

TRABAJO PRÁCTICO N° 14

“AMS, Anisotropía de susceptibilidad magnética”

1) Las planillas adjuntas contienen datos de AMS correspondientes a un flujo piroclástico localizado en la Puna jujeña.

- a) Construya una tabla con los valores medidos (a partir de las planillas de medición) que incluya las orientaciones y magnitudes de los ejes principales AMS, así como también lineación, foliación, grado de anisotropía **P** y **P'** y el factor **T**.
- b) Calcule susceptibilidad media aritmética y geométrica para el sitio de estudio. Compare ambos valores.
- c) Grafique los **diagramas F vs. L** y **T vs. P'**. Indique la forma del elipsoide AMS.
- d) Explique cómo puede obtener la paleodirección de proveniencia.

2) Se adjuntan cuatro archivos .ran con mediciones AMS correspondientes a sendos depósitos volcanoclásticos de la Puna Jujeña. Mediante el uso del software Anisoft 4.2 obtenga los parámetros direccionales y escalares y confeccione una tabla. Identifique la presencia de diferentes fábricas magnéticas y obtenga las posibles direcciones de proveniencia.

Lectura recomendada:

Singer, S., Somoza, R. y Juan F. A. Vilas, 2011. Aplicación de la anisotropía de susceptibilidad magnética al reconocimiento de depósitos volcanoclásticos en el Complejo Volcánico Altiplano-Puna, Andes Centrales, Argentina. 2^{da} Reunión Bienal de la Asociación Latinoamericana de Paleomagnetismo y Geomagnetismo (LATINMAG). Latinmag Letters, vol.1, number 2 (2011), D 126, 1-6, Tandil, Argentina.

J1 ANISOTROPY OF SUSCEPTIBILITY (PROGRAM ANISO 20)

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DATA MEASURED				RESIDUALS		
HOL	-96.0					
VLN	10.00	1381.	1394.	1327.	-.4	.4
VOL	10.00	1346.	1398.	1376.	-.4	-.6
RFC	5.00	1319.	1411.	1362.	.1	2.1
THE	258.	1380.	1393.	1328.	-1.4	-.6
PSI	76.	1345.	1399.	1377.	-1.4	.4
				STD ERR		1.3

T1	F1	L1	T2	F2	L2
00	0. / 0.	0. / 0.	00	0. / 0.	0. / 0.

TESTS FOR ANISOTROPY

95 % CONFIDENCE ANGLES

F	F12	F23	E12	E23	E31
1414.4	129.7	2011.6	5.2	1.3	1.1

-6

MEAN SUSC IN 10 ⁻⁶ SI	NORMING FACTOR	NORMED PRINCIPAL SUSCS		
6857.00	6857.00	1.0306	1.0151	.9543
		+- .0006	.0006	.0006

ANISOTROPY FACTORS

L	F	P	P'	T	U
1.015	1.064	1.080	1.085	.607	.595
ln L	ln F	ln P	ln P'	E	Q
.015	.062	.077	.082	1.048	.225

PRINCIPAL DIRECTIONS

NORMED TENSOR

SPECIMEN D	282.	27.	190.	.9624	1.0281	1.0095
SYSTEM I	5.	71.	18.	-.0128	.0018	.0179
GEOGRAPH D	266.	357.	101.	1.0151	1.0280	.9568
SYSTEM I	10.	3.	79.	.0014	-.0135	.0020

DATE: 10-06-92 OPERATOR: VILAS

ORIENTATION PARAMETERS:

12 0 3 90

J2
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ANISOTROPY OF SUSCEPTIBILITY (PROGRAM ANISO 20)

DATA MEASURED					RESIDUALS		
HOL	-96.0						
VLN	10.00	949.	967.	928.	-2.1	1.5	.8
VOL	10.00	940.	958.	952.	-1.1	.0	1.3
RFC	5.00	924.	970.	954.	.7	1.2	-.6
THE	252.	952.	964.	927.	.9	-1.5	-.2
PSI	80.	941.	958.	950.	-.1	.0	-.7
					STD ERR		
							1.3

T1	F1	L1	T2	F2	L2
00	0. / 0.	0. / 0.	00	0. / 0.	0. / 0.

