

VICC 2010



Photo by Erwin Woenckhaus

International Glaciological Conference Ice and Climate Change: A View from the South

Valdivia, CHILE, 1-3 February 2010

PROGRAMME

Sponsor

**FUNDACION
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CECS



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SUNDAY 31st of JANUARY

17:00 - 21:00	REGISTRATION Sky Bar Hotel Dreams
20:00	ICEBREAKER Sky Bar Hotel Dreams

MONDAY 1st of FEBRUARY

08:00 - 18:00	REGISTRATION
09:30 - 10:30	POSTER SET UP
11:00 - 11:45	OPENING CEREMONY
11:45 - 12:30	COFFEE & 1st POSTER SESSION
12:30 - 13:00	ORAL PRESENTATION OF POSTERS 1 min/each
13:00 - 14:30	LUNCH
14:30 - 16:15	1st ORAL SESSION
16:15 - 17:30	COFFEE & 1st POSTER SESSION
17:30 - 19:15	2nd ORAL SESSION
19:30	WINE TASTING Conference Room 1st floor Hotel Dreams

TUESDAY 2nd of FEBRUARY

08:00 - 18:00	REGISTRATION
08:00 - 09:45	1st ORAL SESSION
09:45 - 10:15	ORAL PRESENTATION OF POSTERS 1 min/each
10:15 - 11:15	COFFEE & 2nd POSTER SESSION
11:15 - 13:00	2nd ORAL SESSION
13:00 - 15:00	LUNCH & APECS MEETING
15:00 - 17:00	3rd ORAL SESSION
17:00 - 18:00	COFFEE & 2nd POSTER SESSION
18:30 - 22:30	BOAT TRIP + BANQUET

WEDNESDAY 3rd of FEBRUARY

08:00 - 18:00	REGISTRATION
08:00 - 09:45	1st ORAL SESSION
09:45 - 10:15	ORAL PRESENTATION OF POSTERS 1 min/each
10:15 - 11:15	COFFEE & 3rd POSTER SESSION
11:15 - 12:30	2nd ORAL SESSION
12:30 - 14:00	LUNCH
14:00 - 16:15	3rd ORAL SESSION
16:15 - 17:15	COFFEE & 3rd POSTER SESSION
17:15 - 19:15	4th ORAL SESSION
19:15 - 19:45	CLOSING SESSION

Monday 1st of February

1st Poster Session (poster display): 11:45-12:30 & 16:15-17:30

GLOBAL TOPICS & ANTARCTICA

Chairs: Gino Casassa & Andrés Rivera. 1 min oral presentation for each poster (23 posters): 12:30-13:00

#	AUTHOR (Presenter)	TITLE
124	Michael Demuth	The diminution of glaciers in key regions of water stress in Chile and Canada – historical change and the evolution of debris-covered ice reservoirs
56	Guisella Gacitúa	Active layer in Greenland permafrost and snow stratigraphy in the Antarctic ice sheet: an assessment of contrasting polar conditions through GPR
13	Patrick Ginot	Data interpretation of Bolivian, Andean and worldwide glacier study network
2	Amarnath Giriraj	Monitoring and assessment of snow in the Hindu Kush-Himalayan region using improved MODIS satellite data and a Geographical Information System
65	Madeleine Griselin	Reaction of a small glacier to recent climate change observed in the Arctic
15	Heather Purdie	Synoptic influences on snow accumulation on glaciers in the Southern Alps of New Zealand
127	Jair Ramirez	The Snow and Ice Working Group of the International Hydrological Programme of UNESCO and its contribution to the knowledge of Andean glaciers
1	Umesh Kumar Singh	Niño 3.4 region warming trend and extreme rainfall events with flood and drought years over India
83	Ian Willis	Mass balance of Brewster Glacier, New Zealand revealed by geodetic methods
84	Claudio Bravo	Recent scientific expeditions to Fleming Glacier, Antarctic Peninsula
67	Carlos Cárdenas	Radio echo sounding near the Chilean base station Bernardo O'Higgins, Antarctic Peninsula
25	Jorge Carrasco	Meteorological analysis at Fleming Glacier, Antarctic Peninsula, derived from one-year in situ AWS data
87	P. Heil (Sebastian Gerland)	The Antarctic Fast-Ice Network (AFIN): beyond IPY
5	Christina Hulbe	Ice mechanics and outlet morphology on Kamb Ice Stream, West Antarctica
106	Alok Sagar Gautam	Signature of increasing climatic parameters at Schimacher region of East Antarctica
45	Stefaan Lhermitte	Extracting small scale ice sheet topography using wavelet analysis
134	J. Kohler (Kirsty Langley)	Norwegian-US Antarctic IPY Traverse
19	Daniel McGrath	In situ observations of snow accumulation on the Larsen C ice shelf, Antarctica
90	Carlos Moffat	The Hydrography and Ocean Circulation of the West Antarctic Peninsula Continental Shelf
130	Gernot Reitmayr	Land gravity surveys in the Antarctic interior: crustal contrast between East and West Antarctica
81	Pedro Skvarca	Ongoing cryospheric changes and present climatic trends on the northeastern Antarctic Peninsula
129	José Andrés Uribe	Radar for cold ice measurements
73	Daqing Yang	Antarctic precipitation observations: challenges and new opportunities

