技術英語

番外編

References の書き方

細川 敬祐

まとめ

- References の書き方の基本
  - Reference とは…
  - 基本的なルール, 形式論
  - 論文を特定するための情報

- Reference 管理の方法
  - 紙媒体から電子媒体への急激な変化
  - 電子媒体の時代の Reference 管理
  - ソフトウェアの紹介（Mendeley）

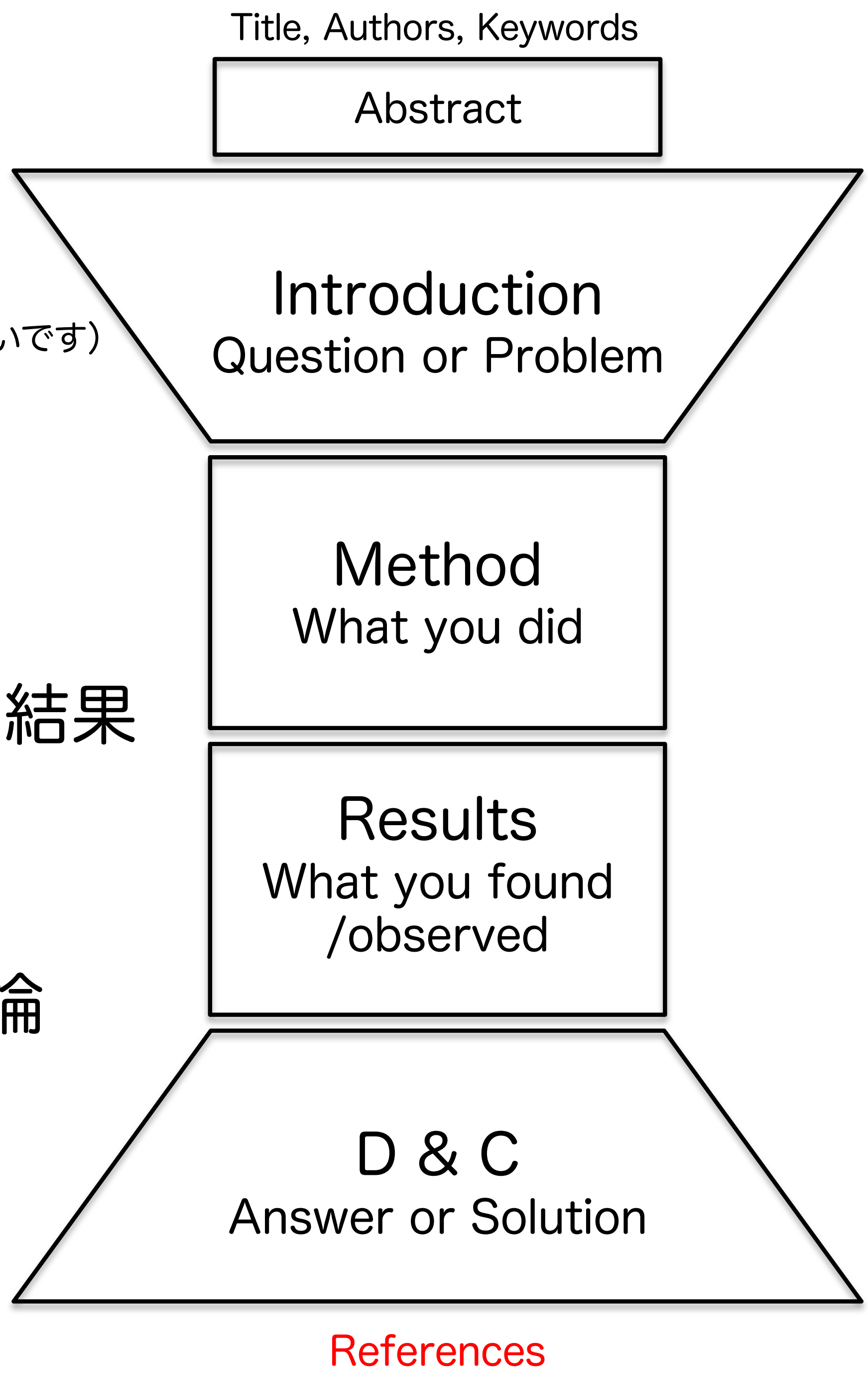
出典: Science Research Writing, Hilary Glasman-Deal

Reference とは...

- 典型的な論文の構成:
  いわゆる IMRAD (アイエムラッドと読むみたいです)

  I : Introduction – 問題提起
  M : Method
  R : Results - 実験, 観測, 計算結果
  A : And
  D : Discussion/Conclusion
  - 結果の考察と結論

- 論文で引用した文献のリスト
  (それ以上でもそれ以下でもない)



基本的なルール

- 論文の中で引用した文献のみを記載する.
  注）研究の過程で読んだ文献を全て挙げるのではない!

- ある確立された概念・手法について引用を行う場合,
  オリジナルである文献もしくはレビュー論文を挙げる.
  例）一般相対性理論であれば,

Einstein, Albert (1907), Über das Relativitätsprinzip und die aus demselben gezogene Folgerungen, *Jahrbuch der Radioaktivitaet und Elektronik* **4**, 411.

