

INTERNATIONAL
STANDARD

ISO
35106

First edition
2017-12

**Petroleum and natural gas
industries — Arctic operations —
Metocean, ice, and seabed data**

*Industries du pétrole et du gaz naturel — Opérations en Arctique
— Données océano-météorologiques et données sur les glaces et les
planchers océaniques*



Reference number
ISO 35106:2017(E)

© ISO 2017



COPYRIGHT PROTECTED DOCUMENT

© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

	Page
Foreword	vii
Introduction	viii
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols and abbreviated terms	7
4.1 Symbols	7
4.2 Abbreviated terms	8
5 General requirements	8
5.1 General	8
5.1.1 Physical environmental data requirements	8
5.1.2 Relationship with ISO 19901-1 and ISO 19906	9
5.1.3 Data sources	9
5.1.4 Selection of appropriate parameters	9
5.1.5 Physical environmental data monitoring	9
5.1.6 Data storage	10
5.2 Particular aspects	10
5.2.1 Region of interest	10
5.2.2 Criticality	10
5.2.3 Variability	10
5.2.4 Statistical	11
5.2.5 Forecasting	12
5.2.6 Weather windows	12
5.2.7 Climatic trends	13
5.2.8 Expertise and experience	13
6 Water depth, tides and storm surges	13
6.1 General	13
6.2 Bathymetry	14
6.3 Tides	14
6.4 Storm surges	14
7 Wind	15
7.1 General	15
7.2 Polar lows	15
7.3 Katabatic wind	15
7.4 Low level arctic jet	15
8 Waves	15
8.1 General	15
8.2 Wave-induced ice motions	15
8.3 Wave transmission through sea ice	15
9 Currents	16
9.1 General	16
9.2 Currents for sea ice and iceberg drift prediction	16
9.3 Current records	16
10 Temperature	16
10.1 General	16
10.2 Sea water temperature	17
10.3 Air temperature	17
11 Atmospheric parameters	17
11.1 General	17
11.2 Daylight considerations	17