LUNCH: 13:00 - 14:30

Monday 1st of February

1st Oral Session: 14:30-16:15

GLOBAL TOPICS

Chair: Bernard Hallet

#	TIME	AUTHOR (Presenter)	TITLE
16	14:30 - 14:45	Michael Zemp	Internationally coordinated glacier monitoring: a view to the south
118	14:45 - 15:00	Ghassem Asrar (Vladimir Ryabinin)	World Climate Research Programme and its Climate and Cryosphere Project
80	15:00 - 15:15	John Reynolds	Managing glacial hazards in a changing climate
108	15:15 - 15:30	Terry Prowse	Lake and river ice responses to changing climate
140	15:30 - 15:45	Luis Miguel Galindo	The economics of climate change: a regional perspective
136	15:45 - 16:00	José Retamales	Chilean programme for scientific research in Antarctica
122	16:00 - 16:15	Andrés Rivera	A nationwide strategic plan for improving current knowledge of Chilean glaciers and modelling glacier impacts of climate change

Monday 1st of February

2nd Oral Session: 17:30-20:20

GLOBAL TOPICS

Chairs: José Retamales & Vladimir Ryabinin

#	TIME	AUTHOR (Presenter)	TITLE
145	17:30 - 17:45	Atsumu Ohmura	Physical conditions for Equilibrium Line Altitudes and their long-term variation during the last 50 years
34	17:45 - 18:00	Paul Leclercq	Glacier fluctuations as a temperature proxy
100	18:00 - 18:15	Douglas Hardy	Kilimanjaro: 10 years of climate and glacier measurements
51	18:15 - 18:30	Joseph McConnell	Dust deposition in East Antarctica during the past 2000 years: linkages to South American climate
29	18:45 - 19:00	Darío Trombotto	The last ten years in South American geocryology
94	19:00 - 19:30	Cunde Xiao	Ice and climate change over the Tibetan Plateau (TP): potential socio-economic impacts
154	19:30 - 19:45	Fernando Santibañez	Crossing the border between physical and biological worlds.
121	19:45 - 20:20	Gino Casassa	An updated glacier inventory for South America and ice volume estimation by means of scaling algorithms

Tuesday 2nd of February

1st Oral Session: 08:00-09:45

GLOBAL TOPICS & PALEOCLIMATE

Chair: Duncan Christie

#	TIME	AUTHOR (Presenter)	TITLE
12	08:00 - 08:15	Brian Anderson	Present-day fluctuations of glaciers in the Southern Alps, New Zealand, and their climatic drivers
112	08:15 - 08:30	Jordy Hendriks	Monitoring and modelling glaciers and seasonal snow in New Zealand: past, present and future
57	08:30 - 08:45	Ben Brock	Modelling bare ice cliff ablation on debris and tephra-covered glaciers
119	08:45 - 09:00	Bernard Hallet	Using glacier surface characteristics and fjord sediments to examine controls on glacial erosion rates from Patagonia to the Antarctic Peninsula
147	09:00 - 09:15	Charles Nittroer	Retreat of tidewater glaciers recorded in sediments of proglacial fjords
52	09:15 - 09:30	Michèle Koppes	Glacial sediment yields in an era of warming climate
63	09:30 - 09:45	Reinhard Dietrich	Rapid crustal uplift in Patagonia as a consequence of increased ice loss

Tuesday 2nd of February

2nd Poster Session (poster display): 10:15-11:15 & 17:00-18:00

GLACIERS OF ARID SOUTH AMERICA & CENTRAL CHILE/ARGENTINA

Chair: Pedro Skvarca. 1 min oral presentation for each poster (24 posters): 09:45-11:15

