

HIWC HAIC Publication List, HIWC/HAIC Science Team Meeting, 28-29 Aug. 2013

Topic	Article #	Originator	article	lead	co-authors	Comments
Regulatory	1	HIWC, HAIC	In-situ deep convective cloud measurements to assess the new ice crystal icing certification envelope Appendix D", maybe to Journal of Aircraft	Strapp	Airbus, Schwarzenboeck, Korolev, NASA, FAA, Airbus, Protat, others	Will not be written until all data is complete (Darwin, Cayenne, DC-8? Etc.)
	56	HIWC	A review of the development of the new ice crystal icing envelope for engineering design and certification, and the development of concepts of in-flight cloud measurements for assessment.	Strapp	Boeing, Airbus and others depending on use of HAIC-HIWC data and final content	This results from a decision to split away from the project overview BAMS paper, and transfer the latter to Schwarzenboeck.
	2	HIWC	Flight Deck Observations During Flight in High Ice Water Content Conditions	Ratvasky	Duchanoy, Bourdinot, Harrah, Strapp, Schwarzenboeck, Dezitter, Grandin	
	3	HIWC	Ice Water Content Variations Found in Anvil Clouds of Tropical Mesoscale Convective Systems, and application to engine events	Grzych	Strapp, Airbus, other HIWC and HAIC as appropriate	an applications to engine events added to emphasize industry application (Strapp)
	4	HAIC, HIWC	Radar extension of statistics for Appendix D/P	Protat or Strapp	Dezitter, Grandin, HIWC and HAIC as appropriate	
Topic	Article #	Originator	article	lead	co-authors	Comments
Project Overview	5	HAIC	In-situ cloud microphysical measurements of deep convection for aviation and science	Schwarzenboeck	Strapp & extended list of HAIC and HIWC contributors as appropriate.	BAMS overview article, currently written; content: Climatological context Darwin & cayenne period, satellite analysis of MCS maxima...Experimental design, Field campaigns executions, BOM radar, MTSAT, Flight guidance, Alpha performance for RDT & NASA cloud retrievals. Campaign highlights: cockpit observations, F20 weather radar, PSD & IWC findings, W-band radar F20 research radar products. Field catalog?, Conceptual microphysical ideas/models, cloud modeling?
	57	HAIC	Projet HAIC (High Altitude Ice Crystals): Utilisation du Falcon 20 dans le cadre d'un projet international dédié à la sécurité aéronautique.	Schwarzenboeck	Leroy, Dezitter, Grandin, Protat, Delanoë, Strapp	
Topic	Article #	Originator	article	lead	co-authors	Comments

HIWC HAIC Publication List, HIWC/HAIC Science Team Meeting, 28-29 Aug. 2013

Topic	Article #	Originator	article	lead	co-authors	Comments
Observational Microphysics	8	HIWC	On the origin of high altitude, high ice water content regions in oceanic deep convection	Korolev	Schwarzenboeck, Zipser, Varble, others as appropriate	Schwarzenboeck 2nd author; overview article and first microphysics article of project, but with limited detail allowing other articles below to proceed
	9	HIWC, HAIC	Characterization of the dynamical and microphysical (PSD, MMD, IWC, m(D), A(D), etc...) properties of HIWC regions and their spatiotemporal distribution using Falcon in-situ and radar data	Schwarzenboeck	HAIC and HIWC as appropriate	Korolev 2nd author, CIRA interest
	12	HIWC, HAIC	Initiation and evolution of ice in mixed phase convective environment: What can we learn from CPSD (and HSI or PDI or CPI probes) measurements	Schwarzenboeck	Korolev, Esposito, Wobrock, Duroure, other HAIC and HIWC as appropriate	Korolev 2nd author; CIRA interest
	77	HAIC	Ice Crystal Sizes in High Ice Water Content Clouds. Part 2: Median Mass Diameter Statistics in Tropical Convection Observed within HAIC/HIWC.	Leroy	Fontaine, Schwarzenboeck, Strapp, Korolev, McFarquhar, Dupuy, Gourbeyre, Lilie, Protat, Delanoë, Dezitter and Grandin.	
	16	HAIC	Mass-diameter relationships constrained from ice particle imagery and absolute IWC data (IKP) as well as cloud radar reflectivities	Coutris	Leroy, Schwarzenboeck, Delanoë, Protat, Korolev, Strapp, McFarquhar, other HAIC and HIWC scientists as appropriate	
	11	HAIC	The dynamical characteristics of HIWC regions and the link to the microphysical processes	Protat or Delanoë	Schwarzenboeck, Korolev, Zipser, Strapp, Grzych, other HAIC and HIWC as appropriate	This articles now proposed to include material from withdrawn article #23 regarding vertical profiles of radar reflectivity.
	78	HAIC	Ice Crystal Sizes in High Ice Water Content Clouds. Part 1: Mass-Size Relationships Derived from Particle Images and TWC for Various Crystal Diameter Definitions and Impact on Median Mass Diameter.	LeRoy	É. Fontaine, A. Schwarzenboeck, J. W. Strapp	
	79	HAIC	Comprehensive analysis of ice crystal size and morphology from merged Darwin & Cayenne high IWC datasets in tropical convection. '	LeRoy	Coutris, Febvre, Fontaine, Schwarzenboeck, Strapp, Korolev, McFarquhar, Lilie, Protat, Delanoë, Dezitter, Grandin, ... & other contributing scientists from HAIC-HIWC	

