located between a square number and its following oblong $\{17, 37, 53, 67, 83, 101, 103, 107, 127, 149, 151, 173, 179, 197, 199, 227, 229, 233, 257, 263, 269, 293, 331, 337, 367, 373, 401, 409, 443, 449, 457, 487, 491, 499, 503, 541, 547, 577, 587, 593, 631, 641, 643, 647, 677, 683, 691, 733, 739, 743, 751, 787, 797, 809, 853, 857, 859, 863, 907, 911, 919, 967, 971, 977, 983, 1031, 1033, 1039, 1049, 1051, 1091, 1093, 1097, 1103, 1109, 1117, 1163, 1171, 1181, 1187, 1229, 1231, 1237, 1249, 1297, 1301, 1303, 1307, 1319, 1321, 1327, 1373, 1381, 1399, 1447, 1451, 1453, 1459, 1471, 1523, 1531, 1543, 1549, 1553, 1601, 1607, 1609, 1613, 1619, 1621, 1627, 1637, \dots\}$, where

$$Axxxxxx = \text{elements from A30750 without the elements A217571.}$$
3. To study the distribution of primes in these areas.

3 Study of the sequences produced by the elements in C parabolic formation in the $PS[x + 2, x, x]$

3.1 The C-Destroyer parabolas with offset Zero in $PS[x + 2, x, x]$

See the picture:

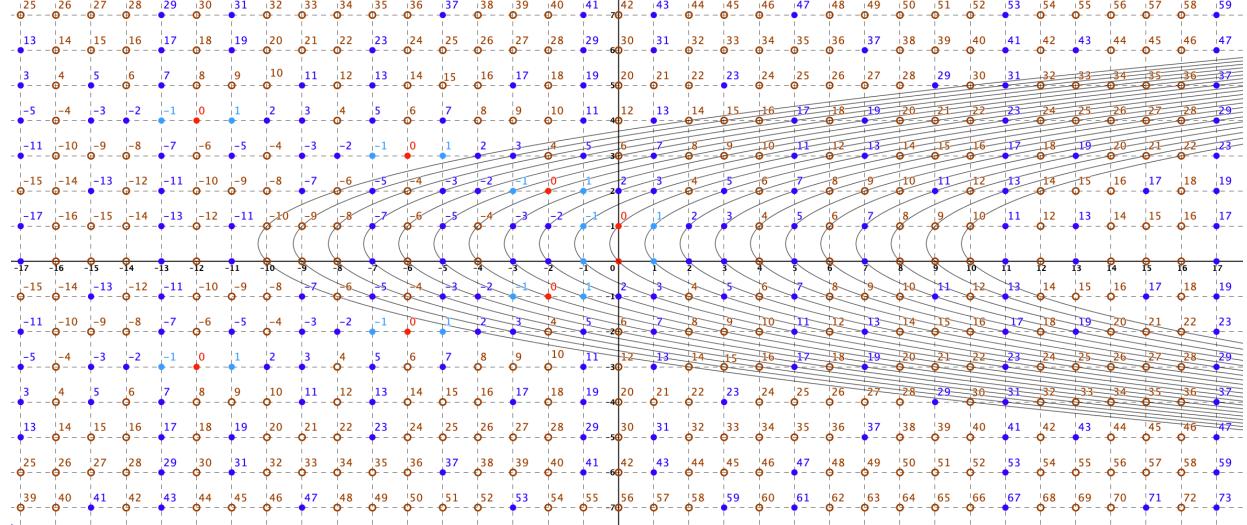


Figure 1. The C-Destroyer parabolas of the form $x = y^2 - y + c$ for $-10 \leq c \leq 10$ with offset $f = 0$ in lattice-grid $PS[x + 2, x, x]$. They produce the paraboctys $PS[x + 4, x, x]$.

Thus, the C-Destroyer parabolas of the form $x = y^2 - y + c$ for $-10 \leq c \leq 10$ with offset $f = 0$ in lattice-grid $PS[x + 2, x, x]$ produce paraboctys with coefficient $a = 2$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	DES																															
Y..ip	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5			
f	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
b	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2		
c	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
15	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	
14	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	
13	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	
12	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	
11	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	
10	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	
9	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	
8	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	
7	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	
6	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	
5	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	
4	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
3	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
2	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Y[1]	1	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Y[0]	0	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Y[-1]	-1	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

Figure 1. The $PS[x + 4, x, x]$ in the table form.

3.2 The C-Destroyer parabolas with variable offset on a vertical of $PS[x + 2, x, x]$

See the picture:

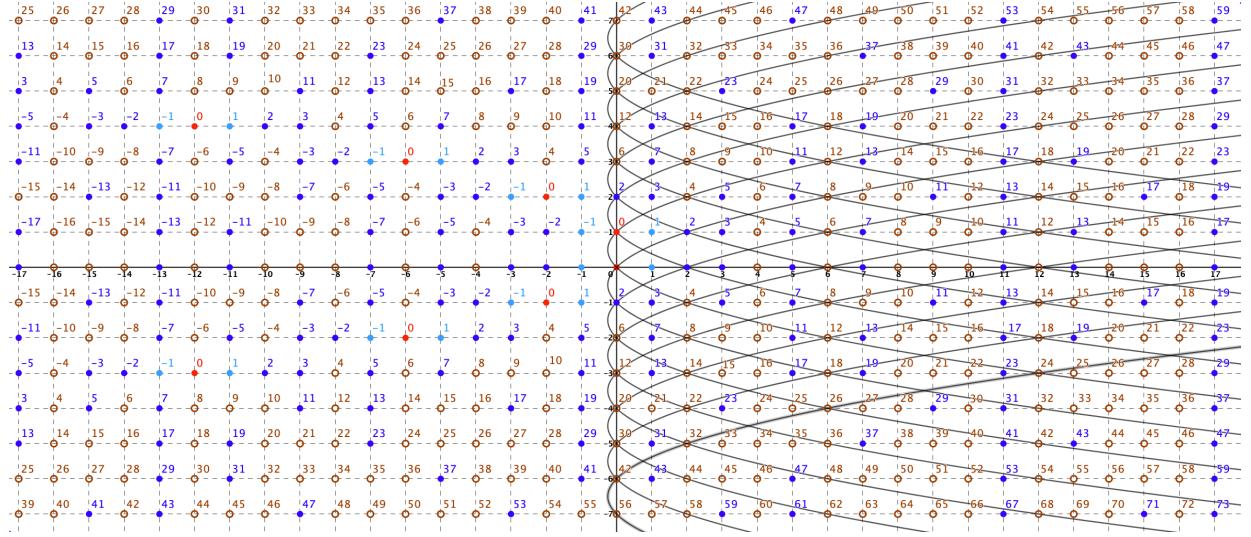


Figure 1. The C-Destroyer parabolas in column $x = 0$ of the lattice-grid $PS[x + 2, x, x]$. They have offset following the staircase function with the step of a unit. These parabolas have equations in the XY plane of the form $x = y^2 - Odd * y + Oblong$. In terms of the offset value: $x = y^2 - (2f + 1)y + (f^2 + f)$.

Each parabola $x = y^2 - (2f + 1)y + (f^2 + f)$ in lattice-grid $PS[x + 2, x, x]$ will produce a quadratic sequence of the form $Y[y] = ay^2 + by + c$. Now, to determine the coefficients a, b, c , for each sequence we have to determine three consecutive elements.

Over each parabola, we can choose 3 consecutive elements from top to bottom or from bottom to top. Because we are synchronizing the y index with the Y-axis, we will choose 3 consecutive bottom-up elements which is the increasing index direction: $[Y[-1], Y[0], Y[1]]$.

The elements of row $y = -1$ in the new paraboctys will be noted as $@Y[-1]$.

The elements of row $y = 0$ in the new paraboctys will be noted as $@Y[0]$.

The elements of row $y = 1$ in the new paraboctys will be noted as $@Y[1]$.

So, let's create the new paraboctys $PS[@Y[-1], @Y[0], @Y[1]]$. This new paraboctys will contain all the sequences formed by the C-Destroyer parabolas with a variable offset in a vertical of lattice-grid $PS[x + 2, x, x]$.

As we have C-Destroyer parabolas, we can understand each sequence as being made of one element of the vertical column $x = 2$ to assume the $@Y[-1]$ elements position and two elements of the vertical column $x = 0$ to assume the $@Y[0]$ and $@Y[1]$ elements positions.

Consequently,

- The elements on the vertical column $x = 2$ with offset $f = -1$ of the current paraboctys $PS[x + 2, x, x]$ is:

$$A014206 \equiv [2,2,4] \equiv @Y[-1] = x^2 + x + 2$$

- The elements on the vertical column $x = 0$ with offset $f = 0$ of the current paraboctys $PS[x + 2, x, x]$ is:

$$A002378 \equiv [2,0,0] \equiv @Y[0] = x^2 - x$$

- The elements on the vertical column $x = 0$ with offset $f = 1$ of the current paraboctys $PS[x + 2, x, x]$ is:

$$A002378 \equiv [6,2,0] \equiv @Y[1] = x^2 - 3x + 2$$

Finally, we create the new paraboctys $PS[@Y[-1], @Y[0], @Y[1]] = PS[x^2 + x + 2, x^2 - x, x^2 - 3x + 2]$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15												
Classif.	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	DES	SUB	DES	SUB	DES	DES	SUB	DES	DES	SUB	DES																							
Y_ip	-7,5	-7	-6,5	-5,5	-5	-4,5	-4	-3,5	-3	-2,5	-2	-1,5	-1	-0,5	0	0,5	1	1,5	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7	7,5														
f	-8	-7	-7	-6	-6	-5	-5	-4	-4	-3	-3	-2	-2	-1	-1	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7												
a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2													
b	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0	-2	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	-26	-30													
c	240	210	182	156	132	110	90	72	56	42	30	20	12	6	2	0	0	2	6	12	20	30	42	54	72	90	110	132	156	182	210												
15	1140	1080	1022	966	912	860	810	762	716	672	630	590	552	516	482	450	420	392	366	342	320	300	282	266	252	240	230	222	216	212	210												
14	1052	994	938	884	832	782	734	688	644	602	562	524	488	454	422	392	364	338	314	292	272	254	238	224	212	202	194	188	184	182	182												
13	968	912	858	806	756	708	662	618	576	536	498	462	428	396	366	338	312	288	266	246	228	212	198	186	176	168	162	158	156	156	158												
12	888	834	782	732	684	638	594	552	512	474	438	404	372	342	314	288	264	242	222	204	188	174	162	152	144	138	134	132	134	138													
11	812	760	710	662	616	572	530	490	452	416	382	350	320	292	266	242	220	200	182	166	152	140	130	122	116	112	110	112	116														
10	740	690	642	596	552	510	470	432	396	362	330	300	272	246	222	200	180	162	146	132	120	110	102	96	92	90	90	92	96	102	110												
9	672	624	578	534	492	452	414	378	344	312	282	254	228	204	182	162	144	128	114	102	92	84	78	74	72	72	74	78	84	92	102												
8	608	562	518	476	436	398	362	328	296	266	238	212	188	166	146	128	112	98	86	76	68	62	58	56	56	58	62	68	76	86	98												
7	548	504	462	422	384	348	314	282	252	224	198	174	152	132	114	98	84	72	62	54	48	44	42	44	48	54	62	72	84	98													
6	492	450	410	372	336	302	270	240	212	186	162	140	120	102	86	72	60	50	42	36	32	30	30	32	36	42	50	60	72	86	102												
5	440	400	362	326	292	260	230	202	176	152	130	110	92	76	62	50	40	32	26	22	20	18	16	14	12	10	8	6	4	2	0	0	2	6	12	20	30	42	56	72	90	92	110
4	392	354	318	284	252	222	194	168	144	122	102	84	68	54	42	32	24	18	14	12	12	14	18	26	36	48	62	78	96	116	138	142											
3	348	312	278	246	216	188	162	138	116	96	78	62	48	36	26	18	12	8	6	8	12	18	26	36	48	62	78	96	116	138	142												
2	308	274	242	212	184	158	134	112	92	74	58	44	32	22	14	8	4	2	2	4	8	14	22	32	44	58	74	92	112	134	158	178											
Y[1]	1	272	240	210	182	156	132	110	90	72	56	42	30	20	12	6	2	0	0	2	6	12	20	30	42	56	72	90	110	132	156	182											
Y[0]	0	240	210	182	156	132	110	90	72	56	42	30	20	12	6	2	0	0	2	6	12	20	30	42	56	72	90	110	132	156	182	210											
Y[-1]	-1	212	184	158	134	112	92	74	58	44	32	22	14	8	4	2	2	4	8	14	22	32	44	58	74	92	112	134	158	184	212	242											
-2	188	162	138	116	90	78	62	48	36	26	18	12	8	6	6	8	12	18	26	36	48	62	78	96	116	138	162	184	216	246	278												
-3	168	144	122	102	84	68	54	42	32	24	18	14	12	12	14	18	24	32	42	54	68	84	102	122	144	168	194	222	252	284	318												
-4	152	130	110	92	76	62	50	40	32	26	22	20	20	22	26	32	40	50	62	76	92	110	130	152	176	202	230	260	292	326	362												
-5	140	120	102	86	72	60	50	42	36	32	30	30	32	36	42	50	60	72	86	102	120	140	162	186	212	240	270	302	336	372	410												
-6	132	114	98	84	72	62	54	48	44	42	42	44	48	54	62	72	84	98	114	132	152	174	198	224	252	282	314	348	384	422	462												
-7	128	112	98	86	76	68	62	58	56	56	58	62	68	76	80	98	112	128	146	166	188	212	238	266	294	328	362	398	436	476	518												
-8	128	114	102	92	84	78	74	72	72	74	78	84	92	102	114	128	144	162	182	204	228	254	282	312	344	378	414	452	492	534	578												
-9	132	120	110	102	96	92	90	90	92	96	102	110	120	132	146	162	180	200	222	246	272	300	330	362	396	432	470	510	552	596	642												
-10	140	130	122	116	112	110	110	112	116	122	130	140	152	166	182	200	220	242	266	292	320	350	382	416	452	490	530	572	616	662	710												
-11	152	144	138	134	132	132	134	138	144	152	162	174	188	204	222	242	264	288	314	342	372	404	438	474	512	552	594	638	684	732	782												
-12	168	162	158	156	156	158	162	168	176	186	198	212	228	246	266	288	312	338	366	396	428	462	498	536	576	618	662	708	756	806	858												
-13	188	184	182	184	188	194	202	212	224	238	254	272	292	314	338	364	392	422	454	488	524	562	602	644	688	734	782	832	884	938													
-14	212	210	210	212	216	222	230	240	252	266	282	300	320	342	366	392	420	450	482	516	552	594	630	672	716	762	810	864	912	966	1022												
-15	240	240	242	246	252	260	270	282	296	312	330	350	372	396	422	450	480	512	546	582	620	660	702	746	792	840	890	942	996	1052	1110												

Figure 1. Paraboctys $PS[x^2 + x + 2, x^2 - x, x^2 - 3x + 2]$. The verticals represent the sequences produced by C-Destroyer parabolas with variable offset on the vertical $x = 0$ of the $PS[x + 2, x, x]$.

The C-Destroyer parabolas with positive offset produce the vertical sequences on the left side of this table. The C-Destroyer parabolas with negative offset produce the vertical sequences on the right side of this table.

Simplifying all verticals for offset $f = 0$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	DES	SUB	DES																				
Y_{-15}	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0				
I^0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
a^0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2			
b^0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2			
c^0	128	112	98	84	72	60	50	40	32	24	18	12	8	4	2	0	0	2	4	8	12	18	24	32	40	50	60	72	84	98		
15	548	562	518	534	492	510	470	490	452	474	438	462	428	454	422	450	420	450	422	454	428	462	438	474	452	490	470	510	492	534	518	
14	492	504	462	476	436	452	414	432	396	416	382	404	372	396	366	392	364	392	366	396	372	404	382	416	396	432	414	452	436	476	462	
13	440	450	410	422	384	398	362	378	344	362	330	350	320	342	314	338	312	338	314	342	320	350	330	362	344	378	362	398	384	362	410	
12	392	400	362	372	336	348	314	328	296	312	282	300	272	292	266	288	264	288	266	292	272	300	282	312	296	328	314	348	336	372	362	
11	348	354	318	326	292	302	270	282	252	266	238	254	228	246	222	242	220	242	222	246	228	254	238	266	252	282	270	302	292	326	318	
10	308	312	278	284	252	260	230	240	212	224	198	212	188	204	182	200	180	200	182	204	188	212	198	224	212	240	230	260	252	284	278	
9	272	274	242	246	216	222	194	202	176	186	162	174	152	166	146	162	144	162	146	166	152	174	162	186	176	202	194	222	216	246	242	
8	240	240	210	212	184	188	162	168	144	152	130	140	120	132	114	128	112	128	114	132	120	140	130	152	144	168	162	188	184	212	210	
7	212	210	182	182	156	158	134	138	116	122	102	110	92	102	86	98	84	98	86	102	92	110	102	122	116	138	134	158	156	182		
6	188	184	158	156	132	132	110	112	92	96	78	84	68	76	62	72	60	72	62	76	68	84	78	96	92	112	110	132	132	156	158	
5	168	162	138	134	112	110	90	90	72	74	58	62	48	54	42	50	40	50	42	54	48	62	58	74	72	90	90	110	112	134	138	
4	152	144	122	116	96	92	74	72	56	56	42	44	32	36	26	32	24	32	26	36	32	44	42	56	56	72	74	92	96	116	122	
3	140	130	110	102	84	78	62	58	44	42	30	30	20	22	14	18	12	18	14	22	20	30	30	42	44	58	62	78	84	102	110	
2	132	120	102	92	76	68	54	48	36	32	22	20	12	12	6	8	4	8	6	12	12	20	22	32	36	48	54	68	76	92	102	
$Y[1]$	1	128	114	98	86	72	62	50	42	32	26	18	14	8	6	2	2	0	2	2	6	8	14	18	26	32	42	50	62	72	86	98
$Y[0]$	0	128	112	98	84	72	60	50	40	32	24	18	12	8	4	2	0	0	2	4	8	12	18	24	32	40	50	60	72	84	98	
$Y[-1]$	-1	132	114	102	86	76	62	54	42	36	26	22	14	12	6	2	4	2	6	6	12	14	22	26	36	42	54	62	76	86	102	
-2	140	120	110	92	84	68	62	48	44	32	30	20	20	12	14	8	12	8	14	12	20	20	30	32	44	48	62	68	84	92	110	
-3	152	130	122	102	96	78	74	58	56	42	42	30	32	22	26	18	24	18	26	22	30	32	42	42	56	58	74	78	96	102	122	
-4	168	144	138	116	112	92	90	72	72	56	58	44	48	36	42	32	40	32	42	36	48	44	58	56	72	72	90	92	112	116	138	
-5	188	162	158	134	132	110	110	90	92	74	78	62	68	54	62	50	60	50	62	54	68	62	78	74	92	90	110	110	132	134	158	
-6	212	184	182	156	156	132	134	112	116	102	84	92	76	86	72	84	72	86	76	92	84	102	96	116	112	134	132	156	156	182		
-7	240	210	210	184	188	158	162	138	144	122	130	110	120	102	114	98	114	102	120	110	130	122	144	138	162	158	184	182	210			
-8	272	240	242	212	216	188	194	168	176	152	162	140	152	132	146	128	146	132	152	140	162	152	176	168	194	188	216	212	242			
-9	308	274	278	246	252	222	230	202	212	186	198	174	188	166	182	162	182	166	188	174	198	186	212	202	230	222	252	246	278			
-10	348	312	318	284	292	260	270	240	252	224	238	212	228	204	222	200	220	202	228	212	238	224	252	240	270	260	292	284	318			
-11	392	354	362	326	336	302	314	282	296	266	282	254	272	246	266	242	266	246	272	254	282	266	296	282	314	302	336	326	362			
-12	440	400	410	372	384	348	362	328	344	312	330	300	320	292	314	288	312	280	320	300	330	312	344	328	362	348	384	372	410			
-13	492	450	462	422	436	398	414	378	396	362	382	350	372	342	366	338	364	338	366	342	372	350	382	362	396	378	414	398	436	422	462	
-14	548	504	518	476	492	452	470	432	452	416	438	404	428	396	422	392	420	392	424	404	438	416	452	432	470	452	492	476	518			
-15	608	562	578	534	552	510	530	490	512	474	498	462	488	454	482	450	480	450	482	454	488	462	498	474	510	530	510	552	534	578		

Figure 1. This paraboctys is the verticals from $PS[x^2 + x + 2, x^2 - x, x^2 - 3x + 2]$ in offset $f = 0$.

See that $PS[x^2 + x + 2, x^2 - x, x^2 - 3x + 2]$ produces vertical sequences with the interlacing of destroyer and submarine parabolas. Therefore, in offset $f=0$, the resulting paraboctys is:

For $Y[1]$: interlacing between $[6,2,2] = 2x^2 - 2x + 2$ and $[2,0,2] = 2x^2$.

For $Y[0]$: interlacing between $[4,0,0] = 2x^2 - 2x$ and $[2,0,2] = 2x^2$.

For $Y[-1]$: interlacing between $[6,2,2] = 2x^2 - 2x + 2$ and $[6,4,6] = 2x^2 + 4$

If we turn the paraboctys $PS[x^2 + x + 2, x^2 - x, x^2 - 3x + 2]$ clockwise 90° around the central point (0,0), we get:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Classif.	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES				
Y ₋ ip	-14,5	-13,5	-12,5	-11,5	-10,5	-9,5	-8,5	-7,5	-6,5	-5,5	-4,5	-3,5	-2,5	-1,5	-0,5	0,5	1,5	2,5	3,5	4,5	5,5	6,5	7,5	8,5	9,5	10,5	11,5	12,5	13,5	14,5	15,5		
f	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
b	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	-1	-3	-5	-7	-9	-11	-13	-15	-17	-19	-21	-23	-25	-27	-29	-31		
c	450	392	338	288	242	200	162	128	98	72	50	32	18	8	2	0	2	8	18	32	50	72	98	128	162	200	242	288	338	392	450		
-15	240	212	188	168	152	140	132	128	132	140	152	168	188	212	240	272	308	348	392	440	492	548	608	672	740	812	888	968	1052	1140			
-14	240	210	184	162	144	130	120	114	112	114	120	130	144	162	184	210	240	274	312	354	400	450	504	562	624	690	760	834	912	994	1080		
-13	242	210	182	158	138	122	110	102	98	98	102	110	122	138	158	182	210	242	278	318	362	410	462	518	578	642	710	782	858	938	1022		
-12	246	212	182	156	134	116	102	92	86	84	86	92	102	116	134	156	182	212	246	284	326	372	422	476	534	596	662	732	806	884	966		
-11	252	216	184	156	132	112	96	84	76	72	72	76	84	96	112	132	156	184	216	252	292	336	384	436	492	552	616	684	756	832	912		
-10	260	222	188	158	132	110	92	78	68	62	60	62	68	78	92	110	132	158	188	222	260	302	348	398	452	510	572	638	708	782	860		
-9	270	230	194	162	134	110	90	74	62	54	50	50	54	62	74	90	110	134	162	194	230	270	314	362	414	470	530	594	662	734	810		
-8	282	240	202	168	138	112	90	72	58	48	42	40	42	48	58	72	90	112	138	168	202	240	282	328	378	432	490	552	618	688	762		
-7	296	252	212	176	144	116	92	72	56	44	36	32	32	36	44	56	72	92	116	144	176	212	252	296	344	396	452	512	576	644	716		
-6	312	266	224	186	152	122	96	74	56	42	32	26	24	26	32	42	56	74	96	122	152	186	226	266	312	362	416	474	536	602	672		
-5	330	282	238	198	162	130	102	78	58	42	30	22	18	18	22	30	42	58	78	102	130	162	198	238	282	330	382	438	498	562	630		
-4	350	300	254	212	174	140	110	84	62	44	30	30	20	14	12	14	20	30	44	52	62	84	110	140	172	212	254	300	350	404	462	524	590
-3	372	320	272	228	188	152	120	92	68	48	32	20	12	8	8	12	20	32	48	68	92	120	152	188	228	272	320	372	428	488	552		
-2	396	342	292	246	204	166	132	102	76	54	36	22	12	6	6	12	22	36	54	76	102	132	166	204	246	292	342	396	454	516			
Y[1]	-1	422	366	314	266	222	182	146	114	86	62	42	26	14	6	6	2	6	14	26	42	62	86	114	146	182	222	266	314	366	422	482	
Y[0]	0	450	392	338	288	242	200	162	128	98	72	50	32	18	8	2	0	2	8	18	32	50	72	98	128	162	200	242	288	338	392	450	
Y[1]	1	480	420	364	312	264	210	180	144	112	84	60	40	24	12	4	0	0	4	12	24	40	60	84	112	144	180	220	264	312	364	420	

Figure 1. Paraboctys $PS[2x^2 + 2x + 2, 2x^2, 2x^2 - 2x]$. The vertical ones here are the horizontal ones of $PS[x^2 + x + 2, x^2 - x, x^2 - 3x + 2]$.

Because of the clockwise 90° rotation the indexes y increase from top to bottom (opposite direction of the Y-axis).

Simplifying all verticals for offset $f = 0$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Classif.	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES																
Y ₋ ip	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5				
f	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
a ^o	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
b ^o	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
c ^o	240	210	182	156	132	110	90	72	56	42	30	20	12	6	2	0	0	2	6	12	20	30	42	56	72	90	110	132	156	182	210		
15	450	420	392	364	342	320	300	282	266	252	240	230	220	216	212	210	210	212	216	222	230	240	252	266	282	300	320	342	366	392	420		
14	422	392	364	334	314	292	272	254	238	224	212	202	194	188	184	182	182	184	188	194	202	212	224	238	254	272	292	314	334	364	392		
13	396	366	334	312	288	266	246	228	212	198	186	176	168	158	156	156	158	162	168	176	186	192	212	224	246	266	288	312	336	366			
12	372	342	314	288	264	242	222	204	188	174	162	152	144	138	134	132	132	134	138	144	152	162	174	188	202	216	232	242	252	262			
11	350	320	292	266	242	220	200	180	162	146	132	120	110	96	92	90	90	92	96	102	110	120	132	146	162	180	200	222	246	272	300		
10	330	300	272	246	222	200	180	162	146	132	120	110	92	96	92	90	90	92	96	102	110	120	132	146	162	180	200	222	246	272	300		
9	312	282	254	228	204	182	162	144	128	114	102	92	84	78	74	72	72	74	78	84	88	92	96	102	114	128	142	156	172	188			
8	296	266	238	212	188	166	146	128	112	98	86	76	68	62	58	56	56	58	62	68	76	86	98	112	128	146	166	188	212	238	266		
7	282	252	224	198	174	152	132	114	98	84	72	62	54	48	44	42	42	44	48	54	62	72	84	98	114	132	152	174	198	225			
6	270	240	212	186	162	140	120	102	86	72	60	50	40	32	26	22	20	20	22	26	32	40	50	60	72	86	102	120	140	162	186	212	240
5	260	230	202	176	152	130	110	92	76	62	50	40	32	26	22	20	20	22	26	32	40	50	62	76	92	110	130	152	176	202	230		
4	252	222	194	168	144	122	102	84	68	54	42	32	24</td																				

Where are the sequences of prime numbers? They appear when we eliminate composite generators by adding Odd numbers.

For example: when we move all C-Destroyer parabolas from vertical column $x = 0$ to vertical column $x = 17$ it is equivalent to do

$$PS[x^2 + x + 2, x^2 - x, x^2 - 3x + 2] + 17 = PS[x^2 + x + 19, x^2 - x + 17, x^2 - 3x + 19]$$

See the picture:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15																																																																				
Classif.	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES																																																																						
Y_ip	-7,5	-7,6	-6,5	-5,5	-5	-4,5	-4	-3,5	-3	-2,5	-2	-1,5	-1	-0,5	0	0,5	1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7	7,5																																																																					
f	-8	-7	-7	-6	-6	-5	-5	-4	-4	-3	-3	-2	-2	-1	-1	0	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7																																																																			
a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2																																																																				
b	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0	2	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	-26	-28	-30																																																																				
c	257	227	199	173	149	127	107	89	73	59	47	37	29	23	19	17	17	19	23	29	37	47	59	73	89	107	127	149	173	199	227																																																																				
15	1157	1097	1039	983	929	877	827	779	733	689	647	607	569	533	499	467	437	409	383	359	337	317	299	283	269	257	247	239	233	229	227																																																																				
14	1069	1011	955	901	849	799	751	705	661	619	579	541	505	471	439	409	381	355	331	309	289	271	255	241	229	219	211	205	201	199	199																																																																				
13	985	929	875	823	773	725	679	635	593	553	515	479	445	413	383	355	329	305	283	263	245	229	215	203	193	185	179	175	173	173	175																																																																				
12	905	851	799	749	701	655	611	569	529	491	455	421	389	359	331	305	281	259	239	221	205	191	179	169	161	155	151	149	149	151	155																																																																				
11	829	777	727	679	633	589	547	507	469	433	399	367	337	309	283	259	237	217	199	183	169	157	147	139	133	129	127	127	129	133	139																																																																				
10	757	707	659	613	569	527	487	449	413	379	347	317	289	263	239	217	197	179	163	149	137	127	119	113	109	107	107	109	113	119	127																																																																				
9	689	641	595	551	509	469	431	391	361	329	299	271	245	221	199	179	161	145	131	119	109	101	95	91	89	91	95	101	109	119	127																																																																				
8	625	579	535	493	453	415	379	345	313	283	255	229	205	183	163	145	129	115	103	93	85	79	75	73	73	75	79	85	93	103	115																																																																				
7	565	521	479	439	401	365	331	299	269	241	215	191	169	149	131	115	101	89	79	71	65	61	59	59	61	65	71	79	89	101	115																																																																				
6	509	467	427	389	353	319	287	257	229	203	179	157	137	119	103	89	77	67	59	53	49	47	47	49	53	59	67	77	89	103	119																																																																				
5	457	417	379	343	309	277	247	219	193	169	147	127	109	93	79	67	57	49	43	39	37	37	39	43	49	57	67	79	93	109	127																																																																				
4	409	371	335	301	269	239	211	185	161	139	119	101	85	71	59	49	41	35	31	29	29	31	31	35	41	49	59	71	85	101	119	139																																																																			
3	365	329	295	263	233	205	179	155	133	113	95	79	65	53	43	35	29	25	23	23	25	25	29	35	43	53	65	79	95	113	133	155																																																																			
2	325	291	259	229	201	175	151	129	109	91	75	61	49	39	31	25	21	19	19	21	25	31	39	49	61	75	91	109	129	151	175																																																																				
Y[1]	1	289	257	227	199	173	149	127	107	89	73	59	47	37	29	23	19	17	17	19	23	29	37	47	59	73	89	107	127	149	173	199																																																																			
Y[0]	0	257	227	199	173	149	127	107	89	73	59	47	37	29	23	19	17	17	19	23	29	37	47	59	73	89	107	127	149	173	199	227																																																																			
Y[-1]	-1	229	201	175	151	129	109	91	75	61	49	39	31	25	21	19	19	21	25	31	39	49	61	75	91	109	129	151	175	201	229	259																																																																			
-2	205	179	155	133	113	95	79	65	53	43	35	29	25	23	23	25	29	35	43	53	65	79	95	113	133	155	179	205	233	263	295																																																																				
-3	185	161	139	119	101	85	71	59	49	41	35	31	29	29	31	35	41	49	59	71	85	101	119	139	161	185	211	239	269	301	335																																																																				
-4	169	147	127	109	93	79	67	57	49	43	39	37	37	39	43	49	57	67	79	93	109	127	147	169	193	219	247	277	309	343	379	417	459	493	535	573	615	653	693	737	799	847																																																									
-5	157	137	119	103	89	77	67	59	53	49	47	47	49	53	59	67	77	89	103	119	137	157	179	199	203	229	257	287	319	353	389	427	467	505	543	581	619	659	697	737	777	817																																																									
-6	149	131	115	101	89	79	71	65	61	59	59	61	65	71	79	89	101	115	131	149	169	191	215	241	269	299	331	365	401	439	479	517	555	593	631	669	701	739	779	817																																																											
-7	145	129	115	103	93	85	79	75	73	73	75	79	85	93	103	115	129	145	163	183	205	229	255	283	313	345	379	415	453	493	535	573	611	651	691	731	771	811	855																																																												
-8	145	131	119	109	101	95	91	89	89	91	101	109	119	131	145	161	179	199	221	245	271	299	329	361	395	431	469	509	551	595	635	675	715	755	795	835	875																																																														
-9	149	137	127	119	113	109	107	107	109	113	119	127	137	149	161	179	191	205	221	239	259	281	309	337	367	399	433	469	507	547	589	633	679	727	777	827	875																																																														
-10	157	147	139	133	129	127	127	129	133	139	147	157	169	183	199	217	237	259	283	309	337	367	399	433	469	507	547	589	633	679	727	777	827	875																																																																	
-11	169	161	155	151	149	149	151	155	155	161	169	179	191	205	221	239	259	281	305	331	359	389	421	455	491	529	569	611	655	701	749	799	847																																																																		
-12	185	179	175	173	175	179	185	193	203	215	229	245	263	283	305	329	355	383	413	445	479	515	553	593	635	679	725	773	823	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425	1475	1525																																																								
-13	205	201	199	199	201	205	211	219	229	241	255	271	289	309	331	355	381	409	439	471	505	541	579	619	661	705	751	799	849	901	955	1009	1063	1117	1171	1225	1275	1325	1375	1425	1475	1525																																																									
-14	229	227	229	233	233	239	247	257	269	283	299	317	337	359	383	409	437	467	499	533	567	607	647	687	727	767	807	847	887	927	967	1007	1047	1087	1127	1167	1207	1247	1287	1327	1367	1407	1447	1487	1527	1567	1607	1647	1687	1727	1767	1807	1847	1887	1927	1967	2007	2047	2087	2127	2167	2207	2247	2287	2327	2367	2407	2447	2487	2527	2567	2607	2647	2687	2727	2767	2807	2847	2887	2927	2967	3007	3047	3087	3127	3167	3207	3247	3287	3327	3367	3407	3447	3487	3527	3567	3607	3647	3687</td

Figure 1. Paraboctys $PS[2x^2 + 2x + 19, 2x^2 + 17, 2x^2 - 2x + 17]$. The vertical ones here are the horizontal ones of $PS[x^2 + x + 19, x^2 - x + 17, x^2 - 3x + 19]$. Because of the clockwise 90° rotation the indexes y increase from top to bottom.