#	AUTHOR (Presenter)	TITLE
132	Peter Romanov	Satellite-based monitoring of snow cover in the Southern Hemisphere at NOAA/NESDIS
20	José Araos	Distributed albedo measurements on glaciers in the upper Huasco catchment, Chile
62	Xavier Bodin	State and dynamics of a tropical rock glacier on the Altiplano (Bolivia, 21.5°S) during the last two decades
40	Mariano Agustín Castro	The rock glaciers of the Cordillera del Tigre, Mendoza, Argentina
22	Simon Gascoin	High-altitude, semi-arid catchments in North-Central Chile: key hydrological processes and relative glacier contribution to streamflow
153	Peter Kirchner	Rock glacier discharge and chemistry in the Sierra Nevada, California, USA
21	Jorge Marín	Surface height changes on Tapado Glacier, upper Elqui valley, Norte Chico (Chile) using DEM data
9	Lindsey Nicholson (Shelley MacDonell)	Modelling point surface ablation and associated energy balance at Glaciar Tapado, Norte Chico, Chile
55	Pierre Pitte	Glacier inventory in the Desert Andes of San Juan, Argentina (29°20'S)
96	Sebastián Vivero	ASTER-derived glacier inventory of the Copiapó basin, northern Chile
150	Francisco Balocchi	Climate change: contradictions and verification in Chile
58	Ben Brock	A high magnitude midwinter melt event at Glaciar Pichillancahue, Volcán Villarrica, Chile
98	Gonzalo Campos	Monitoring of mountain glaciers: a synergistic task force involving students, mountaineers and scientists
4	Alfonso Fernández	Glacier Changes on Sierra Velluda massif, Chile (37°30'S): an approach to study forcing factors in a transitional climate setting
71	María Pilar González	The ecosystem associated with glaciers in the high basin of Rio Blanco, central Chile
148	Hugo Enríquez	The effect of snow line rise on skiing in central Chile
123	Stephanie Joyce	Mass balance of Mocho-Choshuenco Glacier: a new monitoring site in southern Chile
125	María Gabriela Lenzano	GPS measurements at the terminus of Glaciar Horcones Inferior, Aconcagua, Argentina
47	Cedomir Marangunic	Combined (ice, water, heat) balance on the Rinconada West Glacier, Aconcagua River basin, Chile, during February 2009
48	Cedomir Marangunic	Physical characteristics of rock glaciers in the mountains of central Chile
50	Paula Marangunic	Vertical wind and temperature gradients over a field of penitentes
152	Iván Ramírez	Satellite System for Earth Observation (SSOT): a new high resolution satellite for Chile
30	Darío Trombotto	First thermal analysis of the caldera and the summit of the Peteroa volcano complex, Mendoza, Argentina
76	Michael Willis (Joan Ramage)	Remote sensing of velocities and elevation changes at outlet glaciers of the Northern Patagonian Icefield, Chile

Tuesday 2nd of February

2nd Oral Session: 11:15-13:00

ANTARCTICA

Chair: Reinhard Dietrich

#	TIME	AUTHOR (Presenter)	TITLE
59	11:15 - 11:30	Steven Arcone	Radar profiles of stratigraphic structures in the Antarctic ice sheets
8	11:30 - 11:45	Robert Jacobel	Basal reflectivity and bed conditions along the US-ITASE traverse, Taylor Dome to South Pole
60	11:45 - 12:00	Jay Zwally	Antarctic ice sheet mass balance from ICESat (2003-2008)
74	12:00 - 12:15	Rene Forsberg	Mass loss of Antarctica from GRACE
138	12:15 - 12:30	Hilmar Gudmunsson	Tidal motion and the rheology of till
61	12:30 - 12:45	Neil Ross	Stable Holocene ice flow in interior West Antarctica: evidence from the ice divide of Pine Island Glacier
24	12:45 - 13:00	Ralf Greve	Implementation of ice shelf dynamics and marine ice dynamics in the ice sheet model SICOPOLIS