HIWC HAIC Publication List, HIWC/HAIC Science Team Meeting, 28-29 Aug. 2013

Topic	Article #	Originator	article	lead	co-authors	Comments
	28	HIWC	The representation of ice cloud size distributions as gamma distributions as a function of meteorological and cloud conditions using observations from convective core anvils and other regions in tropical cloud systems	McFarquhar	HIWC and HAIC as appropriate	
	29	HIWC	Development and implementation of mesoscale model parameterizations of single-particle properties and fallout using observations from tropical cloud systems	McFarquhar	Zhu, Korolev, Schwarzenboeck, Strapp, Leroy, Varble and Zipser	
	58	HIWC	Analysis of morphologies of ice crystals to build a database for a development of empirical habit classification scheme: A comparison between tropical and mid-latitude ice clouds	Um	McFarquhar, Schwarzenboeck, Korolev, Leroy, and Strapp	
	13	HAIC	Microphysical findings in convection cores of A340 measurement data post-processed with m(D) relations and Robust probe efficiencies retrieved within HAIC.	Duroure	Grandin, Dezitter, Weber, Schwarzenboeck, Protat, Strapp	
	15	HAIC	Interaction of growth mechanisms of ice in tropical deep convection	Duroure	Schwarzenboeck, Korolev, HAIC and HIWC as appropriate	
	14	HAIC	Relative humidity inside and in the vicinity of deep convective clouds	DLR	Korolev, HAIC and HIWC as appropriate	
Topic	Article #	Originator	article	lead	co-authors	Comments
Radar Studies	22	HAIC, HIWC	Comparison between CPOL microphysics and aircraft microphysics	May or Protat	Zipser, other HAIC and HIWC as appropriate	
	25	HAIC	Radar retrievals of HIWC using empirical relationships	Protat	Delanoë, HAIC and HIWC as appropriate	
	59	HAIC	Terminal fall speed of ice crystals in deep tropical convective storms from airborne multi-beam Doppler cloud radar observations	Protat	Delanoë, Schwarzenboeck, Strapp, Ratvasky, Lillie (and all other appropriate co-authors)	This work will very likely make use of IKP data to derive Vt-IWC (-T) relationships to develop a parameterization of ice terminal fall speed (including that of graupel) for large-scale models.
	60	HAIC	RASTA: a 95 GHz radar for cloud studies.	Delanoë	Protat, Vinson, Brett, Caudoux, Bertrand, Pelon, Guignard, Ceccaldi, Schwarzenboeck, Fontaine, possibly US HIWC IKP PIs if we use IKP data to illustrate something: RASTA	