Einstein, Albert (1915), Die Feldgleichungen der Gravitation, *Sitzungsberichte der Preussischen Akademie der Wissenschaften zu Berlin*, 844.

一般相対性理論の基礎

Einstein, Albert (1916), Die Grundlage der allgemeinen Relativitätstheorie, *Annalen der Physik,* **49**.

Einstein, Albert (1917), Kosmologische Betrachtungen zur allgemeinen Relativitätstheorie, *Sitzungsberichte der Preußischen Akademie der Wissenschaften*, 142.

形式論

- 番号を付けて Reference を挙げる場合とそうでない場合がある.
- 自分が投稿したいと考えている学術雑誌（会議）の過去の論文を参照し, 合わせてやればよい.

実例 1 – 番号を振る場合

IEEE COMMUNICATIONS LETTERS, VOL. 16, NO. 1, JANUARY 2012 57

Relay Selection with Imperfect CSI in Bidirectional Cooperative Networks

M. Jafar Taghiyar, Sami Muhaidat, *Member, IEEE*, Jie Liang, *Member, IEEE*, and Mehrdad Dianati, *Member, IEEE*

I. Introduction

MANY researchers have recently focused on bidirectional relaying channels to overcome the problem of bandwidth loss in one-way channels [1]-[3]. In particular, some of them have investigated the performance of these systems in terms of the outage probability [1], [2]. There are also a number of works on the relay selection in bidirectional networks [2], [3]. However, many of the current results are assuming perfect channel state information (CSI) at every terminal. In [4], Vicario *et al*. have considered the outdated CSI. However, their investigation is for the conventional one-way relaying.

The main contribution of this letter is to analyze the effect of the *imperfect* CSI on the outage probability of the *bidirectional* networks when the best relay is selected.

References

[1] H. Ding, J. Ge, D. B. da Costa, and Z. Jiang, "Outage performance of fixed-gain bidirectional opportunistic relaying in Nakagami-m fading," *IEE EL*, vol. 46, no. 18, pp. 1297–1299 Sep. 2010.

[2] M. Ju and I.-M. Kim, "Relay selection with analog network coding in bidirectional networks," in *Proc. 2010 Biennial Symposium on Communications*, pp. 293–296.

[3] X. Zhang, A. Ghrayeb, and M. Hasna, "On relay assignment in network-coded cooperative systems," *IEEE Trans. Wireless Commun.*, vol. 10, no. 3, pp. 868–876, Mar. 2011.

[4] J. L. Vicario, A. Bel, J. A. Lopez-Salcedo, and G. Seco, "Opportunistic relay selection with outdated CSI: outage probability and diversity analysis," *IEEE Trans. Wireless Commun.*, vol. 8, no. 6, pp. 2872–2876, June 2009.

[5] D. Gu and C. Leung, "Performance analysis of transmit diversity scheme with imperfect channel estimation," *IEE EL*, vol. 30, no. 4, pp. 402–403, Feb. 2003.

[6] M. Abramowitz and I. A. Stegun, *Handbook Of Mathematical Functions With Formulas, Graphs, And Mathematical Tables*. Dover Publications, 1964.

[7] I. S. Gradshteyn, I. M. Ryzhik, A. Jeffrey, D. Zwillinger, and S. Technica, *Table of Integrals, Series, and Products,* 7th edition. Academic Press, 2007.

実例２－番号を振らない場合

Reorganization of polar cap patches through shears in the background plasma convection

K. Hosokawa,[1] J.-P. St-Maurice,[2] G. J. Sofko,[2] K. Shiokawa,[3] Y. Otsuka,[3] and T. Ogawa[4]

Received 24 June 2009; revised 3 September 2009; accepted 2 October 2009; published 8 January 2010.

1. Introduction

[2] Polar cap patches are high-plasma density regions that often appear in the polar cap *F* region ionosphere. They are thought to be generated in the vicinity of the dayside cusp region when the interplanetary magnetic field (IMF) is directed southward. Once they are generated on the dayside, they are transported toward the nightside across the central polar cap along the streamline of the higher latitude portion of the twin-cell convection pattern [*Crowley*, 1996; *Hosokawa et al.*, 2006; 2009b]. The horizontal extent of patches typically ranges from 100 km to 1000 km, and the plasma density within these patches is often up to 10 times higher than that in neighboring regions [*Weber et al.*, 1984].

[3] It is relatively well established that a "tongue of ionization (TOI)" is a source of patches [*Sojka et al.*, 1993]. The TOI is a region with dense daytime thermal

（以下，省略）

References

Anderson, D. N., J. Buchau, and R. A. Heelis (1988), Origin of density enhancements in the winter polar cap ionosphere, *Radio Sci.*, *23*, 513–519.

Baker, K. B., and S. Wing (1989), A new magnetic coordinate system for conjugate studies of high latitudes, *J. Geophys. Res.*, *94*, 9139–9143.