TESTS FOR ANISOTROPY

95 % CONFIDENCE ANGLES

F	F12	F23	E12	E23	E31
326.5	61.6	394.6	7.5	3.0	2.1

MEAN SUSC IN 10 ⁻⁶ SI	NORMING FACTOR	NORMED PRINCIPAL SUSCS		
4749.00	4749.00	1.0234	1.0079	.9687
		+- .0009	.0009	.0009

ANISOTROPY FACTORS

L	F	P	P'	T	U
1.015	1.041	1.057	1.058	.445	.434
ln L	ln F	ln P	ln P'	E	Q
.015	.040	.055	.057	1.025	.330

PRINCIPAL DIRECTIONS

NORMED TENSOR

SPECIMEN	D	281.	55.	184.	.9731	1.0210	1.0060
SYSTEM	I	20.	63.	18.	-.0053	-.0039	.0124
GEOGRAPH	D	273.	4.	134.	1.0075	1.0227	.9698
SYSTEM	I	7.	6.	81.	-.0004	-.0061	.0043

DATE: 10-06-92 OPERATOR: VILAS

ORIENTATION PARAMETERS:

12 0 3 90

J3 ANISOTROPY OF SUSCEPTIBILITY (PROGRAM ANISO 20)

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DATA MEASURED					RESIDUALS		
HOL	-96.0						
VLN	10.00	1076.	1082.	1049.	-1.5	.1	.9
VOL	10.00	1048.	1080.	1082.	-1.5	-.4	1.4
RFC	5.00	1046.	1082.	1081.	-.7	1.8	-1.0
THE	230.	1078.	1081.	1049.	.5	-.9	.9
PSI	85.	1050.	1080.	1081.	.5	-.4	.4
					STD ERR 1.3		

T1	F1	L1	T2	F2	L2
00	0. / 0.	0. / 0.	00	0. / 0.	0. / 0.

TESTS FOR ANISOTROPY

95 % CONFIDENCE ANGLES

F	F12	F23	E12	E23	E31
432.1	45.1	600.5	8.7	2.4	1.9

-6

MEAN SUSC IN 10 ⁻⁶ SI	NORMING FACTOR	NORMED PRINCIPAL SUSCS		
5353.00	5353.00	1.0210	1.0099	.9691
		+- .0007	.0007	.0007

ANISOTROPY FACTORS

L	F	P	P'	T	U
1.011	1.042	1.054	1.057	.578	.570
ln L	ln F	ln P	ln P'	E	Q
.011	.041	.052	.055	1.031	.241

PRINCIPAL DIRECTIONS

NORMED TENSOR

SPECIMEN D	308.	92.	197.	.9786	1.0099	1.0115
SYSTEM I	46.	38.	19.	-.0131	-.0007	.0152
GEOGRAPH D	284.	192.	90.	1.0104	1.0134	.9762
SYSTEM I	21.	5.	68.	-.0023	-.0177	.0009

DATE: 10-06-92 OPERATOR: VILAS

ORIENTATION PARAMETERS:

12 0 3 90

J4
**

ANISOTROPY OF SUSCEPTIBILITY (PROGRAM ANISO 20)

DATA MEASURED				RESIDUALS		
HOL	-96.0					
VLN	10.00	1284.	1296.	1254.	-1.7	.9
VOL	10.00	1266.	1300.	1309.	-.7	.4
RFC	5.00	1261.	1293.	1301.	.9	.7
THE	209.	1286.	1295.	1255.	.3	-.1
PSI	78.	1266.	1300.	1308.	-.7	.4
					STD ERR	1.0

T1	F1	L1	T2	F2	L2
00	0. / 0.	0. / 0.	00	0. / 0.	0. / 0.

