Schlumberger

GEOFRAME
PROCESSED
INTERPRETATION

TADPOLE PLOT

SCALE 1:240

*A Mark of Schlumberger

Using the following logs: FMI–GR

COMPANY: JOGMEC
WELL: AURORA/JOGMEC/NRCAN MALLIK 2L–38
FIELD: MALLIK
County:
State:
COUNTRY: CANADA
Date Logged: 6–Mar–2007 Date Processed: 12–Mar–2007
Well Location:

Elevations: KB: 10.55m DF: 10.25m GL: 1m

API Number: 1163 Job Number: 10644

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

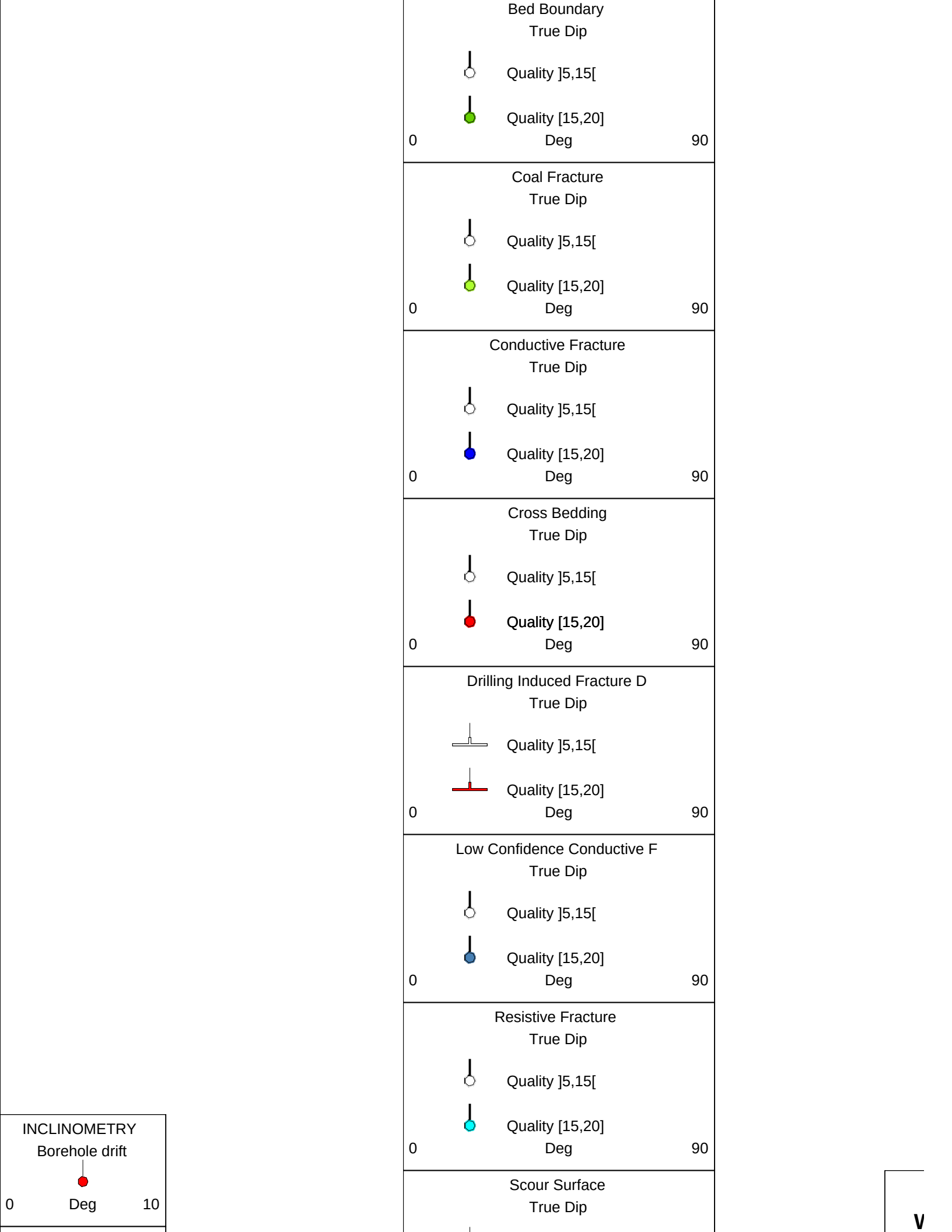
Field Recording:	Location:	Software Version: 14C0–302	Engineer:
Office Recording:	ICS Center: CALGARY DCS	Baseline: GF 4.3	Log Analyst: P.S./H.T.

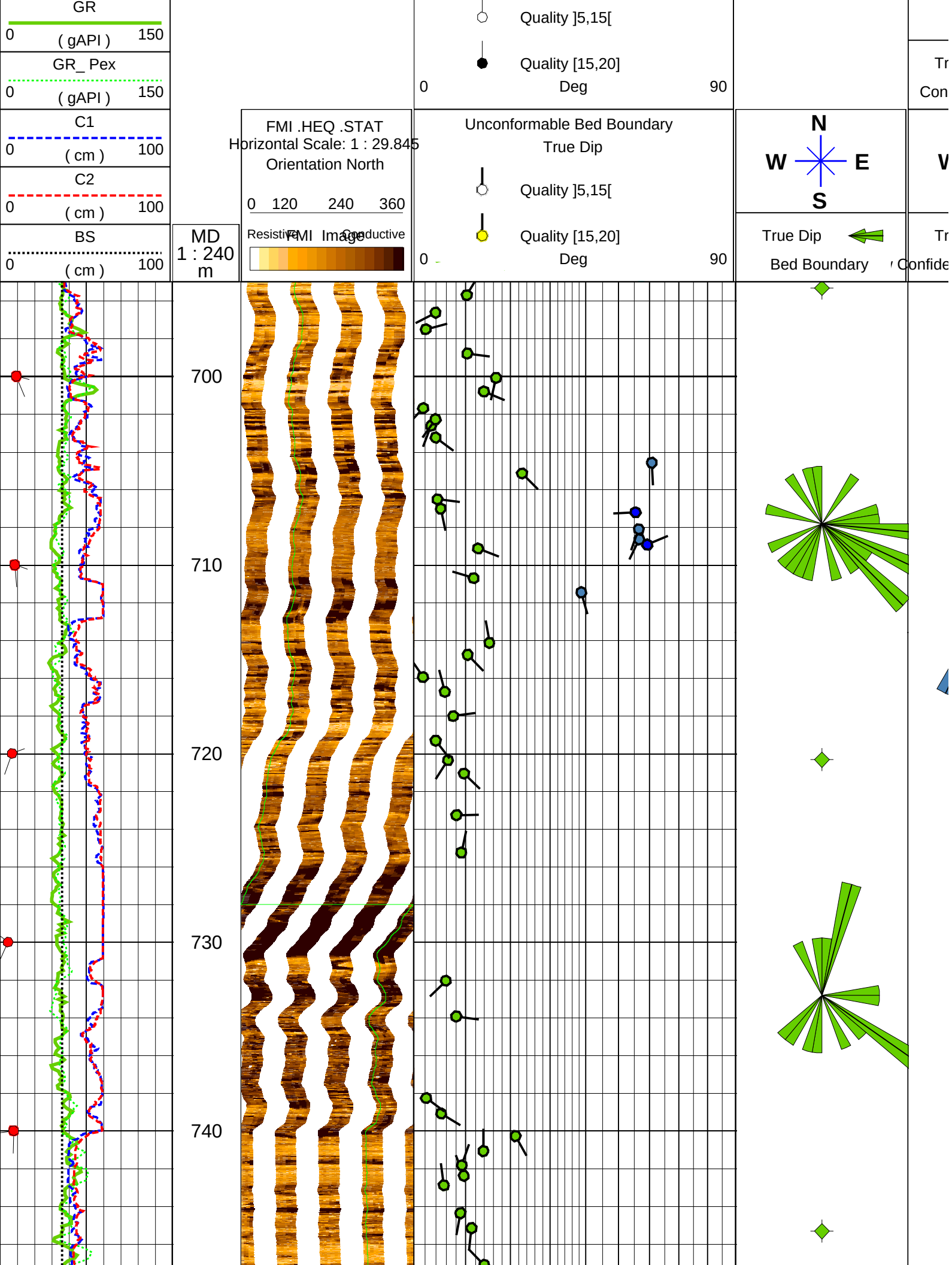
Mud and Borehole Measurements:

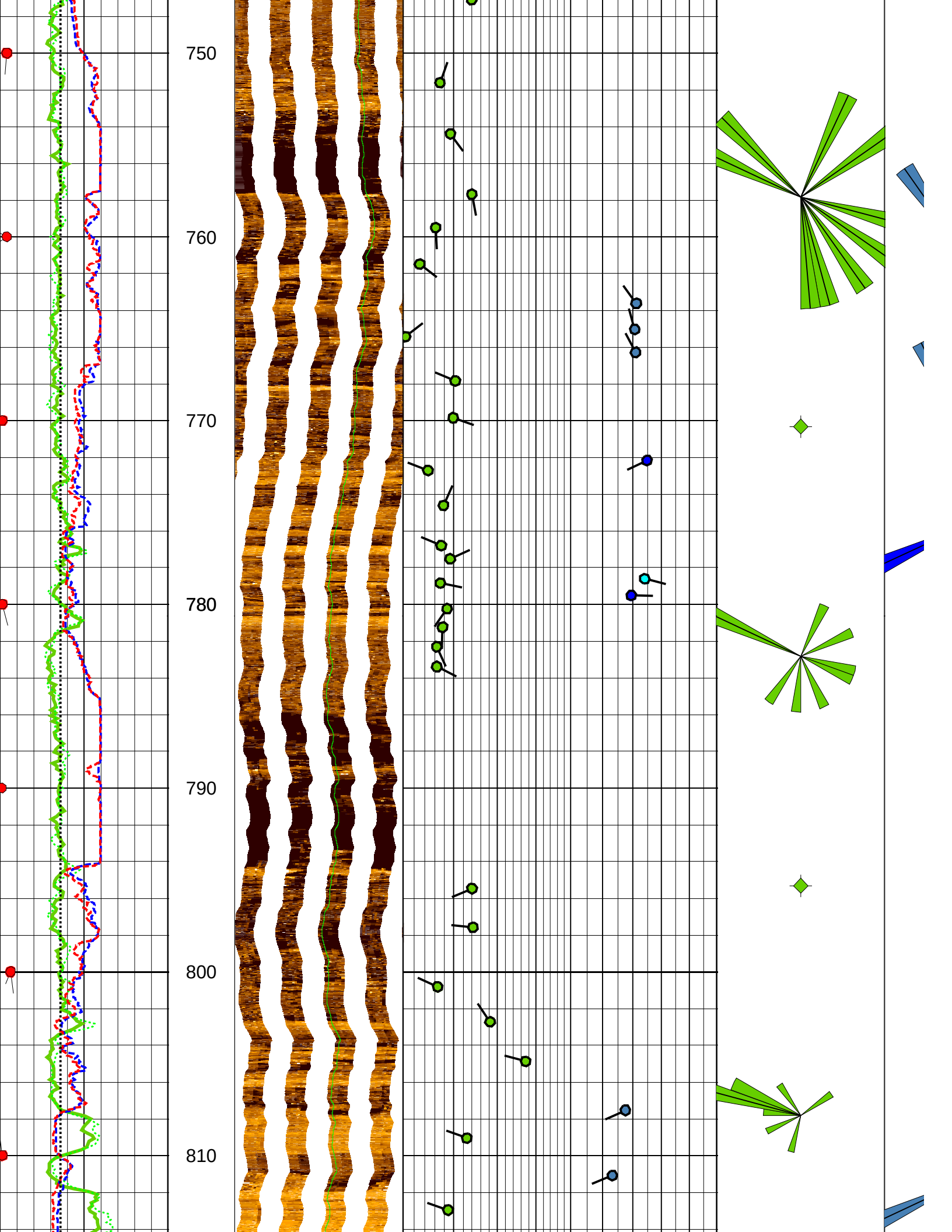
Rm @ Measured Temperature: @	BHT: 13degC	Bitsize: 36.195cm
Rmf @ Measured Temperature: @	Type Fluid in Hole:	
Rmc @ Measured Temperature: @	Mud Density: 1.115g/cm3	

