Appendix C. TED Sensor Data Grouped by Unit Serial Number

TED Serial Number 009 Sensor Data

TED Weighting Factors

0º electron low-energy band number	Particle energy weight	Detection efficiency weight	30º electron low-energy band number	Particle energy weight	Detection efficiency weight
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	3.0	1.0	4	3.0	1.0
5	4.0	1.0	5	4.0	1.0
6	6.0	1.0	6	6.0	1.0
7	8.0	1.0	7	8.0	1.0
8	12.0	1.0	8	12.0	1.0
0º electron high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º electron high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	1.0	1.0	9	1.0	1.0
10	1.5	1.0	10	1.5	1.0
11	3.0	1.0	11	3.0	1.0
12	4.0	1.0	12	4.0	1.0
13	8.0	0.667	13	8.0	0.667
14	16.0	0.667	14	16.0	0.667
15	24.0	0.667	15	24.0	0.667
16	48.0	0.667	16	48.0	0.667
0º proton low-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton low-energy band number**	**Particle energy weight**	**Detection efficiency weight**
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	2.0	1.0	4	2.0	1.0
5	3.0	1.0	5	3.0	1.0
6	4.0	1.0	6	4.0	1.0
7	6.0	1.0	7	6.0	1.0
8	8.0	1.0	8	8.0	1.0
0º proton high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	3.0	1.0	9	3.0	1.0
10	4.0	1.0	10	4.0	1.0
11	4.0	1.0	11	4.0	1.0
12	6.0	1.0	12	6.0	1.0
13	8.0	1.0	13	8.0	1.0
14	12.0	1.0	14	12.0	1.0
15	12.0	1.0	15	12.0	1.0
16	16.0	1.0	16	16.0	1.0

Multiplicative Factors to Convert Actual Counts Within an Energy Band to Directional Energy Flux Contained Within that Energy Band

TED S/N 009 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to mW m^{-2} $ster^{-1}$	30º electron sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	1.519×10^{-6}	2.713×10^{-6}
2	89	2.290×10^{-6}	4.262×10^{-6}
3	130	3.386×10^{-6}	6.224×10^{-6}
4	189	5.061×10^{-6}	9.283×10^{-6}
5	274	7.504×10^{-6}	1.365×10^{-5}
6	399	1.078×10^{-5}	1.969×10^{-5}
7	580	1.579×10^{-5}	2.902×10^{-5}
8	844	2.302×10^{-5}	4.209×10^{-5}
9	1227	7.803×10^{-5}	7.494×10^{-5}
10	1784	1.251×10^{-4}	1.202×10^{-4}
11	2595	2.003×10^{-4}	1.930×10^{-4}
12	3774	3.192×10^{-4}	3.077×10^{-4}
13	5488	5.073×10^{-4}	4.897×10^{-4}
14	7980	8.027×10^{-4}	7.755×10^{-4}
15	11605	1.258×10^{-3}	1.215×10^{-3}
16	16877	1.946×10^{-3}	1.878×10^{-3}

TED S/N 009 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to mW m^{-2} $ster^{-1}$	30º proton sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	1.955×10^{-6}	2.125×10^{-6}
2	89	2.686×10^{-6}	2.961×10^{-6}
3	130	3.555×10^{-6}	3.319×10^{-6}
4	189	4.660×10^{-6}	5.156×10^{-6}
5	274	6.102×10^{-6}	6.802×10^{-6}
6	399	7.930×10^{-6}	8.810×10^{-6}
7	580	1.035×10^{-5}	1.155×10^{-5}
8	844	1.350×10^{-5}	1.504×10^{-5}
9	1227	1.485×10^{-4}	1.167×10^{-4}
10	1784	1.951×10^{-4}	1.535×10^{-4}
11	2595	2.566×10^{-4}	2.027×10^{-4}
12	3774	3.357×10^{-4}	2.662×10^{-4}
13	5488	4.400×10^{-4}	3.493×10^{-4}
14	7980	5.739×10^{-4}	4.565×10^{-4}
15	11605	7.451×10^{-4}	5.919×10^{-4}
16	16877	9.554×10^{-4}	7.568×10^{-4}

Multiplicative Factors to Convert From Actual Counts Within an Energy Band to Directional Number Flux at the Center Energy of that Band

TED S/N 009 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	6.699×10^{6}	1.197×10^{7}
2	89	4.738×10^{6}	8.818×10^{6}
3	130	3.344×10^{6}	6.149×10^{6}
4	189	2.367×10^{6}	4.324×10^{6}
5	274	1.659×10^{6}	3.017×10^{6}
6	399	1.143×10^{6}	2.088×10^{6}
7	580	7.903×10^{5}	1.452×10^{6}
8	844	5.461×10^{5}	9.984×10^{5}
9	1227	8.740×10^{5}	8.394×10^{5}
10	1784	6.651×10^{5}	6.391×10^{5}
11	2595	5.047×10^{5}	4.863×10^{5}
12	3774	3.825×10^{5}	3.687×10^{5}
13	5488	2.901×10^{5}	2.801×10^{5}
14	7980	2.199×10^{5}	2.127×10^{5}
15	11605	1.663×10^{5}	1.610×10^{5}
16	16877	1.251×10^{5}	1.213×10^{5}

TED S/N 009 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	8.623×10^{6}	9.379×10^{6}
2	89	5.559×10^{6}	6.129×10^{6}
3	130	3.514×10^{6}	3.873×10^{6}
4	189	2.181×10^{6}	2.414×10^{6}
5	274	1.350×10^{6}	1.505×10^{6}
6	399	8.424×10^{5}	9.358×10^{5}
7	580	5.187×10^{5}	5.786×10^{5}
8	844	3.206×10^{5}	3.573×10^{5}
9	1227	1.665×10^{6}	1.308×10^{6}
10	1784	1.035×10^{6}	8.145×10^{5}
11	2595	6.427×10^{5}	5.079×10^{5}
12	3774	3.977×10^{5}	3.157×10^{5}
13	5488	2.470×10^{5}	1.965×10^{5}
14	7980	1.531×10^{5}	1.223×10^{5}
15	11605	9.487×10^{4}	7.597×10^{4}
16	16877	5.854×10^{4}	4.701×10^{4}

TED Serial Number 009 Sensor Data
Conversion to Integrated Directional Energy Flux Moment

Sensor	Energy range eV	To convert decompressed counts to mW m^{-2} $ster^{-1}$ multiply by
0º low-energy electron	50 - 1000	1.902×10^{-6}
30º low-energy electron	50 - 1000	3.481×10^{-6}
0º high-energy electron	1000 - 20000	7.656×10^{-5}
30º high-energy electron	1000 - 20000	7.406×10^{-5}
0º low-energy proton	50 - 1000	1.775×10^{-6}
30º low-energy proton	50 - 1000	1.955×10^{-6}
0º high-energy proton	1000 - 20000	5.727×10^{-5}
30º high-energy proton	1000 - 20000	4.575×10^{-5}

