



ThalesAlenia
A Thales / Finmeccanica Company *Space*

■ Activités TAS autour de l'altimétrie sur les glaces

21 Juin 2011

Corporate Communications

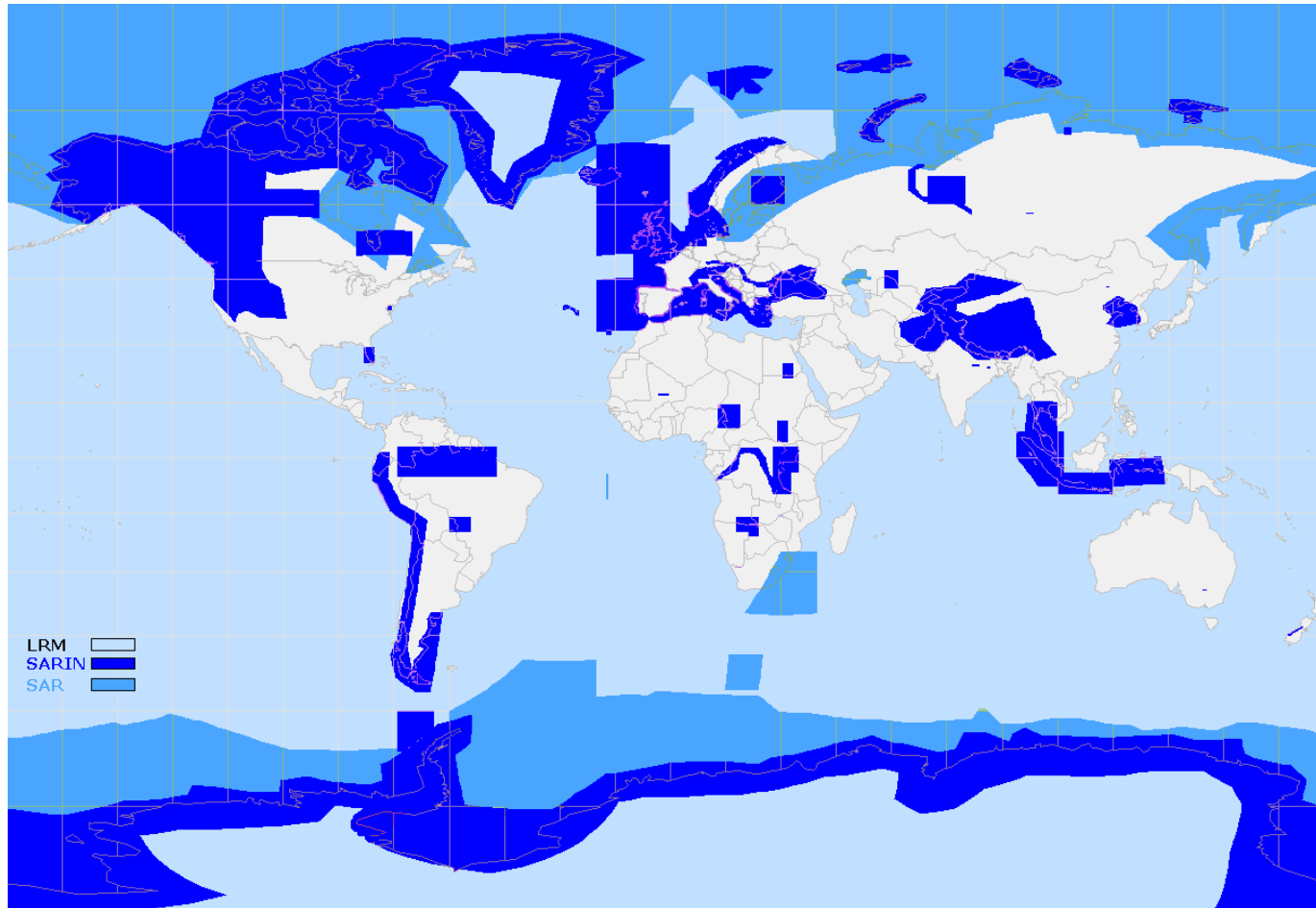
THALES

All rights reserved © 2007, Thales Alenia Space



- Fonctionnalités de SIRAL pour la mission CryoSat
- Activités de mise au point et de suivi en vol

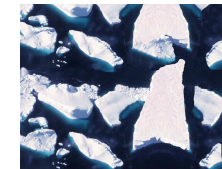
SIRAL MEASUREMENT MODES



1. *The Low Resolution for sea and in Land ice sheets*



2. *High resolution for sea ice*



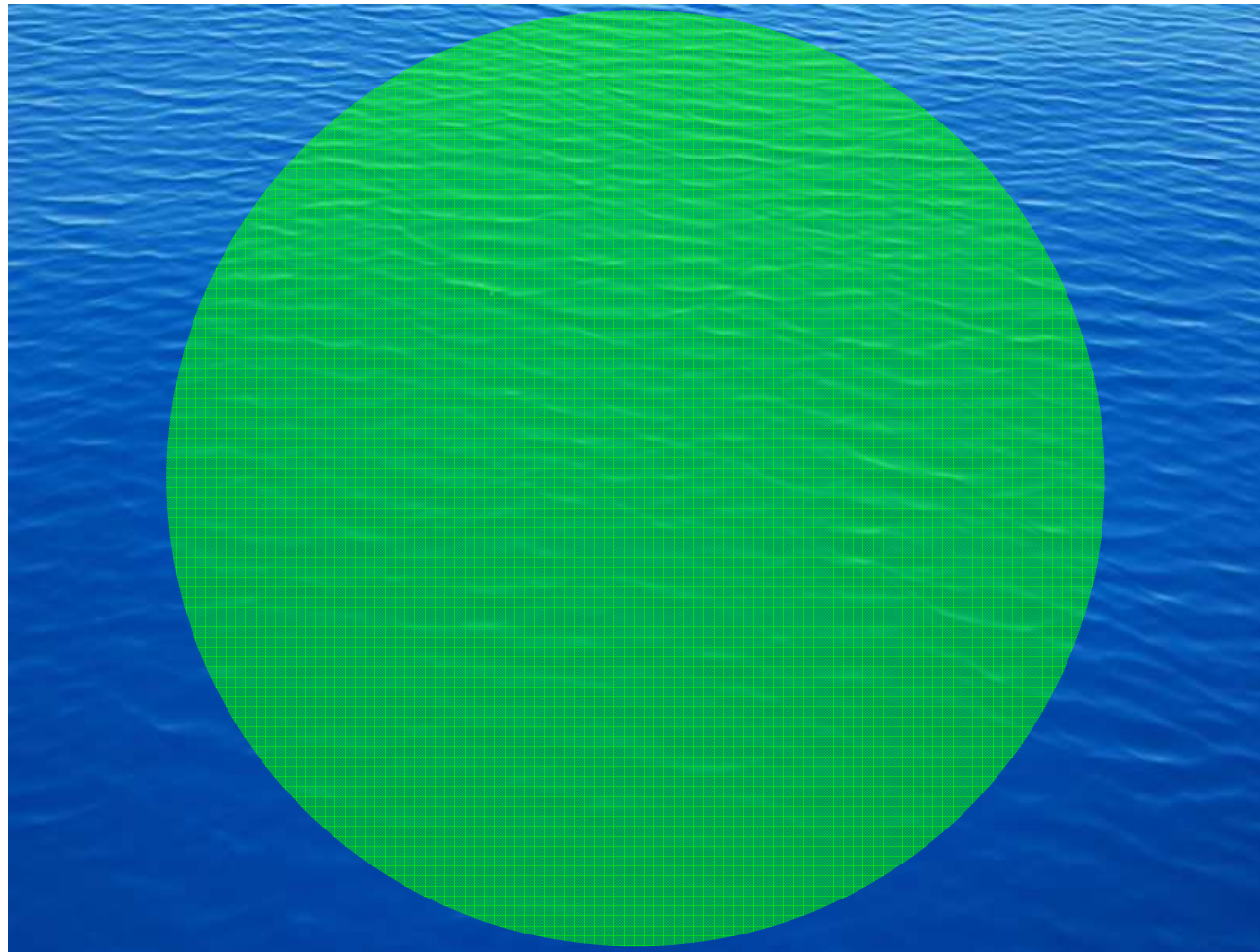
3. *The interferometric of ice sheets margin*