LUNCH: 13:00 - 15:00

Tuesday 2nd of February

3rd Oral Session: 15:00-17:00

ANTARCTICA

Chair: Shelley MacDonell

#	TIME	AUTHOR (Presenter)	TITLE
18	15:00 - 15:15	John Turner	Trends in Antarctic sea ice extent over the last 30 years: mechanisms and links to regional climate change
42	15:15 - 15:30	Helmut Rott	Glacier acceleration and increased ice export after the disintegration of Northern Larsen Ice Shelf, Antarctic Peninsula
113	15:30 - 15:45	Konrad Steffen	Climatology of Larsen C Ice Shelf, Antarctic Peninsula
101	15:45 - 16:00	Jorge Carrasco	Interannual behaviour of the northwestward propagation of katabatic airflow across the Ross Ice Shelf
116	16:00 - 16:15	Juan Quintana	Climate variability in the Antarctic Peninsula
17	16:15 - 16:30	Anja Wendt (Francisca Bown)	Evolution of Wordie Bay glaciers after disintegration of Wordie Ice Shelf
128	16:30 - 16:45	Gernot Reitmayr	On a pronounced isostatic anomaly in central Queen Maud Land, East Antarctica: a result of ice retreat or sediment deposition?
78	16:45 - 17:00	Sebastian Gerland	Monitoring of coastal sea ice thickness in the Arctic and the Antarctic

Tuesday 2nd of February

4th Oral Session: 18:00 - 19:45

ICE CORES & TROPICAL GLACIERS

Chair: Jay Zwally

#	TIME	AUTHOR (Presenter)	TITLE
110	18:00 - 18:15	Joergen P. Steffensen	The NEEM deep ice coring in Greenland: do we get an ice core record of the previous interglacial, and why do we want it?
77	18:15 - 18:30	Margit Schwikowski	Regional temperature reconstruction from Andean ice cores
14	18:30 - 18:45	Patrick Ginot	The Andean ice core climatic archives: from Ecuador to Patagonia
41	18:45 - 19:00	Bernard Francou	The retreat of glaciers in the tropical Andes: new evidences and regional context
31	19:00 - 19:15	Jean Emmanuel Sicart	Relative importance of the turbulent fluxes in the energy balance of tropical Andean glaciers
93	19:15 - 19:30	Raymond Bradley	Recent Climatic Change in the Tropics: the Quelccaya Ice Cap, Peru
89	19:30 - 19:45	Bryan Mark	Climate change and tropical Andean glacier recession: evaluating hydrologic changes and livelihood vulnerability in the Cordillera Blanca, Peru

Wednesday 3rd of February

1st Oral Session: 08:00 - 09:15

PALEOCLIMATOLOGY

Chair: Raymond Bradley

#	TIME	AUTHOR (Presenter)	TITLE
146	0815 - 08:30	Ricardo Villalba	Reconciling the glacial and dendrochronological records in the Cordillera de los Andes during the past centuries: a contribution from the LOTRED-SA initiative
137	08:30 - 08:45	Lydia Espizua	Late Pleistocene-Holocene glacier fluctuations in the Las Leñas and Salado valleys (35°S), Argentina
54	08:45 - 09:00	Mariano Masiokas	A review of glacier fluctuations in southern South America (17°-55°S) during the past millennium
114	09:00 - 09:15	Juan Carlos Aravena	Late Holocene glacial fluctuations at Mount San Lorenzo, Aysén, Chile
141	09:15 - 09:30	Duncan Christie	Aridity changes in the temperate-mediterranean transition of the Andes since A.D. 1346 reconstructed from tree-rings

ICE CORES, TROPICAL GLACIERS, PATAGONIA

Chair: Magnus Magnusson: 1 min oral presentation for each poster (27 posters): 09:15 - 09:45