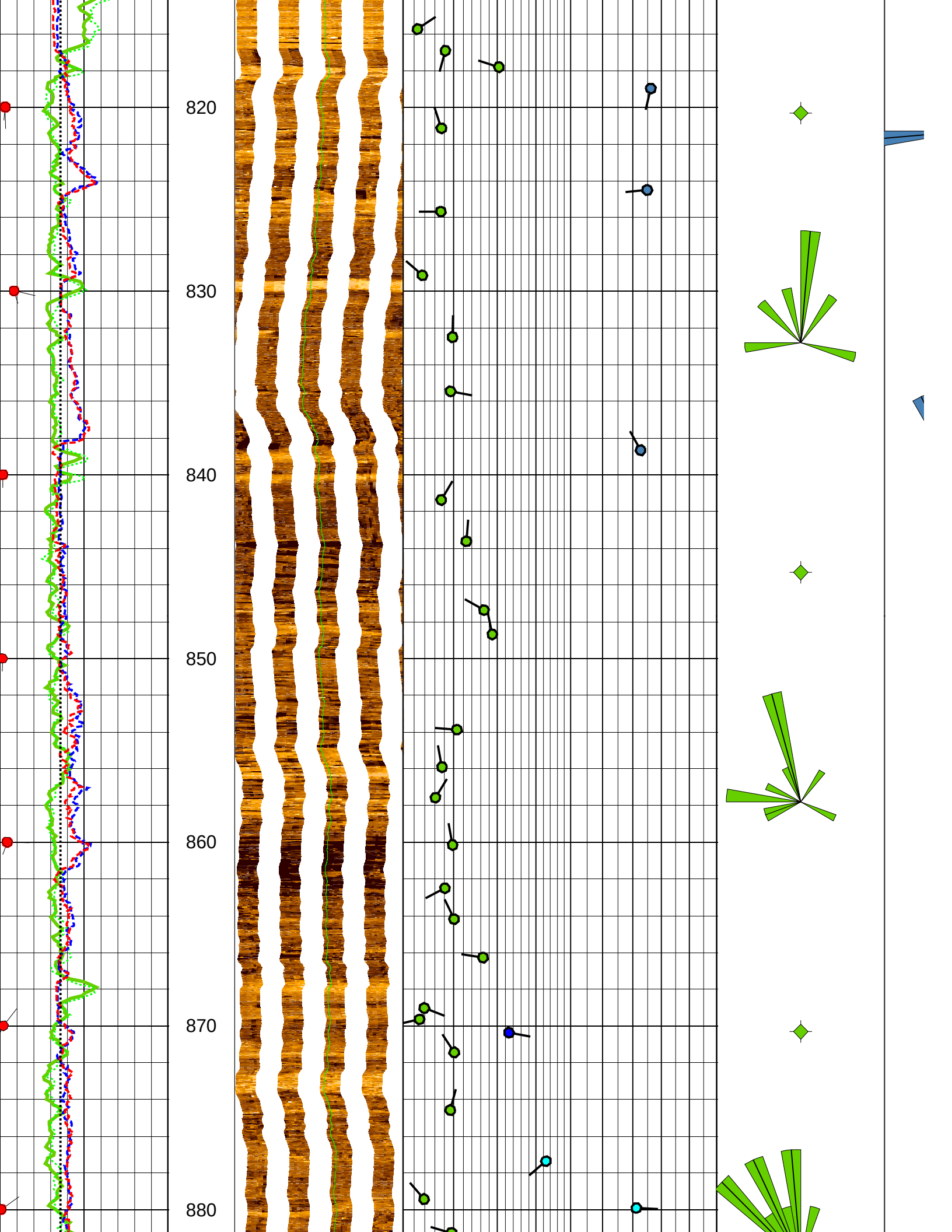
Remarks:

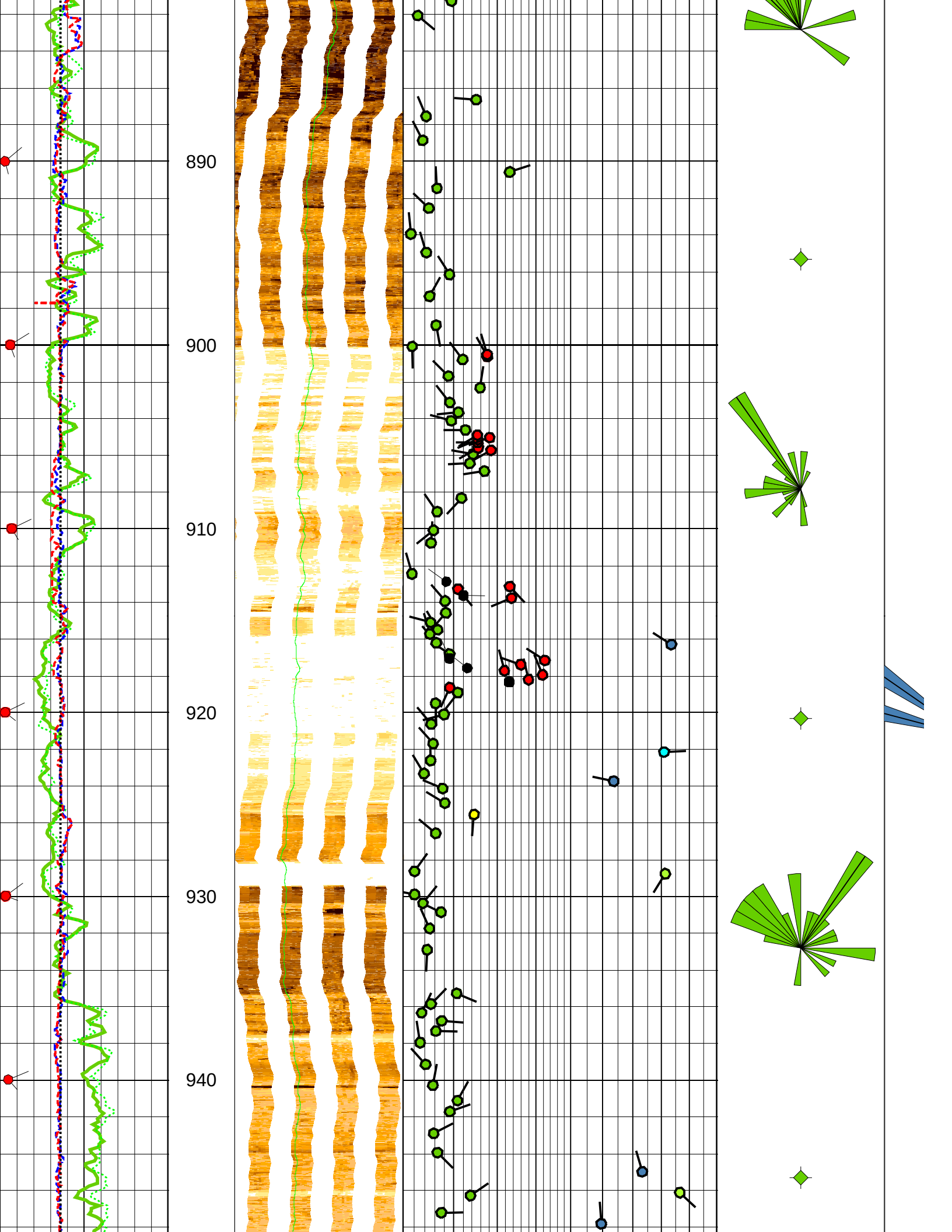
ALL DIPS MANUALLY PICKED
THANK YOU FOR CHOOSING SCHLUMBERGER

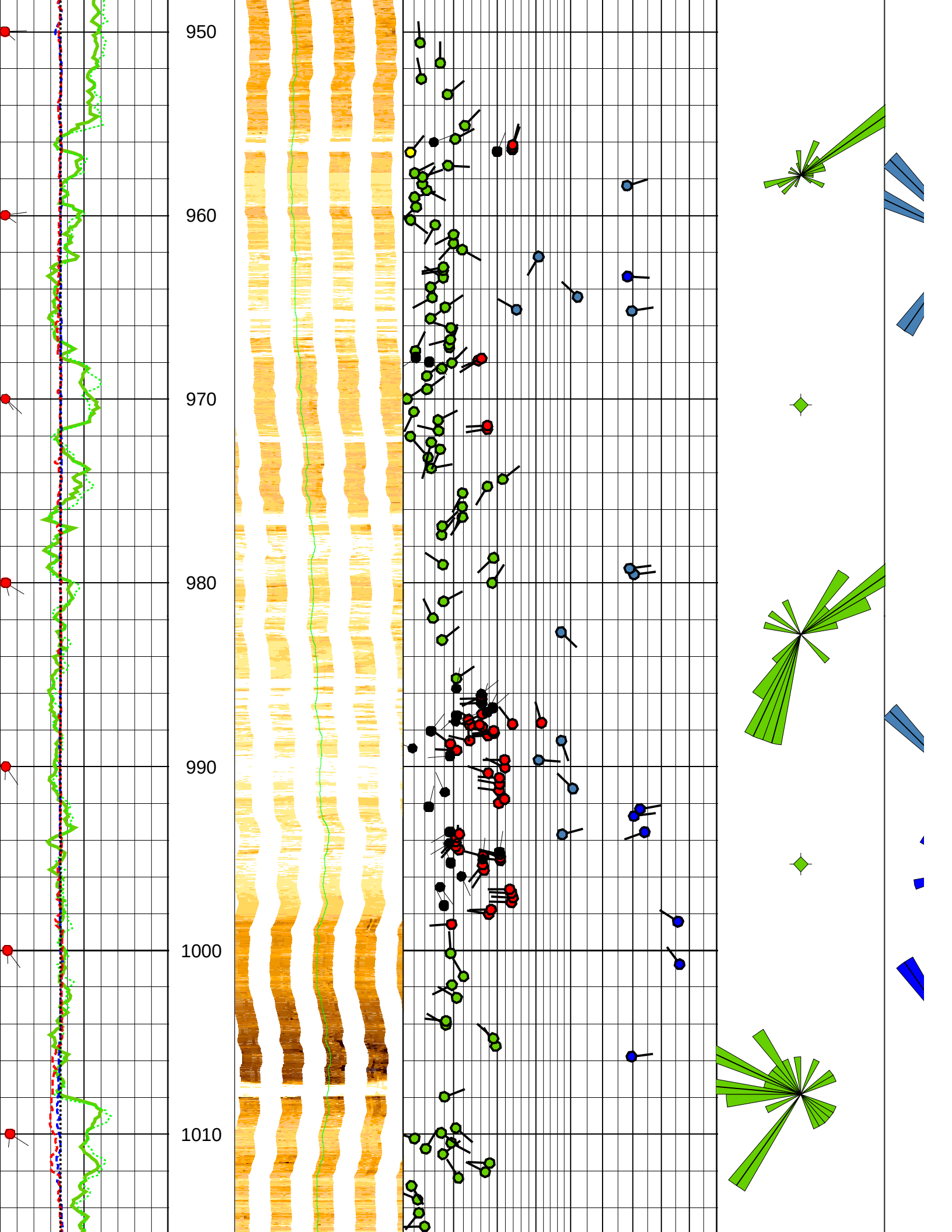

Bed Boundary
True Dip
Quality]5,15[
Quality [15,20]
0
Deg
90
Coal Fracture
True Dip
Quality]5,15[
Quality [15,20]
0
Deg
90
Conductive Fracture
True Dip
Quality]5,15[
Quality [15,20]
0
Deg
90
Cross Bedding
True Dip
Quality]5,15[
Quality [15,20]
0
Deg
90
Drilling Induced Fracture D
True Dip
Quality]5,15[
Quality [15,20]
0
Deg
90
Low Confidence Conductive F
True Dip
Quality]5,15[
Quality [15,20]
0
Deg
90
Resistive Fracture
True Dip
Quality]5,15[
Quality [15,20]
0
Deg
90
Scour Surface
True Dip
INCLINOMETRY
Borehole drift
0
Deg
10