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	DES																															
y^-_ip	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5				
i^p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
a^p	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
b^p	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
c^p	257	227	199	173	149	127	107	89	73	59	47	37	29	23	19	17	17	19	23	29	37	47	59	73	89	107	127	149	173	199	227	
15	467	437	409	383	359	337	317	299	283	269	257	247	239	233	229	227	227	229	233	239	247	257	269	283	299	317	337	359	383	409	437	
14	439	409	381	355	331	309	289	271	255	241	229	219	211	205	201	199	199	201	205	211	219	229	241	255	271	289	309	331	355	381	409	
13	413	383	355	329	305	283	263	245	229	215	203	193	185	179	175	173	173	175	179	185	193	203	215	229	245	263	283	305	329	355	383	
12	389	359	331	305	281	259	239	221	205	191	179	169	161	155	151	149	149	151	155	161	169	179	191	205	221	239	259	281	305	331	359	
11	367	337	309	283	259	237	217	199	183	169	157	147	139	133	129	127	127	129	133	139	147	157	169	183	199	217	237	259	283	309	337	
10	347	317	289	263	239	217	197	179	163	149	137	127	119	113	109	107	107	109	113	119	127	137	149	163	179	197	217	239	263	289	317	
9	329	299	271	245	221	199	179	161	145	131	119	109	101	95	91	89	89	91	95	101	109	119	131	145	161	179	199	221	245	271	299	
8	313	283	255	229	205	183	163	145	129	115	103	93	85	79	75	73	73	75	79	85	93	103	115	129	145	163	183	205	229	255	283	
7	299	269	241	215	191	169	149	131	115	101	89	79	71	65	61	59	59	61	65	71	79	89	101	115	131	149	169	191	215	241	269	
6	287	257	229	203	179	157	137	119	103	89	77	67	59	53	49	47	47	49	53	59	67	77	89	103	119	137	157	179	203	229	257	
5	277	247	219	193	169	147	127	109	93	79	67	57	49	43	39	37	37	39	43	49	57	67	79	93	109	127	147	169	193	219	247	
4	269	239	211	185	161	139	119	101	85	71	59	49	41	35	31	29	29	31	35	41	49	59	71	85	101	119	139	161	185	211	239	
3	263	233	205	179	155	133	113	95	79	65	53	43	35	29	25	23	23	25	29	35	43	53	65	79	95	113	133	155	179	205	233	
2	259	229	201	175	151	129	109	91	75	61	49	39	31	25	21	19	19	21	25	31	39	49	61	75	91	109	129	151	175	201	229	
Y[1]	1	257	227	199	173	149	127	107	89	73	59	47	37	29	23	19	17	17	19	23	29	37	47	59	73	89	107	127	149	173	199	227
Y[0]	0	257	227	199	173	149	127	107	89	73	59	47	37	29	23	19	17	17	19	23	29	37	47	59	73	89	107	127	149	173	199	227
Y[-1]	-1	259	229	201	175	151	129	109	91	75	61	49	39	31	25	21	19	19	21	25	31	39	49	61	75	91	109	129	151	175	201	229
-2	263	233	205	179	155	133	113	95	79	65	53	43	35	29	25	23	23	25	29	35	43	53	65	79	95	113	133	155	179	205	233	
-3	269	239	211	185	161	139	119	101	85	71	59	49	41	35	31	29	29	31	35	41	49	59	71	85	101	119	139	161	185	211	239	
-4	277	247	219	193	169	147	127	109	93	79	67	57	49	43	39	37	37	39	43	49	57	67	79	93	109	127	147	169	193	219	247	
-5	287	257	229	203	179	157	137	119	103	89	77	67	59	53	49	47	47	49	53	59	67	77	89	103	119	137	157	179	203	229	257	
-6	299	269	241	215	191	169	149	131	115	101	89	79	71	65	61	59	59	61	65	71	79	89	101	115	131	149	169	191	215	241	269	
-7	313	283	255	229	205	183	163	145	129	115	103	93	85	79	75	73	73	75	79	85	93	103	115	129	145	163	183	205	229	255	283	
-8	329	299	271	245	221	199	179	161	145	131	119	109	101	95	91	89	89	91	95	101	109	119	131	145	161	179	199	221	245	271	299	
-9	347	317	289	263	239	217	197	179	163	149	137	127	119	113	109	107	107	109	113	119	127	137	149	163	179	197	217	239	263	289	317	
-10	367	337	309	283	259	237	217	199	183	169	157	147	139	133	129	127	127	129	133	139	147	157	169	183	199	217	237	259	283	309	337	
-11	389	359	331	305	281	259	239	221	205	191	179	169	161	155	151	149	149	151	155	161	169	179	191	205	221	239	259	281	305	331	359	
-12	413	383	355	329	305	283	263	245	229	215	203	193	185	179	175	173	173	175	179	185	193	203	215	229	245	263	283	305	329	355	383	
-13	439	409	381	355	331	309	289	271	255	241	229	219	211	205	201	199	199	201	205	211	219	229	241	255	271	289	309	331	355	381	409	
-14	467	437	409	383	359	337	317	299	283	269	257	247	239	233	229	227	227	229	233	239	247	257	269	283	299	317	337	359	383	409	437	
-15	497	467	439	413	389	367	347	329	313	299	287	277	269	263	259	257	257	259	263	269	277	287	299	313	329	347	367	389	413	439	467	

Figure 1. Paraboctys $PS[x^2 - x + 19, x^2 - x + 17, x^2 - x + 17]$. All verticals of Paraboctys $PS[2x^2 + 2x + 19, 2x^2 + 17, 2x^2 - 2x + 17]$ in offset $f = 0$.

3.3 The C-Submarine parabolas with variable offset on a vertical of $PS[x + 2, x, x]$

See the picture:

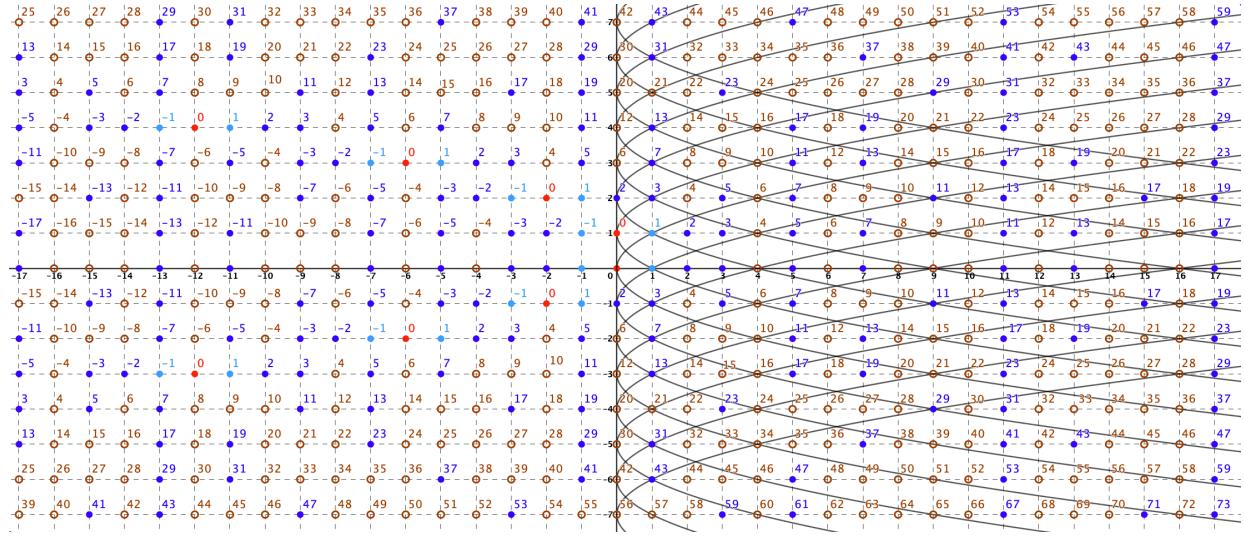


Figure 1. The C-Submarine parabolas in column $x = 0$ of the lattice-grid $PS[x + 2, x, x]$. They have offset following the staircase function with the step of a unit. These parabolas have equations in the XY plane of the form $x = y^2 - Even * y + Square$. In terms of the offset value $x = y^2 - 2fy + f^2$.

Each parabola $x = y^2 - 2fy + f^2$ in lattice-grid $PS[x + 2, x, x]$ will produce a quadratic sequence of the form $Y[y] = ay^2 + by + c$. Now, to determine the coefficients a, b, c , for each sequence we have to determine three consecutive elements.

Over each parabola, we can choose 3 consecutive elements from top to bottom or from bottom to top. Because we are synchronizing the y index with the Y-axis, we will choose 3 consecutive bottom-up elements which is the increasing index direction: $[Y[-1], Y[0], Y[1]]$.

The elements of row $y = -1$ in the new paraboctys will be noted as $@Y[-1]$.

The elements of row $y = 0$ in the new paraboctys will be noted as $@Y[0]$.

The elements of row $y = 1$ in the new paraboctys will be noted as $@Y[1]$.

So, let's create the new paraboctys $PS[@Y[-1], @Y[0], @Y[1]]$. This new paraboctys will contain all the sequences formed by the C-Submarine parabolas with a variable offset in a vertical of lattice-grid $PS[x + 2, x, x]$.

As we have C-Submarine parabolas, we can understand each sequence as being made of two elements of the vertical column $x = 1$ to assume the $@Y[-1]$ and $@Y[1]$ elements position and one element of the vertical column $x = 0$ to assume the $@Y[0]$ elements positions.

Consequently,

4. The elements on the vertical column $x = 1$ with offset $f = -1$ of the current paraboctys $PS[x + 2, x, x]$ is:

$$A002061 \equiv [1,1,3] \equiv @Y[-1] = x^2 + x + 1$$

5. The elements on the vertical column $x = 0$ with offset $f = 0$ of the current paraboctys $PS[x + 2, x, x]$ is:

$$A002378 \equiv [2,0,0] \equiv @Y[0] = x^2 - x$$

6. The elements on the vertical column $x = 1$ with offset $f = 1$ of the current paraboctys $PS[x + 2, x, x]$ is:

$$A002061 \equiv [7,3,1] \equiv @Y[1] = x^2 - 3x + 3$$

Finally, we create the new paraboctys $PS[x^2 + x + 1, x^2 - x, x^2 - 3x + 3]$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC			
y_ip	-7,75	-7,25	6,75	-6,25	5,75	5,25	-4,75	4,25	-3,75	-3,25	-2,75	-2,25	-1,75	-1,25	-0,75	0,25	0,25	0,75	1,25	1,75	2,25	2,75	3,25	3,75	4,25	4,75	5,25	5,75	6,25	6,75	7,25	
f	-8	-7	-7	-6	-6	-5	-5	-4	-4	-3	-3	-2	-2	-1	-1	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	
a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
b	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	-1	-3	-5	-7	-9	-11	-13	-15	-17	-19	-21	-23	-25	-27	-29	
c	240	210	182	156	132	110	90	72	56	42	30	20	12	6	2	0	0	2	6	12	20	30	42	56	72	90	110	132	156	182	210	
15	1155	1095	1037	981	927	875	825	777	731	687	645	605	567	531	497	465	435	407	381	357	335	315	297	281	267	255	245	237	231	227	225	
14	1066	1008	952	898	846	796	748	702	658	616	576	538	502	468	436	406	378	352	328	306	286	268	252	238	226	216	208	202	198	196	196	
13	981	925	871	819	769	721	679	631	589	549	511	475	441	409	379	351	325	301	279	259	241	225	211	199	189	181	175	171	169	169	171	
12	900	846	794	744	696	650	606	564	524	486	450	416	384	354	326	300	276	254	234	216	200	186	174	164	156	150	146	144	144	146		
11	823	771	721	673	627	583	541	501	463	427	393	361	331	303	277	253	231	211	193	177	163	151	141	133	127	123	121	121	123	127	133	
10	750	700	652	606	562	520	480	442	406	372	340	310	282	256	232	210	190	172	156	142	130	120	112	106	102	100	100	102	106	112	120	
9	681	633	587	543	501	461	423	387	353	321	291	263	237	213	191	171	153	137	123	111	101	93	87	83	81	81	83	87	93	101	111	
8	616	570	526	484	444	406	370	336	304	274	246	220	196	174	154	136	120	106	94	84	76	70	66	64	64	66	70	76	84	94	106	
7	555	511	469	429	391	355	321	289	259	231	205	181	159	139	121	105	91	79	69	61	55	51	49	49	51	55	61	69	79	91	105	
6	498	456	416	378	342	308	276	246	218	192	168	146	126	108	92	78	66	56	48	42	38	36	36	38	42	48	56	66	78	92	108	
5	445	405	367	331	297	265	235	207	181	157	135	115	97	81	67	55	45	37	31	27	25	25	27	31	37	45	55	67	81	97	115	
4	396	358	322	288	256	226	198	172	148	126	106	88	72	58	46	36	28	22	18	16	16	18	22	28	36	46	58	72	88	106	126	
3	351	315	281	249	219	191	165	141	119	99	81	65	51	39	29	21	15	11	9	9	11	15	21	29	39	51	65	81	99	119	141	
2	310	276	244	214	186	160	136	114	94	76	60	46	34	24	16	10	6	4	4	4	6	10	16	24	34	46	60	76	94	114	136	160
Y[1]	1	273	241	211	183	157	133	111	91	73	57	43	31	21	13	7	3	1	1	3	7	13	21	31	43	57	73	91	111	133	157	183
Y[0]	0	240	210	182	156	132	110	90	72	56	42	30	20	12	6	2	0	0	2	6	12	20	30	42	56	72	90	110	132	156	182	210
Y[-1]	-1	211	183	157	133	111	91	73	57	43	31	21	13	7	3	1	1	3	7	13	21	31	43	57	73	91	111	133	157	183	211	241
-2	186	160	136	114	94	76	60	46	34	24	16	10	6	4	4	6	10	16	24	34	46	60	76	94	114	136	160	186	214	244	276	
-3	165	141	119	99	81	65	51	39	29	21	15	11	9	9	11	15	21	29	39	51	65	81	99	119	141	165	191	219	249	281	315	
-4	148	126	106	88	72	58	46	36	28	22	18	16	16	18	22	28	36	46	58	72	88	106	126	148	172	198	226	256	288	322	358	
-5	135	115	97	81	67	55	45	37	31	27	25	25	27	31	37	45	55	67	81	97	115	135	157	181	207	235	265	297	331	367	405	
-6	126	108	92	78	66	56	48	42	38	36	36	38	42	48	56	66	78	92	108	126	146	168	192	218	246	276	308	342	378	416	456	
-7	121	105	91	79	69	61	55	51	49	49	51	55	61	69	79	91	105	121	139	159	181	205	231	259	289	321	355	391	429	469	511	
-8	120	106	94	86	76	70	66	64	64	66	70	76	84	94	106	120	136	154	174	196	220	246	274	304	336	370	406	444	484	526	570	
-9	123	111	101	93	87	83	81	81	83	87	93	101	111	123	137	153	171	191	213	237	263	291	321	353	387	423	461	501	543	587	633	
-10	130	120	112	106	102	100	100	102	106	112	120	130	142	156	172	190	210	232	256	282	310	340	372	406	442	480	520	562	606	652	700	
-11	141	133	127	123	121	121	123	133	141	151	163	177	193	211	231	253	277	303	331	361	393	427	463	501	541	583	627	673	721	771		
-12	156	150	146	144	144	146	150	156	164	174	186	200	216	234	254	276	300	326	354	384	416	450	486	524	564	606	650	696	744	794	846	
-13	175	171	169	169	171	175	181	189	199	211	225	241	259	279	301	325	351	379	409	441	475	511	549	589	631	679	721	769	819	871	925	
-14	198	196	196	198	202	208	216	226	238	252	268	286	306	328	352	378	406	436	468	502	538	576	616	658	702	748	796	846	898	952	1008	
-15	225	225	227	231	237	245	255	267	281	297	315	335	357	381	407	435	465	497	531	567	605	645	687	731	777	825	875	927	981	1037	1095	

Figure 1. Paraboctys $PS[x^2 + x + 1, x^2 - x, x^2 - 3x + 3]$. The verticals represent the sequences produced by C-Submarine parabolas with variable offset on the vertical $x = 0$ of the $PS[x + 2, x, x]$. The C-Submarine parabolas with positive offset produce the vertical sequences on the left side of this table. The C-Submarine parabolas with negative offset produce the vertical sequences on the right side of this table.

Simplifying all verticals for offset $f = 0$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	ACC	ACC	ACC																													
y^o_{ip}	0.25	-0.25	0.25	-0.25	0.25	-0.25	0.25	-0.25	0.25	-0.25	0.25	-0.25	0.25	-0.25	0.25	-0.25	0.25	-0.25	0.25	-0.25	0.25	-0.25	0.25	-0.25	0.25	-0.25	0.25	-0.25				
f^o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
a ^o	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2				
b ^o	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1				
c ^o	120	105	91	78	66	55	45	36	28	21	15	10	6	3	1	0	0	1	3	6	10	15	21	28	36	45	55	66	78	91	105	
15	555	570	526	543	501	520	480	501	463	486	450	475	441	468	436	465	435	466	438	471	445	480	456	493	471	510	490	531	513	556	540	
14	498	511	469	484	444	461	423	442	406	427	393	416	384	409	379	406	378	407	381	412	388	421	399	434	414	451	433	472	456	497	483	
13	445	456	416	429	391	406	370	387	353	372	340	361	331	354	326	351	325	352	328	357	335	366	346	379	361	396	380	417	403	442	430	
12	396	405	367	378	342	355	321	336	304	321	291	310	282	303	277	300	276	301	279	306	286	315	297	328	312	345	331	366	354	391	381	
11	351	358	322	331	297	308	276	289	259	274	246	263	237	256	232	253	231	254	234	259	241	262	252	281	267	298	286	319	309	344	336	
10	310	315	281	288	256	265	235	246	218	231	205	220	196	213	191	210	190	211	193	216	200	225	211	238	226	255	245	276	268	301	295	
9	273	276	244	249	219	226	198	207	181	192	168	181	159	174	154	171	153	172	156	177	163	186	174	199	189	216	208	237	231	262	258	
8	240	241	211	214	186	191	165	172	148	157	135	146	126	139	121	136	120	137	123	142	130	151	141	164	156	181	175	202	198	227	225	
7	211	210	182	183	157	160	136	141	119	126	106	115	97	108	92	105	91	106	94	111	101	120	112	133	127	150	146	171	169	196	196	
6	186	183	157	156	132	133	111	114	94	99	81	88	72	81	67	78	66	79	69	84	76	93	87	106	102	123	121	144	144	169	171	
5	165	160	136	133	111	110	90	91	73	76	60	65	51	58	46	55	45	56	48	61	55	70	66	83	81	100	100	121	123	146	150	
4	148	141	119	114	94	91	73	72	56	57	43	46	34	39	29	36	28	37	31	42	38	51	49	64	64	81	83	102	106	127	133	
3	135	126	106	99	81	76	60	57	43	42	30	31	21	24	16	21	15	22	18	27	25	36	36	49	51	66	70	87	93	112	120	
2	126	115	97	88	72	65	51	46	34	31	21	20	12	13	7	10	6	11	9	16	16	25	27	38	42	55	61	76	84	101	111	
Y[1]	1	121	108	92	81	67	58	46	39	29	24	16	13	7	6	2	3	1	4	4	9	11	18	22	31	37	48	56	69	79	94	106
Y[0]	0	120	105	91	78	66	55	45	36	28	21	15	10	6	3	1	0	1	3	6	10	15	21	28	36	45	55	66	78	91	105	
Y[-1]	-1	123	106	94	79	69	56	48	37	31	22	18	11	9	4	4	1	3	2	6	7	13	16	24	29	39	46	58	67	81	92	108
-2	130	111	101	84	76	61	55	42	38	27	25	16	16	9	11	6	10	7	13	12	20	21	31	34	46	51	65	72	88	97	115	
-3	141	120	112	93	87	70	66	51	49	36	36	25	27	18	22	15	21	16	24	21	31	30	42	43	57	60	76	81	99	106	126	
-4	156	133	127	106	102	83	81	64	64	49	51	38	42	31	37	28	36	29	39	34	46	43	57	56	72	73	91	94	114	119	141	
-5	175	150	146	123	121	100	81	83	66	70	55	61	48	56	45	55	46	58	51	65	60	76	73	91	90	110	111	133	136	160		
-6	198	171	169	144	144	121	123	102	106	87	93	76	84	69	79	66	78	67	81	72	88	81	99	94	114	111	133	132	156	157	183	
-7	225	196	196	169	171	146	150	127	133	112	120	101	111	94	106	91	105	92	108	97	115	106	126	119	141	136	160	157	183	210		
-8	256	225	227	198	202	175	181	156	164	141	151	130	142	123	137	120	136	121	139	126	146	135	157	148	172	165	191	188	214	211	241	
-9	291	258	262	231	237	208	216	189	199	174	186	163	177	156	172	153	171	154	174	159	181	168	192	181	207	198	226	219	249	244	276	
-10	330	295	301	268	276	245	255	226	238	211	225	200	216	193	211	190	210	191	213	196	220	205	231	218	246	235	265	256	283	281	315	
-11	373	336	344	309	319	286	298	267	281	252	268	241	259	234	254	231	253	232	256	237	263	246	274	259	289	276	308	297	331	322	358	
-12	420	381	391	354	366	331	345	312	328	297	315	286	306	279	301	276	300	277	303	282	310	291	321	304	336	321	355	342	378	367	405	
-13	471	430	442	403	417	380	396	361	379	346	366	335	357	328	352	325	351	326	354	331	361	340	372	353	387	370	406	391	429	416	456	
-14	526	483	497	456	472	433	451	414	434	399	421	388	412	381	407	378	406	379	409	384	416	393	427	406	442	423	461	444	484	469	511	
-15	585	540	556	513	531	490	510	471	493	456	480	445	471	438	466	435	465	436	468	441	475	450	486	463	501	480	520	501	543	526	570	

Figure 1. This paraboctys is the verticals from $PS[x^2 + x + 1, x^2 - x, x^2 - 3x + 3]$ in offset $f = 0$.

$$f = 0.$$

See that $PS[x^2 + x + 1, x^2 - x, x^2 - 3x + 3]$ produces vertical sequences with the interlacing of y^o_{ip} between their ACC parabolas. Therefore, in offset $f=0$, the resulting paraboctys is:

For $Y[1]$: interlacing between $[6,3,4] = 2x^2 - x + 3$ and $[2,1,4] = 2x^2 + x$.

For $Y[0]$: interlacing between $[3,0,1] = 2x^2 - x$ and $[1,0,3] = 2x^2 + x$.

For $Y[-1]$: interlacing between $[4,1,2] = 2x^2 - x + 1$ and $[4,3,6] = 2x^2 + x + 3$

If we turn the paraboctys clockwise 90° around the central point (0,0), we get:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
Classif.	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES	DES					
Y_ip	-14,5	-13,5	-12,5	-11,5	-10,5	-9,5	-8,5	-7,5	-6,5	-5,5	-4,5	-3,5	-2,5	-1,5	-0,5	0,5	1,5	2,5	3,5	4,5	5,5	6,5	7,5	8,5	9,5	10,5	11,5	12,5	13,5	14,5	15,5			
f	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
b	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	-1	-3	-5	-7	-9	-11	-13	-15	-17	-19	-21	-23	-25	-27	-29	-31			
c	435	378	325	276	231	190	153	120	91	66	45	28	15	6	1	0	3	10	21	36	55	78	105	136	171	210	253	300	351	406	465			
-15	225	198	175	156	141	130	123	120	121	126	135	148	165	186	211	240	273	310	351	396	445	498	555	616	681	750	823	900	981	1066	1155			
-14	225	196	171	150	133	120	111	106	105	108	115	126	141	160	183	210	241	276	315	358	405	456	511	570	633	700	771	846	925	1008	1095			
-13	227	196	146	127	112	101	94	91	92	97	106	119	136	157	182	211	244	281	322	367	416	469	526	587	652	721	794	871	952	1037				
-12	231	198	169	144	123	106	93	84	79	78	81	88	99	114	133	156	183	214	249	288	331	378	429	484	543	606	673	744	819	898	981			
-11	237	202	171	144	121	102	87	76	69	66	67	72	81	94	111	132	157	186	219	256	297	342	391	444	501	562	627	696	769	846	927			
-10	245	208	175	146	121	100	83	70	61	56	55	58	65	76	91	110	133	160	191	226	265	308	355	406	461	520	583	650	721	796	875			
-9	255	216	181	150	123	100	81	66	55	48	45	46	51	60	73	90	111	136	165	198	235	276	321	370	423	480	541	606	675	748	825			
-8	267	226	189	156	127	102	81	64	51	42	37	36	39	46	57	72	91	114	141	172	207	246	289	336	387	442	501	564	631	702	777			
-7	281	238	199	164	133	106	83	64	49	38	31	28	29	34	43	56	73	94	119	148	181	218	259	304	353	406	463	524	589	658	731			
-6	297	252	211	174	141	112	87	66	49	36	27	22	21	24	31	42	57	76	99	126	157	192	231	274	321	372	427	486	549	616	687			
-5	315	268	225	186	151	120	93	70	51	36	25	18	15	16	21	30	43	60	81	106	135	168	205	246	291	340	393	450	511	576	645			
-4	335	286	241	200	163	130	101	76	55	38	25	16	11	10	13	20	31	46	65	88	115	146	181	220	263	310	361	416	475	538	605			
-3	357	306	259	217	177	142	111	84	61	42	25	16	9	6	7	12	21	34	51	72	97	121	159	196	237	282	331	384	441	502	567			
-2	381	328	279	234	193	156	123	94	69	48	31	18	9	4	3	6	13	24	39	58	81	108	139	174	213	256	303	354	409	468	531			
Y[1]	-1	407	352	301	254	211	172	137	106	79	56	37	22	11	4	1	2	7	16	29	46	67	92	121	154	191	232	277	326	379	436	497		
Y[0]	0	435	378	325	276	231	190	153	120	91	66	45	28	15	6	1	0	3	10	21	36	55	78	105	136	171	210	253	300	351	406	465		
Y[-1]	1	465	406	351	300	253	210	171	136	105	78	55	36	21	10	3	0	1	6	15	28	45	66	91	120	153	190	231	276	325	378	435		

Figure 1. Paraboctys $PS[2x^2 + 3x + 2, 2x^2 + x, 2x^2 - x]$. The vertical ones here are the horizontal ones of $PS[x^2 + x + 1, x^2 - x, x^2 - 3x + 3]$. Because of the clockwise 90° rotation the indexes y increase from top to bottom (opposite direction of the Y-axis).

Simplifying all verticals for offset $f = 0$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15						
Classif.	DES																																				
Y_ip	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5								
f	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
a ^o	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
b ^o	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1							
c ^o	225	196	169	144	121	100	81	64	49	36	25	16	9	4	1	0	1	4	9	16	25	36	45	54	64	81	100	121	144	169	196	225					
15	435	406	379	354	331	310	291	274	259	246	235	226	219	214	211	210	211	214	219	226	235	246	259	274	291	310	331	354	379	406	435						
14	407	378	351	326	303	282	263	246	231	218	207	198	191	186	183	182	183	186	191	198	207	218	231	246	263	282	303	326	351	378	407						
13	381	352	325	300	277	256	237	220	205	192	181	172	165	160	157	156	157	160	165	172	181	192	205	220	237	256	277	300	325	352	381						
12	357	328	301	276	253	232	213	196	181	168	157	148	141	136	133	132	133	136	141	148	157	168	181	196	213	232	253	276	301	328	357						
11	335	306	279	254	231	210	191	174	159	146	135	126	119	114	111	110	111	114	119	126	135	142	151	160	171	180	191	201	211	231	251	271	291	311	335		
10	315	286	259	234	211	190	171	154	139	126	115	106	99	94	91	90	91	94	99	106	115	126	139	154	171	190	211	234	259	286	315						
9	297	268	241	216	193	172	153	136	121	108	97	88	81	76	73	72	73	76	81	88	97	108	121	136	151	166	181	196	211	227	242	257	272	287	302	317	332
8	281	252	225	200	177	156	137	120	105	92	81	72	65	60	57	56	57	60	65	72	81	92	105	120	137	156	177	200	225	252	281						
7	267	238	211	186	163	142	123	106	91	78	67	58	51	46	43	42	43	46	51	58	67	78	91	106	123	142	163	186	211	238	267						
6	255	226	199	174	151	130	111	94	79	66	55	46	39	34	31	30	31	34	39	46	55	66	79	94	111	130	151	174	199	226	255						
5	245	216	189	164	141	120	101	84	69	56	45	36																									

See the composite generator $[3,0,1] \equiv [1,0,3] \equiv Y[y] = 2y^2 \pm y$. It is classified into two sequences at OEIS:

A000384 Hexagonal numbers: $a(n) = n^*(2*n-1)$.

0, 1, 6, 15, 28, 45, 66, 91, 120, 153, 190, 231, 276, 325, 378, 435, 496, 561, 630, 703, 780, 861, 946, 1035, 1128, 1225, 1326, 1431, 1540, 1653, 1770, 1891, 2016, 2145, 2278, 2415, 2556, 2701, 2850, 3003, 3160, 3321, 3486, 3655, 3828, 4005, 4186, 4371, 4560

A014105 Second hexagonal numbers: $a(n) = n^*(2*n + 1)$.