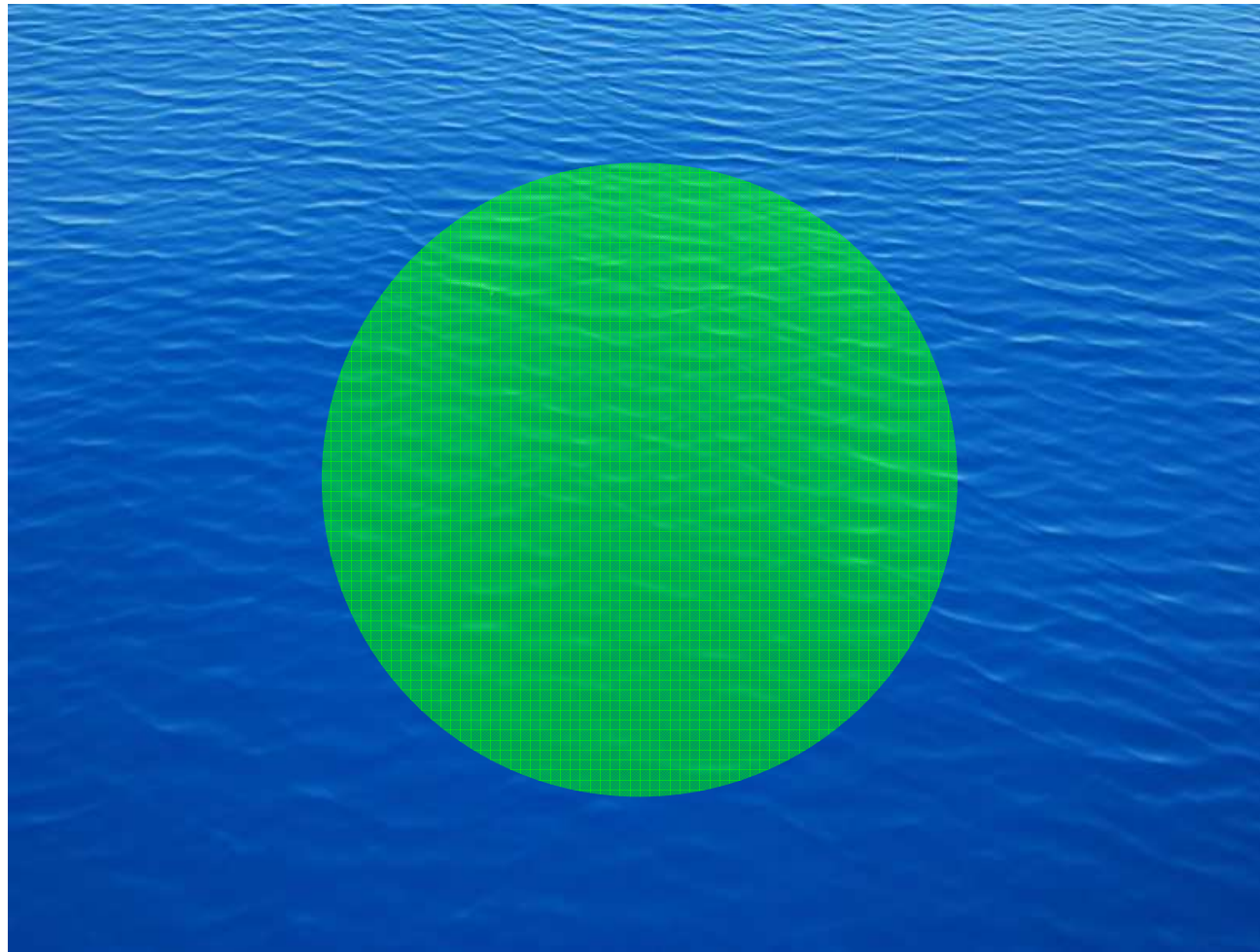


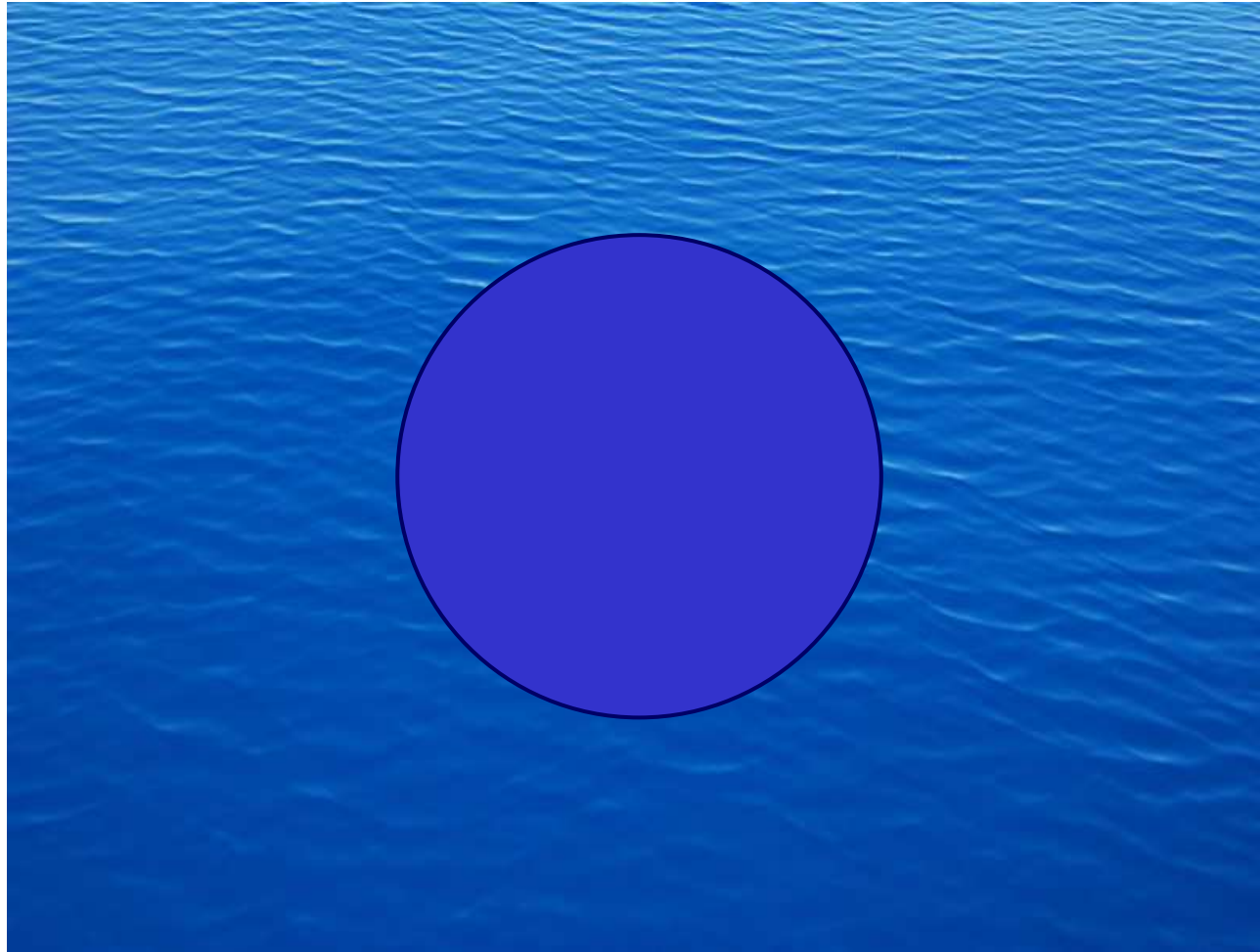


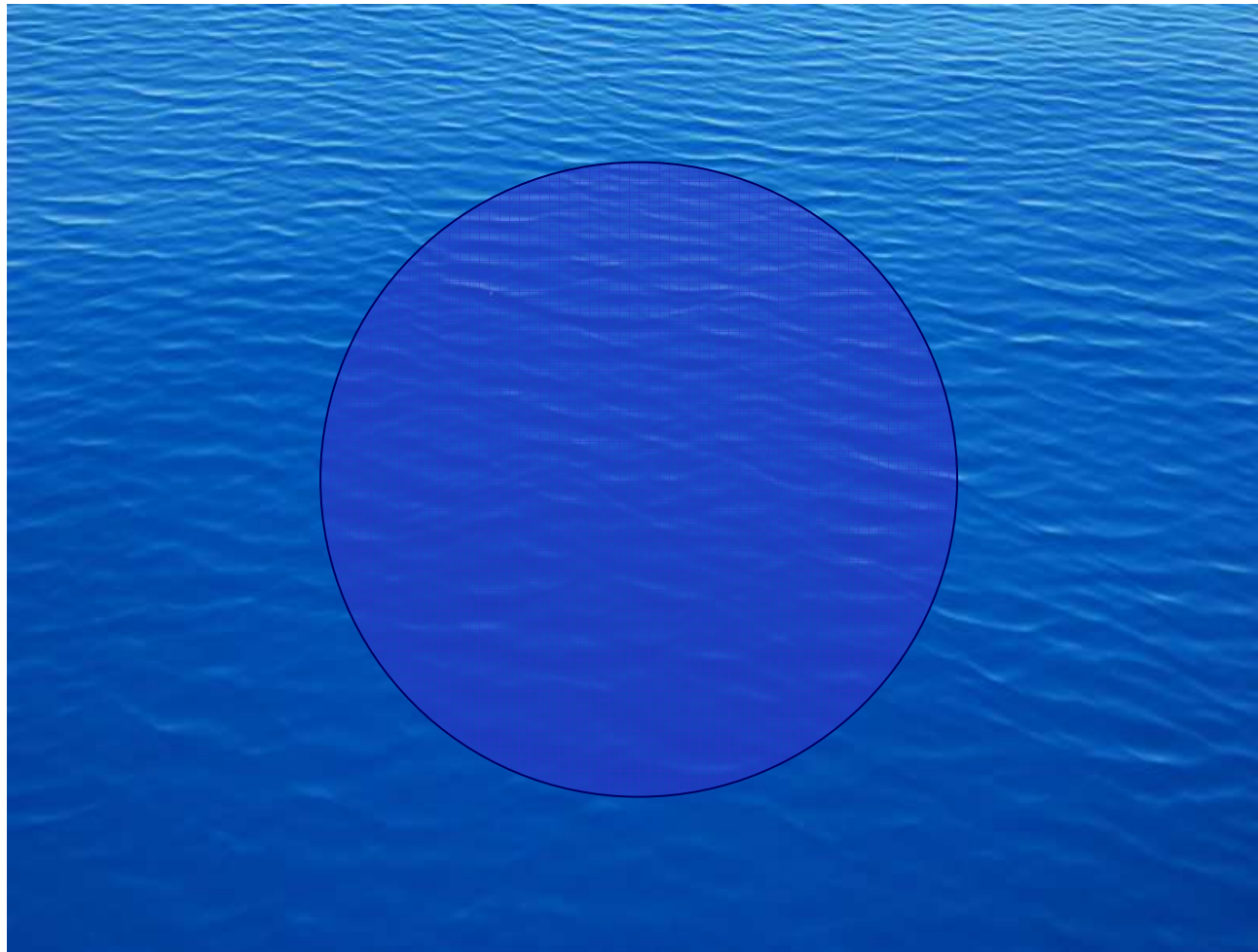


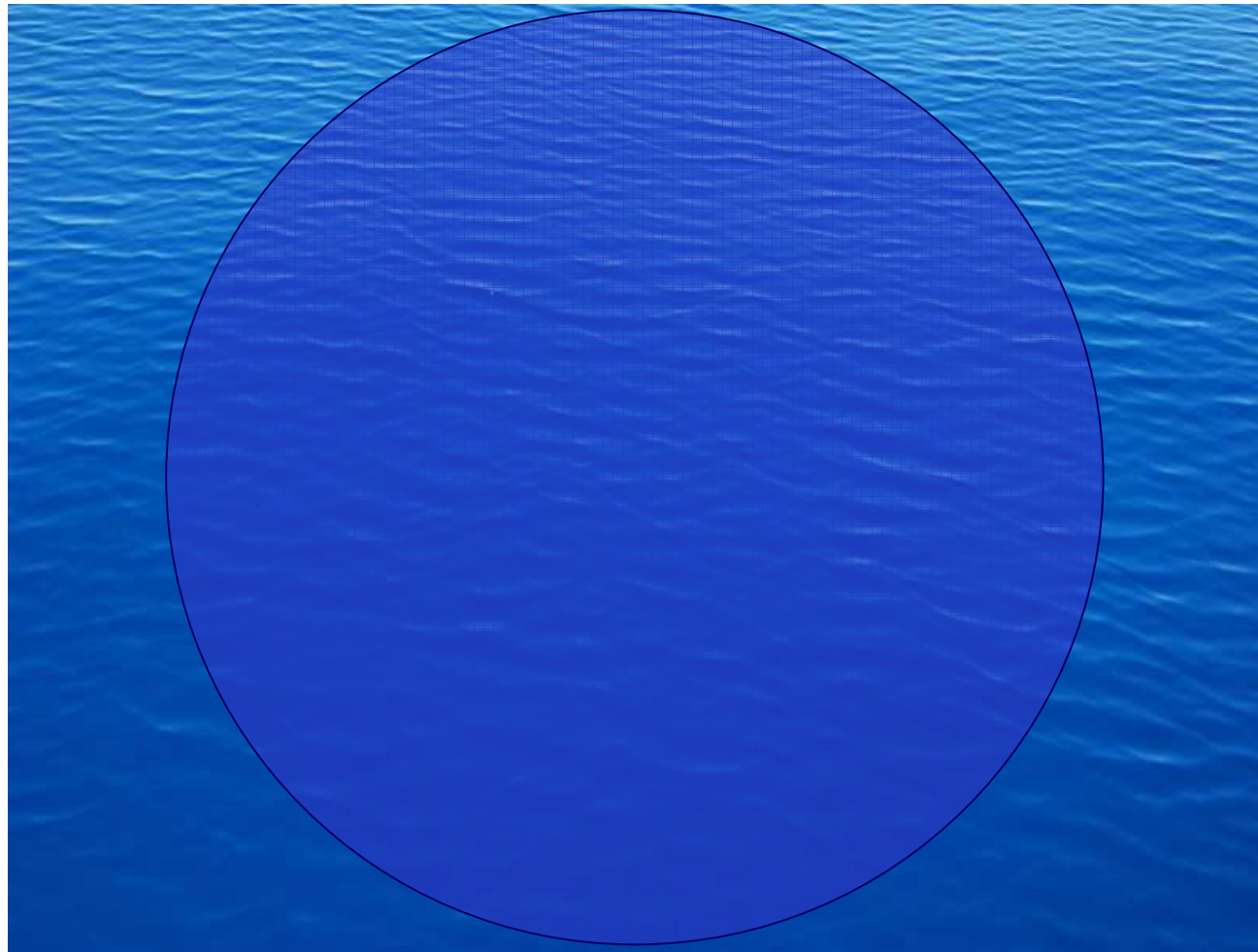


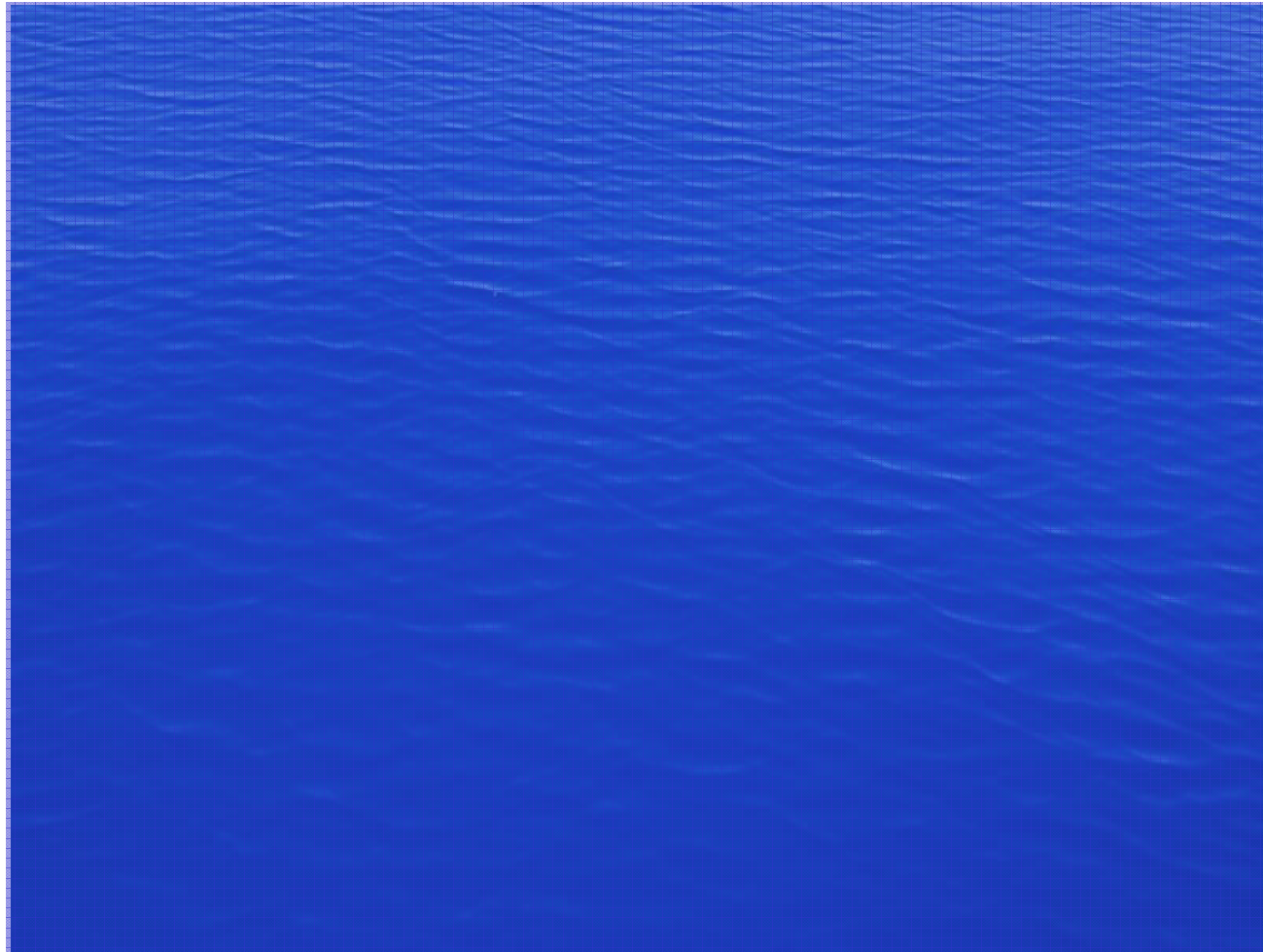






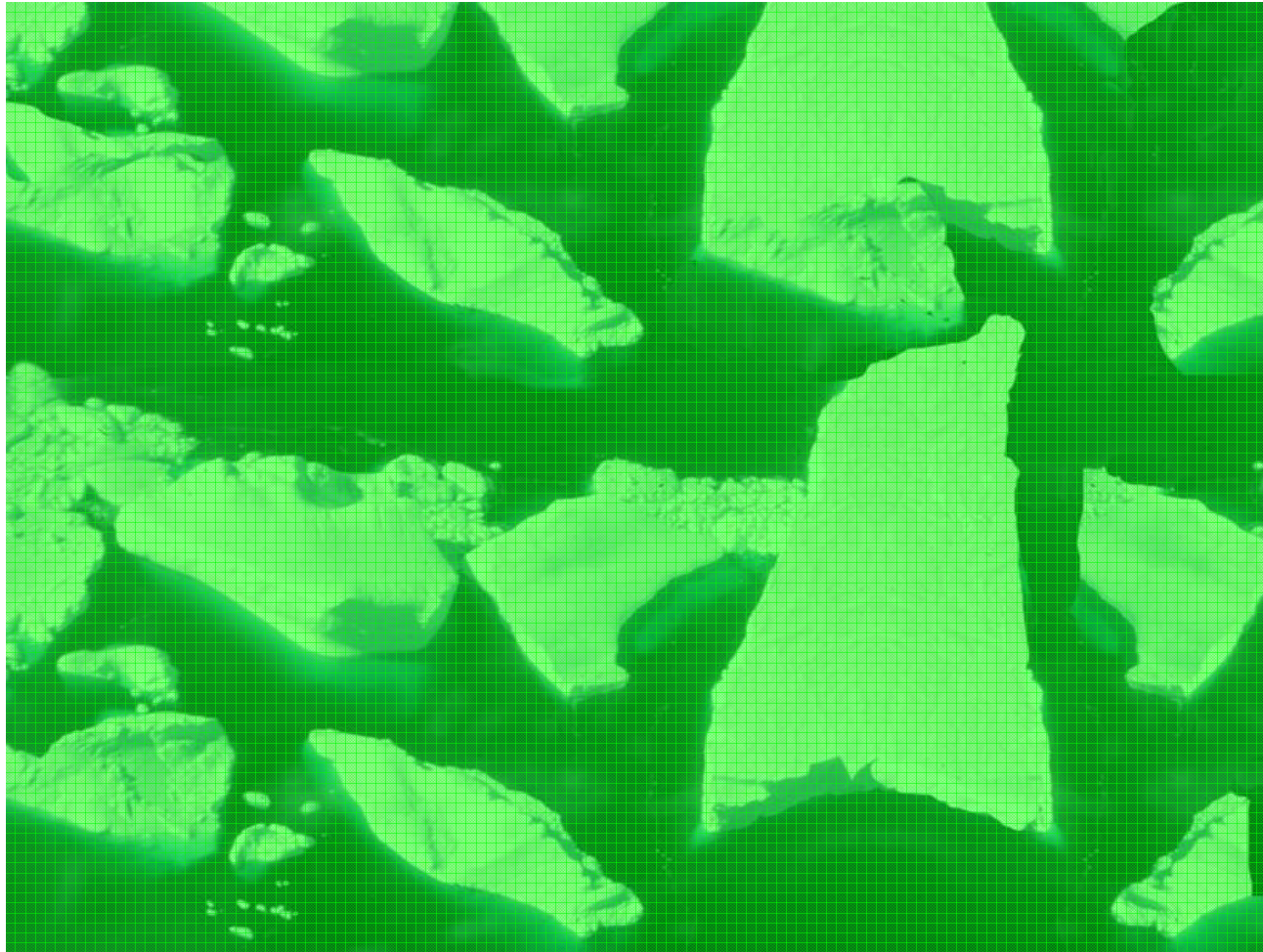
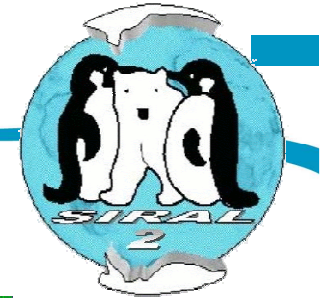


