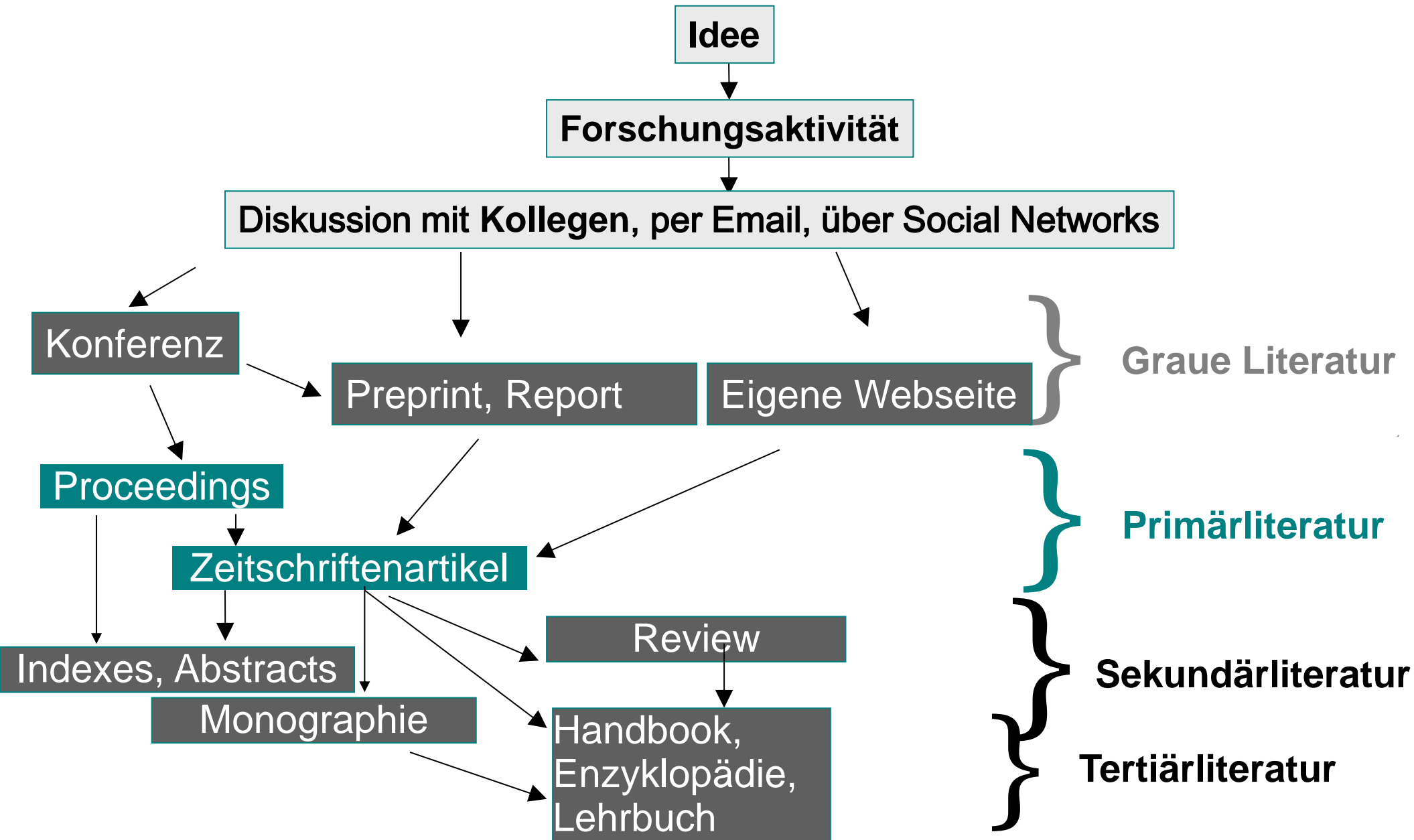


**Einführung
in die
Literaturrecherche**

Verbreitung wissenschaftlicher Information



Überblick

1. Was suchen wir ?

Literaturlisten interpretieren

2. Wo suchen wir ?

1. Bibliothekskataloge

2. Literaturdatenbanken

3. Was machen wir mit gesammelten Zitaten ?

Literaturverwaltungsprogramme

1. Literaturlisten interpretieren

Die wichtigsten Publikationsformen

Bücher

- Monographien: Fach- und Lehrbücher
 - Handbücher
 - Sammelbände
 - Proceedings
 - Forschungsberichte / Reports
- („Graue Literatur“)
- } selbständig