TED Serial Number 010 Sensor Data

TED Weighting Factors

0º electron low-energy band number	Particle energy weight	Detection efficiency weight	30º electron low-energy band number	Particle energy weight	Detection efficiency weight
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	3.0	1.0	4	3.0	1.0
5	4.0	1.0	5	4.0	1.0
6	6.0	1.0	6	6.0	1.0
7	8.0	1.0	7	8.0	1.0
8	12.0	1.0	8	12.0	1.0
0º electron high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º electron high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	1.0	1.0	9	1.0	1.0
10	1.5	1.0	10	1.5	1.0
11	3.0	1.0	11	3.0	1.0
12	4.0	1.0	12	4.0	1.0
13	8.0	1.0	13	8.0	0.667
14	16.0	1.0	14	16.0	0.667
15	24.0	1.0	15	24.0	0.667
16	48.0	1.0	16	48.0	0.667
0º proton low-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton low-energy band number**	**Particle energy weight**	**Detection efficiency weight**
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	2.0	1.0	4	2.0	1.0
5	3.0	1.0	5	3.0	1.0
6	4.0	1.0	6	4.0	1.0
7	6.0	1.0	7	6.0	1.0
8	8.0	1.0	8	8.0	1.0
0º proton high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	3.0	1.0	9	3.0	1.0
10	4.0	1.0	10	4.0	1.0
11	4.0	1.0	11	4.0	1.0
12	6.0	1.0	12	6.0	1.0
13	8.0	1.0	13	8.0	1.0
14	12.0	1.0	14	12.0	1.0
15	12.0	1.0	15	12.0	1.0
16	16.0	1.0	16	16.0	1.0

Multiplicative Factors to Convert Actual Counts Within an Energy Band to Directional Energy Flux Contained Within that Energy Band

TED S/N 010 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to mW m^{-2} $ster^{-1}$	30º electron sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	2.387×10^{-6}	2.724×10^{-6}
2	89	3.455×10^{-6}	4.223×10^{-6}
3	130	5.155×10^{-6}	6.209×10^{-6}
4	189	7.628×10^{-6}	9.243×10^{-6}
5	274	1.122×10^{-5}	1.362×10^{-5}
6	399	1.627×10^{-5}	1.964×10^{-5}
7	580	2.385×10^{-5}	2.889×10^{-5}
8	844	3.469×10^{-5}	4.202×10^{-5}
9	1227	5.665×10^{-5}	5.277×10^{-5}
10	1784	9.543×10^{-5}	8.655×10^{-5}
11	2595	1.602×10^{-4}	1.423×10^{-4}
12	3774	2.679×10^{-4}	2.324×10^{-4}
13	5488	4.463×10^{-4}	3.786×10^{-4}
14	7980	7.398×10^{-4}	6.130×10^{-4}
15	11605	1.213×10^{-3}	9.823×10^{-4}
16	16877	1.960×10^{-3}	1.549×10^{-3}

TED S/N 010 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to mW m^{-2} $ster^{-1}$	30º proton sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	1.013×10^{-6}	1.439×10^{-6}
2	89	1.455×10^{-6}	2.102×10^{-6}
3	130	1.936×10^{-6}	2.912×10^{-6}
4	189	2.602×10^{-6}	4.016×10^{-6}
5	274	3.528×10^{-6}	5.511×10^{-6}
6	399	4.588×10^{-6}	7.471×10^{-6}
7	580	6.098×10^{-6}	1.029×10^{-5}
8	844	8.027×10^{-6}	1.391×10^{-5}
9	1227	1.315×10^{-4}	1.001×10^{-4}
10	1784	1.705×10^{-4}	1.318×10^{-4}
11	2595	2.206×10^{-4}	1.735×10^{-4}
12	3774	2.850×10^{-4}	2.279×10^{-4}
13	5488	3.676×10^{-4}	2.981×10^{-4}
14	7980	4.733×10^{-4}	3.893×10^{-4}
15	11605	6.055×10^{-4}	5.042×10^{-4}
16	16877	7.658×10^{-4}	6.452×10^{-4}

Multiplicative Factors to Convert From Actual Counts Within an Energy Band to Directional Number Flux at the Center Energy of that Band

TED S/N 010 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	1.052×10^{7}	1.202×10^{7}
2	89	7.148×10^{6}	8.738×10^{6}
3	130	5.093×10^{6}	6.134×10^{6}
4	189	3.568×10^{6}	4.323×10^{6}
5	274	2.480×10^{6}	3.010×10^{6}
6	399	1.726×10^{6}	2.084×10^{6}
7	580	1.193×10^{6}	1.446×10^{6}
8	844	8.229×10^{5}	9.969×10^{5}
9	1227	6.345×10^{5}	5.911×10^{5}
10	1784	5.075×10^{5}	4.602×10^{5}
11	2595	4.043×10^{5}	3.589×10^{5}
12	3774	3.219×10^{5}	2.790×10^{5}
13	5488	2.564×10^{5}	2.172×10^{5}
14	7980	2.041×10^{5}	1.690×10^{5}
15	11605	1.620×10^{5}	1.310×10^{5}
16	16877	1.279×10^{5}	1.011×10^{5}

TED S/N 010 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	4.472×10^{6}	6.349×10^{6}
2	89	3.013×10^{6}	4.351×10^{6}
3	130	1.913×10^{6}	2.878×10^{6}
4	189	1.218×10^{6}	1.880×10^{6}
5	274	7.808×10^{5}	1.219×10^{6}
6	399	4.874×10^{5}	7.932×10^{5}
7	580	3.055×10^{5}	5.156×10^{5}
8	844	1.907×10^{5}	3.304×10^{5}
9	1227	1.475×10^{6}	1.122×10^{6}
10	1784	9.042×10^{5}	6.994×10^{5}
11	2595	5.524×10^{5}	4.347×10^{5}
12	3774	3.373×10^{5}	2.701×10^{5}
13	5488	2.061×10^{5}	1.676×10^{5}
14	7980	1.260×10^{5}	1.041×10^{5}
15	11605	7.685×10^{4}	6.459×10^{4}
16	16877	4.671×10^{4}	3.991×10^{4}

TED Serial Number 010 Sensor Data
Conversion to Integrated Directional Energy Flux Moment

Sensor	Energy range eV	To convert decompressed counts to mW m^{-2} $ster^{-1}$ multiply by
0º low-energy electron	50 - 1000	2.868×10^{-6}
30º low-energy electron	50 - 1000	3.473×10^{-6}
0º high-energy electron	1000 - 20000	5.112×10^{-5}
30º high-energy electron	1000 - 20000	5.932×10^{-5}
0º low-energy proton	50 - 1000	1.034×10^{-6}
30º low-energy proton	50 - 1000	1.751×10^{-6}
0º high-energy proton	1000 - 20000	4.691×10^{-5}
30º high-energy proton	1000 - 20000	3.895×10^{-5}