0, 3, 10, 21, 36, 55, 78, 105, 136, 171, 210, 253, 300, 351, 406, 465, 528, 595, 666, 741, 820, 903, 990, 1081, 1176, 1275, 1378, 1485, 1596, 1711, 1830, 1953, 2080, 2211, 2346, 2485, 2628, 2775, 2926, 3081, 3240, 3403, 3570, 3741, 3916, 4095, 4278

New sequences of primes we find when adding Integers. For example, adding 1, turn the parabolocrys clockwise 90°, and we have on offset $f = 0$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	DES																															
$y^2 - ip$	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5				
f^0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
a^0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
b^0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
c^0	226	197	170	145	122	101	82	65	50	37	26	17	10	5	2	1	5	10	17	26	37	50	65	82	101	122	145	170	197	226		
15	436	407	380	355	332	311	292	275	260	247	236	227	220	215	212	211	212	215	220	227	236	247	260	275	292	311	332	355	380	407	436	
14	408	379	352	327	304	283	264	247	232	219	208	199	192	187	184	183	184	187	192	199	208	219	232	247	264	283	304	327	352	379	408	
13	382	353	326	301	278	257	238	221	206	193	182	173	166	161	158	157	158	161	166	173	182	193	206	221	238	257	278	301	326	353	382	
12	358	329	303	277	254	233	214	197	182	169	158	149	142	137	134	133	134	137	142	149	158	169	182	197	214	233	254	277	302	329	358	
11	336	307	280	255	232	211	192	175	160	147	136	127	120	115	112	111	112	115	120	127	136	147	160	175	192	211	232	255	280	307	336	
10	316	287	260	235	212	191	172	155	140	127	116	107	100	95	92	91	92	95	100	107	116	127	140	155	172	191	212	235	260	287	316	
9	298	269	242	217	194	173	154	137	122	109	98	89	82	77	74	73	74	77	82	89	98	109	122	137	154	173	194	217	242	269	298	
8	282	253	226	201	178	157	138	121	106	93	82	73	66	61	58	57	58	61	66	73	82	93	106	121	138	157	178	201	226	253	282	
7	268	239	212	187	164	143	124	107	92	79	68	59	52	47	44	43	44	47	52	59	68	79	92	107	124	143	164	187	212	239	268	
6	256	227	200	175	152	131	112	95	80	67	56	47	40	35	32	31	32	35	40	47	56	67	80	95	112	131	152	175	200	227	256	
5	246	217	190	165	142	121	102	85	70	57	46	37	30	25	22	21	22	25	30	37	46	57	70	85	102	121	142	165	190	217	246	
4	238	209	182	157	134	113	94	77	62	49	38	29	22	17	14	13	14	17	22	29	38	49	62	77	94	113	134	157	182	209	238	
3	232	203	176	151	128	107	88	71	56	43	32	23	16	11	8	7	8	11	16	23	32	43	56	71	88	107	128	151	176	203	232	
2	228	199	172	147	124	103	84	67	52	39	28	19	12	7	4	3	4	7	12	19	28	39	52	67	84	103	124	147	172	199	228	
Y[1]	1	226	197	170	145	122	101	82	65	50	37	26	17	10	5	2	1	2	5	10	17	26	37	50	65	82	101	122	145	170	197	226
Y[0]	0	226	197	170	145	122	101	82	65	50	37	26	17	10	5	2	1	2	5	10	17	26	37	50	65	82	101	122	145	170	197	226
Y[-1]	-1	228	199	172	147	124	103	84	67	52	39	28	19	12	7	4	3	4	7	12	19	28	39	52	67	84	103	124	147	172	199	228
-2	232	203	176	151	128	107	88	71	56	43	32	23	16	11	8	7	8	11	16	23	32	43	56	71	88	107	128	151	176	203	232	
-3	238	209	182	157	134	113	94	77	62	49	38	29	22	17	14	13	14	17	22	29	38	49	62	77	94	113	134	157	182	209	238	
-4	246	217	190	165	142	121	102	85	70	57	46	37	30	25	22	21	22	25	30	37	46	57	70	85	102	121	142	165	190	217	246	
-5	256	227	200	175	152	131	112	95	80	67	56	47	40	35	32	31	32	35	40	47	56	67	80	95	112	131	152	175	200	227	256	
-6	268	239	212	187	164	143	124	107	92	79	68	59	52	47	44	43	44	47	52	59	68	79	92	107	124	143	164	187	212	239	268	
-7	282	253	226	201	178	157	138	121	106	93	82	73	66	61	58	57	58	61	66	73	82	93	106	121	138	157	178	201	226	253	282	
-8	298	269	242	217	194	173	154	137	122	109	98	89	82	77	74	73	74	77	82	89	98	109	122	137	154	173	194	217	242	269	298	
-9	316	287	260	235	212	191	172	155	140	127	116	107	100	95	92	91	92	95	107	116	127	140	155	172	191	212	235	260	287	316		
-10	336	307	280	255	232	211	192	175	160	147	136	127	120	115	112	111	112	115	120	127	136	147	160	175	192	211	232	255	280	307	336	
-11	358	329	302	277	254	233	214	197	182	169	158	149	142	137	134	133	134	134	137	142	149	158	169	182	197	214	233	254	277	302	329	358
-12	382	353	326	301	278	257	238	221	206	193	182	173	166	161	158	157	158	161	166	173	182	193	206	221	238	257	278	301	326	353	382	
-13	408	379	352	327	304	283	264	247	232	219	208	199	192	187	184	183	184	187	192	199	208	219	232	247	264	283	304	327	352	379	408	
-14	436	407	380	355	332	311	292	275	260	247	236	227	220	215	212	211	212	215	220	227	236	247	260	275	292	311	332	355	380	407	436	
-15	466	437	410	385	362	341	322	305	290	277	266	257	250	245	242	241	242	245	250	257	266	277	290	305	322	341	362	385	410	437	466	

Figure 1. $PS[x^2 + 2, x^2, x^2] + 1 = PS[x^2 + 3, x^2 + 1, x^2 + 1]$

3.4 The C-Destroyer and C-Submarine interleaving parabolas with a varying offset in $PS[x + 2, x, x]$

See the picture:

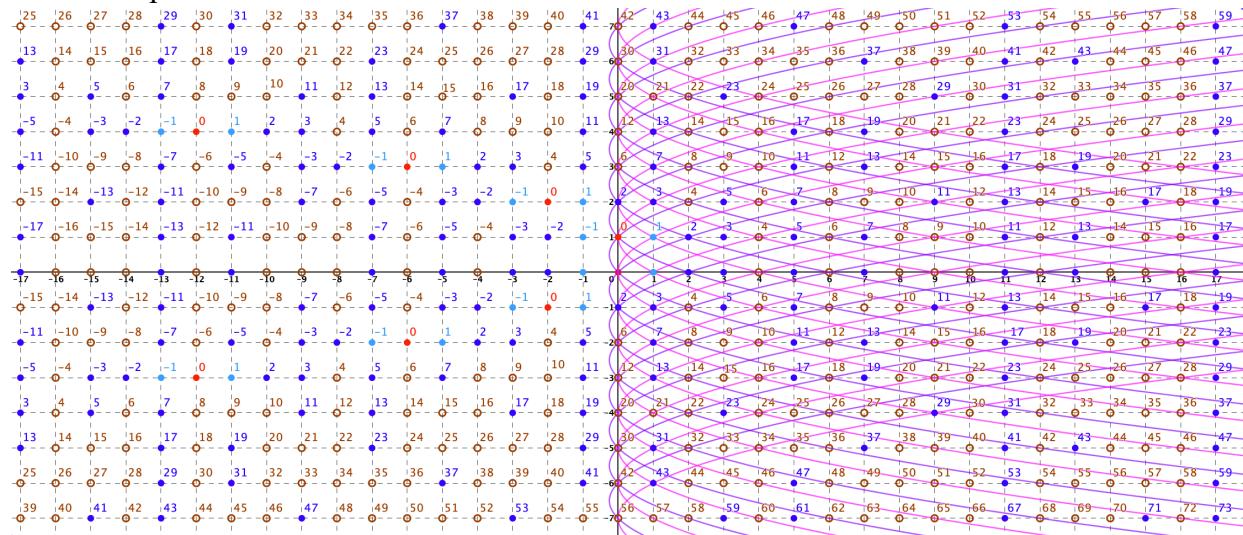


Figure 1. The combined C-Destroyers and C-Submarines vertical parabolas in column $x = 0$ of the lattice-grid $PS[x + 2, x, x]$.

Figure 1. The combined C-Destroyers and C-Submarines parabolas in $PS[x+2, x, x]$ table.

CENTER						
	Even	Odd	Even	Odd	Even	Odd
Y[1]	1	7	6	3	2	1
Y[0]	0	2	2	0	0	0
Y[-1]	-1	1	2	1	2	3

Figure 1. The center of the combined C-Destroyers and C-Submarines parabolas in table $PS[x + 2, x, x]$.

3.4.1 The row $Y[-1] = X_1[x]$

The center of the row $Y[-1] \equiv \{\dots, 1, 2, 1, 2, 3, 4, \dots\}$.

The row $Y[-1]$ is the result of the interlacing between two quadratics:

$$Y[-1] = X_1[x = even] + X_1[x = Odd]$$

$X_1[x = Even]$ is based on sequence $[1, 1, 3] = n^2 + n + 1 \equiv A002061$

$$x = Even = 2n$$

$$n = \frac{x}{2}$$

$$\begin{aligned} X_1[x = Even] &\equiv Ao0o0o2o0o6o1 \equiv [1, o, 2, o, 3, o] \equiv \left(\frac{x}{2}\right)^2 + \frac{x}{2} + 1 = \frac{x^2 + 2x + 4}{4} \\ &= 0.25x^2 + 0.5x + 1 \equiv \frac{A117950}{4} \equiv [1, 0.75, 1] = \frac{x^2 + (\sqrt{3})^2}{2^2} @f = 0 \end{aligned}$$

$$\begin{aligned} AXXXXXX &\equiv \{\dots, 0, 57, 0, 43, 0, 31, 0, 21, 0, 13, 0, 7, 0, 3, 0, 1, 0, 1, 0, 3, 0, 7, 0, 13, 0, 21, 0, 31, 0, 43 \\ &\quad 0, \dots\} \end{aligned}$$

and

$X_1[x = Odd]$ is based on sequence $[2, 2, 4] = n^2 + n + 2 \equiv A014206$

$$x = Odd = 2n - 1$$

$$n = \frac{x+1}{2}$$

$$\begin{aligned} X_1[x = Odd] &\equiv Ao0o1o4o2o0o6 \equiv [2, o, 2, o, 4, o] = \left(\frac{x+1}{2}\right)^2 + \frac{x+1}{2} + 2 \\ &= \frac{x^2 + 2x + 1 + 2x + 2 + 8}{4} = \frac{x^2 + 4x + 11}{4} = 0.25x^2 + x + 2.75 \\ &\equiv \frac{A117619}{4} \equiv [2, 1.75, 2] = \frac{x^2 + (\sqrt{7})^2}{2^2} @f = 0 \end{aligned}$$

$$AXXXXXX \equiv \{\dots, 74, 0, 58, 0, 44, 0, 32, 0, 22, 0, 14, 0, 8, 0, 4, 0, 2, 0, 2, 0, 4, 0, 8, 0, 14, 0, 22, 0, 32, 0, 44, \dots\}$$

$$X_1[-x = Even] = \frac{x^2 + 2x + 4}{4} \equiv \frac{A117950}{4}$$

$$X_1[-x = Odd] = \frac{x^2 + 4x + 11}{4} \equiv \frac{A117619}{4}$$

$$X_1[-x] = X_1[-x = even] + X_1[-x = Odd]$$

$$X_1[-x] = \frac{x^2 + (3x - x(-1)^x) + (7.5 - 3.5(-1)^x)}{4}$$

$$X_1[-x] = \frac{x^2 + 3x + 7.5 - (x + 3.5)(-1)^x}{4}$$

$$X_1[-x] = \frac{2x^2 + 6x + 15 - (2x + 7)(-1)^x}{8}$$

Process table to produce the row Y[-1]								
Classif.	DES	SUB		DES	SUB		X1 =	
y_ip	-0,5	-1		-0,5	-2		X1[Even]	
f	-1	-1		-1	-2		X1[Odd]	
	A002061	X1[Even]		A014206	X1[Odd]		X1[Even]	+ X1[Odd]
a	1	0,25		1	0,25			
b	1	0,5		1	1			
c	1	1	AXXXXXX	2	2,75	AXXXXXX		
	15	241	64,75	0	242	74	74	
	14	211	57	57	212	65,75	57	
	13	183	49,75	0	184	58	58	
	12	157	43	43	158	50,75	43	
	11	133	36,75	0	134	44	44	
	10	111	31	31	112	37,75	31	
	9	91	25,75	0	92	32	32	
	8	73	21	21	74	26,75	21	
	7	57	16,75	0	58	22	22	
	6	43	13	13	44	17,75	13	
	5	31	9,75	0	32	14	14	
	4	21	7	7	22	10,75	7	
	3	13	4,75	0	14	8	8	
	2	7	3	3	8	5,75	3	
	Y[1]	1	3	1,75	0	4	4	
	Y[0]	0	1	1	2	2,75	1	
	Y[-1]	-1	1	0,75	0	2	2	
		-2	3	1	1	4	1,75	
		-3	7	1,75	0	8	2	
		-4	13	3	3	14	2,75	
		-5	21	4,75	0	22	4	
		-6	31	7	7	32	5,75	
		-7	43	9,75	0	44	8	
		-8	57	13	13	58	10,75	
		-9	73	16,75	0	74	14	
		-10	91	21	21	92	17,75	
		-11	111	25,75	0	112	22	
		-12	133	31	31	134	26,75	
		-13	157	36,75	0	158	32	
		-14	183	43	43	184	37,75	
		-15	211	49,75	0	212	44	

Figure 1. Sequence AXXXXXX is the row $Y[-1]$ of the combined C-Destroyers and C-Submarines parabolas in $PS[x + 2, x, x]$. Because of the change of offset that occurs when we put the zeros, the direction of the final sequence is reversed.

The complete sequence in row $Y[-1]$ with positive, zero, and negative indexes is:

$AXXXXXX \equiv \{ \dots, 212, 183, 184, 157, 158, 133, 134, 111, 112, 91, 92, 73, 74, 57, 58, 43, 44, 31, 32, 21, 22, 13, 14, 7, 8, 3, 4, 1, 2, 1, 2, 3, 4, 7, 8, 13, 14, 21, 22, 31, 32, 43, 44, 57, 58, 73, 74, 91, 92, 111, 112, 133, 134, 157, 158, 183, 184, 211, 212, 241, 242, 273, \dots \}$.

Obs.: (to create new sequences with Zeros between elements, and generalize the work of Sato
[link http://vixra.org/pdf/1210.0025v7.pdf](http://vixra.org/pdf/1210.0025v7.pdf))

3.4.2 The row $Y[0] = X_2[x]$

The center of the row $Y[0] \equiv \{\dots, 2, 2, 0, 0, 0, 0, \dots\}$.

The row $Y[0]$ is the result of the interlacing between two quadratics:

$$Y[0] = X_2[x = even] + X_2[x = Odd]$$

$X_2[x = Even]$ is based on sequence $[2, 0, 0] = n^2 - n \equiv A002378 \equiv n(n \pm 1)$

$$x = Even = 2n$$

$$n = \frac{x}{2}$$

$$\begin{aligned} X_2[x = Even] &\equiv A0000o2o3o7o8 \equiv [2, o, 0, o, 0, o] \equiv \left(\frac{x}{2}\right)^2 - \frac{x}{2} = \frac{x^2 - 2x}{4} \\ &= 0.25x^2 - 0.5x \equiv \frac{A005563}{4} \equiv [0, -0.25, 0] = \frac{x^2 - 1^2}{2^2} @f = 0 \end{aligned}$$

$AXXXXXX \equiv \{\dots, 0, 42, 0, 30, 0, 20, 0, 12, 0, 6, 0, 2, 0, 0, 0, 0, 2, 0, 6, 0, 12, 0, 20, 0, 30, 0, 42, 0, 56, 0, \dots\}$

and

$X_2[x = Odd]$ is based on sequence $[2, 0, 0] = n^2 - n \equiv A002378$

$$x = Odd = 2n - 1$$

$$n = \frac{x + 1}{2}$$

$$\begin{aligned} X_2[x = Odd] &\equiv A0o0o2o3o7o8 \equiv [o, 2, o, 0, o, 0] = \left(\frac{x + 1}{2}\right)^2 - \frac{x + 1}{2} \\ &= \frac{x^2 + 2x + 1 - 2x - 2}{4} = \frac{x^2 - 1}{4} = 0.25x^2 - 0.25 \equiv \frac{A005563}{4} \\ &\equiv [0, -0.25, 0] = \frac{x^2 - 1^2}{2^2} @f = 0 \end{aligned}$$

$Axxxxxx \equiv \{\dots, 56, 0, 42, 0, 30, 0, 20, 0, 12, 0, 6, 0, 2, 0, 0, 0, 0, 2, 0, 6, 0, 12, 0, 20, 0, 30, 0, 42, 0, 56, \dots\}$

$$X_2[-x = Even] = \frac{x^2 - 2x}{4} = 0.25x^2 - 0.5x \equiv \frac{A005563}{4}$$

$$X_2[-x = Odd] = \frac{x^2 - 1}{4} = 0.25x^2 - 0.25 \equiv \frac{A005563}{4}$$

$$X_2[-x] = X_2[-x = even] + X_2[-x = Odd]$$

$$X_2[-x] = \frac{x^2 - (x + x(-1)^x) - (0.5 - 0.5(-1)^x)}{4}$$

$$X_2[-x] = \frac{x^2 - x - 0.5 - (x + 0.5)(-1)^x}{4}$$

$$X_2[-x] = \frac{2x^2 - 2x - 1 - (2x + 1)(-1)^x}{8}$$

Process table to produce the row Y[0]								
Classif.	DES	SUB		DES	SUB		X2 =	
y_ip	0,5	1		0,5	0		X2[Even]	
f	0	1		0	0		X2[Odd]	
	A002378	X2[Even]		A002378	X2[Odd]			
a	1	0,25					X2 =	
b	-1	-0,5					X2[Even]	
c	0	0	AXXXXXX				+ X2[Odd]	
	15	210	48,75	0	210	56	56	
	14	182	42	42	182	48,75	0	
	13	156	35,75	0	156	42	42	
	12	132	30	30	132	35,75	0	
	11	110	24,75	0	110	30	30	
	10	90	20	20	90	24,75	0	
	9	72	15,75	0	72	20	20	
	8	56	12	12	56	15,75	0	
	7	42	8,75	0	42	12	12	
	6	30	6	6	30	8,75	0	
	5	20	3,75	0	20	6	6	
	4	12	2	2	12	3,75	0	
	3	6	0,75	0	6	2	2	
	2	2	0	0	2	0,75	0	
Y[1]	1	0	-0,25	0	0	0	0	
Y[0]	0	0	0	0	0	-0,25	0	
Y[-1]	-1	2	0,75	0	2	0	0	
	-2	6	2	2	6	0,75	0	
	-3	12	3,75	0	12	2	2	
	-4	20	6	6	20	3,75	0	
	-5	30	8,75	0	30	6	6	
	-6	42	12	12	42	8,75	0	
	-7	56	15,75	0	56	12	12	
	-8	72	20	20	72	15,75	0	
	-9	90	24,75	0	90	20	20	
	-10	110	30	30	110	24,75	0	
	-11	132	35,75	0	132	30	30	
	-12	156	42	42	156	35,75	0	
	-13	182	48,75	0	182	42	42	
	-14	210	56	56	210	48,75	0	
	-15	240	63,75	0	240	56	56	

Figure 1. Sequence A110660 is the row $Y[0]$ of the combined C-Destroyers and C-Submarines parabolas in $PS[x + 2, x, x]$.

The complete sequence in row $Y[0]$ with positive, zero, and negative indexes is:

$$A110660 \equiv$$

$$\{ \dots, 56, 42, 42, 30, 30, 20, 20, 12, 12, 6, 6, 2, 2, 0, 0, 0, 0, 2, 2, 6, 6, 12, 12, 20, 20, 30, 30, 42, 42, 56, 56, \dots \}.$$

3.4.3 The row $Y[1] = X_3[x]$

The center of the row $Y[1] \equiv \{\dots, 7, 6, 3, 2, 1, 0, \dots\}$.

The row $Y[1]$ is the result of the interlacing between two quadratics:

$$Y[1] = X_3[x = even] + X_3[x = Odd]$$

$X_3[x = Even]$ is based on sequence $[7, 3, 1] = n^2 - 3n + 3 \equiv A002061$

$$x = Even = 2n$$

$$n = \frac{x}{2}$$

$$\begin{aligned} X_3[x = Even] &\equiv A000002000601 \equiv [7, o, 3, o, 1, o] \equiv \left(\frac{x}{2}\right)^2 - \frac{3x}{2} + 3 = \frac{x^2 - 6x + 12}{4} \\ &= 0.25x^2 - 1.5x + 3 \equiv \frac{A117950}{4} \equiv [1, 0.75, 1] = \frac{x^2 - (\sqrt{3})^2}{2^2} @f = 0 \end{aligned}$$

$AXXXXXX \equiv \{\dots, 0, 31, 0, 21, 0, 13, 0, 7, 0, 3, 0, 1, 0, 1, 0, 3, 0, 7, 0, 13, 0, 21, 0, 31, 0, 43, 0, 57, 0, 73, 0, \dots\}$

and

$X_3[x = Odd]$ is based on sequence $[6, 2, 0] = n^2 - 3n + 2 \equiv A002378$

$$x = Odd = 2n - 1$$

$$n = \frac{x + 1}{2}$$

$$\begin{aligned} X_3[x = Odd] &\equiv A00002030708 \equiv [o, 6, o, 2, o, 0] = \left(\frac{x + 1}{2}\right)^2 - \frac{3x + 3}{2} + 2 \\ &= \frac{x^2 + 2x + 1 - 6x - 6 + 8}{4} = \frac{x^2 - 4x + 3}{4} = 0.25x^2 - x + 0.75 \\ &\equiv \frac{A005563}{4} \equiv [0, -0.25, 0] = \frac{x^2 - 1^2}{2^2} @f = 0 \end{aligned}$$

$AXXXXXX \equiv \{\dots, 42, 0, 30, 0, 20, 0, 12, 0, 6, 0, 2, 0, 0, 0, 0, 2, 0, 6, 0, 12, 0, 20, 0, 30, 0, 42, 0, 56, 0, 72, \dots\}$

$$X_3[x = Even] = \frac{x^2 - 6x + 8}{4} \equiv \frac{A117950}{4}$$

$$X_3[x = Odd] = \frac{x^2 - 4x - 1}{4} \equiv \frac{A005563}{4}$$

$$X_3[x] = X_3[x = even] + X_3[x = Odd]$$

$$X_3[x] = \frac{x^2 - (5x + x(-1)^x) - (4.5 + 3.5(-1)^x)}{4}$$

$$X_3[x] = \frac{x^2 - 5x - 4.5 - (x + 3.5)(-1)^x}{4}$$

$$X_3[-x] = \frac{2x^2 - 10x - 9 - (2x + 7)(-1)^x}{8}$$

Process table to produce the row Y[1]								
Classif.	DES	SUB	X3[Even]	DES	SUB	X3[Odd]	X3 = X3[Even] + X3[Odd]	A130404
y_ip	1,5	3		1,5	2			
f	1	3		1	2			
A002061	X3[Even]	A002378	X3[Odd]	182	42	42	42	
a	1	0,25	156	35,75	0	31	31	
b	-3	-1,5	132	30	30	30	30	
c	3	3	110	24,75	0	21	21	
	15	183	90	20	20	20	20	
	14	157	72	15,75	0	13	13	
	13	133	56	12	12	12	12	
	12	111	42	8,75	0	7	7	
	11	91	30	6	6	6	6	
	10	73	20	3,75	0	3	3	
	9	57	12	2	2	2	2	
	8	43	6	0,75	0	1	1	
	7	31	2	0	0	0	0	
	6	21	0	-0,25	0	1	1	
	5	13	0	0	0	0	0	
	4	7	0	0	0	0	0	
	3	3	0	0	0	0	0	
	2	1	0	0	0	0	0	
Y[1]	1	1	1,75	0	0	0	0	
Y[0]	0	3	3	2	0,75	0	3	
Y[-1]	-1	7	4,75	6	2	2	2	
	-2	13	7	12	3,75	0	7	
	-3	21	9,75	20	6	6	6	
	-4	31	0	30	8,75	0	13	
	-5	43	13	42	12	12	12	
	-6	57	21	56	15,75	0	21	
	-7	73	0	72	20	20	20	
	-8	91	31	90	24,75	0	31	
	-9	111	0	110	30	30	30	
	-10	133	43	132	35,75	0	43	
	-11	157	49,75	156	42	42	42	
	-12	183	57	182	48,75	0	57	
	-13	211	0	210	56	56	56	
	-14	241	73	240	63,75	0	73	
	-15	273	81,75	272	72	72	72	

Figure 1. Sequence A130404 is the row $Y[1]$ of the combined C-Destroyers and C-Submarines parabolas in $PS[x + 2, x, x]$.

The complete sequence in row $Y[1]$ with positive, zero, and negative indexes is: \A130404\ \equiv \{..., 42, 31, 30, 21, 20, 13, 12, 7, 6, 3, 2, 1, 0, 1, 0, 3, 2, 7, 6, 13, 12, 21, 20, 31, 30, 43, 42, 57, 56, 73, 72, ... \}.

A130404 Numbers n such that $\text{floor}(n/2)$ is a positive triangular number. Partial sums of A093178. 0, 1, 2, 3, 6, 7, 12, 13, 20, 21, 30, 31, 42, 43, 56, 57, 72, 73, 90, 91, 110, 111, 132, 133, 156, 157, 182, 183, 210, 211, 240, 241, 272, 273, 306, 307, 342, 343, 380, 381, 420, 421, 462, 463, 506, 507, 552, 553, 600, 601, 650, 651, 702, 703, 756, 757, 812, 813

A093178 If n is even then 1, otherwise n. 1, 1, 1, 3, 1, 5, 1, 7, 1, 9, 1, 11, 1, 13, 1, 15, 1, 17, 1, 19, 1, 21, 1, 23, 1, 25, 1, 27, 1, 29, 1, 31, 1, 33, 1, 35, 1, 37, 1, 39, 1, 41, 1, 43, 1, 45, 1, 47, 1, 49, 1, 51, 1, 53, 1, 55, 1, 57, 1, 59, 1, 61, 1, 63, 1, 65, 1, 67, 1, 69, 1, 71, 1, 73, 1, 75, 1, 77, 1, 79, 1, 81, 1, 83, 1, 85

4 Study of the sequences produced by the elements in D parabolic formation in the $PS[x + 1, x, x + 1]$

4.1 The D-Submarine parabolas with offset Zero in $PS[x + 1, x, x + 1]$

See the picture:

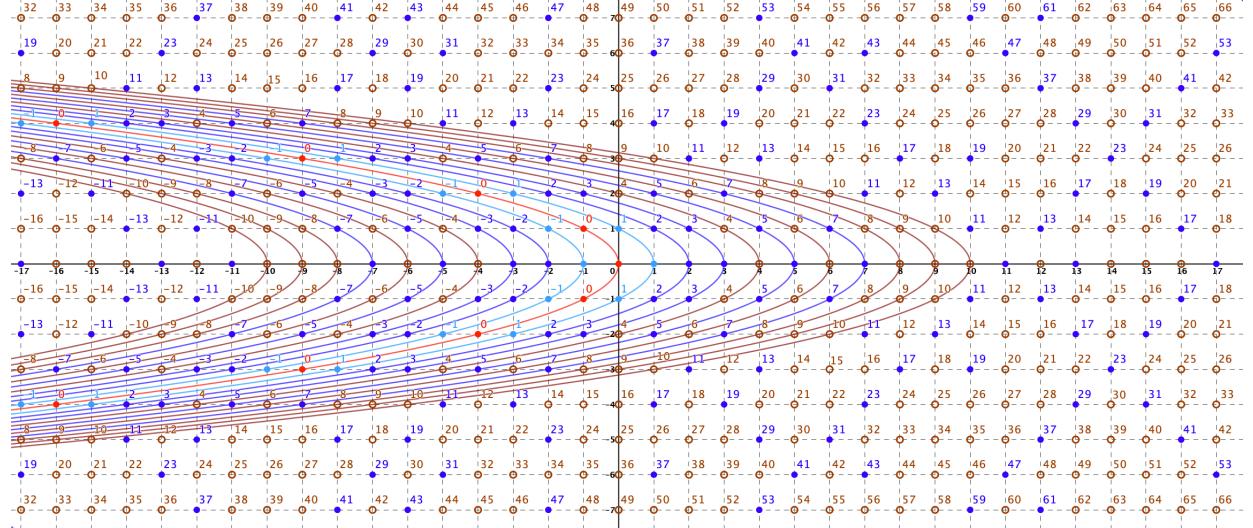


Figure 1. The D-Submarine parabolas of the form $x = -y^2 + c$ for $-10 \leq c \leq 10$ with offset $f = 0$ in lattice-grid $PS[x + 1, x, x + 1]$. They produce the paraboctys $PS[x, x, x]$.

Thus, the D-Submarine parabolas of the form $x = -y^2 + c$ for $-10 \leq c \leq 10$ with offset $f = 0$ in lattice-grid $PS[x + 2, x, x]$ produce paraboctys with coefficient $a = 0$. Each D-Submarine parabola with offset $f = 0$ has sequence $Y[y]$ only the constant value of its coefficient c .

Column -->	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
c	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
15	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
14	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
13	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
12	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
10	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
9	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
8	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
7	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
6	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
5	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
4	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
3	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
2	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
Y[1]	1	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Y[0]	0	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Y[-1]	-1	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
-2	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-3	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-4	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-5	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-6	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-7	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-8	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-9	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-10	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-12	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-13	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-14	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
-15	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	

Figure 1. Paraboctys $PS[x, x, x]$. Initial vertical lines to form any specific paraboctys.

Thus, we can imagine the construction of the $PS[x + 1, x, x + 1]$ starting from infinite vertical lines of the same value according to the table above.

Then, we mold these vertical lines according to the D-Submarine parabolas of the form $x = -y^2 + c$, where $Y[y] = c$ with offset Zero.

This procedure produces the specific paraboctys $PS[x + 1, x, x + 1]$:

Column -->	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
x_ip	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
x_focus	-9,8	-8,8	-7,8	-6,8	-5,8	-4,8	-3,8	-2,8	-1,8	-0,8	0,25	1,25	2,25	3,25	4,25	5,25	6,25	7,25	8,25	9,25	10,3	
LR	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Δ	40	36	32	28	24	20	16	12	8	4	0	-4	-8	-12	-16	-20	-24	-28	-32	-36	-40	
$ \sqrt{\Delta} $	6,32	6	5,66	5,29	4,9	4,47	4	3,46	2,83	2	0	####	####	####	####	####	####	####	####	####	####	
C. G.	0,32	0	0,66	0,29	0,9	0,47	0	0,46	0,83	0	0	####	####	####	####	####	####	####	####	####	####	
Root1	3,16	3	2,83	2,65	2,45	2,24	2	1,73	1,41	1	0	####	####	####	####	####	####	####	####	####	####	
Root2	-3,2	-3	-2,8	-2,6	-2,4	-2,2	-2	-1,7	-1,4	-1	0	####	####	####	####	####	####	####	####	####	####	
Root2-Root1	-6,3	-6	-5,7	-5,3	-4,9	-4,5	-4	-3,5	-2,8	-2	0	####	####	####	####	####	####	####	####	####	####	
Classif.	SUB																					
y_ip	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
f	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
c	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	
15	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	
14	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	
13	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	
12	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	
11	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	
10	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	
9	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	
8	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	
7	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	
6	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	
5	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
4	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
3	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
2	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Y[1]	1	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11
Y[0]	0	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Y[-1]	-1	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11
-2	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
-3	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
-4	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
-5	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
-6	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	
-7	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	
-8	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	
-9	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	
-10	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	
-11	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	
-12	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	
-13	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	
-14	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	
-15	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	

Figure 1. The specific paraboctys $PS[x + 1, x, x + 1]$ in table format. The central column is the Square numbers sequence A000290 $\equiv [1,0,1] \equiv Y[y] = y^2$. Only line Y[0] remains unshifted from $PS[x, x, x]$ to $PS[x + 2, x, x]$.

