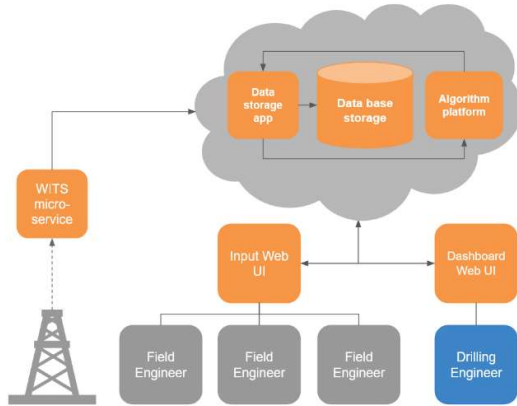


### MWD STD platform

is a cloud platform for fully automatic MWD survey processing and correction. The platform delivers the most accurate wellbore positioning by the outstanding correction and quality check for MWD surveys in **real-time automatic mode**. The Web UI provides multiple-user data access, performance monitoring, and comprehensive reporting.



### Real-Time Services

MWD STD platform delivers all types of MWD survey corrections and quality checks in real-time:



### Automation

Under normal conditions, the MWD STD platform does not require human supervision. The platform continuously evaluates quality of the surveys, MSA performance, correction accuracy, actual trajectory vs plan: if something goes wrong, the system will alert you through the dashboard.

Client 1 - Oilfield 1 - Pad 1 - W2 - BH1 - R1											
Last survey					Plan deviation at total depth						
MD, m	Inc. °	Az. °	DIS, Y30m	TD, m	TVD, m	NS, m	EW, m	dInc. °	dAz. °	dTVD, m	dH, m
1,229.45	3.42	85.31	2.25	1,229.45	1,229.42	0.18	1.42	1.48	0.20	0.43	0.94
QC				Total G	Total B	Dip					
Toolcode				MWD_Rev1_MSA1_SAG2_HD0							

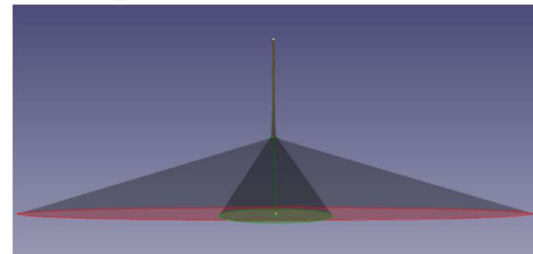
Demo - Demo Field - Demo - High AIZ - BH1 - 3											
Last survey					Plan deviation at total depth						
MD, m	Inc. °	Az. °	DIS, Y30m	TD, m	TVD, m	NS, m	EW, m	dInc. °	dAz. °	dTVD, m	dH, m
2,000.00	90.12	73.35		2,000.00	1,089.09	309.09	1,157.97	0.12	0.35	-1.17	1.21
QC				Total G	Total B	Dip					
Toolcode				MWD_Rev1_MSA1_HD0							

Demo - Demo Field - Demo - High MXY East - BH1 - 3											
Last survey					Plan deviation at total depth						
MD, m	Inc. °	Az. °	DIS, Y30m	TD, m	TVD, m	NS, m	EW, m	dInc. °	dAz. °	dTVD, m	dH, m
2,000.00	90.02	77.36		2,000.00	1,090.03	291.54	1,162.29	0.02	2.36	-0.22	19.22
QC				Total G	Total B	Dip					
Toolcode				MWD_Rev1_POOR_HD0							

### Accuracy

The novel robust drillstring interference prediction<sup>1</sup>, along trajectory geomagnetic reference, pre-correction setup, the most accurate next generation MSA correction algorithm<sup>2</sup>, and declination error estimation provide ultimate accuracy for MWD survey correction. That solid stack of the algorithms ensures superior horizontal accuracy for the wellbore positioning.



MSA performance comparison: conventional MSA correction (red) and the novel algorithm (green)

1. Novel method to predict drillstring interference, K. Bulychenkov, 52<sup>th</sup> General ISCWSA Meeting, October 21rd, 2020

2. Novel MSA Correction, K. Bulychenkov, 54<sup>th</sup> General ISCWSA Meeting, October 7rd, 2021