Mineral Industry Surveys

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IRON AND STEEL SCRAP IN FEBRUARY 2023

In February 2023, purchased steel scrap receipts increased by 3%, recirculating scrap production decreased by 7%, and iron and steel scrap consumption was essentially unchanged compared with those in January. Stocks of purchased and home scrap were essentially unchanged from those at the end of January. In February 2023, pig iron production and consumption each decreased by 5% from that in January. Direct-reduced iron receipts increased by 11% and consumption decreased by 3% from those in January (table 1, fig. 1).

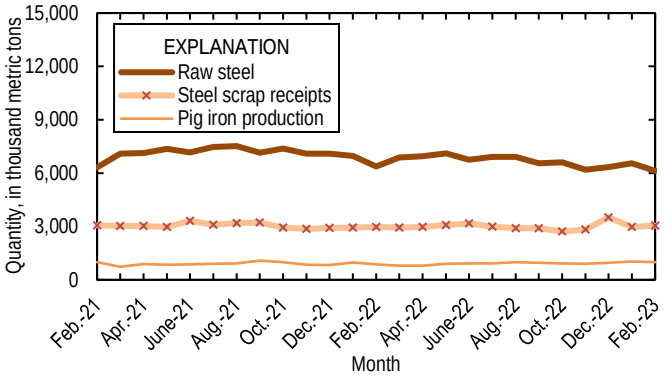

Figure 1. Monthly domestic production of raw steel, receipts of iron and steel scrap, and production of pig iron from February 2021 through February 2023. Sources: U.S. Geological Survey and American Iron and Steel Institute.

Exports of iron and steel scrap in February 2023 increased by 9% from those in January (fig. 2, table 4). In February 2023, Turkey was the leading destination for exports, accounting for 30% of the total tonnage, followed by Vietnam (16%) and Mexico (12%) (table 4). New York City, NY, and San Francisco, CA, were the leading U.S. Customs district by tonnage of exports, accounting for 13% of the total, each, followed by Los Angeles, CA, (12%) (table 5).

Imports of iron and steel scrap in February 2023 increased by 12% compared with those in January (fig. 2, table 7). Canada was the leading country of origin, accounting for 70% of the total tonnage of imports, followed by Mexico (11%) and Sweden (9%) (table 7). Detroit, MI, was the leading U.S. Customs district by tonnage of imports, accounting for 46% of the total, followed by Seattle, WA, (11%) and New Orleans, LA, (10%) (table 8).

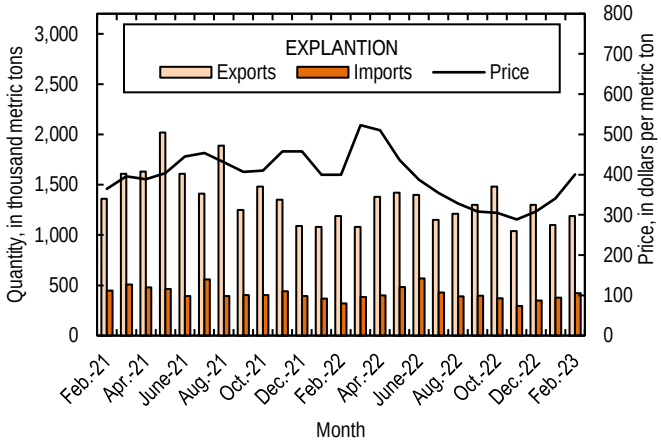

Figure 2. Monthly domestic imports and exports of iron and steel scrap and price for No. 1 heavy melting steel scrap from February 2021 through February 2023. Sources: U.S. Census Bureau and Fastmarkets AMM.

The daily average domestic raw steel production for February, as calculated from the American Iron and Steel Institute's monthly production data, was 219,000 metric tons, a 4% increase from than that in January and a 4% decrease from that in February 2022. Raw steel production capability utilization was 75.5% in February 2023, up from 73.0% in January and down from 80.8% in February 2022 (table 10).