TESTS FOR ANISOTROPY

95 % CONFIDENCE ANGLES

F	F12	F23	E12	E23	E31
984.1	219.8	1127.3	4.0	1.8	1.2

MEAN SUSC IN 10 ⁻⁶ SI	NORMING FACTOR	NORMED PRINCIPAL SUSCS		
6429.00	6429.00	1.0239	1.0071	.9690
		+- .0005	.0005	.0005

ANISOTROPY FACTORS

L	F	P	P'	T	U
1.017	1.039	1.057	1.058	.399	.387
ln L	ln F	ln P	ln P'	E	Q
.017	.039	.055	.057	1.022	.362

PRINCIPAL DIRECTIONS

NORMED TENSOR

SPECIMEN	D	348.	98.	193.	.9807	1.0058	1.0135
SYSTEM	I	63.	10.	25.	-.0074	.0017	.0210
GEOGRAPH	D	293.	201.	78.	1.0094	1.0170	.9736
SYSTEM	I	15.	10.	72.	-.0064	-.0146	-.0006

DATE: 10-06-92 OPERATOR: VILAS

ORIENTATION PARAMETERS:

12 0 3 90



JS ANISOTROPY OF SUSCEPTIBILITY (PROGRAM ANISO 20)
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DATA MEASURED					RESIDUALS		
HOL	-96.0						
VLN	10.00	1079.	1079.	1040.	-.7	-.1	-.1
VOL	10.00	1064.	1065.	1091.	-.2	-.1	-.1
RFC	5.00	1066.	1079.	1066.	.6	.6	.3
THE	233.	1080.	1079.	1040.	.3	-.1	-.1
PSI	70.	1064.	1065.	1091.	-.2	-.1	-.1
STD ERR							.4

T1	F1		L1		T2	F2		L2	
00	0./	0.	0./	0.	00	0./	0.	0./	0.

TESTS FOR ANISOTROPY 95 % CONFIDENCE ANGLES

F	F12	F23	E12	E23	E31
4190.6	1909.6	3397.9	1.4	1.0	.6

-6

MEAN SUSC IN 10	SI	NORMING FACTOR	NORMED PRINCIPAL SUSCS		
5354.00		5354.00	1.0253	1.0025	.9722
			+- .0002	.0002	.0002

ANISOTROPY FACTORS

L	F	P	P'	T	U
1.023	1.031	1.055	1.055	.156	.143
ln L	ln F	ln P	ln P'	E	Q
.022	.031	.053	.053	1.008	.545

PRINCIPAL DIRECTIONS NORMED TENSOR

SPECIMEN	D	322.	69.	181.	.9959	1.0080	.9961
SYSTEM	I	38.	21.	45.	-.0072	-.0065	.0238
GEOGRAPH	D	291.	26.	141.	1.0019	1.0175	.9806
SYSTEM	I	22.	11.	65.	-.0040	-.0146	.0118

DATE: 10-06-92 OPERATOR: VILAS

ORIENTATION PARAMETERS:
 12 0 3 90

J6
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ANISOTROPY OF SUSCEPTIBILITY (PROGRAM ANISO 20)

DATA MEASURED					RESIDUALS		
HOL	-96.0						
VLN	10.00	1106.	1131.	1093.	-2.2	.4	.6
VOL	10.00	1096.	1124.	1118.	-.7	.4	-.4
RFC	5.00	1081.	1124.	1129.	.3	-.2	-1.0
THE	229.	1110.	1131.	1092.	1.8	.4	-.4
PSI	81.	1097.	1124.	1119.	.3	.4	.6
					STD ERR 1.1		

T1	F1	L1	T2	F2	L2
00	0./ 0.	0./ 0.	00	0./ 0.	0./ 0.

TESTS FOR ANISOTROPY

95 % CONFIDENCE ANGLES

F	F12	F23	E12	E23	E31
588.3	63.7	811.8	7.4	2.1	1.6

-6

MEAN SUSC IN 10 SI	NORMING FACTOR	NORMED PRINCIPAL SUSCS		
5563.00	5563.00	1.0213	1.0098	.9689
	+- .0006	.0006	.0006	.0006

ANISOTROPY FACTORS

L	F	P	P'	T	U
1.011	1.042	1.054	1.057	.571	.562
ln L	ln F	ln P	ln P'	E	Q
.011	.041	.053	.055	1.031	.246

PRINCIPAL DIRECTIONS

NORMED TENSOR

SPECIMEN D	302.	90.	186.	.9722	1.0113	1.0165
SYSTEM I	61.	25.	13.	-.0052	-.0031	.0117
GEOGRAPH D	295.	204.	86.	1.0118	1.0185	.9697
SYSTEM I	6.	3.	83.	-.0044	-.0063	.0002