TED Serial Number 012 Sensor Data

TED Weighting Factors

0º electron low-energy band number	Particle energy weight	Detection efficiency weight	30º electron low-energy band number	Particle energy weight	Detection efficiency weight
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	3.0	1.0	4	3.0	1.0
5	4.0	1.0	5	4.0	1.0
6	6.0	1.0	6	6.0	1.0
7	8.0	1.0	7	8.0	1.0
8	12.0	1.0	8	12.0	1.0
0º electron high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º electron high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	1.0	1.0	9	1.0	1.0
10	1.5	1.0	10	1.5	1.0
11	3.0	1.0	11	3.0	1.0
12	4.0	1.0	12	4.0	1.0
13	8.0	0.667	13	8.0	0.667
14	16.0	0.667	14	16.0	0.667
15	24.0	0.667	15	24.0	0.667
16	48.0	0.667	16	48.0	0.667
0º proton low-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton low-energy band number**	**Particle energy weight**	**Detection efficiency weight**
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	2.0	1.0	4	2.0	1.0
5	3.0	1.0	5	3.0	1.5
6	4.0	1.0	6	4.0	1.5
7	6.0	1.0	7	6.0	1.5
8	8.0	1.0	8	8.0	1.5
0º proton high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	3.0	1.0	9	3.0	1.0
10	4.0	1.0	10	4.0	1.0
11	4.0	1.0	11	4.0	1.0
12	6.0	1.0	12	6.0	1.0
13	8.0	1.0	13	8.0	1.0
14	12.0	1.0	14	12.0	1.0
15	12.0	1.0	15	12.0	1.0
16	16.0	1.0	16	16.0	1.0

Multiplicative Factors to Convert Actual Counts Within an Energy Band to Directional Energy Flux Contained Within that Energy Band

TED S/N 012 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to mW m^{-2} $ster^{-1}$	30º electron sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	1.454×10^{-6}	1.889×10^{-6}
2	89	2.284×10^{-6}	2.954×10^{-6}
3	130	3.335×10^{-6}	4.378×10^{-6}
4	189	4.975×10^{-6}	6.460×10^{-6}
5	274	7.312×10^{-6}	9.484×10^{-6}
6	399	1.055×10^{-5}	1.375×10^{-5}
7	580	1.555×10^{-5}	2.027×10^{-5}
8	844	2.264×10^{-5}	2.942×10^{-5}
9	1227	6.343×10^{-5}	8.033×10^{-5}
10	1784	1.021×10^{-4}	1.265×10^{-4}
11	2595	1.645×10^{-4}	1.993×10^{-4}
12	3774	2.634×10^{-4}	3.122×10^{-4}
13	5488	4.207×10^{-4}	4.879×10^{-4}
14	7980	6.685×10^{-4}	7.586×10^{-4}
15	11605	1.051×10^{-3}	1.167×10^{-3}
16	16877	1.630×10^{-3}	1.772×10^{-3}

TED S/N 012 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to mW m^{-2} $ster^{-1}$	30º proton sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	9.360×10^{-7}	8.898×10^{-7}
2	89	1.365×10^{-6}	1.337×10^{-6}
3	130	1.876×10^{-6}	1.929×10^{-6}
4	189	2.576×10^{-6}	2.757×10^{-6}
5	274	3.565×10^{-6}	3.931×10^{-6}
6	399	4.744×10^{-6}	5.488×10^{-6}
7	580	6.508×10^{-6}	7.795×10^{-6}
8	844	8.787×10^{-6}	1.102×10^{-5}
9	1227	1.469×10^{-4}	1.091×10^{-4}
10	1784	1.897×10^{-4}	1.394×10^{-4}
11	2595	2.456×10^{-4}	1.781×10^{-4}
12	3774	3.161×10^{-4}	2.271×10^{-4}
13	5488	4.074×10^{-4}	2.889×10^{-4}
14	7980	5.227×10^{-4}	3.662×10^{-4}
15	11605	6.662×10^{-4}	4.598×10^{-4}
16	16877	8.390×10^{-4}	5.695×10^{-4}

Multiplicative Factors to Convert From Actual Counts Within an Energy Band to Directional Number Flux at the Center Energy of that Band

TED S/N 012 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	6.416×10^{6}	8.332×10^{6}
2	89	4.725×10^{6}	6.111×10^{6}
3	130	3.295×10^{6}	4.325×10^{6}
4	189	2.327×10^{6}	3.022×10^{6}
5	274	1.617×10^{6}	2.096×10^{6}
6	399	1.119×10^{6}	1.459×10^{6}
7	580	7.781×10^{5}	1.014×10^{6}
8	844	5.350×10^{5}	6.951×10^{5}
9	1227	7.105×10^{5}	8.999×10^{5}
10	1784	5.429×10^{5}	6.724×10^{5}
11	2595	4.147×10^{5}	5.022×10^{5}
12	3774	3.157×10^{5}	3.738×10^{5}
13	5488	2.407×10^{5}	2.787×10^{5}
14	7980	1.834×10^{5}	2.077×10^{5}
15	11605	1.393×10^{5}	1.542×10^{5}
16	16877	1.054×10^{5}	1.141×10^{5}

TED S/N 012 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	4.130×10^{6}	3.926×10^{6}
2	89	2.826×10^{6}	2.767×10^{6}
3	130	1.854×10^{6}	1.906×10^{6}
4	189	1.206×10^{6}	1.290×10^{6}
5	274	7.890×10^{5}	8.693×10^{5}
6	399	5.036×10^{5}	5.824×10^{5}
7	580	3.260×10^{5}	3.902×10^{5}
8	844	2.078×10^{5}	2.605×10^{5}
9	1227	1.647×10^{6}	1.224×10^{6}
10	1784	1.006×10^{6}	7.392×10^{5}
11	2595	6.150×10^{5}	4.460×10^{5}
12	3774	3.742×10^{5}	2.690×10^{5}
13	5488	2.286×10^{5}	1.623×10^{5}
14	7980	1.394×10^{5}	9.793×10^{4}
15	11605	8.493×10^{4}	5.898×10^{4}
16	16877	5.155×10^{4}	3.540×10^{4}

TED Serial Number 012 Sensor Data
Conversion to Integrated Directional Energy Flux Moment

Sensor	Energy range eV	To convert decompressed counts to mW m^{-2} $ster^{-1}$ multiply by
0º low-energy electron	50 - 1000	1.865×10^{-6}
30º low-energy electron	50 - 1000	2.427×10^{-6}
0º high-energy electron	1000 - 20000	6.394×10^{-5}
30º high-energy electron	1000 - 20000	7.183×10^{-5}
0º low-energy proton	50 - 1000	1.107×10^{-6}
30º low-energy proton	50 - 1000	9.042×10^{-7}
0º high-energy proton	1000 - 20000	5.191×10^{-5}
30º high-energy proton	1000 - 20000	3.634×10^{-5}