Industry News

In the United Kingdom, British Steel Ltd. announced that owing to high energy prices and the need for low-carbon technology investments, the Scunthorpe works coking ovens would be shut down by the end of 2023. This follows recent discussions of potential government support of up to $362 million (£300 million) each for British Steel and Tata Steel Ltd (India), the only steel producers in the country, to upgrade their integrated steel mills into the more efficient and lower-carbon electric arc furnaces- although estimates to convert were in the billions of dollars each (Jolly, 2023)

Reference Cited

Jolly, Jasper, 2023, British Steel announces 260 job losses at Scunthorpe works: The Guardian [London, United Kingdom], February 22. (Accessed May 23, 2023, at https://www.theguardian.com/business/2023/feb/22/british-steel-announce-300-job-losses-scunthorpe-works.)

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TABLE 1
IRON AND STEEL SCRAP, PIG IRON, AND DIRECT-REDUCED IRON STATISTICS
FOR STEEL PRODUCERS, IN FEBRUARY 2023[1, 2]

(Thousand metric tons)

	February	January–February[3]
Scrap:		
Receipts:		
From outside sources	3,050	6,040
From other own company plants	156	289
Production:		
Recirculating scrap	324	674
Obsolete scrap	10	20
Consumption (by type of furnace):		
Blast furnace	113	230
Basic oxygen process	299	591
Electric furnace	3,060	6,100
Other	--	--
Total consumption	3,470	6,920
Shipments	34	77
Stocks, end of period	3,850	3,850
Pig iron (includes hot metal):		
Receipts	107	226
Production	986	2,020
Consumption	1,120	2,290
Stocks, end of period	666	666
Direct-reduced iron:[4]		
Receipts	223	424
Consumption	212	431
Stocks, end of period	335	335

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes manufacturers of raw steel that also produce steel castings.

[3]May include revisions to previously published data.

[4]Includes direct-reduced iron, hot-briquetted iron, and iron carbide. Domestic production data are included in “Receipts.”

TABLE 2

RECEIPTS FROM OUTSIDE SOURCES, PRODUCTION, CONSUMPTION, AND STOCKS OF IRON AND STEEL SCRAP, BY GRADE, FOR STEEL PRODUCERS, IN FEBRUARY 2023[1, 2]

(Thousand metric tons)

Item	February				January–February[3]		
	Receipts of scrap from outside sources	Production of recirculating scrap	Consumption[4]	Ending stocks	Receipts of scrap from outside sources	Production of recirculating scrap	Consumption[4]
Carbon steel:							
Low-phosphorus plate and punchings	14	W	16	W	28	W	32
Cut structural and plate	263	29	290	330	521	58	583
No. 1 heavy melting steel	278	39	326	172	555	98	654
No. 2 heavy melting steel	333	26	365	244	666	52	731
No. 1 and electric furnace bundles	114	--	113	120	224	--	220
No. 2 and all other bundles	68	W	85	46	138	W	155
Electric furnace 1 foot and under (not bundles)	W	--	W	W	W	--	W
Railroad rails	18	W	19	97	36	15	37
Turnings and borings	134	2	138	205	270	W	276
Slag scrap	31	27	57	43	59	56	119
Shredded and fragmentized	943	W	962	1,540	1,840	W	1,930
No. 1 busheling	369	26	406	336	735	52	800
Steel cans scrap (post consumer)	W	W	10	293	W	W	21
All other carbon steel scrap	188	117	318	224	368	237	630
Stainless steel scrap	42	19	62	32	84	38	124
Alloy steel scrap	23	8	31	50	46	17	63
Ingot mold and stool scrap	W	W	W	W	W	W	W
Machinery and cupola cast iron	4	--	W	W	W	--	8
Cast iron borings	12	--	12	W	24	W	25
Other iron scrap	54	9	53	60	108	17	103
Other mixed scrap	149	12	194	36	295	24	386
Total	3,050	324	3,470	3,850	6,040	674	6,920

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes manufacturers of raw steel that also produce steel castings.