HIWC HAIC Publication List, HIWC/HAIC Science Team Meeting, 28-29 Aug. 2013

Topic	Article #	Originator	article	lead	co-authors	Comments
	61	HAIC	Statistical microphysical properties of tropical deep convective cores using airborne multi-beam Doppler cloud radar observations	Delanoë	Protat, Schwarzenboeck, Strapp, Ratvasky, Lillie (and all other appropriate co-authors)	This is the paper where we will describe the Radonvar technique, evaluate it with the IKP data at flight-level, and produce statistical distribution of IWC, Dm, extinction as a function of temperature and / or height.
	62	HAIC	Simulations of radar reflectivity factors with oblates spheroids approximations; a comparison of retrieved Condensed water content and equivalent radar reflectivity factors	Fontaine	Leroy, Schwarzenboeck, Delanoë, Protat, Dezitter, Grandin, Strapp, Lillie.	
	63	HIWC	2014 HAIC/HIWC Flight Campaign: Radar Reflectivity from X-band Weather Radar	TBD	SAFIRE, Harrah, Grzych?, others	Harrah happy to lead or be a co-author
	64	HIWC	Comparison of X & W band Radar Reflectivities from the 2014 HAIC/HIWC Flight Campaign	Harrah	Protat, others	
Topic	Article #	Originator	article	lead	co-authors	Comments
Cloud Modeling	26	HIWC	Using measurements of low radar reflectivity collocated with high ice water content to constrain representation of microphysical processes in cloud-resolving models of deep tropical convection	NASA GISS	HIWC and HAIC as appropriate	used A340 date for two papers at right
	65	HIWC				see above
	66	HIWC	Investigation of microphysical pathways to high ice water content observed during the HAIC-HIWC campaign using bin microphysics simulations	Fridlind	Ackerman, Korolev, Schwarzenboeck, Leroy, Strapp, et al.	
	67	HIWC	Use of NASA GPM satellite and HAIC-HIWC in situ data to evaluate tropical stratiform precipitation microphysics in the GISS ModelE GCM	Fridlind	Ackerman, Schwarzenboeck, Leroy, Strapp, Protat, et al.	

HIWC HAIC Publication List, HIWC/HAIC Science Team Meeting, 28-29 Aug. 2013

Topic	Article #	Originator	article	lead	co-authors	Comments
	68	HIWC	Use of NASA GPM satellite and HAIC-HIWC in situ data to investigate tropical stratiform microphysical pathways	van Lier-Walqui	Ackerman, Fridlind, McFarquhar, Williams, Schwarzenboeck, Leroy, Strapp, Protat, et al.	
	69	HIWC	Use of cloud-resolving models of deep tropical convection to interpret mechanisms and locations of conditions with low radar reflectivity collocated with high ice water content	NASA GISS	Zipser, HIWC and HAIC as appropriate	
	30	HIWC	Model investigations of ice water content and the properties of the updrafts feeding the upper tropospheric ice mass	Varble	Protat, Korolev,	New article inked to article 11 above.
	32	HIWC	Evaluation of WRF high resolution simulations of tropical convective systems using in-situ and remote sensing data measured during the 2014 HAIC/HIWC campaign	Varble or Zipser	HIWC and HAIC as appropriate	
	70	HIWC	Reducing bulk microphysics parameterization biases using High Ice Water Content field campaign measurements	Varble	Zipser, Strapp, Schwarzenboeck, and others if their observational datasets are used	
	33	HAIC	Comparisons of LaMP cloud model simulations with observations (especially 95 GHz radar)	Wobrock	HIWC and HAIC as appropriate	title provided by Strapp from Wobrock objectives
	34	HAIC	Sensitivity studies on ice nucleation rate and aggregation efficiencies	Wobrock	HIWC and HAIC as appropriate	title provided by Strapp from Wobrock objectives
	35	HIWC	Evaluation and improvement of high ice water content simulations in deep convective storms using the ACCESS model	Franklin	HIWC and HAIC as appropriate	
Topic	Article #	Originator	article	lead	co-authors	Comments
Satellite and Nowcasting	36	HIWC	Nowcasting High Ice Water Content in Deep Convective Clouds Using Routinely Available Meteorological Products	Haggerty	HIWC and HAIC as appropriate (see right)	
	71	HIWC	Climatology of HIWC conditions over North America	Haggerty	Black	No use of HAIC-HIWC data.
	36	HIWC	Evaluation of satellite, radar, and model products for use in HIWC nowcasting (tentative title)	Haggerty	Black, Minnis/Ngyuen/Palikonda, Strapp, Potts, Grandin	