Carlson, H. C., J. Moen, K. Oksavik, C. P. Nielsen, I. W. McCrea, T. R. Pedersen, and P. Gallop (2006), Direct observations of injection events of subauroral plasma into the polar cap, *Geophys. Res. Lett.*, *33*, L05103, doi:10.1029/2005GL025230.

（中略）

Valladares, C., H. Carlson Jr., and K. Fukui (1994), Interplanetary magnetic field dependency of stable sun-aligned polar cap arcs, *J. Geophys. Res.*, *99*, 6247–6272.

Weber, E. J., J. Buchau, J. G. Moore, J. R. Sharber, R. C. Livingston, J. D. Winningham, and B. W. Reinisch (1984), F layer ionization patches in the polar caps, *J. Geophys. Res.*, *89*, 1683–1696.

論文を特定するための情報

- 著者, 論文タイトル, 雑誌名, 巻, 号, 開始・終了ページ, doi

REFERENCES

[1] H. Ding, J. Ge, D. B. da Costa, and Z. Jiang, "Outage performance of fixed-gain bidirectional opportunistic relaying in Nakagami-m fading," *IEE EL*, vol. 46, no. 18, pp. 1297–1299 Sep. 2010.

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- 出版された年（月を含む場合もあり）
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doi:
デジタルオブジェクト識別子

http://dx.doi.org/10.1029/2005GL025230

今日の授業

- References の書き方の基本
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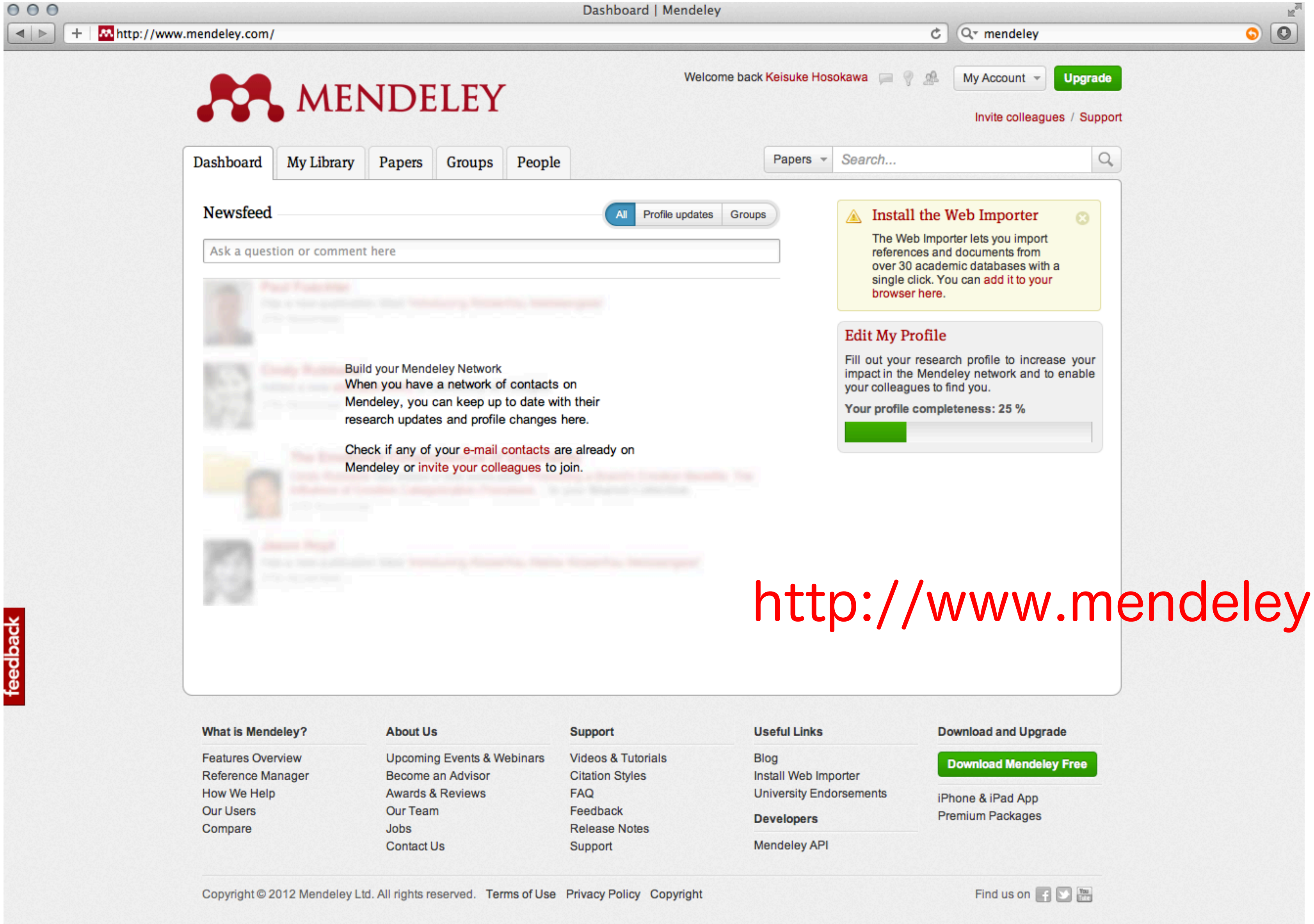
  - 電子媒体の時代の Reference 管理
  - ソフトウェアの紹介（Mendeley）