[3]May include revisions to previously published data.

[4]Includes recirculating scrap.

TABLE 3
RECEIPTS FROM OUTSIDE SOURCES, PRODUCTION, AND CONSUMPTION OF IRON AND STEEL SCRAP,
BY REGION AND STATE, FOR STEEL PRODUCERS, IN FEBRUARY 2023[1, 2]

(Thousand metric tons)

Region and State	February			January–February[3]		
	Receipts of scrap from outside sources	Production of recirculating scrap	Consumption[4]	Receipts of scrap from outside sources	Production of recirculating scrap	Consumption[4]
Mid-Atlantic and New England:						
New Jersey, New York, Pennsylvania	224	37	249	432	75	500
North Central:						
Illinois and Indiana	357	76	457	712	152	918
Iowa, Nebraska, Wisconsin	218	6	237	438	14	475
Michigan	38	5	43	76	9	86
Ohio	376	79	468	777	179	950
Total	989	166	1,210	2,000	354	2,430
South Atlantic:						
Georgia, North Carolina, South Carolina	270	W	290	542	W	579
Virginia, West Virginia	96	W	111	185	W	223
Total	366	17	401	727	36	802
South Central:						
Alabama, Kentucky, Mississippi, Tennessee	667	49	763	1,330	97	1,470
Arkansas and Texas	514	37	530	959	75	1,070
Total	1,180	86	1,290	2,290	172	2,550
Mountain and Pacific:						
California, Colorado, Oregon, Utah, Washington	291	19	324	583	37	645
Grand total	3,050	324	3,470	6,040	674	6,920

W Withheld to avoid disclosing company proprietary data; included in "Total."

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes manufacturers of raw steel that also produce steel castings.

[3]May include revisions to previously published data.

[4]Includes recirculating scrap.

TABLE 4
U.S. EXPORTS OF IRON AND STEEL SCRAP BY SELECTED REGION AND COUNTRY OR LOCALITY, IN FEBRUARY 2023[1, 2]

(Thousand metric tons and thousand dollars)

	February		January–February[3]	
Region and country or locality	Quantity	Value	Quantity	Value
Bangladesh	99	38,700	130	49,600
Belgium	3	3,920	5	6,860
Canada	35	13,600	77	29,400
China	2	3,180	4	6,460
Ecuador	30	12,300	30	12,300
Greece	(4)	20	29	11,700
India	85	51,100	216	119,000
Korea, Republic of	50	23,700	83	37,400
Malaysia	10	11,500	19	22,800
Mexico	149	51,300	408	111,000
Morocco	--	--	17	6,170
Netherlands	(4)	494	3	4,470
Pakistan	20	14,100	43	30,700
Peru	30	12,200	92	36,200
Taiwan	100	44,400	187	80,800
Thailand	22	15,500	38	30,300
Turkey	361	151,000	608	236,000
Vietnam	191	77,300	267	106,000
Other[5]	6	7,070	31	15,300
Total	1,190	532,000	2,290	951,000

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping. Export valuation is on a free-alongside-ship basis.

[3]May include revisions to previously published data.

[4]Less than ½ unit.

[5]Includes countries with quantities of less than 500 metric tons for the current year.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF IRON AND STEEL SCRAP BY
SELECTED CUSTOMS DISTRICT, IN FEBRUARY 2023[1, 2]

(Thousand metric tons and thousand dollars)

