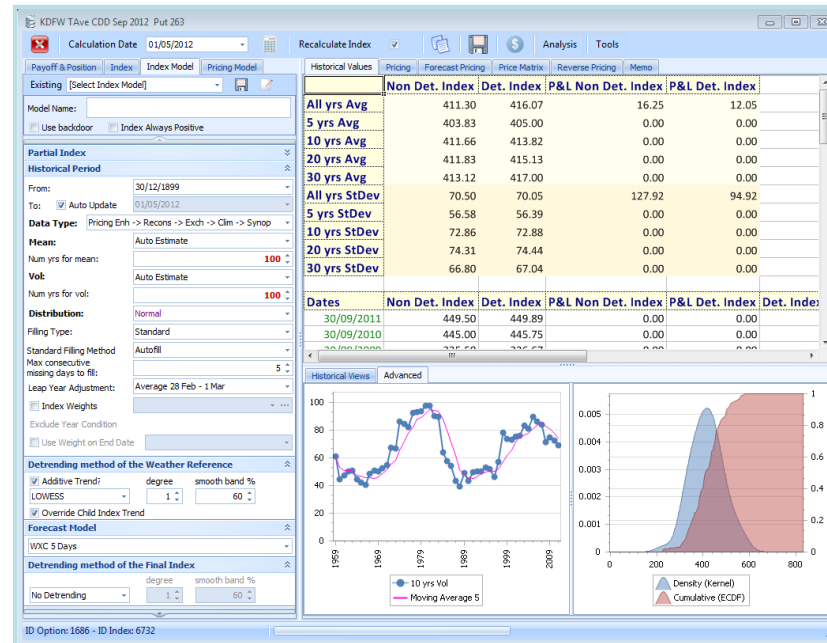


# Speedwell Weather



**SWS is an enterprise software application for pricing weather risk contracts, managing a portfolio of weather risk contracts and managing historical weather data and feeds.**

Speedwell Weather  
Speedwell Weather System



An Introduction



# About SWS

SWS is an enterprise system used by traders of parametric weather-risk contracts since 2002. It provides front, middle and back office support and includes:

- SWS Oasis Desktop for pricing/portfolio management/back office
- SWS Data Manager for management of weather data and forecasts
- SWS Contracts and Invoices module (optional)
- SQL Server Database for weather data / forecasts and commodity data

SWS enables you to:

- Manage historical weather data, feeds and forecasts (including gridded data)
- Price weather risk contracts and provide analysis including gas “quantos”
- Manage portfolio risk and create risk reports
- Manage contracts, invoices, settlement...
- Help meet regulatory requirements
- *New in SWS Version 11 and 12:*
  - automation of weatherXchange Request for Proposal processing
  - seamless integration with new weatherXchange tradeable sites database
  - Optional integration with configurable Automated Pricing Service to automatically respond to weatherXchange RFPs





# A multi-user, enterprise-wide solution

Traders, Risk Officers, Legal Officers, Back Office, ...  
Weather Derivative Pricing  
Deal Booking, Confirmations and legal doc management  
Portfolio P&L and Risk Measures  
Data Management – ad hoc import and quality control  
Correlation analysis  
Weather dependency analysis  
Settlement, Invoicing, EMIR, Dodd Frank Reporting  
...



**System Administrator**  
Set up Users  
Manage Permissions  
Importation of additional data e.g. gas / power data



## Online Sales Solution

We have developed end user clients and sales web solutions fully integrated with SWS for some clients



**Database Server**  
(MS SQL Server)

## SWS Application Server

Continuous Data and Forecast Imports from multiple data providers  
Automatic Pricing Service for weatherXchange RFP  
Automates End of Day Tasks:

- Settlement Calculations
- Daily and Expiry VaR
- P&L reports
- Credit Risk Reports



weatherXchange  
Requests For Pricing  
Online Data Streaming

## Integration





# Data Support



# Data Support



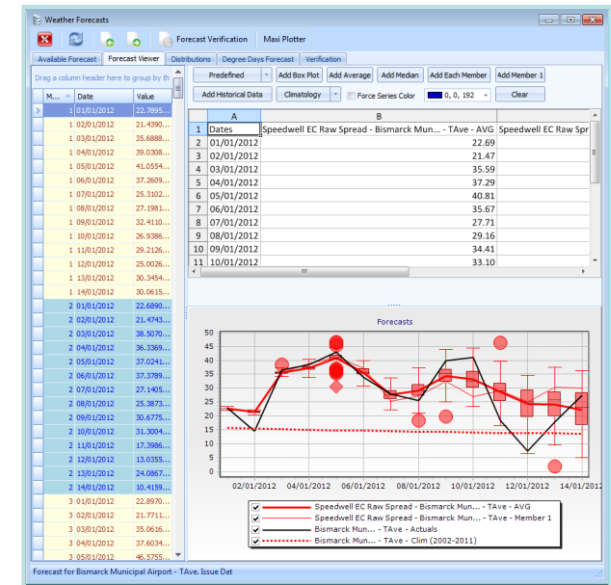
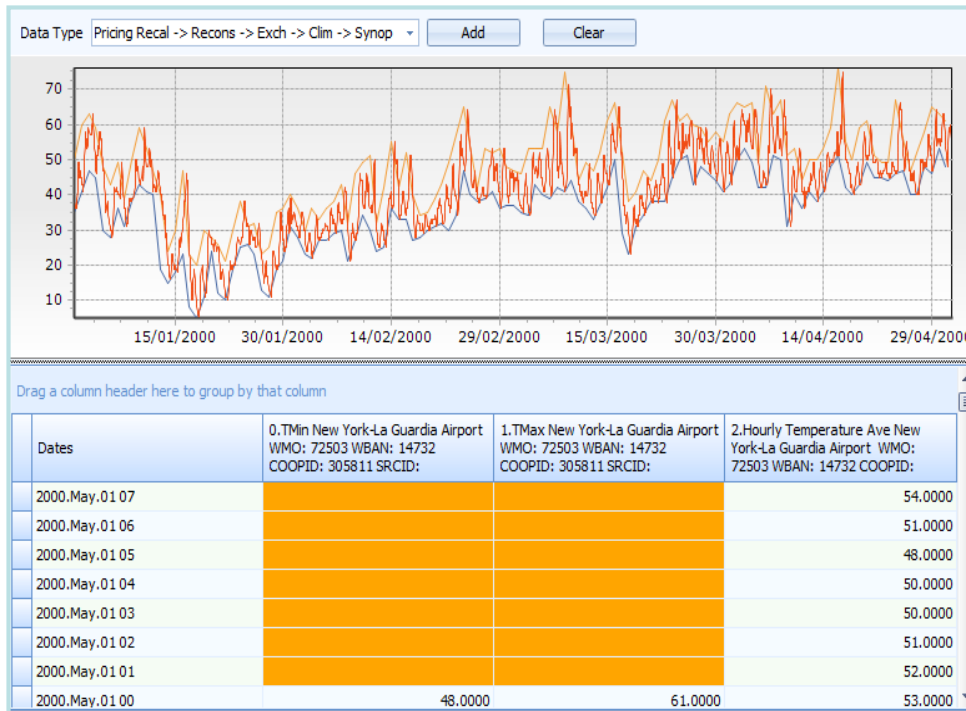
- The SWS data base supports any daily, hourly or sub hourly time series. The data does not even have to be weather related ..eg it could be commodity price data
- Any new 'weather element' can be added at a press of a button
- SWS supports multiple data types and hierarchies
- SWS supports deterministic and ensemble forecasts
- *New in SWS Version 11* : API access to tradeable weatherXchange data sets
- *New in SWS Version 11* : Direct Access to Speedwell Forecast Archive: archived forecasts can be viewed and imported into SWS.
- *New in SWS Version 11* : Gridded Data Services integration: direct access to several gridded data catalogues supported by Speedwell