DATE: 10-06-92 OPERATOR: VILAS

ORIENTATION PARAMETERS:

12 0 3 90

J7

ANISOTROPY OF SUSCEPTIBILITY (PROGRAM ANISO 20)

**

		DATA MEASURED			RESIDUALS		
HOL	-96.0						
VLN	10.00	1118.	1132.	1104.	-.4	.2	.3
VOL	10.00	1094.	1126.	1109.	.1	.2	-.2
RFC	5.00	1085.	1129.	1129.	1.2	.5	.0
THE	220.	1118.	1132.	1103.	-.4	.2	-.7
PSI	89.	1093.	1126.	1109.	-.9	.2	-.2
					STD ERR		
					.6		

T1	F1		L1		T2	F2		L2	
00	0./	0.	0./	0.	00	0./	0.	0./	0.

TESTS FOR ANISOTROPY

95 % CONFIDENCE ANGLES

F	F12	F23	E12	E23	E31
1660.8	71.4	2609.8	7.0	1.2	1.0

-6

MEAN SUSC IN 10 ⁻⁶ SI	NORMING FACTOR	NORMED PRINCIPAL SUSCS		
5574.00	5574.00	1.0183	1.0115	.9702
	+- .0004	.0004	.0004	.0004

ANISOTROPY FACTORS

L	F	P	P ²	T	U
1.007	1.043	1.050	1.054	.722	.716
ln L	ln F	ln P	ln P ²	E	Q
.007	.042	.048	.052	1.036	.153

PRINCIPAL DIRECTIONS

NORMED TENSOR

SPECIMEN	D	286.	101.	194.	.9731	1.0132	1.0137
SYSTEM	I	35.	55.	2.	-.0110	-.0027	.0025
GEOGRAPH	D	256.	165.	45.	1.0106	1.0164	.9730
SYSTEM	I	12.	7.	76.	.0002	-.0084	-.0073

DATE: 10-06-92 OPERATOR: VILAS

ORIENTATION PARAMETERS:

12 0 3 90

JB ANISOTROPY OF SUSCEPTIBILITY (PROGRAM ANISO 20)
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	DATA MEASURED				RESIDUALS		
HOL	-96.0						
VLN	10.00	1220.	1210.	1169.	-.2	-.2	.0
VOL	10.00	1197.	1208.	1224.	-.7	.3	.0
RFC	5.00	1197.	1222.	1197.	.5	.7	.5
THE	233.	1220.	1210.	1169.	-.2	-.2	.0
PSI	57.	1198.	1207.	1224.	.3	-.7	.0
					STD ERR		.5

T1	F1	L1	T2	F2	L2
00	0.7 0.	0.7 0.	00	0.7 0.	0.7 0.

TESTS FOR ANISOTROPY

95 % CONFIDENCE ANGLES

F	F12	F23	E12	E23	E31
3645.4	649.4	4480.0	2.3	.9	.6

-6

MEAN SUSC IN 10 SI	NORMING FACTOR	NORMED PRINCIPAL SUSCS		
6029.00	6029.00	1.0225	1.0079	.9696
	+- .0003	.0003	.0003	.0003

ANISOTROPY FACTORS

L	F	P	P'	T	U
1.014	1.040	1.055	1.057	.459	.448
ln L	ln F	ln P	ln P'	E	Q
.014	.039	.053	.055	1.025	.320

PRINCIPAL DIRECTIONS

NORMED TENSOR

SPECIMEN	D	311.	62.	191.	.9932	1.0137	.9932
SYSTEM	I	28.	34.	43.	-.0093	-.0010	.0228
GEOGRAPH	D	280.	10.	107.	1.0082	1.0195	.9723
SYSTEM	I	13.	2.	77.	-.0018	-.0114	.0030

DATE: 10-06-92 OPERATOR: VILAS

ORIENTATION PARAMETERS:

12 0 3 90

J10

ANISOTROPY OF SUSCEPTIBILITY (PROGRAM ANISO 20)

DATA MEASURED					RESIDUALS		
HOL	-96.0						
VLN	10.00	766.	780.	758.	-.9	.2	-.2
VOL	10.00	756.	782.	763.	.6	.2	.3
RFC	5.00	741.	782.	779.	.2	.5	-1.0
THE	316.	767.	780.	759.	.1	.2	.8
PSI	75.	754.	782.	763.	-1.4	.2	.3
					STD ERR		
					.8		

T1	F1	L1	T2	F2	L2
00	0./ 0.	0./ 0.	00	0./ 0.	0./ 0.