ソフトウェアの紹介 - Mendeley



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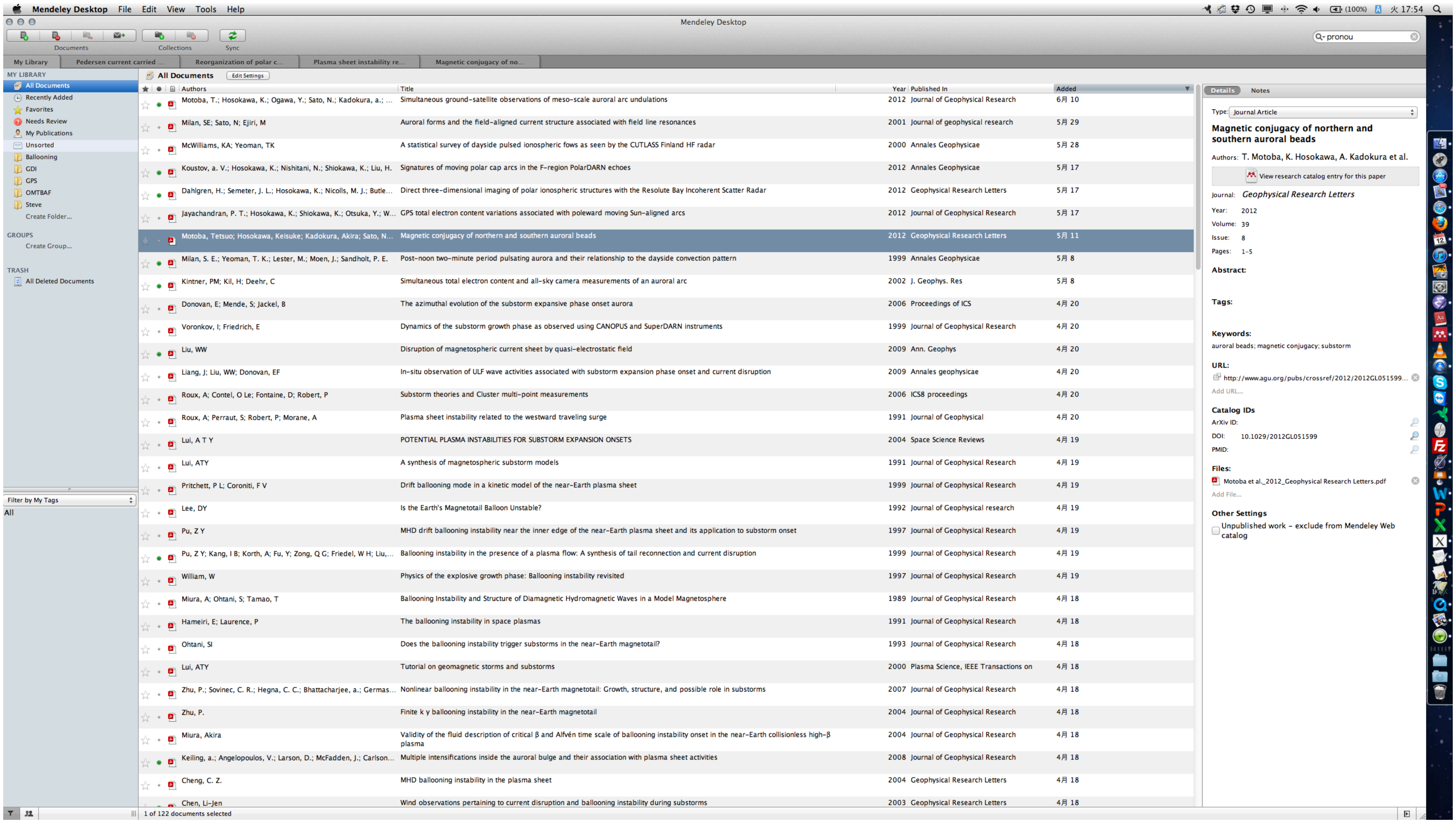