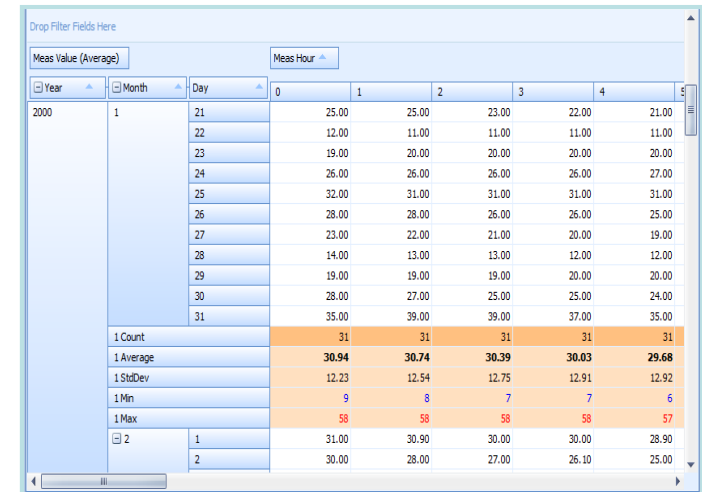


# Data and Forecasts

## Plot Daily and Hourly Data



## Plot and verify forecast





## View Pivot Hourly data tables



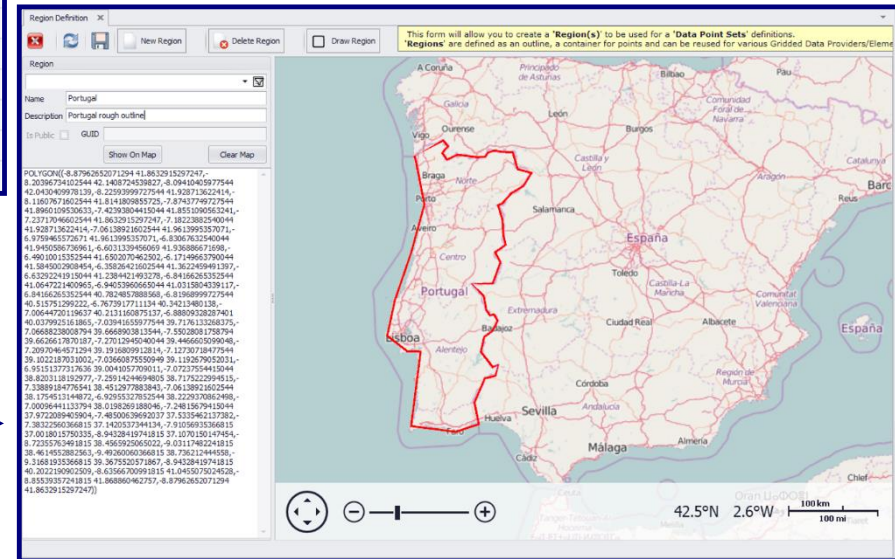
# Gridded Data Support

SWS provides direct access to several gridded data catalogues supported by Speedwell (subject to subscription). Point data is available for any latitude/longitude within a given catalogue. In addition to point data, users can apply mathematical functions over user-defined areas or standard regions. For example, this could be daily average over a given region or the maximum/minimum of all data points within a chosen area

Gridded Data Services - Region		Speedwell Data Service		Gridded Data Services - Region		Gridded Data Services - Region	
<div></div>							
Catalogue							
	Data Element Name	Data Provider Name	Earliest Data	Is Hourly	Latest Data	Measure Units	
▶	Rain	ARC2	01/01/2015	<input type="checkbox"/>	14/12/2015	mm	
	Rain	Aus BOM	01/01/1900	<input type="checkbox"/>	15/04/2016	mm	
	Solar Exposure	Aus BOM	01/01/1990	<input type="checkbox"/>	28/04/2016	MJ/m2	
	Rain	CHIRPs	01/01/1988	<input type="checkbox"/>	13/02/1988	mm	
	Mean Wave Direction	ERA 0.75 resolution	01/01/1979	<input checked="" type="checkbox"/>	31/01/2016	degrees	
	Sea Surface Tempera...	ERA 0.75 resolution	01/01/1979	<input checked="" type="checkbox"/>	31/01/2016	K	
	Temperature 2m	ERA 0.75 resolution	01/01/1979	<input checked="" type="checkbox"/>	31/01/2016	K	
	Wave Height and Swell	ERA 0.75 resolution	01/01/1979	<input checked="" type="checkbox"/>	31/01/2016	m	
	Wind u +10m	ERA 0.75 resolution	01/01/1979	<input checked="" type="checkbox"/>	31/01/2016	m/s	
	Wind v +10m	ERA 0.75 resolution	01/01/1979	<input checked="" type="checkbox"/>	31/01/2016	m/s	

↑  
Select gridded data source

Define the area with the cursor tool and Transform data (eg sum / max / min / average) and extract to SWS







# How to manage your weather data by doing nothing!

The SWS Data Manager manages weather data and forecasts so well that most SWS clients don't even know it exists!

