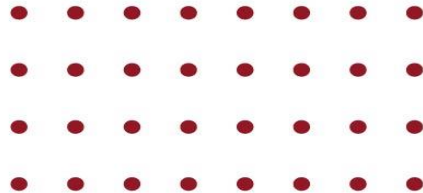


Research Methodology for PhDs



Session 10 Topics

- Overview of utilization of specialized software for quantitative analysis

Quantitative Analysis Software Tools

Quantitative Data Analysis are specialized tools enable researchers to efficiently manage, code, and analyze large volumes of qualitative data, ensuring rigor, consistency, and scalability in the research process.

They empower researchers to uncover hidden patterns, facilitate collaboration, and ultimately enhance the quality and depth of qualitative research across various domains.



Qualitative Analysis Software Tools Key Features

Data Import and Management:

- Capability to import data from various sources such as spreadsheets, databases, text files, or online repositories.

Descriptive Statistics:

- Tools for computing basic descriptive statistics such as measures of central tendency (e.g., mean, median, mode) and measures of dispersion (e.g., standard deviation, variance).

Data Visualization:

- Functionality to create visual representations of data through charts, graphs, histograms, scatter plots, or heatmaps.

©<https://www.questionpro.com/blog/quantitative-data-analysis-software/>

Quantitative Analysis Software Tools Key Features

Statistical Analysis:

- Support for conducting a wide range of statistical tests and analyses to explore relationships, test hypotheses, make predictions, or infer population characteristics from sample data.

Advanced Analytics:

- Advanced analytical techniques for more complex data exploration and modeling, such as cluster analysis, principal component analysis (PCA), time series analysis, survival analysis, and structural equation modeling (SEM).

Automation:

- Features for automating analysis workflows, scripting repetitive tasks, and ensuring the reproducibility of results.

Collaboration:

- Tools for generating customizable reports, summaries, or presentations to communicate analysis results effectively to stakeholders.

© <https://www.questionpro.com/blog/quantitative-data-analysis-software/>

Qualitative Analysis Software Tools Key Features

Cost Reduction

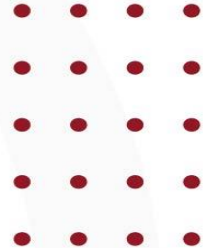
- Analyzing quantitative data helps identify areas where costs can be reduced or optimized.
- For instance, if certain marketing campaigns yield lower-than-average results, reallocating resources to more effective channels can lead to cost savings and improved ROI.

Personalizing User Experience

- Quantitative analysis allows for the mapping of customer journeys and the identification of preferences and behaviors.
- By understanding these patterns, businesses can tailor their offerings, content, and communication to specific user segments, leading to enhanced user satisfaction and engagement.

Improving User Satisfaction and Delight

- Quantitative data analysis highlights areas of success and areas for improvement in products or services.
- For instance, if a webpage shows high engagement but low conversion rates, further investigation can uncover user pain points or friction in the conversion process.
- Addressing these issues can lead to improved user satisfaction and increased conversion rates.



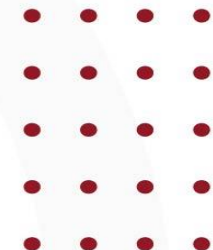
Example List of Software Tools

- Home
- Qualitative Data Analysis Software (Paid) ▾
- Qualitative Data Analysis Software (Free)
- Quantitative Data Analysis Software**
- Excel
- Stata
- SPSS
- SAS
- JMP
- MATLAB
- Python
- Python Libraries
- R
- R Packages
- Digital Mapping ▾
- Other Helpful Tools - StatTransfer and OpenRefine
- DSS Programming Workshops