1. Literaturlisten interpretieren

Die wichtigsten Publikationsformen

Artikel / Aufsätze in

- einer Zeitschrift
- einem Sammelband
- einem Kongressbericht (Proceeding)
- einem Forschungsbericht (Report)

} unselbständig

1. Literaturlisten interpretieren

Die wichtigsten Metadaten

- ▶ **Autor(en)**
- ▶ **Titel**
- ▶ **Erscheinungsjahr**
- ▶ Ort + Verlag (i.d.R. nur bei selbständiger Literatur)
- ▶ übergeordnetes Werk (z.B. Zeitschrift, Sammelband)
- ▶ Bandangabe, Seitenangabe, Artikelnummer
- ▶ **DOI = Digital Object Identifier**

1. Literaturlisten interpretieren

Literaturlisten können sehr unterschiedlich aussehen, aber diese angegebenen Metadaten sollten immer vorhanden sein.

Reihenfolge ist abhängig von Layoutvorgaben des Verlags / Zeitschrift.



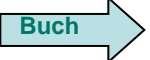






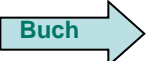
Wichtig ist vor allem das **Erscheinungsjahr**.

Beim Erstellen eigener Listen sollten Abkürzungen von Zeitschriftentiteln **möglichst** vermieden werden.

Seitenzahlen bei Artikeln nicht mehr überall, weil gedruckte Version keine Seitenzahlen mehr enthält => Artikel-Nr. oder **DOI = Digital Object Identifier**

1. Literaturlisten interpretieren

Literaturliste (Beispiel)

-  **Chassignet, Eric P.:** Ocean weather forecasting : an integrated view of oceanography, Dordrecht, Springer, 2006. - 577 S.
-  **Danielson, S., K. Aagaard, T. Weingartner, S. Martin, P. Winsor, G. Gawarkiewicz, und D. Quadfasel:** The St. Lawrence Polynya and the Bering Shelf circulation: New observations and a model comparison. *J. Geophys. Res.*, 111, C09023, 2006 doi: 10.1029/2005JC003268.
-  **Heitmann, S. and J.O. Backhaus:** Large-eddy simulations of convective shear flows. *Deep Sea Res. Part II*, 52, 1156-1180, 2005. doi: 10.1016/j.dsr2.2005.03.001
-  **Kämpf, J.:** Advanced ocean modelling : using open-source software. - Heidelberg, Springer, 2010. - 181 S.
-  **Kaleschke, L., N. Maass, C. Haas, S. Hendricks, G. Heygster, and R.T. Tonboe :** A sea-ice thickness retrieval model for 1.4 GHz radiometry and application to airborne measurements over low salinity sea-ice. *Cryosphere*, 4, 583-592, 2010. doi: 10.5194/tc-4-583-2010
-  **Kern, S., L. Kaleschke, and G. Spreen, :** Climatology of the Nordic (Irminger, Greenland, Barents, Kara and White/Pechora) Seas ice cover based on 85 GHz satellite microwave radiometry: 1992-2008. *Tellus Series A*, 62, 411-434, 2010. doi: 10.1111/j.1600-0870.2010.00457.x.
-  **Lozán, J.L. [ed.]:** Warnsignal Klima: die Meere - Änderungen und Risiken : wissenschaftliche Fakten.. – Hamburg, Wissenschaftliche Auswertungen, 2011. - 383 S.
-  **Meincke, J. und D. Quadfasel:** Konvektion und Frischwasserflüsse im Nordatlantik. *Warnsignale aus den Polarregionen*, J.L. Lozán (ed.). Hamburg, Wissenschaftliche Auswertungen, 2006, 73-77.
-  **Murphy, Dallas:** To follow the water : exploring the sea to discover climate from the Gulf Stream to the blue beyond. - New York, Counterpoint, 2007. - 276 S.
-  **Notz, D. :** Meereis in der Arktis und Antarktis. *Warnsignal Klima: die Meere*, J.L. Lozán (ed.). Hamburg, Wissenschaftliche Auswertungen, 2011, 96-101
-  **Quadfasel, D.:** The Atlantic heat conveyor slows. *Nature*, 438, 565-566, 2005. doi:10.1038/438565a
-  **Spreen, G., Kaleschke, L. und G. Heygster:** Sea ice remote sensing using AMSR-E 89 GHz channels. *J. Geophys. Res.*, 113, C02503, 2008. doi: 10.1029/2005JC003384
-  **Talley, L. D.:** Descriptive physical oceanography : an introduction. - 6. ed. - Amsterdam, Elsevier, 2011. - 555 S.