TESTS FOR ANISOTROPY

95 % CONFIDENCE ANGLES

F	F12	F23	E12	E23	E31
730.3	5.2	1282.5	24.4	1.7	1.6

MEAN SUSC IN 10 ⁻⁶ SI	NORMING FACTOR	NORMED PRINCIPAL SUSCS		
3842.00	3842.00	1.0196	1.0163	.9641
		+- .0007	.0007	.0007

ANISOTROPY FACTORS

L	F	P	P'	T	U
1.003	1.054	1.058	1.065	.884	.880
ln L	ln F	ln P	ln P'	E	Q
.003	.053	.056	.063	1.051	.062

PRINCIPAL DIRECTIONS

NORMED TENSOR

SPECIMEN	D	K ₁	K ₂	K ₃			
SYSTEM	I	97.	289.	188.	.9653	1.0183	1.0164
		16.	74.	3.	-.0075	.0013	.0029
GEOGRAPH	D						
SYSTEM	I	302.	210.	81.	1.0171	1.0156	.9673
		11.	9.	76.	-.0019	-.0126	-.0017

DATE: 10-06-92 OPERATOR: VILAS

ORIENTATION PARAMETERS:

12 0 3 90

J11

ANISOTROPY OF SUSCEPTIBILITY (PROGRAM ANISO 20)

DATA MEASURED				RESIDUALS		
HOL	-106.0					
VLN	10.00	971.	986.	963.	.5	-.5
VOL	10.00	958.	987.	966.	.5	.5
RFC	2.00	943.	988.	986.	1.2	1.9
THE	280.	968.	987.	962.	-2.5	.5
PSI	73.	955.	986.	968.	-2.5	-.5
STD ERR						1.6

T1	F1	L1	T2	F2	L2
00	0. / 0.	0. / 0.	00	0. / 0.	0. / 0.

TESTS FOR ANISOTROPY

95 % CONFIDENCE ANGLES

F	F12	F23	E12	E23	E31
226.6	.1	418.9	74.4	2.9	2.8

MEAN SUSC IN 10 ⁻⁶ SI	NORMING FACTOR	NORMED PRINCIPAL SUSCS		
1948.00	1948.00	1.0161	1.0155	.9684
		+- .0010	.0010	.0010

ANISOTROPY FACTORS

L	F	P	P'	T	L
1.001	1.049	1.049	1.057	.973	.973
ln L	ln F	ln P	ln P'	E	
.001	.047	.048	.055	1.048	.014

PRINCIPAL DIRECTIONS

NORMED TENSOR

SPECIMEN D	261.	95.	188.	.9695	1.0149	1.0157
SYSTEM I	41.	48.	3.	-.0067	.0000	.0023
GEOGRAPH D	142.	233.	40.	1.0137	1.0142	.9721
SYSTEM I	4.	16.	74.	-.0022	-.0082	-.0097

DATE: 09-06-92

OPERATOR: VILAS

ORIENTATION PARAMETERS:
12 0 3 90

*Se midió 2 veces para verificar
si da lo mismo*

J12

ANISOTROPY OF SUSCEPTIBILITY (PROGRAM ANISO 20)

DATA MEASURED					RESIDUALS		
HOL	-106.0						
VLN	10.00	1521.	1547.	1487.	-.8	.0	.5
VOL	10.00	1511.	1543.	1519.	.2	-1.5	.0
RFC	.10	1476.	1562.	1530.	2.7	2.7	-2.1
THE	335.	1519.	1548.	1487.	-2.8	1.0	.5
PSI	57.	1507.	1547.	1520.	-3.8	2.5	1.0
					STD ERR		2.4

T1	F1		L1		T2	F2		L2	
00	0. /	0.	0. /	0.	00	0. /	0.	0. /	0.