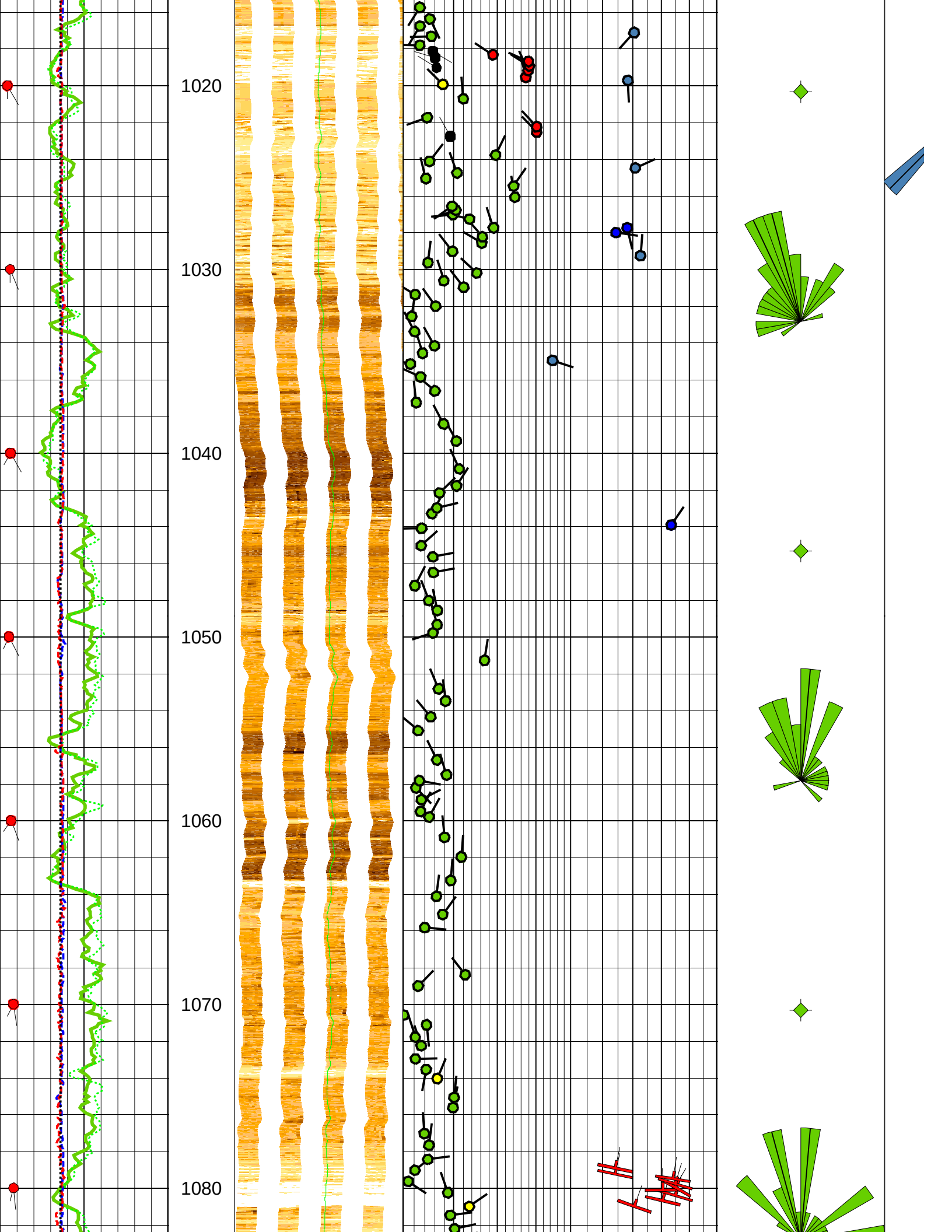

GR
0
(gAPI)
150
GR_ Pex
0
(gAPI)
150
C1
0
(cm)
100
C2
0
(cm)
100
BS
0
(cm)
100
MD
1 : 240
m
700
710
720
730
740
FMI .HEQ .STAT
Horizontal Scale: 1 : 29.845
Orientation North
0 120 240 360
Resistive
FMI Image
Conductive
Quality]5,15[
Quality [15,20]
0
Deg
90
Unconformable Bed Boundary
True Dip
Quality]5,15[
Quality [15,20]
0
Deg
90
N
W
E
S
True Dip
Bed Boundary