1. Literaturlisten interpretieren

Literaturliste (Beispiel) : Erscheinungsjahr hinter den Autoren

- Chassignet, E. P. (2006):** Ocean weather forecasting : an integrated view of oceanography, Dordrecht, Springer, 577 S.
- Danielson, S., K. Aagaard, T. Weingartner, S. Martin, P. Winsor, G. Gawarkiewicz, und D. Quadfasel (2006):** The St. Lawrence Polynya and the Bering Shelf circulation: New observations and a model comparison. *J. Geophys. Res.*, 111, C09023. doi: 10.1029/2005JC003268.
- Heitmann, S, and J.O. Backhaus (2005):** Large-eddy simulations of convective shear flows. *Deep Sea Res. Part II*, 52, 1156-1180. doi: 10.1016/j.dsr2.2005.03.001
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- Kern, S., L. Kaleschke, and G. Spreen (2010):** Climatology of the Nordic (Irminger, Greenland, Barents, Kara and White/Pechora) Seas ice cover based on 85 GHz satellite microwave radiometry: 1992-2008. *Tellus Series A*, 62, 411-434. doi: 10.1111/j.1600-0870.2010.00457.x.
- Lozán, J.L. [ed.] (2011):** Warnsignal Klima: die Meere - Änderungen und Risiken : wissenschaftliche Fakten.. – Hamburg, Wissenschaftliche Auswertungen, 383 S.
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- Spreen, G., Kaleschke, L. and G. Heygster (2008):** Sea ice remote sensing using AMSR-E 89 GHz channels. *J. Geophys. Res.*, 113, C02503. doi: 10.1029/2005JC003384
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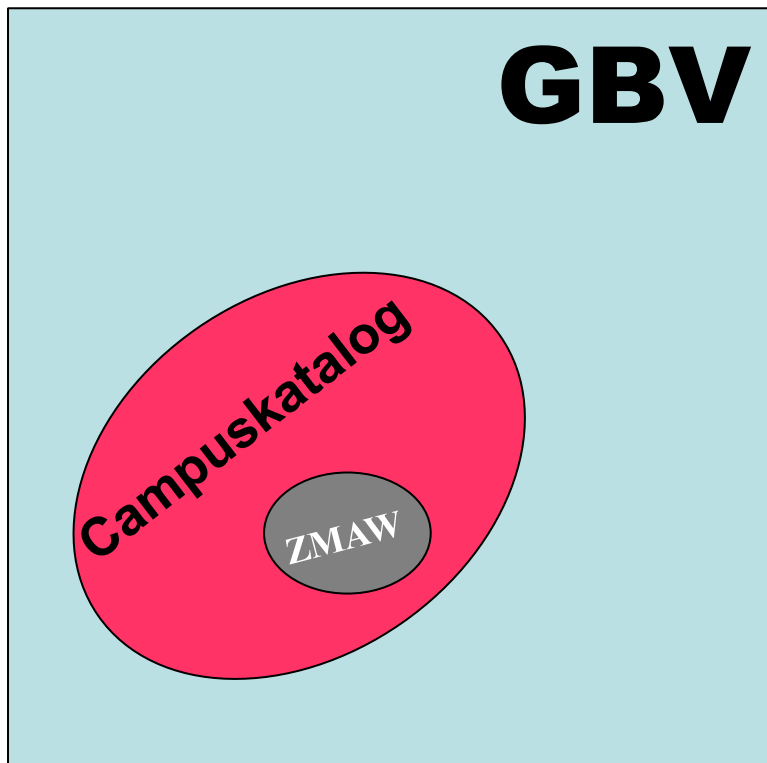
2.1. Bibliothekskataloge