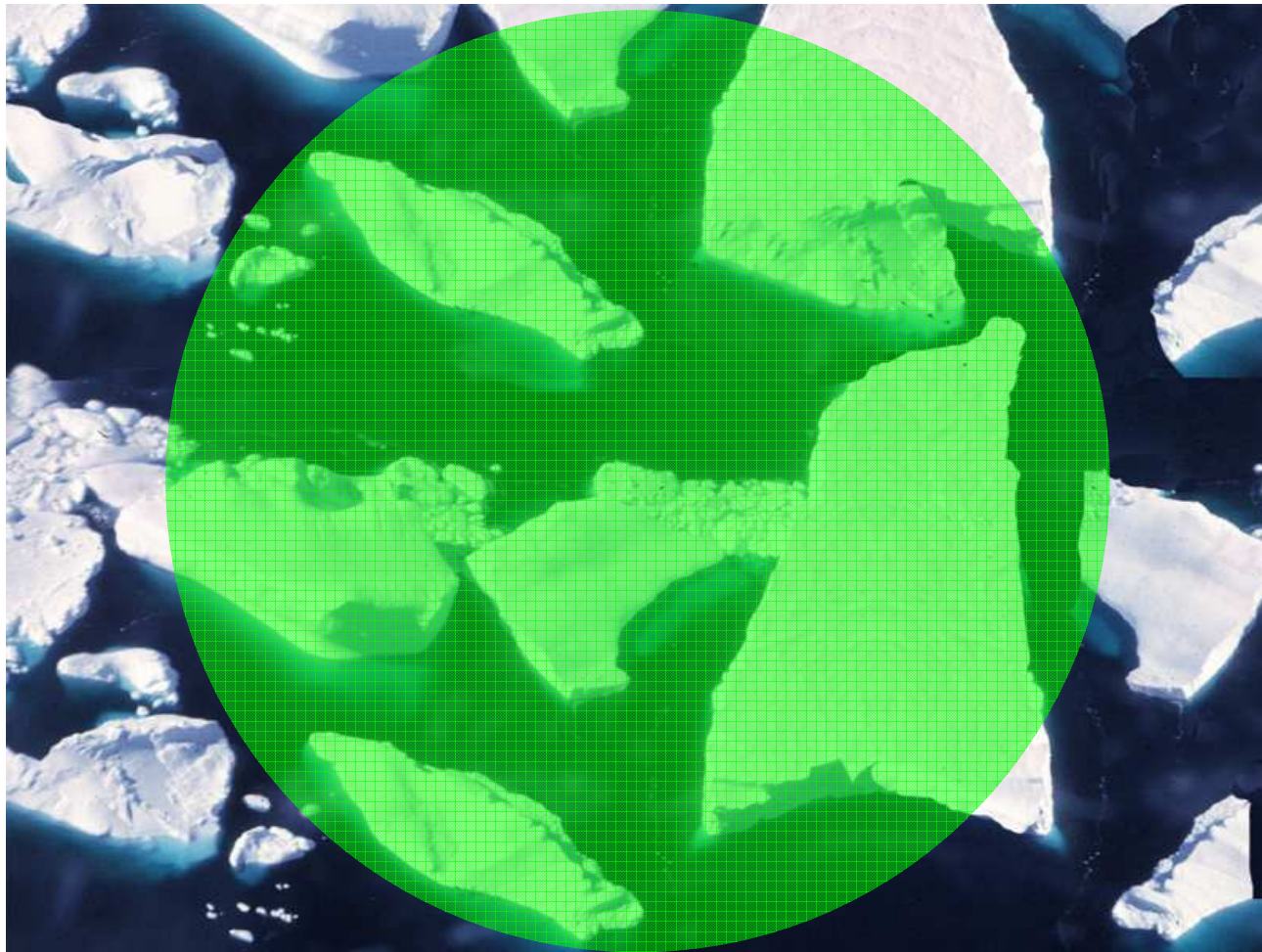


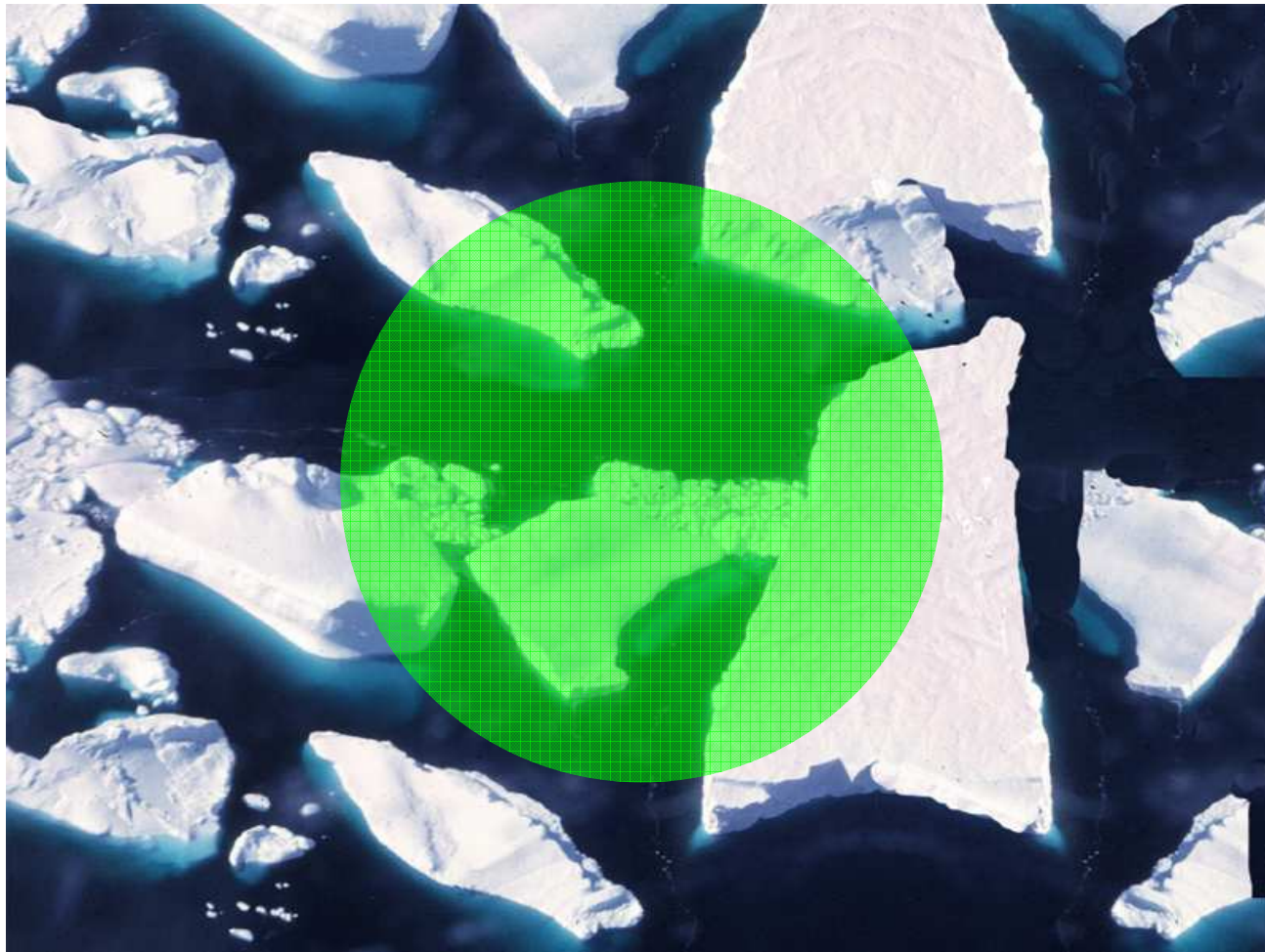


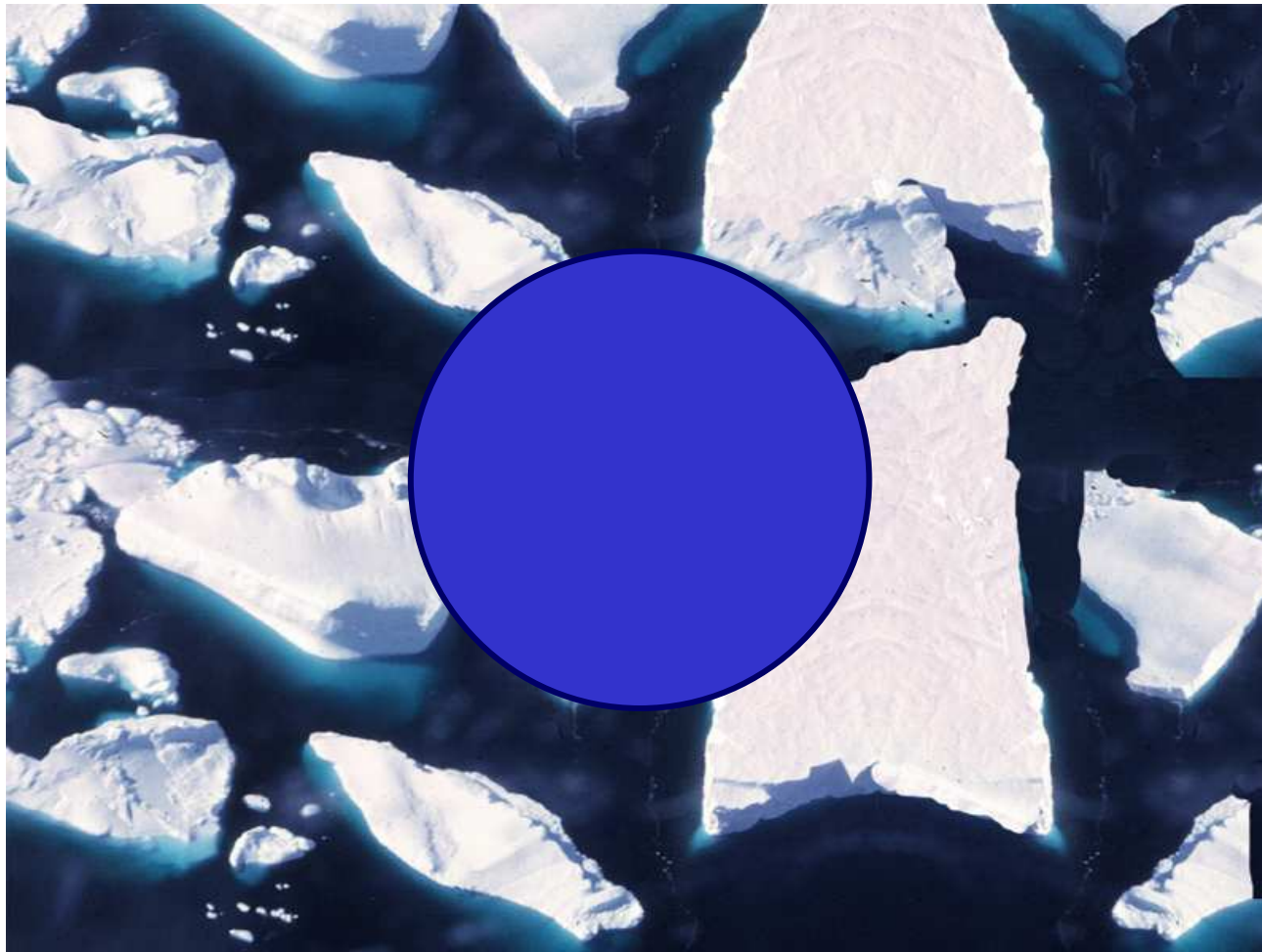


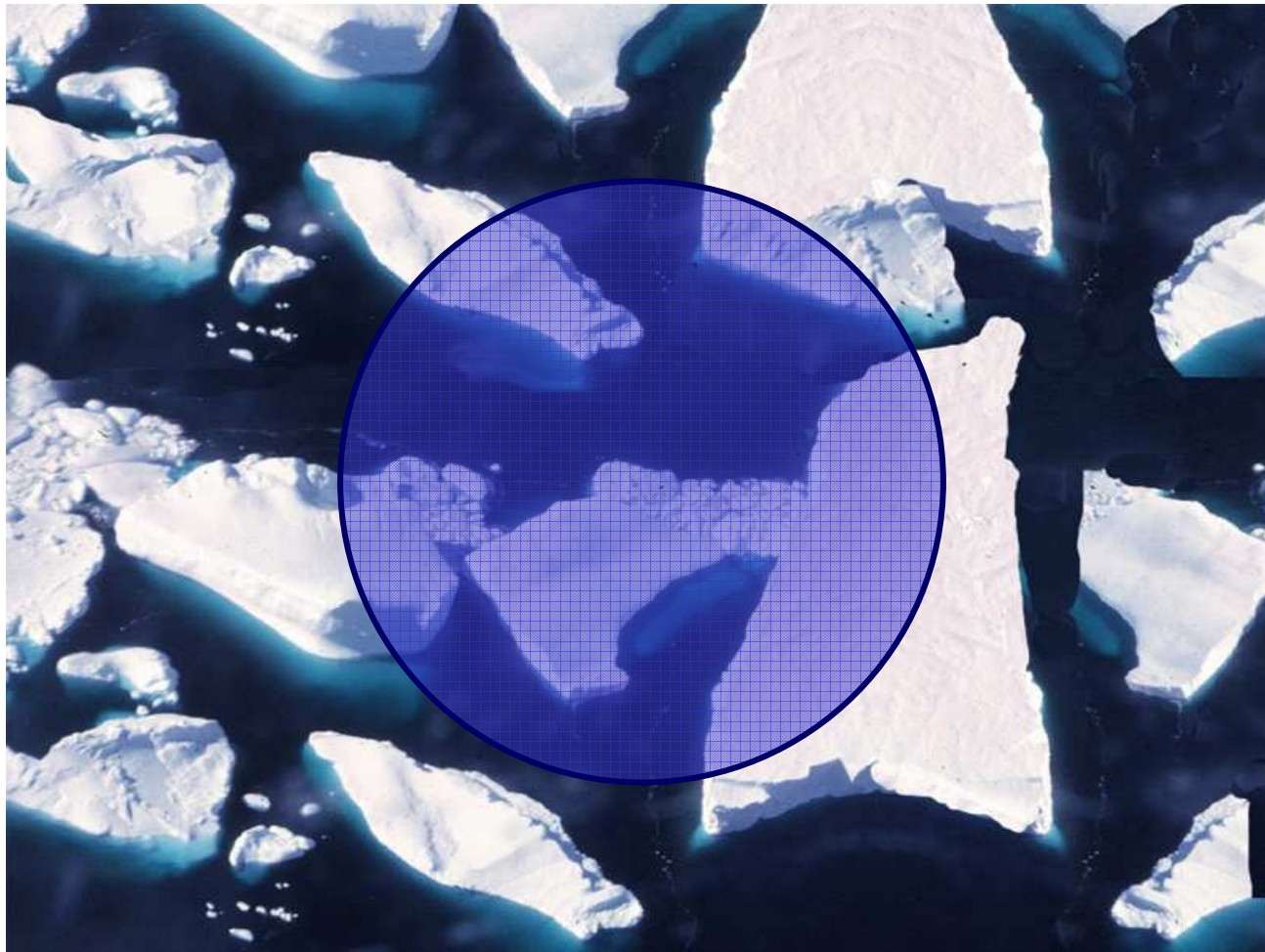


