

Methodology and Specifications Guide Global M2M Oil Quantitatively Modeled Forward Curves

Latest update: Dec 2022

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Introduction

Platts' M2M oil forward curves are market-derived curves for markets that have no effective forward liquidity. They are sometimes referred to as quantitative forward curves [QFCs] to distinguish them from the liquid, assessed forward curves known as Platts Forward Curves (PFC-Oil, addressed at <https://www.spglobal.com/platts/en/our-methodology/methodology-specifications/oil/platts-forward-curve>). They are designed to quantitatively derive prices of illiquid markets of crude oil and refined products through relations with forward liquid markets assessed by Platts and in some cases, using ICE settlement data. This document describes the assumptions, data sources and methods by which Platts quantitatively derives final price values for publication.

Platts discloses publicly the days of publication for its Quantitative Forward Curves, and the times during each trading day in which Platts considers transactions in determining its QFC. This schedule of publication is available on Platts' website, at the following link: <https://www.spglobal.com/platts/en/our-methodology/holiday>.

The dates of publication are subject to change in the event of outside circumstances that affect Platts' ability to adhere to its normal publication schedule. Such circumstances include network outages, power failures, acts of terrorism and other situations that result in an interruption in Platts' operations at one or more of its worldwide offices. In the event that any such circumstance occurs, Platts will endeavor, whenever feasible, to communicate publicly any changes to its publication schedule and assessment periods, with as much advance notice as possible.

All Platts methodologies reflect Platts' commitment to maintaining best practices in price reporting. Platts' methodologies have evolved to reflect changing market conditions through time, and will continue to evolve as markets change. A revision history, a cumulative summary of changes to this and previous updates, is included at the end of the methodology.

How this methodology statement is organized

This description of methodology for quantitatively forward curves is divided into seven major parts (I-VII) that parallel the entire process of producing the price values.

- Part I describes the input data used for the calculations.
- Part II describes any security and confidentiality practices that Platts uses in handling and treating data.
- Part III is meant to provide details of the Market Assessments: This is not applicable to this document, but is included for consistency in numbering with other Platts methodology documents.
- Part IV explains the process for verifying that published prices comply with Platts' standards.
- Part V lays out the verification and correction process for revising published prices and the criteria Platts uses to determine when it publishes a correction.
- Part VI explains how users of Platts M2M Oil can contact Platts for clarification of data that has been published, or to share a complaint. It also describes how to find out more about Platts' complaint policies.
- Part VII is a detailed description of the methodology used to quantitatively model these forward curves. It includes descriptions of the data used, the historical analysis that supports the assumption, summary of the assumptions and a general description of the algorithms used.

Part I: data quality and market intelligence

Platts market intelligence

Platts M2M Oil incorporates Platts' market knowledge and Platts' extensive database of historical price assessments. Some curves also use ICE forward curve settlement data.

S&P Global Platts M2M-Oil offers time-stamped quantitatively derived forward curves for EMEA, ASIA and USA regions with the aim is to satisfy clients' accounting and analysis needs. They are built by the S&P Global Platts Commodity Risk Solutions team and they are modelled using prices extrapolated from the most important trading hubs across the globe, to which the illiquid markets are correlated.

The quantitative forward curves are built applying a combination of the market knowledge of S&P Global Platts markets teams, market relationships and mathematical methods. S&P Global Platts has an extensive and unique database of historical assessed spot and forward curves data which provide the necessary foundation for deriving the statistical relationships needed for the quantitative forward curves.

Usually, the energy spot market is very liquid and therefore the mathematical relationships, extracted using the data recorded at key geographical locations, are extremely robust, reliable and provide an excellent understanding of the relationship between locations and products.

The practice of the netback pricing (which implies pricing a crude grade or a refined product after having discounted transportation costs to deliver the crude/product at a specific trading location) is fairly common within the energy industry, hence, a thorough understanding of the transportation system (shipping routes, pipelines, etc) and most important delivery locations is vital in order to understand price fluctuations. S&P Global Platts closely monitors the essential trading delivery locations (like New York, Houston, Rotterdam, Antwerp, Amsterdam, Primorsk, Augusta and Singapore or macro areas like the US Gulf Coast, the North West Europe, the Mediterranean and south Asia) and the forward curves built on the price assessments of all the physical trading activities in aforementioned locations are actually used as price driver for the quantitative forward curves.

Source of data

The primary sources of data are:

1. Platts editorial observations and assessments, including spot assessments and forward curve assessments (when available)
2. Platts' extensive database of historic commodity prices
3. Platts' deep and abiding commodity market knowledge.
4. Data from relevant third party sources including ICE.

Please refer to our Platts methodology for details on the editorial assessments

<https://www.spglobal.com/platts/en/our-methodology/methodology-specifications/oil>

Part II: Security and confidentiality

Data is stored in a secure network, in accordance with Platts' policies and procedures. This means that all data for use in Platts M2M-Oil may be accessed by Platts Analytics staff while modelling the value of the markets.

Part III: Market assessments

This section is not applicable to M2M-Oil

Part IV: Platts analytics standards

All Platts' employees must adhere to the S&P Global Code of Business Ethics (COBE), which has to be signed annually. The COBE reflects S&P Global commitment to integrity, honesty and acting in good faith in all its dealings. In addition, Platts requires that all employees attest annually that they do not have any personal relationships or personal financial interests that may influence or be perceived to influence or interfere with their ability to perform their jobs in an objective, impartial and effective manner.

Quantitative Analysts are mandated to ensure adherence to published methodologies as well as internal standards that require accurate records are kept in order to document their work. Platts has a Quality & Risk Management (QRM) function that is independent of the analytical group. QRM is responsible for ensuring the quality and adherence to Platts' policies, standards, processes and procedures. The QRM team conduct regular assessments of editorial operations, including checks for adherence to published methodologies.

S&P Global internal auditor, an independent group that reports directly to the parent company's board of directors, reviews the Platts risk assessment programs.

Part V: Corrections

Platts is committed to promptly correcting any material errors. When corrections are made, they are limited to corrections to data that was available when the index or assessment was calculated.

Part VI: Requests for clarifications of data and complaints

Platts strives to provide critical information of the highest standards, to facilitate greater transparency and efficiency in physical commodity markets. Platts' customers raise questions about our methodologies and the approach we take in our price assessments, proposed methodology changes and other editorial decisions in relation to our price assessments. These interactions are strongly valued by Platts and we encourage dialog concerning any questions a customer or market stakeholder may have. However, Platts recognizes that occasionally customers may not be satisfied with responses received or the services provided by Platts and wish to escalate matters. Full information about how to contact Platts to request clarification around an assessment, or make a complaint, is available on our website, at: <https://www.spglobal.com/platts/en/contact/complaints>.

Part VII: Quantitative forward curve methodology

This section describes the methodology used to compute the M2M-OIL forward curves.

General approach

The main approach to modelling the Platts M2M-Oil forward curves is to:

- Analyze the market and designate an anchor curve that acts as a main price driver
- Studying and determining the relationship between the market we want to model and the market driver
- Adjusting the curve so that it is consistent and in line with the most recent market assessments

Each and all of our models have been discussed with our editorial and analytic teams in order to understand the market fundamentals and make sure that our models are consistent with market expectations.

Analyzing the market

The choice of the anchor curve that acts as market driver is fundamentally important. The choice depends on multiple factors such as

- how close the two products are relatively to the distillation process (for example crude is often a good price driver for Fuel Oil)
- physical market connections and regions (for example a FO CIF MED is linked to a FO CIF NWE)
- seasonality (for example ULSD shows strong seasonality)
- availability of the anchor curve

Studying and determining the relationship

Once the driving market has been chosen, the next step is to establish how the markets are statistically related and how the designated curve is going to be modelled from the anchor curve.

For example, if we have two forward curves that are related to each other, one of them is shorter and we want to extend it to the same length as the other one. We can build a relationship between these two markets by using the points of the two forward curves. The relationship would be reliable (because based on assessed points) and re-assessed every day. However, sometimes the number of points of the shortest forward curves is very limited (for example 12 points) which statistically is not sufficient to build a reliable model.

Alternatively, the relationship can be measured from historical data which increase the statistical reliability but it might include different market conditions. It is therefore important to determine the time window that reflects current market conditions. This selection is done both by analyzing the data and talking to our editorial and analytics teams. Moreover, it requires the important assumption the relationship measured on the historical spot prices holds for each and all points of the forward curve.

Adjusting the curve

Once the curve is modelled, it is important to make sure that the curve is in line with the most recent market observations which are either the Platts Forward Curve (for example we want to extend a 12-months PFC-Oil to a longer curve) or the spot market (in case we

don't have PFC-Oil assessments). The adjustments are implemented gradually so that they affect especially the front of the curve whilst the back of the curve remains more in line with the original model outcome.

Relative tenors and contract rolling

Oil Swaps have the standard assumption that the front month – Mo01 – corresponds to the following month of the current assessment date. Therefore, the rolling is performed at the beginning of each month. For example on 01-August Mo01 is September until 31-August and rolls to October on 01-September.

General Algorithm Descriptions

Most curves share similar methodologies or parts of methodologies. All are described below. In general, we will describe the general methodological heuristics that are used, then later define which one(s) that a particular curve uses. The actual algorithms can be quite complex, including provisions for seasonality, multiple spot prices, and shifts to force identical values at various points. These details are proprietary and are not described in this document. Note that all curves are published in nominal prices.

Generally, after each curve is determined for each day, they undergo a quality assurance review: analysts review the curve shape to differentiate changes in the term structure from other market activity and check for outliers, curve abnormalities, and unusual price movements. After that they are published and delivered to clients via API, FTP, Platts.com, channel partners, and/or email.

Spot/Forward

These curves take the relationship between two spot (or specific forward-month) prices, and apply it to the liquid forward curve corresponding to one of the spot prices, to derive the forward curve corresponding to the other spot price.

Term Structure

These curves have a source of data for the front end of the curve, and are extended using the shape of another, closely-related curve.

Smoothing

These curves have another underlying source of forward curve data, which is smoothed to remove individual monthly outliers while, on the whole, preserving the overall shape of the curve.

Flat Extension

Used for long-dated curves, this extends the curve past the end of liquid data at the final price. However, since all prices are nominal, this value is inflated at the now-current Treasury bill rate closest to the final price date as a proxy for future inflation.

ICE Extension

This extends a curve with assessed value with ICE values after the assessed period. This often involves using the ICE shape only applied to the end of the assessed period, as well as adjustments to account for differing expiry dates between the assessed contracts and the ICE contracts.

Forward/Forward

This takes the relationship between two forward curves, customarily at a different MOC, and applying that relationship to one of those forward curves at the "other" MOC.

Simple Spread

Some curves are just the simple differential between two other curves. This is often implied from the name.

Fixed Unit Conversion

The same as another curve, but with the units adjusted.

Combination

These curves are simple, fixed ratio combinations of other forward curves. This differs from Forward/Forwards in one significant manner: The combinations are fixed, a priori.

Symbol Generation

The symbols for all curves follow the same general pattern:

ZZZXnn or **ZZZnnn**

This can be decoded to all symbols for a location in this manner:

ZZZZ is the hub code for that location, and does not change for a particular location. (this is NOT the code used to retrieve the entire curve used in the API and Platts Excel AddIn)

X = periodicity code, **P** for months, unless otherwise noted, for forward curve months less than 100, or **Q**, or **Y** for Quarters or years, respectively.

nn = forward month, quarter, or year, depending on periodicity, or **nnn** for forward months only past 99.

Note that many curves start later than month one – these are curves that extend in tenor a PFC.

Unless otherwise noted, for each curve, in addition to months, there are quarters for every whole forward quarter and years for every whole forward year. (e.g. for a 36 month curve, if the front month is March, Q1 starts in April, and Y1 starts the following January)..

This applies to “extension” curves as well – those that extend PFCs in tenor

Brent Frontline Financial at Houston MOC (240 months)

Hub Code: QBRH

Data Used:

- Platts daily assessments of the Brent Frontline Swap Houston (36 months)
- ICE daily settlements of the Brent Futures (84 months)

Modelling

- Months 37- ~84 (depending on liquidity) ICE Extension, Smoothing
- Months ~84-240 Flat Extension

Bunker 380 CST 3.5% Ex-Wharf Panama Canal M2M Financial (36 months)

Hub Code: QB3P

Data Used:

- Platts daily assessments of the HSFO USGC Financial forward curve
- Historical Platts spot price assessments of the Bunker 380 Panama
- Historical Platts spot price assessments of the HSFO USGC

Modelling

Spot/Forward

Bunker FO 380 CST 3.5% Dlvd Houston Financial (36 months)

Hub Code: QB3H

Data Used:

- Platts daily publication of the HSFO USGC Financial forward curve
- Historical Platts spot price assessments of the Bunker FO 380 CST 3.5% Dlvd Houston
- Historical Platts spot price assessments of the HSFO USGC

Modelling

Spot/Forward

Bunker FO 380 CST 3.5% Dlvd Los Angeles Financial (36 months)**Hub Code: QB3L****Data Used:**

- Platts daily publication of the HSFO 380 Singapore Cargo Financial forward curve
- Historical Platts spot price assessments of the Bunker FO 380 CST 3.5% Dlvd Los Angeles
- Historical Platts spot price assessments of the HSFO Singapore 380

Modelling

Spot/Forward

Dated Brent Houston Financial (240 months)**Hub Code: QDBH****Data Used:**

- Platts daily publication of the Platts DFL Financial London forward curve
- Platts daily publication of the Platts Brent Frontline Financial Houston forward curve

Modelling

- 1-36 months: We assume that the DFL curve in London remains the same at Houston MOC, and apply that to the Brent Frontline at Houston Curve.
- 37-240 months: The values of DFL months 31-36, applied to Brent Frontline, Houston

Eagle Ford Financial (84 months)**Hub Code: QEFD****Data Used:**

- ICE daily settlements of the WTI Futures
- Historical Platts price assessments of the Platts Bunker Eagle Ford Marker Mo02
- Historical Platts price assessments of the WTI Cushing Mo02

Modelling

Spot/Forward

FO 1.0% USAC Cargo vs USGC HSFO Waterborne (HiLo Diff) M2M Financial (36 months)**Hub Code: QFGA****Data Used:**

- Platts daily publication of the HSFO USGC Financial forward curve
- Platts daily publication of the LSFO USAC Financial forward curve

Modelling

Simple Spread

Fuel Oil 1% Resid USAC M2M Financial (240 months)

Hub Code: QF1A

Data Used:

- Platts daily publication of the Fuel Oil 1% Resid USAC Financial forward curve
- Platts daily publication of the FO 1% USGC Financial forward curve

Modelling

13-240 Months: Term Structure

Fuel Oil 1% Resid USGC M2M Financial (240 months)

Hub Code: QLFG

Data Used:

- Platts Historic Fuel Oil 1% Resid USGC spot price
- Platts Historic HSFO USGC spot price
- Platts daily publication of the HSFO USGC Waterborne Financial forward curve

Modelling

Spot/Forward

Gasoil No.2 USGC Prompt Pipeline M2M Financial (36 months)

Hub Code: QGUG

Data Used:

- Platts daily publication of the ULSD USGC Financial forward curve
- Historical Platts spot price assessments of Gasoil No.2 USGC
- Historical Platts spot price assessments of ULSD USGC

Modelling

Spot/Forward, Smoothing

Gasoline CBOB Buckeye Pipeline Financial (36 months)

Hub Code: QCBB

Data Used:

- Platts daily publication of the Gasoline RBOB Frontline Financial forward curve
- Historical Platts spot price assessments of CBOB Buckeye
- Historical Platts spot price assessments of RBOB

Modelling

Spot/Forward, Smoothing

Gasoline CBOB USGC Pipeline M2M Financial (36 months)

Hub Code: QCBG

Data Used:

- Platts daily publication of the Gasoline RBOB Frontline Financial forward curve
- Historical Platts spot price assessments of CBOB 87 USGC Prompt Pipeline
- Historical Platts spot price assessments of Gasoline RBOB NYH Barge

Modelling

Spot/Forward, Smoothing

Gasoline Prem UNLD Seattle WA Pipeline Financial (36 months)

Hub Code: QGAC

Data Used:

- Platts daily publication of the Gasoline USGC Financial forward curve
- Historical Platts spot price assessments of Gasoline Prem UNLD Seattle WA Pipeline
- Historical Platts spot price assessments of Gasoline USGC

Modelling

Spot/Forward, Smoothing

Gasoline RBOB Buckeye Pipeline Financial (36 months)

Hub Code: QR BB

Data Used:

- Platts daily publication of the Platts RBOB Frontline Financial forward curve
- Historical Platts spot price assessments of RBOB Buckeye
- Historical Platts spot price assessments of Gasoline RBOB NYH Barge

Modelling

Spot/Forward, Smoothing

Gasoline Unl 87 USGC Prompt Pipeline M2M Financial (36 months)

Hub Code: QGGC

Data Used:

- Platts daily publication of the RBOB vs USGC 87 Gasoline Financial forward curve
- Platts daily publication of RBOB Financial forward curve

Modelling

Months 1-12: Add Differential to RBOB.