TED Serial Number 013 Sensor Data

TED Weighting Factors

0º electron low-energy band number	Particle energy weight	Detection efficiency weight	30º electron low-energy band number	Particle energy weight	Detection efficiency weight
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	3.0	1.0	4	3.0	1.0
5	4.0	1.5	5	4.0	1.0
6	6.0	1.5	6	6.0	1.0
7	8.0	1.5	7	8.0	1.0
8	12.0	1.5	8	12.0	1.0
0º electron high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º electron high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	1.0	1.0	9	1.0	1.0
10	1.5	1.0	10	1.5	1.0
11	3.0	1.0	11	3.0	1.0
12	4.0	1.0	12	4.0	1.0
13	8.0	1.0	13	8.0	0.667
14	16.0	1.0	14	16.0	0.667
15	24.0	1.0	15	24.0	0.667
16	48.0	1.0	16	48.0	0.667
0º proton low-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton low-energy band number**	**Particle energy weight**	**Detection efficiency weight**
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	2.0	1.0	4	2.0	1.0
5	3.0	1.0	5	3.0	1.0
6	4.0	1.0	6	4.0	1.0
7	6.0	1.0	7	6.0	1.0
8	8.0	1.0	8	8.0	1.0
0º proton high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	3.0	1.0	9	3.0	1.0
10	4.0	1.0	10	4.0	1.0
11	4.0	1.0	11	4.0	1.0
12	6.0	1.0	12	6.0	1.0
13	8.0	1.0	13	8.0	1.0
14	12.0	1.0	14	12.0	1.0
15	12.0	1.0	15	12.0	1.0
16	16.0	1.0	16	16.0	1.0

Multiplicative Factors to Convert Actual Counts Within an Energy Band to Directional Energy Flux Contained Within that Energy Band

TED S/N 013 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to mW m^{-2} $ster^{-1}$	30º electron sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	2.071×10^{-6}	2.084×10^{-6}
2	89	3.288×10^{-6}	3.040×10^{-6}
3	130	4.953×10^{-6}	4.204×10^{-6}
4	189	7.553×10^{-6}	5.886×10^{-6}
5	274	$1.140x\ 10^{-5}$	8.157×10^{-6}
6	399	1.685×10^{-5}	1.107×10^{-5}
7	580	2.538×10^{-5}	1.531×10^{-5}
8	844	3.782×10^{-5}	2.095×10^{-5}
9	1227	7.506×10^{-5}	4.998×10^{-5}
10	1784	1.269×10^{-4}	8.193×10^{-5}
11	2595	2.139×10^{-4}	1.341×10^{-4}
12	3774	3.593×10^{-4}	2.185×10^{-4}
13	5488	6.016×10^{-4}	3.547×10^{-4}
14	7980	1.005×10^{-3}	5.715×10^{-4}
15	11605	1.664×10^{-3}	9.095×10^{-4}
16	16877	2.728×10^{-3}	1.422×10^{-3}

TED S/N 013 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to mW m^{-2} $ster^{-1}$	30º proton sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	1.245×10^{-6}	1.404×10^{-6}
2	89	1.696×10^{-6}	1.932×10^{-6}
3	130	2.278×10^{-6}	2.550×10^{-6}
4	189	3.073×10^{-6}	3.366×10^{-6}
5	274	4.132×10^{-6}	4.471×10^{-6}
6	399	5.446×10^{-6}	5.798×10^{-6}
7	580	7.286×10^{-6}	7.647×10^{-6}
8	844	9.657×10^{-6}	9.995×10^{-6}
9	1227	1.705×10^{-4}	1.212×10^{-4}
10	1784	2.187×10^{-4}	1.554×10^{-4}
11	2595	2.821×10^{-4}	1.996×10^{-4}
12	3774	3.626×10^{-4}	2.551×10^{-4}
13	5488	4.659×10^{-4}	3.257×10^{-4}
14	7980	5.968×10^{-4}	4.143×10^{-4}
15	11605	7.612×10^{-4}	5.215×10^{-4}
16	16877	9.617×10^{-4}	6.475×10^{-4}

Multiplicative Factors to Convert From Actual Counts Within an Energy Band to Directional Number Flux at the Center Energy of that Band

TED S/N 013 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	9.136×10^{6}	9.199×10^{6}
2	89	6.803×10^{6}	6.292×10^{6}
3	130	4.893×10^{6}	4.154×10^{6}
4	189	3.532×10^{6}	2.754×10^{6}
5	274	2.519×10^{6}	1.804×10^{6}
6	399	1.786×10^{6}	1.175×10^{6}
7	580	1.270×10^{6}	7.668×10^{5}
8	844	8.970×10^{5}	4.974×10^{5}
9	1227	8.405×10^{5}	5.599×10^{5}
10	1784	6.748×10^{5}	4.357×10^{5}
11	2595	5.395×10^{5}	3.384×10^{5}
12	3774	4.311×10^{5}	2.627×10^{5}
13	5488	3.445×10^{5}	2.041×10^{5}
14	7980	2.752×10^{5}	1.583×10^{5}
15	11605	2.192×10^{5}	1.225×10^{5}
16	16877	1.737×10^{5}	9.436×10^{4}

TED S/N 013 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	5.492×10^{6}	6.196×10^{6}
2	89	3.509×10^{6}	4.000×10^{6}
3	130	2.252×10^{6}	2.521×10^{6}
4	189	1.438×10^{6}	1.576×10^{6}
5	274	9.143×10^{5}	9.892×10^{5}
6	399	5.784×10^{5}	6.159×10^{5}
7	580	3.650×10^{5}	3.832×10^{5}
8	844	2.293×10^{5}	2.374×10^{5}
9	1227	1.911×10^{6}	1.359×10^{6}
10	1784	1.160×10^{6}	8.242×10^{5}
11	2595	7.061×10^{5}	4.998×10^{5}
12	3774	4.289×10^{5}	3.022×10^{5}
13	5488	2.607×10^{5}	1.830×10^{5}
14	7980	1.584×10^{5}	1.109×10^{5}
15	11605	9.616×10^{4}	6.701×10^{4}
16	16877	5.815×10^{4}	4.037×10^{4}

TED Serial Number 013 Sensor Data
Conversion to Integrated Directional Energy Flux Moment

Sensor	Energy range eV	To convert decompressed counts to mW m^{-2} $ster^{-1}$ multiply by
0º low-energy electron	50 - 1000	2.068×10^{-6}
30º low-energy electron	50 - 1000	1.819×10^{-6}
0º high-energy electron	1000 - 20000	6.900×10^{-5}
30º high-energy electron	1000 - 20000	5.555×10^{-5}
0º low-energy proton	50 - 1000	1.238×10^{-6}
30º low-energy proton	50 - 1000	1.295×10^{-6}
0º high-energy proton	1000 - 20000	5.893×10^{-5}
30º high-energy proton	1000 - 20000	4.118×10^{-5}