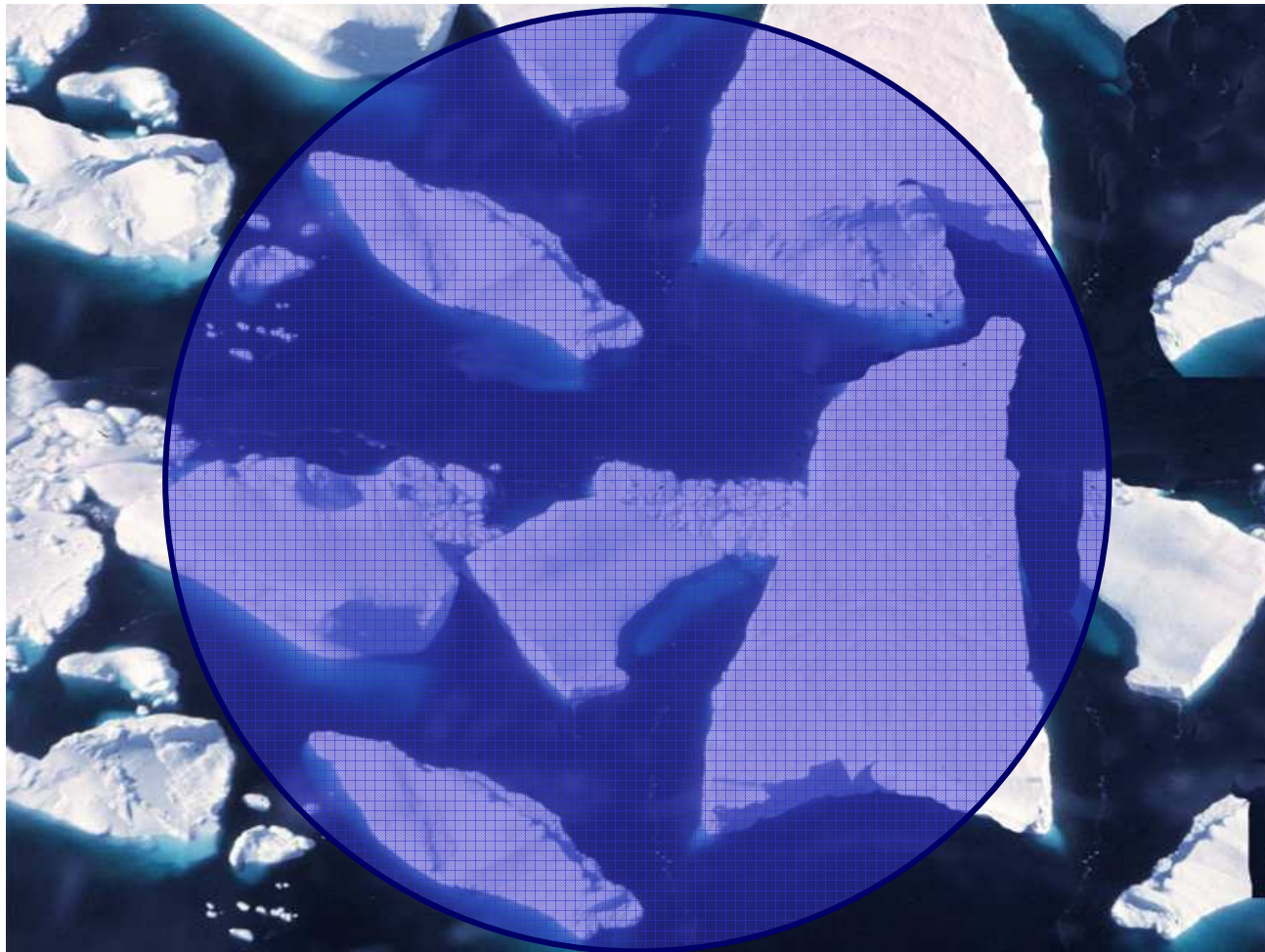


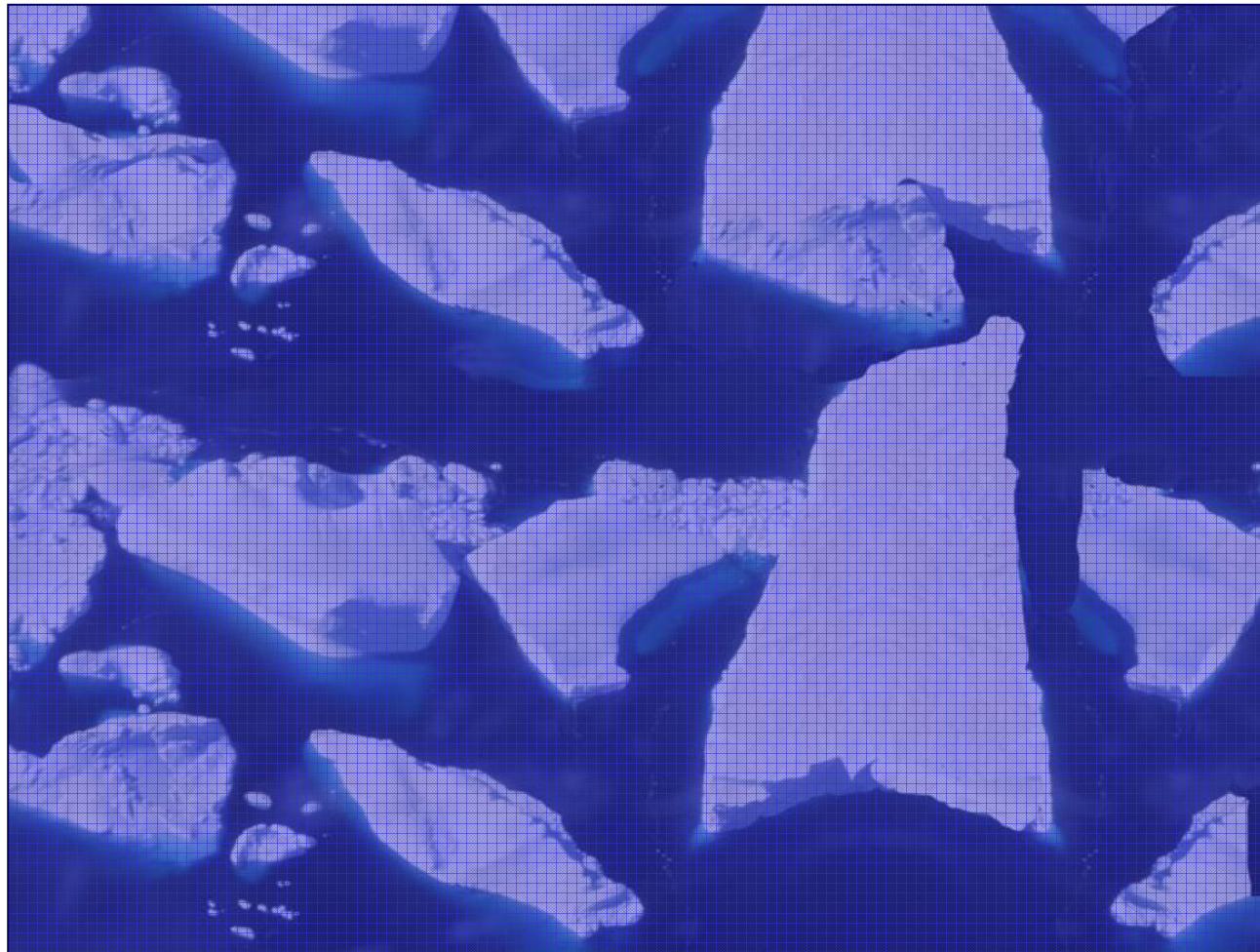


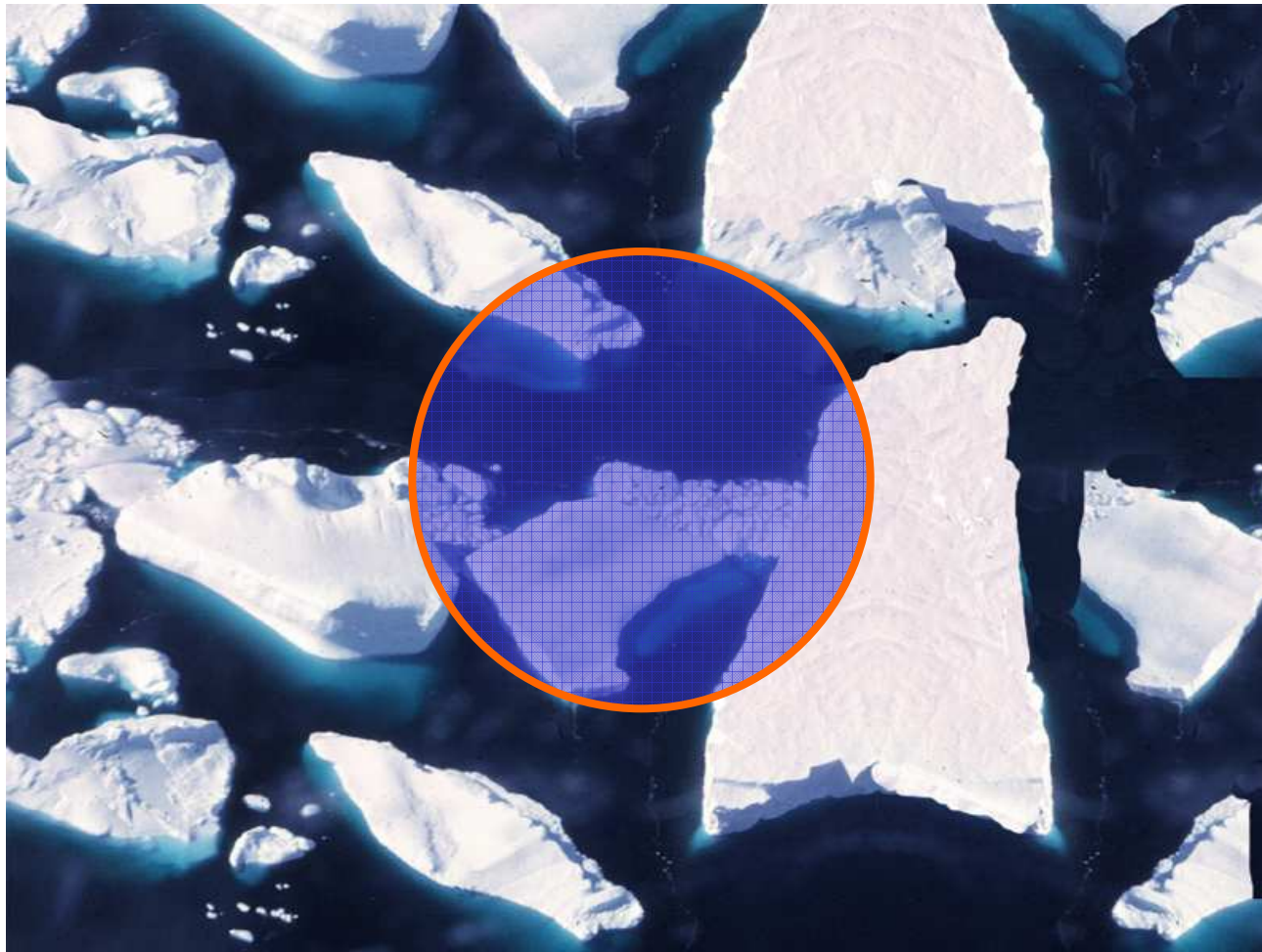


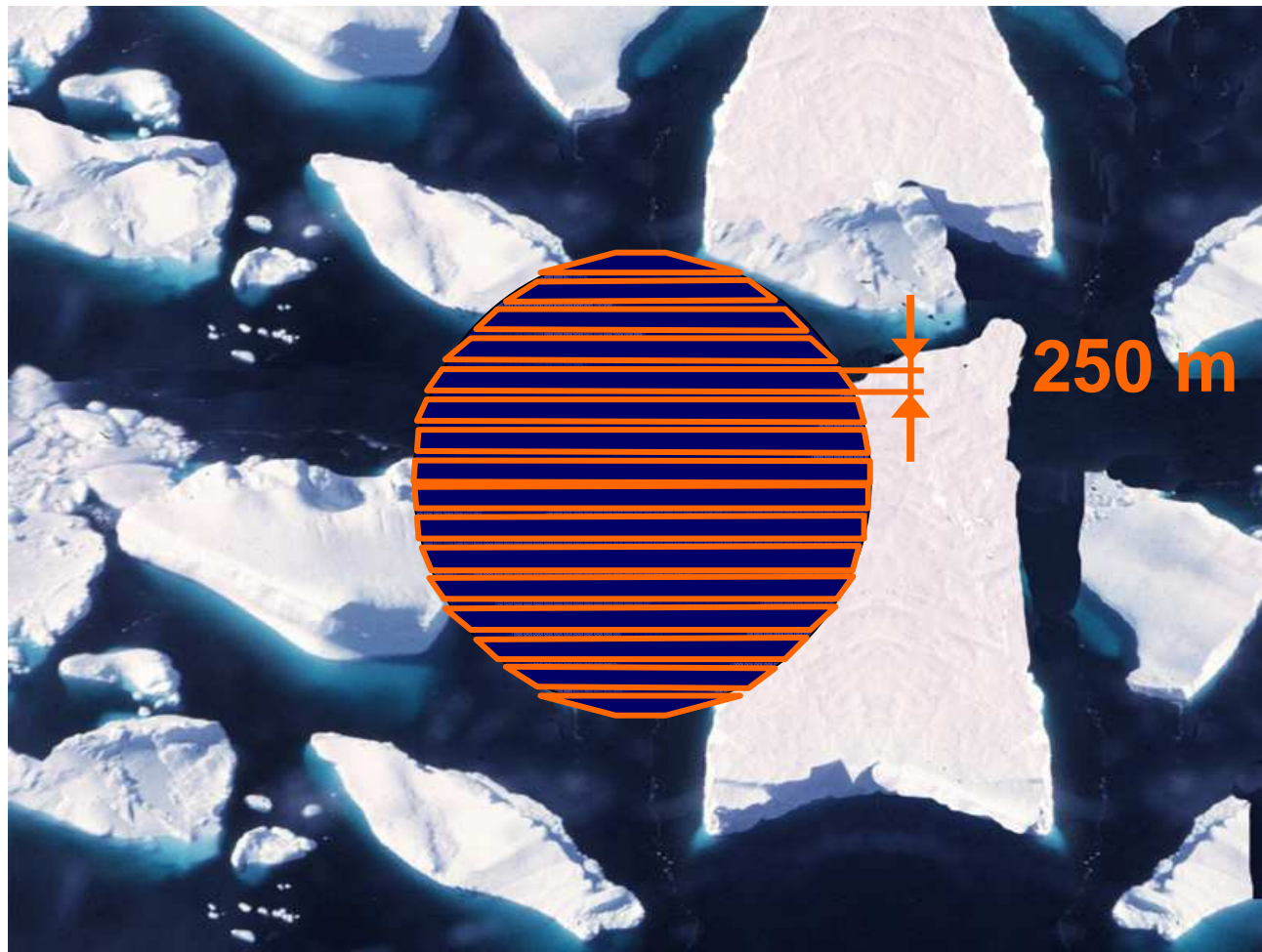