4.2 The D-Destroyer parabolas with variable offset on a vertical of $PS[x + 1, x, x + 1]$

See the picture:

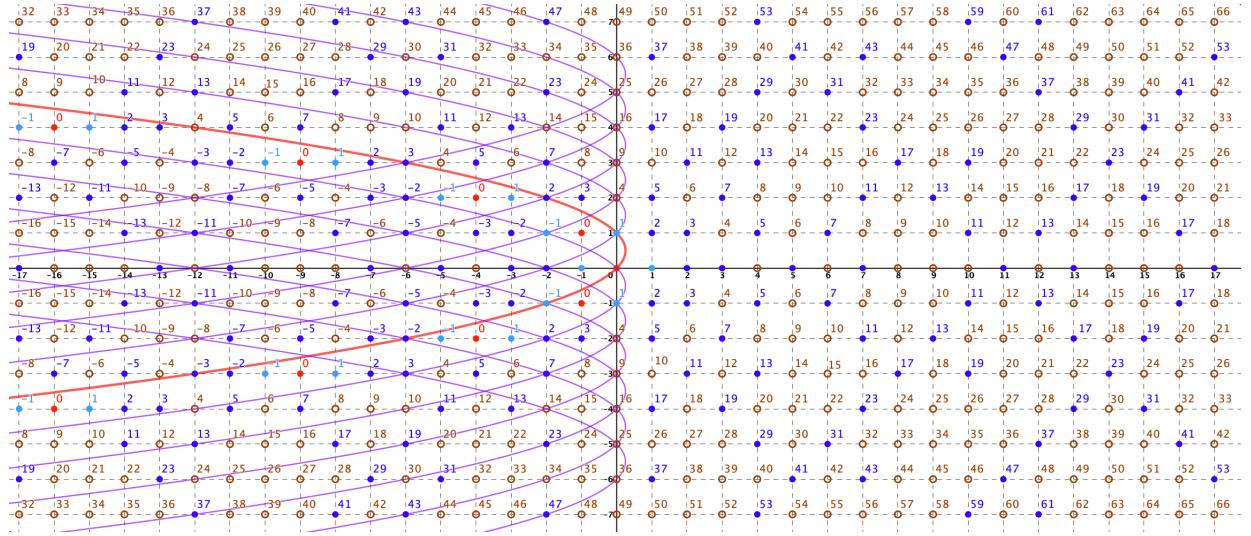


Figure 1. The D-Destroyer parabolas in column $x = 0$ of the lattice-grid $PS[x + 1, x, x + 1]$. They have offset following the staircase function with the step of a unit. These parabolas have equations in the XY plane of the form $x = -y^2 + Odd * y - Oblong$. In terms of the offset value: $x = -y^2 + (2f + 1)y - (f^2 + f)$.

Each parabola $x = -y^2 + (2f + 1)y - (f^2 + f)$ in lattice-grid $PS[x + 1, x, x + 1]$ will produce a quadratic sequence of the form $Y[y] = ay^2 + by + c$. Now, to determine the coefficients a, b, c , for each sequence we have to determine three consecutive elements.

Over each parabola, we can choose 3 consecutive elements from top to bottom or from bottom to top. Because we are synchronizing the y index with the Y-axis, we will choose 3 consecutive bottom-up elements which is the increasing index direction: $[Y[-1], Y[0], Y[1]]$.

The elements of row $y = -1$ in the new paraboctys will be noted as $@Y[-1]$.

The elements of row $y = 0$ in the new paraboctys will be noted as $@Y[0]$.

The elements of row $y = 1$ in the new paraboctys will be noted as $@Y[1]$.

So, let's create the new paraboctys $PS[@Y[-1], @Y[0], @Y[1]]$. This new paraboctys will contain all the sequences formed by the D-Destroyer parabolas with a variable offset in a vertical of lattice-grid $PS[x + 1, x, x + 1]$.

As we have D-Destroyer parabolas, we can understand each sequence as being made of one element of the vertical column $x = -2$ to assume the $@Y[-1]$ elements position and two elements of the vertical column $x = 0$ to assume the $@Y[0]$ and $@Y[1]$ elements positions.

Consequently,

- The elements on the vertical column $x = -2$ with offset $f = -1$ of the current paraboctys $PS[x + 1, x, x + 1]$ is:

$$A008865 \equiv [-2, -1, 2] \equiv @Y[-1] = x^2 + 2x - 1$$

- The elements on the vertical column $x = 0$ with offset $f = 0$ of the current paraboctys $PS[x + 1, x, x + 1]$ is:

$$A000290 \equiv [1, 0, 1] \equiv @Y[0] = x^2$$

- The elements on the vertical column $x = 0$ with offset $f = 1$ of the current paraboctys $PS[x + 1, x, x + 1]$ is:

$$A000290 \equiv [4, 1, 0] \equiv @Y[1] = x^2 - 2x + 1$$

Finally, we create the new paraboctys $PS[@Y[-1], @Y[0], @Y[1]] = PS[x^2 + 2x - 1, x^2, x^2 - 2x + 1]$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
b	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	-1	-3	-5	-7	-9	-11	-13	-15	-17	-19	-21	-23	-25	-27	-29	
c	225	196	169	144	121	100	81	64	49	36	25	16	9	4	1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
15	690	631	574	519	466	415	366	319	274	231	190	151	114	79	46	15	-14	-41	-66	-89	-110	-129	-146	-161	-174	-185	-194	-201	-206	-209	-210	
14	659	602	547	494	443	394	347	302	259	218	179	142	107	74	43	14	-13	-38	-61	-82	-101	-118	-133	-146	-157	-166	-173	-178	-181	-182	-181	
13	628	573	520	469	420	373	328	285	244	205	168	133	100	69	40	13	-12	-35	-56	-75	-92	-107	-120	-131	-140	-147	-152	-155	-156	-155	-152	
12	597	544	493	444	397	352	309	268	229	192	157	124	93	64	37	12	-11	-32	-51	-68	-83	-96	-107	-123	-128	-131	-132	-131	-128	-123		
11	566	515	466	419	374	331	290	251	214	179	146	115	86	59	34	11	-10	-29	-46	-61	-74	-85	-94	-101	-106	-109	-110	-109	-106	-101	-94	
10	535	486	439	394	351	310	271	234	199	166	135	106	79	54	31	10	-9	-26	-41	-54	-65	-74	-81	-86	-90	-89	-86	-81	-74	-65		
9	504	457	412	369	328	289	252	217	184	153	124	97	72	49	28	9	-8	-23	-36	-47	-56	-63	-68	-71	-72	-71	-68	-63	-56	-47	-36	
8	473	428	385	344	305	268	233	200	169	140	113	88	65	44	25	8	-7	-20	-31	-40	-47	-52	-55	-56	-55	-52	-47	-40	-31	-20	-7	
7	442	399	358	319	282	247	214	183	154	127	102	79	58	39	22	7	-6	-17	-26	-33	-38	-41	-42	-41	-38	-33	-26	-17	-6	7	22	
6	411	370	331	294	259	226	195	166	139	114	91	70	51	34	19	6	-5	-14	-21	-26	-29	-30	-29	-26	-21	-14	-5	6	19	34	51	
5	380	341	304	269	236	205	176	149	124	101	80	61	44	29	16	5	-4	-11	-16	-19	-20	-19	-16	-11	-4	5	16	29	44	61	80	
4	349	312	277	244	213	184	157	132	109	88	69	52	37	24	13	4	-3	-8	-11	-12	-11	-8	-3	4	13	24	37	52	69	88	109	
3	318	283	250	219	190	163	138	115	94	75	58	43	30	19	10	3	-2	-5	-6	-5	-2	3	10	19	30	43	58	75	94	115	138	
2	287	254	223	194	167	142	119	98	79	62	47	34	23	14	7	2	-1	-2	-1	2	7	14	23	34	47	62	79	98	119	142	167	
Y[1]	1	256	225	196	169	144	121	100	81	64	49	36	25	16	9	4	1	0	1	4	9	16	25	36	49	64	81	100	121	144	169	196
Y[0]	0	225	196	169	144	121	100	81	64	49	36	25	16	9	4	1	0	1	4	9	16	25	36	49	64	81	100	121	144	169	196	
Y[-1]	-1	194	167	142	119	98	79	62	47	34	23	14	7	2	-1	-2	-1	2	7	14	23	34	47	62	79	98	119	142	167	194	223	254
-2	163	138	115	94	75	58	43	30	19	10	3	-2	-5	-6	-5	-2	3	10	19	30	43	58	75	94	115	138	163	190	219	250	283	
-3	132	109	88	69	52	37	24	13	4	-3	-8	-11	-12	-11	-8	-3	4	13	24	37	52	69	88	109	132	157	184	213	244	277	312	
-4	101	80	61	44	29	16	5	-4	-11	-16	-19	-20	-19	-16	-11	-4	5	16	29	44	61	80	101	124	149	176	205	236	269	304	341	
-5	70	51	34	19	6	-5	-14	-21	-26	-29	-30	-29	-26	-21	-14	-5	6	19	34	51	70	91	114	139	166	195	226	259	294	331	370	
-6	39	22	7	-6	-17	-26	-33	-38	-41	-42	-41	-38	-33	-26	-17	-6	7	22	39	58	79	102	127	154	183	214	247	282	319	358	399	
-7	8	-7	-20	-31	-40	-47	-52	-55	-56	-55	-52	-47	-40	-31	-20	-7	8	25	44	65	88	113	140	169	200	233	268	305	344	385	428	
-8	-23	-36	-47	-56	-63	-68	-71	-72	-71	-68	-63	-56	-47	-36	-23	-8	9	28	49	72	97	124	153	184	217	252	289	328	369	412	457	
-9	-54	-65	-74	-81	-86	-89	-90	-89	-86	-81	-74	-65	-54	-41	-26	-9	10	31	54	79	106	135	166	199	234	271	310	351	394	439	486	
-10	-85	-94	-101	-106	-109	-110	-109	-106	-101	-94	-85	-74	-61	-46	-29	-10	11	34	59	86	115	146	179	214	251	290	331	374	419	466	515	
-11	-116	-123	-128	-131	-132	-131	-123	-116	-107	-96	-83	-68	-51	-32	-11	12	37	64	93	124	157	192	229	268	309	352	397	444	493	544		
-12	-147	-152	-155	-156	-155	-152	-147	-140	-131	-120	-107	-92	-75	-56	-35	-12	13	40	69	100	133	168	205	244	285	328	373	420	469	520	573	
-13	-178	-181	-182	-181	-178	-173	-166	-157	-146	-133	-118	-101	-82	-61	-38	-13	14	43	74	107	142	179	218	259	302	347	394	443	494	547	602	
-14	-209	-210	-209	-206	-201	-194	-185	-174	-161	-146	-129	-110	-89	-66	-41	-14	15	46	79	114	151	190	231	274	319	366	415	466	519	574	631	
-15	-240	-239	-236	-231	-224	-215	-204	-191	-176	-159	-140	-119	-96	-71	-44	-15	16	49	84	121	160	201	244	289	336	385	436	489	544	601	660	

Figure 1. Paraboctys $PS[x^2 + 2x - 1, x^2, x^2 - 2x + 1]$. The verticals represent the sequences produced by D-Destroyer parabolas with variable offset on the vertical $x = 0$ of the $PS[x + 1, x, x + 1]$. The D-Destroyer parabolas with positive offset produce the vertical sequences on the left side of this table. The D-Destroyer parabolas with negative offset produce the vertical sequences on the right side of this table.

If we turn the paraboctys clockwise 90° around the central point $(0,0)$, we get:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB				
Y_ip	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
f	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
b	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0	2	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	-26	-28	-30	
c	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
-15	-240	-209	-178	-147	-116	-85	-54	-23	8	39	70	101	132	163	194	225	256	287	318	349	380	411	442	473	504	535	566	597	628	659	690	
-14	-239	-210	-181	-152	-123	-94	-65	-36	-7	-22	51	80	109	138	167	196	225	254	283	312	341	370	399	428	457	486	515	544	573	602	631	
-13	-236	-209	-182	-155	-128	-101	-74	-47	-20	7	34	61	88	115	142	169	196	223	250	277	304	331	358	385	412	439	466	493	520	547	574	
-12	-231	-206	-181	-156	-131	-106	-81	-56	-31	-6	19	44	69	94	119	144	169	194	219	244	269	294	319	344	369	394	419	444	469	494	519	
-11	-224	-201	-178	-155	-132	-109	-86	-63	-40	-17	6	29	52	75	98	121	141	167	190	213	236	258	282	305	328	351	374	397	420	443	466	
-10	-215	-194	-173	-152	-131	-110	-89	-68	-47	-26	-5	16	37	58	79	100	121	142	163	184	205	226	247	268	289	310	331	352	373	394	415	
-9	-204	-185	-166	-147	-128	-109	-90	-71	-52	-33	-14	5	24	43	62	81	100	119	138	157	176	195	214	233	252	271	290	309	328	347	366	
-8	-191	-174	-157	-140	-123	-106	-89	-72	-55	-38	-21	-4	13	30	47	64	81	98	115	132	149	166	183	200	217	234	251	268	285	302	319	
-7	-176	-161	-146	-131	-116	-101	-86	-71	-56	-41	-26	-11	4	19	34	49	64	79	94	109	124	139	154	169	184	199	214	229	244	259	274	
-6	-159	-146	-133	-120	-107	-94	-81	-68	-55	-42	-29	-16	-3	10	23	36	49	62	75	88	101	114	127	140	153	166	179	192	205	218	231	
-5	-140	-129	-118	-107	-96	-85	-74	-63	-52	-41	-30	-19	-8	3	14	25	36	47	58	69	80	91	102	113	124	135	146	157	168	179	190	
-4	-119	-110	-101	-92	-83	-74	-65	-56	-47	-38	-29	-20	-11	-2	7	16	25	34	43	52	61	70	79	88	97	106	115	124	133	142	151	
-3	-96	-89	-82	-75	-68	-61	-54	-47	-40	-33	-26	-19	-12	-5	2	9	16	23	30	37	44	51	58	65	72	79	86	93	100	107	114	
-2	-71	-66	-61	-56	-51	-46	-41	-36	-31	-26	-21	-16	-11	-6	-1	4	14	19	24	29	34	39	44	49	54	59	64	69	74	79		
Y[1]	-1	-44	-41	-38	-35	-32	-29	-26	-23	-20	-17	-14	-11	-8	-5	-2	1	4	7	10	13	16	19	22	25	28	31	34	37	40	43	46
Y[0]	0	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Y[1]	1	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14
2	49	46	43	40	37	34	31	28	25	22	19	16	13	10	7	4	1	-2	-5	-8	-11	-14	-17	-20	-23	-26	-29	-32	-35	-38	-41	
3	84	79	74	69	64	59	54	49	44	39	34	29	24	19	14	9	4	-1	-6	-11	-16	-21	-26	-31	-36	-41	-46	-51	-56	-61	-66	
4	121	114	107	100	93	86	79	72	65	58	51	44	37	30	23	16	9	2	-5	-12	-19	-26	-33	-40	-47	-54	-61	-68	-75	-82	-89	
5	160	151	142	133	124	115	106	97	88	79	70	61	52	43	34	25	16	7	-2	-11	-20	-29	-38	-47	-56	-65	-74	-83	-92	-101	-110	
6	201	190	179	168	157	146	135	124	113	102	91	80	69	58	47	36	25	14	3	-8	-19	-30	-41	-52	-63	-74	-85	-96	-107	-118	-129	
7	244	231	218	205	192	179	166	153	140	127	114	101	88	75	62	49	36	23	10	-3	-16	-29	-42	-55	-68	-81	-94	-107	-120	-134	-146	
8	289	274	259	244	229	214	199	184	169	154	139	124	109	94	79	64	49	34	19	4	-11	-26	-41	-56	-71	-86	-101	-116	-131	-146	-161	
9	336	319	302	285	268	251	234	217	200	183	166	149	132	115	98	81	64	47	30	13	-4	-21	-38	-55	-72	-89	-106	-123	-140	-157	-174	
10	385	366	347	328	309	290	271	252	233	214	195	176	157	138	119	100	81	62	43	24	5	-14	-33	-52	-71	-90	-109	-128	-147	-166	-185	
11	436	415	394	373	352	331	310	289	268	247	226	205	184	163	142	121	100	79	58	37	16	-5	-26	-47	-68	-89	-110	-131	-152	-173	-194	
12	489	466	443	420	397	374	351	328	305	282	259	236	213	190	167	144	121	98	75	52	29	6	-17	-40	-63	-86	-109	-132	-155	-178	-201	
13	544	519	494	469	444	419	394	369	344	319	294	269	244	219	194	169	144	119	94	69	44	19	-6	-31	-56	-81	-106	-131	-156	-181	-206	
14	601	574	547	520	493	466	439	412	385	358	331	304	277	250	223	196	169	142	115	88	61	34	7	-20	-47	-74	-101	-128	-155	-182	-209	
15	660	631	602	573	544	515	486	457	428	399	370	341	312	283	254	225	196	167	138	109	80	51	22	-7	-36	-65	-94	-123	-152	-181	-210	

Figure 1. Paraboctys $PS[3x + 1, x, -x + 1]$. The vertical ones here are the horizontal ones of $PS[x^2 + 2x - 1, x^2, x^2 - 2x + 1]$. Because of the clockwise 90° rotation the indexes y increase from top to bottom (opposite direction of the Y-axis).

Simplifying all verticals for offset $f = 0$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Classif.	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB			
Y ^{ip}	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
f	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
a ^o	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
b ^o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
c ^o	-240	-210	-182	-156	-132	-110	-																								

4.3 The D-Submarine parabolas with a varying offset in $PS[x + 1, x, x + 1]$

See the picture:

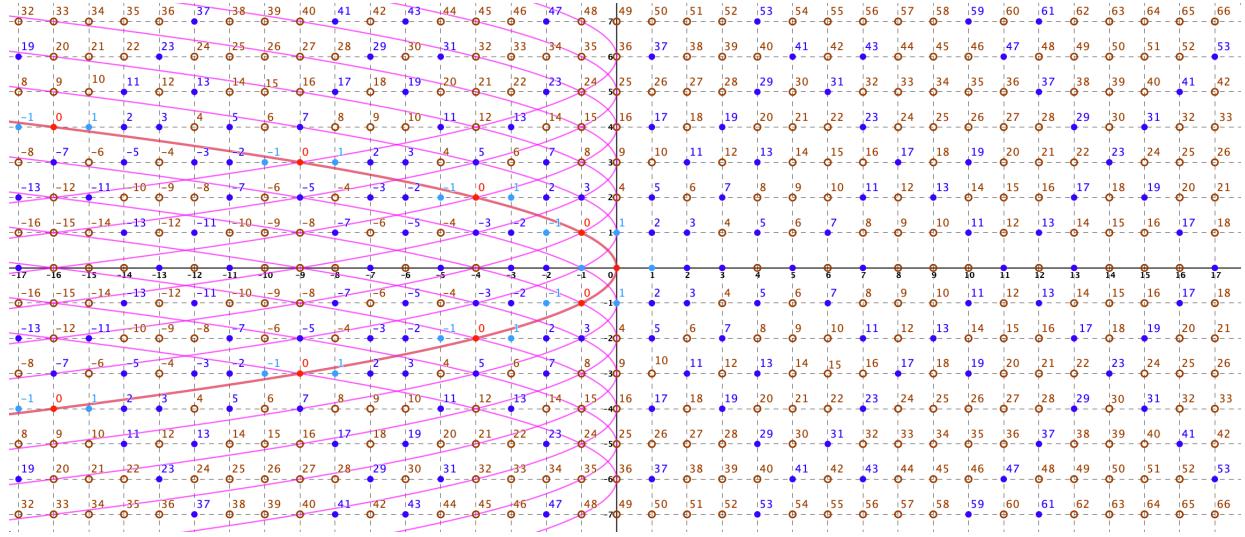


Figure 1. The D-Submarine parabolas in column $x = 0$ of the lattice-grid $PS[x + 1, x, x + 1]$. They have offset following the staircase function with the step of a unit. These parabolas have equations in the XY plane of the form $x = -y^2 + Even * y - Square$. In terms of the offset value $x = -y^2 + 2fy - f^2$.

Each parabola $x = -y^2 + 2fy - f^2$ in lattice-grid $PS[x + 1, x, x + 1]$ will produce a quadratic sequence of the form $Y[y] = ay^2 + by + c$. Now, to determine the coefficients a, b, c , for each sequence we have to determine three consecutive elements.

Over each parabola, we can choose 3 consecutive elements from top to bottom or from bottom to top. Because we are synchronizing the y index with the Y-axis, we will choose 3 consecutive bottom-up elements which is the increasing index direction: $[Y[-1], Y[0], Y[1]]$.

The elements of row $y = -1$ in the new paraboctys will be noted as $@Y[-1]$.

The elements of row $y = 0$ in the new paraboctys will be noted as $@Y[0]$.

The elements of row $y = 1$ in the new paraboctys will be noted as $@Y[1]$.

So, let's create the new paraboctys $PS[@Y[-1], @Y[0], @Y[1]]$. This new paraboctys will contain all the sequences formed by the D-Submarine parabolas with a variable offset in a vertical of lattice-grid $PS[x + 1, x, x + 1]$.

As we have D-Submarine parabolas, we can understand each sequence as being made of two elements of the vertical column $x = -1$ to assume the $@Y[-1]$ and $@Y[1]$ elements position and one element of the vertical column $x = 0$ to assume the $@Y[0]$ elements positions.

Consequently,

7. The elements on the vertical column $x = -1$ with offset $f = -1$ of the current paraboctys $PS[x + 1, x, x + 1]$ is:

$$A005563 \equiv [-1,0,3] \equiv @Y[-1] = x^2 + 2x$$

8. The elements on the vertical column $x = 0$ with offset $f = 0$ of the current paraboctys $PS[x + 1, x, x + 1]$ is:

$$A000290 \equiv [1,0,1] \equiv @Y[0] = x^2$$

9. The elements on the vertical column $x = -1$ with offset $f = 1$ of the current paraboctys $PS[x + 1, x, x + 1]$ is:

$$A005563 \equiv [3,0,-1] \equiv @Y[1] = x^2 - 2x$$

Finally, we create the new paraboctys $PS[x^2 + 2x, x^2, x^2 - 2x]$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
b	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0	-2	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	-26	-28	-30		
c	225	196	169	144	121	100	81	64	49	36	25	16	9	4	1	0	1	4	9	16	25	36	49	64	81	100	121	144	169	196	225		
15	675	616	559	504	451	400	351	304	259	216	175	136	99	64	31	0	-29	-56	-81	-104	-125	-144	-161	-176	-189	-200	-209	-216	-221	-224	-225		
14	645	588	533	480	429	380	333	288	245	204	165	128	93	60	29	0	-27	-52	-75	-96	-115	-132	-147	-160	-171	-180	-187	-192	-195	-196	-195		
13	615	560	507	456	407	360	315	272	231	192	155	120	87	56	27	0	-25	-48	-69	-88	-105	-120	-133	-144	-153	-160	-165	-168	-169	-168	-165		
12	585	532	481	432	385	340	297	256	217	180	145	112	81	52	25	0	-23	-44	-63	-80	-95	-108	-119	-128	-135	-140	-143	-144	-143	-140	-135		
11	555	504	455	408	363	320	279	240	203	168	135	104	75	48	23	0	-21	-40	-57	-72	-85	-96	-105	-112	-117	-120	-121	-120	-117	-112	-105		
10	525	476	429	384	341	300	261	224	189	156	125	96	69	44	21	0	-19	-36	-51	-64	-75	-84	-91	-96	-99	-100	-99	-96	-91	-84	-75		
9	495	448	403	360	319	280	243	208	175	144	115	88	63	40	19	0	-17	-32	-45	-56	-65	-72	-77	-80	-81	-80	-77	-72	-65	-56	-45		
8	465	420	377	336	297	260	225	192	161	132	105	80	57	36	17	0	-15	-28	-39	-48	-55	-60	-63	-64	-63	-60	-55	-48	-39	-28	-15		
7	435	392	351	312	275	240	207	176	147	120	95	72	51	32	15	0	-13	-24	-33	-40	-45	-48	-49	-48	-45	-40	-33	-24	-13	0	15		
6	405	364	325	288	253	220	189	160	133	108	85	64	45	28	13	0	-11	-20	-27	-32	-35	-36	-35	-32	-27	-20	-11	0	13	28	45		
5	375	336	299	264	231	200	171	144	119	96	75	56	39	24	11	0	-9	-16	-21	-24	-25	-24	-21	-16	-9	0	11	24	39	56	75		
4	345	308	273	240	209	180	153	128	105	84	65	48	33	20	9	0	-7	-12	-15	-16	-17	-15	-12	-7	0	9	20	33	48	65	84	105	
3	315	280	247	216	187	160	135	112	91	72	55	40	27	16	7	0	-5	-8	-9	-8	-5	0	7	16	27	40	55	72	91	112	135		
2	285	252	221	192	165	140	117	96	77	60	45	32	21	12	5	0	-3	-4	-3	-4	-3	0	5	12	21	32	45	60	77	96	117	140	165
Y[1]	1	255	224	195	168	143	120	99	80	63	48	35	24	15	8	3	0	-1	0	3	8	15	24	35	48	63	80	99	120	143	168	195	
Y[0]	0	225	196	169	144	121	100	81	64	49	36	25	16	9	4	1	0	1	4	9	16	25	36	49	64	81	100	121	144	169	196	225	
Y[-1]	-1	195	168	143	120	99	80	63	48	35	24	15	8	3	0	-1	3	8	15	24	35	48	63	80	99	120	143	168	195	224	225		
-2	165	140	117	96	77	60	45	32	21	12	5	0	-3	-4	-3	0	5	12	21	32	45	60	77	96	117	140	165	192	221	252	285		
-3	135	112	91	72	55	40	27	16	7	0	-5	-8	-9	-8	-5	0	7	16	27	40	55	72	91	112	135	160	187	216	247	280	315		
-4	105	84	65	48	33	20	9	0	-7	-12	-15	-16	-15	-12	-7	0	9	20	33	48	65	84	105	128	153	180	209	240	273	308	345		
-5	75	56	39	24	11	0	-9	-16	-21	-24	-25	-24	-21	-16	-9	0	11	24	39	56	75	96	119	144	171	200	231	264	299	336	375		
-6	45	28	13	0	-11	-20	-27	-32	-35	-36	-35	-32	-27	-20	-11	0	13	28	45	64	85	108	133	160	189	220	253	288	325	364	405		
-7	15	0	-13	-24	-33	-40	-45	-48	-49	-48	-45	-40	-33	-24	-13	0	15	32	51	72	95	120	147	176	207	240	275	312	351	392	435		
-8	-15	-28	-39	-48	-55	-60	-63	-64	-63	-60	-55	-48	-39	-28	-15	0	17	36	57	80	105	132	161	192	225	260	297	336	377	420	465		
-9	-45	-56	-65	-72	-77	-80	-81	-80	-77	-72	-65	-56	-45	-32	-17	0	19	40	63	88	115	144	175	208	243	280	319	360	403	448	495		
-10	-75	-84	-91	-96	-99	-100	-99	-96	-91	-84	-75	-64	-51	-36	-19	0	21	44	69	96	125	156	189	224	261	300	341	384	429	476	525		
-11	-105	-112	-117	-120	-120	-117	-112	-105	-96	-85	-72	-57	-40	-21	0	23	48	75	104	135	168	203	240	279	320	363	408	455	504	555			
-12	-135	-140	-143	-143	-140	-135	-128	-119	-108	-95	-80	-63	-44	-23	0	25	52	81	112	145	180	217	256	297	340	385	432	481	532	585			
-13	-165	-168	-169	-168	-165	-160	-153	-144	-133	-120	-105	-88	-69	-48	-25	0	27	56	87	120	155	192	231	272	315	360	407	456	507	560	615		
-14	-195	-196	-195	-192	-187	-180	-171	-160	-147	-132	-115	-96	-75	-52	-27	0	29	60	93	128	165	204	245	288	333	380	429	480	533	588	645		
-15	-225	-224	-221	-216	-209	-200	-189	-176	-161	-144	-125	-104	-81	-56	-29	0	31	64	99	136	175	216	259	304	351	400	451	504	559	616	675		

Figure 1. Paraboctys $PS[x^2 + 2x, x^2, x^2 - 2x]$. The verticals represent the sequences produced by D-Submarine parabolas with variable offset on the vertical $x = 0$ of the $PS[x + 1, x, x + 1]$. The D-Submarine parabolas with positive offset produce the vertical sequences on the left side of this table. The D-Submarine parabolas with negative offset produce the vertical sequences on the right side of this table.