Customs district	February		January–February[3]	
	Quantity	Value	Quantity	Value
Baltimore, MD	74	39,100	84	45,800
Boston, MA	118	48,800	187	75,100
Buffalo, NY	5	3,680	11	7,800
Charleston, SC	5	3,820	9	7,080
Columbia–Snake, OR	100	42,000	149	60,500
Detroit, MI	16	7,010	36	15,200
Duluth, MN	(4)	233	1	682
El Paso, TX	1	268	84	322
Honolulu, HI, and Anchorage, AK	26	10,500	29	11,600
Houston–Galveston, TX	13	11,800	28	24,500
Laredo, TX	55	21,100	135	44,500
Los Angeles, CA	144	67,700	223	104,000
Miami, FL	17	7,460	38	16,800
Mobile, AL	1	1,250	3	3,350
New Orleans, LA	1	397	2	1,690
New York City, NY	154	74,300	343	153,000
Norfolk, VA	33	23,600	64	45,100
Ogdensburg, NY	1	150	1	338
Pembina, ND	6	2,420	14	5,370
Philadelphia, PA	83	32,800	202	74,100
Portland, ME	1	351	32	12,300
Providence, RI	--	--	53	18,200
San Diego, CA	33	6,060	50	11,700
San Francisco, CA	154	63,200	251	99,500
San Juan, PR	43	13,900	50	16,000
Savannah, GA	14	11,500	29	23,000
Seattle, WA	59	26,400	90	40,100
St. Albans, VT	1	268	2	492
Tampa, FL	25	10,600	77	30,200
Other	7	1,300	15	2,890
Total	1,190	532,000	2,290	951,000

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping. Export valuation is on a free-alongside-ship basis.

[3]May include revisions to previously published data.

[4]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. EXPORTS OF IRON AND STEEL SCRAP AND OTHER
FERROUS PRODUCTS BY GRADE, IN FEBRUARY 2023[1, 2]

(Thousand metric tons and thousand dollars)

Item	February		January–February[3]	
	Quantity	Value	Quantity	Value
No. 1 heavy melting steel	478	196,000	941	376,000
No. 2 heavy melting steel	49	23,600	99	44,300
No. 1 bundles	7	2,510	11	4,120
No. 2 bundles	1	95	1	95
Shredded steel scrap	474	194,000	764	300,000
Borings, shovelings, and turnings	5	1,080	9	2,140
Cut plate and structural	47	25,100	100	45,200
Tinned iron or steel	12	1,890	19	2,860
Remelting scrap ingots	(4)	29	(4)	151
Cast iron	22	15,400	144	29,100
Other iron and steel	4	807	7	1,540
Total carbon steel and cast iron	1,100	460,000	2,100	806,000
Stainless steel	25	38,100	73	78,100
Other alloy steel	69	33,900	120	67,500
Total stainless and alloy steel	94	72,100	193	146,000
Total carbon, stainless, alloy steel, and cast iron	1,190	532,000	2,290	951,000
Ships, boats, and other vessels for breaking up (for scrapping)	1	158	1	182
Used rails	(4)	192	(4)	644
Used rails for rerolling and other uses	--	--	--	--
Total scrap exports	1,190	532,000	2,290	952,000
Exports of manufactured ferrous products,				
Pig iron < or = 0.5% phosphorus	1	1,060	3	2,480
Pig iron > or = 0.5% phosphorus	--	--	--	--
Alloy Pig Iron	(4)	5	(4)	5
Total pig iron	1	1,060	3	2,480
Direct-reduced iron (DRI)	(4)	8	(4)	21
Granules for abrasive cleaning and other uses	2	2,230	3	4,990
Powders of alloy steel	1	5,560	1	11,300
Other ferrous powders	4	6,970	9	12,700
Total DRI, granules, powders	7	14,800	14	29,000
Grand total	1,200	548,000	2,310	983,000

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Export valuation is on a free-alongside-ship basis.

[3]May include revisions to previously published data.

[4]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP
BY SELECTED COUNTRY OR LOCALITY, IN FEBRUARY 2023[1, 2]

(Thousand metric tons and thousand dollars)

	February		January–February[3]	
Country or locality	Quantity	Value	Quantity	Value
Canada	293	124,000	593	242,000
Cayman Islands	1	92	1	184
Colombia	(4)	115	1	235
Germany	9	2,430	9	2,540
Japan	3	63	6	125
Mexico	46	23,100	89	42,800
Netherlands	32	12,400	32	12,400
New Zealand	--	--	27	12,100
Sweden	36	15,300	37	15,400
Other[5]	2	1,220	3	1,990
Total	421	179,000	798	330,000

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown
[2]Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping. Import valuation is on a Customs basis.
[3]May include revisions to previously published data.
[4]Less than ½ unit.
[5]Includes countries with quantities of less than 500 metric tons for the current year.