TED Serial Number 014 Sensor Data

TED Weighting Factors

0º electron low-energy band number	Particle energy weight	Detection efficiency weight	30º electron low-energy band number	Particle energy weight	Detection efficiency weight
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	3.0	1.0	4	3.0	1.0
5	4.0	1.0	5	4.0	1.0
6	6.0	1.0	6	6.0	1.0
7	8.0	1.0	7	8.0	1.0
8	12.0	1.0	8	12.0	1.0
0º electron high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º electron high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	1.0	1.0	9	1.0	1.0
10	1.5	1.0	10	1.5	1.0
11	3.0	1.0	11	3.0	1.0
12	4.0	1.0	12	4.0	1.0
13	8.0	0.667	13	8.0	0.667
14	16.0	0.667	14	16.0	0.667
15	24.0	0.667	15	24.0	0.667
16	48.0	0.667	16	48.0	0.667
0º proton low-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton low-energy band number**	**Particle energy weight**	**Detection efficiency weight**
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	2.0	1.0	4	2.0	1.0
5	3.0	1.0	5	3.0	1.0
6	4.0	1.0	6	4.0	1.0
7	6.0	1.0	7	6.0	1.0
8	8.0	1.0	8	8.0	1.0
0º proton high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	3.0	1.0	9	3.0	1.0
10	4.0	1.0	10	4.0	1.0
11	4.0	1.0	11	4.0	1.0
12	6.0	1.0	12	6.0	1.0
13	8.0	0.667	13	8.0	0.667
14	12.0	0.667	14	12.0	0.667
15	12.0	0.667	15	12.0	0.667
16	16.0	0.667	16	16.0	0.667

Multiplicative Factors to Convert Actual Counts Within an Energy Band to Directional Energy Flux Contained Within that Energy Band

TED S/N 014 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to mW m^{-2} $ster^{-1}$	30º electron sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	2.500×10^{-6}	2.750×10^{-6}
2	89	3.863×10^{-6}	3.786×10^{-6}
3	130	5.550×10^{-6}	5.305×10^{-6}
4	189	8.142×10^{-6}	7.429×10^{-6}
5	274	1.177×10^{-5}	1.041×10^{-5}
6	399	1.671×10^{-5}	1.431×10^{-5}
7	580	2.423×10^{-5}	1.991×10^{-5}
8	844	3.457×10^{-5}	2.747×10^{-5}
9	1227	7.754×10^{-5}	6.114×10^{-5}
10	1784	1.279×10^{-4}	1.005×10^{-4}
11	2595	2.104×10^{-4}	1.646×10^{-4}
12	3774	3.448×10^{-4}	2.686×10^{-4}
13	5488	5.629×10^{-4}	4.368×10^{-4}
14	7980	9.144×10^{-4}	7.056×10^{-4}
15	11605	1.469×10^{-3}	1.128×10^{-3}
16	16877	2.327×10^{-3}	1.774×10^{-3}

TED S/N 014 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to mW m^{-2} $ster^{-1}$	30º proton sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	1.698×10^{-6}	2.657×10^{-6}
2	89	2.212×10^{-6}	3.334×10^{-6}
3	130	3.033×10^{-6}	4.405×10^{-6}
4	189	4.093×10^{-6}	5.726×10^{-6}
5	274	5.573×10^{-6}	7.511×10^{-6}
6	399	7.346×10^{-6}	9.539×10^{-6}
7	580	9.892×10^{-6}	1.238×10^{-5}
8	844	1.320×10^{-5}	1.591×10^{-5}
9	1227	2.150×10^{-4}	1.705×10^{-4}
10	1784	2.624×10^{-4}	2.076×10^{-4}
11	2595	3.200×10^{-4}	2.537×10^{-4}
12	3774	3.897×10^{-4}	3.092×10^{-4}
13	5488	4.740×10^{-4}	3.762×10^{-4}
14	7980	5.757×10^{-4}	4.557×10^{-4}
15	11605	6.947×10^{-4}	5.467×10^{-4}
16	16877	8.290×10^{-4}	6.455×10^{-4}

Multiplicative Factors to Convert From Actual Counts Within an Energy Band to Directional Number Flux at the Center Energy of that Band

TED S/N 014 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	1.103×10^{7}	1.213×10^{7}
2	89	7.993×10^{6}	7.833×10^{6}
3	130	5.483×10^{6}	5.242×10^{6}
4	189	3.809×10^{6}	3.477×10^{6}
5	274	2.603×10^{6}	2.301×10^{6}
6	399	1.773×10^{6}	1.519×10^{6}
7	580	1.213×10^{6}	9.969×10^{5}
8	844	8.202×10^{5}	6.521×10^{5}
9	1227	8.685×10^{5}	6.847×10^{5}
10	1784	6.803×10^{5}	5.345×10^{5}
11	2595	5.307×10^{5}	4.152×10^{5}
12	3774	4.139×10^{5}	3.225×10^{5}
13	5488	3.229×10^{5}	2.507×10^{5}
14	7980	2.518×10^{5}	1.946×10^{5}
15	11605	1.957×10^{5}	1.506×10^{5}
16	16877	1.514×10^{5}	1.160×10^{5}

TED S/N 014 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	7.492×10^{6}	1.172×10^{7}
2	89	4.578×10^{6}	6.902×10^{6}
3	130	2.998×10^{6}	4.354×10^{6}
4	189	1.916×10^{6}	2.681×10^{6}
5	274	1.233×10^{6}	1.663×10^{6}
6	399	7.800×10^{5}	1.013×10^{6}
7	580	4.995×10^{5}	6.203×10^{5}
8	844	3.134×10^{5}	3.780×10^{5}
9	1227	2.410×10^{6}	1.912×10^{6}
10	1784	1.391×10^{6}	1.101×10^{6}
11	2595	7.998×10^{5}	6.345×10^{5}
12	3774	4.597×10^{5}	3.655×10^{5}
13	5488	2.644×10^{5}	2.107×10^{5}
14	7980	1.521×10^{5}	1.215×10^{5}
15	11605	8.741×10^{4}	6.999×10^{4}
16	16877	5.005×10^{4}	4.015×10^{4}

TED Serial Number 014 Sensor Data
Conversion to Integrated Directional Energy Flux Moment

Sensor	Energy range eV	To convert decompressed counts to mW m^{-2} $ster^{-1}$ multiply by
0º low-energy electron	50 - 1000	2.899×10^{-6}
30º low-energy electron	50 - 1000	2.370×10^{-6}
0º high-energy electron	1000 - 20000	8.846×10^{-5}
30º high-energy electron	1000 - 20000	6.826×10^{-5}
0º low-energy proton	50 - 1000	1.684×10^{-6}
30º low-energy proton	50 - 1000	2.088×10^{-6}
0º high-energy proton	1000 - 20000	7.865×10^{-5}
30º high-energy proton	1000 - 20000	6.287×10^{-5}