Months 13-36: Term Structure

Heating Oil Frontline Financial (240 months)

Hub Code: QHOF

Data Used:

- Daily WTI Frontline at Houston MOC Forward Curve
- Daily Heating Oil Frontline Forward Curve

Modelling

Months 37-240: Term Structure, Smoothing

Jet Kero USAC Barge M2M Financial (36 months)

Hub Code: QJA C

Data Used:

- Platts daily publication of the Jet Kero USGC M2M Financial forward curve
- Platts daily publication of the Jet Kero USAC Barge Financial forward curve

Modelling

Months 13-36: Spot/Forward (using first 12 months of Forwards, replicated and averaged)

Jet Kero 54 USGC pipeline Financial (48 months)

Hub Code: QJGC

Data Used:

- Platts daily publication of the Jet Kero USGC swap forward curve
- Platts daily publication of the ULSD USGC Financial forward curve
- Platts daily publication of the WTI Frontline Financial forward curve
- Historical prices for Jet Kero 54 USGC Prompt Pipeline Month 12
- Historic prices of ULSD USGC Financial Month 12

Modelling

Spot/Forward, Forward/Forward, Smoothing, Combination

Jet Colonial Linden 54 Pipeline Financial (36 months)

Hub Code: QJCL

Data Used:

- Platts daily publication of the Jet Kero USAC Financial forward curve
- Historical Platts spot price assessments of Jet Kero USAC
- Historical Platts spot price assessments of Jet Colonial Linden 54 Pipeline

Modelling

Spot/Forward

[Jet Kero FOB Chicago Pipeline Financial \(36 months\)](#)

Hub Code: QJCH

Data Used:

- Platts daily publication of the Jet Kero USGC swap forward curve
- Historical Platts spot price assessments of Jet Kero USGC
- Historical Platts spot price assessments of Jet Kero FOB Chicago Pipeline

Modelling

Spot/Forward

[Jet Kero Group 3 Pipeline Financial \(36 months\)](#)

Hub Code: QJG3

Data Used:

- Platts daily publication of the Jet Kero USGC swap forward curve
- Historical Platts spot price assessments of Jet Kero USGC
- Historical Platts spot price assessments of Jet Kero Group 3 Pipeline

Modelling

Spot/Forward

[Jet Kero Los Angeles CA Pipeline Financial \(36 months\)](#)

Hub Code: QJWC

Data Used:

- Platts daily publication of the Jet Kero USGC swap forward curve
- Platts daily publication of the Jet Kero USWC swap forward curve

Modelling

Term Structure

[Jet Kero into Seattle-Tacoma Airport Financial \(36 months\)](#)

Hub Code: QSTA

Data Used:

- Jet Kero Los Angeles CA Pipeline M2M Financial forward curve (published daily by Platts)

Modelling

Add constant

Louisiana Light Sweet Crude Financial (240 months)

Hub Code: QLLS

Data Used:

- ICE WTI Futures settlements forward ICE daily settlements of WTI Futures settlements forward curve
- ICE daily settlements of WTI-LLS Futures settlements forward curve
- ICE daily settlements of LLS Futures settlements forward curve
- Platts daily publication of the LLS Mo 01, 02 forward assessments

Modelling

ICE extension

Louisiana Light Sweet Crude vs WTI Cushing Financial (240 months)

Hub Code: QLWT

Data Used:

- Platts daily publication of the WTI Houston forward curve
- Platts daily publication of the LLS forward curve

Modelling

Simple spread

Maya Crude Financial (240 months)

Hub Code: QMAY

Data Used:

- Platts daily publication of WTI Frontline at Houston MOC Financial forward curve
- Platts daily publication of Brent Frontline at Houston MOC Financial forward curve
- US delivered Pemex constant (published every month by Pemex)

Modelling

Spot/Forward

Naphtha FOB USGC Cargo Financial (84 months)

Hub Code: QNAG

Data Used:

- Platts daily assessments of Brent Frontline swap Houston forward curve
- Historical Platts spot price assessments of Platts Naphtha FOB USGC Cargo
- Historical Platts price assessments of Brent Frontline swap Houston Mo01

Modelling

Spot/Forward, Smoothing

ULSD Chicago Pipeline Financial (240 months)

Hub Code: QULC

Data Used:

- Platts daily publication of the ULSD USGC swap forward curve
- Historical Platts spot price assessments of ULSD USGC
- Historical Platts spot price assessments of ULSD Chicago Pipeline

Modelling

Spot/Forward

ULSD Group 3 Pipeline Financial (84 months)

Hub Code: QUL3

Data Used:

- Platts daily publication of the ULSD USGC swap forward curve
- Historical Platts spot price assessments of ULSD USGC
- Historical Platts spot price assessments of ULSD Group 3 Pipeline

Modelling

Spot/Forward

ULSD New Jersey Buckeye Pipeline M2M Financial (36 months)

Hub Code: QUBU

Data Used:

- Platts daily assessments of ULSD USGC Financial forward curve
- Historical Platts spot price assessments of ULSD Buckeye Pipeline
- Historical Platts spot price assessments of ULSD USGC Prompt Pipeline

Modelling

Spot/Forward, Smoothing

ULSD No.2 Los Angeles Ca Pipeline Financial (36 months)

Hub Code: QUWC

Data Used:

- Platts daily publication of the ULSD USGC swap forward curve
- Historical Platts spot price assessments of Platts ULS Diesel No.2 Los Angeles Ca Pipeline
- Historical Platts spot price assessments of ULS Diesel USGC

Modelling

Spot/Forward, Smoothing

ULSD Seattle WA Pipeline Financial (36 months)

Hub Code: QUSW

Data Used:

- Platts daily publication of the ULSD USGC swap forward curve
- Historical Platts spot price assessments of ULS Diesel Seattle WA Pipeline
- Historical Platts spot price assessments of ULS Diesel USGC

Modelling

Spot/Forward, Smoothing

ULSD USGC Prompt Pipeline Financial (240 months)

Hub Code: QULG

Data Used:

- Platts daily publication of the ULS Diesel USGC Financial curve
- Platts daily publication of the Heating Oil Frontline Financial forward curve

Modelling

Spot/Forward (using month 12), Smoothing

ULS Heating Oil USGC Prompt Pipeline M2M Financial (36 months)

Hub Code: QUHY

Data Used:

- Platts daily publication of the ULSD USGC Financial curve
- Platts daily publication of the Heating Oil Frontline Financial forward curve
- Historical Platts spot price assessments of ULS Heating Oil Prompt Pipeline
- Historical Platts spot price assessments of ULSD USGC Prompt Pipeline

Modelling

Spot/Forward (using first 12 month for forwards replicated) and front set using spot.

USGC HSFO Financial (84 months)

Hub Code: QF3G

Data Used:

- Platts daily publication of the HSFO USGC Waterborne USGC Financial forward curve (assessed)
- ICE daily settlements of the USGC HSFO Fuel Oil Swap
- Platts daily publication of the Brent Frontline Financial forward curve

Modelling

Months 13-84: Smoothed, ICE Extension, Term Structure

West Texas Sour Crude Financial (240 months)

Hub Code: QWTS

Data Used:

- ICE daily settlements of WTI Futures settlements forward curve
- ICE daily settlements of WTI-WTS Futures settlements forward curve
- Platts daily publication of the WTS Mo01 Mo02 forward assessments

Modelling

ICE extension

WTI Frontline Financial Houston (240 months)

Hub Code: QWTI

Data Used:

- Platts daily assessments of the WTI Frontline Financial Houston
- ICE daily settlements of the WTI Futures

Modelling

Months 37- ~84: (depending on liquidity) ICE Extension, Smoothing

Months ~84-240: Flat Extension

WTI Midland M2M Financial Houston (240 months)

Hub Code: QWMD

Data Used:

- ICE daily settlements of WTI Futures settlements forward curve
- ICE daily settlements of WTI-WTI Midland Futures settlements forward curve
- Platts daily publication of the WTI Midland Mo01 Mo02 forward assessments

Modelling

ICE extension

Magellan East Houston M2M Financial Houston (240 months)

Hub Code: QMEH

Data Used:

- ICE daily settlements of WTI Futures settlements forward curve
- ICE daily settlements of WTI-MEH Midland Futures settlements forward curve
- Platts daily publication of the MEH Mo01 Mo02 forward assessments

Modelling

ICE extension

Mars M2M Financial Houston (240 months)

Hub Code: QMAR

Data Used:

- ICE daily settlements of WTI Futures settlements forward curve
- ICE daily settlements of Mars Futures settlements forward curve
- ICE daily settlements of WTI-Mars Midland Futures settlements forward curve
- Platts daily publication of the Mars Mo01 forward assessments

Modelling

ICE extension

Brent Frontline Financial London (84 months)

Hub Code: QBRL

Data Used:

- Platts daily assessments of the Brent Frontline Financial London
- ICE daily publish of the Brent Futures

Modelling

Months 37- ~84: (depending on liquidity) ICE Extension, Smoothing

Months ~84-240: Flat Extension

Bunker FO 380 CST 3.5% Dvld Rotterdam M2M Financial (36 months)

Hub Code: QB3R

Data Used:

- Platts daily publication of the Platts HSFO Rotterdam Barges swap forward curve
- Historical Platts spot price assessments of HSFO Rotterdam Barges
- Historical Platts spot price assessments of Bunker FO 380 Rotterdam

Modelling

Spot/Forward

Bunker FO 380 CTS 3.5% Dvld Gibraltar Financial (36 months)

Hub Code: QB3B

Data Used:

- Platts daily publication of the FO 3.5% CIF Med Cargo Financial
- Historical Platts spot price assessments of FO 3.5% CIF Med Cargo
- Historical Platts spot price assessments of Bunker FO 380 Gibraltar

Modelling

Spot/Forward

[Bunker FO 380 CTS 3.5% Dlvd Malta Financial \(36 months\)](#)

Hub Code: QB3M

Data Used:

- Platts daily publication of the FO 3.5% CIF Med Cargo Financial
- Historical Platts spot price assessments of FO 3.5% CIF Med Cargo
- Historical Platts spot price assessments of Bunker FO 380 Malta

Modelling

Spot/Forward

[Bunker FO 380 CTS 3.5% Dlvd Algeciras Financial \(36 months\)](#)

Hub Code: QB3A

Data Used:

- Platts daily publication of the FO 3.5% CIF Med Cargo Financial
- Historical Platts spot price assessments of FO 3.5% CIF Med Cargo
- Historical Platts spot price assessments of Bunker FO 380 Algeciras

Modelling

Spot/Forward

[Bunker FO 380 CTS 3.5% Dlvd Piraeus Financial \(36 months\)](#)

Hub Code: QB3I

Data Used:

- Platts daily publication of the FO 3.5% CIF Med Cargo Financial
- Historical Platts spot price assessments of FO 3.5% CIF Med Cargo
- Historical Platts spot price assessments of Bunker FO 380 Piraeus

Modelling

Spot/Forward

[Marine Fuel 0.5% Bunker Dlvd Gibraltar Financial \(36 months\)](#)

Hub Code: QMBG

Data Used:

- Platts daily publication of the MF 0.5% CIF Med Cargo Financial
- Historical Platts spot price assessments of MF 0.5% CIF Med Cargo
- Historical Platts spot price assessments of MF Bunker Gibraltar

Modelling

Spot/Forward

Marine Fuel 0.5% Bunker Dlvd Malta Financial (36 months)

Hub Code: QMBM

Data Used:

- Platts daily publication of the MF 0.5% CIF Med Cargo Financial
- Historical Platts spot price assessments of MF 0.5% CIF Med Cargo
- Historical Platts spot price assessments of MF Bunker Malta

Modelling

Spot/Forward

Marine Fuel 0.5% Bunker Dlvd Algeciras Financial (36 months)

Hub Code: QMBA

Data Used:

- Platts daily publication of the MF 0.5% CIF Med Cargo Financial
- Historical Platts spot price assessments of MF 0.5% CIF Med Cargo
- Historical Platts spot price assessments of Bunker MF 380 Algeciras

Modelling

Spot/Forward

Marine Fuel 0.5% Bunker Dlvd Piraeus Financial (36 months)

Hub Code: QMBI

Data Used:

- Platts daily publication of the MF 0.5% CIF Med Cargo Financial
- Historical Platts spot price assessments of MF 0.5% CIF Med Cargo
- Historical Platts spot price assessments of Bunker MF 380 Piraeus

Modelling

Spot/Forward

Marine Fuel 0.5% Bunker Dlvd Rotterdam Financial (36 months)

Hub Code: QMBR

Data Used:

- Platts daily publication of the Marine Fuel 0.5% FOB Rotterdam Cargo Financial
- Platts daily publication of the Marine Fuel 0.5% FOB Rotterdam Cargo spot assessment
- Platts daily publication of the Marine Fuel 0.5% Bunker Dlvd Rotterdam spot assessment

Modelling

Term Structure

FO 1% CIF Med Cargo Financial (36 months)

Hub Code: QF1M

Data Used:

- Platts daily publication of the Platts FO 1% FOB NWE Cargo swap forward curve
- Historical Platts spot price assessments of FO 1% CIF Med Cargo
- Historical Platts spot price assessments of FO 1% FOB NWE

Modelling

Spot/Forward

Fuel Oil 1%S FOB MED Cargo Financial (36 months)

Hub Code: QFFM

Data Us ed:

- Platts daily publication of the FO 1%S FOB NWE Cargo Financial forward curve
- Platts daily publication of FO 3.5%S FOB Rdam Barge vs FO 3.5%S FOB Med Cargo Financial

Modelling

Term Structure

Fuel Oil 3.5%S CIF MED Cargo Financial (36 months)

Hub Code: QF3M

Data Used:

- Platts daily publication of the FO 3.5%S FOB Rdam Barge swap forward curve
- Historical Platts spot price assessments of Fuel Oil 3.5%S FOB NWE Cargo
- Historical Platts spot price assessments of Fuel Oil 3.5%S FOB MED Cargo

Modelling

Spot/Forward

Marine fuel 0.5%S FOB Med Cargo Financial (36 months)

Hub Code: QMFF

Data Used:

- Platts daily publication of the FO 3.5%S FOB Med cargo forward curve
- Platts daily publication of the FO 0.5%S FOB Med cargo spot assessment
- Platts daily publication of the FO 0.5%S FOB Rdam barge spot assessment

Modelling

Term Structure

Marine fuel 0.5%S CIF Med Cargo Financial (36 months)

Hub Code: QMFC

Data Used:

- Platts daily publication of the MF 0.5% FOB Med M2M Financial forward curve
- Platts daily publication of the MF 0.5% FOB Med vs MF 0.5% CIF Med spread Mo01, Mo02

Modelling

Simple Spread

Gasoil 0.1%S (1000ppm) CIF Med Cargo M2M Financial (36 months)

Hub Code: QG01

Data Used:

- Platts daily publication of the LSGO Frontline Financial forward curve
- Platts daily publication of Gasoil .1%S (1000ppm) CIF Med Cargo Financial forward curve

Modelling

Months 25-36: Term Structure

Gasoil FOB Spore Cargo at London MOC USD/MT M2M Financial (36 months)

Hub Code: QAST

Data Used:

- Platts daily publication Gasoil FOB Spore Cargo M2M Financial
- ICE Gasoil Futures at Spore MOC
- ICE Gasoil Futures at London MOC

Modelling

Forward/Forward

Gasoil FOB Spore Cargo at London MOC USD/BBL M2M Financial (36 months)

Hub Code: QASL

Data Used:

- Platts daily publication Gasoil FOB Spore Cargo at London MOC USD/MT M2M Financial

Modelling

Units Conversion

Gasoil FOB Spore Dubai crack at London MOC M2M Financial (36 months)

Hub Code: QALD

Data Used:

- Platts daily publication Gasoil FOB Spore Cargo at London MOC USD/MT M2M Financial
- Platts daily publication of Dubai Frontline at London MOC Financial

Modelling

Simple Spread

Gasoil FOB Spore Brent crack at London MOC M2M Financial (36 months)

Hub Code: QALB

Data Used:

- Platts daily publication Gasoil FOB Spore Cargo at London MOC USD/MT M2M Financial
- Platts daily publication of Brent Frontline Financial

Modelling

Simple Spread

Gasoline EUROBOB FOB ARA Cargo M2M Financial (36 months)

Hub Code: QEBA

Data Used:

- Platts daily publication of the Brent Frontline Financial forward curve
- Platts daily publication of Gasoline Eurobob FOB ARA Barge Financial

Modelling

Months 13-36: Forward/Forward, Term Structure, Smoothing

Gasoline Prem Unleaded 10ppmS CIF Med Cargo M2M Financial (36 months)

Hub Code: QPGC

Data Used:

- Platts daily publication of the Gasoline Prem Unleaded 10ppmS FOB Med Cargo M2M Financial forward curve
- Historical Platts spot price assessments of Gasoline Premium Unleaded 10 ppmS FOB MED cargo
- Historical Platts spot price assessments of Gasoline Premium Unleaded 10 ppmS CIF MED cargo

Modelling

Spot/Forward

Gasoline Prem Unleaded 10ppmS FOB Med Cargo M2M Financial (36 months)

Hub Code: QGUM

Data Used:

- Platts daily publication of the Gasoline FOB ARA barge Financial forward curve
- Platts daily publication of Gasoline Eurobob FOB ARA Barge M2M Financial
- Historical Platts spot price assessments of Gasoline Premium Unleaded 10 ppmS FOB MED cargo
- Historical Platts spot price assessments of Gasoline FOB ARA barge

Modelling

Spot/Forward, Term Structure, Smoothing

Gasoline Prem Unleaded 10ppmS FOB Med Cargo Vs EUROBOB FOB ARA Cargo M2M Financial (36 months)

Hub Code: QPUG

Data Used:

- Platts daily publication of the Gasoline Prem Unleaded 10ppmS FOB Med Cargo M2M Financial forward curve
- Platts daily publication of Gasoline Eurobob FOB ARA Barge Financial Forward Curve

Modelling

Simple Spread

Gasoline 92 RON FOB Spore at London MOC M2M Financial \$/BBL (36 months)

Hub Code: QGSL

Data Used:

- Platts daily publication of the Gasoline 92 RON FOB Spore M2M Financial forward curve
- Platts daily publication of Dubai Financial Forward Curve
- Platts daily publication of Dubai at London MOC Financial Forward Curve

Modelling

Forward/Forward

Gasoline 92 RON FOB Spore at London MOC M2M Financial \$/MT (36 months)

Hub Code: QGSL

Data Used:

- Platts daily publication of the Gasoline 92 RON FOB Spore At London MOC M2M Financial forward curve

Modelling

Units Conversion

Gasoline 92 RON FOB Spore Dubai Crack at London MOC M2M Financial (36 months)

Hub Code: QGLD

Data Used:

- Platts daily publication of the Gasoline 92 RON FOB Spore at London MOC M2M Financial forward curve
- Platts daily publication of Dubai at London MOC Financial Forward Curve

Modelling

Simple Spread

Gasoline 92 RON FOB Spore Brent Crack at London MOC M2M Financial (36 months)

Hub Code: QGLB

Data Used:

- Platts daily publication of the Gasoline 92 RON FOB Spore at London MOC M2M Financial forward curve
- Platts daily publication of Brent Frontline Financial Forward Curve

Modelling

Simple Spread

Gasoline 95 RON FOB Spore at London MOC M2M Financial \$/BBL (36 months)

Hub Code: QG95

Data Used:

- Platts daily publication of the Gasoline 92 RON FOB Spore at London MOC M2M Financial forward curve
- Historical Platts spot price assessments of Gasoline Unl 95 FOB Spore Cargo
- Historical Platts spot price assessments of Gasoline Unl 92 FOB Spore Cargo Modelling

Modelling

Spot/Forward

Gasoline 95 RON FOB Spore at London MOC M2M Financial \$/MT (36 months)

Hub Code: QG5T

Data Used:

- Platts daily publication of the Gasoline 95 RON FOB Spore At London MOC M2M Financial forward curve

Modelling

Units Conversion

Jet FOB MED Cargo Financial (36 months)

Hub Code: QJME

Data Used:

- Platts daily publication of the Jet CIF NWE Financial forward curve
- Historical Platts spot price assessments of Jet FOB MED Cargo
- Historical Platts spot price assessments of Jet CIF NWE Cargo

Modelling

Spot/Forward

Jet FOB NWE Cargo Financial (36 months)

Hub Code: QJNW

Data Used:

- Platts daily publication of the Jet CIF NWE Cargo swap forward curve
- Historical Platts spot price assessments of Jet FOB NWE Cargo
- Historical Platts spot price assessments of Jet CIF NWE Cargo

Modelling

Spot/Forward

Jet FOB Rotterdam Barge M2M Financial (36 months)

Hub Code: QJRD

Data Used:

- Platts daily publication of the Jet CIF NWE Cargo swap forward curve
- Platts daily publication of the Jet FOB Rotterdam Barge Forward Curve
- Historical Platts spot price assessments of Platts Jet FOB Rotterdam Barge
- Historical Platts spot price assessments of Jet CIF NWE Cargo

Modelling

Months 3-36: Spot/Forward

Jet Kero FOB Spore Cargo at London MOC M2M Financial \$/MT (36 months)

Hub Code: QJST

Data Used:

- Platts daily publication Jet Kero FOB Spore Cargo M2M Financial
- ICE Gasoil Futures at Spore MOC
- ICE Gasoil Futures at London MOC

Modelling

Forward/Forward

Jet Kero FOB Spore Cargo at London MOC M2M Financial \$/BBL (36 months)

Hub Code: QJSL

Data Used:

- Platts daily publication of the Jet Kero FOB Spore Cargo at London MOC M2M Financial \$/MT forward curve

Modelling

Units Conversion

Jet Kero FOB Spore Cargo Dubai Crack at London MOC M2M Financial (36 months)

Hub Code: QJLD

Data Used:

- Platts daily publication of the Jet Kero FOB Spore Cargo at London MOC M2M Financial forward curve
- Platts daily publication of Dubai at London MOC Financial Forward Curve

Modelling

Simple Spread

Jet Kero FOB Spore Cargo Brent Crack at London MOC M2M Financial (36 months)

Hub Code: QJLB

Data Used:

- Platts daily publication of the Jet Kero FOB Spore Cargo at London MOC M2M Financial forward curve
- Platts daily publication of Brent Frontline Financial Forward Curve

Modelling

Simple Spread

Naphtha CIF NWE M2M Financial (36 months)

Hub Code: QNAN

Data Used:

- Platts daily publication of the Brent Frontline Financial forward curve
- Historical Platts spot price assessments of Brent Frontline Mo 12
- Historical Platts spot price assessments of Naphtha NEW CIF Cargo Financial Mo 12

Modelling

Months 13-36: Spot/Forward

Propane CIF NWE M2M Financial (36 months)

Hub Code: QPCA

Data Used:

- Platts daily publication of the Propane CIF NWE Large Cargo Financial forward curve
- Platts daily publication of the Naphtha CIF NWE Cargo M2M Financial forward curve
- Historical Platts spot price assessments of Propane CIF ARA Large Mo 4
- Historical Platts spot price assessments of Naphtha NEW CIF Cargo Financial Mo 4

Modelling

Months 5-36: Spot/Forward, Term Structure, Smoothing

Straight Run 0.5-0.7%S FOB NWE Cargo M2M Financial (36 months)

Hub Code: QSTF

Data Used:

- Platts daily publication of the FO 1.0% FOB NWE Cargo Financial forward curve
- Historical Platts spot price assessments of FO 1.0% FOB NWE Cargo
- Historical Platts spot price assessments of Straight Run 0.5-0.7%S FOB NWE Cargo

Modelling

Spot/Forward

ULSD 10ppmS FOB ARA Barge M2M Financial (36 months)

Hub Code: QUFA

Data Used:

- Platts daily publication of the LS Gasoil Frontline Financial forward curve
- Platts daily publication of the ULSD 10ppm ARA FOB Brg Flat Prc swap forward curve

Modelling

Months 25-36: Spot/Forward

ULSD 10ppmS CIF Med Cargo Financial (36 months)

Hub Code: QUCM

Data Used:

- Platts daily publication of the LS Gasoil Frontline Financial forward curve
- Platts daily publication of the ULSD CIF Med Cargo forward curve

Modelling

Months 25-36: Term Structure

ULSD 10ppmS FOB Med Cargo Financial (36 months)

Hub Code: QULM

Data Used:

- Platts daily publication of the ULSD 10ppmS FOB ARA Barge Financial forward curve
- Platts daily publication of the ULSD 10ppmS CIF Med Cargo Financial forward curve
- Historical Platts spot price assessments of ULSD 10ppmS FOB Med Cargo
- Historical Platts spot price assessments of ULSD 10ppmS FOB ARA Barge
- Historical Platts spot price assessments of ULSD 10ppmS CIF Med Cargo

Modelling

Spot/Forward, Spot/Forward

VGO 2.0%S CIF NWE M2M Financial (36 months)

Hub Code: QVGC

Data Used:

- Platts daily publication of the Gasoline EUROBOB M2M Financial forward curve
- Platts daily publication of ULSD 10ppmS FOB ARA M2M Financial forward curve
- Historical Platts spot price assessments of ULSD 10ppmS FOB ARA Barge
- Historical Platts spot price assessments of Gasoline EUROBOB FOB ARA Barge
- Historical Platts spot price assessments of VGO 2.0%S CIF NWE

Modelling

Spot/Forward

VGO 2.0%S FOB Rotterdam Barge M2M Financial (36 months)

Hub Code: QVGF

Data Used:

- Platts daily publication of the Gasoline EUROBOB M2M Financial forward curve
- Platts daily publication of ULSD 10pmmS FOB ARA M2M Financial forward curve
- Historical Platts spot price assessments of ULSD 10pmmS FOB ARA Barge
- Historical Platts spot price assessments of Gasoline EUROBOB FOB ARA Barge
- Historical Platts spot price assessments of VGO 2.0%S FOB Rotterdam Barge

Modelling

Spot/Forward

VGO 0.5% Sulfur CIF USGC Barge M2M Financial (36 months)

Hub Code: QVGL

Data Used:

- Platts daily publication of ULSD USGC Prompt Pipeline M2M Financial forward curve
- Platts daily publication of Gasoline Unl 87 USGC Prompt Pipeline M2M Financial forward curve
- Historical Platts spot price assessments of Gasoline Unl 87 USGC Prompt Pipeline
- Historical Platts spot price assessments of ULSD USGC Prompt Pipeline
- Historical Platts spot price assessments of VGO 0.5% Sulfur CIF USGC Barge

Modelling

Spot/Forward

VGO 2% Sulfur CIF USGC Barge M2M Financial (36 months)

Hub Code: QVGH

Data Used:

- Platts daily publication of ULSD USGC Prompt Pipeline M2M Financial forward curve
- Platts daily publication of Gasoline Unl 87 USGC Prompt Pipeline M2M Financial forward curve
- Historical Platts spot price assessments of Gasoline Unl 87 USGC Prompt Pipeline
- Historical Platts spot price assessments of ULSD USGC Prompt Pipeline
- Historical Platts spot price assessments of VGO 2% Sulfur CIF USGC Barge

Modelling

Spot/Forward

WTI Frontline Financial London (84 months)

Hub Code: QTIL

Data Used:

- Platts daily assessments of the WTI Frontline Financial London
- ICE daily publish of the WTI Futures

Modelling

Months 37- ~84: (depending on liquidity) ICE Extension, Smoothing

Months ~84-240: Flat Extension

Brent Frontline Financial At Singapore MOC (240 months)

Hub Code: QBRS

Data Used:

- Platts daily assessments of the Brent Frontline Swap Singapore (36 months)
- ICE daily settlements of the Brent Futures (84 months)

Modelling

- Months 37- ~84: (depending on liquidity) ICE Extension, Smoothing
- Months ~84-240: Flat Extension

WTI Frontline Financial Singapore (84 months)

Hub Code: QTIS

Data Used:

- WTI Frontline Houston Financial
- Brent Frontline Houston Financial
- Brent Frontline Singapore Financial
- Platts daily publication of WTI at Spore forward assessments

Modelling

Forward/Forward

Dated Brent Financial Singapore (36 months)

Hub Code: QDBS

Data Used:

- Platts daily publication of the Platts DFL Financial London forward curve
- Platts daily publication of the Platts Brent Frontline Financial Singapore forward curve

Modelling

We assume that the DFL curve in London remains the same at Houston MOC, and apply that to the Brent Frontline at Singapore Curve.

Bunker FO 380 CST Dlvd Hong Kong Financial (36 months)

Hub Code: QB3G

Data Used:

- Platts daily publication of the HSFO 380 Singapore Cargo Financial forward curve
- Historical Platts spot price assessments of Bunker FO 380 Hong Kong
- Historical Platts spot price assessments of HSFO 380 Singapore

Modelling

Spot/Forward

Bunker FO 380 CST Dlvd Singapore M2M Financial (36 months)

Hub Code: QB3S

Data Used:

- Platts daily publication of the HSFO 380 Singapore Cargo Financial forward curve
- Historical Platts spot price assessments of Bunker FO 380 Singapore
- Historical Platts spot price assessments of HSFO 380 Singapore

Modelling

Spot/Forward

Bunker FO 380 CST Dlvd South Korea Financial (36 months)

Hub Code: QB3K

Data Used:

- Platts daily publication of the HSFO 380 Singapore Cargo Financial forward curve
- Historical Platts spot price assessments of Bunker FO 380 South Korea
- Historical Platts spot price assessments of HSFO 380 Singapore

Modelling

Spot/Forward

[Bunker FO 380 CST Dlvd Fujairah Financial \(36 months\)](#)

Hub Code: QB3F

Data Used:

- Platts daily publication of the HSFO 380 Singapore Cargo Financial forward curve
- Historical Platts spot price assessments of Bunker FO 380 South Korea
- Historical Platts spot price assessments of Bunker FO 380 CST Dlvd Fujairah

Modelling

Spot/Forward

[Marine Fuel 0.5% Bunker Dlvd South Korea Financial \(24 months\)](#)

Hub Code: QMBK

Data Used:

- Platts daily publication of the Marine Fuel 0.5% Bunker Dlvd South Korea spot assessment
- Platts daily publication of the Marine Fuel 0.5% FOB Spore Cargo spot assessment
- Platts daily publication of Marine Fuel 0.5% FOB Spore Cargo M2M Financial

Modelling

Term Structure

[Marine Fuel 0.5% Bunker Dlvd Hong Kong Financial \(24 months\)](#)

Hub Code: QMBH

Data Used:

- Platts daily publication of the Marine Fuel 0.5% Bunker Dlvd Hong Kong spot assessment
- Platts daily publication of the Marine Fuel 0.5% FOB Spore Cargo spot assessment
- Platts daily publication of Marine Fuel 0.5% FOB Spore Cargo M2M Financial

Modelling

Term Structure

[Marine Fuel 0.5% Bunker Dlvd Fujairah Financial \(36 months\)](#)

Hub Code: QMBF

Data Used:

- Platts daily publication of the Marine Fuel 0.5% FOB Fujairah Cargo M2M Financial
- Platts daily publication of the Marine Fuel 0.5% FOB Fujairah Cargo spot assessment
- Platts daily publication of the Marine Fuel 0.5% Bunker Dlvd Fujairah spot assessment

Modelling

Term Structure

Marine Fuel 0.5% Bunker Dlvd Spore Financial (36 months)

Hub Code: QMBF

Data Used:

- Platts daily publication of the Marine Fuel 0.5% FOB Spore Cargo M2M Financial
- Platts daily publication of the Marine Fuel 0.5% FOB Spore Cargo spot assessment
- Platts daily publication of the Marine Fuel 0.5% Bunker Dlvd Spore spot assessment

Modelling

Term Structure

FO 180 CST 3.5% FOB Singapore Financial (36 months)

Hub Code: QF18

Data Used:

- Platts daily publication of the FO 180 3.5%S FOB Singapore Financial forward curve
- Platts daily publication of the FO 3.5% FOB Rotterdam Barge Financial Forward Curve

Modelling

Months 13-36: Term Structure

HSFO 180 Singapore @Spore vs HSFO 3.5% FOB Rotterdam @Spore

Hub Code: QEWS

Data Used:

- Platts daily publication of the FO 180 3.5%S FOB Singapore M2M Financial forward curve
- Platts daily publication of the FO 3.5% FOB Rotterdam Barge Financial Forward Curve
- Platts daily publication of the FO 3.5% FOB Rotterdam Barge at London Financial Forward Curve

Modelling

Forward/Forward, Simple Spread

FO 380 3.5%S FOB Spore Financial (36 months)

Hub Code: QHFS

Data Used:

- Platts daily publication of the HSFO 380 FOB Singapore Financial forward curve
- Platts daily publication of the HSFO 180 FOB Singapore M2M Financial forward curve

Modelling

Months 13-36: Spot/Forward (using first 12 months), Term Structure.

FO 3.5%S FOB Rdam Barge at Spore Financial (36 months)

Hub Code: QRBS

Data Used:

- Platts daily publication of the FO 3.5%S FOB Rdam Barge at Spore Financial forward curve
- Platts daily publication of the FO 3.5%S FOB Rdam Barge Financial forward curve

Modelling

Months 13-36: Spot/Forward (using first 12 months), Term Structure.

Marine Fuel 0.5% FOB Fujairah Financial (24 months)

Hub Code: QFOF

Data Used:

- Platts daily publication of the Marine Fuel 0.5% FOB Spore Financial forward assessments
- Platts daily publication of the Marine Fuel 0.5% FOB Fujairah Cargo forward assessments

Modelling

Term Structure

Marine Fuel 0.5% FOB Rotterdam Barge Financial (12 months)

Hub Code: QMRA

Data Used:

- Platts daily publication of the Marine Fuel 0.5% FOB Rdam Barge forward assessments
- Platts daily publication of the FO 1%S FOB Rdam Barge Financial forward assessments

Modelling

Term Structure

Marine Fuel 0.5% FOB Spore Financial (24 months)

Hub Code: QFOS

Data Used:

- Platts daily publication of the Marine Fuel 0.5% FOB Spore Cargo 12 forward month assessments
- Platts daily publication of the Marine Fuel 0.5% FOB Rdam Barge forward assessments

Modelling

Term Structure

Gasoil FOB Singapore Cargo M2M Financial (36 months)

Hub Code: QGFA

Data Used:

- Platts daily publication of the Gasoil FOB Spore Cargo Financial forward curve
- Platts daily publication of the LS Gasoil Frontline Spore Financial forward curve

Modelling

Months 13-36: Spot/Forward (using first 12 months), Term Structure, Smoothing

Gasoil FOB Singapore Cargo Financial vs LSGO Frontline Financial (ESS) (36 months)

Hub Code: QGUS

Data Used:

- Platts daily publication of the Gasoil FOB Spore Cargo Financial forward curve
- Platts daily publication of the LS Gasoil Frontline Spore Financial forward curve

Modelling

Months 13-36: Simple Spread

Gasoline 92 RON FOB Spore M2M Financial (36 months)

Hub Code: QAXE

Data Used:

- Platts daily publication of the RBOB Frontline Financial forward curve
- Platts daily publication of the Gasoline 92 RON FOB Spore forward curve

Modelling

Spot/forward

Gasoline 95 RON FOB Spore M2M Financial (36 months)

Hub Code: QAX5

Data Used:

- Platts daily publication of the Gasoline 92 RON FOB Spore M2M Financial forward curve
- Historical Platts spot price assessments of Gasoline Unl 95 FOB Spore Cargo
- Historical Platts spot price assessments of Gasoline Unl 92 FOB Spore Cargo

Modelling

Spot/forward

LS GO Frontline Spore Financial (36 months)

Hub Code: QGOS

Data Used:

- Platts daily publication of the ICE LS Gasoil Futures forward curve
- Platts daily publication of ICE LS Gasoil Frontline Spore forward curve

Modelling

Months 13-36: Spot/Forward (using months 7-12 average), Smoothing

Jet Kero FOB Spore M2M Financial (36 months)

Hub Code: QJSP

Data Used:

- Platts daily publication of the Jet Kero FOB Spore Financial forward curve

Modelling

Months 13-36: Extended at same slope of last two months of Curve.