- New historical data sets that are delivered to the FTP are automatically imported
- Daily/hourly updates of weather data feeds are automatically imported





# Seamless Data Management

The screenshot displays the Oasis Data Manager software interface. The main window shows a 'List of Data Providers' table with columns: ID Data Provider, Name, FTP Address, FTP Login, FTP Password, and Local Sa. The table lists various providers, including Speedwell ECMWF Seasonal, Swedish Met Office, and Weather X Change. The 'Weather X Change' provider is selected, and its details are shown in a pop-up window. The 'Import Filter' window is also open, showing a table of database table names, fields, and values, and a section for 'Weather Element' and 'Other Field' configuration.

**List of Data Providers**

ID Data Provider	Name	FTP Address	FTP Login	FTP Password	Local Sa
53	Speedwell ECMWF Seasonal as Data P...				
54	Speedwell ECMWF Seasonal				
95	Speedwell GFS Ens AVG				
96	Speedwell GFS Ens AVG as Data Provi...				
3	SWD				
63	Swedish Met Office				
24	SYNOP & ISH (SYNOP)				
93	Taiwan Met Office Website				
98	TST Data Provider				
40	Thailand Met Office				
18	Turkish Met Office				
99	Ugandan Met Office				
75	UQMO (Data Provider)				
89	US Geological Survey				
1	Weather X Change	ftp.wxch.com			
14	WSI_Forecast				

**Data Provider**

Company: Weather X Change

Name: Weather X Change

FTP address: ftp.wxch.com

FTP Login:

FTP Password:

FTP Data Initial Dir:

Local File Saving Path: E:\Data Files\WXC\

☐ Use Passive FTP File Transfer Mode

☐ Forecast Provider?

**Import Filter**

Data Provider: Weather X Change

Database Table Name | Field | Value

Database Table Name	Field	Value
	Town	CITY
	Latitude	LAT
	Longitude	LONG
	Altitude	ALT
	Allow Create Station	FALSE
	Allow Lookup from NOAA...	FALSE
	Allow Update Station Na...	FALSE
	Allow Update Other Stat...	TRUE
	Forecast Provider File ...	0
	Forecast Import Helper ...	2
	Create one ID Ensemble...	TRUE
tblRelativeHumidity	Relative Humidity	12Z_REL_HUM
tblPressureAve	Pressure Ave	12Z_MSLP
tblRain	Rain	DAILY_RAIN
tblSnow	Snow	DAILY_SNOW
tblSunshine	Sunshine	SUNSHINE

**Weather Element**

Weather Element:

Data Provider Column Header:

**Other Field**

Field Name:

Value:

**FORECAST PROVIDER FILE FORMAT:**

- 0: WXC Date Format: DD/MM/YYYY, CSV=','
- 1: AER Date Format: YYYY-MM-DD, CSV=','
- 2: EarthSat/MDAFederal Specific format,
- 3: WSI Date Format: YYYY-MM-DD, CSV=','

**Forecast Import Helper Type:**

- 1: for WXC and EarthSat Forecast using old import methods
- 2: for WXC and Speedwell forecast format. Station ID is WMO
- 3: for Speedwell forecast where Station ID is the SRCID

1. Define the data sources
2. Map the CSV files Headers
3. That is it – done!



# Strict Data Type Management

Historical Data Viewer

Station: New York-LaGuardia Airport  
Element: Temperature Min  
From: 01/01/2000 To: 01/05/2000  
2nd Element: Temperature Max

Show Empty Data Type Series

Detailed Series with Chart Representation | See All Data Types | Data Comparer | Fast Inventory Summary

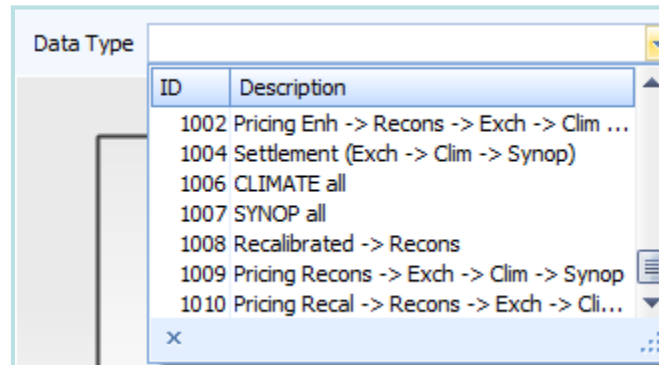
Display | Edit Data

Dates	Synop QC...	Climate Q...	Climate Cl...	Reconstru...	Recalibrat...	User's Seri...
22/03/2000...	38	38	38	38	35.808744...	37.94
23/03/2000...	38	38	38	38	35.808744...	37.94
24/03/2000...	45	45	45	45	42.808744...	44.96
25/03/2000...	50	50	50	50	47.808744...	50
26/03/2000...	51	51	51	51	48.808744...	48.92
27/03/2000...	43	43	43	43	40.808744...	42.98
28/03/2000...	48	48	48	48	45.808744...	48.92
29/03/2000...	46	46	46	46	43.808744...	46.04
30/03/2000...	44	44	44	44	41.808744...	44.06
31/03/2000...	41	41	41	41	38.808744...	41
01/04/2000...	43	43	43	43	40.808744...	42.98
02/04/2000...	50	50	50	50	47.808744...	50
03/04/2000...	53	53	53	53	50.808744...	53.06
04/04/2000...	49	49	49	49	46.808744...	48.02
05/04/2000...	42	42	42	42	39.808744...	42.08
06/04/2000...	42	42	42	42	39.808744...	42.98
07/04/2000...	51	51	51	51	48.808744...	51.98
08/04/2000...	50	50	50	50	47.808744...	50
09/04/2000...	31	31	31	31	28.808744...	31.1
10/04/2000...	40	40	40	40	37.808744...	41
11/04/2000...	36	36	36	36	33.808744...	35.96
12/04/2000...	41	41	41	41	38.808744...	41

