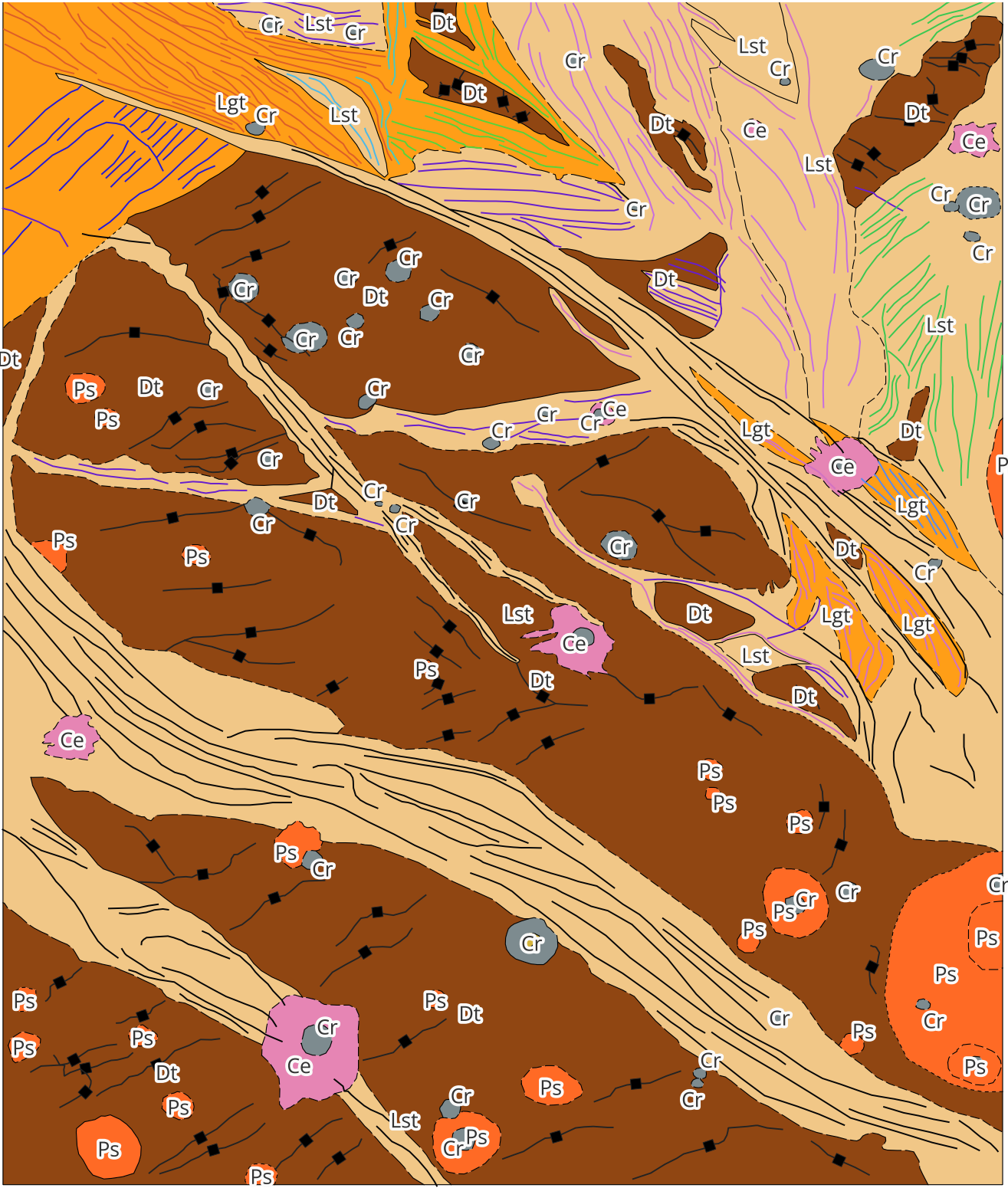























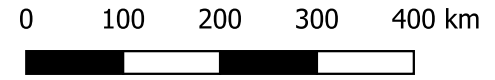


Ganymede Structural Map



Legend

- | Units | | Structural families | |
|---|-----------------------------|---|------------------|
|  | Ce - Crater ejecta |  | furrows |
|  | Cr - Crater rim |  | sharp grooves_1 |
|  | Dt - Dark terrain |  | sharp grooves_2 |
|  | Ps - Palimpsests |  | sharp grooves_3 |
|  | Pt - Pitted terrain |  | sharp grooves_4 |
|  | Lgt - Light grooved terrain |  | sharp grooves_5 |
|  | Lst - Light subdued terrain |  | sharp grooves_6 |
| Contacts | |  | subdued groove_1 |
|  | accurate |  | subdued groove_2 |
|  | approximate |  | subdued groove_3 |
|  | inferred |  | subdued groove_4 |
|  | concealed |  | subdued groove_5 |