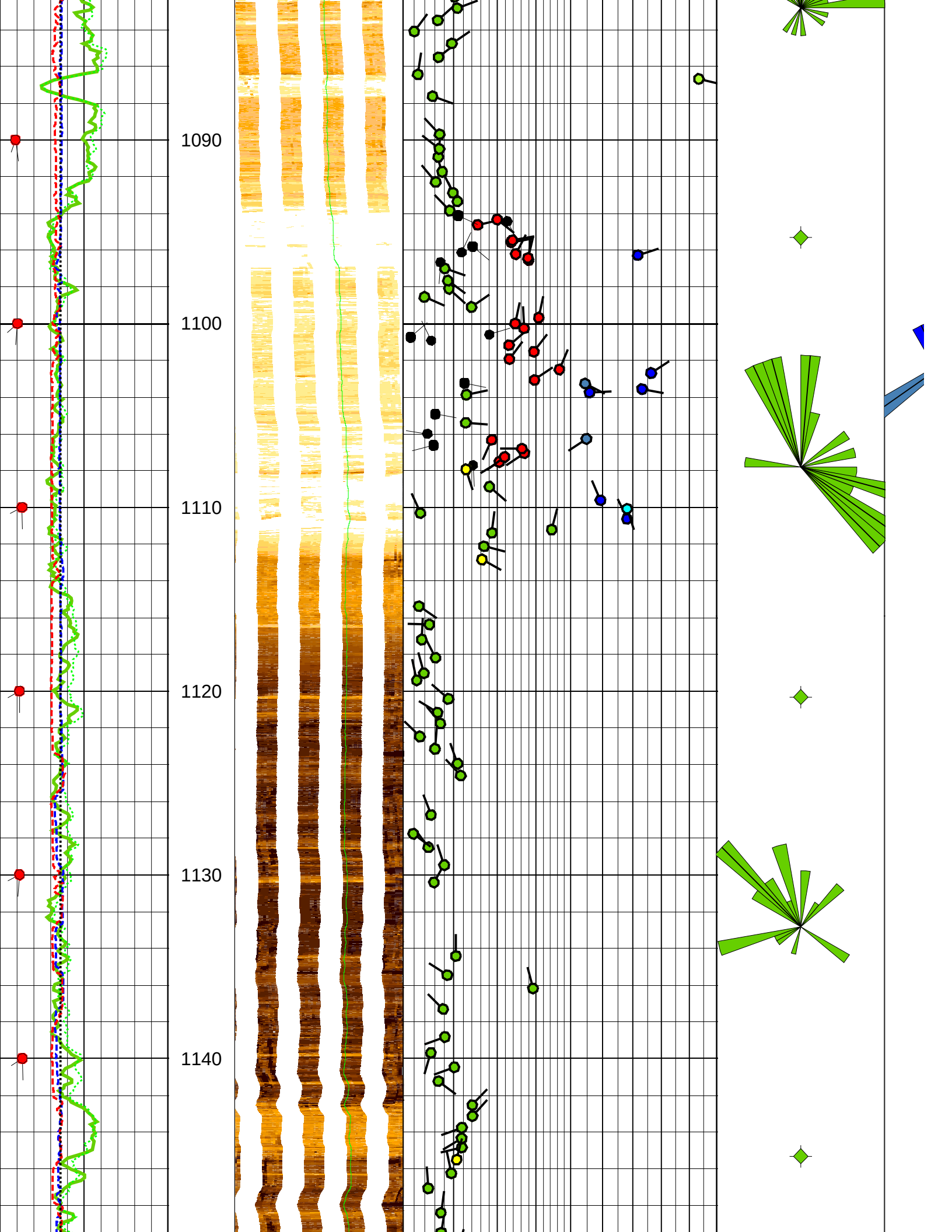

750
760
770
780
790
800
810

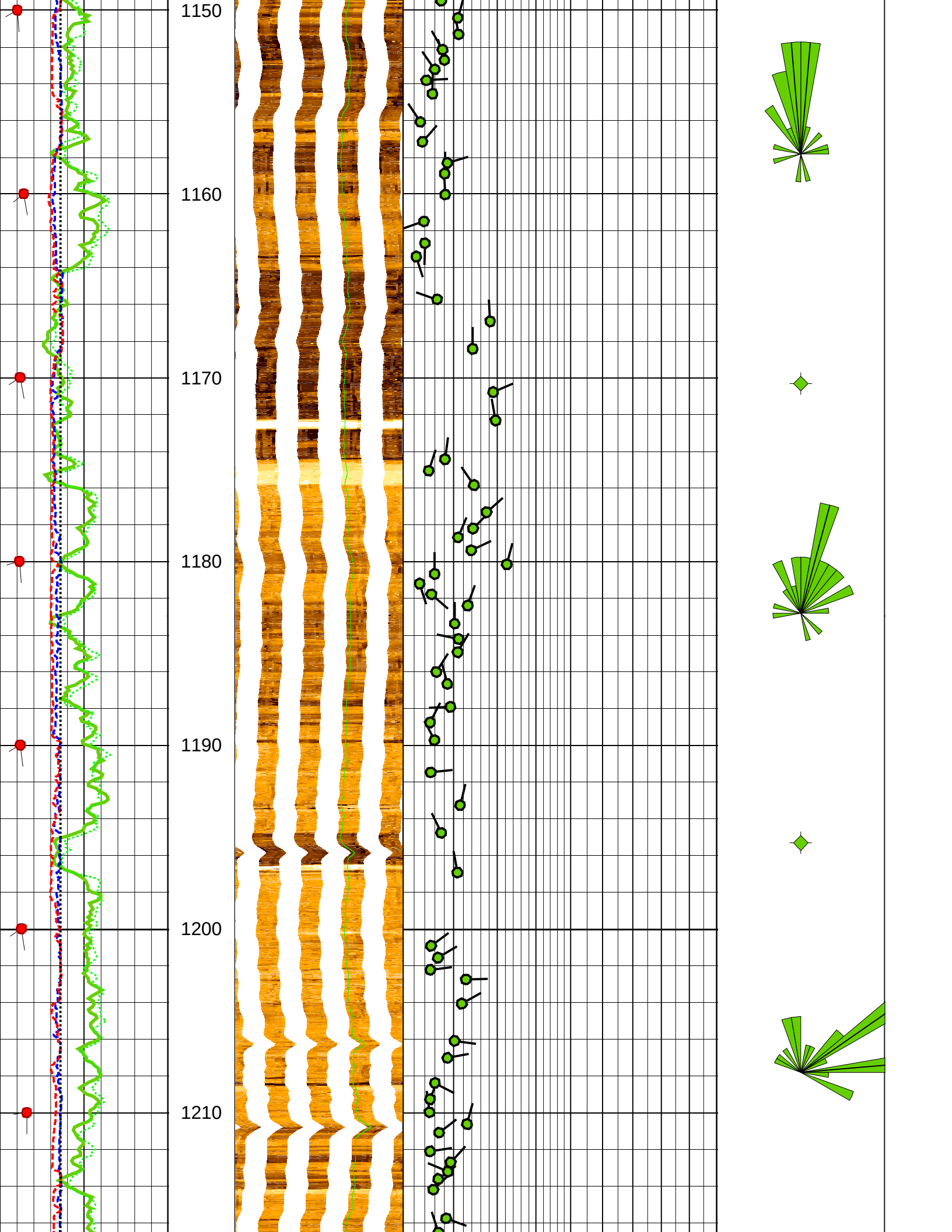

820
830
840
850
860
870
880

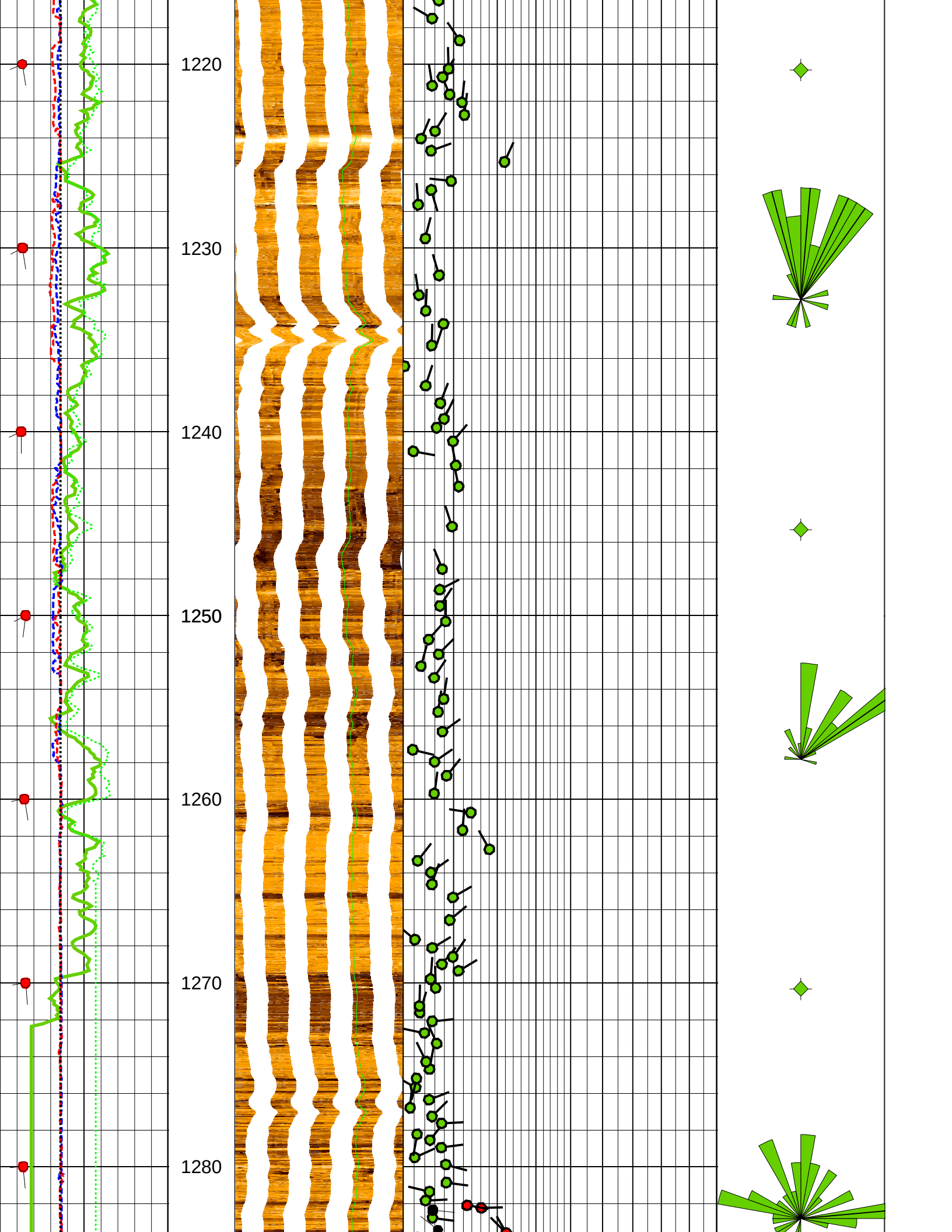

890
900
910
920
930
940

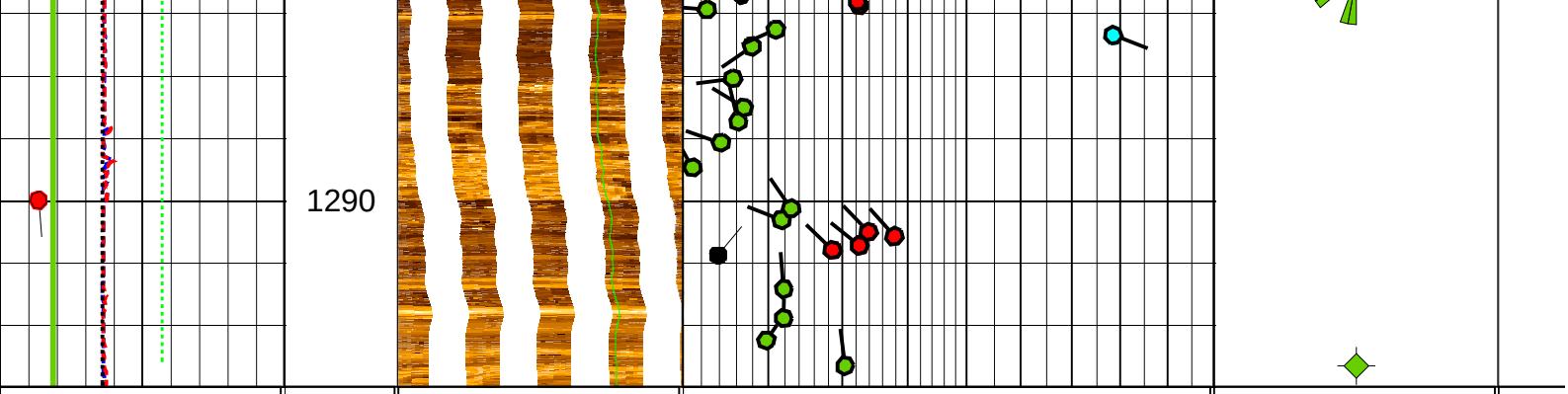

950
960
970
980
990
1000
1010


1020
1030
1040
1050
1060
1070
1080


1090
1100
1110
1120
1130
1140


1150
1160
1170
1180
1190
1200
1210


1220
1230
1240
1250
1260
1270
1280



BS
0 (cm) 100

C2
0 (cm) 100

C1
0 (cm) 100

GR_ Pex
0 (gAPI) 150

GR
0 (gAPI) 150

INCLINOMETRY
Borehole drift
0 Deg 10

MD
1 : 240
m

FMI .HEQ .STAT
Horizontal Scale: 1 : 29.845
Orientation North
0 120 240 360
Resistive FMI Image Conductive

Unconformable Bed Boundary
True Dip
Quality]5,15[
Quality [15,20]
0 Deg 90

Scour Surface
True Dip
Quality]5,15[
Quality [15,20]
0 Deg 90

Resistive Fracture
True Dip
Quality]5,15[
Quality [15,20]
0 Deg 90

Low Confidence Conductive F
True Dip
Quality]5,15[
Quality [15,20]
0 Deg 90

Drilling Induced Fracture D
True Dip
Quality]5,15[
Quality [15,20]
0 Deg 90

Cross Bedding
True Dip
Quality]5,15[
Quality [15,20]
0 Deg 90

N
W E
S

True Dip
Bed Boundary

Conductive Fracture
True Dip

Quality]5,15[

Quality [15,20]

0 Deg 90

Coal Fracture
True Dip

Quality]5,15[

Quality [15,20]

0 Deg 90

Bed Boundary
True Dip

Quality]5,15[

Quality [15,20]

0 Deg 90

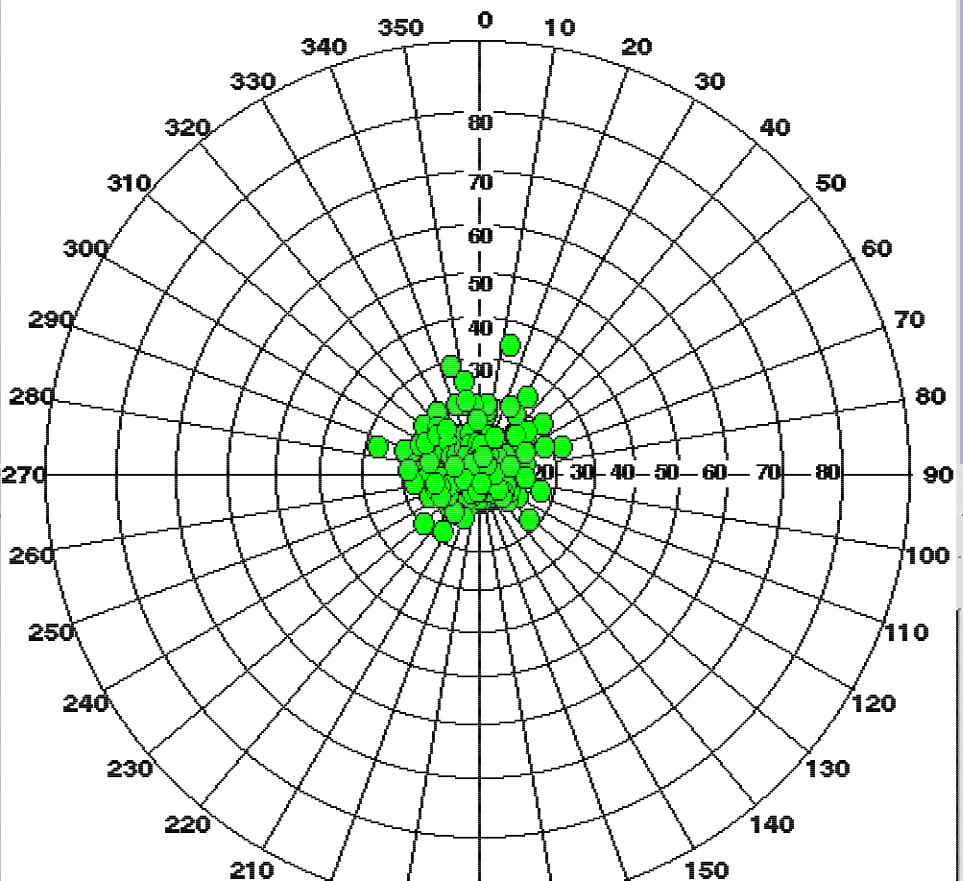
UPPER HEMISPHERE - WULFF PROJECTION

Top Dip = 691.20 m
Bottom Dip = 2727301.75 m

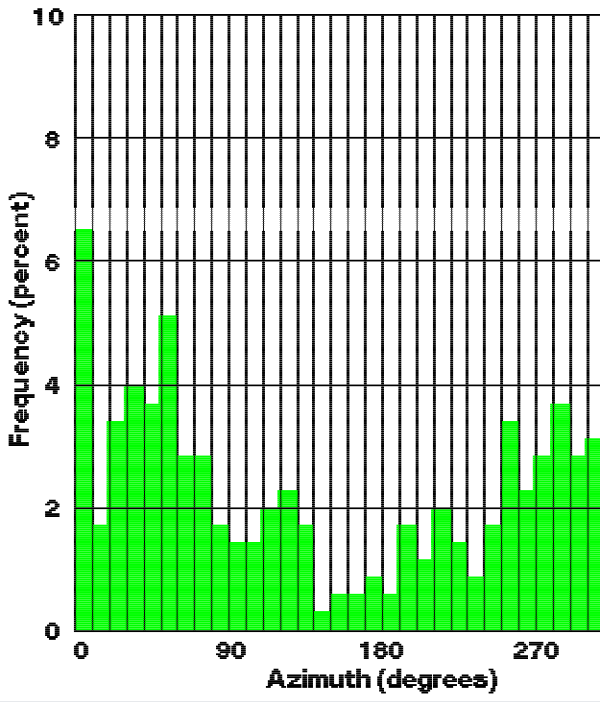
Top Zone = 781.43 m
Bottom Zone = 1180.03 m

Geological Objects:

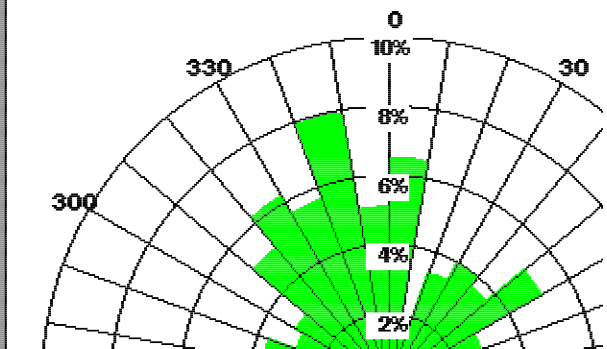
Set Name	Nb of Dips	Great Circle (Dip & Azimuth)	Mean Orientation (Dip & Azimuth)
Bed Boundary...	354	86.4/161.2	3.6/344.4
(Full set)	545	86.7/171.5	3.3/358.1