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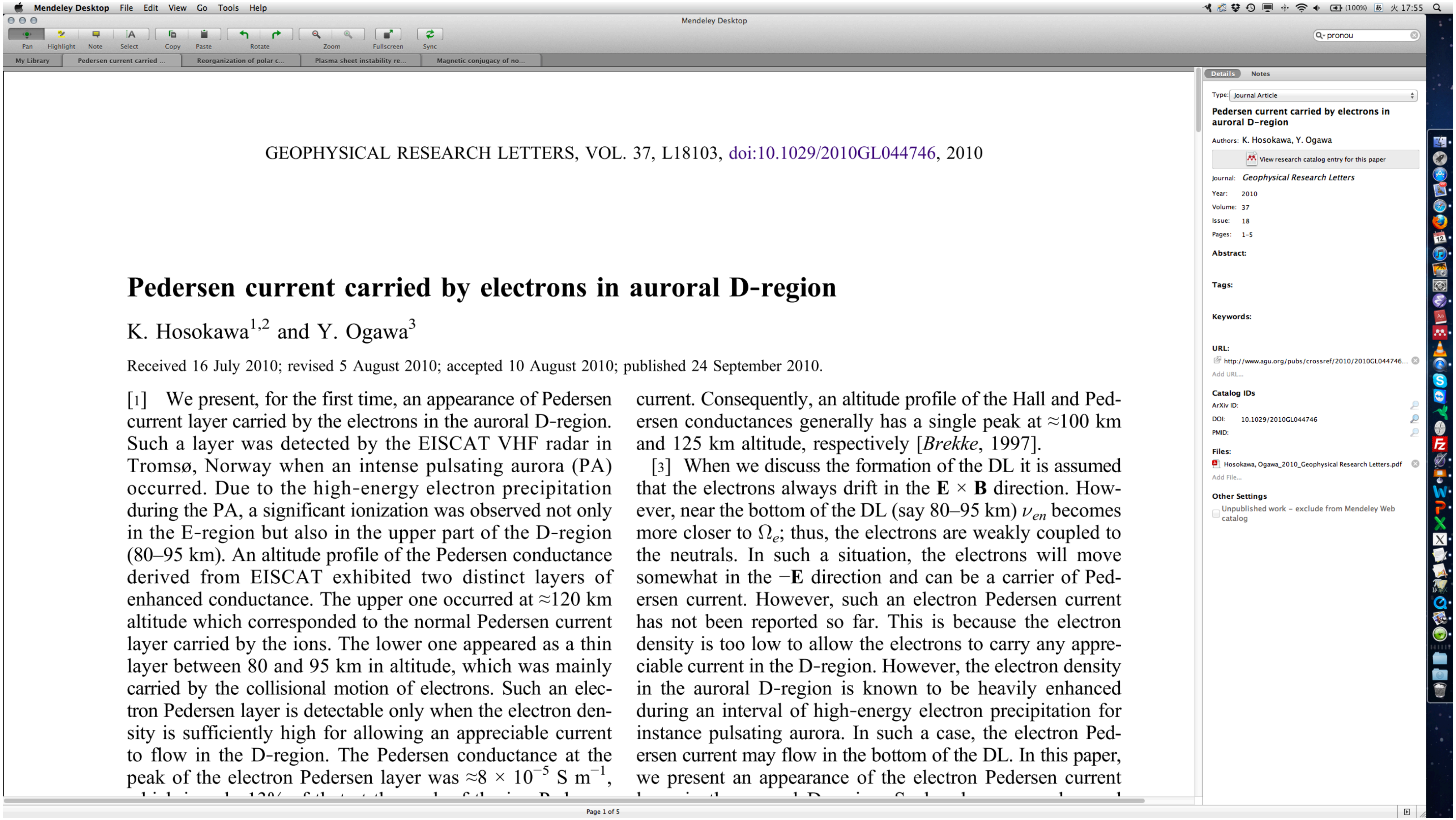