If we turn the paraboctys clockwise 90° around the central point $(0,0)$, we get:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB			
Y _{ip}	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
f	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
b	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0	-2	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	-26	-28	-30	
c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
-15	-225	-195	-165	-135	-105	-75	-45	-15	45	75	105	135	165	195	225	255	285	315	345	375	405	435	465	495	525	555	585	615	645	675		
-14	-224	-196	-168	-140	-112	-84	-56	-28	0	28	56	84	112	140	168	196	224	252	280	308	336	364	392	420	448	476	504	532	560	588	616	
-13	-221	-195	-169	-143	-117	-91	-65	-39	-13	13	39	65	91	117	143	169	195	221	247	273	299	325	351	377	403	429	455	481	507	533	559	
-12	-216	-192	-168	-144	-120	-96	-72	-48	-24	0	24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	408	432	456	480	504	
-11	-209	-187	-165	-143	-121	-99	-77	-55	-33	-11	11	33	55	77	99	121	143	165	187	209	231	253	275	297	319	341	363	385	407	429	451	
-10	-200	-180	-160	-140	-120	-100	-80	-60	-40	-20	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	
-9	-189	-171	-153	-135	-117	-99	-81	-63	-45	-27	-9	9	27	45	63	81	99	117	135	153	171	189	207	225	243	261	279	297	315	333	351	
-8	-176	-160	-144	-128	-112	-96	-80	-64	-48	-32	-16	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	
-7	-161	-147	-133	-119	-105	-91	-77	-63	-49	-35	-21	-7	21	35	49	63	77	91	105	119	133	147	161	175	189	203	217	231	245	259		
-6	-144	-132	-120	-108	-96	-84	-72	-60	-48	-36	-24	-12	0	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	
-5	-125	-115	-105	-95	-85	-75	-65	-55	-45	-35	-25	-15	-5	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165		
-4	-104	-96	-88	-80	-72	-64	-56	-48	-40	-32	-24	-16	-8	0	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136	
-3	-81	-75	-69	-63	-57	-51	-45	-39	-33	-27	-21	-15	-9	-3	3	9	15	21	27	33	39	45	51	57	63	69	75	81	87	93	99	
-2	-56	-52	-48	-44	-40	-36	-32	-28	-24	-20	-16	-12	-8	-4	0	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	
Y[1]	-1	-29	-27	-25	-23	-21	-19	-17	-15	-13	-11	-9	-7	-5	-3	-1	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31
Y[0]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y[1]	1	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	-1	-3	-5	-7	-9	-11	-13	-15	-17	-19	-21	-23	-25	-27	-29
2	64	60	56	52	48	44	40	36	32	28	24	20	16	12	8	4	0	-4	-8	-12	-16	-20	-24	-28	-32	-36	-40	-44	-48	-52	-56	
3	99	93	87	81	75	69	63	57	51	45	39	33	27	21	15	9	3	-3	-9	-15	-21	-27	-33	-39	-45	-51	-57	-63	-69	-75	-81	
4	136	128	120	112	104	96	88	80	72	64	56	48	40	32	24	16	8	0	-8	-16	-24	-32	-40	-48	-56	-64	-72	-80	-88	-96	-104	
5	175	165	155	145	135	125	115	105	95	85	75	65	55	45	35	25	15	5	-5	-15	-25	-35	-45	-55	-65	-75	-85	-95	-105	-115	-125	
6	216	204	192	180	168	156	144	132	120	108	96	84	72	60	48	36	24	12	0	-12	-24	-36	-48	-60	-72	-84	-96	-108	-120	-132	-144	
7	259	245	231	217	203	189	175	161	147	133	119	105	91	77	63	49	35	21	7	-7	-21	-35	-49	-63	-77	-91	-105	-119	-133	-147	-161	
8	304	288	272	256	240	224	208	192	176	160	144	128	112	96	80	64	48	32	16	0	-16	-32	-48	-64	-80	-96	-112	-128	-144	-160	-176	
9	351	333	315	297	279	261	243	225	207	189	171	153	135	117	99	81	63	45	27	9	-9	-27	-45	-63	-81	-99	-117	-135	-153	-171	-189	
10	400	380	360	340	320	300	280	260	240	220	200	180	160	140	120	100	80	60	40	20	0	-20	-40	-60	-80	-100	-120	-140	-160	-180	200	
11	451	429	407	385	363	341	319	297	275	253	231	209	187	165	143	121	99	77	55	33	11	-11	-33	-55	-77	-99	-121	-143	-165	-187	-209	
12	504	480	456	432	408	384	360	336	312	288	264	240	216	192	168	144	120	96	72	48	24	0	-24	-48	-72	-96	-120	-144	-168	-192	-216	
13	559	533	507	481	455	429	403	377	351	325	299	273	247	221	195	169	143	117	91	65	39	13	-13	-39	-65	-91	-117	-143	-169	-195	-221	
14	616	588	560	532	504	476	448	420	392	364	336	308	280	252	224	196	168	140	112	84	56	28	0	-28	-56	-84	-112	-140	-166	-196	-224	
15	675	645	615	585	555	525	495	465	435	405	375	345	315	285	255	225	195	165	135	105	75	45	15	-15	-45	-75	-105	-135	-165	-195	-225	

Simplifying all verticals for offset $f = 0$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Classif.	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB	SUB			
γ^*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
β^*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
a^*	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
b^*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
c^*	-225	-196	-169	-144	-121	-100	-81	-64	-49	-36	-25	-16	-9	-4	-1	0	-4	-9	-16	-25	-36	-49	-64	-81	-100	-121	-144	-169	-196		
15	0	29	56	81	104	125	144	161	176	189	200	209	216	221	224	225	224	221	216	209	200	189	176	161	144	125	104	81	56	29	0
14	-29	0	27	52	75	96	115	132	147	160	171	180	187	192	195	196	195	192	187	180	171	160	147	132	115	96	75	52	27	0	-29
13	-56	-27	0	25	48	69	88	105	120	133	144	153	160	165	168	169	168	165	160	153	144	133	120	105	88	69	48	25	0	-27	-56
12	-81	-52	-25	0	23	44	63	80	95	108	119	128	135	140	143	144	143	140	135	128	119	108	95	80	63	44	23	0	-25	-52	-81
11	-104	-75	-48	-23	0	21	40	57	72	85	96	105	112	117	120	121	120	117	112	105	96	85	72	57	40	21	0	-23	-48	-75	-104
10	-125	-96	-69	-44	-21	0	19	36	51	64	75	84	91	96	99	100	99	96	91	84	75	64	51	36	19	0	-21	-44	-69	-96	-125
9	-144	-115	-88	-63	-40	-19	0	17	32	45	56	65	72	77	80	81	80	77	72	65	56	45	32	17	0	-19	-40	-63	-88	-115	-144
8	-161	-132	-105	-80	-57	-36	-17	0	15	28	39	48	55	60	63	64	63	60	55	48	39	28	15	0	-17	-36	-57	-80	-105	-132	-161
7	-176	-147	-120	-95	-72	-51	-32	-15	0	13	24	33	40	45	48	49	48	45	40	33	24	13	0	-15	-32	-51	-72	-95	-120	-147	-176
6	-189	-160	-133	-108	-85	-64	-45	-28	-13	0	11	20	27	32	35	36	35	32	27	20	11	0	-13	-28	-45	-64	-85	-108	-133	-160	-189
5	-200	-171	-144	-119	-96	-75	-56	-39	-24	-11	0	9	16	21	24	25	24	21	16	9	0	-11	-24	-39	-56	-75	-96	-119	-144	-171	-200
4	-209	-180	-153	-128	-105	-84	-65	-48	-33	-20	-9	0	7	12	15	16	15	12	7	0	-9	-20	-33	-48	-65	-84	-105	-128	-153	-180	-209
3	-216	-187	-160	-135	-112	-91	-72	-55	-35	-27	-16	-7	0	5	8	9	8	5	0	-7	-16	-27	-40	-55	-72	-91	-112	-135	-160	-187	-216
2	-221	-192	-165	-140	-117	-96	-77	-60	-45	-32	-21	-12	-5	0	3	4	3	0	-5	-12	-21	-32	-45	-60	-77	-96	-117	-140	-165	-192	-221
-3	-216	-187	-160	-135	-112	-91	-72	-55	-35	-27	-16	-7	0	5	8	9	8	5	0	-7	-16	-27	-40	-55	-72	-91	-112	-135	-160	-187	-216
-4	-209	-180	-153	-128	-105	-84	-65	-48	-33	-20	-9	0	7	12	15	16	15	12	7	0	-9	-20	-33	-48	-65	-84	-105	-128	-153	-180	-209
-5	-200	-171	-144	-119	-96	-75	-56	-39	-24	-11	0	9	16	21	24	25	24	21	16	9	0	-11	-24	-39	-56	-75	-96	-119	-144	-171	-200
-6	-189	-160	-133	-108	-85	-64	-45	-28	-13	0	11	20	27	32	35	36	35	32	27	20	11	0	-13	-28	-45	-64	-85	-108	-133	-160	-189
-7	-176	-147	-120	-95	-72	-51	-32	-15	0	13	24	33	40	45	48	49	48	45	40	33	24	13	0	-15	-32	-51	-72	-95	-120	-147	-176
-8	-161	-132	-105	-80	-57	-36	-17	0	15	28	39	48	55	60	63	64	63	60	55	48	39	28	15	0	-17	-36	-57	-80	-105	-132	-161
-9	-144	-115	-88	-63	-40	-19	0	17	32	45	56	65	72	77	80	81	80	77	72	65	56	45	32	17	0	-19	-40	-63	-88	-115	-144
-10	-125	-96	-69	-44	-21	0	19	36	51	64	75	84	91	96	99	100	99	96	91	84	75	64	51	36	19	0	-21	-44	-69	-96	-125
-11	-104	-75	-48	-23	0	21	40	57	72	85	96	105	112	117	120	121	120	117	112	105	96	85	72	57	40	21	0	-23	-48	-75	-104
-12	-81	-52	-25	0	23	44	63	80	95	108	119	128	135	140	143	144	143	140	135	128	119	108	95	80	63	44	23	0	-25	-52	-81
-13	-56	-27	0	25	48	69	88	105	120	133	144	153	160	165	168	169	168	165	160	153	144	133	120	105	88	69	48	25	0	-27	-56
-14	-29	0	27	52	75	96	115	132	147	160	171	180	187	192	195	196	195	192	187	180	171	160	147	132	115	96	75	52	27	0	-29
-15	0	29	56	81	104	125	144	161	176	189	200	209	216	221	224	224	221	216	209	200	189	176	161	144	125	104	81	56	29	0	

Figure 1. Paraboctys $PS[-x^2 + 1, -x^2, -x^2 + 1]$. All verticals of Paraboctys $PS[2x + 1, 0, -2x + 1]$ in offset $f = 0$.

4.4 The D-Destroyer and D-Submarine interleaving parabolas with a varying offset in $PS[x + 1, x, x + 1]$

See the picture

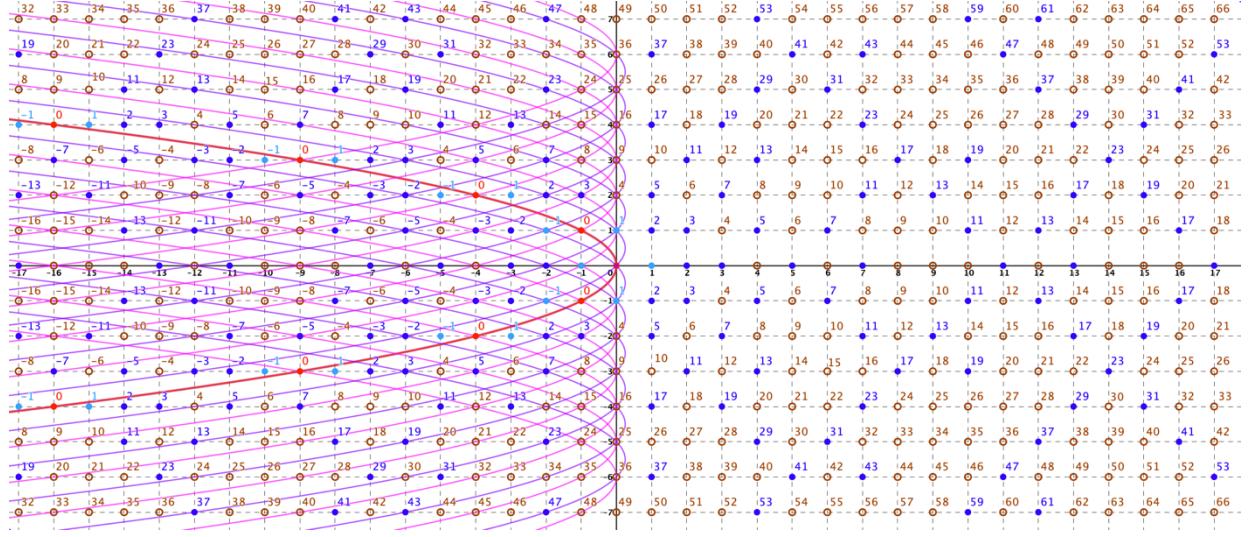


Figure 1. The combined D-Destroyers and D-Submarines parabolas in column $x = 0$ of the lattice-grid $PS[x + 1, x, x + 1]$. They have offset following the staircase function with the step of a unit.

Columns -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
b	17	14	15	12	13	10	11	8	9	6	7	4	5	2	3	0	1	-2	-1	-4	-3	-6	-5	-8	-7	-10	-9	-12	-11	-14	-13			
c	64	49	49	36	36	25	25	16	16	9	9	4	4	1	1	0	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
15	319	259	274	216	231	175	190	136	151	99	114	64	79	31	46	0	15	-29	-14	-56	-41	-81	-66	-104	-89	-125	-110	-144	-129	-161	-146			
14	302	245	259	204	218	165	179	128	142	93	107	60	74	29	43	0	14	-27	-13	-52	-38	-75	-61	-96	-82	-115	-101	-132	-118	-147	-133			
13	285	231	244	192	205	155	168	120	133	87	100	56	69	27	40	0	13	-25	-12	-48	-35	-69	-56	-88	-75	-105	-92	-120	-107	-133	-120			
12	268	217	229	180	192	145	157	112	124	81	93	52	64	25	37	0	12	-23	-11	-44	-32	-63	-51	-80	-68	-95	-83	-108	-96	-119	-107			
11	251	203	214	168	179	135	146	104	115	75	86	48	59	23	34	0	11	-21	-10	-40	-29	-57	-46	-72	-61	-85	-74	-96	-85	-105	-94			
10	234	189	199	156	166	125	135	96	106	69	79	44	54	21	31	0	10	-19	-9	-36	-26	-51	-41	-64	-54	-75	-65	-84	-74	-91	-81			
9	217	175	184	144	153	115	124	88	97	63	72	40	49	19	28	0	9	-17	-8	-32	-23	-45	-36	-56	-47	-65	-56	-72	-63	-77	-68			
8	200	161	169	132	140	105	113	80	88	57	65	36	44	17	25	0	8	-15	-7	-28	-20	-39	-31	-48	-40	-55	-47	-60	-52	-63	-55			
7	183	147	154	120	127	95	102	72	79	51	58	32	39	15	22	0	7	-13	-6	-24	-17	-33	-26	-40	-33	-45	-38	-48	-41	-49	-42			
6	166	133	139	108	114	85	91	64	70	45	51	28	34	13	19	0	6	-11	-5	-20	-14	-27	-21	-32	-26	-35	-29	-36	-30	-35	-29			
5	149	119	124	96	101	75	80	56	61	39	44	24	29	11	16	0	5	-9	-4	-16	-11	-21	-16	-24	-19	-25	-20	-24	-19	-21	-16			
4	132	105	109	84	88	65	69	48	52	33	37	20	24	9	13	0	4	-7	-3	-12	-8	-15	-11	-16	-12	-8	-7	-3	0	3	7	10		
3	115	91	94	72	75	55	58	40	43	27	30	16	19	7	10	0	3	-5	-2	-8	-5	-9	-6	-8	-5	-5	-2	0	3	7	12	14	21	23
2	98	77	79	60	62	45	47	32	34	21	23	12	14	5	7	0	2	-3	-1	-4	-3	-2	-1	-3	-1	-4	0	2	5	7	12	14	21	23
Y[1]	1	81	63	64	48	49	45	35	36	24	25	15	16	8	9	3	4	0	1	1	0	0	1	1	3	4	8	9	15	16	24	25	35	36
Y[0]	0	64	49	49	36	36	25	25	16	16	9	9	4	4	1	1	0	0	1	1	4	4	9	9	16	16	25	25	36	36	49	49		
Y[-1]	-1	47	35	34	24	23	15	14	8	7	3	2	0	-1	-1	-2	0	-1	3	2	8	7	15	14	24	23	35	34	48	47	63	62		
-2	30	21	19	12	10	5	3	0	-2	-3	-5	-4	-6	-3	-5	0	2	5	3	12	10	21	19	32	30	45	43	60	58	77	75			
-3	13	7	4	0	-3	-5	-8	-8	-11	-9	-12	-8	-11	-5	-8	0	-3	7	4	16	13	27	24	40	37	55	52	72	69	91	88			
-4	-4	-7	-7	-11	-12	-16	-15	-19	-16	-20	-15	-19	-12	-16	-7	-11	-4	9	5	20	16	33	29	48	44	65	61	84	80	105	101			
-5	-21	-21	-26	-24	-29	-25	-30	-24	-29	-21	-26	-16	-21	-9	-14	-1	-5	11	6	24	19	39	34	56	51	75	70	96	91	119	114			
-6	-38	-35	-41	-36	-42	-35	-41	-32	-38	-27	-33	-20	-26	-11	-17	0	-6	13	7	28	22	45	39	64	58	85	79	108	102	133	127			
-7	-55	-49	-56	-48	-55	-45	-52	-40	-47	-33	-40	-24	-31	-13	-20	0	-7	15	8	32	25	51	44	72	65	95	88	120	113	147	140			
-8	-72	-63	-71	-60	-68	-55	-63	-48	-56	-39	-47	-28	-36	-15	-23	0	-8	17	9	36	28	57	49	80	72	105	97	132	124	161	153			
-9	-89	-77	-80	-72	-81	-65	-74	-56	-65	-54	-32	-41	-17	-26	0	-9	19	10	40	31	63	54	88	79	115	106	144	135	175	166				
-10	-106	-91	-101	-84	-94	-75	-85	-64	-74	-51	-61	-36	-46	-19	-29	0	-10	21	11	44	34	69	59	96	88	125	115	156	146	189	179			
-11	-123	-105	-116	-96	-107	-85	-96	-72	-83	-57	-68	-40	-51	-21	-32	0	-11	23	12	48	37	75	64	104	93	135	124	168	157	203	192			
-12	-140	-119	-131	-108	-120	-95	-107	-80	-92	-63	-75	-44	-56	-23	-35	0	-12	25	13	52	40	81	69	112	100	145	133	180	168	217	205			
-13	-157	-133	-146	-120	-133	-105	-118	-88	-101	-69	-82	-48	-61	-25	-38	0	-13	27	14	56	43	87	74	120	107	155	142	192	179	231	218			
-14	-174	-147	-161	-132	-146	-115	-129	-96	-110	-75	-79	-52	-66	-27	-41	0	-14	29	15	60	46	93	79	128	114	165	151	204	190	245	231			
-15	-191	-161	-176	-144	-159	-125	-140	-104	-119	-86	-96	-56	-71	-29	-44	0	-15	31	16	64	49	99	84	136	121	175	160	216	201	259	244			

Figure 1. The combined D-Destroyers and D-Submarines parabolas in $PS[x + 1, x, x + 1]$.

CENTER							
	-2	-1	0	1	2	3	
Y[1]	1	3	4	0	1	-1	0
Y[0]	0	1	1	0	1	1	1
Y[-1]	-1	-2	0	-1	3	2	2

Figure 1. The center of the combined D-Destroyers and D-Submarines parabolas in table $PS[x + 1, x, x + 1]$.

4.4.1 The row $Y[-1] = X_{-1}[x]$

The center of the row $Y[-1] \equiv \{\dots, -1, -2, 0, -1, 3, 2, \dots\}$.

The row $Y[-1]$ is the result of the interlacing between two quadratics:

$$Y[-1] = X_1[x = even] + X_1[x = Odd]$$

$X_1[x = Even]$ is based on sequence $[-1, 0, 3] = n^2 + 2n \equiv A005563$

$$x = Even = 2n$$

$$n = \frac{x}{2}$$

$$X_1[x = Even] \equiv Ao0o0o5o5o6o3 \equiv [-1, o, 0, o, 3, o] \equiv \left(\frac{x}{2}\right)^2 + x = \frac{x^2 + 4x}{4} = 0.25x^2 + x$$

$$\equiv \frac{A028347}{4} \equiv [-0.75, -1, -0.75] = \frac{x^2 - 2^2}{2^2} @f = 0$$

AXXXXXX

$$\equiv \{\dots, 0, 63, 0, 48, 0, 35, 0, 24, 0, 15, 0, 8, 0, 3, 0, 0, 0, -1, 0, 0, 0, 3, 0, 8, 0, 15, 0, 24, 0, 35, 0, \dots\}$$

and

$X_1[x = Odd]$ is based on sequence $[-2, -1, 2] = n^2 + 2n - 1 \equiv A008865$

$$x = Odd = 2n - 1$$

$$n = \frac{x+1}{2}$$

$$X_1[x = Odd] \equiv Ao0o0o8o8o6o5 \equiv [-2, o, -1, o, 2, o] = \left(\frac{x+1}{2}\right)^2 + \frac{2(x+1)}{2} - 1$$

$$= \frac{x^2 + 2x + 1 + 4x + 4 - 4}{4} = \frac{x^2 + 6x + 1}{4} = 0.25x^2 + 1.5x + 0.25$$

$$\equiv \frac{A028884}{4} \equiv [-1.75, -2, -1.75] = \frac{x^2 - (\sqrt{8})^2}{2^2} @f = 0$$

AXXXXXX

$$\equiv \{\dots, 79, 0, 62, 0, 47, 0, 34, 0, 23, 0, 14, 0, 7, 0, 2, 0, -1, 0, -2, 0, -1, 0, 2, 0, 7, 0, 14, 0, 23, 0, 34, \dots\}$$

$$X_1[-x = Even] = \frac{x^2 + 4x}{4} \equiv \frac{A028347}{4}$$

$$X_1[-x = Odd] = \frac{x^2 + 6x + 1}{4} \equiv \frac{A028884}{4}$$

$$X_1[-x] = X_1[-x = even] + X_1[-x = Odd]$$

$$X_1[-x] = \frac{x^2 + (5x - x(-1)^x) + (0.5 - 0.5(-1)^x)}{4}$$

$$X_1[-x] = \frac{x^2 + 5x + 0.5 - (x + 0.5)(-1)^x}{4}$$

$$X_1[-x] = \frac{2x^2 + 10x + 1 - (2x + 1)(-1)^x}{8}$$

Process table to produce the row Y[-1]								
Classif.	SUB	SUB	X1[Even]	SUB	SUB	X1[Odd]	X1 = X1[Even] + X1[Odd]	
y_ip	-1	-2		-1	-3 <th data-kind="ghost"></th> <th data-kind="ghost"></th>			
f	-1	-2		-1	-3			
	A005563	X1[Even]		A008865	X1[Odd]			
a	1	0,25		1	0,25			
b	2	1		2	1,5			
c	0	0	AXXXXXX	-1	0,25	AXXXXXX	AXXXXXX	
	15	255	71,25	0	254	79	79	
	14	224	63	63	223	70,25	63	
	13	195	55,25	0	194	62	62	
	12	168	48	48	167	54,25	48	
	11	143	41,25	0	142	47	47	
	10	120	35	35	119	40,25	35	
	9	99	29,25	0	98	34	34	
	8	80	24	24	79	28,25	24	
	7	63	19,25	0	62	23	23	
	6	48	15	15	47	18,25	15	
	5	35	11,25	0	34	14	14	
	4	24	8	8	23	10,25	8	
	3	15	5,25	0	14	7	7	
	2	8	3	3	7	4,25	3	
	Y[1]	1	3	1,25	0	2	2	
	Y[0]	0	0	0	-1	0,25	0	
	Y[-1]	-1	-1	-0,75	0	-2	-1	
		-2	0	-1	-1	-1	-1,75	
		-3	3	-0,75	0	2	-2	
		-4	8	0	0	7	-1,75	
		-5	15	1,25	0	14	-1	
		-6	24	3	23	0,25	3	
		-7	35	5,25	34	2	2	
		-8	48	8	47	4,25	8	
		-9	63	11,25	62	7	7	
		-10	80	15	79	10,25	15	
		-11	99	19,25	98	14	14	
		-12	120	24	119	18,25	24	
		-13	143	29,25	142	23	23	
		-14	168	35	167	28,25	35	
		-15	195	41,25	194	34	34	

Figure 1. Sequence Axxxxxx is the row $Y[-1]$ of the combined D-Destroyers and D-Submarines parabolas in $PS[x+1, x, x+1]$. Because of the interlacing, the direction of the final sequence is reversed.

The row $Y[-1]$ Axxxxxx is the Interleaving of A008865 (Square minus Two) numbers and A005563 (Square minus one) numbers. $\{ \dots, 195, 194, 168, 167, 143, 142, 120, 119, 99, 98, 80, 79, 63, 62, 48, 47, 35, 34, 24, 23, 15, 14, 8, 7, 3, 2, 0, -1, -1, -2, 0, -1, 3, 2, 8, 7, 15, 14, 24, 23, 35, 34, 48, 47, 63, 62, 80, 79, 99, 98, 120, 119, 143, 142, 168, 167, 195, 194, 224, 223, 255, 254, \dots \}$.

4.4.2 The row $Y[0] = X_2[x]$

The center of the row $Y[0] \equiv \{\dots, 1, 1, 0, 0, 1, 1, \dots\}$.

The row $Y[0]$ is the result of the interlacing between two quadratics:

$$Y[0] = X_2[x = even] + X_2[x = Odd]$$

$X_2[x = Even]$ is based on sequence $[1, 0, 1] = n^2 \equiv A000290 \equiv n(n \pm 0)$

$$x = Even = 2n$$

$$n = \frac{x}{2}$$

$$X_2[x = Even] \equiv Ao0o000o2o9o0 \equiv [1, o, 0, o, 1, o] \equiv \left(\frac{x}{2}\right)^2 = \frac{x^2}{4} = 0.25x^2 \equiv \frac{A000290}{4}$$

$$\equiv [0.25, 0, 0.25] = \frac{x^2}{2^2} @f = 0$$

$AXXXXXX \equiv \{\dots, 0, 49, 0, 36, 0, 25, 0, 16, 0, 9, 0, 4, 0, 1, 0, 0, 0, 1, 0, 4, 0, 9, 0, 16, 0, 25, 0, 36, 0, 49, 0, \dots\}$

and

$X_2[x = Odd]$ is based on sequence $[1, 0, 1] = n^2 \equiv A000290 \equiv n(n \pm 0)$

$$x = Odd = 2n - 1$$

$$n = \frac{x+1}{2}$$

$$X_2[x = Odd] \equiv Ao0o00o2o9o0 \equiv [o, 1, o, 0, o, 1] = \left(\frac{x+1}{2}\right)^2 = \frac{x^2 + 2x + 1}{4}$$

$$= 0.25x^2 + 0.5x + 0.25 \equiv \frac{A000290}{4} \equiv [0.25, 0, 0.25] = \frac{x^2}{2^2} @f = 0$$

$AXXXXXX \equiv \{\dots, 64, 0, 49, 0, 36, 0, 25, 0, 16, 0, 9, 0, 4, 0, 1, 0, 0, 0, 1, 0, 4, 0, 9, 0, 16, 0, 25, 0, 36, 0, 49, \dots\}$

$$X_2[-x = Even] = \frac{x^2}{4} \equiv \frac{A000290}{4}$$

$$X_2[-x = Odd] = \frac{x^2 + 2x + 1}{4} \equiv \frac{A000290}{4}$$

$$X_2[-x] = X_2[-x = even] + X_2[-x = Odd]$$

$$X_2[-x] = \frac{x^2 + (x - x(-1)^x) + (0.5 - 0.5(-1)^x)}{4}$$

$$X_2[-x] = \frac{x^2 + x + 0.5 - (x + 0.5)(-1)^x}{4}$$

$$X_2[-x] = \frac{2x^2 + 2x + 1 - (2x + 1)(-1)^x}{8}$$

Process table to produce the row Y[0]								
Classif.	SUB	SUB	X2[Even]	SUB	SUB	X2[Odd]	X2 = X2[Even] + X2[Odd]	
y_ip	0	0		0	-1			
f	0	0		0	-1			
	A000290	X2[Even]		A000290	X2[Odd]			
a	1	0,25		1	0,25			
b	0	0		0	0,5			
c	0	0	AXXXXXX	0	0,25	AXXXXXX	A008794	
	15	225	56,25	0	225	64	64	
	14	196	49	49	196	56,25	0	
	13	169	42,25	0	169	49	49	
	12	144	36	36	144	42,25	0	
	11	121	30,25	0	121	36	36	
	10	100	25	25	100	30,25	0	
	9	81	20,25	0	81	25	25	
	8	64	16	16	64	20,25	0	
	7	49	12,25	0	49	16	16	
	6	36	9	9	36	12,25	0	
	5	25	6,25	0	25	9	9	
	4	16	4	4	16	6,25	0	
	3	9	2,25	0	9	4	4	
	2	4	1	1	4	2,25	0	
Y[1]	1	1	0,25	0	1	1	1	
Y[0]	0	0	0	0	0	0,25	0	0
Y[-1]	-1	1	0,25	0	1	0	0	0
	-2	4	1	1	4	0,25	0	1
	-3	9	2,25	0	9	1	1	1
	-4	16	4	4	16	2,25	0	4
	-5	25	6,25	0	25	4	4	4
	-6	36	9	9	36	6,25	0	9
	-7	49	12,25	0	49	9	9	9
	-8	64	16	16	64	12,25	0	16
	-9	81	20,25	0	81	16	16	16
	-10	100	25	25	100	20,25	0	25
	-11	121	30,25	0	121	25	25	25
	-12	144	36	36	144	30,25	0	36
	-13	169	42,25	0	169	36	36	36
	-14	196	49	49	196	42,25	0	49
	-15	225	56,25	0	225	49	49	49

Figure 1. Sequence A008794 is the row $Y[0]$ of the combined D-Destroyers and D-Submarines parabolas in $PS[x+1, x, x+1]$.

The row $Y[0]$ is the A008794 Squares repeated; $a(n) = \text{floor}(n/2)^2$. $\{..., 225, 225, 196, 196, 169, 169, 144, 144, 121, 121, 100, 100, 81, 81, 64, 64, 49, 49, 36, 36, 25, 25, 16, 16, 9, 9, 4, 4, 1, 1, 0, 0, 1, 1, 4, 4, 9, 9, 16, 16, 25, 25, 36, 36, 49, 49, 64, 64, 81, 81, 100, 100, 121, 121, 144, 144, 169, 169, 196, 196, 225, 225, ...\}$.

4.4.3 The row $Y[1] = X_3[x]$

The center of the row $Y[1] \equiv \{\dots, 3, 4, 0, 1, -1, 0, \dots\}$.

The row $Y[1]$ is the result of the interlacing between two quadratics:

$$Y[1] = X_3[x = even] + X_3[x = Odd]$$

$X_3[x = Even]$ is based on sequence $[3, 0, -1] = n^2 - 2n \equiv A005563 \equiv n(n-2)$

$$x = Even = 2n$$

$$n = \frac{x}{2}$$

$$X_3[x = Even] \equiv A00005050603 \equiv [3, o, 0, o, -1, o] \equiv \left(\frac{x}{2}\right)^2 - x = \frac{x^2 - 4x}{4} = 0.25x^2 - x$$

$$\equiv \frac{A028347}{4} \equiv [-0.75, -1, -0.75] = \frac{x^2 - 2^2}{2^2} @f = 0$$

AXXXXXX

$$\equiv \{\dots, 0, 35, 0, 24, 0, 15, 0, 8, 0, 3, 0, 0, 0, -1, 0, 0, 0, 3, 0, 8, 0, 15, 0, 24, 0, 35, 0, 48, 0, 63, 0, \dots\}$$

and

$X_3[x = Odd]$ is based on sequence $[4, 1, 0] = n^2 - 2n + 1 \equiv A000290$

$$x = Odd = 2n - 1$$

$$n = \frac{x+1}{2}$$

$$X_3[x = Odd] \equiv A0000290 \equiv [o, 4, o, 1, o, 0] = \left(\frac{x+1}{2}\right)^2 - x - 1 + 1$$

$$= \frac{x^2 + 2x + 1 - 4x}{4} = \frac{x^2 - 2x + 1}{4} = 0.25x^2 - 0.5x + 0.25 \equiv \frac{A000290}{4}$$

$$\equiv [0.25, 0.25] = \frac{x^2}{2^2} @f = 0$$

AXXXXXX

$$\equiv \{\dots, 49, 0, 36, 0, 25, 0, 16, 0, 9, 0, 4, 0, 1, 0, 0, 0, 1, 0, 4, 0, 9, 0, 16, 0, 25, 0, 36, 0, 49, 0, 64, \dots\}$$

$$X_3[-x = Even] = \frac{x^2 - 4x}{4} \equiv \frac{A028347}{4}$$

$$X_3[-x = Odd] = \frac{x^2 - 2x + 1}{4} \equiv \frac{A000290}{4}$$

$$X_3[-x] = X_3[-x = even] + X_3[-x = Odd]$$

$$X_3[-x] = \frac{x^2 - (3x - x(-1)^x) + (0.5 - 0.5(-1)^x)}{4}$$

$$X_3[x] = \frac{x^2 - 3x + 0.5 + (x - 0.5)(-1)^x}{4}$$

$$X_3[-x] = \frac{2x^2 - 6x + 1 + (2x - 1)(-1)^x}{8}$$

Process table to produce the row Y[1]								
Classif.	SUB	SUB	X3[Even]	SUB	SUB	X3[Odd]	X3 = X3[Even] + X3[Odd]	
y_ip	1	2		1	1			
f	1	2		1	1			
	A005563	X3[Even]		A000290	X3[Odd]			
a	1	0,25		1	0,25			
b	-2	-1		-2	-0,5			
c	0	0	AXXXXXX	1	0,25	AXXXXXX	A135276	
	15	195	41,25	0	196	49	49	
	14	168	35	35	169	42,25	35	
	13	143	29,25	0	144	36	36	
	12	120	24	24	121	30,25	24	
	11	99	19,25	0	100	25	25	
	10	80	15	15	81	20,25	15	
	9	63	11,25	0	64	16	16	
	8	48	8	8	49	12,25	8	
	7	35	5,25	0	36	9	9	
	6	24	3	3	25	6,25	3	
	5	15	1,25	0	16	4	4	
	4	8	0	0	9	2,25	0	
	3	3	-0,75	0	4	1	1	
	2	0	-1	-1	1	0,25	-1	
Y[1]	1	-1	-0,75	0	0	0	0	
Y[0]	0	0	0	0	1	0,25	0	
Y[-1]	-1	3	1,25	0	4	1	1	
	-2	8	3	3	9	2,25	3	
	-3	15	5,25	0	16	4	4	
	-4	24	8	8	25	6,25	8	
	-5	35	11,25	0	36	9	9	
	-6	48	15	15	49	12,25	15	
	-7	63	19,25	0	64	16	16	
	-8	80	24	24	81	20,25	24	
	-9	99	29,25	0	100	25	25	
	-10	120	35	35	121	30,25	35	
	-11	143	41,25	0	144	36	36	
	-12	168	48	48	169	42,25	48	
	-13	195	55,25	0	196	49	49	
	-14	224	63	63	225	56,25	63	
	-15	255	71,25	0	256	64	64	

Figure 1. Sequence A135276 and \A131805\ is the row Y[1] of the combined D-Destroyers and D-Submarines parabolas in $PS[x + 1, x, x + 1]$.