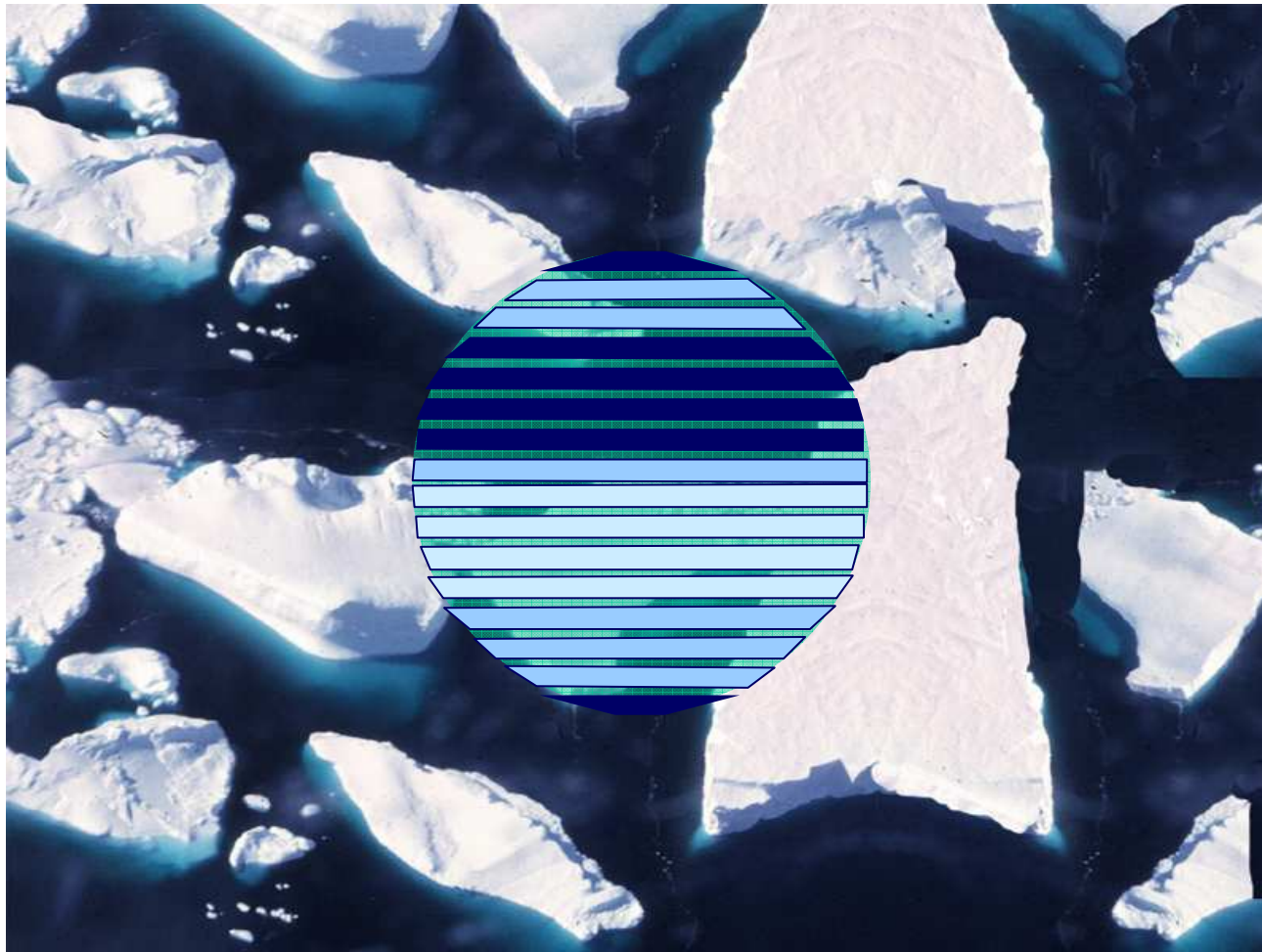




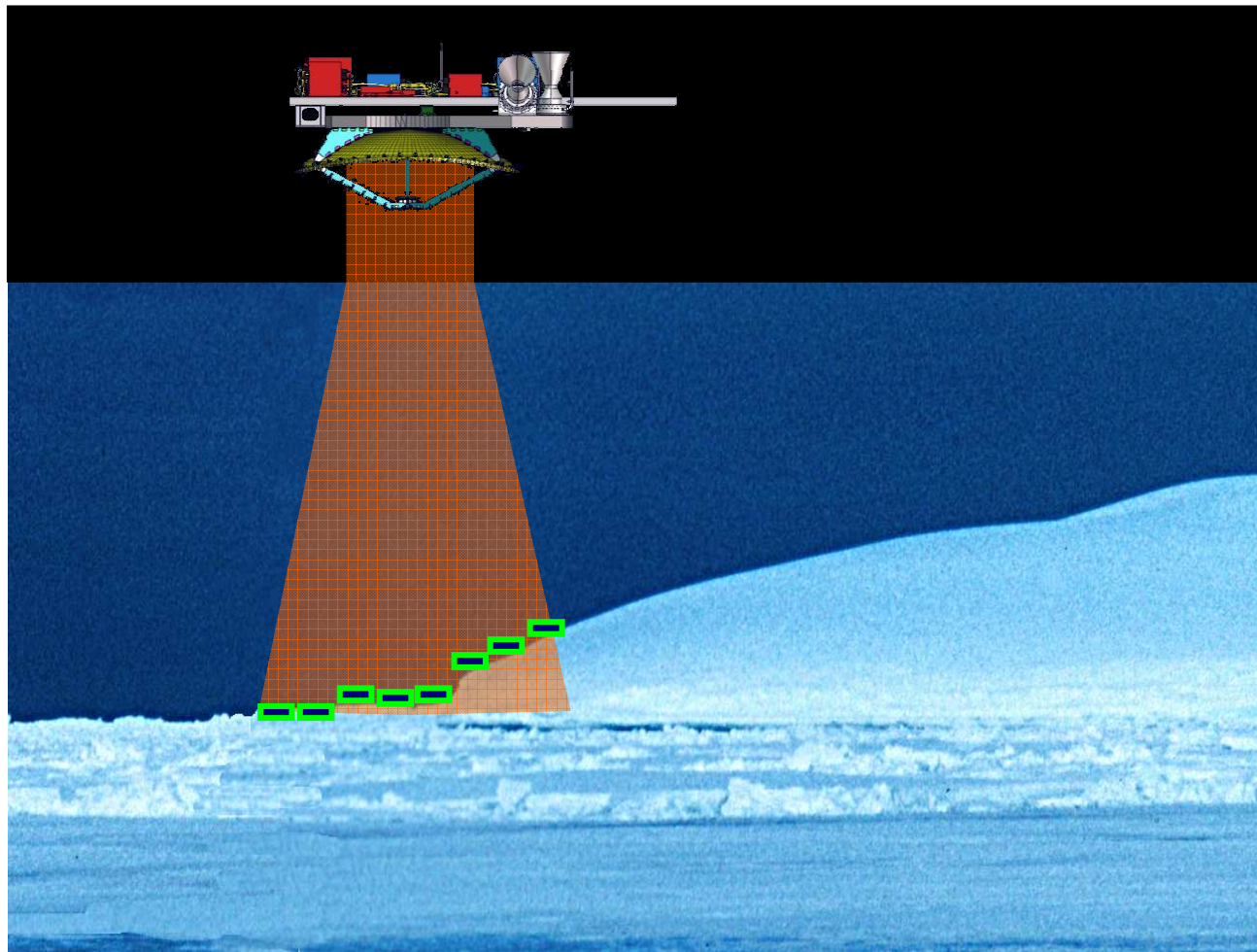




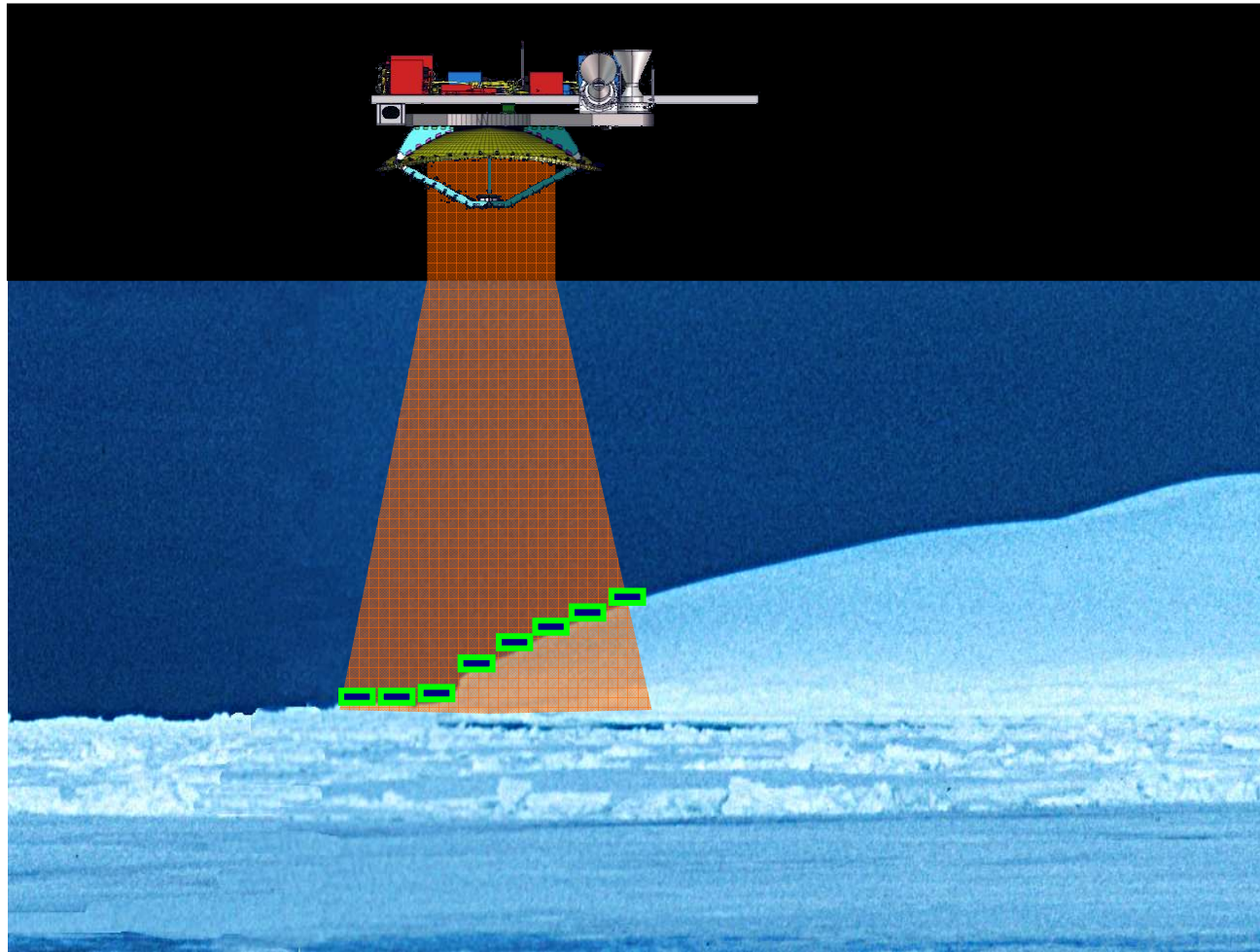