GEOPHYSICAL RESEARCH LETTERS, VOL. 37, L18103, doi:10.1029/2010GL044746, 2010

Pedersen current carried by electrons in auroral D-region

K. Hosokawa[1,2] and Y. Ogawa[3]

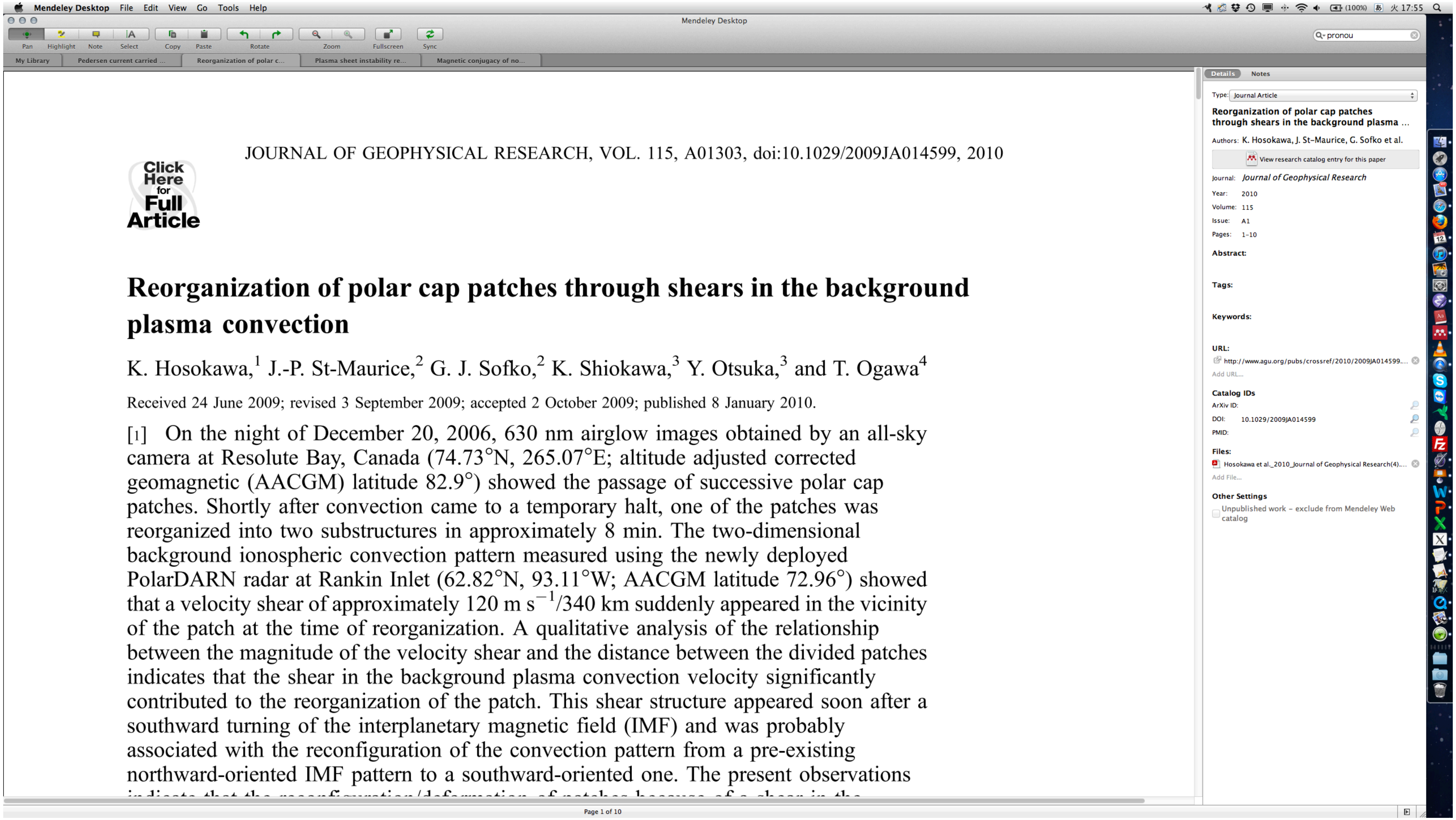
Received 16 July 2010; revised 5 August 2010; accepted 10 August 2010; published 24 September 2010.

[1] We present, for the first time, an appearance of Pedersen current layer carried by the electrons in the auroral D-region. Such a layer was detected by the EISCAT VHF radar in Tromsø, Norway when an intense pulsating aurora (PA) occurred. Due to the high-energy electron precipitation during the PA, a significant ionization was observed not only in the E-region but also in the upper part of the D-region (80–95 km). An altitude profile of the Pedersen conductance derived from EISCAT exhibited two distinct layers of enhanced conductance. The upper one occurred at ≈120 km altitude which corresponded to the normal Pedersen current layer carried by the ions. The lower one appeared as a thin layer between 80 and 95 km in altitude, which was mainly carried by the collisional motion of electrons. Such an electron Pedersen layer is detectable only when the electron density is sufficiently high for allowing an appreciable current to flow in the D-region. The Pedersen conductance at the peak of the electron Pedersen layer was ≈8 × 10^{-5} S m^{-1},

current. Consequently, an altitude profile of the Hall and Pedersen conductances generally has a single peak at ≈100 km and 125 km altitude, respectively [*Brekke*, 1997].

[3] When we discuss the formation of the DL it is assumed that the electrons always drift in the **E** × **B** direction. However, near the bottom of the DL (say 80–95 km) ν_{en} becomes more closer to Ω_e; thus, the electrons are weakly coupled to the neutrals. In such a situation, the electrons will move somewhat in the −**E** direction and can be a carrier of Pedersen current. However, such an electron Pedersen current has not been reported so far. This is because the electron density is too low to allow the electrons to carry any appreciable current in the D-region. However, the electron density in the auroral D-region is known to be heavily enhanced during an interval of high-energy electron precipitation for instance pulsating aurora. In such a case, the electron Pedersen current may flow in the bottom of the DL. In this paper, we present an appearance of the electron Pedersen current