Source: U.S. Census Bureau.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP
BY SELECTED CUSTOMS DISTRICT, IN FEBRUARY 2023[1, 2]

(Thousand metric tons and thousand dollars)

Customs district	February		January–February[3]	
	Quantity	Value	Quantity	Value
Baltimore, MD	1	225	1	275
Buffalo, NY	20	13,200	40	24,500
Charleston, SC	39	14,900	39	15,000
Chicago, IL	(4)	96	(4)	309
Cleveland, OH	(4)	333	(4)	343
Detroit, MI	192	82,700	380	160,000
Duluth, MN	9	3,370	15	5,280
El Paso, TX	3	1,680	8	3,850
Great Falls, MT	1	619	3	1,210
Houston-Galveston, TX	--	--	(4)	132
Laredo, TX	30	15,500	58	29,500
Miami, FL	2	430	3	806
Mobile, AL	3	2,300	5	3,430
New Orleans, LA	41	15,400	71	27,500
New York City, NY	(4)	23	(4)	54
Nogales, AZ	6	2,180	9	3,220
Ogdensburg, NY	2	1,360	2	1,820
Pembina, ND	20	7,930	43	16,400
San Diego, CA	5	1,500	10	2,870
Seattle, WA	48	14,500	108	32,100
St. Albans, VT	2	485	2	509
Other	(4)	239	(4)	342
Total	421	179,000	798	330,000

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats and other vessels for scrapping. Import valuation is on a Customs basis.

[3]May include revisions to previously published data.

[4]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 9
U.S. IMPORTS OF IRON AND STEEL SCRAP AND OTHER FERROUS PRODUCTS BY GRADE, IN FEBRUARY 2023[1, 2]

(Thousand metric tons and thousand dollars)

Item	February		January–February[3]	
	Quantity	Value	Quantity	Value
No. 1 heavy melting steel	12	4,390	31	10,200
No. 2 heavy melting steel	11	3,480	20	6,270
No. 1 bundles	123	51,500	199	82,500
No. 2 bundles	6	2,710	13	5,460
Shredded steel scrap	78	32,900	139	57,500
Borings, shovelings, and turnings	3	773	7	1,620
Cut plate and structural	16	5,050	31	9,980
Tinned iron or steel	28	11,800	50	19,700
Remelting scrap ingots	(4)	51	1	240
Cast iron	13	4,430	49	19,600
Other iron and steel	70	24,200	140	47,400
Total carbon steel and cast iron	360	141,000	680	260,000
Stainless steel	18	21,400	33	39,000
Other alloy steel	44	16,200	85	30,200
Total stainless and alloy steel	61	37,600	118	69,200
Total carbon, stainless, alloy steel, and cast iron	421	179,000	798	330,000
Ships, boats, and other vessels for breaking up (for scrapping)	--	--	--	--
Used rails	1	163	1	197
Used rails, nonalloyed	--	--	--	--
Used rails other	(4)	297	(4)	472
Total scrap imports	422	179,000	799	330,000
Imports of manufactured ferrous products:				
Pig iron < or = 0.5% phosphorus	--	--	--	--
Pig iron > or = 0.5% phosphorus	207	94,000	504	277,000
Alloy pig iron	--	--	(4)	23
Total pig iron	207	94,000	504	277,000
Direct-reduced iron (DRI)	307	93,900	527	174,000
Spongy iron products, not DRI	(4)	126	(4)	361
Granules for abrasive cleaning and other uses	1	2,810	3	5,720
Powders of alloy steel	5	12,200	10	22,500
Other ferrous powders	3	8,550	7	17,100
Total DRI, granules, powders	317	118,000	547	219,000
Grand total	946	391,000	1,850	827,000

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Import valuation is on a Customs basis.