Speedwell Weather uses a standard SWS data base as the backbone of its own data and forecast business with over 100,000 weather stations storing multiple weather elements and multiple data quality types....it scales!



# SWS Pricing and Settlement Hierarchies: Hiding Complexity



SWS Pricing Hierarchies ensure that the best data are automatically loaded for contract pricing and that settlement automatically data is automatically picked up as soon as the risk period starts

In a nutshell:

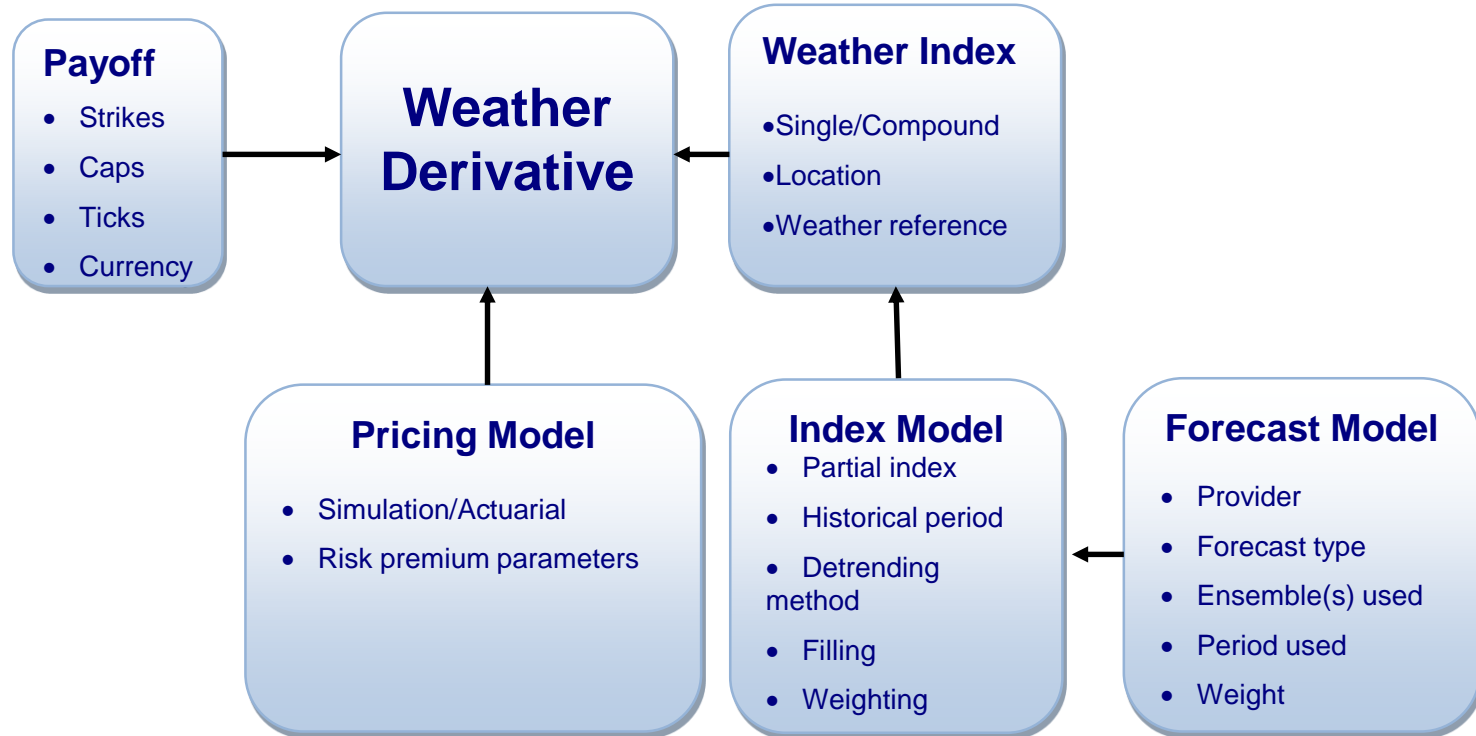
- Data are easy to use
- Multiple data types allow full understanding of data provenance and quality
- Hierarchies mean that processing of those data types is simplified but fully transparent