TED Serial Number 015 Sensor Data

TED Weighting Factors

0º electron low-energy band number	Particle energy weight	Detection efficiency weight	30º electron low-energy band number	Particle energy weight	Detection efficiency weight
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	3.0	1.0	4	3.0	1.0
5	4.0	1.0	5	4.0	1.0
6	6.0	1.0	6	6.0	1.0
7	8.0	1.0	7	8.0	1.0
8	12.0	1.0	8	12.0	1.0
0º electron high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º electron high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	1.0	1.0	9	1.0	1.0
10	1.5	1.0	10	1.5	1.0
11	3.0	1.0	11	3.0	1.0
12	4.0	1.0	12	4.0	1.0
13	8.0	1.0	13	8.0	0.667
14	16.0	1.0	14	16.0	0.667
15	24.0	1.0	15	24.0	0.667
16	48.0	1.0	16	48.0	0.667
0º proton low-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton low-energy band number**	**Particle energy weight**	**Detection efficiency weight**
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	2.0	1.0	4	2.0	1.0
5	3.0	1.0	5	3.0	1.0
6	4.0	1.0	6	4.0	1.0
7	6.0	1.0	7	6.0	1.0
8	8.0	1.0	8	8.0	1.0
0º proton high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	3.0	1.0	9	3.0	1.0
10	4.0	1.0	10	4.0	1.0
11	4.0	1.0	11	4.0	1.0
12	6.0	1.0	12	6.0	1.0
13	8.0	0.667	13	8.0	0.667
14	12.0	0.667	14	12.0	0.667
15	12.0	0.667	15	12.0	0.667
16	16.0	0.667	16	16.0	0.667

Multiplicative Factors to Convert Actual Counts Within an Energy Band to Directional Energy Flux Contained Within that Energy Band

TED S/N 015 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to mW m^{-2} $ster^{-1}$	30º electron sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	1.560×10^{-6}	2.386×10^{-6}
2	89	3.895×10^{-6}	3.445×10^{-6}
3	130	5.662×10^{-6}	4.761×10^{-6}
4	189	8.088×10^{-6}	6.620×10^{-6}
5	274	1.175×10^{-5}	9.103×10^{-6}
6	399	1.658×10^{-5}	1.241×10^{-5}
7	580	2.367×10^{-5}	1.170×10^{-5}
8	844	3.371×10^{-5}	2.339×10^{-5}
9	1227	7.770×10^{-5}	5.833×10^{-5}
10	1784	1.309×10^{-4}	9.674×10^{-5}
11	2595	2.199×10^{-4}	1.608×10^{-4}
12	3774	3.676×10^{-4}	2.656×10^{-4}
13	5488	6.131×10^{-4}	4.375×10^{-4}
14	7980	1.018×10^{-3}	7.161×10^{-4}
15	11605	1.674×10^{-3}	1.160×10^{-3}
16	16877	2.712×10^{-3}	1.849×10^{-3}

TED S/N 015 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to mW m^{-2} $ster^{-1}$	30º proton sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	1.421×10^{-6}	3.426×10^{-6}
2	89	1.910×10^{-6}	4.477×10^{-6}
3	130	2.642×10^{-6}	5.804×10^{-6}
4	189	3.635×10^{-6}	7.510×10^{-6}
5	274	4.967×10^{-6}	9.689×10^{-6}
6	399	6.744×10^{-6}	1.229×10^{-5}
7	580	9.179×10^{-6}	1.548×10^{-5}
8	844	1.245×10^{-5}	2.017×10^{-5}
9	1227	1.946×10^{-4}	1.556×10^{-4}
10	1784	2.369×10^{-4}	1.912×10^{-4}
11	2595	2.900×10^{-4}	2.360×10^{-4}
12	3774	3.536×10^{-4}	2.900×10^{-4}
13	5488	4.309×10^{-4}	3.559×10^{-4}
14	7980	5.425×10^{-4}	4.345×10^{-4}
15	11605	6.341×10^{-4}	5.253×10^{-4}
16	16877	7.590×10^{-4}	6.250×10^{-4}

Multiplicative Factors to Convert From Actual Counts Within an Energy Band to Directional Number Flux at the Center Energy of that Band

TED S/N 015 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	1.129×10^{7}	1.053×10^{7}
2	89	8.061×10^{6}	7.129×10^{6}
3	130	5.595×10^{6}	4.705×10^{6}
4	189	3.785×10^{6}	3.097×10^{6}
5	274	2.599×10^{6}	2.014×10^{6}
6	399	1.760×10^{6}	1.318×10^{6}
7	580	1.185×10^{6}	8.561×10^{5}
8	844	8.001×10^{5}	5.553×10^{5}
9	1227	8.720×10^{5}	6.532×10^{5}
10	1784	6.958×10^{5}	5.144×10^{5}
11	2595	5.548×10^{5}	4.057×10^{5}
12	3774	4.416×10^{5}	3.191×10^{5}
13	5488	3.519×10^{5}	2.512×10^{5}
14	7980	2.803×10^{5}	1.976×10^{5}
15	11605	2.225×10^{5}	1.550×10^{5}
16	16877	1.758×10^{5}	1.210×10^{5}

TED S/N 015 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	6.268×10^{6}	1.511×10^{7}
2	89	3.952×10^{6}	9.266×10^{6}
3	130	2.611×10^{6}	5.737×10^{6}
4	189	1.701×10^{6}	3.516×10^{6}
5	274	1.099×10^{6}	2.145×10^{6}
6	399	7.161×10^{5}	1.305×10^{6}
7	580	4.597×10^{5}	7.942×10^{5}
8	844	2.955×10^{5}	4.793×10^{5}
9	1227	2.181×10^{6}	1.744×10^{6}
10	1784	1.255×10^{6}	1.014×10^{6}
11	2595	7.247×10^{5}	5.906×10^{5}
12	3774	4.170×10^{5}	3.430×10^{5}
13	5488	2.403×10^{5}	1.995×10^{5}
14	7980	1.386×10^{5}	1.161×10^{5}
15	11605	7.976×10^{4}	6.741×10^{4}
16	16877	4.576×10^{4}	3.901×10^{4}

TED Serial Number 015 Sensor Data
Conversion to Integrated Directional Energy Flux Moment

Sensor	Energy range eV	To convert decompressed counts to mW m^{-2} $ster^{-1}$ multiply by
0º low-energy electron	50 - 1000	2.841×10^{-6}
30º low-energy electron	50 - 1000	2.032×10^{-6}
0º high-energy electron	1000 - 20000	7.020×10^{-5}
30º high-energy electron	1000 - 20000	6.963×10^{-5}
0º low-energy proton	50 - 1000	1.568×10^{-6}
30º low-energy proton	50 - 1000	2.664×10^{-6}
0º high-energy proton	1000 - 20000	7.167×10^{-5}
30º high-energy proton	1000 - 20000	6.017×10^{-5}