Jet Kero FOB Spore vs Gasoil FOB Spore Financial (36 months)

Hub Code: QJGS

Data Used:

- Platts daily publication of the Jet Kero FOB Spore Financial forward curve
- Platts daily publication of the Gasoil FOB Spore Financial forward curve

Modelling

Simple Spread

Naphtha C+F Japan Cargo Financial (36 months)

Hub Code: QAXF

Data Used:

- Platts daily publication of the Jet Kero FOB Spore Financial forward curve
- Historical Platts price assessments of Naphtha Japan Swap Mo12
- Historical Platts price assessments of Brent at Spore Swap Mo12

Modelling

Spot/forward

Naphtha FOB Spore Cargo M2M Financial \$/MT (36 months)

Hub Code: QASS

Data Used:

- Platts daily publication of the Naphtha C+F Japan Cargo Financial forward curve
- Platts daily publication of the Gasoil FOB Spore Financial forward curve

Modelling

Term structure

Naphtha FOB Spore Cargo Financial \$/BBL (24 months)

Hub Code: QBS S

Data Used:

- Platts daily publication of the Naphtha C+F Japan Cargo Financial forward curve
- Platts daily publication of the Gasoil FOB Spore Financial forward curve

Modelling

Term structure

Urals NWE CFD M2M (24 months)

Hub Code: QUND

Data Used:

- Platts daily publication of the Urals CIF Rdam CFD editorial assessments Mo1-2
- ICE daily settlements of the Urals North/Dated Brent CFD (24 months)
- Historical Platts spot price assessments of Med dated Brent Strip
- Historical Platts spot price assessments of Urals Rotterdam vs Med Dated Brent Strip

- Platts daily publication of the Dated Brent forward curve

Modelling

- Months 3-~12: (depending on liquidity) ICE Extension, Smoothing
- Months ~12-24: Spot/Forward

Urals Med CFD M2M (24 months)

Hub Code: QU MD

Data Used:

- Platts daily publication of the Urals CIF Med CFD editorial assessments Mo1-2
- ICE daily settlements of the Urals MED/Dated Brent CFD (24 months)
- Historical Platts spot price assessments of Med dated Brent Strip
- Historical Platts spot price assessments of Urals Augusta vs Med Dated Brent Strip
- Platts daily publication of the Dated Brent forward curve

Modelling

- Months 3--12: (depending on liquidity) ICE Extension, Smoothing
- Months ~12-24: Spot/Forward

Urals CIF NWE Financial (24 months)

Hub Code: QUNF

Data Used:

- Platts daily publication of the Urals NWE CFD M2M curve
- Platts daily publication of the Dated Brent forward curve

Modelling

Simple Spread

Urals CIF Med Financial (24 months)

Hub Code: QUMF

Data Used:

- Platts daily publication of the Urals Med CFD M2M curve
- Platts daily publication of the Dated Brent forward curve

Modelling

Simple Spread

M2M OIL Market Data Categories

Please note that for completeness' sake, the curves from market data categories DR, DA, and DU (PFC-Oil) are included, but are not described in this document.

The Curve Code is for retrieval in the Platts API or the Excel Add-in.

MDC	Curve Code	Curve Name	Periodicity	Min	Max
DR	CN00F	180 CST 3.5 FOB Spore vs Rdam	Month	1	3
DR	CN000	Brent CFD	Week	1	8
DR	CN001	Brent DFL Financial	Month	0	36
DR	CN001	Brent DFL Financial	Quarter	1	12
DR	CN001	Brent DFL Financial	Year	1	3
DU	CN03V	Brent Frontline at Houston MOC Financial	Month	1	36
FDU	CN03V	Brent Frontline at Houston MOC Financial	Month	37	84
QDG	CN03V	Brent Frontline at Houston MOC Financial	Month	85	240
DU	CN03V	Brent Frontline at Houston MOC Financial	Quarter	1	12
FDU	CN03V	Brent Frontline at Houston MOC Financial	Quarter	13	28
QDG	CN03V	Brent Frontline at Houston MOC Financial	Quarter	29	76
DU	CN03V	Brent Frontline at Houston MOC Financial	Year	1	3
FDU	CN03V	Brent Frontline at Houston MOC Financial	Year	4	7
QDG	CN03V	Brent Frontline at Houston MOC Financial	Year	8	19
DU	CN03W	Brent Frontline at Houston MOC Financial Time Spread	Month	1	35
DU	CN03W	Brent Frontline at Houston MOC Financial Time Spread	Quarter	1	11
DU	CN03W	Brent Frontline at Houston MOC Financial Time Spread	Year	1	2
DA	CN0NV	Brent Frontline at Spore MOC Financial	Month	1	36
FDA	CN0NV	Brent Frontline at Spore MOC Financial	Month	37	84
QDG	CN0NV	Brent Frontline at Spore MOC Financial	Month	85	240
DA	CN0NV	Brent Frontline at Spore MOC Financial	Quarter	1	4
FDA	CN0NV	Brent Frontline at Spore MOC Financial	Quarter	13	28
DA	CN0NV	Brent Frontline at Spore MOC Financial	Year	1	3

FDA	CN0NV	Brent Frontline at Spore MOC Financial	Year	4	7
DA	CN0NW	Brent Frontline at Spore MOC Financial Time Spread	Month	1	11
DA	CN0NW	Brent Frontline at Spore MOC Financial Time Spread	Quarter	1	3
DA	CN0NW	Brent Frontline at Spore MOC Financial Time Spread	Year	1	2
DR	CN002	Brent Frontline Financial	Month	0	36
FDE	CN002	Brent Frontline Financial	Month	37	84
QDG	CN002	Brent Frontline Financial	Month	85	240
DR	CN002	Brent Frontline Financial	Quarter	1	12
FDE	CN002	Brent Frontline Financial	Quarter	13	28
DR	CN002	Brent Frontline Financial	Year	1	3
FDE	CN002	Brent Frontline Financial	Year	4	7
DR	CN003	Brent Frontline Financial Time Spread	Month	1	35
DR	CN003	Brent Frontline Financial Time Spread	Quarter	1	11
DR	CN003	Brent Frontline Financial Time Spread	Year	1	2
DA	CN0NX	Brent Frontline vs Dubai Frontline at Spore MOC Financial	Month	1	36
DA	CN0NX	Brent Frontline vs Dubai Frontline at Spore MOC Financial	Quarter	1	4
DA	CN0NX	Brent Frontline vs Dubai Frontline at Spore MOC Financial	Year	1	3
DR	CN004	Brent -Dubai at London MOC EFS	Month	1	2
DR	CN0R0	Brent -Dubai at London MOC ESS	Month	1	36
DR	CN0R0	Brent -Dubai at London MOC ESS	Quarter	1	12
DR	CN0R0	Brent -Dubai at London MOC ESS	Year	1	3
QDR	CN2S8	Bunker FO 380 CST 3.5% Dlvd Algeciras Financial	Month	1	36
QDU	CN05L	Bunker FO 380 CST 3.5% Dlvd Houston Financial	Month	1	36
QDU	CN05L	Bunker FO 380 CST 3.5% Dlvd Houston Financial	Quarter	1	8
QDU	CN05L	Bunker FO 380 CST 3.5% Dlvd Houston Financial	Year	1	2
QDU	CN05M	Bunker FO 380 CST 3.5% Dlvd Los Angeles Financial	Month	1	36
QDU	CN05M	Bunker FO 380 CST 3.5% Dlvd Los Angeles Financial	Quarter	1	8
QDU	CN05M	Bunker FO 380 CST 3.5% Dlvd Los Angeles Financial	Year	1	2
QDR	CN2S6	Bunker FO 380 CST 3.5% Dlvd Malta Financial	Month	1	36

QDR	CN2S7	Bunker FO 380 CST 3.5% Dlvd Piraeus Financial	Month	1	36
QDR	CN01Z	Bunker FO 380 CST 3.5% Dlvd Rotterdam Financial	Month	1	36
QDR	CN01Z	Bunker FO 380 CST 3.5% Dlvd Rotterdam Financial	Quarter	1	8
QDR	CN01Z	Bunker FO 380 CST 3.5% Dlvd Rotterdam Financial	Year	1	2
QDU	CN05N	Bunker FO 380 CST 3.5% Ex -Wharf Panama Canal Financial	Month	1	36
QDU	CN05N	Bunker FO 380 CST 3.5% Ex -Wharf Panama Canal Financial	Quarter	1	8
QDU	CN05N	Bunker FO 380 CST 3.5% Ex -Wharf Panama Canal Financial	Year	1	2
QDA	CN2RZ	Bunker FO 380 CST Dlvd Fujairah M2M Financial	Month	1	36
QDA	CN0PU	Bunker FO 380 CST Dlvd Hong Kong Financial	Month	1	36
QDA	CN0PU	Bunker FO 380 CST Dlvd Hong Kong Financial	Quarter	1	8
QDA	CN0PU	Bunker FO 380 CST Dlvd Hong Kong Financial	Year	1	2
QDA	CN0PV	Bunker FO 380 CST Dlvd South Korea Financial	Month	1	36
QDA	CN0PV	Bunker FO 380 CST Dlvd South Korea Financial	Quarter	1	8
QDA	CN0PV	Bunker FO 380 CST Dlvd South Korea Financial	Year	1	2
QDA	CN0PW	Bunker FO 380 CST Dlvd Spore Financial	Month	1	36
QDA	CN0PW	Bunker FO 380 CST Dlvd Spore Financial	Quarter	1	8
QDA	CN0PW	Bunker FO 380 CST Dlvd Spore Financial	Year	1	2
QDR	CN020	Bunker FO 380 CTS 3.5% Dlvd Gibraltar Financial	Month	1	36
QDR	CN020	Bunker FO 380 CTS 3.5% Dlvd Gibraltar Financial	Quarter	1	8
QDR	CN020	Bunker FO 380 CTS 3.5% Dlvd Gibraltar Financial	Year	1	2
DR	CN005	CPC Blend CFD	Month	1	3
QDU	CN050	Dated Brent at Houston MOC Financial	Month	1	36
FDU	CN050	Dated Brent at Houston MOC Financial	Month	37	84
QDG	CN050	Dated Brent at Houston MOC Financial	Month	85	240
QDU	CN050	Dated Brent at Houston MOC Financial	Quarter	1	12
FDU	CN050	Dated Brent at Houston MOC Financial	Quarter	13	28
QDG	CN050	Dated Brent at Houston MOC Financial	Quarter	29	76
QDU	CN050	Dated Brent at Houston MOC Financial	Year	1	3
FDU	CN050	Dated Brent at Houston MOC Financial	Year	4	7

QDG	CN05O	Dated Brent at Houston MOC Financial	Year	8	19
QDA	CN0PX	Dated Brent at Spore MOC Financial	Month	1	36
QDA	CN0PX	Dated Brent at Spore MOC Financial	Quarter	1	8
QDA	CN0PX	Dated Brent at Spore MOC Financial	Year	1	2
DR	CN006	Dated Brent Financial	Month	0	36
DR	CN006	Dated Brent Financial	Quarter	1	12
DR	CN006	Dated Brent Financial	Week	1	8
DR	CN006	Dated Brent Financial	Year	1	3
DA	CN0NY	Dubai at Spore MOC EFS	Month	1	12
DU	CN03X	Dubai Frontline at Houston MOC Financial	Month	1	36
DU	CN03X	Dubai Frontline at Houston MOC Financial	Quarter	1	12
DU	CN03X	Dubai Frontline at Houston MOC Financial	Year	1	3
DU	CN03Y	Dubai Frontline at Houston MOC Financial Time Spread	Month	1	35
DU	CN03Y	Dubai Frontline at Houston MOC Financial Time Spread	Quarter	1	11
DU	CN03Y	Dubai Frontline at Houston MOC Financial Time Spread	Year	1	2
DR	CN007	Dubai Frontline at London MOC Financial	Month	1	36
DR	CN007	Dubai Frontline at London MOC Financial	Quarter	1	12
DR	CN007	Dubai Frontline at London MOC Financial	Year	1	3
DA	CN0NZ	Dubai Frontline at Spore MOC Financial	Month	1	36
DA	CN0NZ	Dubai Frontline at Spore MOC Financial	Quarter	1	4
DA	CN0NZ	Dubai Frontline at Spore MOC Financial	Year	1	3
DA	CN0O0	Dubai Frontline at Spore MOC Financial Time Spread	Month	1	11
DR	CN008	Dubai Frontline London MOC Financial Time Spread	Month	1	35
DR	CN008	Dubai Frontline London MOC Financial Time Spread	Quarter	1	11
DR	CN008	Dubai Frontline London MOC Financial Time Spread	Year	1	2
QDU	CN05P	Eagle Ford Crude FOB Financial	Month	1	36
FDU	CN05P	Eagle Ford Crude FOB Financial	Month	37	84
QDG	CN05P	Eagle Ford Crude FOB Financial	Month	85	240
QDU	CN05P	Eagle Ford Crude FOB Financial	Quarter	1	12

FDU	CN05P	Eagle Ford Crude FOB Financial	Quarter	13	24
QDU	CN05P	Eagle Ford Crude FOB Financial	Year	1	3
FDU	CN05P	Eagle Ford Crude FOB Financial	Year	4	6
DR	CN3AK	FO 1% FOB NWE Cargo Brent Crack Intermonth Spread	Month	0	35
DR	CN3AL	FO 1% FOB NWE Cargo Brent Crack Inter -Quarter Spread	Quarter	1	11
DR	CN3AM	FO 1% FOB NWE Cargo Brent Crack Inter -Year Spread	Year	1	2
DR	CN3AN	FO 1% FOB NWE Cargo Inter -Quarter Spread	Quarter	1	11
DR	CN3AO	FO 1% FOB NWE Cargo Inter -Year Spread	Year	1	2
DR	CN3AP	FO 1% FOB Rdam Barge Brent Crack Intermonth Spread	Month	0	23
DR	CN3AQ	FO 1% FOB Rdam Barge Brent Crack Inter -Quarter Spread	Quarter	1	7
DR	CN3AR	FO 1% FOB Rdam Barge Brent Crack Inter -Year Spread	Year	1	1
DR	CN3AS	FO 1% FOB Rdam Barge Intermonth Spread	Month	0	23
DR	CN3AT	FO 1% FOB Rdam Barge Inter -Quarter Spread	Quarter	1	7
DR	CN3AU	FO 1% FOB Rdam Barge Inter -Year Spread	Year	1	1
QDR	CN021	FO 1%S CIF MED Cargo Financial	Month	1	36
QDR	CN021	FO 1%S CIF MED Cargo Financial	Quarter	1	8
QDR	CN021	FO 1%S CIF MED Cargo Financial	Year	1	2
QDR	CN022	FO 1%S FOB MED Cargo Financial	Month	1	36
QDR	CN022	FO 1%S FOB MED Cargo Financial	Quarter	1	8
QDR	CN022	FO 1%S FOB MED Cargo Financial	Year	1	2
DR	CN009	FO 1%S FOB NWE Cargo Brent Crack Financial	Month	0	36
DR	CN009	FO 1%S FOB NWE Cargo Brent Crack Financial	Quarter	1	12
DR	CN009	FO 1%S FOB NWE Cargo Brent Crack Financial	Year	1	3
DR	CN00A	FO 1%S FOB NWE Cargo Financial	Month	0	36
DR	CN00A	FO 1%S FOB NWE Cargo Financial	Quarter	1	12
DR	CN00A	FO 1%S FOB NWE Cargo Financial	Year	1	3
DR	CN00B	FO 1%S FOB NWE vs FO 3.5%S Barge (HiLo Diff) Financial	Month	0	36
DR	CN00B	FO 1%S FOB NWE vs FO 3.5%S Barge (HiLo Diff) Financial	Quarter	1	12
DR	CN00B	FO 1%S FOB NWE vs FO 3.5%S Barge (HiLo Diff) Financial	Year	1	3