HIWC HAIC Publication List, HIWC/HAIC Science Team Meeting, 28-29 Aug. 2013

Topic	Article #	Originator	article	lead	co-authors	Comments
	37	HIWC	Development of a High Ice Water Content Icing Probability Index	NASA Langley	HIWC and HAIC as appropriate (see right)	
	41	HIWC	Comparisons of deep convective cloud microphysical properties from in situ measurements and satellite retrievals	NASA Langley	HIWC and HAIC as appropriate	
	72	HIWC	Satellite-derived cloud property datasets for High Ice Water Content field experiments	Nguyen	Minnis, Bedka, Palikonda, Yost, Spangenberg, and Chee	
	73	HIWC	Evaluation of satellite-derived ice water content profiles using in situ and RASTA data.	Yost	Smith, Minnis, Spangenberg, Nguyen, Protat, and Strapp	
	74	HIWC	Relationships between overshooting deep convective cloud tops and high ice water content	Bedka	Yost, Spangenberg, Minnis, Protat, and Strapp	
	38	HAIC	General paper on satellite detection of HIWC	Defer	Delanoë, Parol, Protat, other HIWC and HAIC as appropriate	
	39	HAIC	CloudSat-CALIPSO detection of HIWC	Guignard or Ceccaldi	Delanoë, Protat, HAIC and HIWC as appropriate	
	40	HAIC	Verification and refining of High IWC detection algorithm developed in WP3.3 from remote sensing and in situ F20 measurements, Ground-based radar, Concurrent coincident space-based observations (LEO mission), possible submission	Meteo France	HIWC and HAIC as appropriate; collaborate with HIWC nowcasting if possible	
	75	HAIC	The Use of RDT Nowcasting Tool for Detecting Convective Areas Associated with High Ice Water Content during HAIC/HIWC Field Campaign	Gounou	Moisselin, Autones, Levailant, Brenguier, Defer, Faivre	
	76	HIWC	Studies of Cloud Characteristics Related to Jet Engine Ice Crystal Icing Utilizing Infrared Satellite Imagery	Grzych	Tritz, Mason, Bravin, Sharpsten	Minimal use of HAIC-HIWC data
Topic	Article #	Originator	article	lead	co-authors	Comments
Microphysical Instruments	42	HIWC	TWC measurements of deep tropical convection using a new isokinetic evaporator"	Strapp, Lilie, or Ratvasky	Schwarzenboeck	coordinate with NRC
	43	HIWC	Robust Probe measurements compared to IKP and other data to document the Robust Probe's collection efficiency in order to validate previously acquired data taken using the Robust Probe	Strapp or Lilie	Schwarzenboeck, Airbus, HIWC and HAIC as appropriate	Similar title submitted by Schwarzenboeck, with Lilie as lead. Merged here.

HIWC HAIC Publication List, HIWC/HAIC Science Team Meeting, 28-29 Aug. 2013

Topic	Article #	Originator	article	lead	co-authors	Comments
	44	HIWC	Evaluation of the IKP probe's performance in natural icing	Lilie	Ratvasky, Lilie, Schwarzenboeck, HIWC and HAIC as appropriate	coordinate with NRC
	45	HAIC	Possible publication on Nephelometer capability improvement	Airbus	HAIC and HIWC as appropriate	
	46	HAIC	Improvements of measurements of size and concentration of small ice particles, and measurements of the phase composition of clouds with the new HSI probe	Esposito	HAIC and HIWC as appropriate	New article suggested by Strapp for Esposito lead.
	48	HIWC	Possible technical report on performance aspects of IKP	NRC	Lilie, Ratvasky, Strapp, HAIC and HIWC as appropriate	
	49	HAIC	Icing detection based on electric phenomena (tribo electricity, induction),	Chazottes, Lalande	HAIC and HIWC if appropriate	
Topic	Article #	Originator	article	lead	co-authors	Comments
Applications to Tunnel Simulations	50	HIWC	Comparisons of cloud data to NASA PSL simulation	NASA	HIWC and HAIC contributors	
	51	HAIC	Comparison ice crystals generated in DGA test facility with those collected during the 2014 Darwin Field Campaign	DGA	HAIC and HIWC as appropriate	
	52	HAIC	Comparison of simulated glaciated and mixed phase conditions in TU BS icing wind tunnel with the Falcon-20 Darwin data	TUBS	HAIC and HIWC as appropriate	
Topic	Article #	Originator	article	lead	co-authors	Comments
Other	53	HIWC	Particle trajectories around the Falcon-20 aircraft	Bidwell (NASA)	HIWC and HAIC contributors	
	54	HAIC	Numerical simulations of the INCAS ice crystal trajectory and ice accretion package	INCAS	HIWC and HAIC contributors, if any	
	55	HAIC	Ice particles trajectory, impingement and accretion modeling and representativeness	ONERA P.Villedieu	C.Tropea, D.Raps, HAIC and HIWC, if appropriate	