Software Comparison

Software	Interface*	Learning Curve	Data Manipulation	Statistical Analysis	Graphics	Specialties
SPSS	Menus & Syntax	Gradual	Moderate	Moderate Scope Low Versatility	Good	Custom Tables, ANOVA and Multivariate Analysis
Stata	Menus & Syntax	Moderate	Strong	Broad Scope Medium Versatility	Good	Panel Data, Mixed Models, Survey Data Analysis
SAS	Syntax	Steep	Very Strong	Very Broad Scope High Versatility	Very Good	Large Datasets, Reporting, Password Encryption, Components for Specific Fields
R	Syntax	Steep	Very Strong	Very Broad Scope High Versatility	Excellent	Graphic Packages, Machine Learning, Predictive Modeling
Matlab	Syntax	Steep	Very Strong	Limited Scope High Versatility	Excellent	Simulations, Multidimensional Data, Image and Signal Processing
JMP	Menus & Syntax	Gradual	Strong	Moderate Scope Medium Versatility	Great	Design of Experiments, Quality Control, Model Fit

*The primary interface is bolded in the case of multiple interface types available



©<https://guides.lib.uci.edu/c.php?g=988129&p=8435590>

Resources and support for statistical and numerical data analysis

- Home
- SPSS
- Stata
- SAS
- R
- MATLAB
- JMP
- Python
- Excel
- SQL
- Merging Data Sets
- Reshaping Data Sets
- Choosing a Statistical Test
- Which Statistical Software to Use?

Statistical Software Comparison

Overview **SPSS** JMP Stata SAS R MATLAB Summary

Software Access

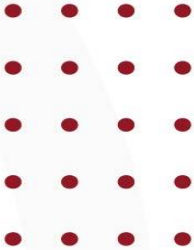
Software	Mac/Windows	DS Lab	VCL	HPC	Personal Access at NYU
<i>SPSS</i>	Both	✓	✓		Available via NYU OnTheHub
<i>JMP</i>	Both	✓	✓		Available via NYU OnTheHub Download a Free 30 day Trial
<i>Stata</i>	Both	✓	✓	✓	Purchase via Stata Grad Plan
<i>SAS</i>	Windows	✓	✓	✓	Available via NYU OnTheHub SAS University Edition is free for students and professors
<i>R</i>	Both	✓	✓	✓	Free download via CRAN website
<i>MATLAB</i>	Both	✓	✓	✓	Free via NYU OnTheHub For HPC, contact hpc@nyu.edu

Excel Opportunities

Excel Statistical Formulas

Excel BI

Excel Analysis Package



Excel Demo. Statistics

J2 : $\times \checkmark f_x$ =AVERAGE(C2:C20)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Dimension 1	Date Month	SUM(Sum Deposits)	Difference SUM	Diff. %	total	% from total							
2	India Cash	2018-09-01	41 179,35		%	174 912,00	23,54%		Average	274 577,65	274 577,65			
3	India Cash	2018-10-01	41 735,42	556,07	1,35	207 417,00	20,12%	0	Std.Dev	261034,97	261034,97			
4	India Cash	2018-11-01	5 595,22	-36 140,20	-86,59	209 088,00	2,68%		Sample size	19	19			
5	India Cash	2018-12-01	24 459,50	18 864,28	337,15	336 279,00	7,27%		Cofd.Int 95%	125814,83	125814,8301			
6	India Cash	2019-01-01	33 612,24	9 152,74	37,42	360 472,00	9,32%		Cofd.Int 99%	172376,93				
7	India Cash	2019-02-01	40 782,78	7 170,54	21,33	457 773,00	8,91%							
8	India Cash	2019-03-01	82 793,69	42 010,91	103,01	578 622,00	14,31%		95% confidence interval					
9	India Cash	2019-04-01	26 850,18	-55 943,51	-67,57	612 677,00	4,38%		Low	High				
10	India Cash	2019-05-01	211 789,57	184 939,39	688,78	1 059 875,00	19,98%		148 762,82	400 392,48				
11	India Cash	2019-06-01	256 702,15	44 912,58	21,21	1 057 646,00	24,27%							
12	India Cash	2019-07-01	257 618,07	915,92	0,36	1 476 477,00	17,45%		99% confidence interval					
13	India Cash	2019-08-01	204 625,33	-52 992,74	-20,57	1 539 650,00	13,29%		Low	High				
14	India Cash	2019-09-01	467 004,38	262 379,05	128,22	1 928 931,00	24,21%		102 200,72	446 954,58				
15	India Cash	2019-10-01	354 870,43	-112 133,95	-24,01	1 931 756,00	18,37%							
16	India Cash	2019-11-01	630 729,93	275 859,50	77,74	2 099 503,00	30,04%							
17	India Cash	2019-12-01	556 797,37	-73 932,56	-11,72	2 621 565,00	21,24%							
18	India Cash	2020-01-01	656 135,05	99 337,68	17,84	3 255 008,00	20,16%							
19	India Cash	2020-02-01	844 985,90	188 850,85	28,78	3 916 694,00	21,57%							
20	India Cash	2020-03-01	478 708,80	-366 277,10	-43,35	3 815 594,00	12,55%							
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														
32														