The row $Y[1]$ is the Interleaving of A000290 Square numbers and A005563 (Square minus one) numbers. $Y[1] \equiv \A131805\ + A135276 \equiv \{..., 255, 256, 224, 225, 195, 196, 168, 169, 143, 144, 120, 121, 99, 100, 80, 81, 63, 64, 48, 49, 35, 36, 24, 25, 15, 16, 8, 9, 3, 4, 0, 1, -1, 0, 0, 1, 3, 4, 8, 9, 15, 16, 24, 25, 35, 36, 48, 49, 63, 64, 80, 81, 99, 100, 120, 121, 143, 144, 168, 169, 195, 196, 224, 225, 255, 256, 288, 289, 323, 324, 360, 361, 399, 400, 440, 441, 483, 484, 528, 529, 575, 576, 624, 625, 675, 676, 728, 729, 783, 784, 840, 841, 899, 900, 960, 961, ...\}.$

A131805 Row sums of triangular array T: $T(j,k) = -(k+1)/2$ for odd k , $T(j,k) = 0$ for $k = 0$, $T(j,k) = j+1-k/2$ for even $k > 0$; $0 \leq k \leq j$.

$\{0, -1, 1, 0, 4, 3, 9, 8, 16, 15, 25, 24, 36, 35, 49, 48, 64, 63, 81, 80, 100, 99, 121, 120, ...\}$.

Interleaving of A000290 and A067998 (starting at second term).

First differences are $-1, 2, -1, 4, -1, 6, -1, 8, -1, 10, \dots$: $a(n+1) - a(n) = (-1)^{n+1} * A124625(n+2)$.

The main diagonal of T is in A001057, antidiagonal sums are in A131804.

First seven rows of T are

```
[ 0 ],
[ 0, -1 ],
[ 0, -1, 2 ],
[ 0, -1, 3, -2 ],
[ 0, -1, 4, -2, 3 ],
```

[0, -1, 5, -2, 4, -3],

[0, -1, 6, -2, 5, -3, 4]

A135276 a(0)=0, a(1)=1; for n>1, a(n) = a(n-1) + n^0 if n odd, a(n) = a(n-1) + n^1 if n is even.

{ 0, 1, 3, 4, 8, 9, 15, 16, 24, 25, 35, 36, 48, 49, 63, 64, 80, 81, 99, 100, 120, 121, 143, 144, ... }.

5 Study of the sequences produced by the elements in C parabolic formation in the $PS[x + 1, x, x + 1]$

5.1 The C-Submarine parabolas with offset Zero in $PS[x + 1, x, x + 1]$

See the picture:

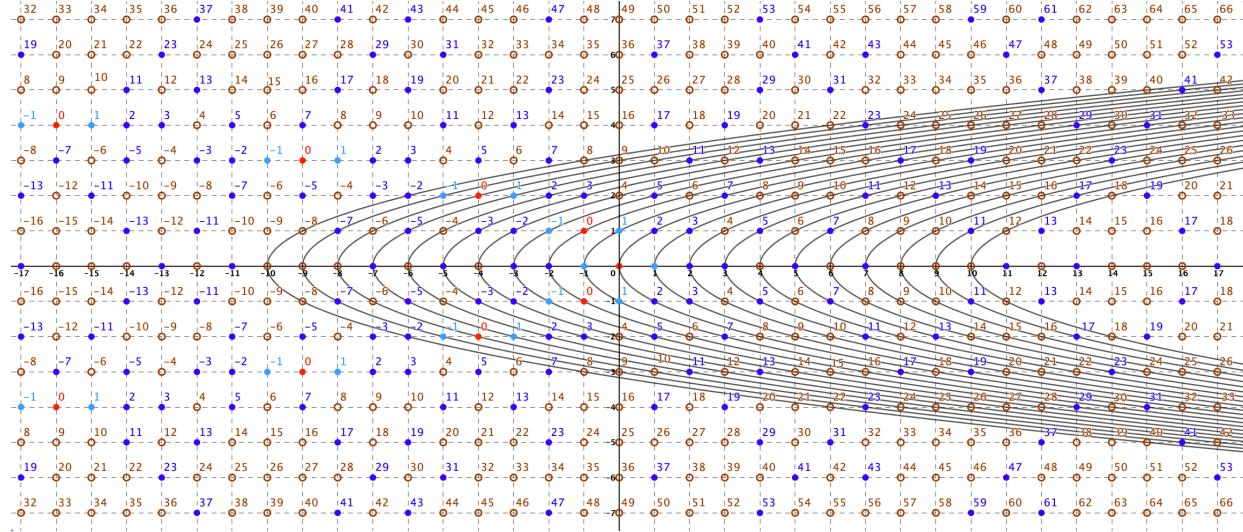


Figure 1. The C-Submarine parabolas of the form $x = y^2 + c$ for $-10 \leq c \leq 10$ with offset $f = 0$ in lattice-grid $PS[x + 1, x, x + 1]$. They produce the paraboctys $PS[x + 2, x, x + 2]$.

Thus, the C-Submarine parabolas of the form $x = y^2 + c$ for $-10 \leq c \leq 10$ with offset $f = 0$ in lattice-grid $PS[x + 1, x, x + 1]$ produce paraboctys with coefficient $a = 2$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Classif.	SUB																																
Y_ip	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
f	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2				
b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
c	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
15	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465		
14	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407		
13	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353		
12	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303		
11	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257		
10	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215		
9	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177		
8	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143		
7	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113		
6	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87		
5	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65		
4	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47		
3	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33		
2	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
Y[1]	1	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Y[0]	0	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Y[-1]	-1	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		

Figure 1. The $PS[x + 2, x, x + 2]$ in the table form.

5.2 The C-Destroyer parabolas with variable offset on a vertical of $PS[x + 1, x, x + 1]$

See the picture:

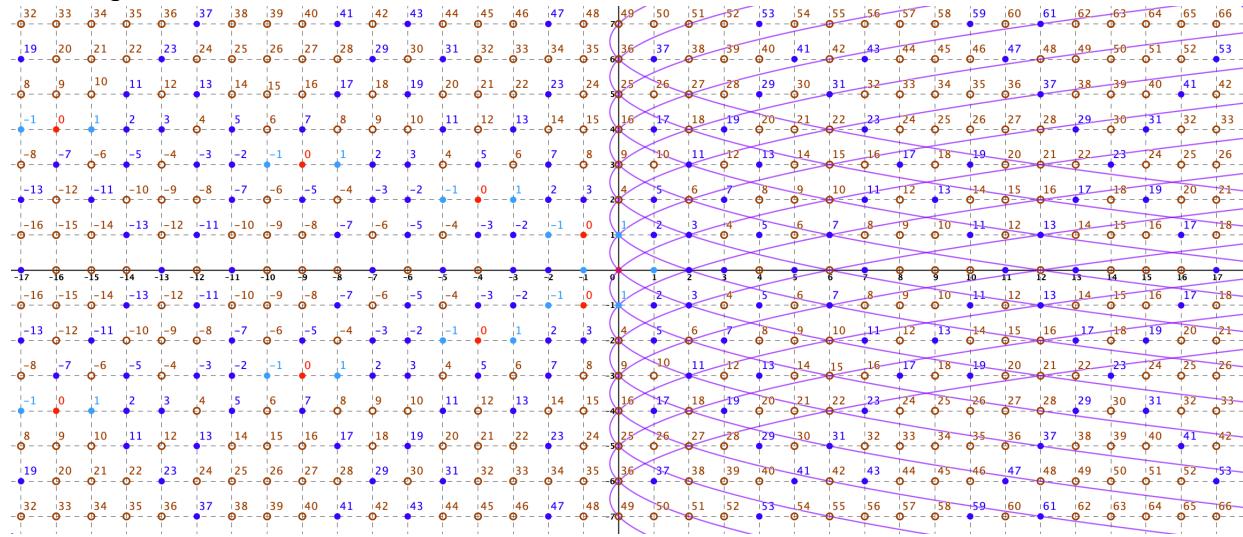


Figure 1. The C-Destroyer parabolas in column $x = 0$ of the lattice-grid $PS[x + 1, x, x + 1]$. They have offset following the staircase function with the step of a unit. These parabolas have equations in the XY plane of the form $x = y^2 - Odd * y + Oblong$. In terms of the offset value: $x = y^2 - (2f + 1)y + (f^2 + f)$.

Each parabola $x = y^2 - (2f + 1)y + (f^2 + f)$ in lattice-grid $PS[x + 1, x, x + 1]$ will produce a quadratic sequence of the form $Y[y] = ay^2 + by + c$. Now, to determine the coefficients a, b, c , for each sequence we have to determine three consecutive elements.

Over each parabola, we can choose 3 consecutive elements from top to bottom or from bottom to top. Because we are synchronizing the y index with the Y-axis, we will choose 3 consecutive bottom-up elements which is the increasing index direction: $[Y[-1], Y[0], Y[1]]$.

The elements of row $y = -1$ in the new paraboctys will be noted as $@Y[-1]$.

The elements of row $y = 0$ in the new paraboctys will be noted as $@Y[0]$.

The elements of row $y = 1$ in the new paraboctys will be noted as $@Y[1]$.

So, let's create the new paraboctys $PS[@Y[-1], @Y[0], @Y[1]]$. This new paraboctys will contain all the sequences formed by the C-Destroyer parabolas with a variable offset in a vertical of lattice-grid $PS[x + 1, x, x + 1]$.

As we have C-Destroyer parabolas, we can understand each sequence as being made of one element of the vertical column $x = 2$ to assume the $@Y[-1]$ elements position and two elements of the vertical column $x = 0$ to assume the $@Y[0]$ and $@Y[1]$ elements positions.

Consequently,

4. The elements on the vertical column $x = 2$ with offset $f = -1$ of the current paraboctys $PS[x + 1, x, x + 1]$ is:

$$A059100 \equiv [2,3,6] \equiv @Y[-1] = x^2 + 2x + 3$$

5. The elements on the vertical column $x = 0$ with offset $f = 0$ of the current paraboctys $PS[x + 1, x, x + 1]$ is:

$$A000290 \equiv [1,0,1] \equiv @Y[0] = x^2$$

6. The elements on the vertical column $x = 0$ with offset $f = 1$ of the current paraboctys $PS[x + 1, x, x + 1]$ is:

$$A000290 \equiv [4,1,0] \equiv @Y[1] = x^2 - 2x + 1$$

Finally, we create the new paraboctys $PS[@Y[-1], @Y[0], @Y[1]] = PS[x^2 + 2x + 3, x^2, x^2 - 2x + 1]$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC																
Y_ip	-7,25	-6,75	-6,25	-5,75	-5,25	-4,75	-4,25	-3,75	-3,25	-2,75	-2,25	-1,75	-1,25	-0,75	-0,25	0,25	0,75	1,25	1,75	2,25	2,75	3,25	3,75	4,25	4,75	5,25	5,75	6,25	6,75	7,25	7,75	
f	-7	-7	-6	-6	-5	-5	-4	-4	-3	-3	-2	-2	-1	-1	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	
a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
b	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	-1	-3	-5	-7	-9	-11	-13	-15	-17	-19	-21	-23	-25	-27	-31		
c	225	196	169	144	121	100	81	64	49	36	25	16	9	4	1	0	1	4	9	16	25	36	49	64	81	100	121	141	169	196		
15	1110	1051	994	939	886	835	786	739	694	651	610	571	534	499	466	435	406	379	354	331	310	291	274	259	246	235	226	219	214	211	210	
14	1023	966	911	858	807	758	711	666	623	582	543	506	471	438	407	378	351	326	303	282	263	246	231	218	207	198	191	186	183	182	183	
13	940	885	832	781	732	685	640	597	556	517	480	445	412	381	352	325	300	277	256	237	220	205	192	181	172	165	160	157	156	157	160	
12	861	808	757	708	661	616	573	532	493	456	421	388	357	328	301	276	253	232	213	196	181	168	157	148	141	136	133	132	133	136	141	
11	786	735	686	639	594	551	510	471	434	399	366	335	306	279	254	231	210	191	174	159	146	135	126	119	114	111	110	111	114	119	126	
10	715	666	619	574	531	490	451	414	379	346	315	286	259	234	211	190	171	154	139	126	115	106	99	94	91	90	91	94	99	106	115	
9	648	601	556	513	472	433	396	361	328	297	268	241	216	193	172	153	136	121	108	97	88	81	76	73	72	73	76	81	88	97	108	
8	585	540	497	456	417	380	345	312	281	252	225	200	177	156	137	120	105	92	81	72	65	60	57	56	57	60	65	72	81	92	105	
7	526	483	442	403	366	331	298	267	238	211	186	163	142	123	106	91	78	67	58	51	46	43	42	43	46	51	58	67	78	91	106	
6	471	430	391	354	319	286	255	226	199	174	151	130	111	94	79	66	55	46	39	34	31	30	31	34	39	46	55	66	79	94	111	
5	420	381	344	309	276	245	216	189	164	141	120	101	84	69	56	45	36	29	24	21	20	21	24	29	36	45	56	69	84	101	120	
4	373	336	301	268	237	208	181	156	133	112	93	76	61	48	37	28	21	16	13	12	13	16	21	28	37	48	61	76	93	112	133	
3	330	295	262	231	202	175	150	127	106	87	70	55	42	31	22	15	10	7	6	7	10	15	22	31	42	55	70	87	106	127	150	
2	291	258	227	198	171	146	123	102	83	66	51	38	27	18	11	6	3	2	3	6	11	18	27	38	51	66	83	102	123	146	171	
Y[1]	1	256	225	196	169	144	121	100	81	64	49	36	25	16	9	4	1	0	1	4	9	16	25	36	49	64	81	100	121	144	169	196
Y[0]	0	225	196	169	144	121	100	81	64	49	36	25	16	9	4	1	0	1	4	9	16	25	36	49	64	81	100	121	144	169	196	
Y[-1]	-1	198	171	146	123	102	83	66	51	38	27	18	11	6	3	2	3	6	11	18	27	38	51	66	83	102	123	146	171	198	227	258
-2	175	150	127	106	87	70	55	42	31	22	15	10	7	6	3	2	3	6	11	18	27	38	51	66	83	102	123	146	171	198	227	258
-3	156	133	112	93	76	61	48	37	28	21	16	13	12	13	16	21	28	37	48	61	76	93	112	133	156	181	208	237	268	301	336	
-4	141	120	101	84	69	56	45	36	29	24	21	20	21	24	29	36	45	56	69	84	101	120	141	164	189	216	245	276	309	344	381	
-5	130	111	94	79	66	55	46	39	34	31	30	31	34	39	46	55	66	79	94	111	130	151	174	199	226	255	286	319	354	391	430	
-6	123	106	91	78	67	58	51	46	43	42	43	46	51	58	67	78	91	106	123	142	163	186	211	238	267	298	331	364	403	442	483	
-7	120	105	92	81	72	65	60	57	56	57	60	65	72	81	92	105	120	137	156	177	200	225	252	281	313	345	380	421	477	540		
-8	121	108	97	88	81	76	73	72	73	76	81	88	97	108	121	136	153	172	193	216	241	268	297	328	361	396	433	472	513	556	601	
-9	126	115	106	99	94	91	90	91	94	99	106	115	126	139	154	171	190	211	234	259	286	315	346	379	414	451	490	531	574	619	666	
-10	135	126	119	114	111	110	111	114	119	126	135	146	159	174	191	210	231	254	279	306	335	366	399	434	471	510	551	594	639	686	735	
-11	148	141	136	133	132	133	136	141	148	157	168	181	196	213	232	253	276	301	328	357	388	421	456	493	532	573	616	661	708	757	808	
-12	165	160	157	156	157	160	165	172	181	192	205	220	237	256	277	300	325	352	381	412	445	480	517	556	597	640	685	732	781	832	885	
-13	186	183	182	183	186	191	198	207	218	231	246	263	282	303	326	351	378	407	438	471	506	543	582	623	666	711	758	807	858	911	966	
-14	211	210	211	214	219	226	235	246	259	274	291	310	331	354	379	406	435	466	499	534	571	610	651	694	739	786	835	886	939	994	1051	
-15	240	241	244	249	256	265	276	289	304	321	340	361	384	409	436	465	496	529	564	601	640	681	724	769	816	865	916	969	1024	1081	1140	

Figure 1. Paraboctys $PS[x^2 + 2x + 3, x^2, x^2 - 2x + 1]$. The verticals represent the sequences produced by C-Destroyer parabolas with variable offset on the vertical $x = 0$ of the $PS[x + 1, x, x + 1]$. The C-Destroyer parabolas with positive offset produce the vertical sequences on the left side of this table. The C-Destroyer parabolas with negative offset produce the vertical sequences on the right side of this table.

Simplifying all verticals for offset $f = 0$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Classif.	ACC	ACC																															
Y^*_{-1p}	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25					
r^*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
a^*	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2					
b^*	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1					
c^*	120	105	91	78	66	55	45	36	28	21	15	10	6	3	1	0	0	1	3	6	10	15	21	28	36	45	55	66	78	91	105		
15	585	540	556	513	531	490	510	471	493	456	480	445	471	438	466	435	465	436	468	441	475	450	486	463	501	480	520	501	543	526	570		
14	526	483	497	456	472	433	451	414	434	399	421	388	412	381	407	378	406	379	409	384	416	393	427	406	442	423	461	444	484	469	511		
13	471	430	442	403	417	380	396	361	379	346	366	335	357	328	352	325	351	326	354	331	361	340	372	353	387	370	406	391	429	416	456		
12	420	381	391	354	309	319	286	298	267	281	252	268	241	259	234	254	231	253	232	256	237	263	246	274	259	289	276	308	297	331	322	358	
10	330	295	301	268	276	245	255	226	238	211	225	200	216	193	211	190	210	191	213	196	220	205	231	218	246	235	265	256	288	281	315		
9	291	258	262	231	237	208	216	189	199	174	186	163	177	156	172	153	171	154	174	159	181	168	192	181	207	198	226	219	249	244	276		
8	256	225	227	198	202	175	181	156	164	141	151	130	142	123	137	120	136	121	139	126	146	135	157	148	172	165	191	186	214	211	241		
7	225	196	196	169	171	146	150	127	133	112	120	101	111	94	106	91	105	92	108	97	115	106	126	119	141	136	160	157	183	182	210		
6	198	171	169	144	144	121	123	102	106	87	93	76	84	69	79	66	78	67	81	72	88	81	99	94	114	111	133	132	156	157	183		
5	175	150	146	123	121	100	100	81	83	66	70	55	61	48	56	45	55	46	58	51	65	60	76	73	91	90	110	111	133	136	160		
4	156	133	127	106	102	83	81	64	64	49	51	38	42	31	37	28	36	29	39	34	46	43	57	56	72	73	91	94	114	119	141		
3	141	120	112	93	87	70	66	51	49	36	36	25	27	18	22	15	21	16	24	21	31	30	42	43	57	60	76	81	99	106	126		
2	130	111	101	84	76	61	55	42	38	27	25	16	16	9	11	6	10	7	13	12	20	21	31	34	46	51	65	72	88	97	115		
Y[1]	1	123	106	94	79	69	56	48	37	31	22	18	11	9	4	4	1	3	2	6	7	13	16	24	29	39	46	58	67	81	92	108	
Y[0]	0	120	105	91	78	66	55	45	36	28	21	15	10	6	3	1	0	0	1	3	6	10	15	21	28	36	45	55	66	78	91	105	
Y[-1]	-1	121	108	92	81	67	58	46	39	29	24	16	13	7	6	2	3	1	4	4	9	11	18	22	31	37	48	56	69	79	94	106	
-2	126	115	97	88	72	65	51	46	34	31	21	20	12	13	7	10	6	11	9	16	16	25	27	38	42	55	61	76	84	101	111		
-3	135	126	106	99	81	76	60	57	43	42	30	31	21	24	16	21	15	22	18	27	25	36	36	49	51	66	70	87	93	112	120		
-4	148	141	119	114	94	91	73	72	56	57	43	46	34	39	29	36	28	37	31	42	38	51	49	64	64	81	83	102	106	127	133		
-5	165	160	136	133	111	110	90	91	73	76	60	65	51	58	46	55	45	56	48	61	55	70	66	83	81	100	100	121	123	146	150		
-6	186	183	157	156	132	133	111	114	94	99	81	88	72	81	67	78	66	79	69	84	76	93	87	106	102	123	121	144	144	169	171		
-7	211	210	182	183	157	160	136	141	119	126	106	115	97	108	92	105	91	106	94	111	101	120	112	133	127	150	146	171	169	196			
-8	240	241	211	214	186	191	165	172	148	157	135	146	126	139	121	136	120	137	123	142	130	151	141	164	156	181	175	202	198	227	225		
-9	273	276	244	249	219	226	198	207	181	192	168	181	159	174	154	171	153	172	156	177	163	186	174	199	186	216	208	237	231	262	258		
-10	310	315	281	288	256	265	235	246	218	231	205	205	220	206	196	213	201	210	190	211	193	216	200	225	211	238	226	255	245	276	268	301	295
-11	351	358	322	331	297	308	276	289	259	274	246	263	237	256	232	253	231	254	234	259	241	268	252	281	267	298	286	319	309	344	336		
-12	396	405	367	378	342	355	321	336	304	321	291	310	282	303	277	300	276	301	279	306	286	315	297	328	312	345	331	366	354	391	381		
-13	445	456	416	429	391	406	370	387	353	372	340	361	331	354	326	351	325	352	328	357	335	366	346	379	361	396	380	417	403	442	430		
-14	498	511	469	484	444	461	423	442	406	427	393	416	384	409	379	406	378	407	381	412	388	421	399	434	414	451	433	472	456	497	483		
-15	555	570	526	543	501	520	480	501	463	486	450	475	441	468	436	465	435	466	438	471	445	480	456	493	471	510	490	531	513	556	540		

Figure 1. Verticals from $PS[x^2 + 2x + 3, x^2, x^2 - 2x + 1]$ in offset $f = 0$.

See that paraboctys above produces vertical sequences with the inflection point bouncing. Therefore, this paraboctys is:

For $Y[1]$: interlacing between $A084849 \equiv A130883 \equiv [4,1,2] = 2x^2 - x + 1$ and $A100037 \equiv A236257 \equiv [4,3,6] = 2x^2 + x + 3$.

For $Y[0]$: interlacing between $A000384 \equiv A014105 \equiv [3,0,1] = 2x^2 - x$ and $A000384 \equiv A014105 \equiv [1,0,3] = 2x^2 + x$.

For $Y[-1]$: interlacing between $A100037 \equiv A236257 \equiv [6,3,4] = 2x^2 - 1x + 3$ and $A084849 \equiv A130883 \equiv [2,1,4] = 2x^2 + x + 1$

If we turn the paraboctys $PS[x^2 + 2x + 3, x^2, x^2 - 2x + 1]$ clockwise 90° around the central point (0,0), we get:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	SUB																															
Y_ip	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
f	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
b	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0	-2	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	-26	-28	-30	
c	465	406	351	300	253	210	171	136	105	78	55	36	21	10	3	0	1	6	15	28	45	66	91	120	153	190	231	276	325	378	435	
-15	240	211	186	165	148	135	126	121	120	123	130	141	156	175	198	225	256	291	330	373	420	471	526	585	648	715	786	861	940	1023	1110	
-14	241	210	183	160	141	126	115	108	105	106	111	120	133	150	171	196	225	258	295	336	381	430	483	540	601	666	735	808	885	966	1051	
-13	244	211	182	157	136	119	106	97	92	91	94	101	112	127	146	169	196	227	262	301	344	391	442	497	556	619	686	757	832	911	994	
-12	249	214	183	156	133	114	99	88	81	78	79	84	93	106	123	144	169	198	231	268	309	354	403	456	513	574	639	708	781	858	939	
-11	256	219	185	157	132	114	94	81	72	67	66	69	76	87	102	121	144	171	202	237	276	319	366	417	472	531	594	661	732	807	886	
-10	265	226	191	160	133	110	91	76	65	58	55	56	61	70	83	100	121	146	175	208	245	286	331	380	433	490	551	616	685	758	835	
-9	276	235	198	165	136	111	90	73	60	51	46	45	48	55	66	81	100	123	150	181	216	255	298	345	396	451	510	573	640	711	786	
-8	289	246	207	172	141	114	91	72	57	46	39	36	37	42	51	64	81	102	127	156	189	226	267	312	361	414	471	532	597	666	739	
-7	304	259	218	181	148	119	94	73	56	43	34	29	28	31	38	49	64	83	103	133	164	199	238	281	328	379	434	493	556	623	694	
-6	321	274	231	192	157	126	99	76	57	42	31	24	21	22	27	36	49	66	87	112	141	174	211	252	297	346	399	456	517	582	651	
-5	340	291	246	205	168	135	106	81	60	43	30	21	16	15	18	25	36	51	70	93	120	151	186	225	268	315	366	421	480	543	610	
-4	361	310	263	220	181	146	115	88	65	46	31	20	13	10	11	16	25	38	55	76	101	130	163	200	241	286	335	388	445	506	571	
-3	384	331	283	237	196	159	126	97	72	51	34	21	12	7	6	9	16	27	42	61	84	111	142	177	216	259	306	357	412	471	534	
-2	409	354	303	256	213	174	139	108	81	58	39	24	13	6	3	4	9	18	31	48	69	94	123	156	193	234	279	328	381	438	499	
Y[-1]	-1	436	379	326	277	223	191	154	121	92	67	46	29	16	7	2	1	4	11	22	37	56	79	106	137	172	211	254	301	352	407	466
Y[0]	0	465	406	351	300	253	210	171	136	105	78	55	36	21	10	3	0	1	6	15	28	45	66	91	120	153	190	231	276	325	378	435
Y[1]	1	496	435	378	325	276	231	190	153	120	91	66	45	28	15	6	1	0	3	10	21	36	55	78	105	136	171	210	253	300	351	406

Figure 1. Paraboctys $PS[2x^2 + x + 1, 2x^2 - x, 2x^2 - 3x + 1]$. The vertical ones here are the horizontal ones of $PS[x^2 + 2x + 3, x^2, x^2 - 2x + 1]$. Because of the clockwise 90° rotation the indexes y increase from top to bottom (opposite direction of the Y-axis).

Simplifying all verticals for offset $f = 0$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Classif.	SUB																														
Y_ip	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
f	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
a ^o	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
b ^o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
c ^o	240	210	182	156	132	110	90	72	56	42	30	20	12	6	2	0	0	2	6	12	20	30	42	56	72	90	110	132	156	182	210
15	465	435	407	381	357	335	315	297	281	267	255	245	237	231	227	225	225	227	231	237	245	255	267	281	297	315	335	357	381	407	435
14	436	406	378	352	328	306	286	268	252	238	226	216	208	202	198	196	196	198	202	208	216	226	238	252	268	286	306	328	352	378	406
13	409	379	351	325	301	279	259	241	225	211	199	189	181	175	171	169	169	171	175	181	189	199	211	225	241	259	279	301	325	351	379
12	384	354	326	300	276	254	234	216	200	186	174	164	156	150	146	144	144	146	150	156	164	174	186	200	216	234	254	276	300	326	354
11	361	331	303	277	253	231	211	193	177	163	151	141	133	127	123	121	121	123	127	133	141	151	163	177	193	211	231	253	277	303	331
10	340	310	282	256	232	210	190	172	156	142	130	120	112	106	102	100	100	102	106	112	120	130	142	156	172	190	210	232	256	282	310
9	321	291	263	237	213	191	171	153	137	123	111	101	93	87	83	81	81	83	87	93	101	111	123	137	153	171	191	213	237	263	291
8	304	274	246	220	196	174	154	136	120	106	94	84	76	70	66	64	64	66	70	76	84	94	106	120	136	154	174	196	220	246	274
7	289	259	231	205	181	159	139	121	105	91	79	69	61	55	51	49	49	51	55	61	69	79	91	105	121	139	159	181	205	231	259
6	276	246	218	192	168	146	126	108	92	78	66	56	48	42	38	36	36	38	42	48	56	68	78	92	108	126	146	168	192	218	246
5	265	235	207	181	157	135	115	97	81	67	55	45	37	31	27	25	25	27	31	37	45	55	67	81	97	115	135	157	181	207	235
4	256	226	198	172	148	126	106	88	72	58	46	36	28	22	18	16	16	18	22	28	36	46	58	72	88	106	126	148	172	198	226
3																															

5.3 The C-Submarine parabolas with variable offset on a vertical of $PS[x + 1, x, x + 1]$

See the picture:

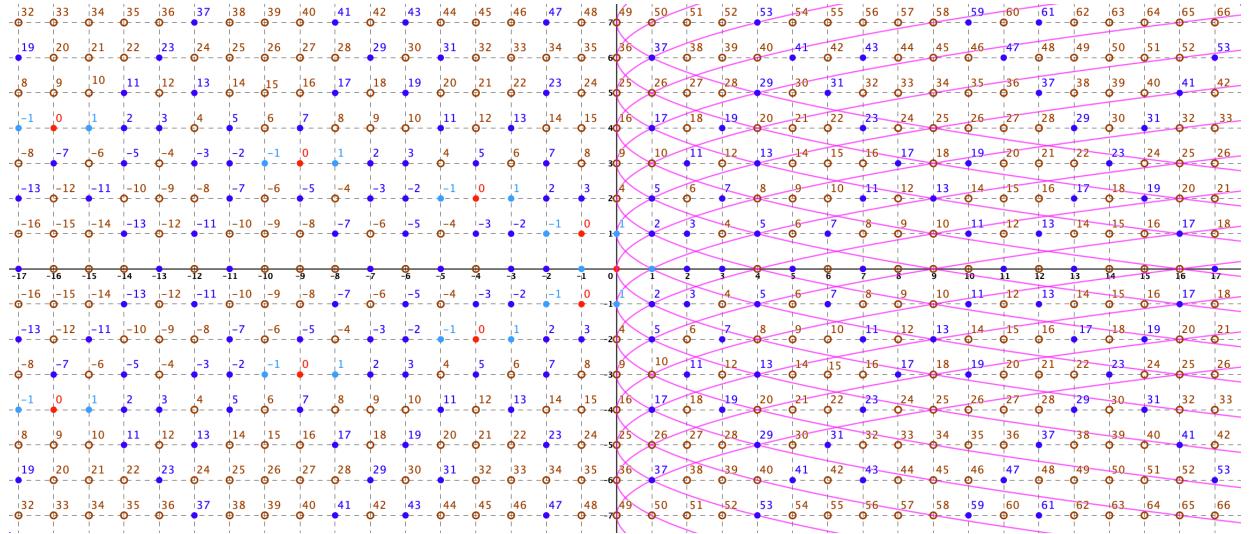


Figure 1. The C-Submarine parabolas in column $x = 0$ of the lattice-grid $PS[x + 1, x, x + 1]$. They have offset following the staircase function with the step of a unit. These parabolas have equations in the XY plane of the form $x = y^2 - \text{Even} * y + \text{Square}$. In terms of the offset value $x = y^2 - 2fy + f^2$.

Each parabola $x = y^2 - 2fy + f^2$ in lattice-grid $PS[x + 1, x, x + 1]$ will produce a quadratic sequence of the form $Y[y] = ay^2 + by + c$. Now, to determine the coefficients a, b, c , for each sequence we have to determine three consecutive elements.

Over each parabola, we can choose 3 consecutive elements from top to bottom or from bottom to top. Because we are synchronizing the y index with the Y-axis, we will choose 3 consecutive bottom-up elements which is the increasing index direction: $[Y[-1], Y[0], Y[1]]$.

The elements of row $y = -1$ in the new paraboctys will be noted as $@Y[-1]$.

The elements of row $y = 0$ in the new paraboctys will be noted as $@Y[0]$.

The elements of row $y = 1$ in the new paraboctys will be noted as $@Y[1]$.

So, let's create the new paraboctys $PS[@Y[-1], @Y[0], @Y[1]]$. This new paraboctys will contain all the sequences formed by the C-Submarine parabolas with a variable offset in a vertical of lattice-grid $PS[x + 2, x, x]$.

As we have C-Submarine parabolas, we can understand each sequence as being made of two elements of the vertical column $x = 1$ to assume the $@Y[-1]$ and $@Y[1]$ elements position and one element of the vertical column $x = 0$ to assume the $@Y[0]$ elements positions.