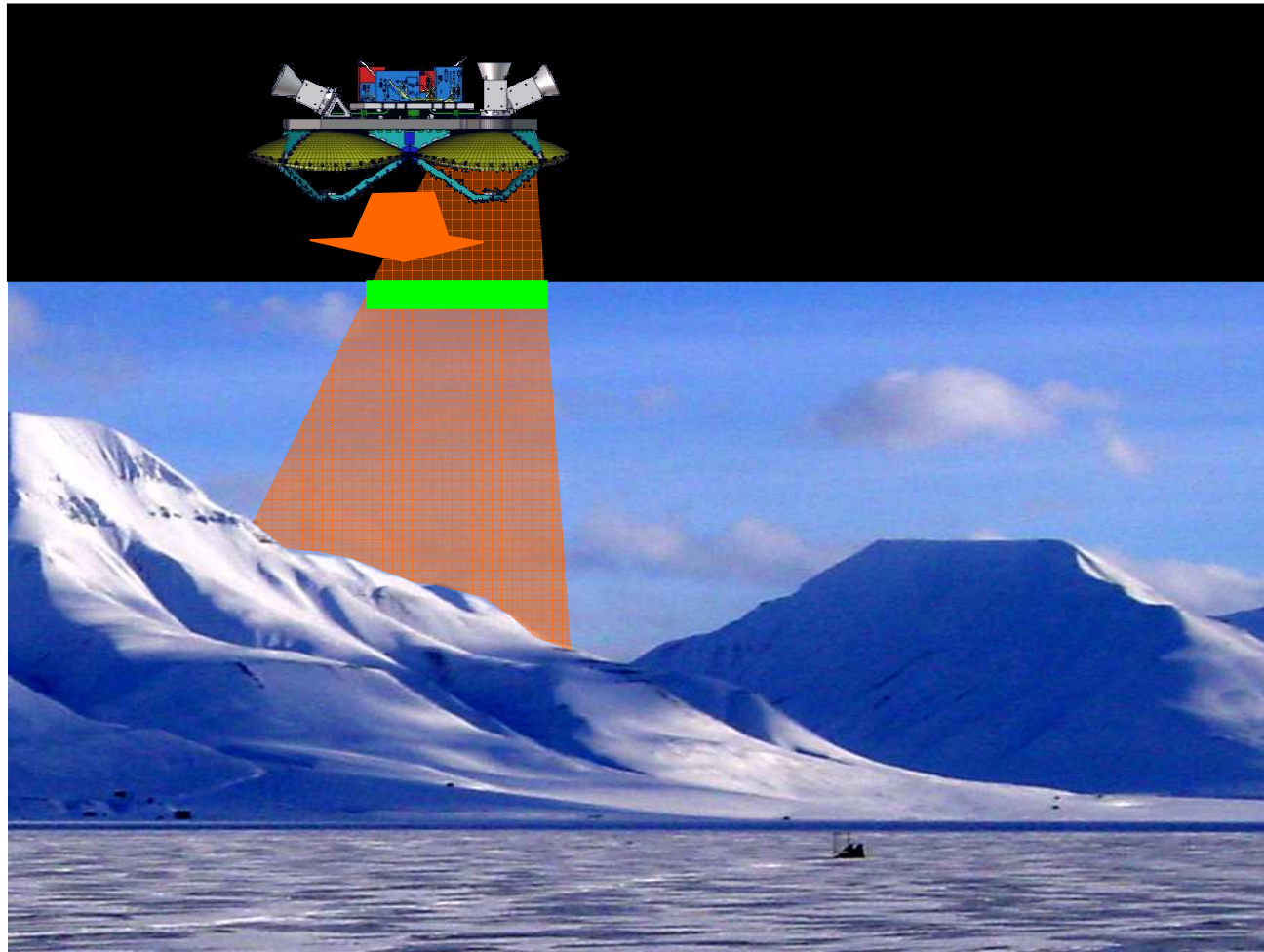


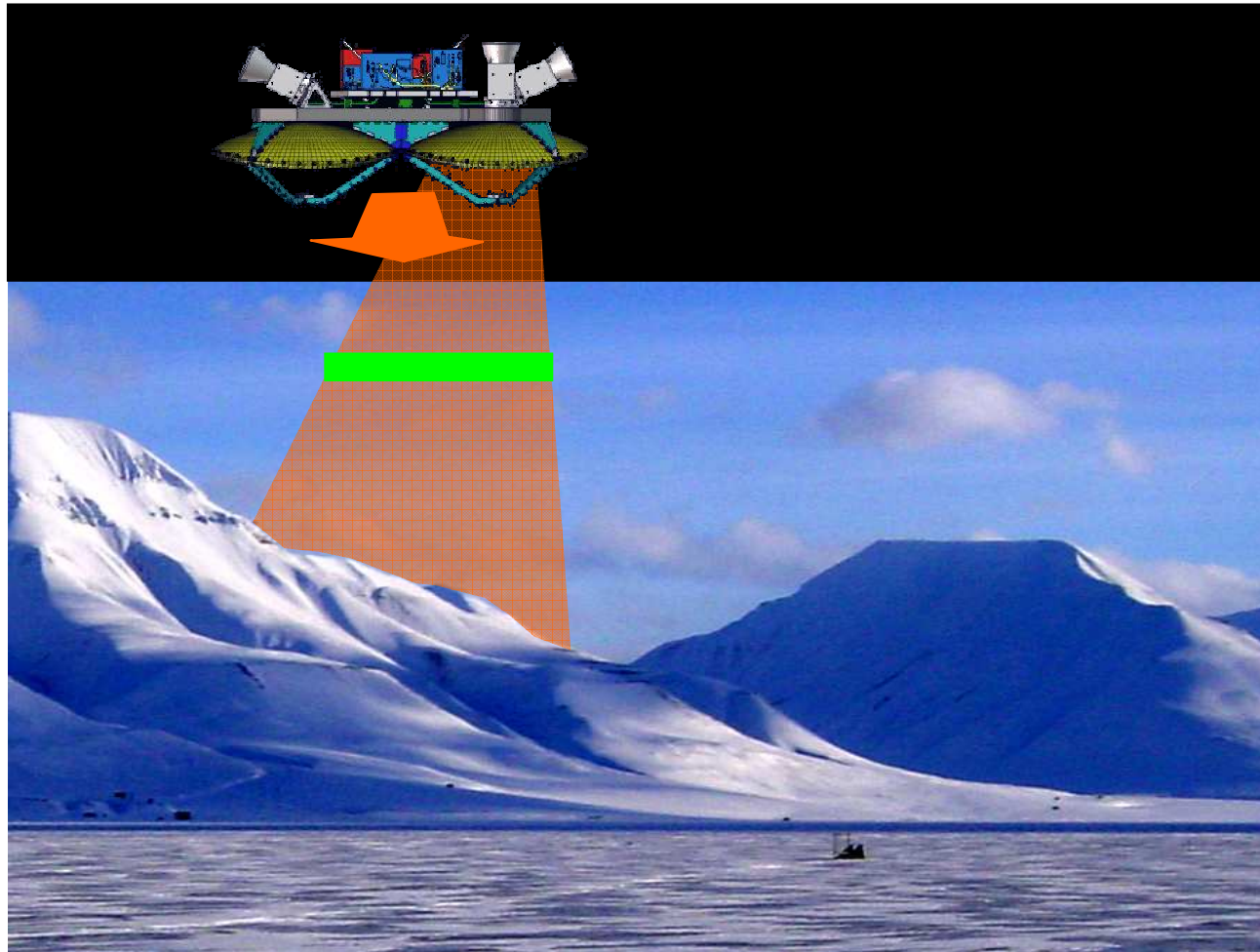


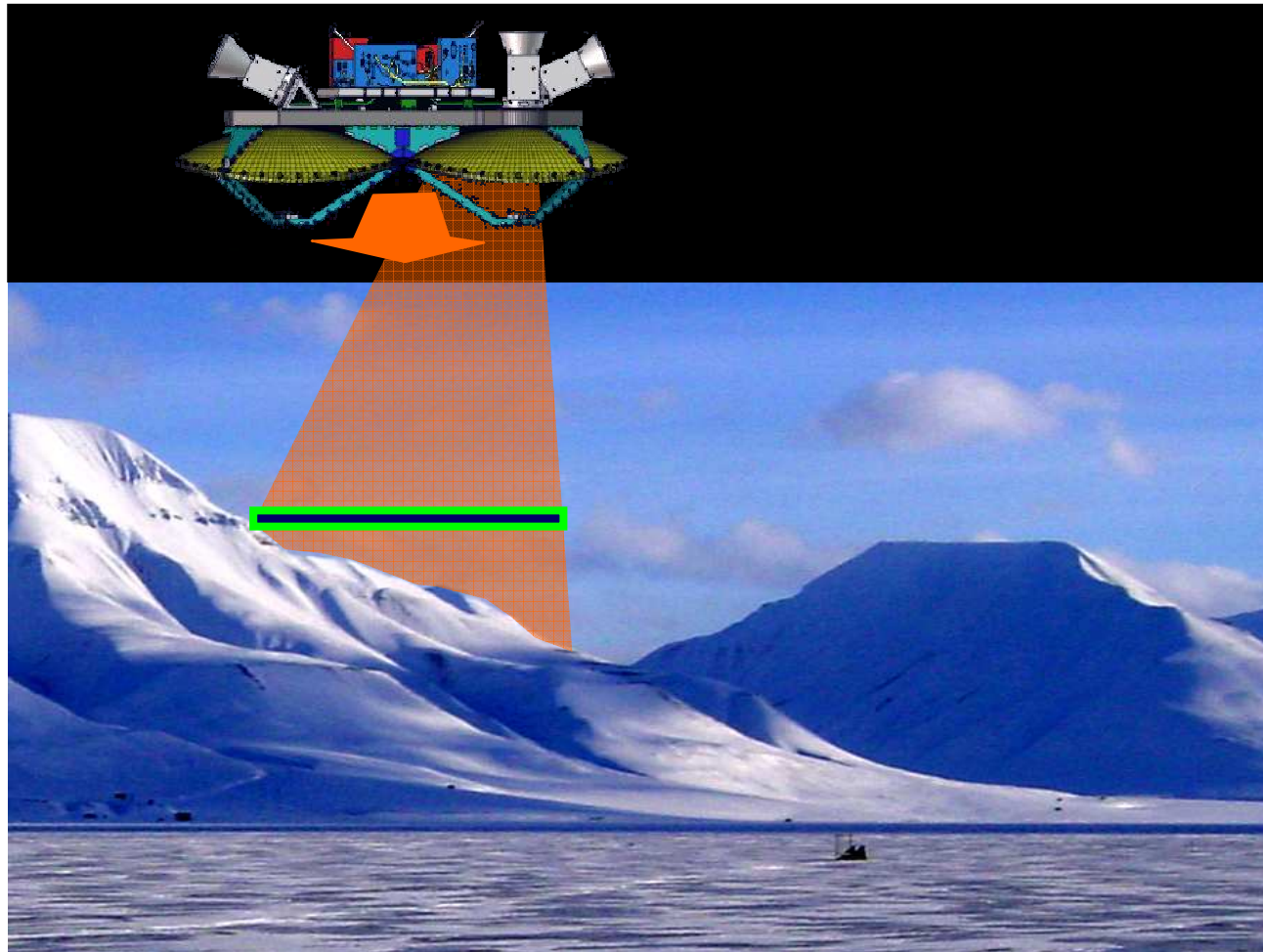


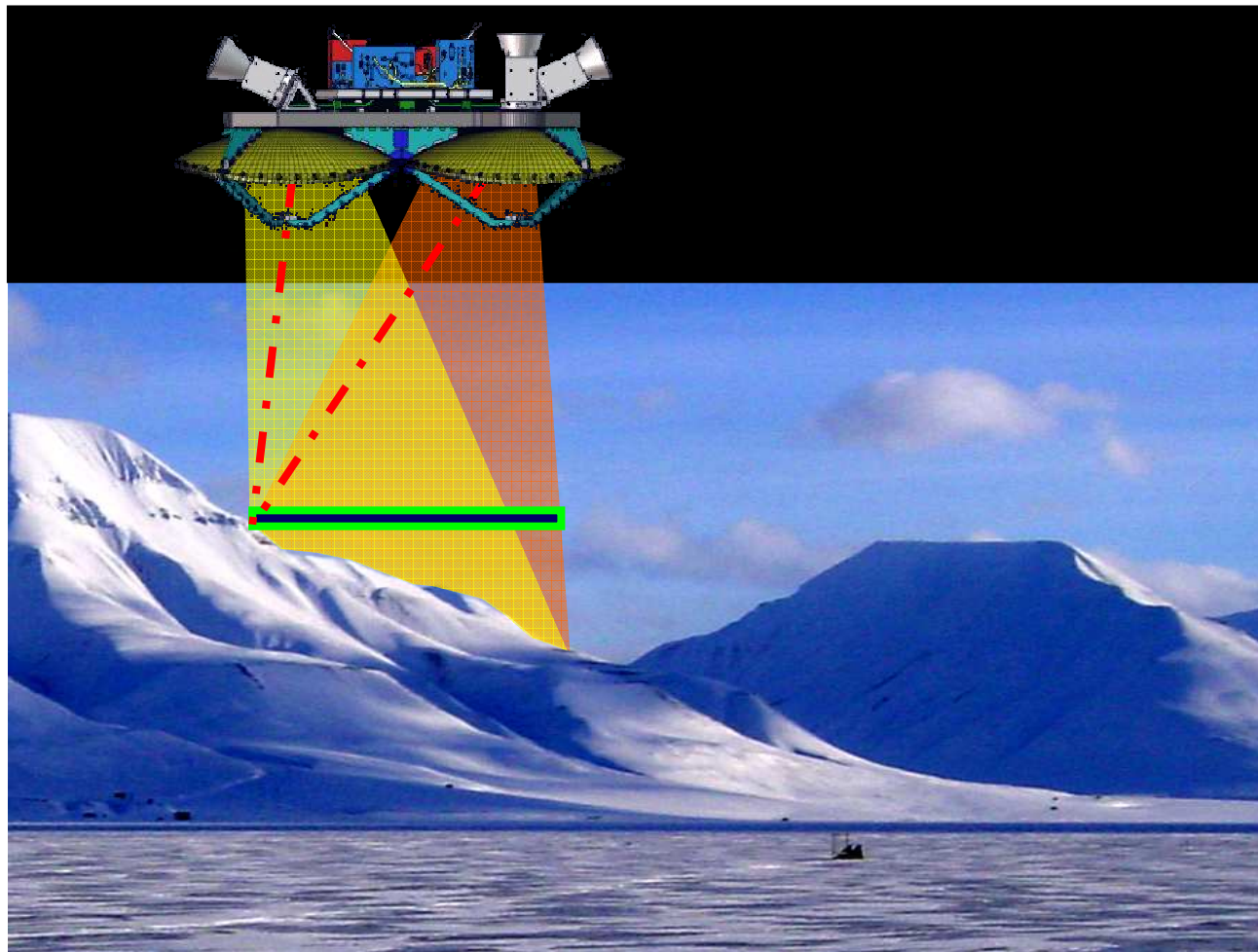


