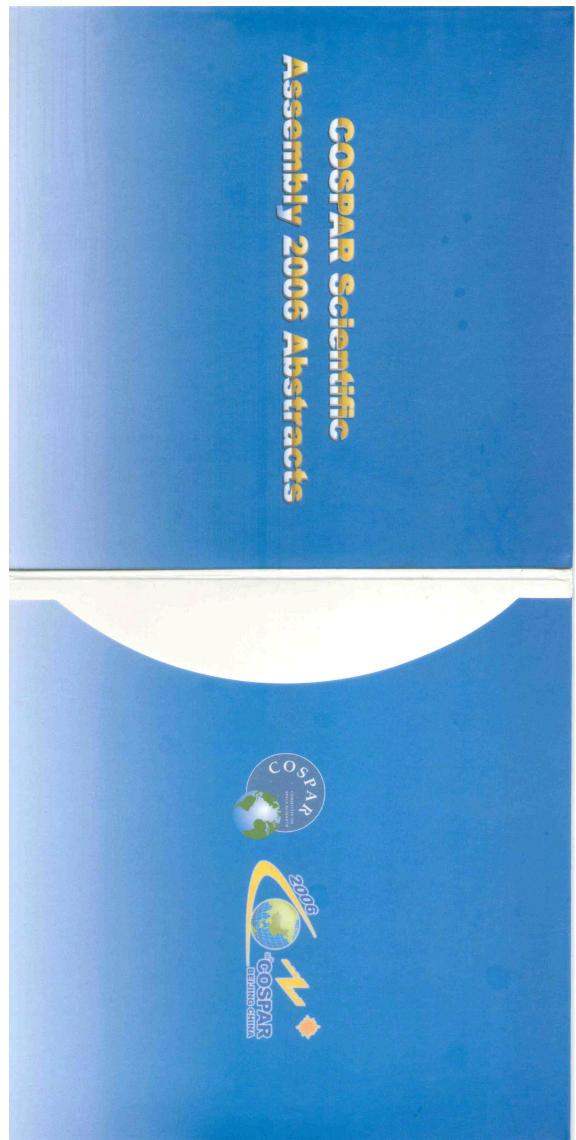


Gravity wave signatures in the stratosphere over Equator

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Gravity wave activities in the stratosphere are deduced from GPS radio occultation temperature profiles obtained by CHAMP satellite. From the temperature data potential energy profiles are deduced and used to study the gravity wave activity in the stratosphere. The results obtained over South America showed a seasonal variation of the gravity waves, with a major activity during the spring and autumn. An annual variation in the gravity wave activity was also observed, with the maximum occurrence in 2002 and 2004 and minimum during 2003 and 2005. These results will be compared with the gravity wave activity around the Equator for the last 4 years.



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MSO: Taylor, M.

DO: Fukao, S.

Co-Sponsorship:

Thursday, 20 July 2006

Lecture Room: Room 1001-1002

Chairperson: TAYLOR, M

- 9:30 - 9:50 [COSPAR2006-A-01502](#); [C2.2-0001-06](#)
Forbes, J.M.; Palo, S.E.; Zhang, X.; Russell, J.; Mertens, C.J.; Mlynczak, M.
Mesosphere-thermosphere penetration of stratosphere planetary waves from TIMED/SABER temperature measurements (solicited)
- 9:50 - 10:05 [COSPAR2006-A-02381](#); [C2.2-0002-06](#)
Xiong, J.; Wan, W.; Ning, B.; Liu, L.; Vincent, R.A.; Reid, I.
Tides and Quasi-two-day waves observed in Wuhan and their comparisons with those in Adelaide during 2002 and 2003
- 10:05 - 10:20 [COSPAR2006-A-01531](#); [C2.2-0003-06](#)
Wu, D. L.; **Pi, X.**; Ao, C. O.; Mannucci, A. J.
Quasi-biannual oscillations (QBO) seen in GPS/CHAMP tropospheric and ionospheric data
- 10:20 - 10:40 [COSPAR2006-A-01838](#); [C2.2-0004-06](#)
Zhao, Y.; Taylor, M.; Gardner, C.; Liu, A.
Title: Investigating planetary wave and seasonal variability in mesospheric temperature at mid- and low-latitudes (solicited)
- 10:40 - 10:55 [COSPAR2006-A-03686](#); [C2.2-0005-06](#)
Li, T.; She, C.Y.; Palo, S.; Wu, Q.; Liu, H.; Salby, M.L.
Coordinated Lidar and TIMED observations of the quasi-two-day wave during August 2002-2004 and possible quasi-biennial oscillation influence
- 10:55 - 11:10 [COSPAR2006-A-00650](#); [C2.2-0006-06](#)
Gurubaran, S.; Rajaram, R
Long-term variabilities of the 6.5-day planetary wave in the low latitude mesopause region
- 11:10 COFFEE BREAK
- Chairperson: FORB, J
- 11:30 - 11:45 [COSPAR2006-A-01644](#); [C2.2-0007-06](#)
Takahashi, H.; Wrasse, C. M.; Pancheva, D.; Abdu, M. A.; Batista, I. S.; Lima, L. M.; Batista, P. P.; Clemesha, B. R.; Shiokawa, K.
Planetary waves in the equatorial mesosphere and ionosphere
- 11:45 - 12:05 [COSPAR2006-A-02045](#); [C2.2-0008-06](#)
Pancheva, D.
Planetary wave coupling of the low latitude atmosphere-ionosphere system (solicited)
- 12:05 - 12:20 [COSPAR2006-A-01156](#); [C2.2-0009-06](#)
Jiang, G.; Xiong, J.; Wan, W.; Ning, B.; Liu, L.
Meteor radar observation of 6.5-day wave in the MLT region over Wuhan (30.5°N, 114.3°E)
- 12:20 - 12:35 [COSPAR2006-A-02737](#); [C2.2-0010-06](#)
Sridharan, S.; Nakamura, T.; Tsuda, T.; Vincent, R. A.; Russell, J. M.
Radar, Radiosonde and Satellite-based Observations of 5-8-day wave in the Equatorial Atmosphere: Vertical Propagation and Zonal Characteristics of the wave from Troposphere to MLT Region
- 12:35 - 12:50 [COSPAR2006-A-01419](#); [C2.2-0011-06](#)
Zhang, Z.; Shepherd, S.

