

Risk Arrays - Standard

PC-SPAN 4.016

Risk Arrays -- Standard

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 Exch. Complex: CME - Chicago Mercantile Exchange

Comb Comm	Product		Contract		Price	Imp. Vol	Price Scan	Vol Scan	Arr ID	Delta	Scenario									
	ID	Alias	ID	Alias							16	13/14	9/10	5/6	1/2	3/4	7/8	11/12	15	
SP 364	CME	ES	Fut																	
				1	200109	1221.40	0.000000	3450.000000	0.0500											
									1	1.0000	3105.00	3450.00	2300.00	1150.00	0.00	-1150.00	-2300.00	-3450.00	-3105.00	
											3450.00	2300.00	1150.00	0.00	-1150.00	-2300.00	-3450.00			
				2	200112	1228.90	0.000000	3450.000000	0.0500											
									1	1.0000	3105.00	3450.00	2300.00	1150.00	0.00	-1150.00	-2300.00	-3450.00	-3105.00	
											3450.00	2300.00	1150.00	0.00	-1150.00	-2300.00	-3450.00			
SP 359	CME	SP	Fut																	
				1	200109	1221.40	0.000000	17250.000000	0.0500											
									1	1.0000	15525.00	17250.00	11500.00	5750.00	0.00	-5750.00	-11500.00	-17250.00	-15525.00	
											17250.00	11500.00	5750.00	0.00	-5750.00	-11500.00	-17250.00			
				2	200112	1228.90	0.000000	17250.000000	0.0500											
									1	1.0000	15525.00	17250.00	11500.00	5750.00	0.00	-5750.00	-11500.00	-17250.00	-15525.00	
											17250.00	11500.00	5750.00	0.00	-5750.00	-11500.00	-17250.00			
				3	200203	1236.40	0.000000	17250.000000	0.0500											
									1	1.0000	15525.00	17250.00	11500.00	5750.00	0.00	-5750.00	-11500.00	-17250.00	-15525.00	
											17250.00	11500.00	5750.00	0.00	-5750.00	-11500.00	-17250.00			
				4	200206	1246.20	0.000000	17250.000000	0.0500											
									1	1.0000	15525.00	17250.00	11500.00	5750.00	0.00	-5750.00	-11500.00	-17250.00	-15525.00	
											17250.00	11500.00	5750.00	0.00	-5750.00	-11500.00	-17250.00			
				5	200209	1256.70	0.000000	17250.000000	0.0500											
									1	1.0000	15525.00	17250.00	11500.00	5750.00	0.00	-5750.00	-11500.00	-17250.00	-15525.00	
											17250.00	11500.00	5750.00	0.00	-5750.00	-11500.00	-17250.00			
				6	200212	1268.70	0.000000	17250.000000	0.0500											
									1	1.0000	15525.00	17250.00	11500.00	5750.00	0.00	-5750.00	-11500.00	-17250.00	-15525.00	

Risk Arrays--Standard

This report is like the Risk Arrays Report, but it includes the Combined Commodity contract's Price and Volatility Scan Ranges. Additionally, it shows the risk arrays in order of greatest decline to greatest increase. This report pairs scenarios 1-14 and shows 15 and 16 (the extreme scenarios) separately.

Comb Comm: Combined Commodity

The set of all eligible products used to generate a total requirement for each Exchange Complex within a portfolio. A Combined Commodity generally consists of all products of the same underlying physical. For example, at the CME, the Eurodollar combined commodity encompasses Mid-Curve options, Eurodollars and Eurodollar options.

Product:

ID: Span assigns an internal product ID number to each product within a family

Alias: Name that defines the product

Contract

ID: Span assigns an internal contract ID number to each contract

Alias: The alias gives the Contract month and year in yyyy/mm format. For options contracts, the alias also includes "C" or "P" for call or put, and the strike price. For example, 200107 or 200109C 1380 is the alias for an July 2001 1380 Call with an underlying September 2000 future.

Price: The price (premium for an option) of a contract

Imp Vol: The Implied volatility calculated for each specific option, or the averaged implied volatility calculated for the option along with its corresponding call or put pair.

Price Scan: The price scan range for the scenarios in the Risk Array. The price scan range is equal to the current Maintenance Requirement for a Combined Commodity. Therefore in the current Maintenance Requirement on the ED contract is \$700, then the ED Price Scan Range is \$700.

Vol Scan: The Volatility Scan Range for the scenarios in the Risk Array. Just as there is a set price scan range, there is a set Volatility scan range for a Combined Commodity. The Volatility Scan is the amount by which the implied volatility is changed in each risk array scenario.

Arr ID: Span assigns an ID number for each type of array

Delta: The composite delta value of an option. The composite Delta is derived as the weighted average of the deltas, where the weights are associated with each underlying price scan point.

Scenario 1-16:

These Scan Risk Scenarios provide sixteen different potential market scenarios and show the associated gain/loss per Contract. The chart below displays the sixteen risk scenarios.

1	Futures Price Unchanged; Volatility up the Volatility Scan Range
2	Futures Price Unchanged; Volatility down the Volatility Scan Range
3	Futures Price up 1/3 the Price Scan range; Volatility up the Volatility Scan Range
4	Futures up 1/3 the Price Scan range; Volatility down the Volatility Scan Range
5	Futures down 1/3 the Price Scan range; Volatility up the Volatility Scan Range
6	Futures down 1/3 the Price Scan range; Volatility down the Volatility Scan Range
7	Futures up 2/3 the Price Scan range; Volatility up the Volatility Scan Range
8	Futures up 2/3 the Price Scan range; Volatility down the Volatility Scan Range
9	Futures down 2/3 the Price Scan range; Volatility up the Volatility Scan Range
10	Futures down 2/3 range the Price Scan; Volatility down the Volatility Scan Range
11	Futures up 3/3 range the Price Scan; Volatility up the Volatility Scan Range
12	Futures up 3/3 range the Price Scan; Volatility down the Volatility Scan Range
13	Futures down 3/3 range the Price Scan; Volatility up the Volatility Scan Range
14	Futures down 3/3 range the Price Scan; volatility down the Volatility Scan Range
15	Futures up extreme (3 times the Price Scan Range) - Cover 30% of loss
16	Futures down extreme (3 times the Price Scan Range) - Cover 30% of loss