Excel Demo. Power BI

Power Query

Get data

Choose data

Search

Display options

Excel workbook [4]

- Orders
- People
- Returns
- Sheet1

Sheet1

ABC 123	Column1	ABC 123	Column2	ABC 123	Column3	ABC 123	Column4	ABC 123	Column5
Category	Office Supplies		null		null		null		null
Sub-Category	(All)		null		null		null		null
	null		null		null		null		null
Row Labels	Sum of Sales	Sum of Discount	Count of Row ID	Sum of Quantity					
Central	null	null	null	null					
Aaron Bergman	12.624	0.2	1	2					
Aaron Smayling	36.288	0.2	1	7					
Adam Bellavance	240.15	0	3	14					
Adam Hart	51.84	0.2	1	10					
Adam Shillingsburg	227.936	1.6	10	33					
Adrian Barton	11318.532	1.4	7	34					
Adrian Hane	174.44	1.2	3	11					
Aimee Bixby	153.196	0.8	5	15					
Alan Haines	16.03	0.8	1	5					
Central Total	12231.036	6.4	32	131					
East	null	null	null	null					
Aaron Hawkins	295.356	0.4	4	21					
Aaron Smayling	65.78	0	1	11					
Adam Bellavance	4480.562	0.6	6	18					
Adam Hart	1089.727	1.3	6	20					