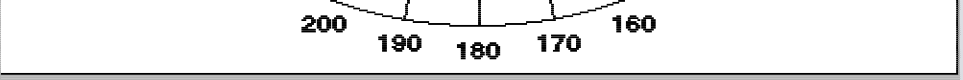


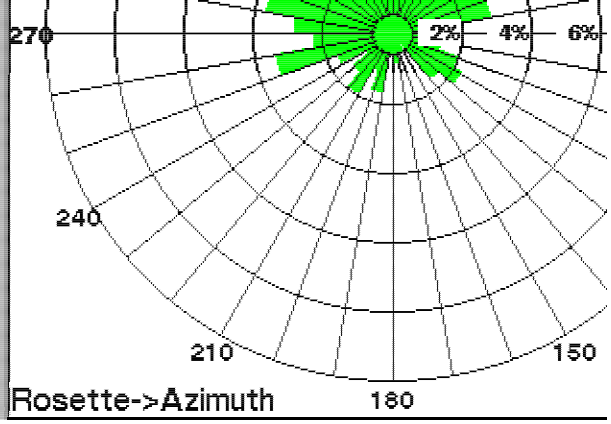
Histogram -> Azimuth



Rosette -> Azimuth







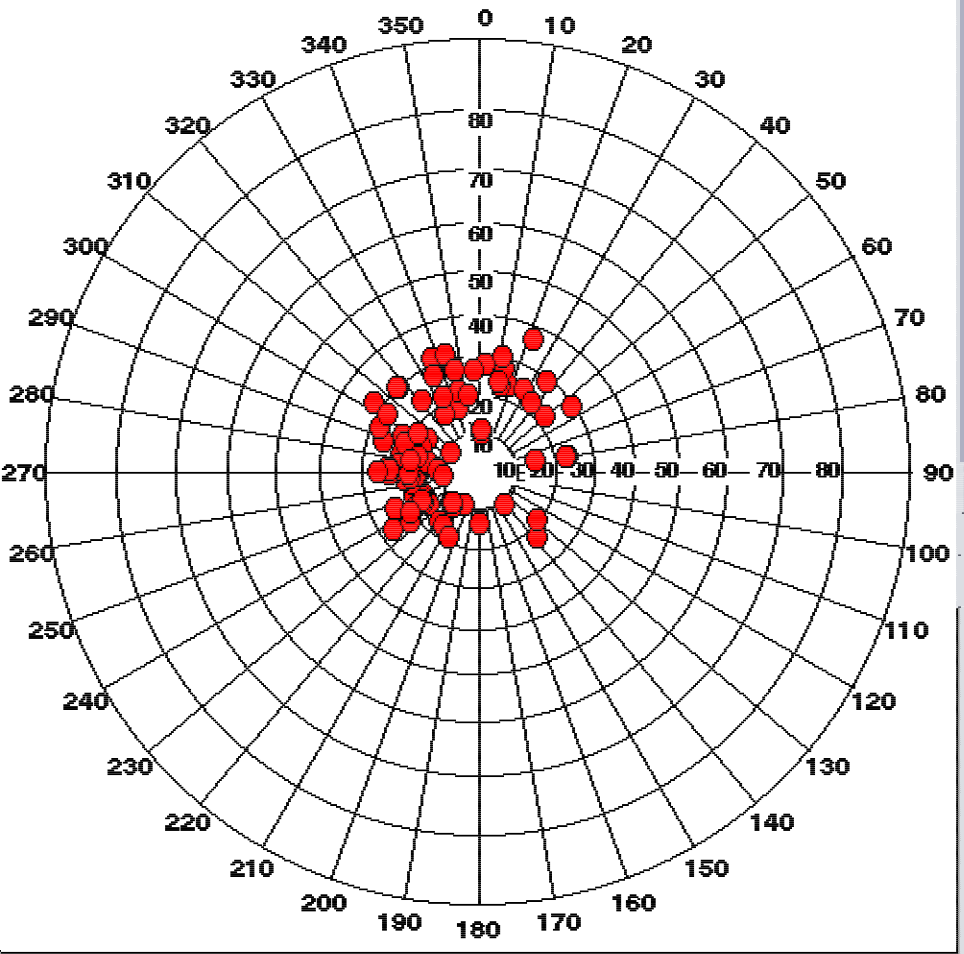
UPPER HEMISPHERE - WULFF PROJECTION

Top Dip = 900.46 m
Bottom Dip = 1291.66 m

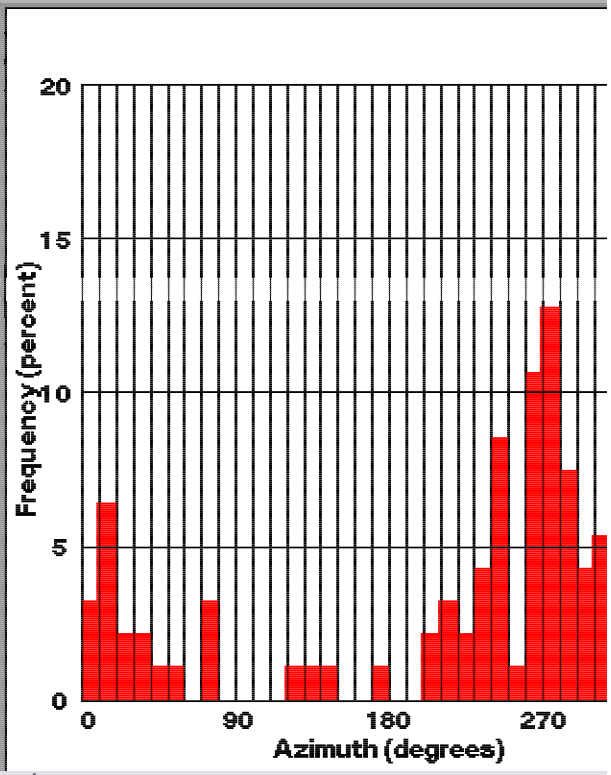
Top Zone = 781.43 m
Bottom Zone = 1180.03 m

Geological Objects:

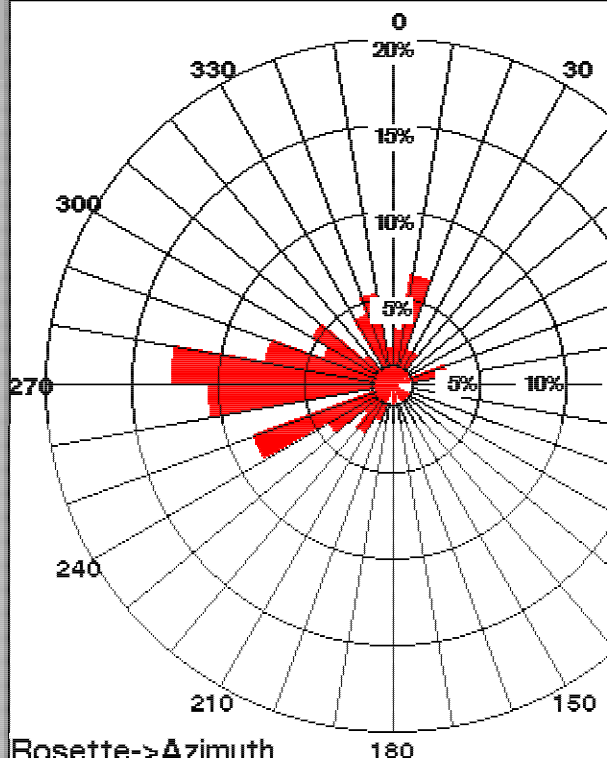
	Set Name	Nb of Dips	Great Circle (Dip & Azimuth)	Mean Orientation (Dip & Azimuth)
●	Cross Bedding...	94	78.7/131.1	11.6/299.7
●	(Full set)	102	78.4/132.4	11.8/302.5



Histogram -> Azimuth



Rosette -> Azimuth



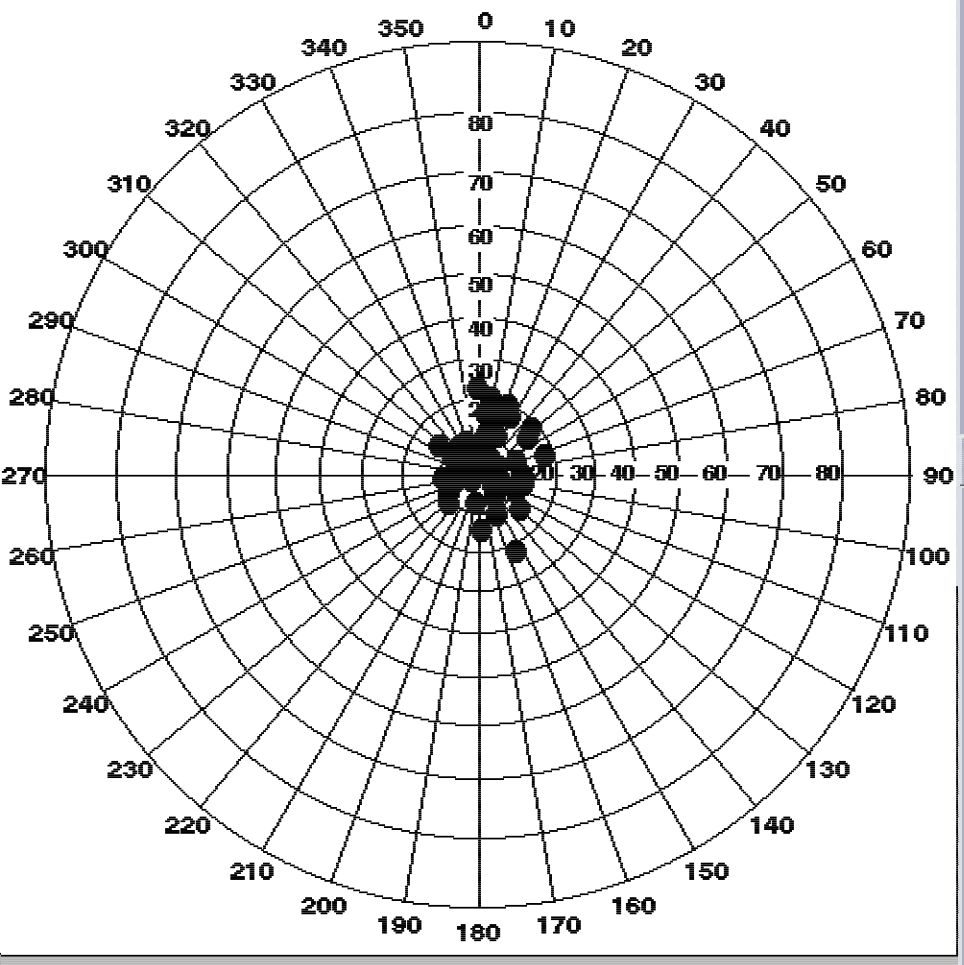
UPPER HEMISPHERE - WULFF PROJECTION

Top Dip = 912.86 m
Bottom Dip = 1291.78 m

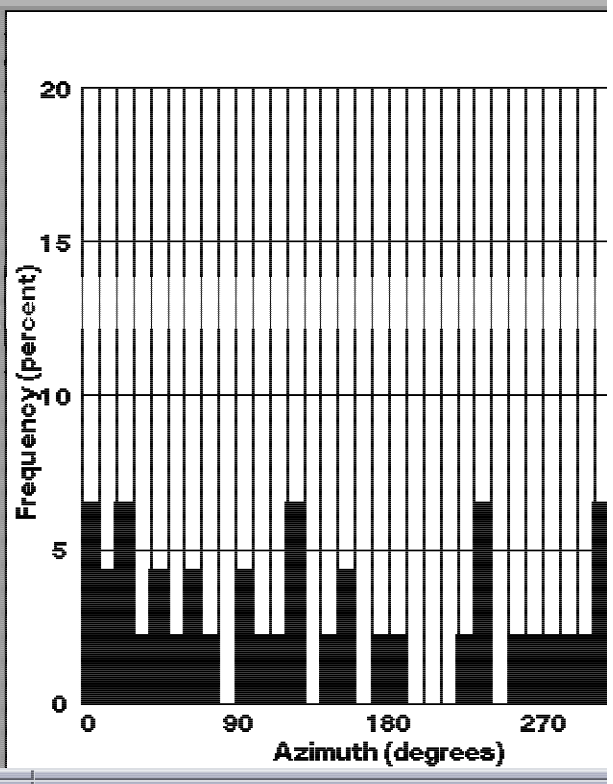
Top Zone = 781.43 m
Bottom Zone = 1160.03 m