TED Serial Number 016 Sensor Data

TED Weighting Factors

0º electron low-energy band number	Particle energy weight	Detection efficiency weight	30º electron low-energy band number	Particle energy weight	Detection efficiency weight
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	3.0	1.0	4	3.0	1.0
5	4.0	1.0	5	4.0	1.0
6	6.0	1.0	6	6.0	1.0
7	8.0	1.0	7	8.0	1.0
8	12.0	1.0	8	12.0	1.0
0º electron high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º electron high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	1.0	1.0	9	1.0	1.0
10	1.5	1.0	10	1.5	1.0
11	3.0	1.0	11	3.0	1.0
12	4.0	1.0	12	4.0	1.0
13	8.0	0.667	13	8.0	0.667
14	16.0	0.667	14	16.0	0.667
15	24.0	0.667	15	24.0	0.667
16	48.0	0.667	16	48.0	0.667
0º proton low-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton low-energy band number**	**Particle energy weight**	**Detection efficiency weight**
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	2.0	1.0	4	2.0	1.0
5	3.0	1.0	5	3.0	0.667
6	4.0	1.0	6	4.0	0.667
7	6.0	1.0	7	6.0	0.667
8	8.0	1.0	8	8.0	0.667
0º proton high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	3.0	1.0	9	3.0	1.0
10	4.0	1.0	10	4.0	1.0
11	4.0	1.0	11	4.0	1.0
12	6.0	1.0	12	6.0	1.0
13	8.0	1.0	13	8.0	1.0
14	12.0	1.0	14	12.0	1.0
15	12.0	1.0	15	12.0	1.0
16	16.0	1.0	16	16.0	1.0

Multiplicative Factors to Convert Actual Counts Within an Energy Band to Directional Energy Flux Contained Within that Energy Band

TED S/N 016 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to mW m^{-2} $ster^{-1}$	30º electron sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	2.029×10^{-6}	2.642×10^{-6}
2	89	3.032×10^{-6}	3.762×10^{-6}
3	130	4.516×10^{-6}	5.127×10^{-6}
4	189	6.642×10^{-6}	7.030×10^{-6}
5	274	9.722×10^{-6}	9.531×10^{-6}
6	399	1.404×10^{-5}	1.282×10^{-5}
7	580	2.064×10^{-5}	1.741×10^{-5}
8	844	2.991×10^{-5}	2.349×10^{-5}
9	1227	7.233×10^{-5}	7.145×10^{-5}
10	1784	1.190×10^{-4}	1.161×10^{-4}
11	2595	1.963×10^{-4}	1.881×10^{-4}
12	3774	3.223×10^{-4}	3.037×10^{-4}
13	5488	5.276×10^{-4}	4.886×10^{-4}
14	7980	8.587×10^{-4}	7.821×10^{-4}
15	11605	1.383×10^{-3}	1.239×10^{-3}
16	16877	2.192×10^{-3}	1.932×10^{-3}

TED S/N 016 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to mW m^{-2} $ster^{-1}$	30º proton sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	1.494×10^{-6}	2.854×10^{-6}
2	89	1.904×10^{-6}	3.627×10^{-6}
3	130	2.500×10^{-6}	4.479×10^{-6}
4	189	3.257×10^{-6}	5.586×10^{-6}
5	274	4.218×10^{-6}	6.856×10^{-6}
6	399	5.387×10^{-6}	8.334×10^{-6}
7	580	6.953×10^{-6}	1.032×10^{-5}
8	844	8.910×10^{-6}	1.266×10^{-5}
9	1227	1.333×10^{-4}	1.118×10^{-4}
10	1784	1.716×10^{-4}	1.422×10^{-4}
11	2595	2.209×10^{-4}	1.815×10^{-4}
12	3774	2.846×10^{-4}	2.310×10^{-4}
13	5488	3.653×10^{-4}	2.935×10^{-4}
14	7980	4.678×10^{-4}	3.712×10^{-4}
15	11605	5.948×10^{-4}	4.464×10^{-4}
16	16877	7.478×10^{-4}	5.725×10^{-4}

Multiplicative Factors to Convert From Actual Counts Within an Energy Band to Directional Number Flux at the Center Energy of that Band

TED S/N 016 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	8.951×10^{6}	1.166×10^{7}
2	89	6.273×10^{6}	7.786×10^{6}
3	130	4.461×10^{6}	5.067×10^{6}
4	189	3.107×10^{6}	3.289×10^{6}
5	274	2.149×10^{6}	2.109×10^{6}
6	399	1.490×10^{6}	1.361×10^{6}
7	580	1.033×10^{6}	8.718×10^{5}
8	844	7.096×10^{5}	5.577×10^{5}
9	1227	8.102×10^{5}	8.003×10^{5}
10	1784	6.330×10^{5}	6.174×10^{5}
11	2595	4.952×10^{5}	4.744×10^{5}
12	3774	3.870×10^{5}	3.642×10^{5}
13	5488	3.027×10^{5}	2.800×10^{5}
14	7980	2.366×10^{5}	2.150×10^{5}
15	11605	1.844×10^{5}	1.646×10^{5}
16	16877	1.430×10^{5}	1.255×10^{5}

TED S/N 016 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	6.589×10^{6}	1.259×10^{7}
2	89	3.940×10^{6}	7.512×10^{6}
3	130	2.472×10^{6}	4.428×10^{6}
4	189	1.525×10^{6}	2.617×10^{6}
5	274	9.336×10^{5}	1.518×10^{6}
6	399	5.723×10^{5}	8.859×10^{5}
7	580	3.485×10^{5}	5.176×10^{5}
8	844	2.117×10^{5}	3.009×10^{5}
9	1227	1.494×10^{6}	1.254×10^{6}
10	1784	9.101×10^{5}	7.545×10^{5}
11	2595	5.529×10^{5}	4.547×10^{5}
12	3774	3.368×10^{5}	2.737×10^{5}
13	5488	2.047×10^{5}	1.650×10^{5}
14	7980	1.246×10^{5}	9.949×10^{4}
15	11605	7.562×10^{4}	5.984×10^{4}
16	16877	4.575×10^{4}	3.588×10^{4}

TED Serial Number 016 Sensor Data
Conversion to Integrated Directional Energy Flux Moment

Sensor	Energy range eV	To convert decompressed counts to mW m^{-2} $ster^{-1}$ multiply by
0º low-energy electron	50 - 1000	2.477×10^{-6}
30º low-energy electron	50 - 1000	2.063×10^{-6}
0º high-energy electron	1000 - 20000	8.320×10^{-5}
30º high-energy electron	1000 - 20000	7.517×10^{-5}
0º low-energy proton	50 - 1000	1.172×10^{-6}
30º low-energy proton	50 - 1000	2.551×10^{-6}
0º high-energy proton	1000 - 20000	4.632×10^{-5}
30º high-energy proton	1000 - 20000	3.690×10^{-5}