# Front Office



# Pricing a Weather Derivative





# Index Structure Support



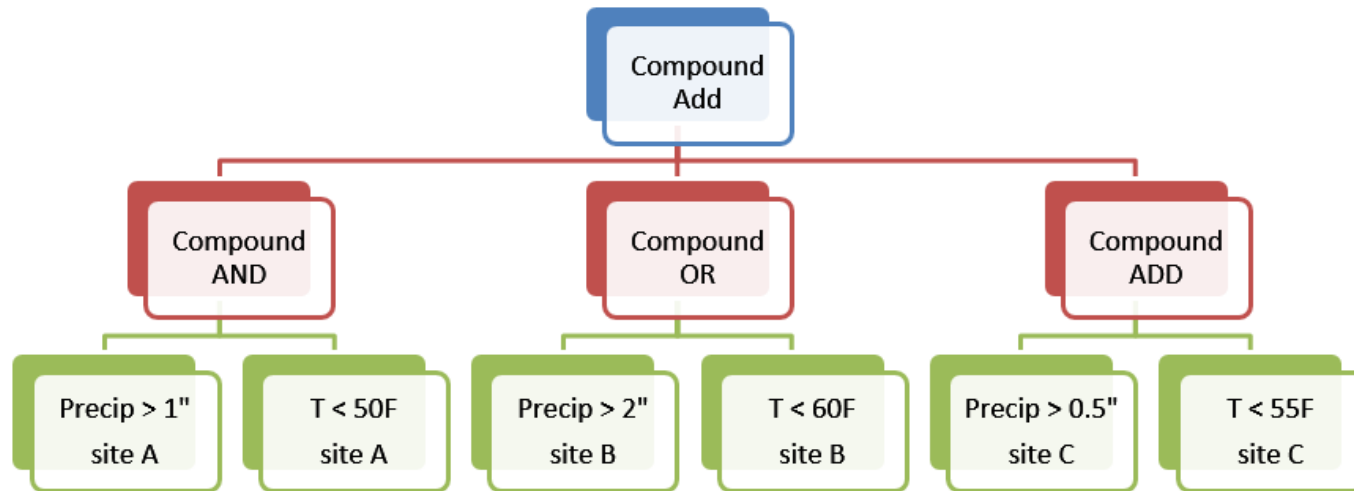
- Daily / Hourly / sub Hourly Index
- Basket Index
- Compound Index e.g. Wind + Temp
- Multi stations (baskets, any weights)
- Can mix daily and hourly variables
- Super exotics
- Strips – multi year, month, flexi
- Power Curve Builder Scripting Tool: simplifies the transformation of a wind turbine power curve table into an SWS-compatible index for weighting wind speeds
- Gas-Quanto pricer using daily temperature simulation and gas price simulation (mean-reverting with jump process)





# Compound Indices

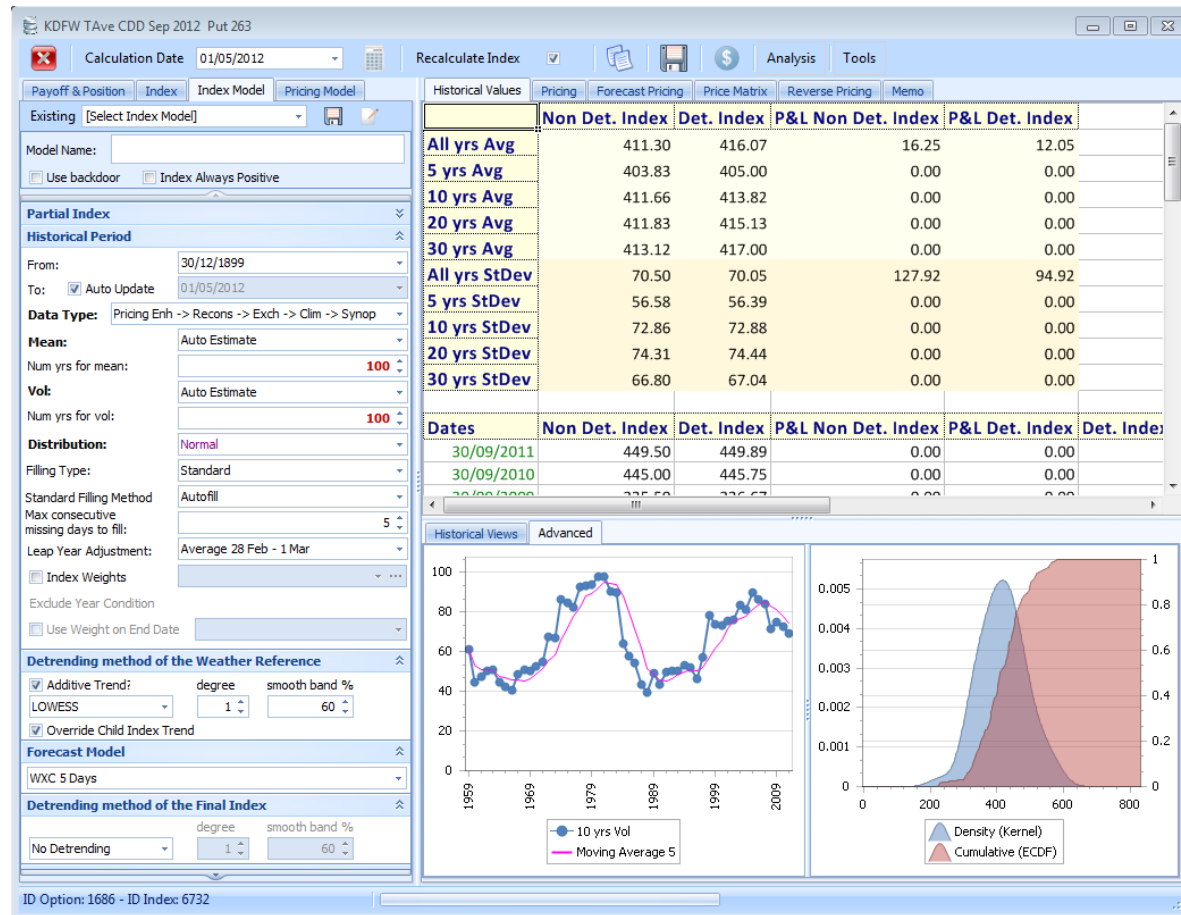
SWS supports super-exotic structures by allowing complex compounding







# Rich functionality giving you all the necessary pricing tools





# Analysis Tools

- Reverse Pricing
- Time Series Analysis
- Multi-model analysis
- Distribution fitting
- Index model analysis
- Burn analysis
- Correlation analysis
- “Cone chart”



# Portfolio Risk Management



# Portfolios

SWS supports four types of portfolios:

- *Real Portfolios* are the portfolios that contain actual executed transactions.
- *Working Portfolios* are “throw away” portfolios and can be used for analysis (eg marginal impact of a proposed transaction).
- *Mirrored Portfolios* are working portfolios that mirror a real portfolio but for which a different portfolio risk model is attached to for analysis or reporting purposes.
- *The Enterprise Portfolio* is the portfolio made of all Real Portfolios