Excel Demo. Analysis Package

File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help

Comments Share

U3 : X ✓ fx 731,94

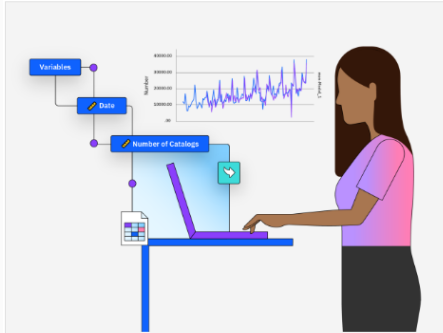
	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	City	State	Short State Name	Postal Code	Address by Co	Address b	Region	Product ID	Category	Sub-Category	Product Name	Sales	Quantity	Discount	Profit	
2	Henderson	Kentucky	KEN	42420	Henderson, Ker	42420;	Hen South	FUR-BO-1000	Furniture	Bookcases	Bush Somers	261,96	2	0	41,9136	
3	Henderson	Kentucky	KEN	42420	Henderson, Ker	42420;	Hen South	FUR-CH-1000	Furniture	Chairs	Hon Deluxe	731,94	3	0	219,582	
4	Los Angeles	California	CAL	90036	Los Angeles, Ca	90036;	Los West	OFF-LA-1000	Office Suppli	Labels	Self-Adhesive	14,62	2	0	6,8714	
5	Fort Lauderdale	Florida	FLO	33311	Fort Lauderdale	33311;	Fort South	FUR-TA-1000	Furniture	Tables	Bretford CR4	957,5775	5	0,45	-383,031	
6	Fort Lauderdale	Florida	FLO	33311	Fort Lauderdale	33311;	Fort South	OFF-ST-1000	Office Suppli	Storage	Eldon Fold 'N	22,368	2	0,2	2,5164	
7	Los Angeles	California	CAL	90032	Los Angeles, Ca	90032;	Los West	FUR-FU-1000	Furniture	Furnishings	Eldon Express	48,86	7	0	14,1694	
8	Los Angeles	California	CAL	90032	Los Angeles, Ca	90032;	Los West	OFF-AR-1000	Office Suppli	Art	Newell 322	7,28	4	0	1,9656	
9	Los Angeles	California	CAL	90032	Los Angeles, Ca	90032;	Los West	TEC-PH-1000	Technology	Phones	Mitel 5320 IF	907,152	6	0,2	90,7152	
10	Los Angeles	California	CAL	90032	Los Angeles, Ca	90032;	Los West	OFF-BI-1000	Office Suppli	Binders	DXL Angle-Vi	18,504	3	0,2	5,7825	
11	Los Angeles	California	CAL	90032	Los Angeles, Ca	90032;	Los West	OFF-AP-1000	Office Suppli	Appliances	Belkin F5C20	114,9	5	0	34,47	
12	Los Angeles	California	CAL	90032	Los Angeles, Ca	90032;	Los West	FUR-TA-1000	Furniture	Tables	Chromcraft F	1706,184	9	0,2	85,3092	
13	Los Angeles	California	CAL	90032	Los Angeles, Ca	90032;	Los West	TEC-PH-1000	Technology	Phones	Konftel 250 C	911,424	4	0,2	68,3568	
14	Concord	North Carolina	NOR	28027	Concord, North	28027;	Con South	OFF-PA-1000	Office Suppli	Paper	Xerox 1967	15,552	3	0,2	5,4432	
15	Seattle	Washington	WAS	98103	Seattle, Washir	98103;	Sea West	OFF-BI-1000	Office Suppli	Binders	Fellowes PB2	407,976	3	0,2	132,5922	
16	Fort Worth	Texas	TEX	76106	Fort Worth, Te	76106;	Fort Central	OFF-AP-1000	Office Suppli	Appliances	Holmes Repl.	68,81	5	0,8	-123,858	
17	Fort Worth	Texas	TEX	76106	Fort Worth, Te	76106;	Fort Central	OFF-BI-1000	Office Suppli	Binders	Storex DuraT	2,544	3	0,8	-3,816	
18	Madison	Wisconsin	WIS	53711	Madison, Wisc	53711;	Mad Central	OFF-ST-1000	Office Suppli	Storage	Stur-D-Stor S	665,88	6	0	13,3176	
19	West Jordan	Utah	UTA	84084	West Jordan, U	84084;	We West	OFF-ST-1000	Office Suppli	Storage	Fellowes Sup	55,5	2	0	9,99	
20	San Francisco	California	CAL	94109	San Francisco, C	94109;	San West	OFF-AR-1000	Office Suppli	Art	Newell 341	8,56	2	0	2,4824	
21	San Francisco	California	CAL	94109	San Francisco, C	94109;	San West	TEC-PH-1000	Technology	Phones	Cisco SPA 50	213,48	3	0,2	16,011	
22	San Francisco	California	CAL	94109	San Francisco, C	94109;	San West	OFF-BI-1000	Office Suppli	Binders	Wilson Jones	22,72	4	0,2	7,384	
23	Fremont	Nebraska	NEB	68025	Fremont, Nebr	68025;	Frer Central	OFF-AR-1000	Office Suppli	Art	Newell 318	19,46	7	0	5,0596	
24	Fremont	Nebraska	NEB	68025	Fremont, Nebr	68025;	Frer Central	OFF-AP-1000	Office Suppli	Appliances	Acco Six-Out	60,34	7	0	15,6884	
25	Philadelphia	Pennsylvania	PEN	19140	Philadelphia, P	19140;	Phil East	FUR-CH-1000	Furniture	Chairs	Global Delux	71,372	2	0,3	-1,0196	
26	Orem	Utah	UTA	84057	Orem, Utah, Un	84057;	Ore West	FUR-TA-1000	Furniture	Tables	Bretford CR4	1044,63	3	0	240,2649	
27	Los Angeles	California	CAL	90049	Los Angeles, Ca	90049;	Los West	OFF-BI-1000	Office Suppli	Binders	Wilson Jones	11,648	2	0,2	4,2224	
28	Los Angeles	California	CAL	90049	Los Angeles, Ca	90049;	Los West	TEC-AC-1000	Technology	Accessories	Imation 8GB	90,57	3	0	11,7741	
29	Philadelphia	Pennsylvania	PEN	19140	Philadelphia, P	19140;	Phil East	FUR-BO-1000	Furniture	Bookcases	Riverside Pal	3083,43	7	0,5	-1665,0522	
30	Philadelphia	Pennsylvania	PEN	19140	Philadelphia, P	19140;	Phil East	OFF-BI-1000	Office Suppli	Binders	Avery Recycl	9,618	2	0,7	-7,0532	