TED Serial Number 017 Sensor Data

TED Weighting Factors

0º electron low-energy band number	Particle energy weight	Detection efficiency weight	30º electron low-energy band number	Particle energy weight	Detection efficiency weight
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	3.0	1.0	4	3.0	1.0
5	4.0	1.5	5	4.0	1.0
6	6.0	1.5	6	6.0	1.0
7	8.0	1.5	7	8.0	1.0
8	12.0	1.5	8	12.0	1.0
0º electron high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º electron high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	1.0	1.0	9	1.0	1.0
10	1.5	1.0	10	1.5	1.0
11	3.0	1.0	11	3.0	1.0
12	4.0	1.0	12	4.0	1.0
13	8.0	0.667	13	8.0	0.667
14	16.0	0.667	14	16.0	0.667
15	24.0	0.667	15	24.0	0.667
16	48.0	0.667	16	48.0	0.667
0º proton low-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton low-energy band number**	**Particle energy weight**	**Detection efficiency weight**
1	1.0	1.0	1	1.0	1.0
2	1.5	1.0	2	1.5	1.0
3	2.0	1.0	3	2.0	1.0
4	2.0	1.0	4	2.0	1.0
5	3.0	1.0	5	3.0	0.667
6	4.0	1.0	6	4.0	0.667
7	6.0	1.0	7	6.0	0.667
8	8.0	1.0	8	8.0	0.667
0º proton high-energy band number	**Particle energy weight**	**Detection efficiency weight**	**30º proton high-energy band number**	**Particle energy weight**	**Detection efficiency weight**
9	3.0	1.0	9	3.0	1.0
10	4.0	1.0	10	4.0	1.0
11	4.0	1.0	11	4.0	1.0
12	6.0	1.0	12	6.0	1.0
13	8.0	1.0	13	8.0	1.0
14	12.0	1.0	14	12.0	1.0
15	12.0	1.0	15	12.0	1.0
16	16.0	1.0	16	16.0	1.0

Multiplicative Factors to Convert Actual Counts Within an Energy Band to Directional Energy Flux Contained Within that Energy Band

TED S/N 017 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to mW m^{-2} $ster^{-1}$	30º electron sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	8.907×10^{-7}	1.243×10^{-6}
2	89	1.488×10^{-6}	1.904×10^{-6}
3	130	2.358×10^{-6}	2.788×10^{-6}
4	189	3.717×10^{-6}	4.011×10^{-6}
5	274	5.872×10^{-6}	5.870×10^{-6}
6	399	9.110×10^{-6}	8.341×10^{-6}
7	580	1.429×10^{-5}	1.199×10^{-5}
8	844	2.228×10^{-5}	1.720×10^{-5}
9	1227	5.094×10^{-5}	3.493×10^{-5}
10	1784	8.318×10^{-5}	5.627×10^{-5}
11	2595	1.356×10^{-4}	9.069×10^{-5}
12	3774	2.203×10^{-4}	1.452×10^{-4}
13	5488	3.563×10^{-4}	2.320×10^{-4}
14	7980	5.727×10^{-4}	3.689×10^{-4}
15	11605	9.092×10^{-4}	5.804×10^{-4}
16	16877	1.418×10^{-3}	9.003×10^{-4}

TED S/N 017 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to mW m^{-2} $ster^{-1}$	30º proton sensor to convert counts to mW m^{-2} $ster^{-1}$
1	61	2.189×10^{-6}	2.062×10^{-6}
2	89	2.929×10^{-6}	2.645×10^{-6}
3	130	3.776×10^{-6}	3.254×10^{-6}
4	189	4.919×10^{-6}	4.004×10^{-6}
5	274	6.397×10^{-6}	4.959×10^{-6}
6	399	8.103×10^{-6}	5.997×10^{-6}
7	580	1.046×10^{-5}	7.376×10^{-6}
8	844	1.337×10^{-5}	8.990×10^{-6}
9	1227	1.898×10^{-4}	1.079×10^{-4}
10	1784	2.401×10^{-4}	1.367×10^{-4}
11	2595	3.032×10^{-4}	1.734×10^{-4}
12	3774	3.823×10^{-4}	2.190×10^{-4}
13	5488	4.813×10^{-4}	2.762×10^{-4}
14	7980	6.050×10^{-4}	3.471×10^{-4}
15	11605	7.551×10^{-4}	4.317×10^{-4}
16	16877	9.328×10^{-4}	5.295×10^{-4}

Multiplicative Factors to Convert From Actual Counts Within an Energy Band to Directional Number Flux at the Center Energy of that Band

TED S/N 017 Electron Detector System

Energy band	Band center energy (eV)	0º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º electron sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	3.929×10^{6}	5.483×10^{6}
2	89	3.077×10^{6}	3.941×10^{6}
3	130	2.328×10^{6}	2.755×10^{6}
4	189	1.738×10^{6}	1.877×10^{6}
5	274	1.297×10^{6}	1.298×10^{6}
6	399	9.655×10^{5}	8.849×10^{5}
7	580	7.145×10^{5}	6.001×10^{5}
8	844	5.282×10^{5}	4.081×10^{5}
9	1227	5.706×10^{5}	3.913×10^{5}
10	1784	4.423×10^{5}	2.991×10^{5}
11	2595	3.422×10^{5}	2.286×10^{5}
12	3774	2.647×10^{5}	1.741×10^{5}
13	5488	2.048×10^{5}	1.328×10^{5}
14	7980	1.584×10^{5}	1.012×10^{5}
15	11605	1.221×10^{5}	7.691×10^{4}
16	16877	9.370×10^{4}	5.819×10^{4}

TED S/N 017 Proton Detector System

Energy band	Band center energy (eV)	0º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$	30º proton sensor to convert counts to particles m^{-2} sec^{-1} eV^{-1} $ster^{-1}$
1	61	9.661×10^{6}	9.101×10^{6}
2	89	6.063×10^{6}	5.477×10^{6}
3	130	3.733×10^{6}	3.218×10^{6}
4	189	2.303×10^{6}	1.876×10^{6}
5	274	1.416×10^{6}	1.098×10^{6}
6	399	8.608×10^{5}	6.375×10^{5}
7	580	5.241×10^{5}	3.699×10^{5}
8	844	3.177×10^{5}	2.137×10^{5}
9	1227	2.128×10^{6}	1.210×10^{6}
10	1784	1.273×10^{6}	7.250×10^{5}
11	2595	7.585×10^{5}	4.342×10^{5}
12	3774	4.518×10^{5}	2.592×10^{5}
13	5488	2.693×10^{5}	1.550×10^{5}
14	7980	1.605×10^{5}	9.276×10^{4}
15	11605	9.555×10^{4}	5.537×10^{4}
16	16877	5.667×10^{4}	3.295×10^{4}

TED Serial Number 017 Sensor Data
Conversion to Integrated Directional Energy Flux Moment

Sensor	Energy range eV	To convert decompressed counts to mW m^{-2} $ster^{-1}$ multiply by
0º low-energy electron	50 - 1000	1.174×10^{-6}
30º low-energy electron	50 - 1000	1.441×10^{-6}
0º high-energy electron	1000 - 20000	5.550×10^{-5}
30º high-energy electron	1000 - 20000	3.529×10^{-5}
0º low-energy proton	50 - 1000	1.762×10^{-6}
30º low-energy proton	50 - 1000	1.819×10^{-6}
0º high-energy proton	1000 - 20000	5.938×10^{-5}
30º high-energy proton	1000 - 20000	3.433×10^{-5}