Bibliothekskataloge sind

- frei verfügbar im Internet
- **abhängig von Bibliotheksbeständen**
- verzeichnen überwiegend selbständig erschienene Literatur: Fach-/Lehrbücher, Enzyklopädien, Reports, Tagungsbände
- Zeitschriften(titel)
- nur in begrenztem Umfang unselbständig erschienene Literatur (Aufsätze, Buchkapitel)

2.1. Bibliothekskataloge

Gemeinsamer Bibliotheksverbund (GBV)



Bibliotheksbestände der Uni HH über den **Campuskatalog** recherchieren

Ausschnitte über kleinere Einheiten, z.B. ZMAW

2.1. Bibliothekskataloge

Suchen
Suchergebnis
Erweiterte Suche
Zwischenablage
Benutzer-Info
Hilfe

sortiert nach
 Unscharfe Suche

Benutzergruppe: 1000 | IP: 136.172.96.227

Suchgeschichte
Kurzliste
Titeldaten

■ Ihre Aktion suchen [und] (Titelstichwörter [TIT]) Descriptive physical oceanography 1 - 6 von 6

- 1
2
3
4
5
6

[Descriptive physical oceanography : an introduction](#)
 / Lynne D Talley. - 6. ed. - Amsterdam [u.a.] : Elsevier, 2011
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 / George L. Pickard. - 4., enl. ed. (in SI units). - Oxford [u.a.] : Pergamon Press, 1982
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 / George Lawson Pickard. - 3. ed. - Oxford u.a. : Pergamon Pr., 1979
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[Descriptive physical oceanography : an introduction](#)
 / George L. Pickard. - 2. ed. - Oxford [u.a.] : Pergamon Pr., 1975

1 - 6 von 6

Wort	Typ	Anzahl
descriptive	Titelstichwörter [TIT]	13
physical	Titelstichwörter [TIT]	291
oceanography	Titelstichwörter [TIT]	306

gehe zu 1 - 6 von 6

2.1. Bibliothekskataloge

➤ Virtueller Katalog der UB Karlsruhe (KVK)

<http://www.ubka.uni-karlsruhe.de/kvk.html>

Sucht simultan in verschiedenen Bibliothekskatalogen gleichzeitig

➤ Zeitschriftendatenbank (ZDB)

<http://www.zdb-opac.de>

verzeichnet die gedruckten Zeitschriftenbestände in deutschen Bibliotheken

➤ Elektronische Zeitschriftenbibliothek (EZB)

<http://rzbvm013.uni-regensburg.de/ezeit/index.phtml?bibid=MPIM&colors=7>

verzeichnet die elektronischen Zeitschriften und ihre Lizenzzugänge für die jeweilige Bibliothek nach Ampelsystem:



2.1. Bibliothekskataloge : EZB



**Elektronische
Zeitschriftenbibliothek**

Max-Planck-Institut für Meteorologie, Hamburg

**Elektronische
Zeitschriftenbibliothek**

Bibliothekssystem Universität Hamburg

Der Service EZB Datenbanken ZDB

A⁺ A A⁻

A⁺ A A⁻

Zeitschriften

nach Fächern

alphabetisch

erweiterte Suche

neu in der EZB

Zeitschriftentitel

Bibliotheksauswahl

Einstellungen

Kontakt

Ansprechpartner

Titelvorschlag

103144 Titel

○○● Marine Ecology Progress Series : MEPS

Volltext nicht lizenziert: ○○○ [Homepage der Zeitschrift](#)
[gedruckt vorhanden?](#)

Allgemeine Angaben zur Online-Ausgabe der Zeitschrift:

Titel:	Marine Ecology Progress Series : MEPS
Verlag:	Inter-Research Open Access Policy des Verlages in SHERPA/ROMEO suchen
Fachgruppe(n):	Biologie
Schlagwort(e):	Meeresbiologie
E-ISSN(s):	1616-1599
P-ISSN(s):	0171-8630
ZDB-Nummer:	2022265-8
erste Volltextausgabe:	Jg. 1 (1979)
Homepage(s):	http://www.int-res.com/journals/meps/meps-home/
Erscheinungsweise:	Volltext, Online und Druckausgabe
Kosten:	kostenlos mit Druckausgabe
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restlichen Zeiträume: ○○○ [Homepage der Zeitschrift](#)

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Allgemeine Angaben zur Online-Ausgabe der Zeitschrift:

Titel:	Marine Ecology Progress Series : MEPS
Verlag:	Inter-Research
Fachgruppe(n):	Biologie
Schlagwort(e):	Meeresbiologie
E-ISSN(s):	1616-1599
P-ISSN(s):	0171-8630
ZDB-Nummer:	2022265-8
erste Volltextausgabe:	Jg. 1 (1979)
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Erscheinungsweise:	Volltext, Online und Druckausgabe
Kosten:	kostenlos mit Druckausgabe
Bemerkung:	Volltext ab 1.1979, Artikel älter als vier Jahre frei

2.1. Bibliothekskataloge : EZB

The screenshot shows the website of the library system at the University of Hamburg. At the top, there are social media links for Twitter, Facebook, FAQ, Sitemap, and contact options. The main header includes the library's name and logo. A navigation menu is visible with options for Recherche, Service, Bibliotheken, and Blog. The main content area features a login section titled 'Anmeldung' with a prompt to enter a library card number and password. A sidebar on the left lists various services like catalogs, databases, and e-books. A footer section provides information about the regional library and its collections.

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Recherche Service Bibliotheken Blog

Startseite > Service

Anmeldung

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Passwort:

Anmelden

Kataloge
Datenbanken
Elektronische Zeitschriften
E-Books
Literaturverwaltung
Recherche nach Fächern
Teaching Library

Thema Hamburg

Landesbibliothek der Freien und Hansestadt Hamburg

Die Stabi bietet Sammlungen, Information und Service zu Hamburgs Geschichte und Landeskunde.
mehr >

Zugriff auf elektronische Medien der Uni HH auch von ausserhalb mit Ausweis des Bibliotheksystems Uni Hamburg.

2.2. Literaturdatenbanken

- häufig nicht frei verfügbar (IP-Adresse, Log-in)
- **unabhängig von Bibliotheksbeständen**
- auf eine Auswahl von ausgewerteten Publikationen beschränkt

- Zeitschriftenaufsätze
- Konferenzbeiträge
- geringe Auswahl an grauer Literatur (nicht über den Buchhandel erhältlich)
- Fach-/Lehrbücher nur in Auswahl

- häufig direkte Verlinkung auf die elektronischen Volltexte

-> Fulltext

Context Sensitive Links



2.2. Literaturdatenbanken

- **Datenbankangebote im BIS-ZMAW** (fachliche Auswahl)

<http://www.zmaw.de/Datenbanken.45.0.html>

Lizenzen nur für ZMAW-Netz (136.172.*.*)

Datenbanken von außerhalb i.d.R. nicht verfügbar (mit vorhandenem ZMAW-Account mittels VPN, SSH u.ä möglich)

- **Datenbankangebote der Uni HH**

<http://www.sub.uni-hamburg.de/recherche/datenbanken.html>

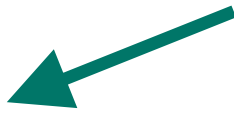
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Datenbanken von außerhalb verfügbar mit Hilfe des Bibliotheksausweises

- Kataloge
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Datenbanken

Die Zugänge zu allen Datenbanken funktionieren nur in unserem IP-Bereich.



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- INSPEC *(auch über STNEasy)*
- Zoological Records
- Journal Citation Index

[SCOPUS \(Elsevier\)](#)

[CSA-Datenbanken](#)

- ASFA
- BioOne Fulltext
- Biological Sciences
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- Eric
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Einstieg in die im BIS-ZMAW verfügbaren Datenbanken (Auswahl)

2.2. Literaturdatenbanken

Web of Science (ISI)

multidisziplinäre Fachdatenbank mit Abstracts und direkter Verlinkung zu Volltexten.

lizenziert bei MPG und Uni HH.

nimmt auch die Literaturlisten der Artikel auf und verknüpft so die einzelnen Artikel untereinander

=> Möglichkeit zur Suche nach Artikeln, die einen älteren bereits vorliegenden zitieren.