Ganymede Structural Map

Project 3

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In the Project 3 the mapping of the area located at the west side of the Galileo Regio. This area covers multiple types of units from light terrains and dark terrains on the surface of Ganymede. The most important features in this area are the different groove families present, essentially differentiated by their direction and crosscutting relationships in the light grooved terrains and light subdued terrains.

Structural units

Up to 11 groove families were found in the mapping area of Ganymede. They are separated in two main groups: Sharp grooves and subdued grooves. The sharp grooves are located inside the light grooved terrains and mainly show a strike direction northwest-southeast, although the first sharp groove family has a strike direction of northeast-southwest. The subdued grooves are the most common grooves in the area and show a clear trend from the northwest towards the southeast, with a minority in a north-south strike direction.

Another group of structures found were the furrows, located inside the dark terrains and showing no particular direction between them or related to surrounding structures.

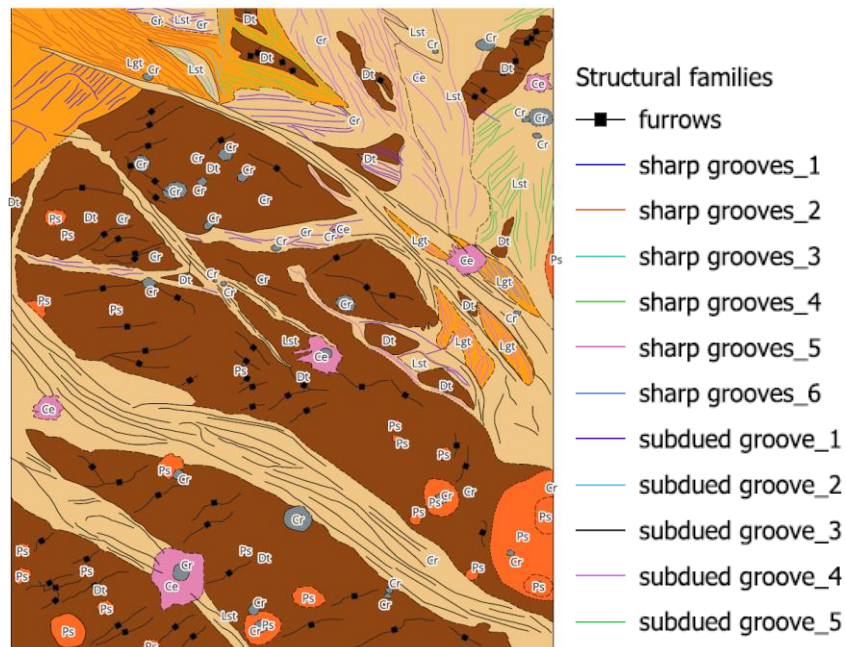


Figure 1. Ganymede structural map showing the main structural families present on this area.

Main geological Units

- **Light terrains (Lgt, Lst):** The light terrains were divided into two main structural groups: the Light grooved terrains (Lgt), and the Light subdued terrains (Lsd). The light grooved terrains have a high to moderate albedo and are essentially located at the northwest of the map and are composed of multiple sharp grooves. The light subdued terrains show a soft surface and moderate albedo with a flow pattern and less noticeable grooves. They are present mainly in the northeast part of the map.
- **Dark terrains (Dt):** Terrains present on the whole map. They show different structures within them such as palimpsests, furrows, and craters.
- **Palimpsests (Ps):** Old craters in dark terrains visible due to their higher albedo and circular shape.
- **Crater units (Cr, Ce):** Multiple impacts present on the entire surface of Ganymede. Some of them may show their central peak and the surrounding ejecta material.

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