International Seismological Centre

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 . . . 11

2.6 Data Contributing Agencies . . . 12

2.7 ISC Staff . . . 21

3 Availability of the ISC Bulletin **26**

4 Citing the International Seismological Centre **27**

5 Summary of Seismicity, July - December 2013 **29**

6 Notable Events **34**

6.1 Notable events of Kamchatka in 2013 . . . 34

6.2 The February 28, 2013, M_W 6.8 South Kamchatka Earthquake . . . 34

6.2.1 Introduction . . . 34

6.2.2 Focal mechanism of the earthquake . . . 36

6.2.3 Main features of the aftershocks process . . . 36

6.2.4 Macroseismic data . . . 38

6.2.5 Ground motion . . . 41

6.2.6 Conclusion . . . 45

6.3 The largest deep-focus Sea of Okhotsk earthquake May 24, 2013, $M_W = 8.3$ . . . 47

6.3.1 Introduction . . . 47

6.3.2 Tectonic setting and the focal mechanism of the earthquake . . . 50

6.3.3 Main features of the aftershock sequence . . . 58

6.3.4 Macroseismic data . . . 59

6.3.5 Conclusion . . . 63

6.4 References . . . 63

7 Statistics of Collected Data **66**

7.1 Introduction . . . 66
7.2 Summary of Agency Reports to the ISC . . . 66
7.3 Arrival Observations . . . 71
7.4 Hypocentres Collected . . . 78
7.5 Collection of Network Magnitude Data . . . 80
7.6 Moment Tensor Solutions . . . 86
7.7 Timing of Data Collection . . . 89

8 Overview of the ISC Bulletin 91
8.1 Events . . . 91
8.2 Seismic Phases and Travel-Time Residuals . . . 100
8.3 Seismic Wave Amplitudes and Periods . . . 106
8.4 Completeness of the ISC Bulletin . . . 108
8.5 Magnitude Comparisons . . . 109

9 The Leading Data Contributors 114
9.1 The Largest Data Contributors . . . 114
9.2 Contributors Reporting the Most Valuable Parameters . . . 116
9.3 The Most Consistent and Punctual Contributors . . . 120

10 Appendix 122

11 Glossary of ISC Terminology 141

12 Acknowledgements 145

References 146