実際こんな感じ – 論文読みモード



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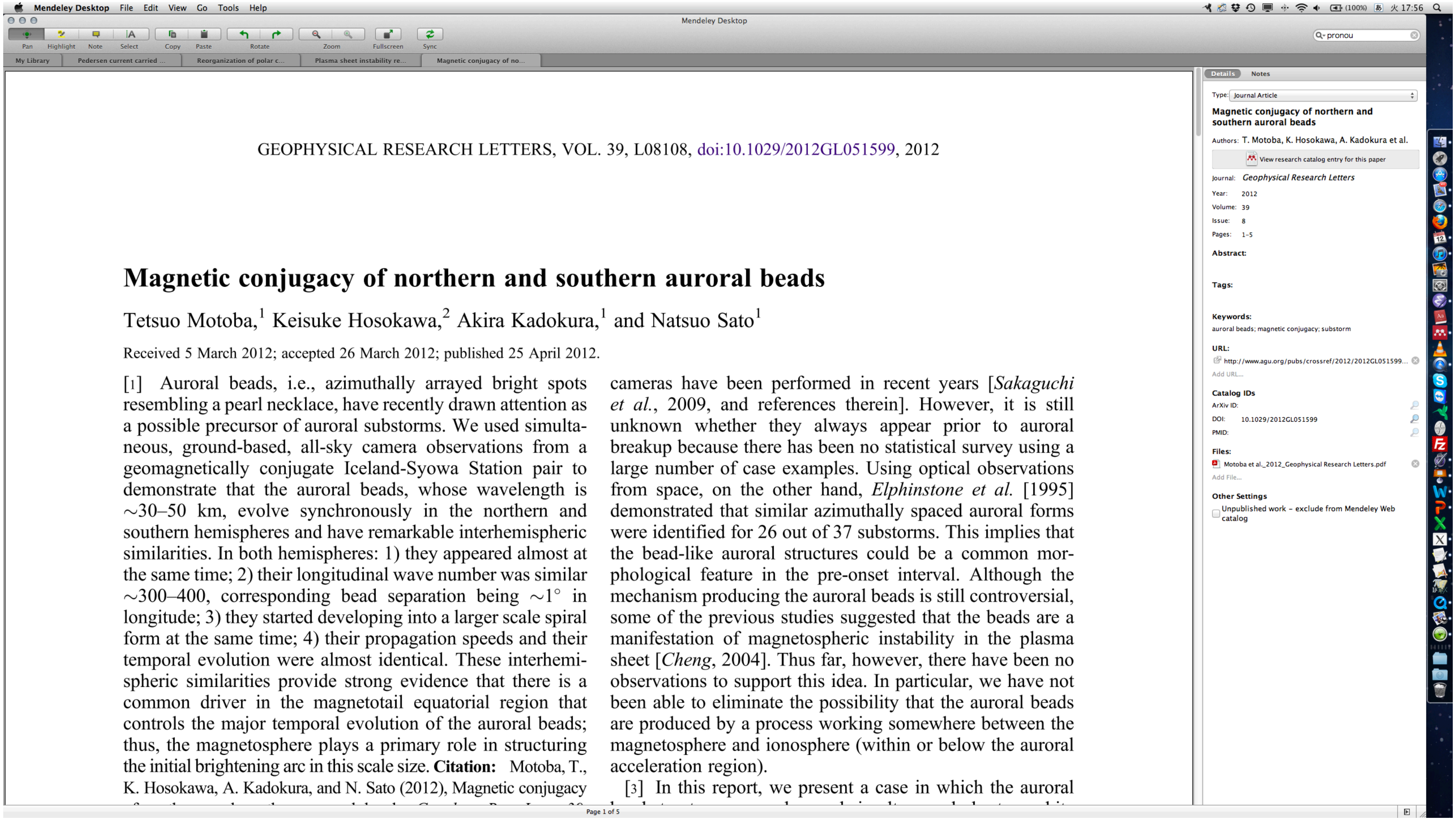


GEOPHYSICAL RESEARCH LETTERS, VOL. 39, L08108, doi:10.1029/2012GL051599, 2012

Magnetic conjugacy of northern and southern auroral beads

Tetsuo Motoba,[1] Keisuke Hosokawa,[2] Akira Kadokura,[1] and Natsuo Sato[1]