TESTS FOR ANISOTROPY

95 % CONFIDENCE ANGLES

F	F12	F23	E12	E23	E31
300.7	48.2	380.2	8.5	3.0	2.2

MEAN SUSC IN 10 ⁻⁶ SI		NORMING FACTOR	NORMED PRINCIPAL SUSCS		
157.50		157.50	1.0243	1.0092	.9665
			+- .0010	.0010	.0010

ANISOTROPY FACTORS

L	F	P	P'	T	U
1.015	1.044	1.060	1.062	.486	.475
ln L	ln F	ln P	ln P'	E	Q
.015	.043	.058	.060	1.029	.302

PRINCIPAL DIRECTIONS

NORMED TENSOR

SPECIMEN	D	275.	24.	183.	.9694	1.0240	1.0067
SYSTEM	I	5.	75.	14.	-.0035	-.0008	.0103
GEOGRAPH	D	342.	252.	75.	1.0226	1.0064	.9710
SYSTEM	I	1.	19.	71.	-.0056	-.0127	-.0032

DATE: 02-04-90

OPERATOR: VILLAS

J13

ANISOTROPY OF SUSCEPTIBILITY (PROGRAM ANISO 20)

DATA MEASURED					RESIDUALS		
HOL	-106.0						
VLN	10.00	1217.	1230.	1188.	-.9	.4	.0
VOL	10.00	1231.	1251.	1256.	.6	-.1	1.0
RFC	2.00	1205.	1244.	1237.	-.2	1.0	-.7
THE	333.	1218.	1229.	1189.	.1	-.6	1.0
PSI	58.	1229.	1251.	1255.	-1.4	-.1	.0
STD ERR							.9

T1	F1	L1	T2	F2	L2
00	0./ 0.	0./ 0.	00	0./ 0.	0./ 0.

TESTS FOR ANISOTROPY

95 % CONFIDENCE ANGLES

F	F12	F23	E12	E23	E31
1683.6	537.0	1671.7	2.5	1.4	.9

-6

MEAN SUSC IN 10⁻⁶ SI NORMING FACTOR NORMED PRINCIPAL SUSCS

2463.00	2463.00	1.0300	1.0061	.9639
		+-.0005	.0005	.0005

ANISOTROPY FACTORS

L	F	P	P'	T	U
1.024	1.044	1.069	1.070	.292	.276
ln L	ln F	ln P	ln P'	E	Q
.023	.043	.066	.067	1.020	.442

PRINCIPAL DIRECTIONS

NORMED TENSOR

SPECIMEN	D	46.	287.	180.	.9810	1.0116	1.0074
SYSTEM	I	48.	24.	32.	.0051	.0087	.0272
GEOGRAPH	D	272.	2.	171.	1.0061	1.0299	.9639
SYSTEM	I	0.	0.	90.	-.0008	-.0001	.0003

DATE: 09-06-92 OPERATOR: VILAS

ORIENTATION PARAMETERS:

12 0 3 90

J14

ANISOTROPY OF SUSCEPTIBILITY (PROGRAM ANISO 20)

		DATA MEASURED			RESIDUALS		
HOL	-106.0						
VLN	10.00	1647.	1679.	1643.	-1.5	.6	.7
VOL	10.00	1656.	1679.	1669.	-1.0	.6	1.2
RFC	1.00	1630.	1678.	1679.	.6	1.9	-1.6
THE	304.	1648.	1678.	1643.	-1.5	-.4	.7
PSI	76.	1656.	1678.	1668.	-1.0	-.4	.2
						STD ERR	1.3

T1	F1	L1	T2	F2	L2
00	0./ 0.	0./ 0.	00	0./ 0.	0./ 0.