There is no limit to the number of Portfolios



# Portfolio and Risk Reports

Speedwell Weather System - Oasis Desktop

FileData & ForecastBack OfficeMiddle OfficeMarket PricingPortfolios AnalysisToolsWindowsAbout

Weather Index ListList of Weather DerivativesEGLT Tave HDO Feb 2012 Call 100Portfolios ListPortfolio Profit and Loss and Expiry VaR reports

Risk ModelPrevious Day Report01/02/2012

PortfolioCalculations SummaryP&L and Expiry VaR ReportsMarkowitz AnalysisSaved Reports

A	B	C	D	E	F	G	H	I
1 SWS transaction Report published on: 02/02/2012 17:39:37								
2 Calculation Date: 02/02/2012								
3								
ID Transaction			Trade Date	Trade Parts	Settlement Date	Post Settlement Date	Parts Settled	Is Settled?
5	1	OPTION	Listed	12/01/2012	1	05/04/2012	29/06/2012	0 / 1 FALSE
6	2	OPTION	OTC	12/01/2012	1	05/01/2021	31/03/2021	0 / 1 FALSE
7	3	OPTION	Listed	12/01/2012	1	06/02/2012	30/04/2012	0 / 1 FALSE
8	5	OPTION	Listed	12/01/2012	3	05/04/2012	29/06/2012	3-Feb FALSE
9	6	OPTION	Listed	13/01/2012	1	05/04/2012	29/06/2012	0 / 1 FALSE
10	7	OPTION	OTC	13/01/2012	1	05/01/2012	30/03/2012	1-Jan TRUE
11	24	SWAP	Listed	27/01/2012	1	05/04/2012	29/06/2012	0 / 1 FALSE
12	25	SWAP	Listed	27/01/2012	1	05/04/2012	29/06/2012	0 / 1 FALSE
13	26	SWAP	Listed	27/01/2012	1	05/07/2011	28/09/2011	1-Jan TRUE
14	27	SWAP	Listed	27/01/2012	1	05/07/2011	28/09/2011	1-Jan TRUE
15	32	SWAP	Listed	02/02/2012	1	05/04/2012	29/06/2012	0 / 1 FALSE
16	33	OPTION	Listed	02/02/2012	1	20/02/2012	14/05/2012	0 / 1 FALSE
17								
18								
19								
Reporting	Amount	Realised P&L	Unrealised P&L					
21 Total P&L From Inception (USD, Actual FX Rates)	-44505432.33	-33.00	-44505399.33					
22 Total P&L From Inception (USD, Current FX Rates)	-44505432.33	-33.00	-44505399.33					
23 Total P&L From Last Year End (USD, Actual FX Rates)	-44505432.33	-33.00	-44505399.33					
24 Total P&L From Last Year End (USD, Current FX Rates)	-44505432.33	-33.00	-44505399.33					
25 Total P&L From Last Reval (USD, Actual FX Rates)	-44505432.33	-33.00	-44505399.33					
26 Total P&L From Last Reval (USD, Current FX Rates)	-44505432.33	-33.00	-44505399.33					
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								

Profit & LossGreeksRisk Report

Done.

Connected to: SPEED\_TEST\_2 on: WEATHERDATABASE\WEATHER

Open WindowsTabbedSkin Picker

- Historical
- Simulations
- PL
- Expiry VaR
- Daily VaR
- Markowitz Charts
- PCA
- SSD





# Automating Portfolio Calculations

Overnight Report Settings

☐ Run Credit Risk Reports    Overnight Report Directory:

☐ Run Daily VaR    Expiry Portfolio Reports to Run: ☒ 10 Yrs Burn    ☒ Correlated Index Simulation  
☒ All Yrs Det. Burn    ☐ Daily Simulation

ID Portfolio	Is Run Overnight?	Portfolio Name	Is Working Portfolio	No. of Derivatives	No. of Transactions
> 1	<input checked="" type="checkbox"/>	Real	<input type="checkbox"/>	4	13
2	<input type="checkbox"/>	test2	<input type="checkbox"/>	3	3
3	<input type="checkbox"/>	Turn of Year Test	<input checked="" type="checkbox"/>	2	2

Application exe name	Main Parameter	Action
SWSDesktop	/OVERNIGHT	Automatic portfolio and risk calculations



# Back Office and Invoicing





# Summary of Back Office Functionality

- Flow of the weather trade (notification of each stage)
- Generation of confirms
- Generation of invoices
- Payment reports
- Settlement reports
- Export of reports to Excel®
- Trade query
- Static data maintenance – counterparty details...

Microsoft Windows, SQL Server, Excel, Word and PowerPoint are trademarks of the Microsoft Corporation



# Full Support for the Trade Life-Cycle

Take control of the entire trade flow

Weather Index List | List of Weather Derivatives | EGLL Tave HDD Feb 2012 Call 100 | Portfolios List | Portfolio Profit and Loss and Expiry VaR reports | List of Weather Derivatives | Transaction Booking | Transaction List

Display Transaction Types: Real (selected), Fictitious. Show Only: Ready for Calculation. Show Changes to Transaction, Show Deleted Transactions.

Copy to Working Portfolio [Select Portfolio] Move To Portfolio [Select Portfolio]

ID Transaction	ID Option	Listed?	Trade Type	Strip Type	Weather Reference	Station	Type Of Option	Strike	Tick	Cap (Tick)	Trader	Buyer	Seller	Transaction Date
23	1646		OPTION	Single	Temperature Min	MANCHESTER (Woodford)	Call (NO cap)	1000	5000		Trial	Speedwell Weather D...	Merill Lynch UK (E...	24/01/2012