DR	CN00C	FO 1%S FOB Rdam Barge Brent Crack Financial	Month	0	24
DR	CN00C	FO 1%S FOB Rdam Barge Brent Crack Financial	Quarter	1	8
DR	CN00C	FO 1%S FOB Rdam Barge Brent Crack Financial	Year	1	2
DR	CN00D	FO 1%S FOB Rdam Barge Financial	Month	0	24
DR	CN00D	FO 1%S FOB Rdam Barge Financial	Quarter	1	8
DR	CN00D	FO 1%S FOB Rdam Barge Financial	Year	1	2
DR	CN00E	FO 1%S FOB Rdam Barge vs FO 1%S FOB NWE Cargo Financial	Month	0	24
DR	CN00E	FO 1%S FOB Rdam Barge vs FO 1%S FOB NWE Cargo Financial	Quarter	1	8
DR	CN00E	FO 1%S FOB Rdam Barge vs FO 1%S FOB NWE Cargo Financial	Year	1	2
DU	CN03Z	FO 1.0% USAC Cargo Brent Crack at Houston MOC Financial	Month	1	12
DU	CN03Z	FO 1.0% USAC Cargo Brent Crack at Houston MOC Financial	Quarter	1	4
DU	CN03Z	FO 1.0% USAC Cargo Brent Crack at Houston MOC Financial	Year	1	2
DU	CN040	FO 1.0% USAC Cargo Dubai Crack at Houston MOC Financial	Month	1	12
DU	CN040	FO 1.0% USAC Cargo Dubai Crack at Houston MOC Financial	Quarter	1	4
DU	CN040	FO 1.0% USAC Cargo Dubai Crack at Houston MOC Financial	Year	1	2
DU	CN041	FO 1.0% USAC Cargo Financial	Month	0	12
QDU	CN041	FO 1.0% USAC Cargo Financial	Month	13	36
FDU	CN041	FO 1.0% USAC Cargo Financial	Month	37	84
QDG	CN041	FO 1.0% USAC Cargo Financial	Month	85	240
DU	CN041	FO 1.0% USAC Cargo Financial	Quarter	1	4
QDU	CN041	FO 1.0% USAC Cargo Financial	Quarter	5	8
DU	CN041	FO 1.0% USAC Cargo Financial	Year	1	2
QDU	CN041	FO 1.0% USAC Cargo Financial	Year	3	3
FDU	CN041	FO 1.0% USAC Cargo Financial	Year	4	7
DU	CN042	FO 1.0% USAC Cargo Financial Time Spread	Month	1	11
DU	CN042	FO 1.0% USAC Cargo Financial Time Spread	Quarter	1	3
DU	CN042	FO 1.0% USAC Cargo Financial Time Spread	Year	1	1
DU	CN043	FO 1.0% USAC Cargo vs USGC HSFO Waterborne (HiLo Diff) Financial	Month	1	12
QDU	CN043	FO 1.0% USAC Cargo vs USGC HSFO Waterborne (HiLo Diff) Financial	Month	13	36

DU	CN043	FO 1.0% USAC Cargo vs USGC HSFO Waterborne (HiLo Diff) Financial	Quarter	1	4
QDU	CN043	FO 1.0% USAC Cargo vs USGC HSFO Waterborne (HiLo Diff) Financial	Quarter	5	8
DU	CN043	FO 1.0% USAC Cargo vs USGC HSFO Waterborne (HiLo Diff) Financial	Year	1	2
QDU	CN0RN	FO 1.0% USAC Cargo vs USGC HSFO Waterborne (HiLo Diff) M2M Financial	Quarter	1	4
QDU	CN0RN	FO 1.0% USAC Cargo vs USGC HSFO Waterborne (HiLo Diff) M2M Financial	Year	1	2
DU	CN044	FO 1.0% USAC Cargo WTI Crack Financial	Month	1	12
DU	CN044	FO 1.0% USAC Cargo WTI Crack Financial	Quarter	1	4
DU	CN044	FO 1.0% USAC Cargo WTI Crack Financial	Year	1	2
QDU	CN05R	FO 1.0% USGC Cargo Financial	Month	1	36
FDU	CN05R	FO 1.0% USGC Cargo Financial	Month	37	84
QDG	CN05R	FO 1.0% USGC Cargo Financial	Month	85	240
QDU	CN05R	FO 1.0% USGC Cargo Financial	Quarter	1	12
FDU	CN05R	FO 1.0% USGC Cargo Financial	Quarter	13	28
QDU	CN05R	FO 1.0% USGC Cargo Financial	Year	1	3
FDU	CN05R	FO 1.0% USGC Cargo Financial	Year	4	7
DA	CN001	FO 180 3.5% FOB Spore Cargo vs FO 3.5% FOB Rdam Barge at Spore MOC (E -W) Financial	Month	1	12
DA	CN002	FO 180 3.5%S FOB Spore Cargo vs FO 380 3.5%S FOB Spore Cargo (Visc Spread) Financial	Month	1	12
DA	CN002	FO 180 3.5%S FOB Spore Cargo vs FO 380 3.5%S FOB Spore Cargo (Visc Spread) Financial	Quarter	1	4
QDA	CN0PY	FO 180 CST 3.5% FOB Spore Cargo vs FO 3.5% FOB Rdam Barge at Spore MOC Financial	Month	13	36
QDA	CN0PY	FO 180 CST 3.5% FOB Spore Cargo vs FO 3.5% FOB Rdam Barge at Spore MOC Financial	Quarter	1	8
QDA	CN0PY	FO 180 CST 3.5% FOB Spore Cargo vs FO 3.5% FOB Rdam Barge at Spore MOC Financial	Year	2	2
DR	CN3AV	FO 180 CST 3.5% FOB Spore Cargo vs FO 3.5% FOB Rdam Barge Intermonth Spread	Month	1	2
DR	CN00G	FO 180 CST 3.5%S FOB Spore Cargo at London MOC Financial	Month	1	3
DA	CN003	FO 180 CST 3.5%S FOB Spore Cargo Brent Crack at Spore MOC Financial	Month	1	12
DA	CN003	FO 180 CST 3.5%S FOB Spore Cargo Brent Crack at Spore MOC Financial	Quarter	1	4
DA	CN004	FO 180 CST 3.5%S FOB Spore Cargo Dubai Crack Financial	Month	1	12
DA	CN004	FO 180 CST 3.5%S FOB Spore Cargo Dubai Crack Financial	Quarter	1	4
DA	CN005	FO 180 CST 3.5%S FOB Spore Cargo Financial	Month	0	12
QDA	CN005	FO 180 CST 3.5%S FOB Spore Cargo Financial	Month	13	36

DA	CN005	FO 180 CST 3.5%S FOB Spore Cargo Financial	Quarter	1	4
QDA	CN005	FO 180 CST 3.5%S FOB Spore Cargo Financial	Quarter	5	8
QDA	CN005	FO 180 CST 3.5%S FOB Spore Cargo Financial	Year	1	2
DA	CN006	FO 180 CST 3.5%S FOB Spore Cargo Financial Price Change	Month	0	2
DA	CN007	FO 180 CST 3.5%S FOB Spore Cargo Financial Time Spread	Month	1	11
DA	CN007	FO 180 CST 3.5%S FOB Spore Cargo Financial Time Spread	Quarter	1	3
DR	CN3AW	FO 180 CST vs FO 380 CST 3.5% FOB Spore Cargo Financial	Month	1	3
QDR	CN023	FO 3.5% CIF MED Cargo Financial	Month	1	36
QDR	CN023	FO 3.5% CIF MED Cargo Financial	Quarter	1	8
QDR	CN023	FO 3.5% CIF MED Cargo Financial	Year	1	2
DR	CN3AX	FO 3.5% FOB Med Cargo Brent Crack Intermonth Spread	Month	0	23
DR	CN3AY	FO 3.5% FOB Med Cargo Brent Crack Inter -Quarter Spread	Quarter	1	7
DR	CN3AZ	FO 3.5% FOB Med Cargo Brent Crack Inter -Year Spread	Year	1	1
DR	CN4A0	FO 3.5% FOB Med Cargo Inter -Quarter Spread	Month	1	7
DR	CN4A1	FO 3.5% FOB Med Cargo Inter -Year Spread	Month	1	1
DR	CN4A2	FO 3.5% FOB Rdam Barge Brent Crack Intermonth Spread	Month	0	35
DR	CN4A3	FO 3.5% FOB Rdam Barge Brent Crack Inter -Quarter Spread	Quarter	1	11
DR	CN4A4	FO 3.5% FOB Rdam Barge Brent Crack Inter -Year Spread	Year	1	2
DR	CN4A5	FO 3.5% FOB Rdam Barge Inter -Quarter Spread	Quarter	1	11
DR	CN4A6	FO 3.5% FOB Rdam Barge Inter -Year Spread	Year	1	2
DR	CN0R1	FO 3.5%S FOB Med Cargo Brent Crack Financial	Month	0	24
DR	CN0R1	FO 3.5%S FOB Med Cargo Brent Crack Financial	Quarter	1	8
DR	CN0R1	FO 3.5%S FOB Med Cargo Brent Crack Financial	Year	1	2
DR	CN00H	FO 3.5%S FOB Med Cargo Financial	Month	0	24
DR	CN00H	FO 3.5%S FOB Med Cargo Financial	Quarter	1	8
DR	CN00H	FO 3.5%S FOB Med Cargo Financial	Year	1	2
DA	CN008	FO 3.5%S FOB Rdam Barge at Spore MOC Financial	Month	1	12
QDA	CN008	FO 3.5%S FOB Rdam Barge at Spore MOC Financial	Month	13	36
DA	CN009	FO 3.5%S FOB Rdam Barge at Spore MOC Financial Time Spread	Month	1	11

DA	CN00A	FO 3.5%S FOB Rdam Barge Brent Crack at Spore MOC Financial	Month	1	12
DR	CN00I	FO 3.5%S FOB Rdam Barge Brent Crack Financial	Month	0	36
DR	CN00I	FO 3.5%S FOB Rdam Barge Brent Crack Financial	Quarter	1	12
DR	CN00I	FO 3.5%S FOB Rdam Barge Brent Crack Financial	Year	1	3
DR	CN00J	FO 3.5%S FOB Rdam Barge Financial	Month	0	36
DR	CN00J	FO 3.5%S FOB Rdam Barge Financial	Quarter	1	12
DR	CN00J	FO 3.5%S FOB Rdam Barge Financial	Year	1	3
DR	CN00K	FO 3.5%S FOB Rdam Barge vs FO 3.5%S FOB Med Cargo Financial	Month	0	24
DR	CN00K	FO 3.5%S FOB Rdam Barge vs FO 3.5%S FOB Med Cargo Financial	Quarter	1	8
DR	CN00K	FO 3.5%S FOB Rdam Barge vs FO 3.5%S FOB Med Cargo Financial	Year	1	2
DA	CN2WW	FO 380 3.5% FOB Spore Cargo vs FO 3.5% FOB Rdam Barge at Spore MOC (E -W) Financial	Month	1	12
DR	CN00L	FO 380 CST 3.5 FOB Spore vs Rdam	Month	1	3
DA	CN00B	FO 380 CST 3.5% FOB Arab Gulf Cargo Financial	Month	0	2
DA	CN0R9	FO 380 CST 3.5% FOB Spore Cargo Brent Crack At Spore MOC Financial	Month	1	12
DA	CN0R9	FO 380 CST 3.5% FOB Spore Cargo Brent Crack At Spore MOC Financial	Quarter	1	4
DA	CN0RK	FO 380 CST 3.5% FOB Spore Cargo Dubai Crack Financial	Month	1	12
DA	CN0RK	FO 380 CST 3.5% FOB Spore Cargo Dubai Crack Financial	Quarter	1	4
DR	CN00M	FO 380 CST 3.5%S FOB Spore Cargo at London MOC Financial	Month	1	3
DA	CN00E	FO 380 CST 3.5%S FOB Spore Cargo Financial	Month	0	12
QDA	CN00E	FO 380 CST 3.5%S FOB Spore Cargo Financial	Month	13	36
DA	CN00E	FO 380 CST 3.5%S FOB Spore Cargo Financial	Quarter	1	4
QDA	CN00E	FO 380 CST 3.5%S FOB Spore Cargo Financial	Quarter	5	8
QDA	CN00E	FO 380 CST 3.5%S FOB Spore Cargo Financial	Year	1	2
DA	CN00F	FO 380 CST 3.5%S FOB Spore Cargo Financial Price Change	Month	0	2
DA	CN00G	FO 380 CST 3.5%S FOB Spore Cargo Financial Time Spread	Month	1	11
DA	CN00G	FO 380 CST 3.5%S FOB Spore Cargo Financial Time Spread	Quarter	1	3
DR	CN00N	Gasoil .1%S (1000ppm) CIF Med Cargo Brent Crack Financial	Month	0	24
DR	CN00N	Gasoil .1%S (1000ppm) CIF Med Cargo Brent Crack Financial	Quarter	1	8
DR	CN00N	Gasoil .1%S (1000ppm) CIF Med Cargo Brent Crack Financial	Year	1	2

DR	CN000	Gasoil .1%S (1000ppm) CIF Med Cargo Financial	Month	0	24
QDR	CN000	Gasoil .1%S (1000ppm) CIF Med Cargo Financial	Month	25	36
DR	CN000	Gasoil .1%S (1000ppm) CIF Med Cargo Financial	Quarter	1	8
DR	CN000	Gasoil .1%S (1000ppm) CIF Med Cargo Financial	Year	1	2
DR	CN00P	Gasoil .1%S (1000ppm) CIF Med Cargo vs LS Gasoil Frontline Financial	Month	0	24
DR	CN00P	Gasoil .1%S (1000ppm) CIF Med Cargo vs LS Gasoil Frontline Financial	Quarter	1	8
DR	CN00P	Gasoil .1%S (1000ppm) CIF Med Cargo vs LS Gasoil Frontline Financial	Year	1	2
DR	CN00Q	Gasoil .1%S (1000ppm) FOB ARA Barge Brent Crack Financial	Month	0	24
DR	CN00Q	Gasoil .1%S (1000ppm) FOB ARA Barge Brent Crack Financial	Quarter	1	8
DR	CN00Q	Gasoil .1%S (1000ppm) FOB ARA Barge Brent Crack Financial	Year	1	2
DR	CN00R	Gasoil .1%S (1000ppm) FOB ARA Barge Financial	Month	0	24
DR	CN00R	Gasoil .1%S (1000ppm) FOB ARA Barge Financial	Quarter	1	8
DR	CN00R	Gasoil .1%S (1000ppm) FOB ARA Barge Financial	Year	1	2
DR	CN00S	Gasoil .1%S (1000ppm) FOB ARA Barge vs LS Gasoil Frontline Financial	Month	0	24
DR	CN00S	Gasoil .1%S (1000ppm) FOB ARA Barge vs LS Gasoil Frontline Financial	Quarter	1	8
DR	CN00S	Gasoil .1%S (1000ppm) FOB ARA Barge vs LS Gasoil Frontline Financial	Year	1	2
DR	CN00T	Gasoil 0.1%S CIF NWE Cargo Brent Crack Financial	Month	0	24
DR	CN00T	Gasoil 0.1%S CIF NWE Cargo Brent Crack Financial	Quarter	1	8
DR	CN00T	Gasoil 0.1%S CIF NWE Cargo Brent Crack Financial	Year	1	2
DR	CN00U	Gasoil 0.1%S CIF NWE Cargo Financial	Month	0	24
DR	CN00U	Gasoil 0.1%S CIF NWE Cargo Financial	Quarter	1	8
DR	CN00U	Gasoil 0.1%S CIF NWE Cargo Financial	Year	1	2
DR	CN00V	Gasoil 0.1%S CIF NWE Cargo vs LS Gasoil Frontline Financial	Month	0	24
DR	CN00V	Gasoil 0.1%S CIF NWE Cargo vs LS Gasoil Frontline Financial	Quarter	1	8
DR	CN00V	Gasoil 0.1%S CIF NWE Cargo vs LS Gasoil Frontline Financial	Year	1	2
DA	CN00S	Gasoil at Spore MOC EFS	Quarter	1	3
DA	CN00J	Gasoil at Spore MOC ESS	Month	1	12
QDA	CN00J	Gasoil at Spore MOC ESS	Month	13	36
DA	CN00J	Gasoil at Spore MOC ESS	Quarter	1	3

QDA	CN00J	Gasoil at Spore MOC ESS	Quarter	4	8
QDA	CN00J	Gasoil at Spore MOC ESS	Year	2	2
DA	CN00K	Gasoil FOB Arab Gulf Cargo Financial	Month	0	2
QDR	CN024	Gasoil FOB Spore Cargo at London MOC USD/BBL Financial	Month	1	36
QDR	CN025	Gasoil FOB Spore Cargo at London MOC USD/MT Financial	Month	1	36
QDR	CN026	Gasoil FOB Spore Cargo Brent crack at London MOC Financial	Month	1	36
DA	CN00L	Gasoil FOB Spore Cargo Brent Crack at Spore MOC Financial	Month	1	12
DA	CN00L	Gasoil FOB Spore Cargo Brent Crack at Spore MOC Financial	Quarter	1	4
DA	CN00M	Gasoil FOB Spore Cargo Dubai Crack Financial	Month	1	12
DA	CN00M	Gasoil FOB Spore Cargo Dubai Crack Financial	Quarter	1	4
DA	CN00N	Gasoil FOB Spore Cargo Financial	Month	0	12
QDA	CN00N	Gasoil FOB Spore Cargo Financial	Month	13	36
DA	CN00N	Gasoil FOB Spore Cargo Financial	Quarter	1	4
QDA	CN00N	Gasoil FOB Spore Cargo Financial	Quarter	5	8
QDA	CN00N	Gasoil FOB Spore Cargo Financial	Year	1	2
DA	CN00O	Gasoil FOB Spore Cargo Financial Price Change	Month	0	2
DA	CN00P	Gasoil FOB Spore Cargo Financial Time Spread	Month	1	11
DA	CN00P	Gasoil FOB Spore Cargo Financial Time Spread	Quarter	1	3
QDR	CN027	Gasoil FOB Spore Dubai crack at London MOC Financial	Month	1	36
DA	CN00Q	Gasoil FOB Spore EFS	Month	1	12
DA	CN00R	Gasoil FOB Spore EFS Price Change	Month	1	2
QDU	CN05V	Gasoil No.2 USGC Prompt Pipeline Financial	Month	1	36
QDU	CN05V	Gasoil No.2 USGC Prompt Pipeline Financial	Quarter	1	8
QDU	CN05V	Gasoil No.2 USGC Prompt Pipeline Financial	Year	1	2
QDR	CN028	Gasoline 92 RON FOB Spore at London MOC Financial \$/Bbl	Month	1	36
QDR	CN029	Gasoline 92 RON FOB Spore at London MOC Financial \$/MT	Month	1	36
DA	CN00T	Gasoline 92 RON FOB Spore Brent Crack at Spore MOC Financial	Month	1	12
DA	CN00T	Gasoline 92 RON FOB Spore Brent Crack at Spore MOC Financial	Quarter	1	4
DA	CN00U	Gasoline 92 RON FOB Spore Dubai Crack Financial	Month	1	12