Geological Objects:

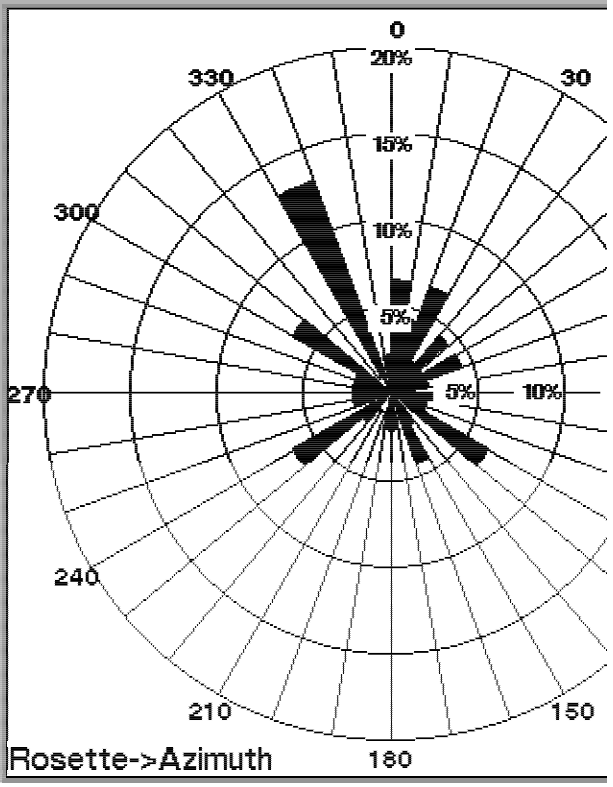
Set Name	Nb of Dips	Great Circle (Dip & Azimuth)	Mean Orientation (Dip & Azimuth)
Scour Surface	46	88.4/273.2	3.5/30.2
(Full set)	49	88.4/272.4	3.4/30.0



Histogram -> Azimuth



Rosette -> Azimuth



UPPER HEMISPHERE - WULFF PROJECTION

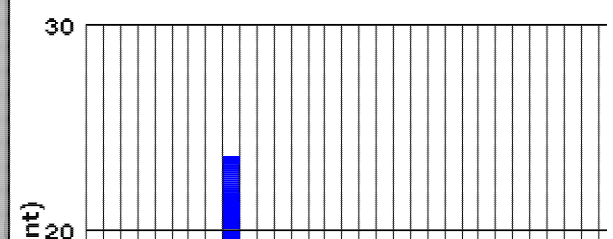
Top Dip = 706.78 m
Bottom Dip = 1110.91 m

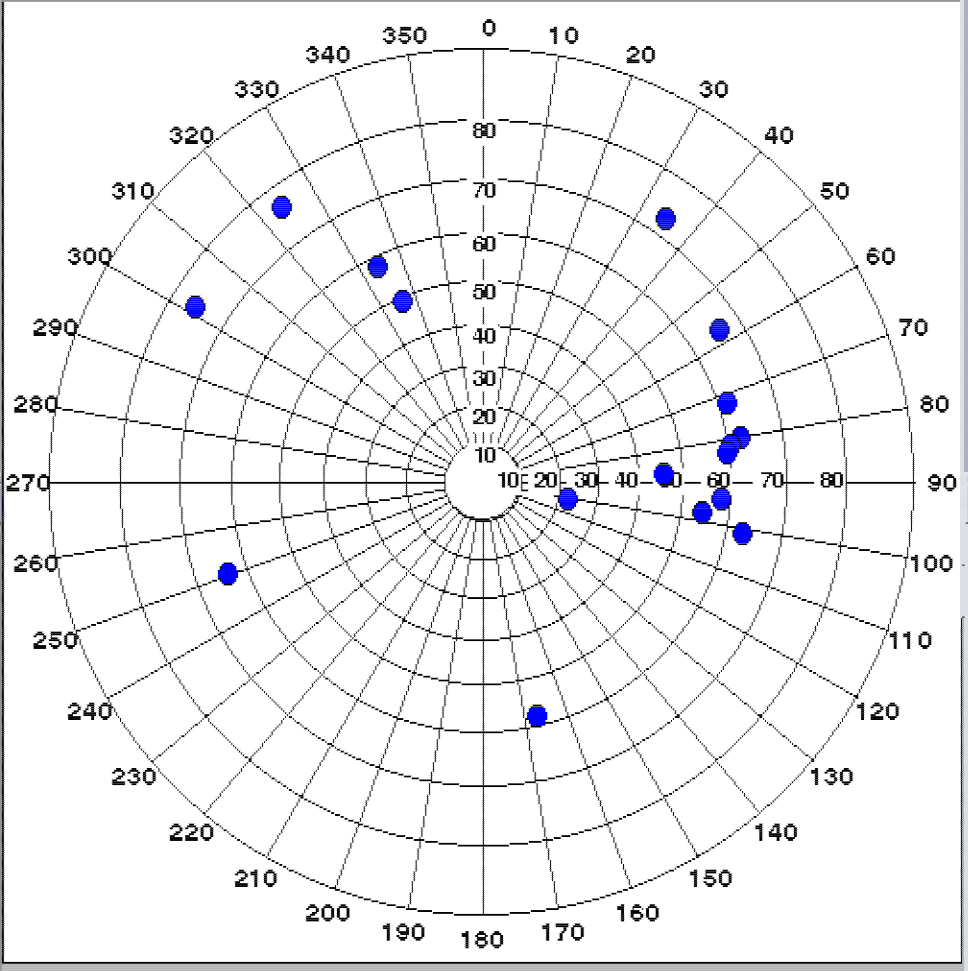
Top Zone = 781.43 m
Bottom Zone = 1160.03 m

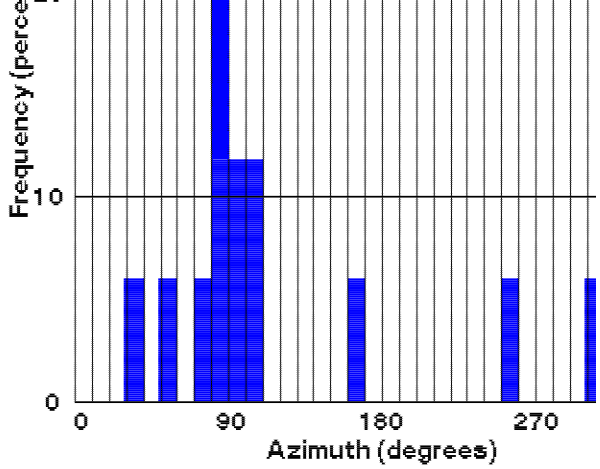
Geological Objects:

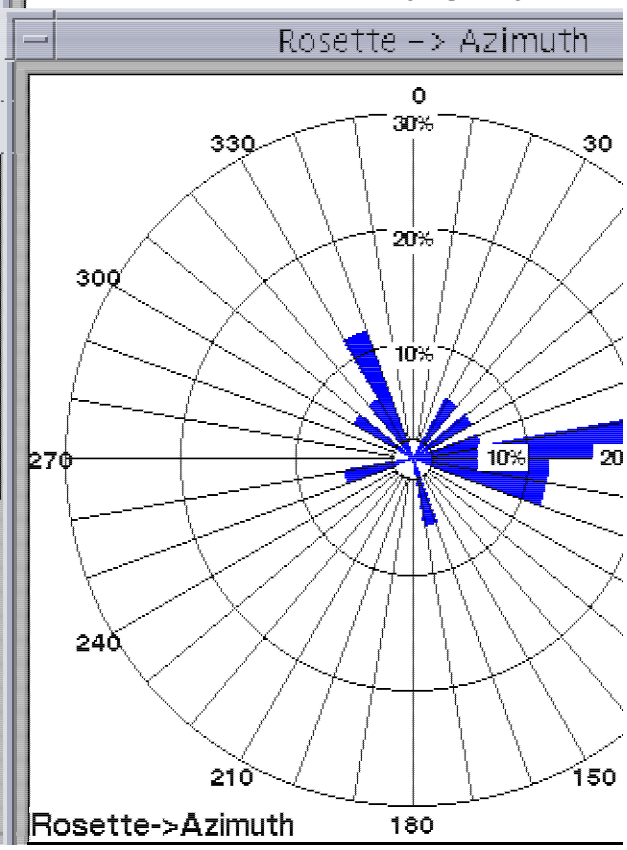
Set Name	Nb of Dips	Great Circle (Dip & Azimuth)	Mean Orientation (Dip & Azimuth)
Conductive Fra...	17	41.9/215.7	60.3/86.1
(Full set)	21	50.6/196.4	65.0/83.9

Histogram -> Azimuth









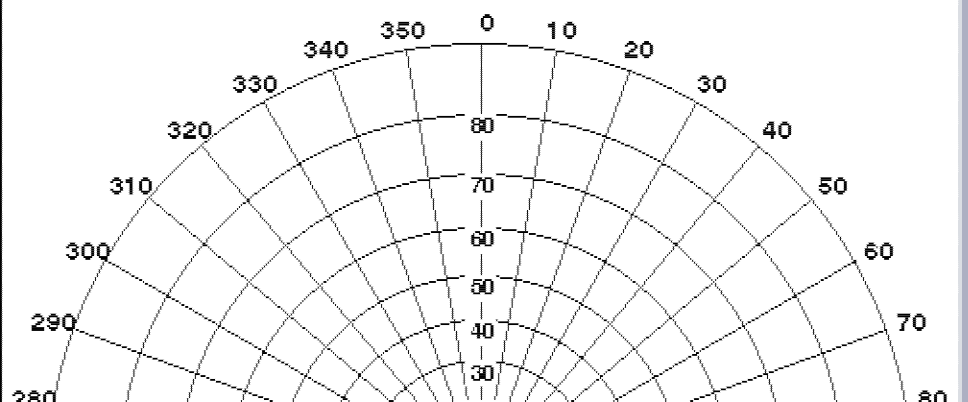
UPPER HEMISPHERE - WULFF PROJECTION

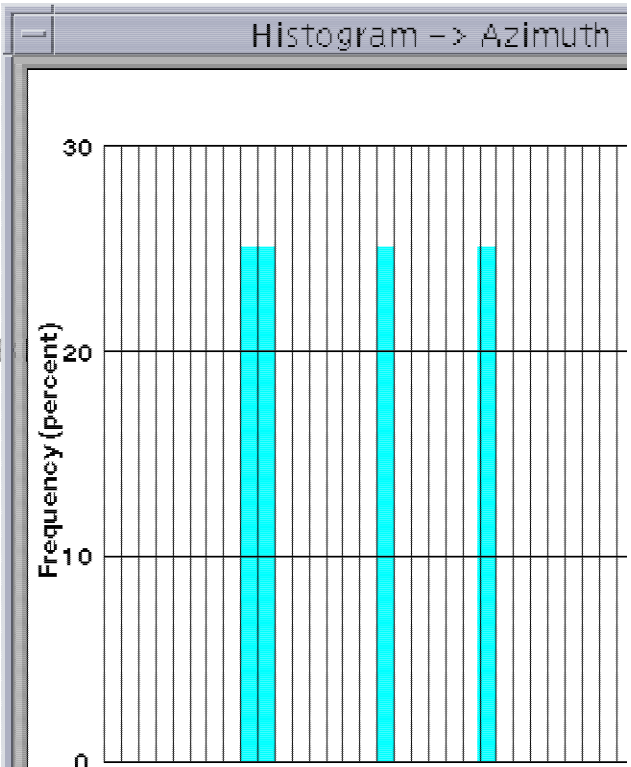
Top Dip = 694.36 m
Bottom Dip = 1285.21 m