Session 9-2 Topics

- Example of specialized software for qualitative analysis
 - GNU PSPP

The software name originally stood for Statistical Package for the Social Sciences (SPSS), reflecting the original market, then later changed to Statistical Product and Service Solutions.

IBM SPSS Family



IBM SPSS Statistics

Uncover data insights that can help solve business and research problems.



IBM SPSS Modeler

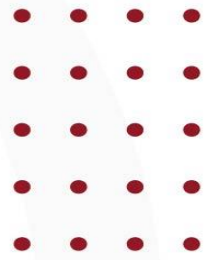
IBM SPSS Modeler helps you tap into data assets and modern applications, with algorithms and models that are ready for immediate use.



IBM SPSS Amos

Use structural equation modeling (SEM) to test hypotheses and gain new insights from data.

<https://www.spss-tutorials.com/spss-what-is-it/>



GNU PSPP

GNU PSPP is a program for statistical analysis of sampled data.

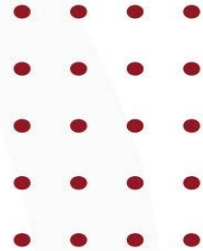
It is a free as in freedom replacement for the proprietary program SPSS, and appears very similar to it with a few exceptions.

- Support for over 1 billion cases.
- Support for over 1 billion variables.
- Syntax and data files which are compatible with those of SPSS.
- A choice of terminal or graphical user interface.
- A choice of text, postscript, pdf, opendocument or html output formats.
- Inter-operability with Gnumeric, LibreOffice, OpenOffice.Org and other free software.
- Easy data import from spreadsheets, text files and database sources.
- The capability to open, analyse and edit two or more datasets concurrently. They can also be merged, joined or concatenated.
- A user interface supporting all common character sets and which has been translated to multiple languages.
- Fast statistical procedures, even on very large data sets.
- No license fees.
- Freedom ensured; It is licensed under the GPLv3 or later.
- Portability; Runs on many different computers and many different operating systems (GNU or GNU/Linux are the preferred platforms, but we have had many reports that it runs well on other systems too).

PSPP Tips to Find the Launch program

Your installation folder\PSPP\bin\psppire.exe
Create a shortcut and put it on your desktop

PSPP Quick Tour - <https://www.gnu.org/software/pspp/tour.html>










PSPP Demo (Statistical Analysis)