=> Information über Anzahl der Zitierungen eines Artikels

Grundlage für den **Journal Citation Report**, der den Impaktfaktor von Zeitschriften ausgibt basierend auf Berechnungen, die von ISI entwickelt wurden.

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Author(s): Spreen G (Spreen, G.)¹, Kaleschke L (Kaleschke, L.)^{1,2}, Heygster G (Heygster, G.)²

Source: JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS **Volume:** 113 **Issue:** C2 **Article Number:** C02S03 **Published:** JAN 17 2008

Times Cited: 8 **References:** 40 [Citation Map](#) *beta*

Abstract: Recent progress in sea ice concentration remote sensing by satellite microwave radiometers has been stimulated by two developments: First, the new sensor Advanced Microwave Scanning Radiometer-EOS (AMSR-E) offers spatial resolutions of approximately 6 x 4 km at 89 GHz, nearly 3 times the resolution of the standard sensor SSM/I at 85 GHz (15 x 13 km). Second, a new algorithm enables estimation of sea ice concentration from the channels near 90 GHz, despite the enhanced atmospheric influence in these channels. This allows full exploitation of their horizontal resolution, which is up to 4 times finer than that of the channels near 19 and 37 GHz, the frequencies used by the most widespread algorithms for sea ice retrieval, the NASA-Team and Bootstrap algorithms. The ASI algorithm used combines a model for retrieving the sea ice concentration from SSM/I 85-GHz data proposed by Svendsen et al. (1987) with an ocean mask derived from the 18-, 23-, and 37-GHz AMSR-E data using weather filters. During two ship campaigns, the correlation of ASI, NASA-Team 2, and Bootstrap algorithms ice concentrations with bridge observations were 0.80, 0.79, and 0.81, respectively. Systematic differences over the complete AMSR-E period (2002-2006) between ASI and NASA-Team 2 are below -2 +/- 8.8%, and between ASI and Bootstrap are 1.7 +/- 10.8%. Among the geophysical implications of the ASI algorithm are: (1) Its higher spatial resolution allows better estimation of crucial variables in numerical atmospheric and ocean models, for example, the heat flux between ocean and atmosphere, especially near coastlines and in polynyas. (2) It provides an additional time series of ice area and extent for climate studies.

Document Type: Article

Language: English

KeyWords Plus: SSM/I; GHZ; VARIABILITY; ALGORITHMS; REDUCTION; IMAGERY; SUMMER; IMPACT; MODEL; AREA

Reprint Address: Spreen, G (reprint author), Univ Hamburg, ZMAW, Inst Oceanog, Bundesstr 53, D-20146 Hamburg, Germany

Addresses:

1. Univ Hamburg, ZMAW, Inst Oceanog, D-20146 Hamburg, Germany
2. Univ Bremen, Inst Environm Phys, D-28334 Bremen, Germany

E-mail Addresses: gunnar.spreen@zmaw.de, lars.kaleschke@zmaw.de, heygster@uni-bremen.de

Publisher: AMER GEOPHYSICAL UNION, 2000 FLORIDA AVE NW, WASHINGTON, DC 20009 USA

Subject Category: Oceanography

IDS Number: 254EV

Cited by: 8

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Morin S, Savarino J, Frey MM, et al. [Comprehensive isotopic composition of atmospheric nitrate in the Atlantic Ocean boundary layer from 65 degrees S to 79 degrees N](#) JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES 114 MAR 6 2009

Siebert S, Anton-Erxleben F, Kiko R, et al. [Sympagohydra tuuli \(Cnidaria, Hydrozoa\): first report from sea ice of the central Arctic Ocean and insights into histology, reproduction and locomotion](#) MARINE BIOLOGY 156 4 541-554 MAR 2009

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Sea ice remote sensing using AMSR-E 89-GHz channels

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Author(s): Spreen G (Spreen, G.)¹, Kaleschke L (Kaleschke, L.)^{1,2}, Heygster G (Heygster, G.)²