TESTS FOR ANISOTROPY

95 % CONFIDENCE ANGLES

F	F12	F23	E12	E23	E31
478.2	16.7	766.7	14.2	2.1	1.9

-6

MEAN SUSC IN 10 ⁻⁶ SI	NORMING FACTOR	NORMED PRINCIPAL SUSCS		
1667.00	1667.00	1.0130	1.0086	.9784
	+-	.0005	.0005	.0005

ANISOTROPY FACTORS

L	F	P	P'	T	U
1.004	1.031	1.035	1.039	.747	.743
ln L	ln F	ln P	ln P'	E	D
.004	.030	.035	.038	1.026	.137

PRINCIPAL DIRECTIONS

NORMED TENSOR

SPECIMEN	D	29.	267.	175.	.9804	1.0084	1.0111
SYSTEM	I	74.	8.	13.	.0025	.0000	.0076
GEOGRAPH	D	222.	132.	314.	1.0110	1.0104	.9786
SYSTEM	I	0.	5.	85.	.0023	.0018	-.0018

DATE: 09-06-92

OPERATOR: VILAS

ORIENTATION PARAMETERS:

12 0 3 90

J15

ANISOTROPY OF SUSCEPTIBILITY (PROGRAM ANISO 20)

	DATA MEASURED				RESIDUALS		
HOL	-106.0						
VLN	10.00	476.	483.	484.	-.7	-.7	1.0
VDL	10.00	476.	493.	482.	-.7	1.3	1.0
RFC	5.00	469.	485.	495.	.5	.0	-.5
THE	350.	477.	490.	482.	.3	1.3	-1.0
PSI	82.	477.	491.	480.	.3	-.7	-1.0
						STD ERR	1.1

T1	F1	L1	T2	F2	L2
00	0. / 0.	0. / 0.	00	0. / 0.	0. / 0.

TESTS FOR ANISOTROPY

95 % CONFIDENCE ANGLES

F	F12	F23	E12	E23	E31
135.7	54.0	120.0	8.0	5.4	3.2

-6

MEAN SUSC IN 10 ⁻⁶ SI	NORMING FACTOR	NORMED PRINCIPAL SUSCS		
2420.00	2420.00	1.0263	1.0037	.9700
		+- .0014	.0014	.0014

ANISOTROPY FACTORS

L	F	P	R'	T	U
1.023	1.035	1.058	1.059	.210	.197
ln L	ln F	ln P	ln P'	E	Q
.022	.034	.056	.057	1.012	.502

PRINCIPAL DIRECTIONS

NORMED TENSOR

SPECIMEN	D	105.	270.	360.	.9700	1.0041	1.0258
SYSTEM	I	82.	8.	2.	.0000	.0031	-.0021
GEOGRAPH	D	268.	178.	79.	1.0037	1.0246	.9717
SYSTEM	I	10.	2.	80.	.0005	-.0096	-.0013

DATE: 09-06-92 OPERATOR: VILAS

ORIENTATION PARAMETERS:

12 0 3 90

J16

ANISOTROPY OF SUSCEPTIBILITY (PROGRAM ANISO 20)

DATA MEASURED				RESIDUALS		
HOL	-106.0					
VLN	10.00	871.	901.	870.	.4	.4
VOL	10.00	891.	885.	896.	-2.6	.4
RFC	5.00	875.	893.	895.	2.1	1.6
THE	65.	869.	900.	870.	-1.6	-.6
PSI	53.	895.	884.	896.	1.4	-.6
					STD ERR	1.5

T1	F1	L1	T2	F2	L2
00	0./ 0.	0./ 0.	00	0./ 0.	0./ 0.

TESTS FOR ANISOTROPY

95 % CONFIDENCE ANGLES

F	F12	F23	E12	E23	E31
165.6	4.9	269.3	25.0	3.6	3.2

-6

MEAN SUSC IN 10 SI

NORMING FACTOR

NORMED PRINCIPAL SUSCS

4436.00

4436.00

1.0172
+- .00111.0117
.0011.9712
.0011

ANISOTROPY FACTORS

L	F	P	P'	T	U
1.005	1.042	1.047	1.052	.767	.762
ln L	ln F	ln P	ln P'	E	Q
.005	.041	.046	.051	1.036	.126

PRINCIPAL DIRECTIONS

NORMED TENSOR

SPECIMEN	D	295.	56.	153.	.9852	1.0060	1.0088
SYSTEM	I	60.	16.	24.	.0130	-.0090	.0147
GEOGRAPH	D	306.	210.	86.	1.0133	1.0070	.9796
SYSTEM	I	21.	15.	64.	-.0028	-.0174	.0000

DATE: 02 04 77