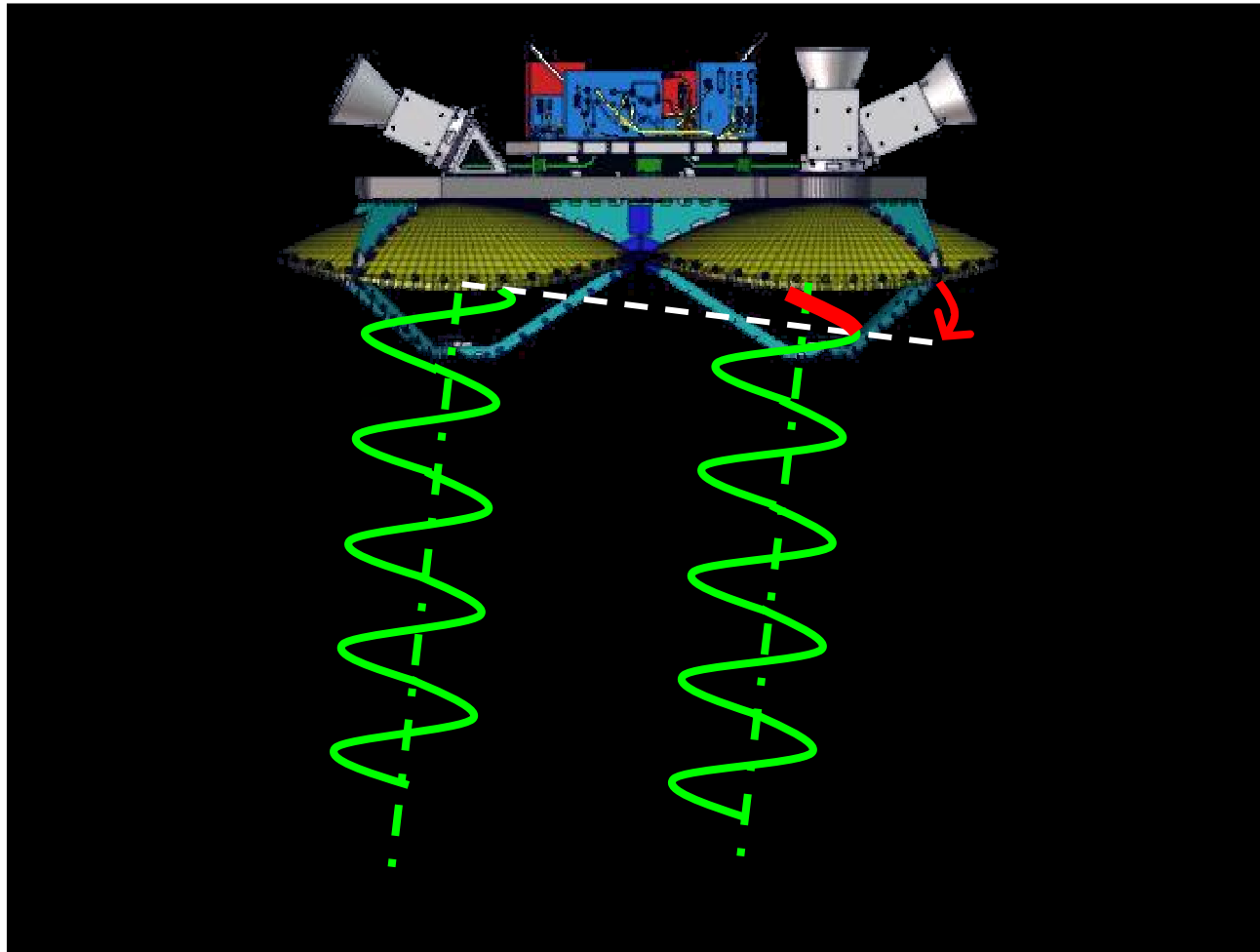


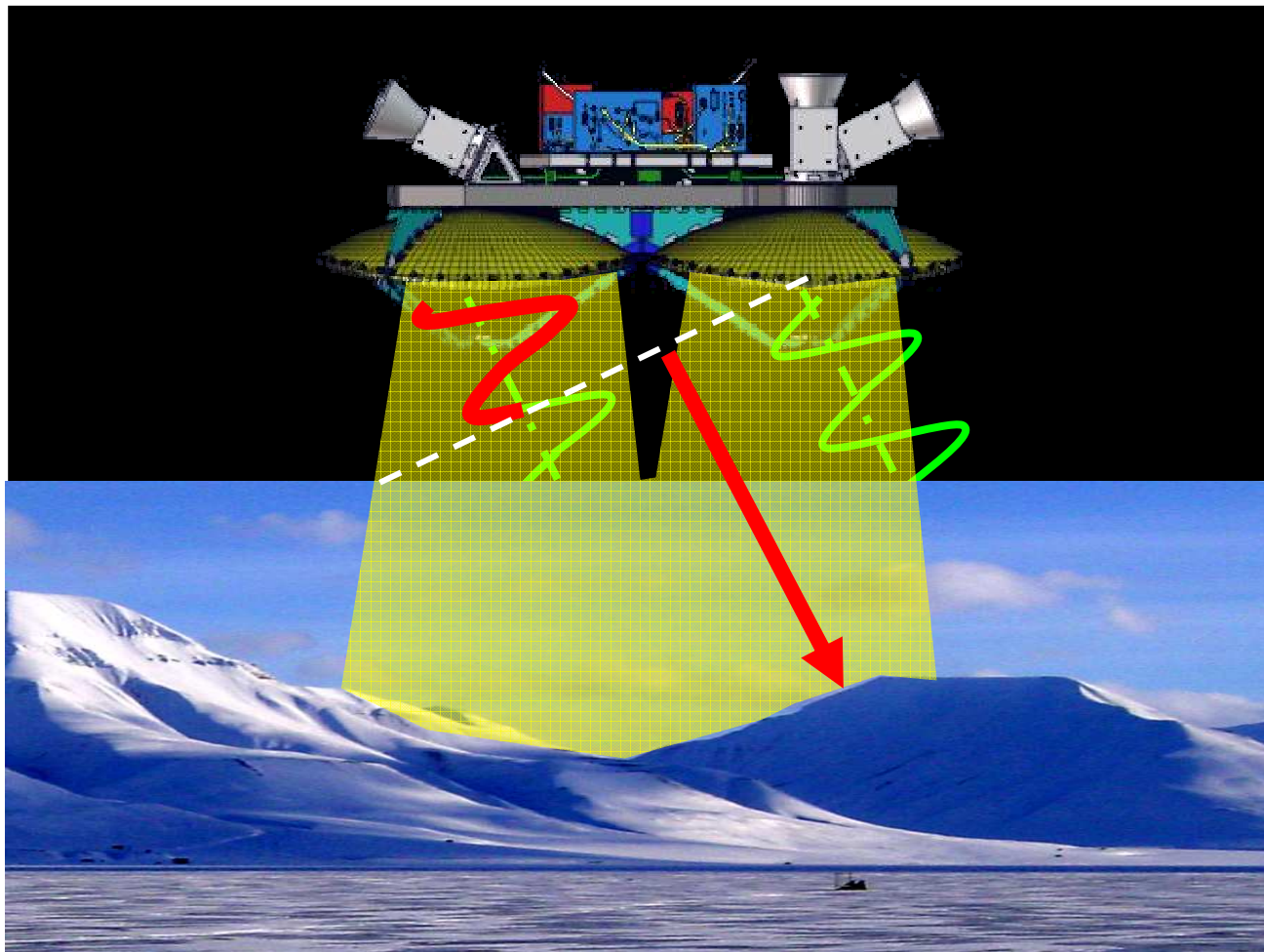


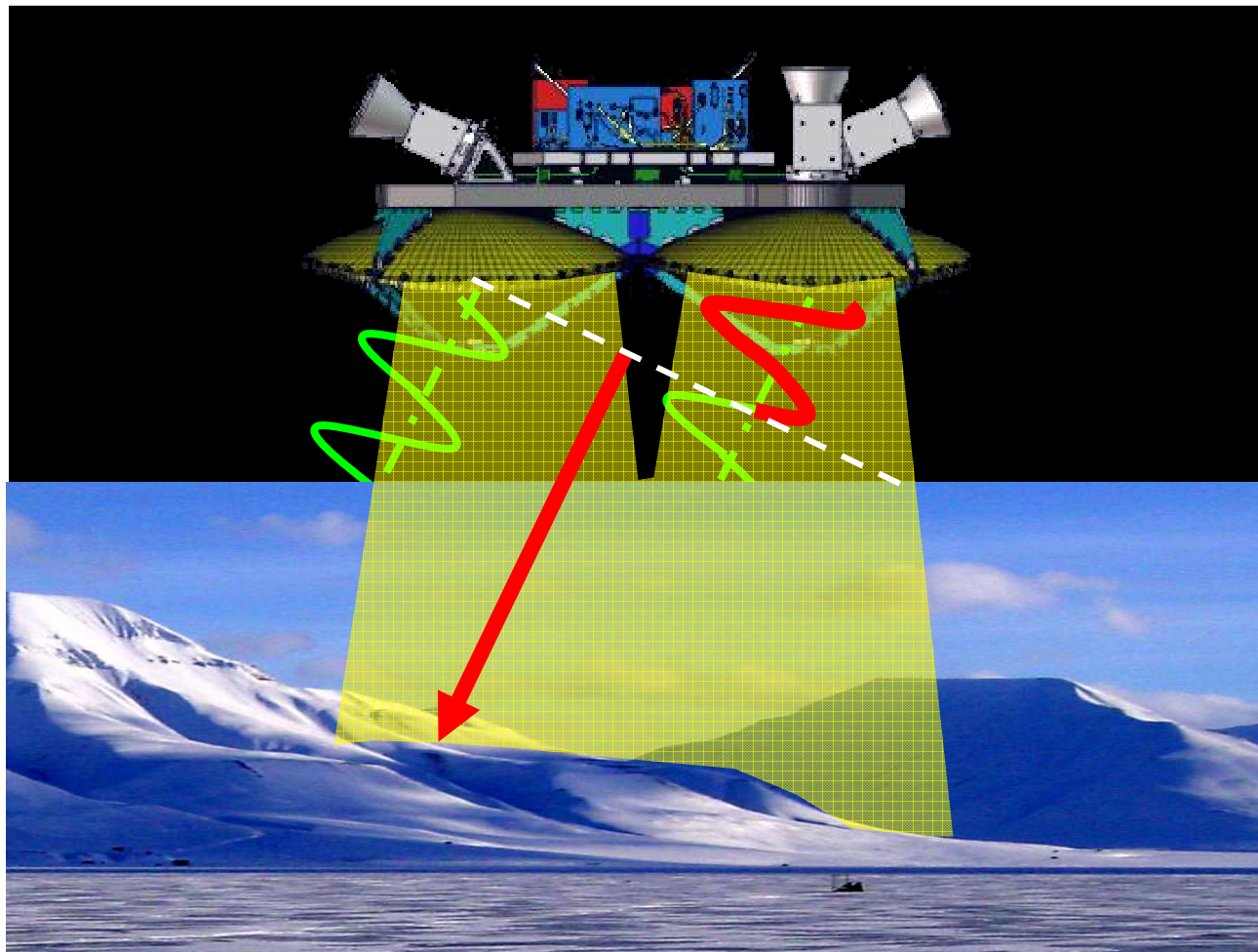
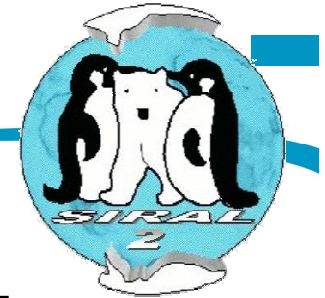