Consequently,

10. The elements on the vertical column $x = 1$ with offset $f = -1$ of the current paraboctys $PS[x + 1, x, x + 1]$ is:

$$A002522 \equiv [1,2,5] \equiv @Y[-1] = x^2 + 2x + 2$$

11. The elements on the vertical column $x = 0$ with offset $f = 0$ of the current paraboctys $PS[x + 1, x, x + 1]$ is:

$$A000290 \equiv [1,0,1] \equiv @Y[0] = x^2$$

12. The elements on the vertical column $x = 1$ with offset $f = 1$ of the current paraboctys $PS[x + 1, x, x + 1]$ is:

$$A002522 \equiv [5,2,1] \equiv @Y[1] = x^2 - 2x + 2$$

Finally, we create the new paraboctys $PS[x^2 + 2x + 2, x^2, x^2 - 2x + 2]$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES	SUB	DES			
y_ip	-7,5	-7	6,5	6	-5,5	-5	4,5	4	-3,5	-3	2,5	-2	-1,5	-1	-0,5	0	0,5	1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7	7,5	
f	-8	-7	-7	-6	-6	-5	-5	-4	-4	-3	-3	-2	-2	-1	-1	0	0	0	1	1	2	3	3	4	4	5	5	6	6	7	7	
a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
b	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0	-2	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	-26	-28	-30	
c	225	196	169	144	121	100	81	64	49	36	25	16	9	4	1	0	1	4	9	16	25	36	49	64	81	100	121	144	169	196	225	
15	1125	1066	1009	954	901	850	801	754	709	666	625	586	549	514	481	450	421	394	369	346	325	306	289	274	261	250	241	234	229	226	225	
14	1037	980	925	872	821	772	725	680	637	596	557	520	485	452	421	392	365	340	317	296	277	260	245	232	221	212	205	200	197	196	197	
13	953	898	845	794	745	698	653	610	569	530	493	458	425	394	365	338	313	290	269	250	233	218	205	194	185	178	173	170	169	170	173	
12	873	820	769	720	673	628	585	544	505	468	433	400	369	340	313	286	265	244	225	208	193	180	169	160	153	148	145	144	145	148	153	
11	797	746	697	650	605	562	521	482	445	410	377	346	317	290	265	242	221	202	185	170	157	146	137	130	125	122	121	122	125	130	137	
10	725	676	629	584	541	500	461	424	389	356	325	296	269	244	221	200	181	164	149	136	125	116	109	104	101	100	101	104	109	116	125	
9	657	610	565	522	481	442	405	370	337	306	277	250	225	202	181	162	145	130	117	106	97	90	85	82	81	82	85	90	97	106	117	
8	593	548	505	464	425	388	353	320	289	260	233	208	185	164	145	128	113	100	89	80	73	68	65	64	65	68	73	80	89	100	113	
7	533	490	449	410	373	338	305	274	245	218	193	170	149	130	113	98	85	74	65	58	53	50	49	50	53	58	65	74	85	98	113	
6	477	436	397	360	325	292	261	232	205	180	157	136	117	100	85	72	61	52	45	40	37	36	37	40	45	52	61	72	85	100	117	
5	425	386	349	314	281	250	221	194	169	146	125	106	89	74	61	50	41	34	29	26	25	26	29	34	41	50	61	74	89	106	125	
4	377	340	305	272	241	212	185	160	137	116	97	80	65	52	41	32	25	20	17	16	17	20	25	32	41	52	65	80	97	116	137	
3	333	298	265	234	205	178	153	130	109	90	73	58	45	34	25	18	13	10	9	10	13	18	25	34	45	58	73	90	109	130	153	
2	293	260	229	200	173	148	125	104	85	68	53	40	29	20	13	8	5	4	5	8	13	20	29	40	53	68	85	104	125	148	173	
Y[1]	1	257	226	197	170	145	122	101	82	65	50	37	26	17	10	5	2	1	2	5	10	17	26	37	50	65	82	101	122	145	170	197
Y[0]	0	225	196	169	144	121	100	81	64	49	36	25	16	9	4	1	0	1	4	9	16	25	36	49	64	81	100	121	144	169	196	225
Y[-1]	-1	197	170	145	122	101	82	65	50	37	26	17	10	5	2	1	2	5	10	17	26	37	50	65	82	101	122	145	170	197	226	257
-2	173	148	125	104	85	68	53	40	29	20	13	8	5	4	5	8	13	20	29	40	53	68	85	104	125	148	173	200	229	260	293	
-3	153	130	109	90	73	58	45	34	25	18	13	10	9	10	13	18	25	34	45	58	73	90	109	130	153	178	205	234	265	298	333	
-4	137	116	97	80	65	52	41	32	25	20	17	16	17	20	25	32	41	52	65	80	97	116	137	160	185	212	241	272	305	340	377	
-5	125	106	89	74	61	50	41	34	29	26	25	26	29	34	41	50	61	74	89	106	125	146	169	194	221	250	281	314	349	386	425	
-6	117	100	85	72	61	52	45	40	37	36	37	40	45	52	61	72	85	100	117	136	157	180	205	232	261	292	325	360	397	436	477	
-7	113	98	85	74	65	58	53	50	49	50	53	58	65	74	85	98	113	130	149	170	193	218	245	274	305	338	373	410	449	490	533	
-8	113	100	89	80	73	68	65	64	68	73	80	89	100	113	128	145	164	185	208	233	260	289	320	353	388	425	464	505	548	593		
-9	117	106	97	90	85	82	81	82	85	90	97	106	117	130	145	162	181	202	225	250	277	306	337	370	405	442	481	522	565	610	657	
-10	125	116	109	104	101	100	101	104	109	116	125	136	149	164	181	200	221	244	269	296	325	356	389	424	461	500	541	584	629	676	725	
-11	137	130	125	122	121	122	125	130	137	146	157	170	185	202	221	242	265	290	317	346	377	410	445	482	521	562	605	650	697	746	797	
-12	153	148	145	144	145	148	153	160	169	180	193	208	225	244	265	288	313	340	369	400	433	468	505	544	585	628	673	720	769	820	873	
-13	173	170	169	170	173	178	185	194	205	212	233	250	269	290	313	338	365	394	425	458	493	530	569	610	653	698	745	794	845	889	953	
-14	197	196	197	200	205	212	221	232	245	260	277	296	317	340	365	392	421	452	485	520	557	596	637	680	725	772	821	872	925	980	1037	
-15	225	226	229	234	241	250	261	274	289	306	325	346	369	394	421	450	481	514	549	586	625	666	709	754	801	850	901	954	1009	1066	1125	

Figure 1. Paraboctys $PS[x^2 + 2x + 2, x^2, x^2 - 2x + 2]$. The verticals represent the sequences produced by C-Submarine parabolas with variable offset on the vertical $x = 0$ of the $PS[x + 2, x, x]$. The C-Submarine parabolas with positive offset produce the vertical sequences on the left side of this table. The C-Submarine parabolas with negative offset produce the vertical sequences on the right side of this table.

Simplifying all verticals for offset $f = 0$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	DES	SUB	DES																													
y^o_{ip}	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5			
a^o	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2			
b^o	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2	0	-2			
c^o	113	98	85	72	61	50	41	32	25	18	13	8	5	2	1	0	1	2	5	8	13	18	25	32	41	50	61	72	85	98	113	
15	533	548	505	522	481	500	461	482	445	468	433	458	425	452	421	450	421	452	425	458	433	468	445	482	461	500	481	522	505	548	533	
14	477	490	449	464	425	442	405	424	389	410	377	400	369	394	365	392	365	394	369	400	377	410	389	424	405	442	425	464	449	490	477	
13	425	436	397	410	373	388	353	370	337	356	325	346	317	340	313	338	313	340	317	346	325	356	337	370	353	388	373	410	397	436	425	
12	377	386	349	360	325	338	305	320	289	306	277	296	269	290	265	288	265	290	269	296	277	306	289	320	305	338	325	360	349	386	377	
11	333	340	305	314	281	292	261	274	245	260	233	250	225	244	221	242	221	244	225	250	233	260	245	274	261	292	281	314	305	340	333	
10	293	298	265	272	241	250	221	232	205	218	193	208	185	202	181	200	181	202	185	208	193	218	205	232	221	250	241	272	265	298	293	
9	257	260	229	234	205	212	185	194	169	180	157	170	149	164	145	162	145	164	149	170	157	180	169	194	185	212	205	234	229	260	257	
8	225	226	197	200	173	178	153	160	137	146	125	136	117	130	113	128	113	130	117	136	125	146	137	160	153	178	173	200	197	226	225	
7	197	196	169	170	145	148	125	130	109	116	97	106	89	100	85	98	85	100	89	106	97	116	109	130	125	148	145	170	170	197		
6	173	170	145	144	121	122	101	104	85	90	73	80	65	74	61	72	61	74	65	80	73	90	85	104	101	122	121	144	145	170	173	
5	153	148	125	122	101	101	80	81	82	65	68	53	58	45	52	41	50	41	52	45	58	63	68	82	81	100	101	122	125	148	153	
4	137	130	109	104	85	85	82	65	64	49	50	37	40	29	34	25	32	25	34	29	40	37	50	49	64	65	82	85	104	109	130	137
3	125	116	97	90	73	68	53	50	37	36	25	26	17	20	13	18	13	20	17	26	25	36	37	50	53	68	73	90	97	116	125	
2	117	106	89	80	65	58	45	40	29	26	17	16	9	10	5	8	5	10	9	16	17	26	29	40	45	58	65	80	89	106	117	
$Y[1]$	1	113	100	85	74	61	52	41	34	25	20	13	10	5	4	1	2	1	4	5	10	13	20	25	34	41	52	61	74	85	100	113
$Y[0]$	0	113	98	85	72	61	50	41	32	25	18	13	8	5	2	1	0	1	2	5	8	13	18	25	32	41	50	61	72	85	98	113
$Y[-1]$	-1	117	100	89	74	65	52	45	34	29	20	17	10	9	4	5	2	5	4	9	10	17	20	29	34	45	52	65	74	89	100	117
-2	125	106	97	80	73	58	53	40	37	26	25	16	17	10	13	8	13	10	17	16	25	26	37	40	53	58	73	80	97	106	125	
-3	137	116	109	90	85	68	65	50	49	36	37	26	29	20	25	18	25	20	29	26	37	36	49	50	65	68	85	90	109	116	137	
-4	153	130	125	104	101	82	81	64	65	50	53	40	45	34	41	34	45	40	53	50	65	64	81	82	101	104	125	130	153			
-5	173	148	145	122	121	100	101	82	85	68	73	58	65	52	61	50	61	52	65	58	73	68	85	82	101	100	121	122	145	148	173	
-6	197	170	169	144	145	122	125	104	109	90	97	80	89	74	85	72	85	74	89	80	97	90	109	104	125	122	145	144	169	170	197	
-7	225	196	197	170	173	148	153	130	137	116	125	106	117	100	113	98	113	100	117	106	125	116	137	130	153	148	173	170	197	196	225	
-8	257	226	229	200	205	178	185	160	169	146	157	136	149	130	145	128	145	130	149	136	157	146	169	160	185	178	205	200	229	226	257	
-9	293	260	265	234	241	212	221	194	205	180	193	170	185	164	181	164	185	170	193	180	205	194	221	212	241	234	265	260	293			
-10	333	298	305	272	281	250	261	232	245	218	233	208	225	202	221	200	221	202	225	208	233	218	245	232	261	250	281	272	305	298	333	
-11	377	340	349	314	325	292	305	274	289	260	277	250	269	244	265	242	265	244	269	250	277	260	289	274	305	292	325	314	349	340	377	
-12	425	386	397	360	373	338	353	320	337	306	325	296	317	290	313	288	313	290	317	296	325	306	337	320	353	338	373	360	397	386	425	
-13	477	436	449	410	425	388	405	370	389	356	377	346	369	340	365	338	365	340	369	346	377	356	389	370	405	388	425	410	449	436	477	
-14	533	490	505	464	481	442	461	424	445	410	433	400	425	394	421	392	421	394	425	400	433	410	445	424	461	442	481	464	505	490	533	
-15	593	548	565	522	541	500	521	482	505	468	493	458	485	452	481	450	481	452	485	458	493	468	505	482	521	500	541	522	565	548	593	

Figure 1. This paraboctys is the verticals from $PS[x^2 + 2x + 2, x^2, x^2 - 2x + 2]$ in offset $f = 0$.

See that $PS[x^2 + 2x + 2, x^2, x^2 - 2x + 2]$ produces vertical sequences with y^o_{ip} bouncing.

Therefore, in offset $f=0$, the resulting paraboctys is:

For $Y[1]$: interlacing between $A271624 \equiv [4,2,4] = 2x^2 + 2$ and $A001844 \equiv [1,1,5] = 2x^2 + 2x + 1$.

For $Y[0]$: interlacing between $A001105 \equiv [2,0,2] = 2x^2$ and $A001844 \equiv [1,1,5] = 2x^2 + 2x + 1$.

For $Y[-1]$: interlacing between $A271624 \equiv [4,2,4] = 2x^2 + 2$ and $A294774 \equiv [5,5,9] = 2x^2 + 2x + 5$

To be continued...

If we turn the paraboctys clockwise 90° around the central point (0,0), we get:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	SUB																															
Y_ip	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
f	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
b	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0	-2	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	-26	-30		
c	450	392	338	288	242	200	162	128	98	72	50	32	18	8	2	0	2	8	18	32	50	72	98	128	162	200	242	288	338	392	450	
-15	225	197	173	153	137	125	117	113	117	125	137	153	173	197	225	257	293	333	377	425	477	533	593	657	725	797	873	953	1037	1125		
-14	226	196	170	148	130	116	106	100	98	100	106	116	130	148	170	196	226	260	298	340	386	430	490	548	610	676	746	820	898	980	1066	
-13	229	197	169	145	125	109	97	89	85	85	89	97	109	125	145	169	197	229	265	305	349	397	449	505	565	629	697	769	845	925	1009	
-12	234	200	170	144	122	104	90	80	74	72	74	80	90	104	122	144	170	200	234	272	314	360	410	464	522	584	650	720	794	872	954	
-11	241	205	173	145	121	101	85	73	65	61	61	65	73	85	101	121	145	173	205	241	281	325	373	425	481	541	605	673	745	821	901	
-10	250	212	178	148	122	100	82	68	58	52	50	52	58	68	82	100	122	148	178	212	250	292	338	388	442	500	562	628	698	772	850	
-9	261	221	185	153	125	101	81	65	53	45	41	41	45	53	65	81	101	125	153	185	221	261	305	353	405	461	521	585	653	725	801	
-8	274	232	194	160	130	104	82	64	50	40	34	32	34	40	50	64	82	104	130	160	194	232	274	320	370	424	482	544	610	680	754	
-7	289	245	205	169	137	109	85	65	49	37	29	25	25	29	37	49	65	85	109	137	169	205	245	289	337	389	445	505	569	637	709	
-6	306	260	218	180	146	116	90	68	50	36	26	20	18	20	26	36	50	68	90	116	146	180	218	260	306	356	410	468	530	596	666	
-5	325	277	233	193	157	125	97	73	53	37	25	17	13	13	17	25	37	53	73	97	125	157	193	233	277	325	377	433	493	557	625	
-4	346	296	250	208	170	136	106	80	58	40	26	16	10	8	10	16	26	40	58	80	106	136	170	208	256	346	400	458	520	586		
-3	369	317	269	225	185	149	117	89	65	45	29	17	9	5	5	9	17	29	45	65	89	117	149	185	225	269	317	369	425	485	549	
-2	394	340	290	244	202	164	130	100	74	52	34	20	10	4	2	4	10	20	34	52	74	100	130	164	202	244	290	340	394	452	514	
Y[1]	-1	421	365	313	265	221	181	145	113	85	61	41	25	13	5	1	1	5	13	25	41	61	85	113	145	181	221	265	313	365	421	
Y[0]	0	450	392	338	288	242	200	162	128	98	72	50	32	18	8	2	0	2	8	18	32	50	72	98	128	162	200	242	288	338	392	450
Y[1]	1	481	421	365	313	265	221	181	145	113	85	61	41	25	13	5	1	1	5	13	25	41	61	85	113	145	181	221	265	313	365	421

Figure 1. Paraboctys $PS[2x^2 + 2x + 1, 2x^2, 2x^2 - 2x + 1]$. The vertical ones here are the horizontal ones of $PS[x^2 + 2x + 2, x^2, x^2 - 2x + 2]$. Because of the clockwise 90° rotation the indexes y increase from top to bottom (opposite direction of the Y-axis).

Simplifying all verticals for offset $f = 0$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	SUB																															
Y ^z _ip	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
f ^z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
a ^z	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
b ^z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
c ^z	225	196	169	144	121	100	81	64	49	36	25	16	9	4	1	0	1	4	9	16	25	36	49	64	81	100	121	144	169			
Y[1]	-15	450	421	394	369	346	325	306	289	274	261	250	241	234	229	225	226	229	234	241	250	261	274	289	306	325	346	369	394	421	450	
Y[0]	0	450	392	338	288	242	200	162	128	98	72	50	32	18	8	2	0	2	8	18	32	50	72	98	128	162	200	242	288	338	392	450
Y[1]	1	481	421	365	313	265	221	181	145	113	85	61	41	25	13	5	1	1	5	13	25	41	61	85	113	145	181	221	265	313	365	421
Y[0]	0	450	392	338	288	242	200	162	128	98	72	50	32	18	8	2	0	2	8	18	32	50	72	98	128	162	200	242	288	338	392	450
Y[1]	-1	226	197	170	145	122	101	82	65	50	37	26	17	10	5	2	1	2	5	10	17	26	37	50	65	82	101	122	144	169	197	226
Y[0]	0	225	196	169	144	121	100	81	64	49	36	25	16	9	4	1	0	1	4	9	16	25	36	49	64	81	100	121	144	169	196	225
Y[1]	-1	226	197	170	145	122	101	82	65	50	37	26	17	10	5	2	1	2	5	10	17	26	37	50	65	82	101	122	145	170	197	226
Y[0]	0	225	196	169	144	121	100	81	64	49	36	25	16	9	4	1	0	1	4	9	16	25	36	49	64	81	100	121	144	169	196	225
Y[1]	-1	229	200	173	148	125	104	85	68	53	40	29	20	13	8	5	4	5	8	13	20	29	40	53	68	85	104	125	148	173	200	229
Y[0]	0	229	200	173	148	125	104	85	68	53	40	29	20	13	8	5	4	5	8	13	20	29	40	53	68	85	104	125	148	173	200	229
Y[1]	-1	229	200	173	148	125	104	85	68	53	40	29	20	13	8	5	4	5	8	13	20	29	40	53	68	85	104	125	148	173	200	229
Y[0]	0	234	205	178	153	130	109	93	73	58	45	34	25	18	13	10	9	10	13	18	25	34	45	58	73	90	109	130	153	178	205	234
Y[1]	-1	241	212	185	160	137	116	97	80																							

New sequences of primes we find when adding Integers. For example, adding 11, turn the paraboctys clockwise 90° , and we have on offset $f = 0$:

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	SUB																															
y^*_ip	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
P^*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
a^*	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
b^*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
c^*	236	207	180	155	132	111	92	75	60	47	36	27	20	15	12	11	12	15	20	27	36	47	60	75	92	111	132	155	180	207	236	
15	461	432	405	380	357	336	317	300	285	272	261	252	245	240	237	236	237	240	245	252	261	272	285	300	317	336	357	380	405	432	461	
14	432	403	376	351	328	307	288	271	256	243	232	223	216	211	208	207	208	211	216	223	232	243	256	271	288	307	328	351	376	403	432	
13	405	376	349	324	301	280	261	244	229	216	205	196	189	184	181	180	181	184	189	196	205	216	229	244	261	280	301	324	349	376	405	
12	380	351	324	299	276	255	236	219	204	191	180	171	164	159	156	155	156	159	164	171	180	191	204	219	236	255	276	299	324	351	380	
11	357	328	301	276	253	232	213	196	181	168	157	148	141	136	133	132	133	136	141	148	157	168	181	196	213	232	253	276	301	328	357	
10	336	307	280	255	232	211	192	175	160	147	136	127	120	115	112	111	112	115	120	127	136	147	160	175	192	211	232	255	280	307	336	
9	317	288	261	236	213	192	173	156	141	128	117	108	101	96	93	92	93	96	101	108	117	128	141	156	173	192	213	236	261	288	317	
8	300	271	244	219	196	175	156	139	124	111	100	91	84	79	76	75	76	79	84	91	100	111	124	139	156	175	196	219	244	271	300	
7	285	256	229	204	181	160	141	124	109	96	85	76	69	64	61	60	61	64	69	76	85	96	109	124	141	160	181	204	229	256	285	
6	272	243	216	191	168	147	128	111	96	83	72	63	56	51	48	47	48	51	56	63	72	83	96	111	128	147	168	191	216	243	272	
5	261	232	205	180	157	136	117	100	85	72	61	52	45	40	37	36	37	40	55	52	61	72	85	100	117	136	157	180	205	232	261	
4	252	223	196	171	148	127	108	91	76	63	52	43	36	31	28	27	28	31	36	43	52	63	76	91	108	127	148	171	196	223	252	
3	245	216	189	164	141	120	101	84	69	56	45	36	29	24	21	20	21	24	29	36	45	56	69	84	101	120	141	164	189	216	245	
2	240	211	184	159	136	115	96	79	64	51	40	31	24	19	16	15	16	19	24	31	40	51	64	79	96	115	136	159	184	211	240	
Y[1]	1	237	208	181	156	133	112	93	76	61	48	37	28	21	16	13	12	13	16	21	28	37	48	61	76	93	112	133	156	181	208	237
Y[0]	0	236	207	180	155	132	111	92	75	60	47	36	27	20	15	12	11	12	15	20	27	36	47	60	75	92	111	132	155	180	207	236
Y[-1]	-1	237	208	181	156	133	112	93	76	61	48	37	28	21	16	13	12	13	16	21	28	37	48	61	76	93	112	133	156	181	208	237
-2	240	211	184	159	136	115	96	79	64	51	40	31	24	19	16	15	16	19	24	31	40	51	64	79	96	115	136	159	184	211	240	
-3	245	216	189	164	141	120	101	84	69	56	45	36	29	24	21	20	21	24	29	36	45	56	69	84	101	120	141	164	189	216	245	
-4	252	223	196	171	148	127	108	91	76	63	52	43	36	31	28	27	28	31	36	43	52	63	76	91	108	127	148	171	196	223	252	
-5	261	232	205	180	157	136	117	100	85	72	61	52	45	40	37	36	37	40	45	52	61	72	85	100	117	136	157	180	205	232	261	
-6	272	243	216	191	168	147	128	111	96	83	72	63	56	51	48	47	48	51	56	63	72	83	96	111	128	147	168	191	216	243	272	
-7	285	256	229	204	181	160	141	124	109	96	85	76	69	64	61	60	61	64	69	76	85	96	109	124	141	160	181	204	229	256	285	
-8	300	271	244	219	196	175	156	139	124	111	100	91	84	79	76	75	76	79	84	91	100	111	124	139	156	175	196	219	244	271	300	
-9	317	288	261	236	213	192	173	156	141	128	117	108	101	96	93	92	93	96	101	108	117	128	141	156	173	192	213	236	261	288	317	
-10	336	307	280	255	232	211	192	175	160	147	136	127	120	115	112	111	112	115	120	127	136	147	160	175	192	211	232	255	280	307	336	
-11	357	328	301	276	253	232	213	196	181	168	157	148	141	136	133	132	133	136	141	148	157	168	181	196	213	232	253	276	301	328	357	
-12	380	351	324	299	276	255	236	219	204	191	180	171	164	159	156	155	156	159	164	171	180	191	204	219	236	255	276	299	324	351	380	
-13	405	376	349	324	301	280	261	244	229	216	205	196	189	184	181	180	181	184	189	196	205	216	229	244	261	280	301	324	349	376	405	
-14	432	403	376	351	328	307	288	271	256	243	232	223	216	211	208	207	208	211	216	223	232	243	256	271	288	307	328	351	376	403	432	
-15	461	432	405	380	357	336	317	300	285	272	261	252	245	240	237	236	237	240	245	252	261	272	285	300	317	336	357	380	405	432	461	

Figure 1. $PS[x^2 + 12, x^2 + 11, x^2 + 12]$

5.4 The C-Destroyer and C-Submarine interleaving parabolas with a varying offset in $PS[x + 1, x, x + 1]$

See the picture:

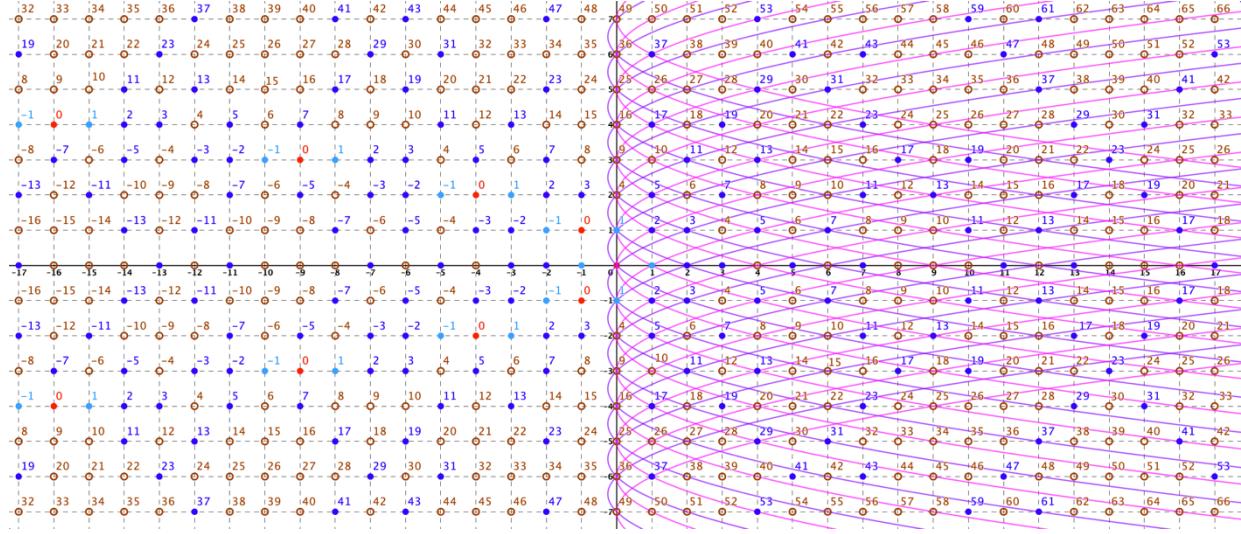


Figure 1. The combined C-Destroyers and C-Submarines vertical parabolas in column $x = 0$ of the lattice-grid $PS[x + 1, x, x + 1]$.

Column -->	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Classif.	ACC	DES	ACC	SUB	ACC	DES	ACC	SUB	ACC	DES	ACC	SUB	ACC	DES	ACC	SUB	ACC	DES														
Y_ip	-3.75	-3.5	-3.25	-3	-2.75	-2.5	-2.25	-2	-1.75	-1.5	-1.25	-1	-0.75	-0.5	-0.25	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3	3.25	3.5	3.75	
f	-4	-4	-3	-3	-3	-3	-2	-2	-2	-2	-1	-1	-1	-1	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	4	
a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
b	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	
c	64	49	49	36	36	25	25	16	16	9	9	4	4	1	1	0	0	1	1	4	4	9	9	16	16	25	25	36	36	49	49	
1	15	739	709	694	666	651	625	610	586	571	549	534	514	499	481	466	450	435	421	406	394	379	369	354	346	331	325	310	306	291	289	274
2	14	666	637	623	596	582	557	543	520	506	485	471	452	438	421	407	392	378	365	351	340	326	317	303	296	282	277	263	260	246	245	231
3	13	597	569	556	530	517	493	480	458	445	425	412	394	381	365	352	338	325	313	300	290	277	269	256	250	237	233	220	218	205	205	192
4	12	532	505	493	468	456	433	421	400	388	369	357	340	328	313	301	288	276	265	253	244	232	225	213	208	196	193	181	180	168	169	157
5	11	471	445	434	410	399	377	366	346	335	317	306	290	279	265	254	242	231	221	210	202	191	185	174	170	159	157	146	146	135	137	126
6	10	414	389	379	356	346	325	315	296	286	269	259	244	234	221	211	200	190	181	171	164	154	149	139	136	126	125	115	116	106	109	99
7	9	361	337	328	306	297	277	264	250	241	225	216	202	193	181	172	162	153	145	136	130	121	117	108	106	97	97	88	90	81	85	76
8	8	312	289	281	260	252	233	225	208	200	185	177	164	156	145	137	128	120	113	105	100	92	89	81	80	72	73	65	68	60	65	57
9	7	267	245	238	218	211	193	186	170	163	149	142	130	123	113	106	98	91	85	78	74	67	65	58	58	51	53	46	50	43	49	42
10	6	226	205	199	180	174	157	151	136	130	117	111	100	94	85	79	72	66	61	55	52	46	45	39	40	34	37	31	36	30	37	31
11	5	189	169	164	146	141	125	120	106	101	89	84	74	69	61	56	50	45	41	36	34	29	29	24	26	21	25	20	26	21	29	24
12	4	156	137	133	116	112	97	93	80	76	65	61	52	48	41	37	32	28	25	21	20	16	17	13	16	12	17	13	20	16	25	21
13	3	127	109	106	90	87	73	70	58	55	45	42	34	31	25	22	18	15	13	10	10	7	9	6	10	7	13	10	18	15	25	22
14	2	102	85	83	68	66	53	51	40	38	29	27	20	18	13	11	8	6	5	3	4	2	5	3	8	6	13	11	20	18	29	27
Y[1]	1	81	65	64	50	49	37	36	26	25	17	16	10	9	5	4	2	1	1	0	2	1	5	4	10	9	17	16	26	25	37	36
Y[0]	0	64	49	49	36	36	25	25	16	16	9	9	4	4	1	1	0	1	1	4	4	9	9	16	15	25	25	36	36	49	49	
Y[-1]	-1	51	37	38	26	27	17	18	10	11	5	6	2	3	1	2	2	3	5	6	10	11	17	18	26	27	37	38	50	51	65	66
-2	-42	29	31	20	22	13	15	8	10	5	7	4	6	5	7	8	10	13	15	20	22	29	31	40	42	53	55	68	70	85	87	
-3	-37	25	28	18	21	13	16	10	13	9	12	10	13	13	16	18	21	25	28	34	37	45	48	58	61	73	76	90	93	109	112	
-4	-36	25	29	20	24	17	21	16	20	17	21	20	24	25	29	32	36	41	45	52	56	65	69	80	84	97	101	116	120	137	141	
-5	-39	29	34	26	31	25	30	26	31	29	34	34	39	41	46	50	55	61	66	74	79	89	94	106	111	125	130	146	151	169	174	
-6	-46	37	43	36	42	37	43	40	46	45	51	52	58	61	67	72	78	85	91	100	106	117	123	136	142	157	163	180	186	205	211	
-7	-57	49	56	50	57	53	60	58	65	65	72	74	81	85	92	98	105	113	120	130	137	149	156	170	177	193	200	218	225	245	252	
-8	-72	65	73	68	76	73	81	80	88	89	97	100	108	113	121	128	136	145	153	164	172	185	193	208	216	233	241	260	268	289	297	
-9	-91	85	94	90	99	97	106	106	115	117	126	130	139	145	154	162	171	181	190	202	211	225	234	250	259	277	286	306	315	337	346	
-10	-114	109	119	116	126	125	135	136	146	149	159	164	174	181	191	200	210	221	231	244	254	269	279	296	306	325	335	356	366	389	399	
-11	-141	137	148	146	157	157	168	170	181	185	196	202	213	221	232	242	253	265	276	290	301	317	328	346	357	377	388	410	421	445	456	
-12	-172	169	181	180	192	193	205	208	220	225	237	244	256	265	277	288	300	313	326	340	352	369	381	400	412	433	445	468	480	505	517	
-13	-207	205	218	218	231	233	246	250	263	269	282	290	303	313	326	338	351	365	378	394	407	425	438	458	471	493	506	530	543	569	582	
-14	-246	245	259	260	274	277	291	296	310	317	331	340	354	365	379	392	406	421	435	452	466	485	499	520	534	557	571	596	610	637	651	
-15	-289	289	304	306	321	325	340	346	361	369	384	394	409	421	436	450	465	481	496	514	529	549	564	586	601	625	640	666	681	709	724	

Figure 1. The center of the combined C-Destroyers and C-Submarines parabolas in table $PS[x + 1, x, x + 1]$.

5.4.1 The row $Y[-1] = X_1[x]$

The center of the row $Y[-1] \equiv \{\dots, 1, 2, 2, 3, 5, 6, \dots\}$.