- 10:05 - [COSP2006-A-00274](#); [C2.2-0026-06](#)
10:20 **Janches, D.**; Fritts, D. C.; Riggins, D. M.; Stockwell, R. G.; Sulzer, M. P.; Gonzalez, S.
Gravity waves and momentum fluxes in the MLT using the 430 MHz Dual-Beam Measurements at Arecibo
- 10:20 - [COSP2006-A-01847](#); [C2.2-0027-06](#)
10:35 Ejiri, M. K.; **Taylor, M. J.**; Pautet, P. D.; Zhao, Y.; Liu, A. Z.
Investigating short-period mesospheric gravity wave propagation and momentum flux at low-latitudes using simultaneous Na lidar and temperature mapper measurements
- 10:35 - [COSP2006-A-00185](#); [C2.2-0028-06](#)
10:50 **Clemesha, B.**; Yang, G; Tokumoto, A; Batista, P; Simonich, D
Gravity wave statistics at 23 S from lidar and meteor radar measurements
- 10:50 - [COSP2006-A-03115](#); [C2.2-0029-06](#)
11:05 **Chen, Z.**; Lu, D.; Preusse, P.; Ern, M.
Spectra of The Stratospheric GWs Induced by A Tropical Cyclone

11:05 COFFEE BREAK

Chairperson: YAMAMOTO, M

- 11:30 - [COSP2006-A-01307](#); [C2.2-0030-06](#)
11:50 **Gerding, M.**; Rauthe, M.; Hoeffner, J.; Berger, U.; Luebken, F.-J.
Lidar temperature soundings of gravity and tidal waves from 1 to 105 km altitude at mid-latitudes (solicited)
- 11:50 - [COSP2006-A-01549](#); [C2.2-0031-06](#)
12:05 **Venkat Ratnam, M.**; Tsuda, T.; Shibagaki, Y.; Kozu, T.; Mori, S.
Gravity wave characteristics over the equator observed during CPEA campaign using simultaneous multiple stations data
- 12:05 - [COSP2006-A-01293](#); [C2.2-0032-06](#)
12:20 Preusse, P.; **Ern, M.**; Krebsbach, M.; Eckermann, S.D.; Warner, C.D.; Picard, R.H.
A four-year climatology of SABER gravity wave activity
- 12:20 - [COSP2006-A-02711](#); [C2.2-0033-06](#)
12:35 Evan, S.; **Chane-Ming, F.**; Keckhut, P.
Activity of convective tropical gravity-waves above the south west indian ocean
- 12:35 - [COSP2006-A-01538](#); [C2.2-0034-06](#)
12:50 **Jiang, J. H.**; Wu, D. L.
New Results of Gravity Wave Observations from Aura MLS
- 12:50 - [COSP2006-A-01262](#); [C2.2-0035-06](#)
13:05 **DEBASHIS NATH, D.**; RAMKUMAR, T. K.; NARAYANA RAO, D.; BHAVANI KUMAR, Y.; VISHNU PRASANTH, P.
VHF radar and lidar observations of high frequency gravity waves from lower troposphere to mesosphere in the tropical region

13:05 LUNCH BREAK

Chairperson: FRITTS,D AND CLEMESH, B

- 15:30 - [COSP2006-A-01890](#); [C2.2-0036-06](#)
15:50 **Snively, J.**; Pasko, V; Taylor, M; Hocking, W
Mesopause airglow modulation by Doppler-ducted gravity waves (solicited)
- 15:50 - [COSP2006-A-01545](#); [C2.2-0037-06](#)
16:05 **Shiokawa, K.**; Suzuki, S.; Otsuka, Y.; Ogawa, T.; Nakamura, T.; Mlynarczyk, M. G.; Russell III, J. M.
A multi-instrument measurement of a mesospheric front-like structure at the equator
- 16:05 - [COSP2006-A-00678](#); [C2.2-0038-06](#)
16:20 Nikoukar, R.; Kamalabadi, F.; **Swenson, G.**; Liu, A.
Variability of mesospheric OH layer volume emission profiles derived from SABER limb measurements
- 16:20 - [COSP2006-A-01410](#); [C2.2-0039-06](#)
16:35 **Wrasse, C. M.**; Takahashi, H.; Fehine, J.; Medeiros, A. F.; Wickert, J.; Denardini, C. M.
Gravity wave signatures in the stratosphere over Equator
- 16:35 - [COSP2006-A-02552](#); [C2.2-0040-06](#)
16:50 **Yu, Y.**; Hickey, M.
The Numerical Simulation of Gravity Waves Propagating Upward Through The Middle Atmosphere Forced by Latent and Convective Heating