File Edit View Data Transform **Analyze** Graphs Utilities Windows Help

Case	Order_ID	Order Date	Class	Customer_ID	Customer_Name	Segment	City	State	Postal_Code	Region	Product_ID	Product Name
187	CA-2016-107104			MS-17365	Maribeth Schnell	Consumer	Los Angeles	California	90045,00	West	OFF-AP-10000055	OFF-AP-10000055
188	CA-2016-107104			MS-17365	Maribeth Schnell	Consumer	Los Angeles	California	90045,00	West	FUR-FU-10002937	FUR-FU-10002937
189	CA-2014-156160			AS-10090	Adam Shillingsbu	Consumer	New York City	New York	10035,00	East	FUR-FU-10001876	FUR-FU-10001876
190	CA-2014-156160			AS-10090	Adam Shillingsbu	Consumer	New York City	New York	10035,00	East	OFF-BI-10003355	OFF-BI-10003355
191	CA-2014-156160			AS-10090	Adam Shillingsbu	Consumer	New York City	New York	10035,00	East	OFF-AR-10003876	OFF-AR-10003876
192	CA-2014-156160			AS-10090	Adam Shillingsbu	Consumer	New York City	New York	10035,00	East	FUR-CH-10004983	FUR-CH-10004983
193	CA-2014-100860	26-MAR-2014	Second Class	CS-12505	Cindy Stewart	Consumer	Pomona	California	91767,00	West	OFF-LA-10001982	OFF-LA-10001982
194	CA-2017-132619	31-AUG-2017	Standard Class	MS-17770	Maxwell Schwartz	Consumer	San Francisco	California	94109,00	West	OFF-ST-10001511	OFF-ST-10001511
195	CA-2017-157448	16-NOV-2017	Standard Class	LC-16885	Lena Creighton	Consumer	Los Angeles	California	90049,00	West	FUR-FU-10003268	FUR-FU-10003268
196	CA-2017-157448	16-NOV-2017	Standard Class	LC-16885	Lena Creighton	Consumer	Los Angeles	California	90049,00	West	FUR-FU-10001847	FUR-FU-10001847
197	CA-2016-126270	23-APR-2016	Standard Class	AF-10870	Art Ferguson	Consumer	San Clemente	California	92672,00	West	OFF-BI-10002764	OFF-BI-10002764
198	CA-2016-126270	23-APR-2016	Standard Class	AF-10870	Art Ferguson	Consumer	San Clemente	California	92672,00	West	OFF-EN-10004386	OFF-EN-10004386
199	CA-2017-145275	02-APR-2017	Standard Class	AH-10465	Amy Hunt	Consumer	Decatur	Alabama	35601,00	South	OFF-LA-10001569	OFF-LA-10001569
200	US-2017-140312	13-NOV-2017	Standard Class	KL-16645	Ken Lonsdale	Consumer	Dublin	California	94568,00	West	TEC-PH-10003442	TEC-PH-10003442
201	US-2014-164644	22-JUL-2014	Second Class	JL-15850	John Lucas	Consumer	Houston	Texas	77095,00	Central	OFF-ST-10003123	OFF-ST-10003123
202	CA-2016-137393	06-MAY-2016	Standard Class	GM-14500	Gene McClure	Consumer	Bakersfield	California	93309,00	West	FUR-FU-10001617	FUR-FU-10001617
203	CA-2017-122770	13-DEC-2017	Standard Class	EP-13915	Emily Phan	Consumer	San Francisco	California	94122,00	West	OFF-LA-10004559	OFF-LA-10004559
204	CA-2017-122770	13-DEC-2017	Standard Class	EP-13915	Emily Phan	Consumer	San Francisco	California	94122,00	West	OFF-PA-10003172	OFF-PA-10003172
205	CA-2017-122770	13-DEC-2017	Standard Class	EP-13915	Emily Phan	Consumer	San Francisco	California	94122,00	West	FUR-FU-10001473	FUR-FU-10001473
206	CA-2017-122770	13-DEC-2017	Standard Class	EP-13915	Emily Phan	Consumer	San Francisco	California	94122,00	West	OFF-PA-10000232	OFF-PA-10000232
207	CA-2017-116498	30-MAY-2017	Standard Class	KA-16525	Kelly Andreaa	Consumer	San Diego	California	92037,00	West	OFF-AR-10003405	OFF-AR-10003405
208	US-2017-135986	20-JUN-2017	Standard Class	PG-18895	Paul Gonzalez	Consumer	Richmond	Virginia	23223,00	South	OFF-PA-10001534	OFF-PA-10001534
209	US-2017-135986	20-JUN-2017	Standard Class	PG-18895	Paul Gonzalez	Consumer	Richmond	Virginia	23223,00	South	TEC-PH-10003691	TEC-PH-10003691

PSPP Demo (Graphics)