[3]May include revisions to previously published data.

[4]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 10
U.S. RAW STEEL PRODUCTION, RAW STEEL CAPABILITY UTILIZATION,
AND CONTINUOUS CAST STEEL PRODUCTION[1]

Period	Raw steel production, thousand metric tons		Raw steel capability utilization, percent		Continuous cast steel production, percent	
	Monthly[2]	Year to date[2]	Monthly[2]	Year to date[2]	Monthly[2]	Year to date[2]
2022:						
February	6,370	13,300	80.8	80.3	99.7	99.8
March	6,870	20,200	78.7	79.7	99.6	99.7
April	6,950	27,200	81.9	80.3	99.7	99.7
May	7,120	34,300	81.1	80.5	99.7	99.7
June	6,760	41,000	79.6	80.3	99.7	99.7
July	6,910	48,000	78.1	80.0	99.7	99.7
August	6,910	54,900	78.0	79.7	99.7	99.7
September	6,550	61,400	76.4	79.4	99.7	99.7
October	6,610	68,000	73.7	78.8	99.7	99.7
November	6,200	74,200	71.5	78.1	99.6	99.7
December	6,330	80,500	70.6	77.5	99.7	99.7
2023:						
January	6,550	6,550	73.0	73.0	99.6	99.6
February	6,130	12,700	75.5	74.2	99.7	99.7

[1]Data are rounded to no more than three significant digits.
[2]May include revisions to previously published data.

Source: American Iron and Steel Institute.

TABLE 11
COMPOSITE PRICES FOR STEEL SCRAP AND PIG IRON

Period	Steel Scrap[1]		Pig Iron[2]	
	$/lt	$/t	$/lt	$/t
2022:				
February	406.67	400.25	517.30	509.13
March	531.67	523.27	513.66	505.55
April	518.33	510.14	649.12	638.87
May	443.33	436.33	566.12	557.18
June	393.33	387.12	753.47	741.57
July	360.00	354.31	742.36	730.64
August	333.33	328.07	974.43	959.04
September	313.33	308.38	618.84	609.07
October	310.00	305.11	924.99	910.38
November	293.33	288.70	511.23	503.16
December	313.33	308.38	662.89	652.42
Average, January–December	313.33	308.38	665.66	655.15
2023:				
January	346.67	341.20	560.18	551.33
February	406.67	400.25	439.42	432.48

[1]Prices are for No. 1 heavy melting steel scrap. Source: Fastmarkets-AMM.
[2]Prices are Brazilian basic pig iron, free on board, New Orleans, LA. Source: U.S. Census Bureau.

Note: Long tons = lt; metric tons = t.

TABLE 12
U.S. IRON AND STEEL SCRAP RECEIPTS FROM OUTSIDE SOURCES, PRODUCTION OF PIG IRON, AND DIRECT-REDUCED IRON (DRI) CONSUMPTION[1]

(Thousand metric tons)

Period	Receipts of scrap from outside sources		Pig iron production		DRI consumption	
	Monthly[2]	Year to date[2]	Monthly[2]	Year to date[2]	Monthly[2]	Year to date[2]
2022:						
February	2,980	5,920	877	1,850	241	458
March	2,930	8,850	802	2,650	258	717
April	2,980	11,800	802	3,450	258	975
May	3,080	14,900	903	4,350	284	1,260
June	3,170	18,100	920	5,270	303	1,560
July	2,990	21,100	922	6,200	262	1,820
August	2,900	24,000	988	7,180	188	2,010
September	2,910	26,900	950	8,140	187	2,190
October	2,720	29,500	918	9,060	138	2,380
November	2,830	32,400	898	9,960	138	2,520
December	3,510	35,900	956	10,900	202	2,720
2023:[2]						
January	2,980	2,980	1,030	1,030	219	212
February	3,050	6,040	986	2,020	212	431

[1]Data are rounded to no more than three significant digits.
[2]May include revisions to previously published data.