#	AUTHOR (Presenter)	TITLE
92	Francisco Cereceda-Balic	Chemical characterisation of samples of snow and ice from the Andes, Metropolitan Region, Chile
117	Editha Elias	A community of snow algae on a glacier in southern Chile
120	Pamela Santibañez	Microorganisms living on glaciers and their use for obtaining climatological and glaciological information
104	Kate Sinclair	Mechanisms for moisture delivery to two ice core sites in the Ross Sea region, Antarctica
28	Richard Sylwester	Mapping glaciomarine sediments at remote sites
33	Bolívar Cáceres	An updated glacier inventory for Ecuador
44	Bolívar Cáceres	Evolution of a small glacier at the west Ecuadorean Andes
39	Eduardo Carrillo	The cryosphere at the Mérida Andes: a small ice-cap, a big challenge for the science
38	Jorge Cortés	Glacial shrinkage and its relation with radiative factors and local climatic changes: case of study of Citlaltépetl Volcano, Mexico
43	P. Ginot (G. Leonardini)	Monthly analysis of glaciological and hydrological mass balance from Zongo Glacier (Bolivia)
66	Joan Ramage	Modern ELA Variations in the Cordilleras Huayhuash and Raura, Peru
144	Rafael da Rocha Ribeiro	Remote sensing of Tres Cruces mountain glaciers using Landsat and CBERS 2b data
102	Francisca Bown	Remote sensing-derived glacier inventories and fluctuations in active volcanoes at the southernmost Southern Andean Volcanic Zone
109	Daniela Carrión	Lake Greve (SPI): feasibility of occurrence of Ice Dammed Lake Outburst Flood (IDLOF)
46	Silvia Delgado	Developing an Argentinean glacier inventory: first results from the Southern Patagonian Icefield submitted to GLIMS
26	D. Floricioiu (H. Rott)	High resolution ice velocity fields and glacier changes in the Patagonia Icefields derived from TerraSAR-X satellite data
139	Heiner Lange	Glacial isostatic uplift near SPI – an approach to estimate seasonal effects
107	Paulina López	Mass balance of Nef glacier (Patagonia) by means of laser altimetry
85	Takane Matsumoto	Features of water and sediment discharges from the Glaciar Exploradores drainage basin, Chilean Patagonia
143	Patricia Monahan	Seasonal and interannual melt characteristics of the Patagonian Icefields from AMSR-E, 2002-2008
111	Andreas Richter	Do crustal deformations observed by GPS in Tierra del Fuego (Argentina) reflect glacial-isostatic adjustment?
115	José Luis Rodríguez	Snowmelt detection with satellite passive microwave data: Patagonian ice fields and the Antarctic Peninsula
131	David Ulloa	A simulation algorithm for modelling lateral returns from airborne radio echo sounding signals: application to data collected with the SIRAHT HF radar in Patagonia
36	Lucas Ruiz	A preliminary remote sensing glacier inventory for the Wet Andes, Argentina and Chile, between 42°S and 42°10'S
149	A. White (M. Demuth)	Recent variations of glacier fronts on the Southern Patagonia Icefield
95	Rodrigo Zamora	First Ground Penetrating Radar studies of Martial Glacier, Ushuaia, Argentina
86	Pablo Zenteno	Variations of glacier surface albedo due to volcanic ash deposition derived from ASTER satellite data

Wednesday 3rd of February

2nd Oral Session: 11:00 - 13:15

SPECIAL CEAZA (Centro de Estudios Avanzados en Zonas Áridas) SESSION: GLACIERS OF ARID SOUTH AMERICA

Chair: Margit Schwikowski

#	TIME	AUTHOR (Presenter)	TITLE
79	11:00 - 11:15	Mathias Vuille	Climate change and glaciers in the (semi-)arid zone of South America
23	11:15 - 11:30	Christophe Kinnard	Glacier and hydroclimate interactions in the high-altitude, semi-arid Chilean Norte Chico region: progresses and challenges
27	11:30 - 11:45	Shelley MacDonell	The behaviour of turbulent heat fluxes on Guanaco Glacier, upper Huasco valley, Chile, using eddy covariance data and energy balance modeling
103	11:45 - 12:00	Stefaan Lhermitte	Spatial and temporal accuracy of MODIS snow cover products in northern Chile
135	12:00 - 12:15	Sebastián Vicuña	Climate change impacts on the hydrology of a snowmelt driven basin in semiarid Chile
91	12:15 - 12:30	Alexander Brenning	Rock glaciers as landforms and water resources in the Andes: present knowledge and research directions
35	12:30 - 12:45	Manfred Buchroithner	The glaciers of the Ojos del Salado-Tres Cruces Massifs, Atacama Andes
49	12:45 - 13:00	Cedomir Marangunic	Management of glaciers: experiences and results in Chile
64	13:00 - 13:15	Gonzalo Cortés	Analysing trends, variability and climatic dependence of the hydrological regime of Chilean rivers using the annual hydrograph centroid during the 1961-2005 period