update Oct. 2015
re-confirm Oct. 2015:
re-confirmed Oct. 2015: Article is well underway. Content is not fully decided, but will mainly emphasize pre-HAIC-HIWC work and review material. Plan to submit to J. Aerospace.
re-confirmed Oct. 2015: , UK. AIAA Aviation 2016, 13-17 June, 2016, Washington DC, (written paper)
need to re-confirm in Oct. 2015
re-confirmed in Oct. 2015 (still planned)
update Oct. 2015
Changed from Strapp to Schwarzenboeck as first author in 2014. Update Oct. 2015: title changed to "HAIC-HIWC field project"
changed to: SAFIRE : DES AVIONS AU SERVICE DE LA RECHERCHE EN ENVIRONNEMENT. Caroline Lamorthe, SAFIRE, Agnès Borbon, LISA (now LaMP), Alfons Schwarzenboeck LaMP UMR 6016 (Université Blaise-Pascal, CNRS) ; Jean-Christophe Canonici, SAFIRE. La Météorologie (French journal). Replaces La Météorologie paper,
update Oct. 2015

update Oct. 2015

re-confirmed in Oct. 2015 as still planned

need to reconfirm in Oct. 2015

title and author list change Oct. 2105: Initiation and evolution of ice in mixed phase convective environment: Measurement of droplets and small ice crystals in high IWC. Combined use of CDP and 2D-S probes (F20 Cayenne data). D. Leroy, G. Febvre, P. Coutris, A. Schwarzenboeck, ... & contributing scientists from HAIC-HIWC ...?

new title, draft available, not yet submitted, probably JOAT

re-confirmed in Oct. 2015. Authorship lead changed to Coutris

Not re-confirmed in Oct. 2015. Likely similar work in new titles below

new title Oct. 2015: Submitted to JOAT. (in review process)

new title Oct. 2015

HIWC HAIC Publication List, HIWC/HAIC Science Team Meeting, 28-29 Aug. 2013

update Oct. 2015
title change Oct. 2015: Zhu, S., G.M. McFarquhar, W. Wu, A. Schwarzenboeck, A.V. Korolev, J.W. Strapp and D. Leroy, 2016: The dependence of ice cloud size distributions represented as gamma functions on meteorological and cloud conditions: Results from the High Ice Water Content Campaign. J. Atmos. Sci., planned submission
title change Oct. 2015: Development and implementation of model parameterizations for ice cloud single-scattering and fallout using observations from the High Ice Water Content Campaign. To submit to JAS 2016
new title Oct. 2015: JGR intended
need to re-confirm in Oct. 2015
need to re-confirm in Oct. 2015
need to re-confirm in Oct. 2015
update Oct. 2015
need to re-confirm in Oct. 2015
title change Oct. 2015: The Measured Relationship between Ice Water Content and Cloud Radar Reflectivity in Tropical Convective clouds. A. Protat, J. Delanoë, J. W. Strapp, E. Fontaine, D. Leroy, A. Schwarzenboeck, F. Dezitter, A. Grandin, M. Weber. Submitted to JAMC, summer 2015.
New title March 2015. JAMC.
New title March 2015: Probably JOAT

update Oct. 2015
New title March 2015. Maybe JGR or JAS
New title Oct. 2015. Planned for fall 2015 submission.
New title Aug. 2013: submitted by Steve Harrah after Aug. 2013 Science Team meeting; needs Oct. 2015 confirmation
New title Aug. 2013: submitted by Steve Harrah after Aug. 2013 Science Team meeting; needs Oct. 2015 confirmation
update Oct. 2015
Title changed pre-Oct. 2015: High ice water content at low radar reflectivity near deep convection: Part I. Consistency of in situ and remote-sensing observations with stratiform rain column simulations. Fridlind, Ackerman, Grandin, Dezitter, Weber, Strapp, and Korolev, Atmos. Chem. Phys., 15, 11713-11728., doi:10.5194/acp-15-11713-2015
Title changed pre-Oct. 2015: High ice water content at low radar reflectivity near deep convection: Part II. Evaluation of microphysical pathways in updraft parcel simulations, 2015. Ackerman, Fridlind, Grandlin, Dezitter, Weber, Strapp, and Korolev. Atmos. Chem. Phys., 15, 11729-11751, doi:10.5194/acp-15-11729-2015
new title Oct. 2015: Journal TBD. 3D simulations planned, details depending on future analysis of recently released data; appropriate author list TBD
new title Oct. 2015: if submitted proposal funded; appropriate author list TBD