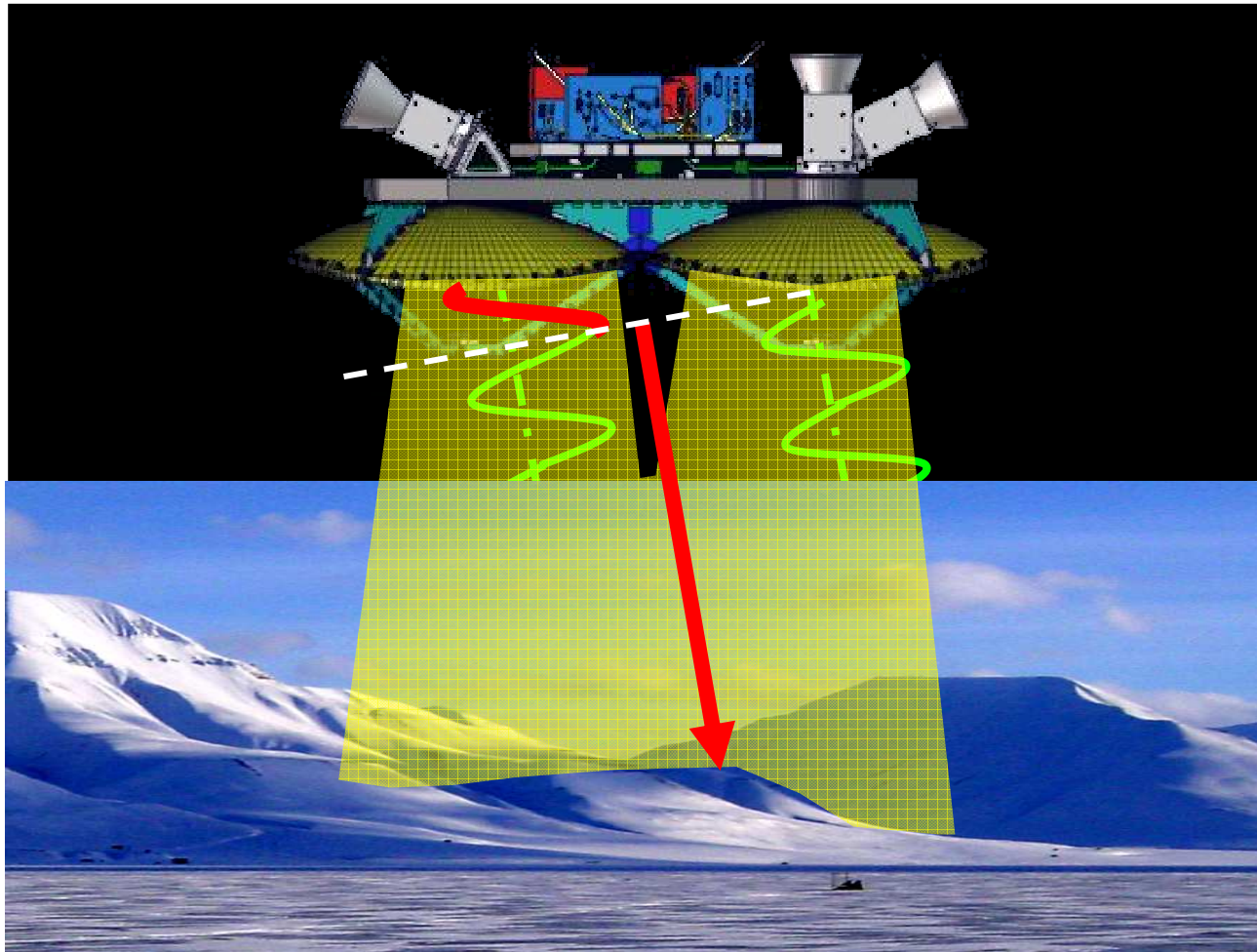


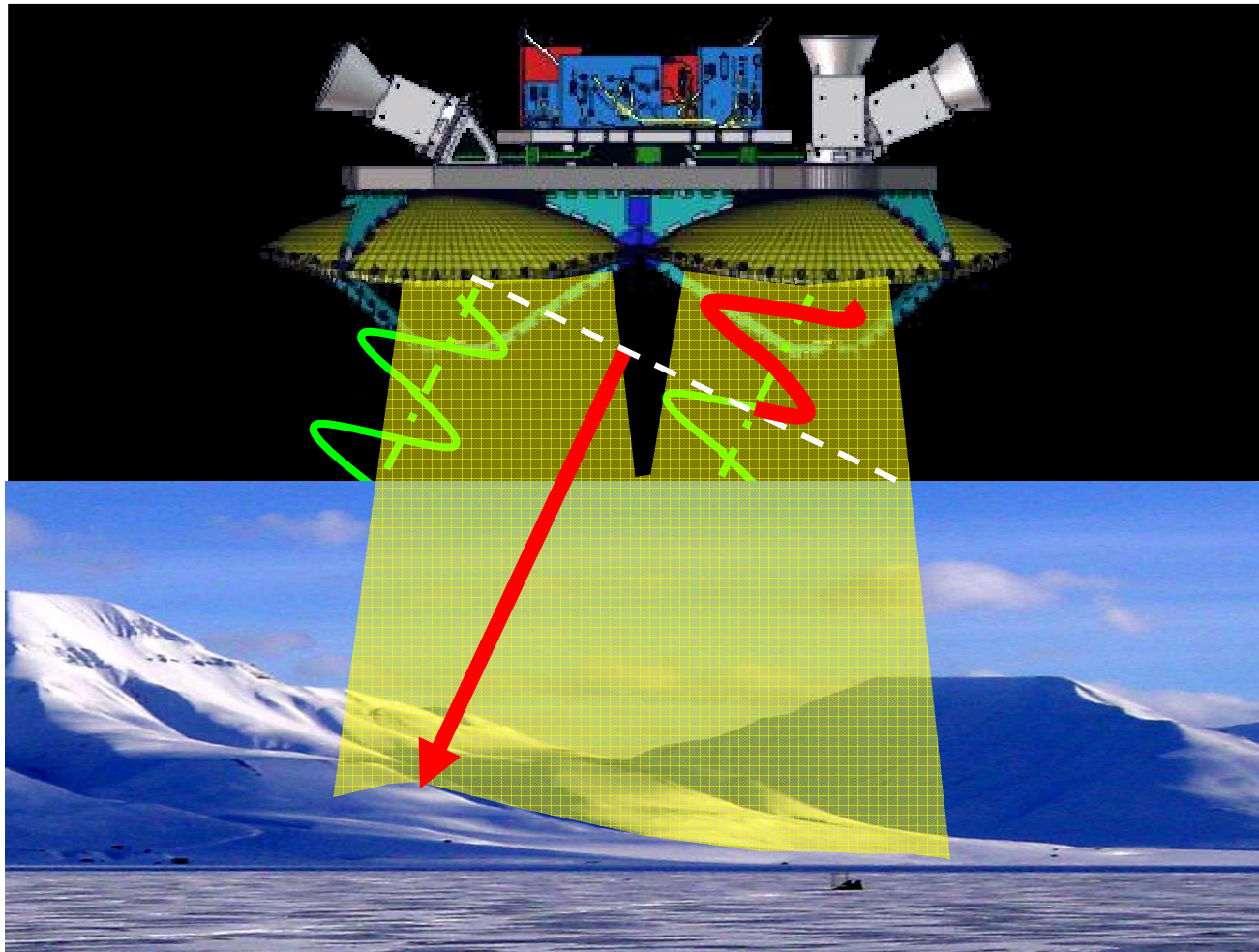






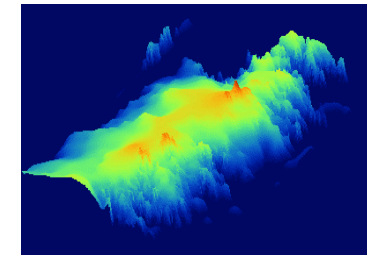
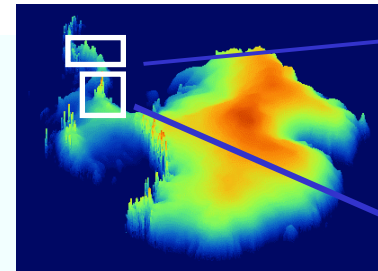
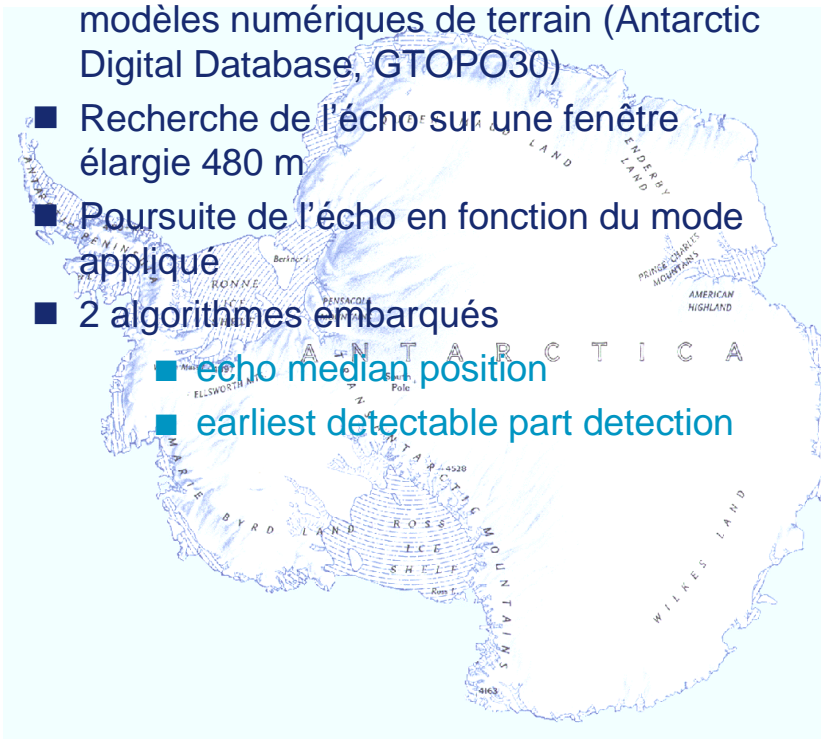




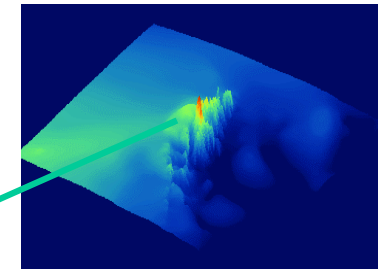
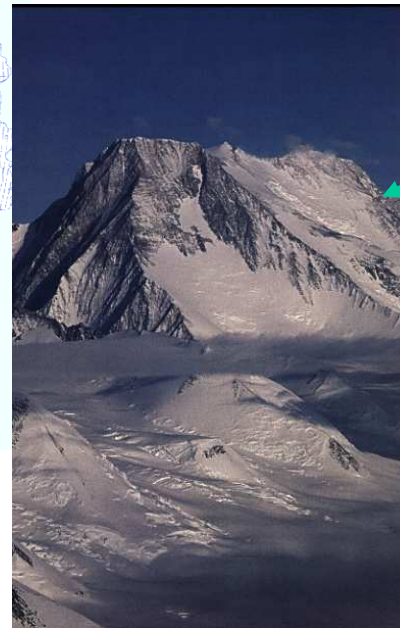




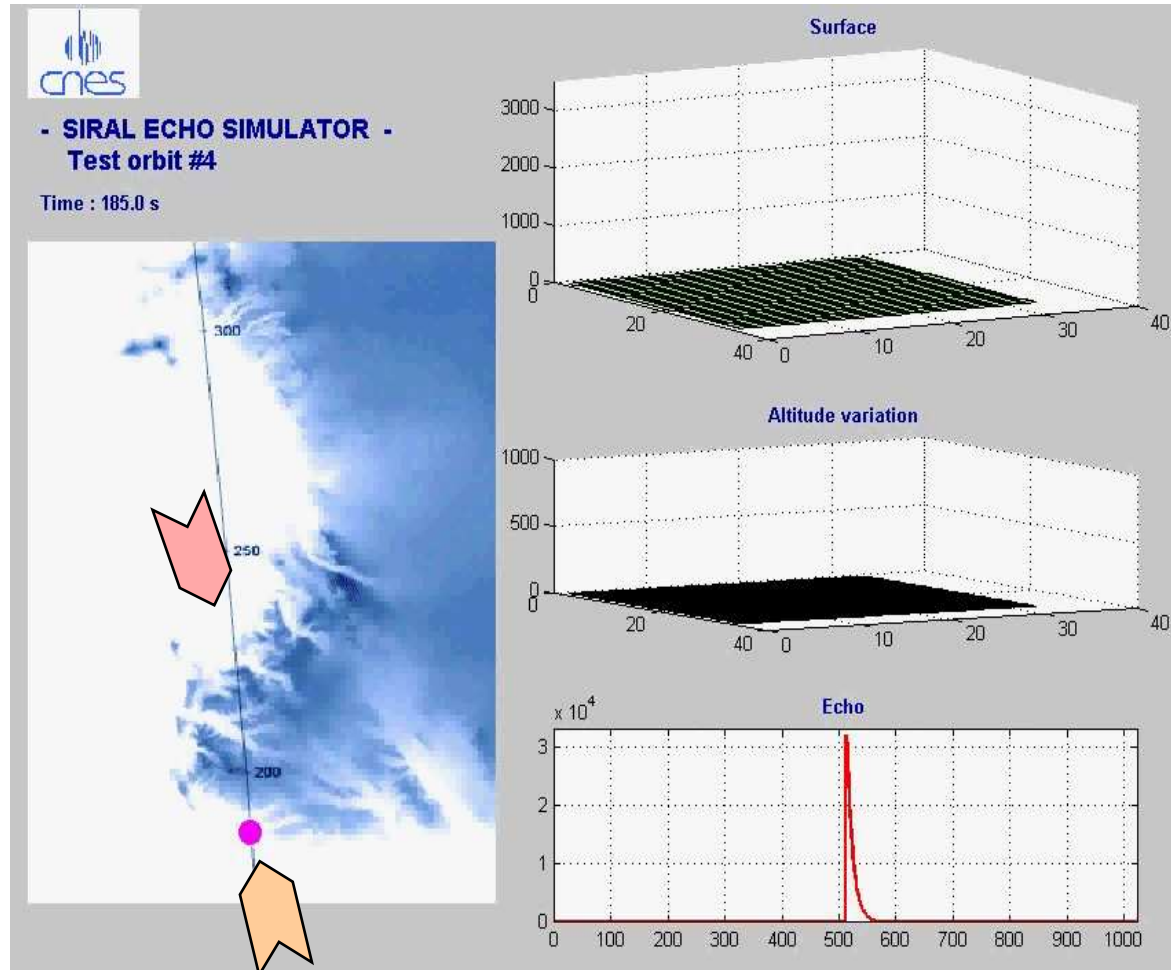
- Conception du tracker basé sur des modèles numériques de terrain (Antarctic Digital Database, GTOPO30)
- Recherche de l'écho sur une fenêtre élargie 480 m
- Poursuite de l'écho en fonction du mode appliqué
- 2 algorithmes embarqués
 - echo median position
 - earliest detectable part detection

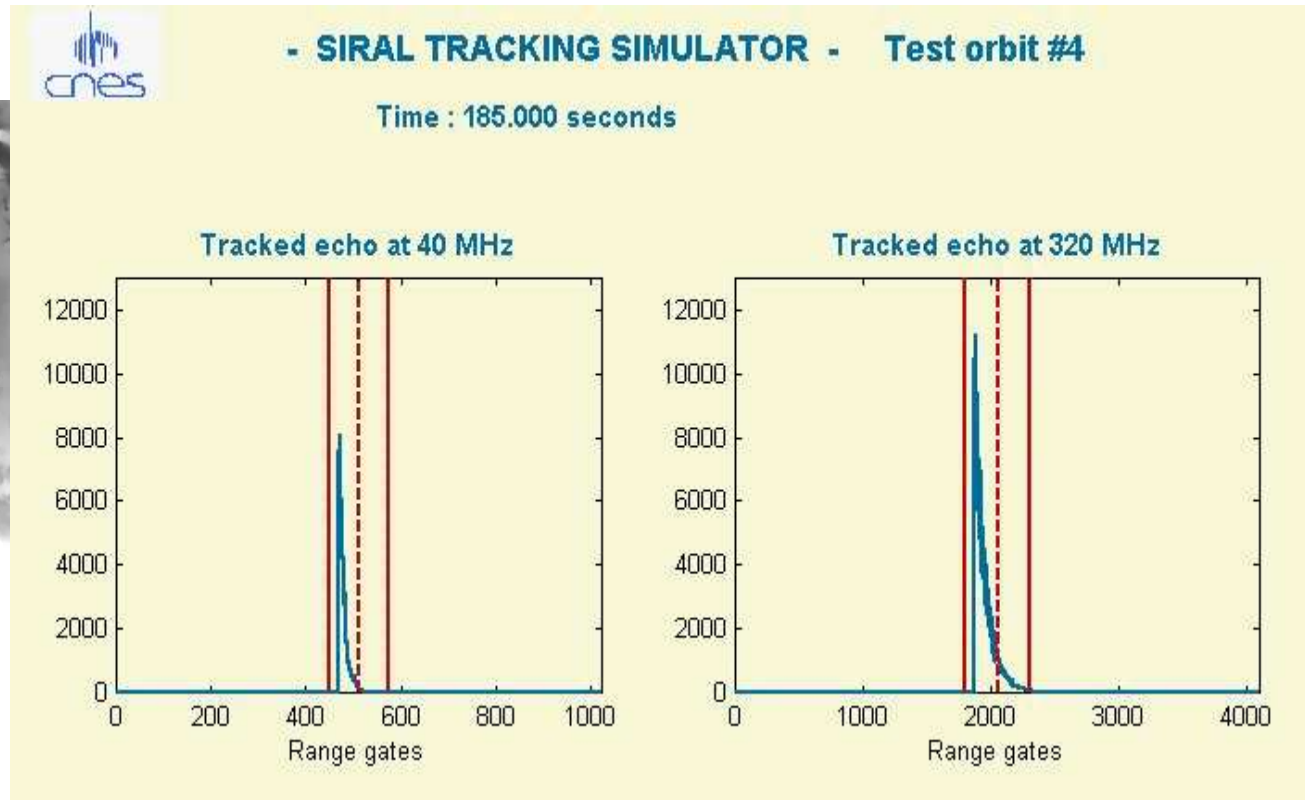
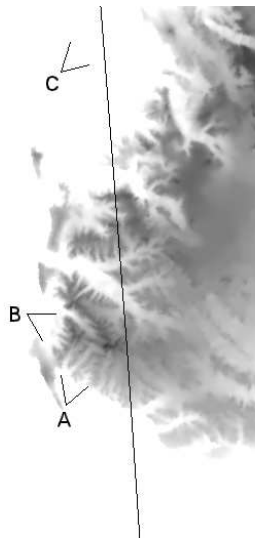


Mount Jackson area (4190 m)



Vinson Massif area (5140 m)







Durant la phase de commissioning du 11 avril au 10 octobre 2010

- Correction des paramètres radar
 - PRF en fonction de l'excentricité de l'orbite
 - Réglage Base de Donnée Radar
 - Ambiguïtés dans la mesure d'étalonnage de la chaîne de réception
 - Paramètres du tracker pour être moins sensible à la détection de signaux faibles
- Suivi du fonctionnement et des performances d'étalonnage

ATP pour suivre pendant 3 ans le fonctionnement de SIRAL 2

- Analyse mensuelle
- Synthèse semestrielle
- Maintient opérationnel du modèle sol de SIRAL avec son banc et son simulateur d'écho