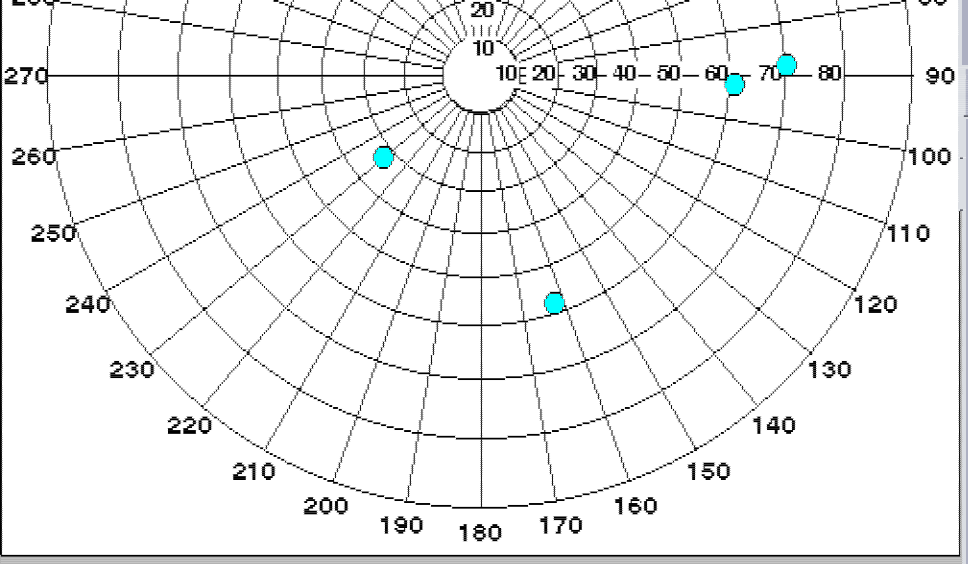
Top Zone = 781.43 m
Bottom Zone = 1180.03 m

Geological Objects:

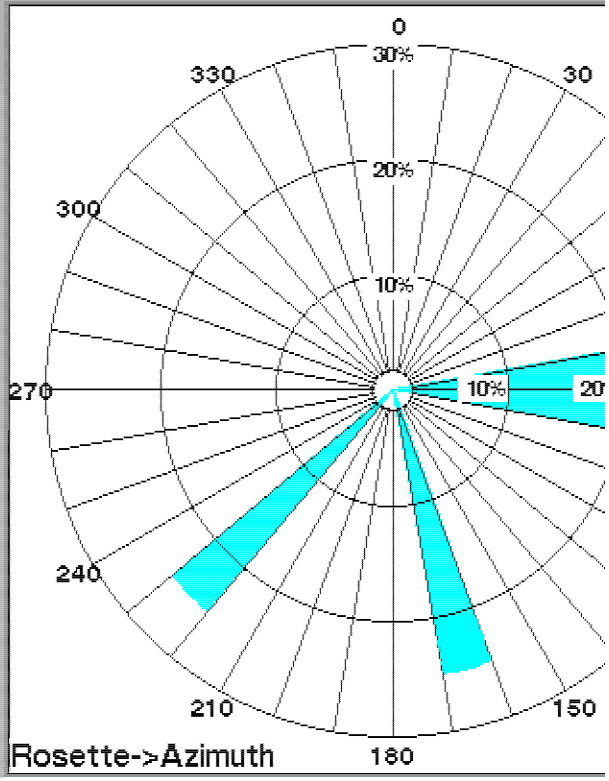
Set Name	Nb of Dips	Great Circle (Dip & Azimuth)	Mean Orientation (Dip & Azimuth)
Resistive Fract...	4	53.2/348.6	53.4/112.3
(Full set)	7	59.2/0.8	69.5/103.7







Rosette -> Azimuth



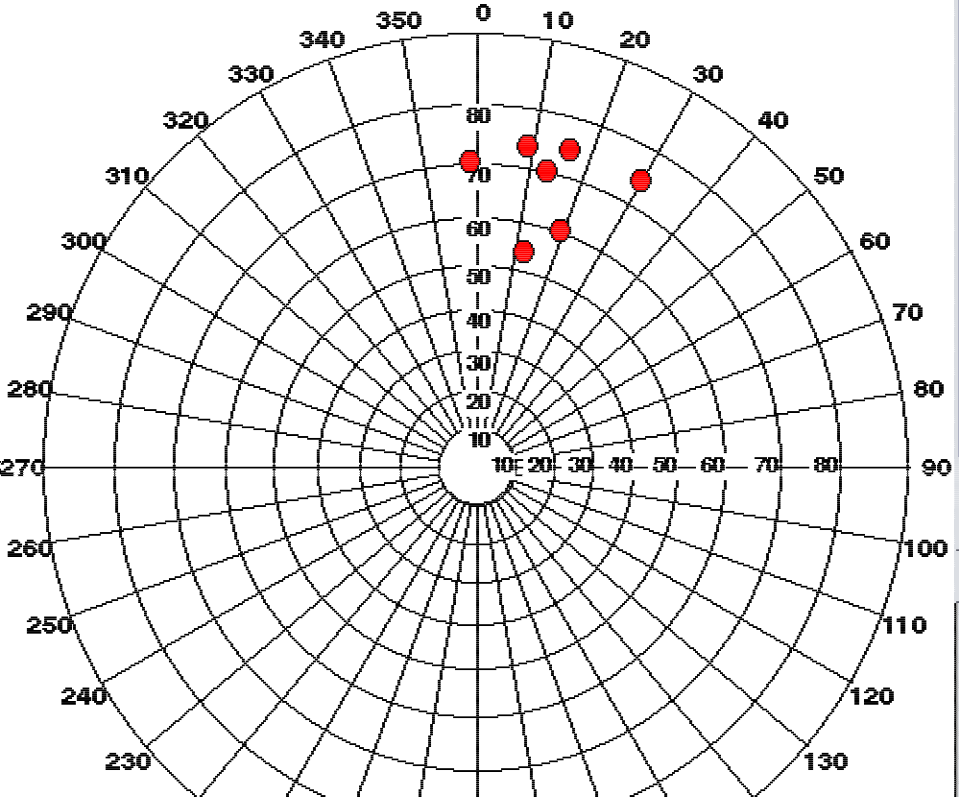
UPPER HEMISPHERE - WULFF PROJECTION

Top Dip = 1078.66 m
Bottom Dip = 1081.33 m

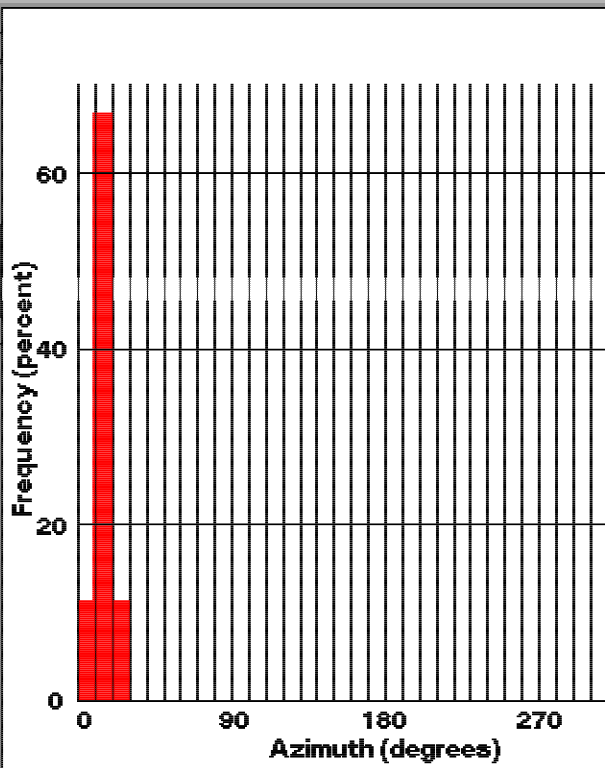
Top Zone = 781.43 m
Bottom Zone = 1180.03 m

Geological Objects:

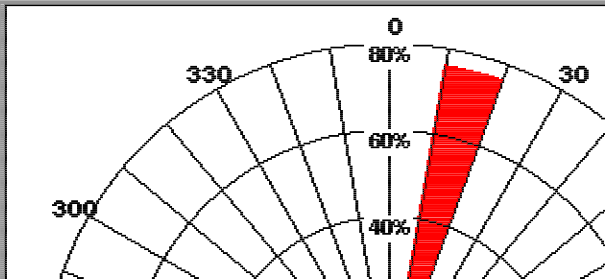
	Set Name	Nb of Dips	Great Circle (Dip & Azimuth)	Mean Orientation (Dip & Azimuth)
●	Drilling Induced...	9	67.8/114.0	67.5/14.2