DA	CN00U	Gasoline 92 RON FOB Spore Dubai Crack Financial	Quarter	1	4
DA	CN00V	Gasoline 92 RON FOB Spore Financial	Month	0	12
DA	CN00V	Gasoline 92 RON FOB Spore Financial	Quarter	1	4
DA	CN00W	Gasoline 92 RON FOB Spore Financial Price Change	Month	0	2
DA	CN00X	Gasoline 92 RON FOB Spore Financial Time Spread	Month	1	11
DA	CN00X	Gasoline 92 RON FOB Spore Financial Time Spread	Quarter	1	3
QDA	CN0PZ	Gasoline 92 RON FOB Spore M2M Financial	Month	13	36
DA	CN00Y	Gasoline 92 RON FOB Spore vs Naphtha FOB Spore Financial	Month	0	12
DA	CN00Y	Gasoline 92 RON FOB Spore vs Naphtha FOB Spore Financial	Quarter	1	4
DA	CN00Z	Gasoline 92 RON FOB Spore vs Naphtha FOB Spore Financial Price Change	Month	0	2
QDR	CN02A	Gasoline 92RON Spore Brent crack at London MOC Financial	Month	1	36
QDR	CN02B	Gasoline 92RON Spore vs Dubai at London MOC Financial	Month	1	36
DA	CN0P0	Gasoline 95 RON Arab Gulf Financial	Month	0	2
QDR	CN02C	Gasoline 95 RON FOB Spore at London MOC \$/Bbl Financial	Month	1	36
QDR	CN02D	Gasoline 95 RON FOB Spore at London MOC \$/MT Financial	Month	1	36
QDA	CN0Q0	Gasoline 95RON FOB Spore Financial	Month	1	36
QDU	CN05W	Gasoline CBOB Buckeye Pipeline Financial	Month	1	36
QDU	CN05W	Gasoline CBOB Buckeye Pipeline Financial	Quarter	1	8
QDU	CN05W	Gasoline CBOB Buckeye Pipeline Financial	Year	1	2
QDU	CN0RH	Gasoline CBOB USGC Financial	Month	1	36
DR	CN00W	Gasoline Eurobob 10ppm FOB ARA Barge Brent Crack Financial	Month	0	12
DR	CN00W	Gasoline Eurobob 10ppm FOB ARA Barge Brent Crack Financial	Quarter	1	4
DR	CN00W	Gasoline Eurobob 10ppm FOB ARA Barge Brent Crack Financial	Year	1	1
DR	CN00X	Gasoline Eurobob 10ppm FOB ARA Barge Financial	Month	0	12
QDR	CN00X	Gasoline Eurobob 10ppm FOB ARA Barge Financial	Month	13	36
DR	CN00X	Gasoline Eurobob 10ppm FOB ARA Barge Financial	Quarter	1	4
DR	CN00X	Gasoline Eurobob 10ppm FOB ARA Barge Financial	Year	1	1
DR	CN2VW	Gasoline Eurobob 10ppm FOB ARA Barge Financial Time Spread	Month	0	11
DR	CN2VW	Gasoline Eurobob 10ppm FOB ARA Barge Financial Time Spread	Quarter	1	3

DR	CN1BN	Gasoline Eurobob E10 Non -Oxy FOB AR Barge Financial	Month	0	2
DR	CN2VX	Gasoline Eurobob E10 Non -Oxy FOB AR Barge Financial Time Spread	Month	0	1
QDU	CN05Y	Gasoline Prem UNLD Seattle WA Pipeline Financial	Month	1	36
QDU	CN05Y	Gasoline Prem UNLD Seattle WA Pipeline Financial	Quarter	1	8
QDU	CN05Y	Gasoline Prem UNLD Seattle WA Pipeline Financial	Year	1	2
QDR	CN02E	Gasoline Prem Unleaded 10ppm CIF MED Cargo Financial	Month	1	36
QDR	CN02E	Gasoline Prem Unleaded 10ppm CIF MED Cargo Financial	Quarter	1	8
QDR	CN02E	Gasoline Prem Unleaded 10ppm CIF MED Cargo Financial	Year	1	2
DR	CN00Y	Gasoline Prem Unleaded 10ppm FOB ARA Barge Brent Crack Financial	Month	0	12
DR	CN00Y	Gasoline Prem Unleaded 10ppm FOB ARA Barge Brent Crack Financial	Quarter	1	4
DR	CN00Y	Gasoline Prem Unleaded 10ppm FOB ARA Barge Brent Crack Financial	Year	1	1
DR	CN00Z	Gasoline Prem Unleaded 10ppm FOB ARA Barge Financial	Month	0	12
DR	CN00Z	Gasoline Prem Unleaded 10ppm FOB ARA Barge Financial	Quarter	1	4
DR	CN00Z	Gasoline Prem Unleaded 10ppm FOB ARA Barge Financial	Year	1	1
DR	CN010	Gasoline Prem Unleaded 10ppm FOB MED Cargo Financial	Month	0	2
QDR	CN010	Gasoline Prem Unleaded 10ppm FOB MED Cargo Financial	Month	3	36
QDR	CN010	Gasoline Prem Unleaded 10ppm FOB MED Cargo Financial	Quarter	1	8
QDR	CN010	Gasoline Prem Unleaded 10ppm FOB MED Cargo Financial	Year	1	2
DR	CN011	Gasoline Premium Unleaded 10ppm FOB MED Cargo Brent Crack Financial	Month	0	2
QDU	CN05Z	Gasoline RBOB Buckeye Pipeline Financial	Month	1	36
QDU	CN05Z	Gasoline RBOB Buckeye Pipeline Financial	Quarter	1	8
QDU	CN05Z	Gasoline RBOB Buckeye Pipeline Financial	Year	1	2
DU	CN04B	Gasoline Unl 87 USGC Prompt Pipeline Brent Crack at Houston MOC Financial	Month	1	12
DU	CN04B	Gasoline Unl 87 USGC Prompt Pipeline Brent Crack at Houston MOC Financial	Quarter	1	4
DU	CN04C	Gasoline Unl 87 USGC Prompt Pipeline Dubai Crack at Houston MOC Financial	Month	1	12
DU	CN04C	Gasoline Unl 87 USGC Prompt Pipeline Dubai Crack at Houston MOC Financial	Quarter	1	4
DU	CN04D	Gasoline Unl 87 USGC Prompt Pipeline Financial	Month	0	12
QDU	CN04D	Gasoline Unl 87 USGC Prompt Pipeline Financial	Month	13	36
DU	CN04D	Gasoline Unl 87 USGC Prompt Pipeline Financial	Quarter	1	4

QDU	CN04D	Gasoline Unl 87 USGC Prompt Pipeline Financial	Quarter	5	8
QDU	CN04D	Gasoline Unl 87 USGC Prompt Pipeline Financial	Year	2	2
DU	CN04E	Gasoline Unl 87 USGC Prompt Pipeline Financial Time Spread	Month	1	11
DU	CN04E	Gasoline Unl 87 USGC Prompt Pipeline Financial Time Spread	Quarter	1	3
DU	CN04F	Gasoline Unl 87 USGC Prompt Pipeline vs RBOB Frontline Financial	Month	0	12
DU	CN04F	Gasoline Unl 87 USGC Prompt Pipeline vs RBOB Frontline Financial	Quarter	1	4
DU	CN04G	Gasoline Unl 87 USGC Prompt Pipeline WTI Crack Financial	Month	1	12
DU	CN04G	Gasoline Unl 87 USGC Prompt Pipeline WTI Crack Financial	Quarter	1	4
DU	CN04H	Heating Oil Frontline Financial	Month	1	36
FDU	CN04H	Heating Oil Frontline Financial	Month	37	84
QDG	CN04H	Heating Oil Frontline Financial	Month	85	240
DU	CN04H	Heating Oil Frontline Financial	Quarter	1	12
DU	CN04H	Heating Oil Frontline Financial	Year	1	3
DU	CN04I	Heating Oil Frontline Financial Time Spread	Month	1	35
DU	CN04I	Heating Oil Frontline Financial Time Spread	Quarter	1	11
DU	CN04I	Heating Oil Frontline Financial Time Spread	Year	1	2
DA	CN0P1	ICE Brent at Spore MOC Time Spread	Month	1	35
DA	CN0P1	ICE Brent at Spore MOC Time Spread	Quarter	1	11
DA	CN0P1	ICE Brent at Spore MOC Time Spread	Year	1	2
DR	CN012	ICE Brent Time Spread	Month	2	35
DR	CN012	ICE Brent Time Spread	Quarter	2	11
DR	CN012	ICE Brent Time Spread	Year	2	3
DA	CN0P2	ICE Gasoil at Spore MOC	Month	1	36
DA	CN0P2	ICE Gasoil at Spore MOC	Quarter	1	12
DA	CN0P2	ICE Gasoil at Spore MOC	Year	1	3
DA	CN0P3	ICE Gasoil at Spore MOC Time Spread	Month	1	35
DA	CN0P3	ICE Gasoil at Spore MOC Time Spread	Quarter	1	11
DA	CN0P3	ICE Gasoil at Spore MOC Time Spread	Year	1	2
DA	CN0P4	ICE Gasoil Frontline at Spore MOC Financial	Month	1	12

QDA	CN0P4	ICE Gasoil Frontline at Spore MOC Financial	Month	13	36
DA	CN0P4	ICE Gasoil Frontline at Spore MOC Financial	Quarter	1	3
DA	CN0P5	ICE Gasoil Frontline at Spore MOC Financial Time Spread	Month	1	11
DA	CN0P5	ICE Gasoil Frontline at Spore MOC Financial Time Spread	Quarter	1	2
DR	CN013	Jet CIF NWE Cargo Brent Crack Financial	Month	0	36
DR	CN013	Jet CIF NWE Cargo Brent Crack Financial	Quarter	1	12
DR	CN013	Jet CIF NWE Cargo Brent Crack Financial	Year	1	3
DR	CN014	Jet CIF NWE Cargo Financial	Month	0	36
DR	CN014	Jet CIF NWE Cargo Financial	Quarter	1	12
DR	CN014	Jet CIF NWE Cargo Financial	Year	1	3
DR	CN015	Jet CIF NWE Cargo vs LS Gasoil Frontline Financial	Month	0	36
DR	CN015	Jet CIF NWE Cargo vs LS Gasoil Frontline Financial	Quarter	1	12
DR	CN015	Jet CIF NWE Cargo vs LS Gasoil Frontline Financial	Year	1	3
QDU	CN062	Jet Colonial Linden 54 Pipeline Financial	Month	1	36
QDU	CN062	Jet Colonial Linden 54 Pipeline Financial	Quarter	1	8
QDU	CN062	Jet Colonial Linden 54 Pipeline Financial	Year	1	2
QDR	CN02F	Jet FOB MED Cargo Financial	Month	1	36
QDR	CN02F	Jet FOB MED Cargo Financial	Quarter	1	8
QDR	CN02F	Jet FOB MED Cargo Financial	Year	1	2
QDR	CN02G	Jet FOB NWE Cargo Financial	Month	1	36
QDR	CN02G	Jet FOB NWE Cargo Financial	Quarter	1	8
QDR	CN02G	Jet FOB NWE Cargo Financial	Year	1	2
DR	CN016	Jet FOB Rdam Barge Brent Crack Financial	Month	0	2
DR	CN017	Jet FOB Rdam Barge Financial	Month	0	2
QDR	CN017	Jet FOB Rdam Barge Financial	Month	3	36
QDR	CN017	Jet FOB Rdam Barge Financial	Quarter	1	8
QDR	CN017	Jet FOB Rdam Barge Financial	Year	1	2
DR	CN018	Jet FOB Rdam Barge vs Jet CIF NWE Cargo Financial	Month	0	2
DR	CN019	Jet FOB Rdam Barge vs LS Gasoil Frontline Financial	Month	0	2

DR	CN01A	Jet FOB Rdam vs ULSD 10ppm FOB ARA Barge Financial	Month	0	2
DU	CN04J	Jet Kero 54 USGC Prompt Pipeline Brent Crack at Houston MOC Financial	Month	1	12
DU	CN04J	Jet Kero 54 USGC Prompt Pipeline Brent Crack at Houston MOC Financial	Quarter	1	4
DU	CN04K	Jet Kero 54 USGC Prompt Pipeline Dubai Crack at Houston MOC Financial	Month	1	12
DU	CN04K	Jet Kero 54 USGC Prompt Pipeline Dubai Crack at Houston MOC Financial	Quarter	1	4
DU	CN04L	Jet Kero 54 USGC Prompt Pipeline Financial	Month	0	12
QDU	CN04L	Jet Kero 54 USGC Prompt Pipeline Financial	Month	13	36
FDU	CN04L	Jet Kero 54 USGC Prompt Pipeline Financial	Month	37	48
DU	CN04L	Jet Kero 54 USGC Prompt Pipeline Financial	Quarter	1	4
QDU	CN04L	Jet Kero 54 USGC Prompt Pipeline Financial	Quarter	5	8
QDU	CN04L	Jet Kero 54 USGC Prompt Pipeline Financial	Year	1	2
DU	CN04M	Jet Kero 54 USGC Prompt Pipeline Financial Time Spread	Month	1	11
DU	CN04M	Jet Kero 54 USGC Prompt Pipeline Financial Time Spread	Quarter	1	3
DU	CN04N	Jet Kero 54 USGC Prompt Pipeline vs Heating Oil Frontline Financial	Month	0	12
DU	CN04N	Jet Kero 54 USGC Prompt Pipeline vs Heating Oil Frontline Financial	Quarter	1	4
DU	CN04O	Jet Kero 54 USGC Prompt Pipeline WTI Crack Financial	Month	1	12
DU	CN04O	Jet Kero 54 USGC Prompt Pipeline WTI Crack Financial	Quarter	1	4
DA	CN0P6	Jet Kero FOB Arab Gulf Cargo Financial	Month	0	2
QDU	CN063	Jet Kero FOB Chicago Pipeline Financial	Month	1	36
QDU	CN063	Jet Kero FOB Chicago Pipeline Financial	Quarter	1	8
QDU	CN063	Jet Kero FOB Chicago Pipeline Financial	Year	1	2
QDR	CN02I	Jet Kero FOB Spore Cargo at London MOC Financial \$/Bbl	Month	1	36
QDR	CN02J	Jet Kero FOB Spore Cargo at London MOC Financial \$/MT	Month	1	36
DA	CN0P7	Jet Kero FOB Spore Cargo Brent Crack at Spore MOC Financial	Month	1	12
DA	CN0P7	Jet Kero FOB Spore Cargo Brent Crack at Spore MOC Financial	Quarter	1	4
QDR	CN02K	Jet Kero FOB Spore Cargo Brent crack Financial	Month	1	36
QDR	CN2W6	Jet Kero FOB Spore Cargo Dubai Crack Fin	Month	1	12
DA	CN02L	Jet Kero FOB Spore Cargo Dubai crack Financial	Month	1	12
QDR	CN02L	Jet Kero FOB Spore Cargo Dubai crack Financial	Month	13	36