The row $Y[-1]$ is the result of the interlacing between two quadratics:

$$Y[-1] = X_1[x = even] + X_1[x = Odd]$$

$X_1[x = Even]$ is based on sequence $[1, 2, 5] = n^2 + 2n + 2 \equiv A002522 \equiv A160457$

$$x = Even = 2n$$

$$n = \frac{x}{2}$$

$$\begin{aligned} X_1[x = Even] &\equiv Ao0o0o2o5o2o2 \equiv [1, o, 2, o, 5, o] \equiv \left(\frac{x}{2}\right)^2 + x + 2 = \frac{x^2 + 4x + 8}{4} \\ &= 0.25x^2 + x + 2 \equiv \frac{A087475}{4} \equiv [1.25, 1, 1.25] = \frac{x^2 + 2^2}{2^2} @f = 0 \end{aligned}$$

AXXXXXX

$\equiv \{\dots, 0, 65, 0, 50, 0, 37, 0, 26, 0, 17, 0, 10, 0, 5, 0, 2, 0, 1, 0, 2, 0, 5, 0, 10, 0, 17, 0, 26, 0, 37, 0, \dots\}$

and

$X_1[x = Odd]$ is based on sequence $[2, 3, 6] = n^2 + 2n + 3 \equiv A059100$

$$x = Odd = 2n - 1$$

$$n = \frac{x+1}{2}$$

$$\begin{aligned} X_1[x = Odd] &\equiv Ao0o5o9o1o0o0 \equiv [2, o, 3, o, 6, o] = \left(\frac{x+1}{2}\right)^2 + x + 1 + 3 \\ &= \frac{x^2 + 2x + 1 + 4x + 16}{4} = \frac{x^2 + 6x + 17}{4} = 0.25x^2 + 1.5x + 4.25 \\ &\equiv \frac{A189833}{4} \equiv [2.25, 2, 2.25] = \frac{x^2 + (\sqrt{8})^2}{2^2} @f = 0 \end{aligned}$$

AXXXXXX

$\equiv \{\dots, 83, 65, 66, 50, 51, 37, 38, 26, 27, 17, 18, 10, 11, 5, 6, 2, 3, 1, 2, 2, 3, 5, 6, 10, 11, 17, 18, 26, 27, 37, 38, \dots\}$

$$X_1[-x = Even] = \frac{x^2 + 4x + 8}{4} \equiv \frac{A087475}{4}$$

$$X_1[-x = Odd] = \frac{x^2 + 6x + 17}{4} \equiv \frac{A189833}{4}$$

$$X_1[-x] = X_1[-x = even] + X_1[-x = Odd]$$

$$X_1[-x] = \frac{x^2 + (5x - x(-1)^x) + (12.5 - 4.5(-1)^x)}{4}$$

$$X_1[-x] = \frac{x^2 + 5x + 12.5 - (x + 4.5)(-1)^x}{4}$$

$$X_1[-x] = \frac{2x^2 + 10x + 25 - (2x + 9)(-1)^x}{8}$$

Process table to produce the row $Y[-1]$									
Classif.	SUB	SUB	X1[Even]	SUB	SUB	X1[Odd]	X1 = X1[Even] + X1[Odd]		
y_ip	-1	-2							
f	-1	-2							
	A002522	X1[Even]							
a	1	0,25							
b	2	1							
c	2	2	AXXXXXX						
	15	257	73,25	0					
	14	226	65	65					
	13	197	57,25	0					
	12	170	50	50					
	11	145	43,25	0					
	10	122	37	37					
	9	101	31,25	0					
	8	82	26	26					
	7	65	21,25	0					
	6	50	17	17					
	5	37	13,25	0					
	4	26	10	10					
	3	17	7,25	0					
	2	10	5	5					
Y[1]	1	5	3,25	0					
Y[0]	0	2	2	2					
Y[-1]	-1	1	1,25	0					
	-2	2	1	1					
	-3	5	1,25	0					
	-4	10	2	2					
	-5	17	3,25	0					
	-6	26	5	5					
	-7	37	7,25	0					
	-8	50	10	10					
	-9	65	13,25	0					
	-10	82	17	17					
	-11	101	21,25	0					
	-12	122	26	26					
	-13	145	31,25	0					
	-14	170	37	37					
	-15	197	43,25	0					

Figure 1. Sequence AXXXXXX is the row $Y[-1]$ of the combined C-Destroyers and C-Submarines parabolas in $PS[x + 1, x, x + 1]$. Because of the change of offset that occurs when we put the zeros, the direction of the final sequence is reversed.

The row $Y[-1]$ is the Interleaving of A002522 (Square plus One) numbers and A059100 (Square plus Two) numbers.. The result is the sequence Axxxxxx{..., 197, 198, 170, 171, 145, 146, 122, 123, 101, 102, 82, 83, 65, 66, 50, 51, 37, 38, 26, 27, 17, 18, 10, 11, 5, 6, 2, 3, 1, 2, 2, 3, 5, 6, 10, 11, 17, 18, 26, 27, 37, 38, 50, 51, 65, 66, 82, 83, 101, 102, 122, 123, 145, 146, 170, 171, 197, 198, 226, 227, 257, 258, ...}.

5.4.2 The row $Y[0] = X_2[x]$

The center of the row $Y[0] \equiv \{\dots, 1, 1, 0, 0, 1, 1, \dots\}$.

The row $Y[0]$ is the result of the interlacing between two quadratics:

$$Y[0] = X_2[x = even] + X_2[x = Odd]$$

$X_2[x = Even]$ is based on sequence $[1, 0, 1] = n^2 \equiv A000290 \equiv n(n \pm 0)$

$$x = Even = 2n$$

$$n = \frac{x}{2}$$

$$X_2[x = Even] \equiv Ao0o0o0o2o9o0 \equiv [1, o, 0, o, 1, o] \equiv \left(\frac{x}{2}\right)^2 = \frac{x^2}{4} = 0.25x^2 \equiv \frac{A000290}{4}$$

$$\equiv [0.25, 0, 0.25] = \frac{x^2}{2^2} @f = 0$$

$$AXXXXXX \equiv \{\dots, 0, 49, 0, 36, 0, 25, 0, 16, 0, 9, 0, 4, 0, 1, 0, 0, 0, 1, 0, 4, 0, 9, 0, 16, 0, 25, 0, 36, 0, 49, 0, \dots\}$$

and

$X_2[x = Odd]$ is based on sequence $[1, 0, 1] = n^2 - n \equiv A000290$

$$x = Odd = 2n - 1$$

$$n = \frac{x+1}{2}$$

$$X_2[x = Odd] \equiv Ao0o0o0o2o9o0 \equiv [o, 1, o, 0, o, 1] = \left(\frac{x+1}{2}\right)^2 = \frac{x^2 + 2x + 1}{4}$$

$$= 0.25x^2 + 0.5x + 0.25 \equiv \frac{A000290}{4} \equiv [0.25, 0, 0.25] = \frac{x^2}{2^2} @f = 0$$

$$AXXXXXX \equiv \{\dots, 64, 0, 49, 0, 36, 0, 25, 0, 16, 0, 9, 0, 4, 0, 1, 0, 0, 0, 1, 0, 4, 0, 9, 0, 16, 0, 25, 0, 36, 0, 49, \dots\}$$

$$X_2[x = Even] = \frac{x^2}{4} \equiv \frac{A000290}{4}$$

$$X_2[x = Odd] = \frac{x^2 + 2x + 1}{4} \equiv \frac{A000290}{4}$$

$$X_2[x] = X_2[x = even] + X_2[x = Odd]$$

$$X_2[x] = \frac{x^2 + (x - x(-1)^x) + (0.5 - 0.5(-1)^x)}{4}$$

$$X_2[x] = \frac{x^2 + x + 0.5 - (x + 0.5)(-1)^x}{4}$$

$$X_2[-x] = \frac{2x^2 + 2x + 1 - (2x + 1)(-1)^x}{8}$$

Process table to produce the row Y[0]								
Classif.	SUB	SUB	X2[Even]	SUB	SUB	X2[Odd]	X2 = X2[Even] + X2[Odd]	
y_ip	0	0		0	-1			
f	0	0		0	-1			
	A000290	X2[Even]		A000290	X2[Odd]			
a	1	0,25		1	0,25			
b	0	0		0	0,5			
c	0	0	AXXXXX	0	0,25	AXXXXX	A008794	
15	225	56,25	0	225	64	64	64	
14	196	49	49	196	56,25	0	49	
13	169	42,25	0	169	49	49	49	
12	144	36	36	144	42,25	0	36	
11	121	30,25	0	121	36	36	36	
10	100	25	25	100	30,25	0	25	
9	81	20,25	0	81	25	25	25	
8	64	16	16	64	20,25	0	16	
7	49	12,25	0	49	16	16	16	
6	36	9	9	36	12,25	0	9	
5	25	6,25	0	25	9	9	9	
4	16	4	4	16	6,25	0	4	
3	9	2,25	0	9	4	4	4	
2	4	1	1	4	2,25	0	1	
Y[1]	1	1	0,25	0	1	1	1	
Y[0]	0	0	0	0	0,25	0	0	
Y[-1]	-1	1	0,25	0	1	0	0	
-2	4	1	1	4	0,25	0	1	
-3	9	2,25	0	9	1	1	1	
-4	16	4	4	16	2,25	0	4	
-5	25	6,25	0	25	4	4	4	
-6	36	9	9	36	6,25	0	9	
-7	49	12,25	0	49	9	9	9	
-8	64	16	16	64	12,25	0	16	
-9	81	20,25	0	81	16	16	16	
-10	100	25	25	100	20,25	0	25	
-11	121	30,25	0	121	25	25	25	
-12	144	36	36	144	30,25	0	36	
-13	169	42,25	0	169	36	36	36	
-14	196	49	49	196	42,25	0	49	
-15	225	56,25	0	225	49	49	49	

Figure 1. Sequence A008794 is the row $Y[0]$ of the combined C-Destroyers and C-Submarines parabolas in $PS[x+1, x, x+1]$.

The row $Y[0]$ is the Interleaving of A000290 Square numbers and itself. The result is the sequence A008794 Squares repeated; $a(n) = \text{floor}(n/2)^2 \cdot \{..., 225, 225, 196, 196, 169, 169, 144, 144, 121, 121, 100, 100, 81, 81, 64, 64, 49, 49, 36, 36, 25, 25, 16, 16, 9, 9, 4, 4, 1, 1, 0, 0, 1, 1, 4, 4, 9, 9, 16, 16, 25, 25, 36, 36, 49, 49, 64, 64, 81, 81, 100, 100, 121, 121, 144, 144, 169, 169, 196, 196, 225, 225, ...\}$.

5.4.3 The row $Y[1] = X_3[x]$

The center of the row $Y[1] \equiv \{\dots, 5, 4, 2, 1, 0, \dots\}$.

The row $Y[1]$ is the result of the interlacing between two quadratics:

$$Y[1] = X_3[x = even] + X_3[x = Odd]$$

$X_3[x = Even]$ is based on sequence $[5, 2, 1] = n^2 - 2n + 2 \equiv A002522$

$$x = Even = 2n$$

$$n = \frac{x}{2}$$

$$X_3[x = Even] \equiv Ao0o0o0o2o9o0 \equiv [4, o, 1, o, 0, o] \equiv \left(\frac{x}{2}\right)^2 - x + 2 = \frac{x^2 - 4x + 8}{4}$$

$$= 0.25x^2 - 1x + 2 \equiv \frac{A087475}{4} \equiv [1.25, 1, 1.25] = \frac{x^2 + 2^2}{2^2} @f = 0$$

AXXXXXX

$$\equiv \{\dots, 0, 37, 0, 26, 0, 17, 0, 10, 0, 5, 0, 2, 0, 1, 0, 2, 0, 5, 0, 10, 0, 17, 0, 26, 0, 37, 0, 50, 0, 65, 0, \dots\}$$

and

$X_3[x = Odd]$ is based on sequence $[4, 1, 0] = n^2 - 2n + 1 \equiv A000290$

$$x = Odd = 2n - 1$$

$$n = \frac{x+1}{2}$$

$$X_3[x = Odd] \equiv Ao0o0o0o2o9o0 \equiv [o, 4, o, 1, o, 0] = \left(\frac{x+1}{2}\right)^2 - x - 1 + 1$$

$$= \frac{x^2 + 2x + 1 - 4x}{4} = \frac{x^2 - 2x + 1}{4} = 0.25x^2 - 0.5x + 0.25 \equiv \frac{A000290}{4}$$

$$\equiv [0.25, 0, 0.25] = \frac{x^2 + 0^2}{2^2} @f = 0$$

AXXXXXX

$$\equiv \{\dots, 49, 0, 36, 0, 25, 0, 16, 0, 9, 0, 4, 0, 1, 0, 0, 0, 1, 0, 4, 0, 9, 0, 16, 0, 25, 0, 36, 0, 49, 0, 64, \dots\}$$

$$X_3[-x = Even] = \frac{x^2 - 4x + 8}{4} \equiv \frac{A087475}{4}$$

$$X_3[-x = Odd] = \frac{x^2 - 2x + 1}{4} \equiv \frac{A000290}{4}$$

$$X_3[-x] = X_3[-x = even] + X_3[-x = Odd]$$

$$X_3[-x] = \frac{x^2 - (3x + x(-1)^x) + (4.5 + 3.5(-1)^x)}{4}$$

$$X_3[-x] = \frac{x^2 - 3x + 4.5 - (x - 3.5)(-1)^x}{4}$$

$$X_3[-x] = \frac{2x^2 - 6x + 9 - (2x - 7)(-1)^x}{8}$$

Process table to produce the row Y[1]								
Classif.	SUB	SUB	X3[Even]	SUB	SUB	X3[Odd]	X3 = X3[Even] + X3[Odd]	Axxxxxx
y_ip	1	2		1	1			
f	1	2		1	1			
	A002522	X3[Even]		A000290	X3[Odd]			
a	1	0,25		1	0,25			
b	-2	-1		-2	-0,5			
c	2	2	AXXXXXX	1	0,25	AXXXXXX	Axxxxxx	
15	197	43,25	0	196	49	49	49	
14	170	37	37	169	42,25	0	37	
13	145	31,25	0	144	36	36	36	
12	122	26	26	121	30,25	0	26	
11	101	21,25	0	100	25	25	25	
10	82	17	17	81	20,25	0	17	
9	65	13,25	0	64	16	16	16	
8	50	10	10	49	12,25	0	10	
7	37	7,25	0	36	9	9	9	
6	26	5	5	25	6,25	0	5	
5	17	3,25	0	16	4	4	4	
4	10	2	2	9	2,25	0	2	
3	5	1,25	0	4	1	1	1	
2	2	1	1	1	0,25	0	1	
Y[1]	1	1	1,25	0	0	0	0	
Y[0]	0	2	2	1	0,25	0	2	
Y[-1]	-1	5	3,25	4	1	1	1	
	-2	10	5	9	2,25	0	5	
	-3	17	7,25	16	4	4	4	
	-4	26	10	25	6,25	0	10	
	-5	37	13,25	36	9	9	9	
	-6	50	17	49	12,25	0	17	
	-7	65	21,25	64	16	16	16	
	-8	82	26	81	20,25	0	26	
	-9	101	31,25	100	25	25	25	
	-10	122	37	121	30,25	0	37	
	-11	145	43,25	144	36	36	36	
	-12	170	50	169	42,25	0	50	
	-13	197	57,25	196	49	49	49	
	-14	226	65	225	56,25	0	65	
	-15	257	73,25	256	64	64	64	

Figure 1. Sequence Axxxxxx is the row $Y[1]$ of the combined C-Destroyers and C-Submarines parabolas in $PS[x+1, x, x+1]$.

The row $Y[1]$ is the Interleaving of A000290 Square numbers and A002522 (Square plus One) numbers. The result is the sequence Axxxxxx $\{..., 257, 256, 226, 225, 197, 196, 170, 169, 145, 144, 122, 121, 101, 100, 82, 81, 65, 64, 50, 49, 37, 36, 26, 25, 17, 16, 10, 9, 5, 4, 2, 1, 1, 0, 2, 1, 5, 4, 10, 9, 17, 16, 26, 25, 37, 36, 50, 49, 65, 64, 82, 81, 101, 100, 122, 121, 145, 144, 170, 169, 197, 196, ...\}$.

6 Summary

PS[x+2,x,x]					
D-Destroyer					
90° f=0					
Vertical $x=-y^2+(2f+1)y-(f^2+1)$	Oblong-2 ≡ A028552 ≡ $x(x-3)$	4x+2	$2^{\circ}\text{Odd} \equiv 2 \bmod 4$	$-x^2+x+2$	Oblong-2 ≡ A028552 ≡ $x(x-3)$
@Y[-1]	x^2+x-2	Oblong ≡ A002378 ≡ $x(x-1)$	2x	Even ≡ A005843	$-x^2+x$
@Y[0]	x^2-x	Oblong ≡ A002378 ≡ $x(x-1)$	0	Zero	$-x^2+x$
@Y[1]	x^2-3x+2	Oblong ≡ A002378 ≡ $x(x-1)$	1	One	$-x^2+x$
a	0	Zero	1	One	Unit
b	$-2x+2$	Even ≡ A005843	$-2x-1$	Odd ≡ A005408	-1
c	x^2-x	Oblong ≡ A002378 ≡ $x(x-1)$	2x	Even ≡ A005843	$-x^2+x$

PS[x+2,x,x]					
D-Submarine					
90° f=0					
Vertical $x=-y^2+2fy-f^2$	Fibonacci ≡ A165900	$3x+2$	$2 \bmod 3$	$-x^2+2$	A008865
@Y[-1]	x^2+x-1	Fibonacci ≡ A165900	x	Integers ≡ A256958	$-x^2$
@Y[0]	x^2-x	Oblong ≡ A002378 ≡ $x(x-1)$	-x	Integers ≡ A256958	$-x^2$
@Y[1]	x^2-3x+1	Fibonacci ≡ A165900	1	One	Unit
a	0	Zero	1	One	Unit
b	$-2x+1$	Odd ≡ A005408	$-2x-1$	Odd ≡ A005408	-1
c	x^2-x	Oblong ≡ A002378 ≡ $x(x-1)$	x	Integers	x^2

PS[x+2,x,x]					
D-(Destroyer and Submarine)					
Vertical $x=-y^2+(2f+1)y-(f^2+1)$ and $x=-y^2+2fy-f^2$					
@Y[-1]	$[2,-2,0]=n^2+2-n^2\equiv A028552$ $(x^2+2x-8)/4=0.25x^2+0.5x-2\equiv A028560/4=[-2,-2.5,-2]/2^{\wedge}2 @f=0$ $[-1,-1,1]=n^2+n-1\equiv A165900$ $(x^2+4x-1)/4=0.25x^2+2x-0.25\equiv A028875/4=[-1,-1.25,-1]=[x^2-(-\sqrt{5})^2]/2^{\wedge}2 @f=0$				A217571 X_1[-x]=(2x^2+6x-9-(2x+7)(-1)^x)/8
@Y[0]	$[2,0,0]=n^2-2-n^2\equiv A002378$ $(x^2-2x)/4=0.25x^2-0.5x\equiv A005563/4=[0,-0.25,0]=[x^2-1\wedge2]/2^{\wedge}2 @f=0$ $[2,0,0]=n^2-2-n^2\equiv A002378$ $(x^2-1)/4=0.25x^2-0.25\equiv A005563/4=[0,-0.25,0]=[x^2-1\wedge2]/2^{\wedge}2 @f=0$				A110660 X_2[-x]=(2x^2-2x-1-(2x+1)(-1)^x)/8
@Y[1]	$[6,2,0]=n^2-3n+2\equiv A002378$ $(x^2-6x+8)/4=0.25x^2-1.5x+2\equiv A005563/4=[0,-0.25,0]=[x^2-1\wedge2]/2^{\wedge}2 @f=0$ $[5,1,-1]=n^2-3n+1\equiv A165900$ $(x^2-4x-1)/4=0.25x^2-0.25\equiv A028875/4=[-1,-1.25,-1]=[x^2-(-\sqrt{5})^2]/2^{\wedge}2 @f=0$				A188652 X_3[-x]=(2x^2-10x-9-(2x+7)(-1)^x)/8

Figure 1. D-parabolas in $PS[x + 2, x, x]$.

PS[x+2,x,x]					
C-Destroyer					
90° f=0					
Vertical $x=y^2-2(f+1)y+(f^2+1)$	Oblong+2 ≡ A014206	$2x^2+2x$	A051890	x^2-x+2	Oblong+2 ≡ A014206
@Y[-1]	x^2-x	Oblong ≡ A002378 ≡ $x(x-1)$	$2x^2$	A001105	x^2-x
@Y[0]	x^2-3x+2	Oblong ≡ A002378 ≡ $x(x-1)$	$2x^2-2x$	A046092	x^2-x
@Y[1]	2	Two	1	Unit	Unit
a	$-2x$	Even ≡ A005843	$-2x-1$	Odd ≡ A005408	-1
b	x^2-x	Oblong ≡ A002378 ≡ $x(x-1)$	$2x^2$	A001105	x^2-x

PS[x+2,x,x]					
C-Submarine					
90° f=0					
Vertical $x=y^2-2fy+f^2$	A002061 ≡ Oblong + 1	$2x^2+3x+2$	A084849 / A130883	x^2+2	A059100
@Y[-1]	x^2+x+1	Oblong ≡ A002378 ≡ $x(x-1)$	$2x^2+x$	A000384 / A014105	x^2
@Y[0]	x^2-x	Oblong ≡ A002378 ≡ $x(x-1)$	$2x^2-x$	A000384 / A014105	x^2
@Y[1]	x^2-3x+3	A002061 ≡ Oblong + 1	$2x^2-x$	A000384 / A014105	x^2
a	2	Two	1	Unit	Unit
b	$-2x+1$	Odd ≡ A005408	$-2x-1$	Odd ≡ A005408	-1
c	x^2-x	Oblong ≡ A002378 ≡ $x(x-1)$	$2x^2+x$	A000384 / A014105	x^2

PS[x+2,x,x]					
C-(Destroyer and Submarine)					
Vertical $x=-y^2+(2f+1)y-(f^2+1)$ and $x=-y^2+2fy-f^2$					
@Y[-1]	$[1,1,3]=n^2+2n+1\equiv A002061$ $(x^2+2x+4)/4=0.25x^2+0.5x+1\equiv A117950/4=[1,0.75,1]=[x^2+(\sqrt{3})^2]/2^{\wedge}2 @f=0$ $[2,2,4]=n^2+2n+2\equiv A014206$ $(x^2+4x+11)/4=0.25x^2+x+2.75\equiv A117619/4=[2,1.75,2]=[x^2+(\sqrt{7})^2]/2^{\wedge}2 @f=0$				AXXXXXX X_1[-x]=(2x^2+6x+15-(2x+7)(-1)^x)/8
@Y[0]	$[2,0,0]=n^2-2-n^2\equiv A002378$ $(x^2-2x)/4=0.25x^2-0.5x\equiv A005563/4=[0,-0.25,0]=[x^2-1\wedge2]/2^{\wedge}2 @f=0$ $[2,0,0]=n^2-2-n^2\equiv A002378$ $(x^2-1)/4=0.25x^2-0.25\equiv A005563/4=[0,-0.25,0]=[x^2-1\wedge2]/2^{\wedge}2 @f=0$				A110660 X_2[-x]=(2x^2-2x-1-(2x+1)(-1)^x)/8
@Y[1]	$[7,3,1]=n^2-3n+3\equiv A002061$ $(x^2-6x+12)/4=0.25x^2-1.5x+3\equiv A117950/4=[1,0.75,1]=[x^2-((\sqrt{3})^2)]/2^{\wedge}2 @f=0$ $[6,2,0]=n^2-3n+2\equiv A002378$ $(x^2-4x+3)/4=0.25x^2-x+0.75\equiv A005563/4=[0,-0.25,0]=[x^2-1\wedge2]/2^{\wedge}2 @f=0$				A130404 X_3[-x]=(2x^2-10x-9-(2x+7)(-1)^x)/8

Figure 1. C-parabolas in $PS[x + 2, x, x]$.

PS[x+1,x,x+1]					
D-Destroyer					
			90°		90° f=0
Vertical $x=-y^2+(2f+1)y-(f^2+f)$					
@Y[-1] x^2+2x-1	Square-2 ≡ A008865	$3x+1$	$1 \bmod 3 \equiv A016777$	$-x^2+x+1$	Fibonacci ≡ A165900
@Y[0] x^2	Square ≡ A000290 ≡ x(x-0)	x	Integers ≡ A256958	$-x^2+x$	Oblong ≡ A002378 ≡ x(x-1)
@Y[1] x^2-2x+1	Square ≡ A000290 ≡ x(x-0)	$-x+1$	Integers ≡ A256958	$-x^2+x+1$	Fibonacci ≡ A165900
a 0	Zero	1	Unit	1	Unit
b $-2x+1$	Odd ≡ A005408	$-2x$	Even ≡ A005843	0	Zero
c x^2	Square ≡ A000290 ≡ x(x-0)	x	Integers ≡ A256958	$-x^2+x$	Oblong ≡ A002378 ≡ x(x-1)
PS[x+1,x,x+1]					
D-Submarine					
			90°		90° f=0
Vertical $x=-y^2+2fy-f^2$					
@Y[-1] x^2+2x	Square-1 ≡ A005563 ≡ x(x-2)	$2x+1$	Odd ≡ A005408	$-x^2+1$	Square-1 ≡ A005563 ≡ x(x-2)
@Y[0] x^2	Square ≡ A000290 ≡ x(x-0)	0	Zero	$-x^2$	Square ≡ A000290 ≡ x(x-0)
@Y[1] x^2-2x	Square-1 ≡ A005563 ≡ x(x-2)	$-2x+1$	Odd ≡ A005408	$-x^2+1$	Square-1 ≡ A005563 ≡ x(x-2)
a 0	Zero	1	Unit	1	Unit
b $-2x$	Even ≡ A005843	$-2x$	Even ≡ A005843	0	Zero
c x^2	Square ≡ A000290 ≡ x(x-0)	0	Zero	x^2	Square ≡ A000290 ≡ x(x-0)
PS[x+1,x,x+1]					
D-(Destroyer and Submarine)					
			Vertical $x=-y^2+(2f+1)y-(f^2+f)$ and $x=-y^2+2fy-f^2$		
@Y[-1] $[-1,0,3]=n^2+2n \equiv A005563$	$(x^2+4x)/4=0.25x^2+x \equiv A028347/4 \equiv [-0.75,1,-0.75]=(x^2+2x+2)/2 \wedge @f=0$				AXXXXXX X_1[-x]=(x^2+10x+1-(2x+1)(-1)^x)/8
[-2,-1,2]=n^2-2n-1 ≡ A008865	$(x^2+6x+1)/4=0.25x^2+2.5x+0.25 \equiv A028884/4 \equiv [-1.75,-2,1.75]=(x^2-(\sqrt{8})^2)/2 \wedge @f=0$				
@Y[0] $[1,0,1]=n^2 \equiv A000290$	$x^2/4=0.25x^2 \equiv A000290/4 \equiv [0.25,0,0.25]=x^2/2 \wedge @f=0$				A008794 X_2[-x]=(x^2+2x+1-(2x+1)(-1)^x)/8
[1,0,1]=n^2-2 ≡ A000290	$(x^2+2x+1)/4=0.25x^2+0.5x+0.25 \equiv A000290/4 \equiv [0.25,0,0.25]=x^2/2 \wedge @f=0$				
@Y[1] $[3,0,-1]=n^2-2x \equiv A005563$	$(x^2-4x)/4=0.25x^2-2x \equiv A028347/4 \equiv [-0.75,-1,-0.75]=(x^2+2x+2)/2 \wedge @f=0$				\A131805+\A135276=X_3[x]=(2x^2-6x+1+(2x-1)(-1)^x)/8
[4,1,0]=n^2-2n+1 ≡ A000290	$(x^2-2x+1)/4=0.25x^2-0.5x+0.25 \equiv A000290/4 \equiv [0.25,0,0.25]=x^2/2 \wedge @f=0$				

Figure 1. D-parabolas in $PS[x + 1, x, x + 1]$.

PS[x+1,x,x+1]					
C-Destroyer					
			90°		90° f=0
Vertical $x=y^2-(2f+1)y+(f^2+f)$					
@Y[-1] x^2+2x+3	Square+2 ≡ A059100	$2x^2+x+1$	$\backslash A130883 \wedge A084849$	x^2-x+1	Oblong+1 ≡ A002061
@Y[0] x^2	Square ≡ A000290 ≡ x(x-0)	$2x^2-x$	$\backslash A014105 \wedge A000384$	x^2-x	Oblong ≡ A002378 ≡ x(x-1)
@Y[1] x^2-2x+1	Square ≡ A000290 ≡ x(x-0)	$2x^2-3x+1$	$\backslash A000384 \wedge A014105$	x^2-x+1	Oblong+1 ≡ A002061
a 2	Two	1	Unit	1	Unit
b $-2x-1$	Odd ≡ A005408	$-2x$	Even ≡ A005843	0	Zero
c x^2	Square ≡ A000290 ≡ x(x-0)	$2x^2-x$	$\backslash A014105 \wedge A000384$	x^2-x	Oblong ≡ A002378 ≡ x(x-1)
PS[x+1,x,x+1]					
C-Submarine					
			90°		90° f=0
Vertical $x=y^2-2fy+f^2$					
@Y[-1] x^2+2x+2	Square+1 ≡ A002522	$2x^2+2x+1$	$2^*Oblong+1 \equiv A001844$	x^2+1	Square+1 ≡ A002522
@Y[0] x^2	Square ≡ A000290 ≡ x(x-0)	$2x^2$	$2^*Square \equiv A001105$	x^2	Square ≡ A000290 ≡ x(x-0)
@Y[1] x^2-2x+2	Square+1 ≡ A002522	$2x^2-2x+1$	$2^*Oblong+1 \equiv A001844$	x^2+1	Square+1 ≡ A002522
a 2	Two	1	Unit		
b $-2x$	Even ≡ A005843	$-2x$	Even ≡ A005843		
c x^2	Square ≡ A000290 ≡ x(x-0)	$2x^2$	$2^*Square \equiv A001105$		
PS[x+1,x,x+1]					
C-(Destroyer and Submarine)					
			Vertical $x=-y^2+(2f+1)y-(f^2+f)$ and $x=-y^2+2fy-f^2$		
@Y[-1] $[1,2,5]=n^2+2n+2 \equiv A002522$	$(x^2+4x+8)/4=0.25x^2+2x+2 \equiv A087475/4 \equiv [1.25,1,1.25]=(x^2+2x+2)/2 \wedge @f=0$				AXXXXXX X_1[-x]=(x^2+10x+25-(2x+9)(-1)^x)/8
[2,3,6]=n^2+2+2n+3 ≡ A059100	$(x^2+6x+17)/4=0.25x^2+2.5x+4.25 \equiv A189833/4 \equiv [2.25,2,2.25]=(x^2+(\sqrt{8})^2)/2 \wedge @f=0$				
@Y[0] $[1,0,1]=n^2 \equiv A000290$	$x^2/4=0.25x^2 \equiv A000290/4 \equiv [0.25,0,0.25]=x^2/2 \wedge @f=0$				A008794 X_2[-x]=(x^2+2x+1-(2x+1)(-1)^x)/8
[1,0,1]=n^2-2 ≡ A000290	$(x^2+2x+1)/4=0.25x^2+0.5x+0.25 \equiv A000290/4 \equiv [0.25,0,0.25]=x^2/2 \wedge @f=0$				
@Y[1] $[5,2,1]=n^2-2n+2 \equiv A002522$	$(x^2-4x+8)/4=0.25x^2-2x+2 \equiv A087475/4 \equiv [1.25,1,1.25]=(x^2+2x+2)/2 \wedge @f=0$				AXXXXXX X_3[-x]=(x^2+2x+9-(2x+7)(-1)^x)/8
[4,1,0]=n^2-2n+1 ≡ A000290	$(x^2-2x+1)/4=0.25x^2-0.5x+0.25 \equiv A000290/4 \equiv [0.25,0,0.25]=(x^2+0^2)/2 \wedge @f=0$				

Figure 1. C-parabolas in $PS[x + 1, x, x + 1]$.

7 Conclusions

Parabolas D in paraboctys decreases the coefficient a.

Parabolas C in paraboctys increases the coefficient a.

Verticals and diagonals straight lines in paraboctys keep the same coefficient a of paraboctys.

Horizontal lines in paraboctys are always the Integer numbers line.

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[3] te