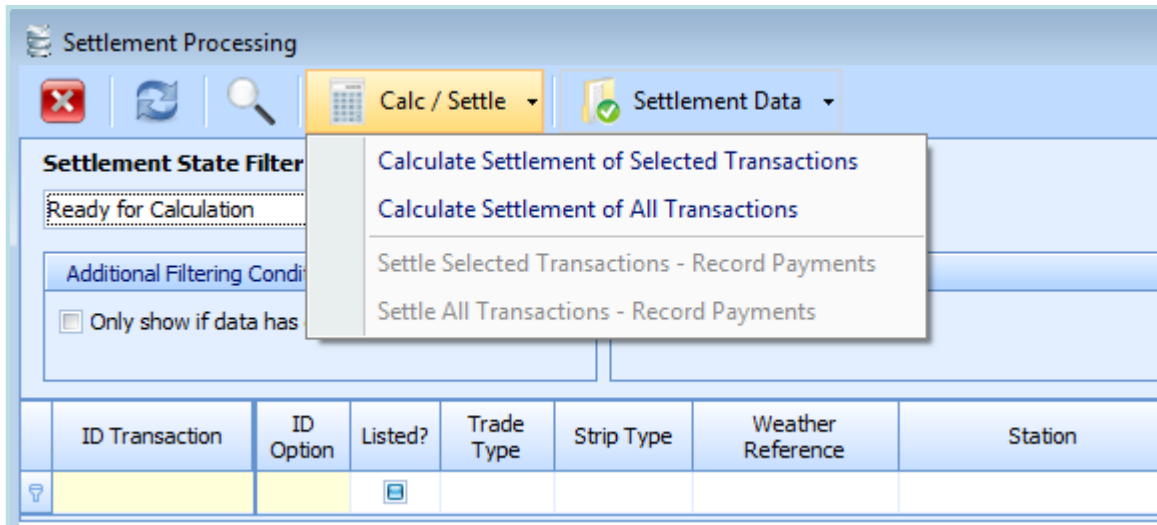
1 listed trade(s)

Transaction List | Transaction Life Cycle Status List

Position	Status Name	Is Visible?	Payment Occurring?	Applies to each Transaction Parts?
0	Contract is sent	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	Contract is signed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Premium is exchanged	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	Broker's fees are paid	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Settlement is paid	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	Post Settlement is paid	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



# Automatic Batch Processing of Trades



- Configure SWS to automatically calculate and settle trades at the end of each day
- Never forget a trade
- Additional optional components available to further automate trade processing



# Automatic Notifications

**Configure Email Notification**

Send report via email on FTP download / data import

☐ Always Notify Email: Maintenance@speedwell.net

☐ If FTP download error Email Subject Prefix: [STVG App Server 2]

☒ If data import error

Send Email on Action

Transaction Booked: ian.brookes@speedwellweather.com

Transaction Edited: ian.brookes@speedwellweather.com

Transaction moved or removed from portfolio: ian.brookes@speedwellweather.com

End of Day Portfolio PL & VaR Report: ian.brookes@speedwellweather.com

End of Day Credit Risk Report: ian.brookes@speedwellweather.com

End of Day Batch Calculation: ian.brookes@speedwellweather.com

End of Day Batch Settlement: ian.brookes@speedwellweather.com

Missing Payment Report: ian.brookes@speedwellweather.com

Speedwell Reporting

URL: http://www.speedwellweather.com:9334/Speedwell.ReportService.svc/mex

Email: production@speedwell.net

Common Email Settings

SMTP Server: SMTP.SAL.LOCAL

Email Sender Address: Production@speedwell.net

OK Cancel



# Technical



# Back Office Integration

- SWS can be internally installed in your organisation or hosted by us
- For internal installations, Speedwell have experience of integrating SWS into other existing back office processes
- It is possible to raise email alerts at key stages in the settlement life cycle (eg when a Transaction has been edited). These can be implemented using SQL Server emailing functionalities and triggers or by creating specific Windows Services



# SWS Permissions Matrix

Full user permissioning is supported either with standard permissions or configurable permissions

Speedwell Weather System - Help

Hide Back Forward Home Print Options

Contents | Index Search Favorites

Type in the word(s) to search for:

permission

List Topics Display

Select topic: Found: 1

Title	Location	Rank
Group Permissions	Speedwell Weath...	1

☐ Search previous results  
☒ Match similar words  
☐ Search titles only

Navigation: SWS Oasis Desktop > Reference Information > Permissions >

## Permissions Matrix - Back Office

Navigation: SWS Oasis Desktop > Reference Information > Permissions >

## Permissions Matrix - Trading

Product	Feature Group	Features	Can Trade	Can Create and Edit Derivatives
Oasis Desktop	Historical Reports	Display Historical Reports	Y	
Oasis Desktop	Historical Portfolio Reports	Add Historical Portfolio Report Edit Historical Portfolio Report Remove Historical Portfolio Report Save Historical Portfolio Report		
Oasis Desktop	Back Office	Display Back Office Menu		
Oasis Desktop	Transaction Fallbacks	Configure Trade Transaction Fallbacks		
Oasis Desktop	Transaction List	Copy Transaction to a working portfolio	Y	
Oasis Desktop	Group Transactions	Display List of Group Transactions	Y	
Oasis Desktop	Pricers	Display Pricing Form Display Multi Model Pricing Form Display Periodic Index Calculator Display Black 76 Pricer Display Roll Pricing		Y
Oasis Desktop	Trade	Trade Live Futures Price Trade Live Options Price Trade Pricing Trade Multi-Model Pricing	Y	
Oasis Desktop	Trade	Display Strip Wizard Trade Weather Derivatives List	Y	
Oasis Desktop	Portfolios	Portfolio - Clear Non Traded Options Portfolio - Remove Derivative List of Weather Derivatives - Add to Portfolio	Y	
Oasis Desktop	Portfolio VaR	Run Portfolio Daily VaR Run Portfolio Profit and Loss & Daily VaR		Y
Oasis Desktop	Portfolio Profit and Loss & Expiry Var	Save the report		
Oasis Desktop	Portfolio Daily Var	Save the report		
Oasis Desktop		Add Derivative or Strip Edit Derivative or Strip		Y
Oasis Desktop	Index Position Analysis	Display Index Position Analysis	Y	
Oasis Desktop	Assign Models	Display Set Pricing Models	Y	
Oasis Desktop	Display Set Index Models	Display Set Index Models		
Oasis Desktop	Index Creation Wizard	Display Index Creation Wizard	Y	