DA	CN02L	Jet Kero FOB Spore Cargo Dubai crack Financial	Quarter	1	4
DA	CN0P9	Jet Kero FOB Spore Cargo Financial	Month	0	12
QDA	CN0P9	Jet Kero FOB Spore Cargo Financial	Month	13	36
DA	CN0P9	Jet Kero FOB Spore Cargo Financial	Quarter	1	4
QDA	CN0P9	Jet Kero FOB Spore Cargo Financial	Quarter	5	8
QDA	CN0P9	Jet Kero FOB Spore Cargo Financial	Year	1	2
DA	CN0PA	Jet Kero FOB Spore Cargo Financial Price Change	Month	0	2
DA	CN0PB	Jet Kero FOB Spore Cargo Financial Time Spread	Month	1	11
DA	CN0PB	Jet Kero FOB Spore Cargo Financial Time Spread	Quarter	1	3
DA	CN0PC	Jet Kero FOB Spore Cargo vs Gasoil FOB Spore Cargo Financial	Month	0	12
QDA	CN0PC	Jet Kero FOB Spore Cargo vs Gasoil FOB Spore Cargo Financial	Month	13	36
DA	CN0PC	Jet Kero FOB Spore Cargo vs Gasoil FOB Spore Cargo Financial	Quarter	1	4
QDA	CN0PC	Jet Kero FOB Spore Cargo vs Gasoil FOB Spore Cargo Financial	Quarter	5	8
QDA	CN0PC	Jet Kero FOB Spore Cargo vs Gasoil FOB Spore Cargo Financial	Year	1	2
QDU	CN064	Jet Kero Group 3 Pipeline Financial	Month	1	36
QDU	CN064	Jet Kero Group 3 Pipeline Financial	Quarter	1	8
QDU	CN064	Jet Kero Group 3 Pipeline Financial	Year	1	2
QDU	CN0RD	Jet Kero into Seattle -Tacoma Airport Financial	Month	1	36
DU	CN04P	Jet Kero Los Angeles CA Pipeline Brent Crack at Houston MOC Financial	Month	1	12
DU	CN04P	Jet Kero Los Angeles CA Pipeline Brent Crack at Houston MOC Financial	Quarter	1	4
DU	CN04Q	Jet Kero Los Angeles CA Pipeline Dubai Crack at Houston MOC Financial	Month	1	12
DU	CN04Q	Jet Kero Los Angeles CA Pipeline Dubai Crack at Houston MOC Financial	Quarter	1	4
DU	CN04R	Jet Kero Los Angeles CA Pipeline Financial	Month	1	12
QDU	CN04R	Jet Kero Los Angeles CA Pipeline Financial	Month	13	36
DU	CN04R	Jet Kero Los Angeles CA Pipeline Financial	Quarter	1	4
QDU	CN04R	Jet Kero Los Angeles CA Pipeline Financial	Quarter	5	8
QDU	CN04R	Jet Kero Los Angeles CA Pipeline Financial	Year	1	2
DU	CN04S	Jet Kero Los Angeles CA Pipeline Financial Time Spread	Month	1	11
DU	CN04S	Jet Kero Los Angeles CA Pipeline Financial Time Spread	Quarter	1	3

DU	CN04T	Jet Kero Los Angeles CA Pipeline vs Heating Oil Frontline Financial	Month	1	12
DU	CN04T	Jet Kero Los Angeles CA Pipeline vs Heating Oil Frontline Financial	Quarter	1	4
DU	CN04U	Jet Kero Los Angeles CA Pipeline WTI Crack Financial	Month	1	12
DU	CN04U	Jet Kero Los Angeles CA Pipeline WTI Crack Financial	Quarter	1	4
DU	CN04V	Jet Kero USAC Barge Brent Crack at Houston MOC Financial	Month	1	12
DU	CN04V	Jet Kero USAC Barge Brent Crack at Houston MOC Financial	Quarter	1	4
DU	CN04W	Jet Kero USAC Barge Dubai Crack at Houston MOC Financial	Month	1	12
DU	CN04W	Jet Kero USAC Barge Dubai Crack at Houston MOC Financial	Quarter	1	4
DU	CN04X	Jet Kero USAC Barge Financial	Month	1	12
QDU	CN04X	Jet Kero USAC Barge Financial	Month	13	36
DU	CN04X	Jet Kero USAC Barge Financial	Quarter	1	4
QDU	CN04X	Jet Kero USAC Barge Financial	Quarter	5	8
QDU	CN04X	Jet Kero USAC Barge Financial	Year	2	2
DU	CN04Y	Jet Kero USAC Barge Financial Time Spread	Month	1	11
DU	CN04Y	Jet Kero USAC Barge Financial Time Spread	Quarter	1	3
DU	CN04Z	Jet Kero USAC Barge vs Heating Oil Frontline Financial	Month	1	12
DU	CN04Z	Jet Kero USAC Barge vs Heating Oil Frontline Financial	Quarter	1	4
DU	CN050	Jet Kero USAC Barge WTI Crack Financial	Month	1	12
DU	CN050	Jet Kero USAC Barge WTI Crack Financial	Quarter	1	4
QDU	CN0RR	LLS vs WTI Cushing Financial	Month	1	36
FDU	CN0RR	LLS vs WTI Cushing Financial	Month	37	240
QDU	CN065	Louisiana Light Sweet Crude Financial	Month	1	36
FDU	CN065	Louisiana Light Sweet Crude Financial	Month	37	84
QDG	CN065	Louisiana Light Sweet Crude Financial	Month	85	240
QDU	CN065	Louisiana Light Sweet Crude Financial	Quarter	1	8
QDU	CN065	Louisiana Light Sweet Crude Financial	Year	1	2
DR	CN01B	LS Gasoil Frontline Brent Crack Financial	Month	0	36
DR	CN01B	LS Gasoil Frontline Brent Crack Financial	Quarter	1	12
DR	CN01B	LS Gasoil Frontline Brent Crack Financial	Year	1	3

DR	CN01C	LS Gasoil Frontline Financial	Month	0	36
DR	CN01C	LS Gasoil Frontline Financial	Quarter	1	12
DR	CN01C	LS Gasoil Frontline Financial	Year	1	3
QDU	CN2GP	Magellan East Houston M2M Financial	Month	1	36
FDU	CN2GP	Magellan East Houston M2M Financial	Month	37	84
QDG	CN2GP	Magellan East Houston M2M Financial	Month	85	240
QDR	CN2S5	Marine Fuel 0.5% Bunker Dlvd Algeciras Financial	Month	1	36
QDA	CN2U9	Marine Fuel 0.5% Bunker Dlvd Fujairah Financial	Month	25	36
QDA	CN2RW	Marine Fuel 0.5% Bunker Dlvd Fujairah M2M Financial	Month	1	24
QDR	CN2S2	Marine Fuel 0.5% Bunker Dlvd Gibraltar Financial	Month	1	36
QDA	CN2RX	Marine Fuel 0.5% Bunker Dlvd Hong Kong M2M Financial	Month	1	36
QDR	CN2S3	Marine Fuel 0.5% Bunker Dlvd Malta Financial	Month	1	36
QDR	CN2S4	Marine Fuel 0.5% Bunker Dlvd Piraeus Financial	Month	1	36
QDR	CN2UA	Marine Fuel 0.5% Bunker Dlvd Rotterdam Financial	Month	1	36
QDA	CN2RY	Marine Fuel 0.5% Bunker Dlvd South Korea M2M Financial	Month	1	24
QDA	CN2U8	Marine Fuel 0.5% Bunker Dlvd Spore Financial	Month	1	36
QDR	CN2RT	Marine Fuel 0.5% CIF Med Cargo M2M Financial	Month	1	36
DA	CN0RJ	Marine Fuel 0.5% FOB Fujairah Cargo Financial	Month	0	2
QDA	CN0RJ	Marine Fuel 0.5% FOB Fujairah Cargo Financial	Month	3	36
DA	CN0RI	Marine Fuel 0.5% FOB Fujairah Cargo Financial Time Spread	Month	1	1
QDR	CN2RS	Marine Fuel 0.5% FOB Med Cargo M2M Financial	Month	1	36
DR	CN4A7	Marine Fuel 0.5% FOB Rdam Barge Brent Crack Intermonth Spread	Month	0	23
DR	CN4A8	Marine Fuel 0.5% FOB Rdam Barge Brent Crack Inter-Quarter Spread	Quarter	1	7
DR	CN4A9	Marine Fuel 0.5% FOB Rdam Barge Brent Crack Inter-Year Spread	Year	1	1
DR	CN4AA	Marine Fuel 0.5% FOB Rdam Barge Inter-Quarter Spread	Quarter	1	7
DR	CN4AB	Marine Fuel 0.5% FOB Rdam Barge Inter-Year	Year	1	1
DR	CNMAF	Marine Fuel 0.5% FOB Rotterdam Barge Financial	Month	0	24
QDR	CNMAF	Marine Fuel 0.5% FOB Rotterdam Barge Financial	Month	25	36
DR	CNMAF	Marine Fuel 0.5% FOB Rotterdam Barge Financial	Quarter	1	8

DR	CNMAF	Marine Fuel 0.5% FOB Rotterdam Barge Financial	Year	1	2
DR	CN2UE	Marine Fuel 0.5% FOB Rotterdam Barge Time Spread	Month	0	23
DR	CNMCF	Marine Fuel 0.5% FOB Rotterdam Barge vs Brent 1st Line Financial	Month	0	24
DR	CNMCF	Marine Fuel 0.5% FOB Rotterdam Barge vs Brent 1st Line Financial	Quarter	1	8
DR	CNMCF	Marine Fuel 0.5% FOB Rotterdam Barge vs Brent 1st Line Financial	Year	1	2
DR	CNMBF	Marine Fuel 0.5% FOB Rotterdam Barge vs FO 3.5% FOB Rotterdam Barge Financial	Month	0	24
DR	CNMBF	Marine Fuel 0.5% FOB Rotterdam Barge vs FO 3.5% FOB Rotterdam Barge Financial	Quarter	1	8
DR	CNMBF	Marine Fuel 0.5% FOB Rotterdam Barge vs FO 3.5% FOB Rotterdam Barge Financial	Year	1	2
DA	CN0RP	Marine Fuel 0.5% FOB Spore Cargo Financial	Month	0	12
QDA	CN0RP	Marine Fuel 0.5% FOB Spore Cargo Financial	Month	13	36
DA	CN0RP	Marine Fuel 0.5% FOB Spore Cargo Financial	Quarter	1	4
DA	CN0RQ	Marine Fuel 0.5% FOB Spore Cargo Financial Time Spread	Month	1	11
DA	CN0RQ	Marine Fuel 0.5% FOB Spore Cargo Financial Time Spread	Quarter	1	3
DR	CN2UD	Marine Fuel 1% FOB NWE Cargo Time Spread	Month	0	35
DR	CN2UC	Marine Fuel 3.5% FOB Med Cargo Time Spread	Month	0	23
DR	CN2UB	Marine Fuel 3.5% FOB Rotterdam Barge Time Spread	Month	0	35
DU	CN0RV	Marine Fuel USGC 0.5% Financial	Month	0	12
DU	CN0RV	Marine Fuel USGC 0.5% Financial	Quarter	1	4
DU	CN0RV	Marine Fuel USGC 0.5% Financial	Year	1	1
DU	CN0RE	Marine Fuel USGC 0.5% Financial Time Spread	Month	1	11
DU	CN0RE	Marine Fuel USGC 0.5% Financial Time Spread	Quarter	1	3
DU	CN0RB	Marine Fuel USGC 0.5% vs HSFO USGC Waterborne Financial	Month	0	12
DU	CN0RB	Marine Fuel USGC 0.5% vs HSFO USGC Waterborne Financial	Quarter	1	4
QDU	CN2RJ	Mars M2M Financial	Month	1	36
FDU	CN2RJ	Mars M2M Financial	Month	37	84
QDG	CN2RJ	Mars M2M Financial	Month	85	240
QDU	CN066	Maya Crude Financial	Month	1	36
FDU	CN066	Maya Crude Financial	Month	37	84
QDG	CN066	Maya Crude Financial	Month	85	240

QDU	CN066	Maya Crude Financial	Quarter	1	12
FDU	CN066	Maya Crude Financial	Quarter	13	28
QDG	CN066	Maya Crude Financial	Quarter	29	76
QDU	CN066	Maya Crude Financial	Year	1	3
FDU	CN066	Maya Crude Financial	Year	4	7
QDG	CN066	Maya Crude Financial	Year	8	19
DA	CN2WX	MF 0.5% FOB Spore Cargo vs MF 0.5% FOB Rdam Barge at Spore MOC (E -W) Fin	Month	1	12
DA	CN0PD	Naphtha C+F Japan Cargo Brent Crack at Spore MOC Financial	Month	1	12
DA	CN0PE	Naphtha C+F Japan Cargo Dubai Crack Financial	Month	1	12
DA	CN0PF	Naphtha C+F Japan Cargo Financial	Month	1	12
QDA	CN0PF	Naphtha C+F Japan Cargo Financial	Month	13	36
DA	CN0PF	Naphtha C+F Japan Cargo Financial	Quarter	1	3
DA	CN0PG	Naphtha C+F Japan Cargo Financial Price Change	Month	1	3
DA	CN0PH	Naphtha C+F Japan Cargo Financial Time Spread	Month	1	11
DA	CN0PH	Naphtha C+F Japan Cargo Financial Time Spread	Quarter	1	2
DA	CN0PI	Naphtha C+F Japan Cargo vs CIF NWE Cargo at Spore MOC Financial	Month	1	3
DU	CN2S1	Naphtha CFR Japan Cargo Financial	Month	0	3
DR	CN01D	Naphtha CFR MOPJ vs Naphtha CIF NWE Cargo at London MOC Financial	Month	1	3
DA	CN0PJ	Naphtha CIF NWE Cargo at Spore MOC Financial	Month	1	3
DR	CN01E	Naphtha CIF NWE Cargo Brent Crack Financial	Month	0	12
DR	CN01E	Naphtha CIF NWE Cargo Brent Crack Financial	Quarter	1	4
DR	CN01E	Naphtha CIF NWE Cargo Brent Crack Financial	Year	1	1
DR	CN01F	Naphtha CIF NWE Cargo Financial	Month	0	12
QDR	CN01F	Naphtha CIF NWE Cargo Financial	Month	13	36
DR	CN01F	Naphtha CIF NWE Cargo Financial	Quarter	1	4
DR	CN01F	Naphtha CIF NWE Cargo Financial	Year	1	1
DR	CN2VY	Naphtha CIF NWE Cargo Financial Time Spread	Month	0	11
DR	CN2VY	Naphtha CIF NWE Cargo Financial Time Spread	Quarter	1	3
DA	CN0PK	Naphtha FOB Spore Cargo Brent Crack at Spore MOC Financial	Month	1	12

DA	CN0PK	Naphtha FOB Spore Cargo Brent Crack at Spore MOC Financial	Quarter	1	4
DA	CN0PL	Naphtha FOB Spore Cargo Dubai Crack Financial	Month	1	12
DA	CN0PL	Naphtha FOB Spore Cargo Dubai Crack Financial	Quarter	1	4
DA	CN0PM	Naphtha FOB Spore Cargo Financial	Month	0	12
QDA	CN0PM	Naphtha FOB Spore Cargo Financial	Month	13	36
DA	CN0PM	Naphtha FOB Spore Cargo Financial	Quarter	1	4
DA	CN0PN	Naphtha FOB Spore Cargo Financial Price Change	Month	0	2
DA	CN0PO	Naphtha FOB Spore Cargo Financial Time Spread	Month	1	11
DA	CN0PO	Naphtha FOB Spore Cargo Financial Time Spread	Quarter	1	3
QDA	CN3DH	Naphtha FOB Spore Cargo M2M Financial \$/mt	Month	1	36
QDU	CN067	Naphtha FOB USGC Cargo Financial	Month	1	36
FDU	CN067	Naphtha FOB USGC Cargo Financial	Month	37	84
QDG	CN067	Naphtha FOB USGC Cargo Financial	Month	85	240
QDU	CN067	Naphtha FOB USGC Cargo Financial	Quarter	1	12
FDU	CN067	Naphtha FOB USGC Cargo Financial	Quarter	13	24
QDU	CN067	Naphtha FOB USGC Cargo Financial	Year	1	3
FDU	CN067	Naphtha FOB USGC Cargo Financial	Year	4	6
DR	CN01G	NYMEX WTI at London MOC Time Spread	Month	2	35
DR	CN01G	NYMEX WTI at London MOC Time Spread	Quarter	2	11
DR	CN01G	NYMEX WTI at London MOC Time Spread	Year	2	3
DA	CN0PP	NYMEX WTI at Spore MOC Time Spread	Month	1	3
DA	CN0PQ	NYMEX WTI vs ICE Brent at Spore MOC	Month	2	4
DR	CN01H	NYMEX WTI-ICE Brent Spread at London MOC	Month	1	35
DR	CN01H	NYMEX WTI-ICE Brent Spread at London MOC	Quarter	1	11
DR	CN01H	NYMEX WTI-ICE Brent Spread at London MOC	Year	1	3
DA	CN0PR	Oman at Spore MOC Financial	Month	1	3
DA	CN0PS	Oman vs Dubai at Spore MOC Financial	Month	1	3
QDR	CN02M	Prem Unl 10ppm FOB MED Cargo vs Gasoline Eurobob 10ppm FOB ARA Barge Financial	Month	1	36
QDR	CN02M	Prem Unl 10ppm FOB MED Cargo vs Gasoline Eurobob 10ppm FOB ARA Barge Financial	Quarter	1	8