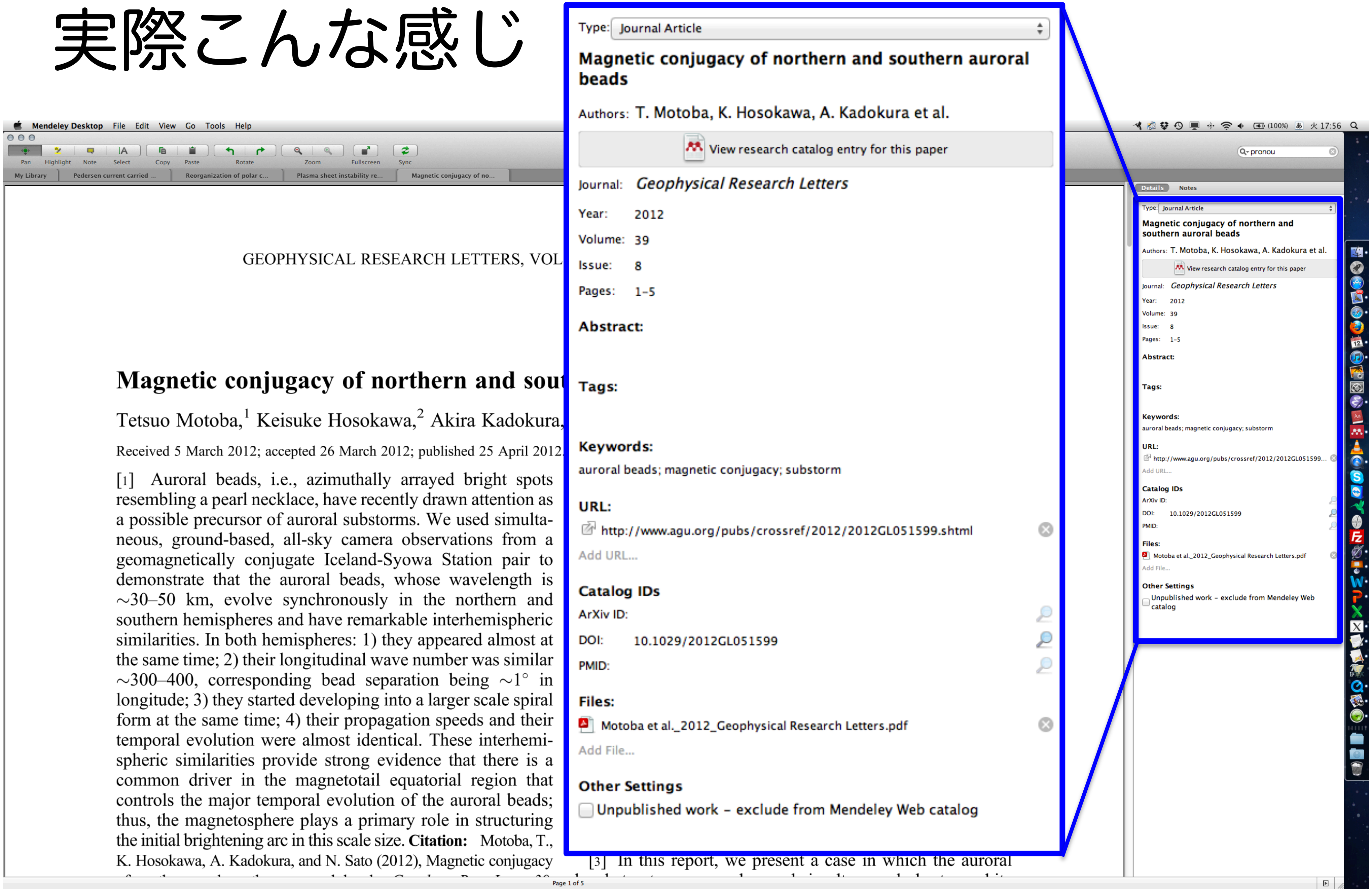
Received 5 March 2012; accepted 26 March 2012; published 25 April 2012.

[1] Auroral beads, i.e., azimuthally arrayed bright spots resembling a pearl necklace, have recently drawn attention as a possible precursor of auroral substorms. We used simultaneous, ground-based, all-sky camera observations from a geomagnetically conjugate Iceland-Syowa Station pair to demonstrate that the auroral beads, whose wavelength is ~30–50 km, evolve synchronously in the northern and southern hemispheres and have remarkable interhemispheric similarities. In both hemispheres: 1) they appeared almost at the same time; 2) their longitudinal wave number was similar ~300–400, corresponding bead separation being ~1° in longitude; 3) they started developing into a larger scale spiral form at the same time; 4) their propagation speeds and their temporal evolution were almost identical. These interhemispheric similarities provide strong evidence that there is a common driver in the magnetotail equatorial region that controls the major temporal evolution of the auroral beads; thus, the magnetosphere plays a primary role in structuring the initial brightening arc in this scale size. **Citation:** Motoba, T., K. Hosokawa, A. Kadokura, and N. Sato (2012), Magnetic conjugacy

cameras have been performed in recent years [*Sakaguchi et al.*, 2009, and references therein]. However, it is still unknown whether they always appear prior to auroral breakup because there has been no statistical survey using a large number of case examples. Using optical observations from space, on the other hand, *Elphinstone et al.* [1995] demonstrated that similar azimuthally spaced auroral forms were identified for 26 out of 37 substorms. This implies that the bead-like auroral structures could be a common morphological feature in the pre-onset interval. Although the mechanism producing the auroral beads is still controversial, some of the previous studies suggested that the beads are a manifestation of magnetospheric instability in the plasma sheet [*Cheng*, 2004]. Thus far, however, there have been no observations to support this idea. In particular, we have not been able to eliminate the possibility that the auroral beads are produced by a process working somewhere between the magnetosphere and ionosphere (within or below the auroral acceleration region).

[3] In this report, we present a case in which the auroral

実際こんな感じ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Plasma sheet instability re...
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GEOPHYSICAL RESEARCH LETTERS, VOL
Magnetic conjugacy of northern and sout
Tetsuo Motoba,1 Keisuke Hosokawa,2 Akira Kadokura,
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Page 1 of 5
Type: Journal Article
Magnetic conjugacy of northern and southern auroral beads
Authors: T. Motoba, K. Hosokawa, A. Kadokura et al.
View research catalog entry for this paper
Journal: Geophysical Research Letters
Year: 2012
Volume: 39
Issue: 8
Pages: 1-5
Abstract:
Tags:
Keywords:
auroral beads; magnetic conjugacy; substorm
URL:
http://www.agu.org/pubs/crossref/2012/2012GL051599.shtml
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