LUNCH: 13:15 - 14:45

Wednesday 3rd of February

3rd Oral Session: 14:45 - 16:45

PATAGONIA

Chair: Konrad Steffen

#	TIME	AUTHOR (Presenter)	TITLE
133	14:45 - 15:00	René Garreaud	Climate Change along the extratropical Andes: evidences and projections
75	15:00 - 15:15	Juan Carlos Leiva	Climate change and recent variations in small Andean glaciers
82	15:15 - 15:30	Pedro Skvarca	Documenting 23 years of areal loss of Hielo Patagónico Sur, recent climate data and potential impact on Río Santa Cruz water discharge
72	15:30 - 15:45	Hans-Gerd Maas	Photogrammetric determination of spatio-temporal velocity fields at Glaciar San Rafael
142	15:45 - 16:00	Norbert Blindow	Field tests and first results of a 30 MHz helicopter-borne pulse radar (BGR-P30) in deep temperate ice of Patagonia
3	16:00 - 16:15	A. Dussaillant (F. Espinoza)	Repeated Glacial Lake Outburst Floods in Patagonia: an increasing hazard?
6	16:15 - 16:30	Rodolfo Iturraspe	Water resources vulnerability to glacier recession in Tierra del Fuego, Argentina
99	16:30 - 16:45	Jorge Quinteros	A personal view of the Patagonian Icefields

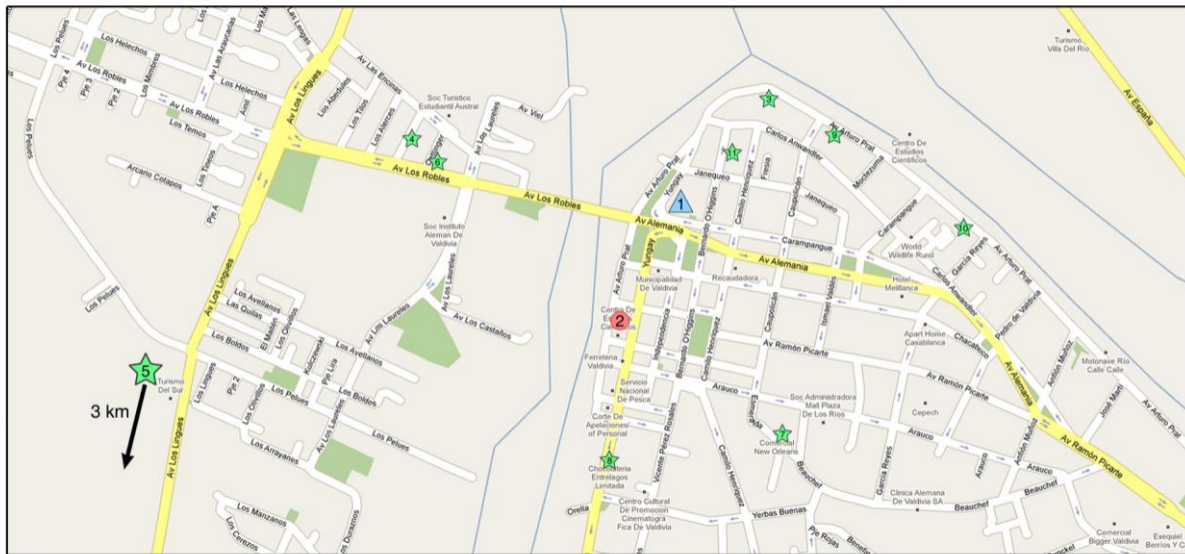
CLOSING SESSION 17:30 - 18:00

BOAT TRIP + BANQUET 18:15 - 22:30

Notes

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-  Hotel Dreams
-  CECS
-  Agridulce
-  Gohan
-  Kunstmann
-  Lomo de Toro
-  New Orleans
-  Santo Pecado
-  Sazón
-  La Parrilla de Thor
-  La Calesa





CECS

Recommended Restaurants (VICC credential needed)

Agridulce

Avda. Prat N° 327

Patagonian food

Non-smoking only, free drink

2 blocks from Hotel Dreams

Gohan

Saelzer 20, Isla Teja

Japanese food

Smoking and non-smoking, free pisco sour

5 blocks from Hotel Dreams

Kunstmann

Ruta T-350 (Camino a Niebla) N° 950

German food

Smoking and non-smoking

4.6 km from Hotel Dreams

Lomo de Toro

Los Robles 170

Meats

Only smoking, 10% discount

4 blocks from Hotel Dreams

New Orleans

Esmeralda 682

International food

Only smoking, 10% discount

7 blocks from Hotel Dreams

Santo Pecado

Yungay 745

International food

Only smoking, 10% discount

7 blocks from Hotel Dreams

Sazón

Av. Arturo Prat 425

Seafood

Smoking and non-smoking, 10% discount

3 blocks from Hotel Dreams

La Parrilla de Thor

Av. Arturo Prat 653

Meats

Only smoking, 10% discount

7 blocks from Hotel Dreams



INTERNATIONAL GLACIOLOGICAL CONFERENCE

Ice and Climate Change: A View from the South