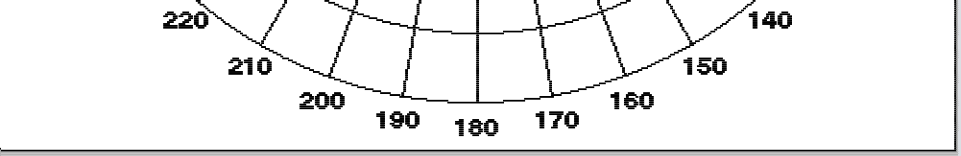


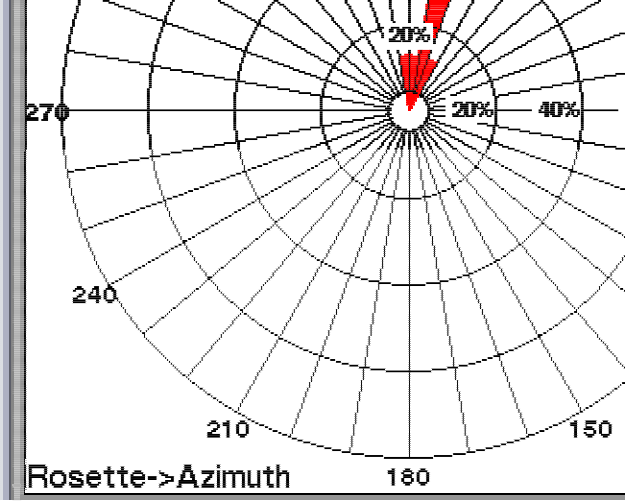
Histogram -> Azimuth



Rosette -> Azimuth







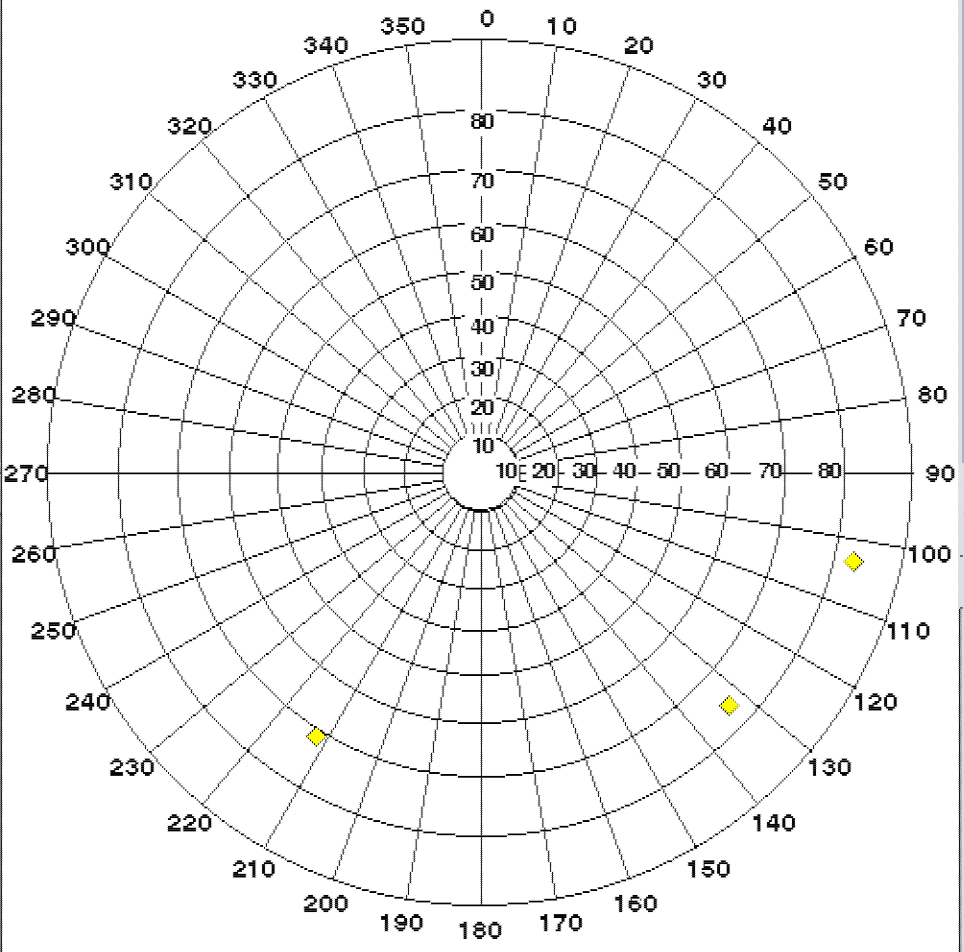
UPPER HEMISPHERE - WULFF PROJECTION

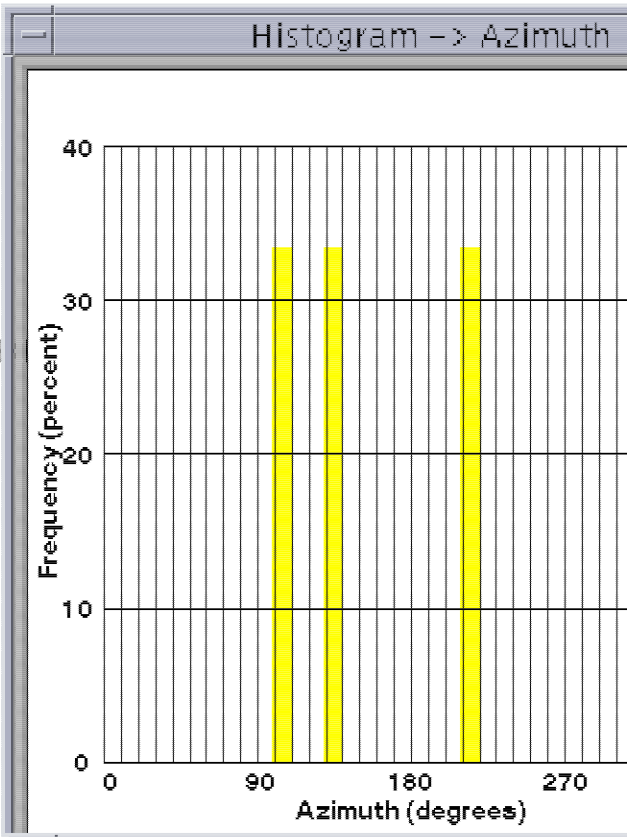
Top Dip = 928.23 m
Bottom Dip = 1088.41 m

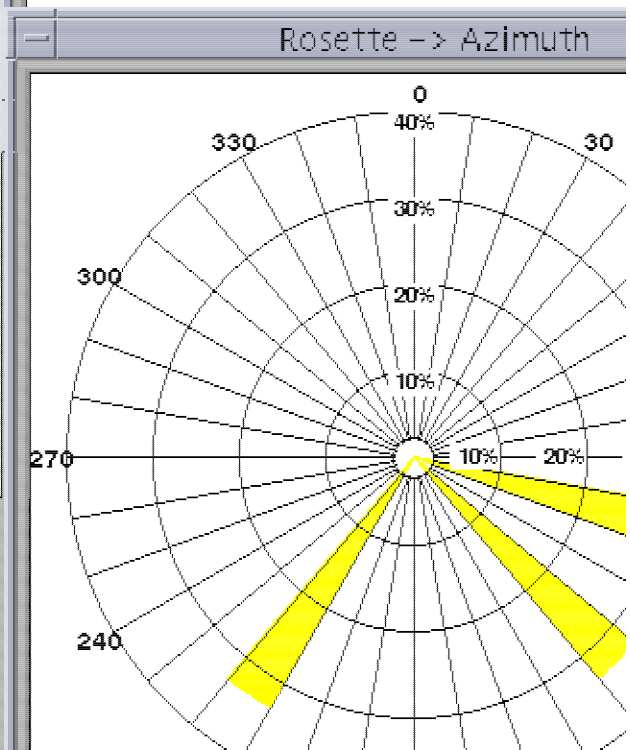
Top Zone = 781.43 m
Bottom Zone = 1180.03 m

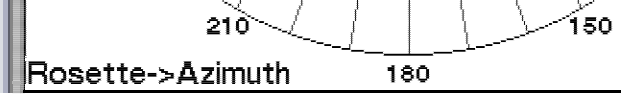
Geological Objects:

	Set Name	Nb of Dips	Great Circle (Dip & Azimuth)	Mean Orientation (Dip & Azimuth)
◆	Coal Fracture	3	21.0/359.6	79.7/117.9







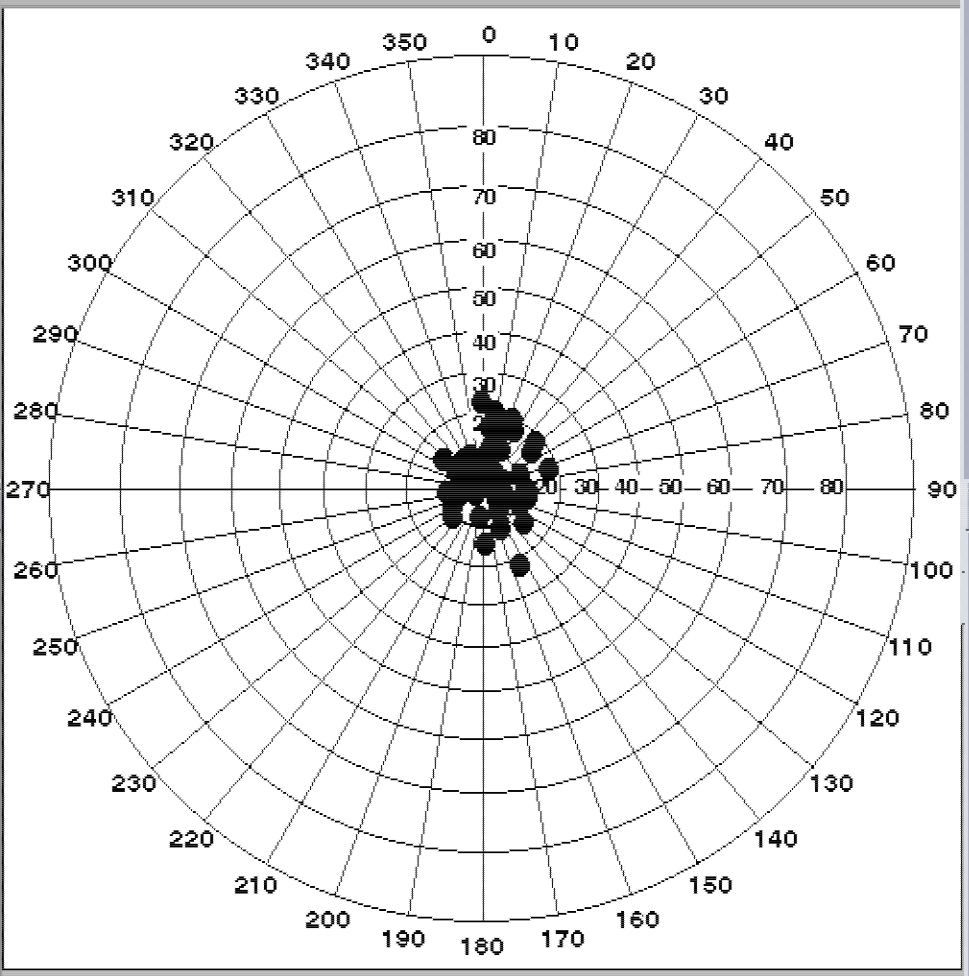


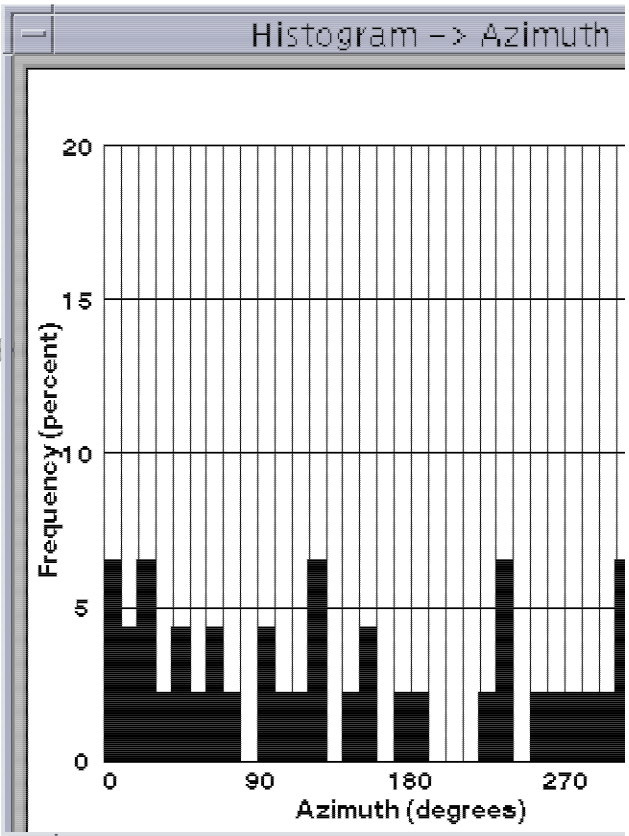
UPPER HEMISPHERE - WULFF PROJECTION

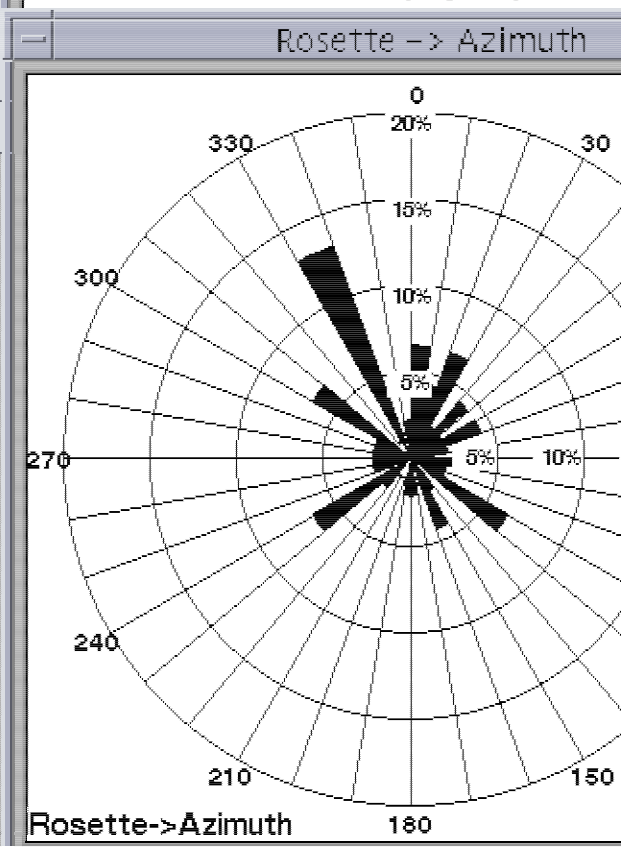
Top Dip = 912.66 m
Bottom Dip = 1291.76 m
Top Zone = 781.43 m
Bottom Zone = 1180.03 m

Geological Objects:

Set Name	Nb of Dips	Great Circle (Dip & Azimuth)	Mean Orientation (Dip & Azimuth)
Scour Surface	46	88.4/273.2	3.5/30.2
(Full set)	49	88.4/272.4	3.4/30.0







UPPER HEMISPHERE - WULFF PROJECTION

Top Dip = 704.11 m
Bottom Dip = 1106.47 m
Top Zone = 781.43 m
Bottom Zone = 1180.03 m

Geological Objects:

Set Name	Nb of Dips	Great Circle (Dip & Azimuth)	Mean Orientation (Dip & Azimuth)
Low Confidenc...	28	89.8/357.0	5.0/89.6

(Full set)	35	74.8/54.3	15.5/222.5