update Oct. 2015
new title Oct. 2015: if submitted proposal funded; appropriate author list TBD
need to re-confirm in Oct. 2015
title change Oct. 2015: Factors influencing the evolution of simulated high ice water content regions and comparison with observations from the High Ice Water Content campaign. Varble, Zipser, Strapp, Schwarzenboeck, and others if their observational datasets are used.
title change Oct. 2015: Comparison of observed and simulated convective drafts in tropical monsoon mesoscale convective systems during the High Ice Water Content campaign. Stanford, Varble, Zipser, Strapp, Schwarzenboeck, and others if their observational datasets are used
New title Oct. 2015: Journal TBD.
need to re-confirm in Oct. 2015
need to re-confirm in Oct. 2015
new title Oct. 2015: Controls on phase composition and ice water content in a convection permitting model simulation of a tropical mesoscale convective system. Franklin and Protat. Journal probably QJRM, to be submitted early Nov. 2015
update Oct. 2015
title change Oct. 2016: Development and Verification of a Detection Method for High Ice Water Content Regions. Haggerty, Black, McCabe, Cuning, Minnis, Strapp, Potts. In preparation Sept. 2015. Planned submission to JAMC.
New title Oct. 2015: . To be submitted to JAMC. Not a HAIC-HIWC article.
New title Oct. 2015: In preparation Sept. 2015. Planned submission to JAMC.

HIWC HAIC Publication List, HIWC/HAIC Science Team Meeting, 28-29 Aug. 2013

update Oct. 2015
title change Oct. 2016: Minnis, Yost, Bedka, Spangenberg, Palikonda, Nguyen, Strapp, and Grandin/Dezitter, 2015: A prototype method for diagnosing high ice water content probability using satellite imager data. J. Atmos. Oceanic Tech., in preparation.
need to re-confirm in Oct. 2015
new title Oct. 2015: Geosci. Data Jour., in preparation.
new title Oct. 2015: Atmos. Meas. Tech., in preparation
new title Oct. 2015: . J. Appl. Meteor. Climatol., in preparation.
title change pre-Oct. 2015: Overview of the HAIC Space-Borne Observation and Nowcasting of High Ice Water Content Regions Sub-Project and Mid-Term Results. Brenguier, De Laat, Delanoë, Dezitter, Faivre, Gounou, Grandin, Guignard, Meirink, Moisselin, Parol, Protat, and Vanbauce. SAE Technical Paper 2015-01-2123, 2015, doi:10.4271/2015-01-2123.
need to re-confirm in Oct. 2015
need to re-confirm in Oct. 2015, possibly same as title #59
new title pre-Oct. 2015: SAE Technical Paper 2015-01-2124, 2015, doi:10.4271/2015-01-2124.
SAE Technical Paper 2015-01-2086, 2015, doi:10.4271/2015-01-2086. SAE 2015 International Conference on Icing of Aircraft, Engines, and Structures, Prague, Czech Republic. June 2015.
update Oct. 2015
need to re-confirm in Oct. 2015
re-confirmed Oct. 2015.

HIWC HAIC Publication List, HIWC/HAIC Science Team Meeting, 28-29 Aug. 2013

update Oct. 2015
title change Oct. 2015: Isokinetic TWC Evaporator Probe Development and Performance Testing for the HAIC-HIWC Darwin 2014 and Cayenne 2015 Field Campaigns, Lyle Lilie, J. Walter Strapp , Thomas Ratvasky, Craig Davison , Chris Dumont ; AIAA Aviation 2016, 13-17 June, 2016, Washington DC (written paper)
need to re-confirm in Oct. 2015
need to re-confirm in Oct. 2015
need to re-confirm in Oct. 2015
need to re-confirm in Oct. 2015
update Oct. 2015
need to re-confirm in Oct. 2015
need to re-confirm in Oct. 2015
need to re-confirm in Oct. 2015
update Oct. 2015
cancelled due to retirement (as per Tom Ratvasky, 21-Oct-15)
need to re-confirm in Oct. 2015
need to re-confirm in Oct. 2015