Navigation: SWS Oasis Desktop > Reference Information > Permissions >

## Permissions Matrix - Data Manager

Product	Feature Group	Features	Can Start the SWS Data Manager	Can Access the Database Management Functions	Can Access the Database Navigator	Can Create and Modify Users & Permissions	Can Import Data And Forecast	Can Edit Station Mapping	Can Edit Station Details
Oasis Desktop	Weather Data	Edit Weather Data					Y		
Oasis Desktop	Station Details	Edit Station Details							Y
Data Manager	Data Manager	Launch Data Manager Application	Y						
Data Manager	Database Navigator	Display Database Navigator		Y					
Data Manager	Clean Up Centre	Display Database Clean Up Centre		Y					
Data Manager	Users	Show Password Reset Password				Y			
Data Manager	Weather Data	Clean Up Centre - Allow delete old data import errors Clean Up Centre - Allow delete old data audit trail Audit Trail - Allow roll-back Advanced Management - Delete Data Advanced Management - Recalculate Temperature Average Advanced Management - Super Delete					Y		
Data Manager	Weather Data	Create New Element						Y	
Data Manager	Weather Data	Display Historical Data Viewer Display Advanced Weather Data Management Display Data Providers Display Import From FTP Display Missing Data Configure Report Display Historical Data Import From CSV Display Historical Data Import From Spreadsheet Display Historical Data Generic Data File Converter Display Historical Data Measure Unit Wizard Display Forecast Provider Measure Units Display Import Forecast From File Display Data Inventory Display Data Cleaning Display List of Countries Display List of States Display List of Counties Display List of Measure Units Display Forecast Import Information							
Data Manager	Station Mapping	Edit Station Mapping						Y	
Data Manager	Station Details	Edit Station Details							Y
Data Manager	Data Administration	Display Database Structure Display Error Messages Display List of Currencies Display Portfolio Option Reconstruction Display Strip Dates Reconstruction Clean Up Centre - Allow delete old indices Clean Up Centre - Allow delete old messages Clean Up Centre - Allow delete old Portfolios Clean Up Centre - Allow delete old errors							





# Booking a Weather Trade:

SWS immediately does the following:

- Locks up for editing/deleting the Weather Derivative
- Sends an internal message to SWS desktops
- Makes available the Transaction in the Back Office
- Integrates the Transaction in P&L, VaR, Credit Reports, etc

Only a person with Back Office privileges can:

- Edit the Transaction (e.g. Premium/Transaction Date)
- Mark the Transaction as deleted (the Transaction is never physically deleted from the DB)
- Record statuses
- Record payments
- Settle the Transaction
- Remove the Transaction from the assigned portfolio



# Auditing

**SWS Oasis - Event Viewer**

Close    Audit Action    System Events

Exit    User Audit    Event Viewer

User Audit    System Events    User Audit

Search Filter

User:  Form Name:

Action:  Table Name:

Date From: 04/08/2013 Date To: 10/08/2013

Find Clear

Drag a column header here to group by that column

ID Audit	User Name	Action Da...	Action Name	Info	Form Name	Form Guid	Value Bef...	Value After	Table Name	Parameters
1638	Trial	2013-08-...	CREATE	IDIndex=...	FormInde...	a70814bf...			Trading	Batch Inde...
1637	Trial	2013-08-...	CREATE	IDIndex=...	FormInde...	a70814bf...			Trading	Batch Inde...
1636	Trial	2013-08-...	CREATE	IDIndex=...	FormInde...	a70814bf...			Trading	Batch Inde...
1635	Trial	2013-08-...	CREATE	IDIndex=...	FormInde...	b7e7865d...			Trading	Batch Inde...
1634	Trial	2013-08-...	CREATE	IDIndex=...	FormInde...	b7e7865d...			Trading	Batch Inde...

User    Value Before/After    Information    Parameters

Connected to: SPEED\_TEST\_2 on: WEATHERDATABASE\WEATHER    Open Windows    Tabbed    Skin Picker



# Why SWS? ....Part 1

- Does your weather system handle hourly data?.. strips? ..compounds?.. multi period deals?..multi triggers? ..baskets ..gas quantos?
- When pricing a transaction can you exclude days of the week and specific dates?
- Does it support ultra-exotic deals through a "back door" with those deals still being fully incorporated in portfolio calculations?
- Can you create a structure that handles risk on specific non-consecutive hourly periods in a day?
- Do you handle leap year adjustments robustly? - we offer six different methodologies
- Can your middle office users stress test a portfolio by overriding the front office valuation models with one of their own choice?
- Can you price a weather hedge using INDIVIDUAL members of an ensemble forecast to capture the implicit convexity?
- Does your weather database respect the different data qualities that are used and which may be dramatically different even at the same weather station?



# Why SWS? ....Part 2

- Would your audit trail breakdown if a weather data point already used in settling a transaction is later revised by a national met service and subsequently updated after settlement of a weather hedge?
- Can you detrend the underlying weather data AND the final index?
- Does your detrending method respect the differing trends at different times of year?
- Does your system automate the raising of trade confirmations and invoices?
- Do you have a permissioning structure that prevents, for example, accidental deletion of booked trades by front office users or un-authorised changes to front office models by back office users?
- Do you handle credit risk reports?
- Can you easily export weather data and historical forecasts for use in external applications ?
- Can you run a weather hedge valuation or a retrospective portfolio valuation using only the information that was available at that time?



# Why SWS? ....Part 3

- Can you retrieve a snapshot of the weather data that was used to settle a transaction before and QC revisions to that data?
- Does your weather database respect the various different types of weather data on which a transaction can be priced?
- Can your database support non-weather variables including energy or commodity prices?
- Does your weather database scale to tens of thousands of weather sites and handle daily, hourly and sub hourly ..down to minutes?
- Does your system support daily VaR calculations at the portfolio level?
- Does your system support full regulatory reporting?
- Does your weather pricing system support Speedwell weatherML for the purpose of sending and receiving weatherXchange RFQs?

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