Source: JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS **Volume:** 113 **Issue:** C2 **Article Number:** C02S03 **Published:** JAN 17 2008

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Abstract: Recent progress in sea ice concentration remote sensing by satellite microwave radiometers has been stimulated by two developments: First, the new sensor Advanced Microwave Scanning Radiometer-EOS (AMSR-E) offers spatial resolutions of approximately 6 x 4 km at 89 GHz, nearly 3 times the resolution of the standard sensor SSM/I at 85 GHz (15 x 13 km). Second, a new algorithm enables estimation of sea ice concentration from the channels near 90 GHz, despite the enhanced atmospheric influence in these channels. This allows full exploitation of their horizontal resolution, which is up to 4 times finer than that of the channels near 19 and 37 GHz, the frequencies used by the most widespread algorithms for sea ice retrieval, the NASA-Team and Bootstrap algorithms. The ASI algorithm used combines a model for retrieving the sea ice concentration from SSM/I 85-GHz data proposed by Svendsen et al. (1987) with an ocean mask derived from the 18-, 23-, and 37-GHz AMSR-E data using weather filters. During two ship campaigns, the correlation of ASI, NASA-Team 2, and Bootstrap algorithms ice concentrations with bridge observations were 0.80, 0.79, and 0.81, respectively. Systematic differences over the complete AMSR-E period (2002-2006) between ASI and NASA-Team 2 are below -2 +/- 8.8%, and between ASI and Bootstrap are 1.7 +/- 10.8%. Among the geophysical implications of the ASI algorithm are: (1) Its higher spatial resolution allows better estimation of crucial variables in numerical atmospheric and ocean models, for example, the heat flux between ocean and atmosphere, especially near coastlines and in polynyas. (2) It provides an additional time series of ice area and extent for climate studies.

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Reprint Address: Spreen, G (reprint author), Univ Hamburg, ZMAW, Inst Oceanog, Bundesstr 53, D-20146 Hamburg, Germany

Addresses:
1. Univ Hamburg, ZMAW, Inst Oceanog, D-20146 Hamburg, Germany
2. Univ Bremen, Inst Environm Phys, D-28334 Bremen, Germany

E-mail Addresses: gunnar.spreen@zmaw.de, lars.kaleschke@zmaw.de, heygster@uni-bremen.de

Publisher: AMER GEOPHYSICAL UNION, 2000 FLORIDA AVE NW, WASHINGTON, DC 20009 USA

Subject Category: Oceanography

IDS Number: 254EV

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Lu P, Li ZJ, Cheng B, et al. Sea ice surface features in Arctic summer 2008: Aerial observations REMOTE SENSING OF ENVIRONMENT 114 4 693-699 APR 15 2010

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Language: English

KeyWords Plus: SSM/I; GHZ; VARIABILITY; ALGORITHMS; REDUCTION; IMAGERY; SUMMER; IMPACT; MODEL; AREA

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Addresses:

1. Univ Hamburg, ZMAW, Inst Oceanog, D-20146 Hamburg, Germany

2. Univ Bremen, Inst Environm Phys, D-28334 Bremen, Germany

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Spreen, G.^a, Kaleschke, L.^{a, b}, Heygster, G.^b

^a Institute of Oceanography, Centre for Marine and Atmospheric Sciences (ZMAW), University of Hamburg, Bundesstrasse 53, D-20146 Hamburg, Germany
^b Institute of Environmental Physics, University of Bremen, P.O. Box 330440, D-28334 Bremen, Germany

Abstract

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- Palmer, Quantifying the risk of extreme seasonal precipitation events in a changing climate
- Daulton et al PNAS, 2010
- Scott A.C. Geophys. Res. Lett., 2010

- Olbers, D. et al, Ocean dynamics
Zusatz: Welche Ausgaben dieses Buches sind verfügbar ?
Wieviele Ausleihexemplare gibt es und wo stehen sie ?



Falls Sie Fragen haben, kommen Sie bitte in den Bibliotheks- und Informationsservice des ZMAW und fragen Sie uns !

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bis@zmaw.de

Tel. 42838 5076

www.bis.zmaw.de