File Edit View Data Transform Analyze **Graphs** Utilities Windows Help

- Scatterplot
- Histogram
- Barchart

Case	Order_ID	Order_Date	Ship_Mode	Customer_ID	Customer_Name	Segment	City	State	Postal_Code	Region	Product_ID
1	CA-2017-121853	23-SEP-2017	Standard Class	DB-13660	Duane Benoit	Consumer	Los Angeles	California	90036,00	West	FUR-CH-10003973
2	CA-2014-128237	25-MAR-2014	Standard Class	CA-12265	Christina Anders	Consumer	San Francisco	California	94110,00	West	OFF-AR-10000034
3	CA-2014-128237	25-MAR-2014	Standard Class	CA-12265	Christina Anders	Consumer	San Francisco	California	94110,00	West	OFF-AR-10003338
4	CA-2014-128237	25-MAR-2014	Standard Class	CA-12265	Christina Anders	Consumer	San Francisco	California	94110,00	West	OFF-AR-10003829
5	CA-2017-121853	23-SEP-2017	Standard Class	DB-13660	Duane Benoit	Consumer	Los Angeles	California	90036,00	West	OFF-BI-10000977
6	CA-2017-121853	23-SEP-2017	Standard Class	DB-13660	Duane Benoit	Consumer	Los Angeles	California	90036,00	West	OFF-PA-10003641
7	CA-2014-128237	25-MAR-2014	Standard Class	CA-12265	Christina Anders	Consumer	San Francisco	California	94110,00	West	TEC-AC-10002558
8	CA-2015-111948	11-NOV-2015	Same Day	AG-10495	Andrew Gjertsen	Corporat	Detroit	Michigan	48234,00	Central	OFF-AP-10002311
9	CA-2015-111948	11-NOV-2015	Same Day	AG-10495	Andrew Gjertsen	Corporat	Detroit	Michigan	48234,00	Central	OFF-ST-10003282
10	CA-2015-137603	19-SEP-2015	Standard Class	MH-17290	Marc Harrigan	Home Off	Santa Fe	New Mexico	87505,00	West	OFF-AR-10001972
11	US-2017-108343	20-JUL-2017	Standard Class	AR-10825	Anthony Rawles	Corporat	New York City	New York	10009,00	East	FUR-CH-10002780
12	US-2017-108343	20-JUL-2017	Standard Class	AR-10825	Anthony Rawles	Corporat	New York City	New York	10009,00	East	FUR-FU-10000747
13	US-2016-102141	26-AUG-2016	Standard Class	KD-16615	Ken Dana	Corporat	New York City	New York	10024,00	East	OFF-BI-10001510
14	US-2017-108343	20-JUL-2017	Standard Class	AR-10825	Anthony Rawles	Corporat	New York City	New York	10009,00	East	OFF-PA-10000743
15	CA-2016-161907	05-APR-2016	Standard Class	JH-16180	Justin Hirsh	Consumer	Philadelphia	Pennsylvania	19140,00	East	OFF-SU-10000646
16	CA-2016-161907	05-APR-2016	Standard Class	JH-16180	Justin Hirsh	Consumer	Philadelphia	Pennsylvania	19140,00	East	TEC-PH-10000141
17	US-2015-163433	18-APR-2015	Second Class	MP-17965	Michael Paige	Corporat	Mcallen	Texas	78501,00	Central	FUR-CH-10000225
18	US-2016-111563	04-NOV-2016	Standard Class	SM-20005	Sally Matthias	Consumer	Houston	Texas	77041,00	Central	FUR-FU-10000723
19	US-2016-111563	04-NOV-2016	Standard Class	SM-20005	Sally Matthias	Consumer	Houston	Texas	77041,00	Central	FUR-FU-10002445
20	CA-2017-148642	06-MAR-2017	Standard Class	DW-13540	Don Weiss	Consumer	Dallas	Texas	75220,00	Central	OFF-AR-10000588
21	US-2015-163433	18-APR-2015	Second Class	MP-17965	Michael Paige	Corporat	Mcallen	Texas	78501,00	Central	OFF-AR-10003481
22	US-2015-163433	18-APR-2015	Second Class	MP-17965	Michael Paige	Corporat	Mcallen	Texas	78501,00	Central	OFF-BI-10000320
23	US-2015-163433	18-APR-2015	Second Class	MP-17965	Michael Paige	Corporat	Mcallen	Texas	78501,00	Central	OFF-BI-10003676



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