QDR	CN02M	Prem Unl 10ppm FOB MED Cargo vs Gasoline Eurobob 10ppm FOB ARA Barge Financial	Year	1	2
DR	CN01I	Prem Unleaded 10ppm FOB MED Cargo vs Gasoline Eurobob 10ppm FOB ARA Barge Financial	Month	0	2
DR	CN01J	Propane CIF NWE Large Cargo Financial	Month	0	4
QDR	CN01J	Propane CIF NWE Large Cargo Financial	Month	5	36
DR	CN01J	Propane CIF NWE Large Cargo Financial	Quarter	1	4
QDR	CN01J	Propane CIF NWE Large Cargo Financial	Quarter	5	8
QDR	CN01J	Propane CIF NWE Large Cargo Financial	Year	2	2
DR	CN2VZ	Propane CIF NWE Large Cargo Financial Time Spread	Month	0	3
DR	CN2VZ	Propane CIF NWE Large Cargo Financial Time Spread	Quarter	1	3
DR	CN01K	Propane CIF NWE Large Cargo vs Naphtha CIF NWE Cargo Financial	Month	0	4
DR	CN01K	Propane CIF NWE Large Cargo vs Naphtha CIF NWE Cargo Financial	Quarter	1	4
DA	CN0PT	Propane FOB Saudi Arabia CP Financial	Month	1	3
DA	CN0PT	Propane FOB Saudi Arabia CP Financial	Quarter	1	1
DU	CN051	Propane USGC Financial	Month	1	3
DU	CN051	Propane USGC Financial	Quarter	1	2
DU	CN052	Propane USGC Financial Time Spread	Month	1	2
DU	CN052	Propane USGC Financial Time Spread	Quarter	1	1
DU	CN053	RBOB Frontline Financial	Month	1	36
DU	CN053	RBOB Frontline Financial	Quarter	1	12
DU	CN053	RBOB Frontline Financial	Year	1	3
DU	CN054	RBOB Frontline Financial Time Spread	Month	1	35
DU	CN054	RBOB Frontline Financial Time Spread	Quarter	1	11
DU	CN054	RBOB Frontline Financial Time Spread	Year	1	2
QDR	CN02N	Straight Run 0.5 -0.7%S FOB NWE cargo Financial	Month	1	36
QDU	CN068	ULS Heating Oil USGC Prompt Pipeline Financial	Month	1	36
QDU	CN068	ULS Heating Oil USGC Prompt Pipeline Financial	Quarter	1	8
QDU	CN068	ULS Heating Oil USGC Prompt Pipeline Financial	Year	1	2
DR	CN01L	ULSD 10ppm CIF MED Cargo Brent Crack Financial	Month	0	24
DR	CN01L	ULSD 10ppm CIF MED Cargo Brent Crack Financial	Quarter	1	8

DR	CN01L	ULSD 10ppm CIF MED Cargo Brent Crack Financial	Year	1	2
DR	CN01M	ULSD 10ppm CIF NWE Cargo Brent Crack Financial	Month	0	24
DR	CN01M	ULSD 10ppm CIF NWE Cargo Brent Crack Financial	Quarter	1	8
DR	CN01M	ULSD 10ppm CIF NWE Cargo Brent Crack Financial	Year	1	2
DR	CN01N	ULSD 10ppmS CIF Med Cargo Financial	Month	0	24
QDR	CN01N	ULSD 10ppmS CIF Med Cargo Financial	Month	25	36
DR	CN01N	ULSD 10ppmS CIF Med Cargo Financial	Quarter	1	8
DR	CN01N	ULSD 10ppmS CIF Med Cargo Financial	Year	1	2
DR	CN01O	ULSD 10ppmS CIF Med Cargo vs CIF NWE Cargo Financial	Month	0	24
DR	CN01O	ULSD 10ppmS CIF Med Cargo vs CIF NWE Cargo Financial	Quarter	1	8
DR	CN01O	ULSD 10ppmS CIF Med Cargo vs CIF NWE Cargo Financial	Year	1	2
DR	CN01P	ULSD 10ppmS CIF Med Cargo vs LS Gasoil Frontline Financial	Month	0	24
DR	CN01P	ULSD 10ppmS CIF Med Cargo vs LS Gasoil Frontline Financial	Quarter	1	8
DR	CN01P	ULSD 10ppmS CIF Med Cargo vs LS Gasoil Frontline Financial	Year	1	2
DR	CN01Q	ULSD 10ppmS CIF NWE Cargo Financial	Month	0	24
DR	CN01Q	ULSD 10ppmS CIF NWE Cargo Financial	Quarter	1	8
DR	CN01Q	ULSD 10ppmS CIF NWE Cargo Financial	Year	1	2
DR	CN01R	ULSD 10ppmS CIF NWE Cargo vs LS Gasoil Frontline Financial	Month	0	24
DR	CN01R	ULSD 10ppmS CIF NWE Cargo vs LS Gasoil Frontline Financial	Quarter	1	8
DR	CN01R	ULSD 10ppmS CIF NWE Cargo vs LS Gasoil Frontline Financial	Year	1	2
DR	CN01S	ULSD 10ppmS FOB ARA Barge Brent Crack Financial	Month	0	24
DR	CN01S	ULSD 10ppmS FOB ARA Barge Brent Crack Financial	Quarter	1	8
DR	CN01S	ULSD 10ppmS FOB ARA Barge Brent Crack Financial	Year	1	2
DR	CN01T	ULSD 10ppmS FOB ARA Barge Financial	Month	0	24
QDR	CN01T	ULSD 10ppmS FOB ARA Barge Financial	Month	25	36
DR	CN01T	ULSD 10ppmS FOB ARA Barge Financial	Quarter	1	8
DR	CN01T	ULSD 10ppmS FOB ARA Barge Financial	Year	1	2
DR	CN01U	ULSD 10ppmS FOB ARA Barge vs LS Gasoil Frontline Financial	Month	0	24
DR	CN01U	ULSD 10ppmS FOB ARA Barge vs LS Gasoil Frontline Financial	Quarter	1	8

DR	CN01U	ULSD 10ppmS FOB ARA Barge vs LS Gasoil Frontline Financial	Year	1	2
QDR	CN02O	ULSD 10ppmS FOB MED Cargo Financial	Month	1	36
QDR	CN02O	ULSD 10ppmS FOB MED Cargo Financial	Quarter	1	8
QDR	CN02O	ULSD 10ppmS FOB MED Cargo Financial	Year	1	2
QDU	CN0RL	ULSD Chicago Financial	Month	1	36
FDU	CN0RL	ULSD Chicago Financial	Month	37	84
QDG	CN0RL	ULSD Chicago Financial	Month	85	240
QDU	CN069	ULSD Group 3 Pipeline Financial	Month	1	36
FDU	CN069	ULSD Group 3 Pipeline Financial	Month	37	84
QDU	CN069	ULSD Group 3 Pipeline Financial	Quarter	1	12
FDU	CN069	ULSD Group 3 Pipeline Financial	Quarter	13	24
QDU	CN069	ULSD Group 3 Pipeline Financial	Year	1	3
FDU	CN069	ULSD Group 3 Pipeline Financial	Year	4	6
QDU	CN06A	ULSD New Jersey Buckeye Pipeline Financial	Month	1	36
QDU	CN06A	ULSD New Jersey Buckeye Pipeline Financial	Quarter	1	8
QDU	CN06A	ULSD New Jersey Buckeye Pipeline Financial	Year	1	2
QDU	CN06B	ULSD No.2 Los Angeles Ca Pipeline Financial	Month	1	36
QDU	CN06B	ULSD No.2 Los Angeles Ca Pipeline Financial	Quarter	1	8
QDU	CN06B	ULSD No.2 Los Angeles Ca Pipeline Financial	Year	1	2
QDU	CN06C	ULSD Seattle WA Pipeline Financial	Month	1	36
QDU	CN06C	ULSD Seattle WA Pipeline Financial	Quarter	1	8
QDU	CN06C	ULSD Seattle WA Pipeline Financial	Year	1	2
DU	CN055	ULSD USGC Prompt Pipeline Brent Crack at Houston MOC Financial	Month	1	12
DU	CN055	ULSD USGC Prompt Pipeline Brent Crack at Houston MOC Financial	Quarter	1	4
DU	CN056	ULSD USGC Prompt Pipeline Dubai Crack at Houston MOC Financial	Month	1	12
DU	CN056	ULSD USGC Prompt Pipeline Dubai Crack at Houston MOC Financial	Quarter	1	4
DU	CN057	ULSD USGC Prompt Pipeline Financial	Month	0	12
QDU	CN057	ULSD USGC Prompt Pipeline Financial	Month	13	36
FDU	CN057	ULSD USGC Prompt Pipeline Financial	Month	37	84

QDG	CN057	ULSD USGC Prompt Pipeline Financial	Month	85	240
DU	CN057	ULSD USGC Prompt Pipeline Financial	Quarter	1	4
QDU	CN057	ULSD USGC Prompt Pipeline Financial	Quarter	5	12
FDU	CN057	ULSD USGC Prompt Pipeline Financial	Quarter	13	24
QDU	CN057	ULSD USGC Prompt Pipeline Financial	Year	1	3
FDU	CN057	ULSD USGC Prompt Pipeline Financial	Year	4	6
DU	CN058	ULSD USGC Prompt Pipeline Financial Time Spread	Month	1	11
DU	CN058	ULSD USGC Prompt Pipeline Financial Time Spread	Quarter	1	3
QDU	CN06H	ULSD USGC Prompt Pipeline M2M Financial	Quarter	1	4
DU	CN059	ULSD USGC Prompt Pipeline vs Heating Oil Frontline Financial	Month	0	12
DU	CN059	ULSD USGC Prompt Pipeline vs Heating Oil Frontline Financial	Quarter	1	4
DU	CN05A	ULSD USGC Prompt Pipeline WTI Crack Financial	Month	1	12
DU	CN05A	ULSD USGC Prompt Pipeline WTI Crack Financial	Quarter	1	4
DR	CN01V	Urals CIF Med CFD	Month	1	3
QDR	CN4AV	Urals CIF Med M2M Financial	Month	1	24
QDR	CN4AT	Urals CIF NWE M2M Financial	Month	1	24
DR	CNANL	Urals CIF Rdam CFD	Month	1	3
QDR	CN4AW	Urals Med CFD M2M	Month	1	24
QDR	CN4AU	Urals NWE CFD M2M	Month	1	24
DU	CN2WR	USGC CBOB Brent Crack at Houston MOC Financial	Month	1	12
DU	CN2WR	USGC CBOB Brent Crack at Houston MOC Financial	Quarter	1	4
DU	CN2WT	USGC CBOB Dubai Crack at Houston MOC Financial	Month	1	12
DU	CN2WT	USGC CBOB Dubai Crack at Houston MOC Financial	Quarter	1	4
DU	CN2WO	USGC CBOB Financial	Month	0	12
DU	CN2WO	USGC CBOB Financial	Quarter	1	4
DU	CN2WQ	USGC CBOB Financial Time Spread	Month	1	11
DU	CN2WQ	USGC CBOB Financial Time Spread	Quarter	1	3
DU	CN2WP	USGC CBOB vs RBOB Frontline Financial	Month	0	12
DU	CN2WP	USGC CBOB vs RBOB Frontline Financial	Quarter	1	4

DU	CN2WS	USGC CBOB WTI Crack Financial	Month	1	12
DU	CN2WS	USGC CBOB WTI Crack Financial	Quarter	1	4
DU	CN05B	USGC HSFO Waterborne Brent Crack at Houston MOC Financial	Month	1	12
DU	CN05B	USGC HSFO Waterborne Brent Crack at Houston MOC Financial	Quarter	1	4
DU	CN05B	USGC HSFO Waterborne Brent Crack at Houston MOC Financial	Year	1	2
DU	CN05C	USGC HSFO Waterborne Dubai Crack at Houston MOC Financial	Month	1	12
DU	CN05C	USGC HSFO Waterborne Dubai Crack at Houston MOC Financial	Quarter	1	4
DU	CN05C	USGC HSFO Waterborne Dubai Crack at Houston MOC Financial	Year	1	2
DU	CN05D	USGC HSFO Waterborne Financial	Month	0	12
QDU	CN05D	USGC HSFO Waterborne Financial	Month	13	36
FDU	CN05D	USGC HSFO Waterborne Financial	Month	37	84
QDG	CN05D	USGC HSFO Waterborne Financial	Month	85	240
DU	CN05D	USGC HSFO Waterborne Financial	Quarter	1	4
QDU	CN05D	USGC HSFO Waterborne Financial	Quarter	5	12
FDU	CN05D	USGC HSFO Waterborne Financial	Quarter	13	24
DU	CN05D	USGC HSFO Waterborne Financial	Year	1	2
QDU	CN05D	USGC HSFO Waterborne Financial	Year	3	3
FDU	CN05D	USGC HSFO Waterborne Financial	Year	4	6
DU	CN05E	USGC HSFO Waterborne Financial Time Spread	Month	1	11
DU	CN05E	USGC HSFO Waterborne Financial Time Spread	Quarter	1	3
DU	CN05E	USGC HSFO Waterborne Financial Time Spread	Year	1	1
DU	CN05F	USGC HSFO Waterborne WTI Crack Financial	Month	1	12
DU	CN05F	USGC HSFO Waterborne WTI Crack Financial	Quarter	1	4
DU	CN05F	USGC HSFO Waterborne WTI Crack Financial	Year	1	2
QDU	CN3D6	VGO 0.5% Sulfur CIF USGC Barge M2M Financial	Month	1	36
QDU	CN3D7	VGO 2.0% Sulfur CIF USGC Barge M2M Financial	Month	1	36
QDR	CN02P	VGO 2.0%S CIF NWE Financial	Month	1	36
QDR	CN02Q	VGO 2.0%S FOB Rdam barge Financial	Month	1	36
QDU	CN06D	West Texas Sour Crude Financial	Month	1	36

FDU	CN06D	West Texas Sour Crude Financial	Month	37	84
QDG	CN06D	West Texas Sour Crude Financial	Month	85	240
QDU	CN06D	West Texas Sour Crude Financial	Quarter	1	8
QDU	CN06D	West Texas Sour Crude Financial	Year	1	2
DU	CN05G	WTI Frontline at Houston MOC Financial	Month	1	36
FDU	CN05G	WTI Frontline at Houston MOC Financial	Month	37	84
QDG	CN05G	WTI Frontline at Houston MOC Financial	Month	85	240
DU	CN05G	WTI Frontline at Houston MOC Financial	Quarter	1	12
FDU	CN05G	WTI Frontline at Houston MOC Financial	Quarter	13	28
QDG	CN05G	WTI Frontline at Houston MOC Financial	Quarter	29	76
DU	CN05G	WTI Frontline at Houston MOC Financial	Year	1	3
FDU	CN05G	WTI Frontline at Houston MOC Financial	Year	4	7
QDG	CN05G	WTI Frontline at Houston MOC Financial	Year	8	19
DU	CN05H	WTI Frontline at Houston MOC Financial Time Spread	Month	1	35
DU	CN05H	WTI Frontline at Houston MOC Financial Time Spread	Quarter	1	11
DU	CN05H	WTI Frontline at Houston MOC Financial Time Spread	Year	1	2
DR	CN01W	WTI Frontline at London MOC Financial	Month	0	36
FDE	CN01W	WTI Frontline at London MOC Financial	Month	37	84
QDG	CN01W	WTI Frontline at London MOC Financial	Month	85	240
DR	CN01W	WTI Frontline at London MOC Financial	Quarter	1	12
FDE	CN01W	WTI Frontline at London MOC Financial	Quarter	13	28
DR	CN01W	WTI Frontline at London MOC Financial	Year	1	3
FDE	CN01W	WTI Frontline at London MOC Financial	Year	4	7
DR	CN01X	WTI Frontline at London MOC Financial Time Spread	Month	1	35
DR	CN01X	WTI Frontline at London MOC Financial Time Spread	Quarter	1	11
DR	CN01X	WTI Frontline at London MOC Financial Time Spread	Year	1	2
QDA	CN0Q1	WTI Frontline at Spore MOC Financial	Month	1	36
FDA	CN0Q1	WTI Frontline at Spore MOC Financial	Month	37	84
QDA	CN0Q1	WTI Frontline at Spore MOC Financial	Quarter	1	12

FDA	CN0Q1	WTI Frontline at Spore MOC Financial	Quarter	13	28
QDA	CN0Q1	WTI Frontline at Spore MOC Financial	Year	1	3
FDA	CN0Q1	WTI Frontline at Spore MOC Financial	Year	4	7
DU	CN05I	WTI Frontline vs Brent Frontline at Houston MOC Financial	Month	1	36
DU	CN05I	WTI Frontline vs Brent Frontline at Houston MOC Financial	Quarter	1	12
DU	CN05I	WTI Frontline vs Brent Frontline at Houston MOC Financial	Year	1	3
DR	CN01Y	WTI Frontline vs Brent Frontline at London MOC Financial	Month	0	36
DR	CN01Y	WTI Frontline vs Brent Frontline at London MOC Financial	Quarter	1	12
DR	CN01Y	WTI Frontline vs Brent Frontline at London MOC Financial	Year	1	3
DU	CN05J	WTI Frontline vs Dubai Frontline at Houston MOC Financial	Month	1	36
DU	CN05J	WTI Frontline vs Dubai Frontline at Houston MOC Financial	Quarter	1	12
DU	CN05J	WTI Frontline vs Dubai Frontline at Houston MOC Financial	Year	1	3
DU	CN05K	WTI Frontline vs Dubai Frontline at Houston MOC Financial Time Spread	Month	1	35
DU	CN05K	WTI Frontline vs Dubai Frontline at Houston MOC Financial Time Spread	Quarter	1	11
DU	CN05K	WTI Frontline vs Dubai Frontline at Houston MOC Financial Time Spread	Year	1	2
QDU	CN0RO	WTI Midland Financial	Month	1	36
FDU	CN0RO	WTI Midland Financial	Month	37	84
QDG	CN0RO	WTI Midland Financial	Month	85	240

Revision history

Dec 2022: Additional curves

May 2022: Additional curves

March 2022: Additional curves

October 2020: Update table of contents

September 2020: Additional Curves

October 2019: Additional Curves

August 2019: Removed curves

May 2019: Complete rewrite

December 2016: Additional Curves

February 2016: Alignment to Platts Standard documentation

January 2016: First Version

Methodology

<https://www.spglobal.com/commodityinsights/en/our-methodology/methodology-specifications/oil>

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