

Contents

1	Preface	1
2	The International Seismological Centre	2
2.1	The ISC Mandate	2
2.2	Brief History of the ISC	3
2.3	Former Directors of the ISC and its U.K. Predecessors	4
2.4	Member Institutions of the ISC	5
2.5	Sponsoring Organisations	10
2.6	Data Contributing Agencies	11
2.7	ISC Staff	19
3	Availability of the ISC Bulletin	24
4	Citing the International Seismological Centre	25
4.1	The ISC Bulletin	25
4.2	The Summary of the Bulletin of the ISC	26
4.3	The historical printed ISC Bulletin (1964-2009)	26
4.4	The IASPEI Reference Event List	26
4.5	The ISC-GEM Catalogue	26
4.6	The ISC-EHB Dataset	28
4.7	The ISC Event Bibliography	28
4.8	International Registry of Seismograph Stations	28
4.9	Seismological Dataset Repository	28
4.10	Data transcribed from ISC CD-ROMs/DVD-ROMs	28
5	Operational Procedures of Contributing Agencies	29
5.1	Regional Seismological Observation Network in Yakutia	29
5.1.1	Introduction	29
5.1.2	A Brief History of Instrumental Seismological Observations in Yakutia	30
5.1.3	Current Status of Instrumental Seismic Observations	30
5.1.4	General Characteristics of the Observed Seismicity	33
5.1.5	Future Seismological Observation Development Project	36
5.1.6	Conclusion	36
6	Summary of Seismicity, January – June 2021	38

7	Statistics of Collected Data	44
7.1	Introduction	44
7.2	Summary of Agency Reports to the ISC	44
7.3	Arrival Observations	49
7.4	Hypocentres Collected	56
7.5	Collection of Network Magnitude Data	58
7.6	Moment Tensor Solutions	64
7.7	Timing of Data Collection	67
8	Overview of the ISC Bulletin	69
8.1	Events	69
8.2	Seismic Phases and Travel-Time Residuals	78
8.3	Seismic Wave Amplitudes and Periods	83
8.4	Completeness of the ISC Bulletin	86
8.5	Magnitude Comparisons	87
9	The Leading Data Contributors	91
9.1	The Largest Data Contributors	91
9.2	Contributors Reporting the Most Valuable Parameters	94
9.3	The Most Consistent and Punctual Contributors	99
10	Appendix	100
10.1	ISC Operational Procedures	100
10.1.1	Introduction	100
10.1.2	Data Collection	100
10.1.3	ISC Automatic Procedures	101
10.1.4	ISC Location Algorithm	105
10.1.5	Review Process	115
10.1.6	Probabilistic Point Source Model (ISC-PPSM)	117
10.1.7	The use of Network code for Arrivals at the ISC and in ISCLoc	118
10.1.8	History of Operational Changes	119
10.2	IASPEI Standards	120
10.2.1	Standard Nomenclature of Seismic Phases	120
10.2.2	Flinn-Engdahl Regions	128
10.2.3	IASPEI Magnitudes	135
10.2.4	The IASPEI Seismic Format (ISF)	139
10.2.5	Ground Truth (GT) Events	141
10.2.6	Nomenclature of Event Types	143
10.3	Tables	144
11	Glossary of ISC Terminology	162

12 Acknowledgements	166
References	167